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**Earnings Management, Human Rationality, and Relative
Deprivation -- Some Critical Assessments**

**SETTORE SCIENTIFICO DISCIPLINARE DI AFFERENZA: SECS-P/07
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List of Contents

Acknowledgements

Prologue

1. Accounting, Accountability, and the Practice of Earnings Management

1.1. Organisational Accountability in the Context of Contemporary Accounting Practices

1.2. Accounting Manipulations – A Curtain Raiser

1.2.1. Earnings and Earnings Management, and Their Importance in The Context of Accounting Manipulation

1.3. Literature Review on Earnings Management

1.3.1. Motives/Intents behind Earnings Management

1.3.1.1. Incentives and Earnings Management

1.3.1.2. Information Asymmetry and Earnings Management

1.3.1.3. Social and Political Costs and Earnings Management

1.3.1.4. Impression/Reputation/Relationship Management and Earnings Management

1.3.1.5. Motives Concerning Internal Aspects of a Firm and Earnings Management

1.3.2. Fraud and Earnings Management

1.3.3. Techniques Used to Detect Earnings Management

1.3.3.1. Detecting Earnings Management Using Aggregate or Total Accruals

1.3.3.2. Detecting Earnings Management through Specific Accruals

1.3.3.3. Detecting Earnings Management through Cost Allocation and/or Cost Shifting

1.3.3.4. Detecting Earnings Management through Disclosures

1.3.3.5. Detecting Earnings Management through Studying Real Activities

1.3.4. Actions/Initiatives to Restrain Earnings Management

1.3.4.1. Earnings Management in Itself is Self-defeating

1.3.4.2. More Developed Accounting Standards with optimal accounting choices and More Efficient Regulatory Authorities in Restraining Earnings Management

- 1.3.4.3. More Versatile Auditing in Restraining Earnings Management
- 1.3.4.4. Better Corporate Governance to Restrain Earnings Management
- 1.3.4.5. External Factors to be Considered in Restraining Earnings Management
- 1.3.4.6. More-Ethical-Considerations in Restraining Earnings Management

1.3.5. Various Research Attempts to Improve Studies on Earnings Management

1.3.6. Summary of the Literature Review on Earnings Management

1.4. The Stakeholders' Profile in The Earnings Management Phenomenon

1.5. A Summary of Our Discussion until Now

1.6. Raising the Curtains for the Next Chapter

2. Rationality – A Critique from an Economic-Psycho-Sociological Perspective

2.1. Rationality and Economics

2.1.1. Calculability and Rationality

2.1.1.1. Utility Maximisation and Rationality

2.1.1.2. Preference Ranking and Rationality

2.1.2. Rational Choice Theory and Rationality

2.1.2.1. Revealed Preference Theory and Rationality

2.1.3. Self Interest and Rationality

2.1.3.1. Individualism and Rationality

2.1.4. Ethics and Morality, and Rationality

2.1.4.1. Sense of Responsibility and Rationality

2.1.5. Freedom and Rationality

2.1.5.1. Boundedly Rational and Rationality

2.1.6. Empiricism versus Formalism, and Rationality

2.2. Psychology and Rationality

2.2.1. Psychoanalysis and Rationality

2.2.2. Biases and Rationality

2.2.2.1. Self-serving Bias

2.2.2.2. Attribution Bias

2.2.3. Heuristics and Rationality

2.3. Sociology and Rationality

2.3.1. Max Weber, Bureaucracy and (Formal) Rationality

2.3.1.1. Bureaucracy and Freedom

2.3.1.2. Bureaucracy and the Informality-of-Formality

2.3.1.3. Bureaucracy and, Concentration of Power and Conflict

2.3.1.4. Bureaucracy and, Rational-Irrationality and Irrational-Rationality

2.3.2. Institutionalisation and Rationality

2.3.3. Taylorism and Scientific Management, and Rationality

2.3.4. Social Embeddedness of Economic Activities and Rationality

2.3.4.1. Social Exchange Theory and Rationality

2.3.5. Freewill and Sovereign Action, and Rationality

2.3.6. Individualism and Rationality

2.3.6.1. Methodological Individualism and Rationality

2.3.7. Contingency and Context Dependency of Behaviour, and Rationality

2.3.8. Knowledge Limitations and Rationality

2.3.9. Deontology and Rationality

2.4. A Summary of Our Discussion until Now

2.5. Raising the Curtains for the Next Chapter

3. Turning Expectations from Relative Deprivation into Motivations to Manipulate Earnings (in stead of Managing Them)! An Empirical Study Based on a Real Case

3.1. Introduction

3.2. Intentional Action

- 3.2.1. American Dream and Intentional Action
- 3.3. Relative Deprivation
 - 3.3.1. Relative Deprivation and White-Collar Crime
- 3.4. What is at Stake for the Accounting Community?
- 3.5. Study Methodology
 - 3.5.1. Why Crosby's Relative Deprivation Theory?
 - 3.5.2. Why Cross-Sectional Design?
 - 3.5.3. Why Practitioner-centric Survey?
 - 3.5.4. Why Web-survey?
 - 3.5.5. Why Vignettes?
- 3.6. Study Design
 - 3.6.1. Research Tools Used
 - 3.6.1.1. Design Issues Concerning the Vignettes
 - 3.6.1.2. Design Issues Concerning the Web-Questionnaire
 - 3.6.2. Study Schema
 - 3.6.3. Linking the Study Schema with the Enron Scandal
- 3.7. Study Findings and Discussion:
 - 3.7.1. Findings from Vignette#1 Concerning the Reason Types behind the Intention to Manipulate Earnings
 - 3.7.2. Findings from Vignette#2 Concerning the Importance of Enabling Factors for Managing and Manipulating Earnings
 - 3.7.3. Findings from Vignette#3 Concerning the Influence of RD in Manipulating Earnings
 - 3.7.4. Findings Regarding Some General Questions Pertaining to White-collar Criminals having RD and their Modus Operandi with Respect to MEM
 - 3.7.4.1. Does RD Oriented Directional Goals Lead to MEM?
 - 3.7.4.2. Biased (Human) Decision-Making and MEM
 - 3.7.4.3. The Background of Intentionality and Enabling Factors, and MEM
 - 3.7.4.4. The Practice of MEM to Overcome RD Can Become an Obsession!
 - 3.7.5. Let Us Look Critically at the Main Findings of the General Questions Section Concerning the Role of RD on MEM vis-à-vis the Findings from the Vignettes!

3.7.6. The Inference Tree:

3.7.6.1. The Inference Set in the Context of RD Leading to
MEM

3.8. Study Shortcomings and Limitations

3.9. Conclusion (Including Implications and Future Research Directions)

Endnotes 1

Bibliography 1

Endnotes 2

Bibliography 2

Endnotes 3

Bibliography 3

Appendix 1: Web-Survey Questionnaire

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“Īśvaraḥ paramaḥ kṛṣṇaḥ sac-cid-ānanda-vigrahaḥ
anādir ādir govindaḥ sarva-kāraṇa-kāraṇam” (Brahma-saṁhitā 5.1)

(Krishna is the Supreme Personality of Godhead. He is the very form of eternal being, full of knowledge and bliss. He is the primeval Lord Govinda and the Cause of all causes.)

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Prologue

Earnings management (EM) is permissible under various accounting statutes and guidelines, by which the management of a company adjusts its earnings so that the figures match a predetermined target. It is often employed to manipulate earnings for the purpose of income smoothing; i.e., rather than having years of exceptionally good or bad earnings, companies try to keep the figures relatively stable and healthy by adding and removing cash from reserve accounts, or, “cookie jar” accounts – accounting-based EM. In real-activities based EM, earnings are manipulated using methods that deviate from normal business practices (e.g., R&D budget cuts), undertaken with the primary objective of meeting certain earnings. EM is typically carried out with the intention that healthy and stable earnings are important in attracting investment from the market. However, as noted by Arthur Levitt, the former Chairman of the US SEC, its widespread use to prepare financial statements, gives reasons to believe that companies may be indulging in manipulating earnings through illegal and fraudulent ways – i.e., manipulative earnings management (MEM) – in stead of managing them through permissible and prudent means. To paraphrase Warren Buffett, managers who promise to make the numbers will at some point intend to make up the numbers.

Although, EM has been described as an intentional action, but nothing further has been said about the intentional element underlying it. Our dissertation is an attempt to investigate relative deprivation (RD) – i.e., people’s reaction to objective situations depend on their subjective comparisons – as a causal factor behind the intention to manipulate earnings in the name of managing them. We have attempted this by undertaking our research in three phases, namely: (a) Accounting, Accountability and Earnings Management; (b) Human Rationality – A Critique from an Economic-Psycho-Sociological Perspective; and, (c) Turning Expectations from Relative Deprivation into Inspirations to Manipulate Earnings! An Empirical Study Based on a Real Case.

In the first chapter – Accounting, Accountability and Earnings Management – we have discussed the transformation that accounting has undergone from being a vital means to make firms accountable towards their stakeholders and society, to its new avatar of accounting manipulations by which it enables companies to attract investment from the market by making them to look (sic) attractive, using various EM techniques; which, in one sense, is a “paradigm shift” that accounting has undergone from its traditional and foundational tenets. Additionally, we have undertaken an literature review that reveals that much of the research on EM has been done from the rationalist paradigm that emphasises the fact that managers manage earnings in order to safeguard and further their self-interest, and maximise their utility – the neoclassical paradigm.

The second chapter – Human Rationality – A Critique from an Economic-Psycho-Sociological Perspective – is a critique on human rationality – especially in its neo-classical avatar. We have done it by taking into account the perspectives of economists, psychologists and sociologists. Some of the salient findings in this

chapter are: agents systematically violate the axioms of standard economic theories; they are boundedly rational; while making decisions, they often use heuristics and are prone to biases; economic actions are socially embedded; and so on. It concludes with a note that human beings although are rational, but limitedly so.

Finally, the third chapter – Turning Expectations from Relative Deprivation into Inspirations to Manipulate Earnings! An Empirical Study Based on a Real Case – is an empirical study based on the Enron Scandal. Using Searle’s notion of (Human) Intentionality from the perspective of the theory of mind and Malle’s theorisation of intentional action from the perspective of social psychology, we have investigated the role of RD as the reason behind the intention – i.e., the causal history of reason – to carry out MEM. We have attempted this by taking into consideration that (managerial) decision-making, along with being an economical activity, is socially situated. Thus, there are various societal factors that bring about MEM. And, we have elucidated that RD is an important factor to zero in on here, particularly in the context of our contemporary society dominated by the ethos of the American Dream that postulate that a person needs to be (financially) rich and (socially) famous in order to be seen as successful. This empirical study is based on the opinions of management practitioners, which we collected using vignettes in an Web-survey (i.e., a mix of qualitative and quantitative methods), and analysed using descriptive statistics. Our findings are mixed in the sense that while answering if RD causes earnings management to stray into earnings manipulations, the respondents have supported it in varying degrees, under two different situations. That is, when we directly asked if RD cause EM to stray into MEM, the respondents supported it to a lesser degree than if EM stray into MEM when directional goals (to overcome RD) overshadow accuracy goals (to report earnings prudently). We attribute this anomaly to question-answer framing effects (involving both wording and situational factors) and social desirability bias. Additionally, based on some interesting observations on MEM vis-à-vis RD, we have zeroed in on Behavioural Accounting as a potential field where our findings have relevant applicability. As the concluding remark, we are of the view that the philosophy of mind – especially the analytical works on Intentionality – can potentially set the roadmap for future research on the causal correlates behind managing earnings, including manipulating them.

1. Accounting, Accountability, and the Practice of Earnings Management

“Practicing accountants and managers face similar alternatives in relation to accounting information. They can put effort and energy into seeking to improve the nature and quality of the information they use, or alternatively, they can look to the conditions and consequences of their actual *use* of this information. As information divorced from use is literally meaningless, it is only through a combination of these two approaches that researchers and practitioners can hope to understand and enhance the effectiveness of accounting practice.”¹

Accounting is theorised in and around various organisational practices (e.g., preparing finance statements).² Earnings management (EM) is a technique, using which company decision-makers present earning figures in finance statements through managerial judgements based on justification, speculation and, even, deception; they generally carry it out to achieve some individual gains by meeting organisational goals, with the intent to manifest (sic) accountability towards the organisation and its stakeholders.^{3,4} Thus, three key aspects of EM are: accounting (giving accounts), accountability, and accounting methods (to manage earnings). Let us briefly discuss them before furthering our dissertation which is on EM.

“[...] The real power of accounting [...] lies in the way in which, as a structure of meaning, it comes to define what shall and shall not count as significant within an organization.”⁵ In management studies, accounting mainly entails management accounting and financial accounting. The former deals with the inside activities of an organisation, provides information to inside stakeholders (like employees) enabling them to carry out efficient decision-making. Whereas, financial accounting mainly provides information to outside stakeholders like shareholders, so that they make informative investments in firms. Thus, accounting in its totality concerns with descriptions of various past, present and future (economic) activities of a firm that are relevant for its stakeholders. Putting it succinctly: “[...] accounting [comprises of ...] all those spatially and historically varying calculative practices – ranging from budgeting to fair value accounting – that allow accountants and others to describe and act on entities, processes, and persons [purposefully...].”⁶ Two of the most important purposes of accounting is that: (a) firms give accounts⁷ about themselves to their stakeholders – employees, shareholders, regulators, auditors, suppliers, customers, etc. – thereby manifesting their accountability towards them;⁸ (b) this accounts-giving, in turn, helps them to attract resources from them.⁹

‘[...]O]rganizations depend on a flow of resources for survival; society has beliefs in the efficacy of “rational” management practices; organizations which adopt such practices are more likely to be rewarded [e.g., attracting capital]. [...]’¹⁰

An account is a description of reality through words and numbers,¹¹ through which agents become accountable to one another. To be accountable is to be “[...] detectable, countable, recordable, reportable, tell-a-story-about-able, analyzable [...]”¹² By being accountable and thereby manifesting accountability, agents attempt to make their invisible intents/motives visible and hence verifiable.¹³ In this way, through accounting, a firm manifests its accountability towards its stakeholders.

“Accountability is the capacity and willingness to give explanations for conduct, stating how one has discharged one’s responsibilities. Accountability therefore involves both an explaining of conduct with a credible story of what happened, and a calculation and balancing of competing obligations, including moral ones. These two faces of accountability are also seen in the etymology of the word ‘account’ and are crucial for understanding the social construction of accountability. In the Oxford English Dictionary, we see that *account* comes from both the Old French *a conter*, meaning *to tell a story* and from the late Latin *accomputare*, meaning to compute. Accountability thus entails the giving of an account as in a narration of what transpired (a recounting of events in a story form) and giving an account as in a reckoning of money (a calculation of net balances of events in a transaction form).”¹⁴

Agents give accounts through various socio-economic activities, and in doing so, they become accountable to one another; in the process, ethos appear.¹⁵ As a result, they get socio-economic identities, undergo alignments and realignments among themselves, facilitate communities and become members of them, let the generated ethos link them to other communities, and in this way accountability towards each other spreads, spatio-temporally.¹⁶ Thus, accounting is a vital means to create ethos in the business community – the Market, based on which transactions and interactions between firms and their stakeholders take place. And in this manner, accountability between agents and firms emerges, spreads and gets institutionalised.

1.1. Organisational Accountability in the Context of Contemporary Accounting Practices

Watching some of the happenings in the market that have grabbed the limelight in the recent times, it can be said that accounting is either not *all* about manifesting accountability or the very notion of accountability in the context of accounting over the years has undergone metamorphoses.

“With the bursting of the Internet bubble in 2000, the previously bullish stock markets became bearish, and the ugly truth eventually caught up with companies that allegedly tried to obscure unpleasant reality in their accounting reports. The first big scandal occurred in 2000, when Xerox revealed that it had overstated profits by \$1.4 billion over a 4-year period. Unfortunately, Xerox was not an isolated instance. Twenty large and highly publicized scandals followed between October 2001 and the enactment of Sarbanes-Oxley Act of 2002, including those involving WorldCom, Adelphia, Tyco, and Global Crossing. [...] The corporate meltdowns in the wake of the scandals caused hundreds of millions of dollars in losses to investors. The largest collapse was that of WorldCom in May 2002, with estimated losses approximating \$180 billion.”¹⁷

“Historically, bubbles are followed by crashes, which in turn are followed by punitive legislation. The 1999-2003 era is fully consistent with this pattern [...] During the collapse of the high tech bubble in 2000 and 2001, publicly held firms audited by the Big Five fell by over \$1 trillion in market value. [...]”¹⁸

“Increasingly, I [Arthur Levitt, the former Chairman of the U.S. Securities & Exchange Commission (SEC)] have become concerned that the motivation to meet Wall Street earnings expectations may be overriding common sense business practices. Too many corporate managers, auditors, and analysts are participants in a game of nods and winks. In the zeal to satisfy consensus earnings estimates and project a smooth earnings path [through creative accounting practices which includes earnings management, wishful thinking may be winning the day over faithful representation. [...] As a result, I fear that we are witnessing an erosion in the quality of earnings, and therefore, the quality of

financial reporting. Managing may be giving way to manipulation; Integrity may be losing out to illusion.”¹⁹

“[...] A study conducted in 2000 finds that in 1998 the] stockholders [in the U.S.A.] come from all walks of life, young and old, rich and not so rich. [...] Interestingly, half of those stockholders have income of less than \$57,000 and only 18 percent have family incomes that exceed \$100,000. Indeed, the average stockholder today is the average American who lives next door, is your aunt or uncle, a close friend or family member.”²⁰

‘[...] There is a crisis of confidence today about corporate earnings reports and the credibility of chief executives. And it’s justified. For many years, I’ve [Warren Buffett] had little confidence in the earnings numbers reported by most corporations. I’m not talking about Enron and WorldCom – examples of outright crookedness. Rather, I am referring to the legal, but improper, accounting methods used by chief executives to inflate reported earnings. [...] To clean up their act on these fronts, C.E.O.’s don’t need “independent” directors, oversight committees or auditors absolutely free of conflicts of interest. They simply need to do what’s right. [...] The attitudes and actions of C.E.O.’s are what determine corporate conduct. [...] C.E.O.s want to be respected and believed. They will be – and should be – only when they deserve to be. [...]’²¹

Thus, accounting is no more confined to business only but concerned with society too. Additionally, the business ethos has undergone a “paradigm shift”²² in the sense that the accountability aspect of accounting has often been ignored. What is accountability? For that matter, what is it in our contemporary era? Is it about being responsible to a selected few (e.g., to the owners of a company)? Has it become a hostage to the neo-classical economics paradigm and its underlying tenets that treat people as “[...] utilitarian, rationalist, and individualist [...]”^{23,24,25} What role does accounting play in upgrading or downgrading accounts-giving activities through accounting statements to make firms accountable to their stakeholders? And, so forth.

Wood (1990)²⁶ views that a corporation exists for the generation and distribution of wealth in society, and accounts must be produced to report these activities. Financial accounting is an important means through which firms give accounts and become accountable to society by representing, in some cases constructing, their states of affairs through financial numbers; and, in the process, enabling the users of these information to take informative decisions.

*“Accounting is not an end in itself. As an information system, the justification of accounting can be found only in how well accounting information serves those who use it. Thus, [...] the basic objective of financial statements is to provide information for making economic decisions.”*²⁷

In principle, this should eventually lead to the wellbeing of everyone in society.

“In 1966 the American Accounting Association defined [financial] accounting as: ‘... the process of identifying measuring and communicating economic information to permit informed judgements and decisions by the users of that information’. In 1975 they added that the *purpose* of this process was: ‘... to provide information which is potentially useful for making economic decisions and which, if provided, will enhance social welfare’. Thus we might deduce that accounting involves: • Identifying • Collecting • Describing • Recording • Processing • Communicating ... INFORMATION ABOUT WHAT HAS HAPPENED TO SELECTED PEOPLE (WHO HAVE A NEED FOR IT?) ... TO SUPPORT ECONOMIC DECISIONS ... IN ORDER TO ENHANCE SOCIAL WELFARE”²⁸

Some of the important elements of accounting statements are: to be sentient about their users' profiles, cost-benefit analysis (benefits of using them should exceed costs incurred), understandability, usefulness to decision-makers through relevance and reliability; where relevance is obtained through their predictive value, feed-back value (confirming and/or correcting prior expectations), completeness, and timeliness; and reliability comes from verifiability, neutrality, materiality, unbiased presentation, and faithful representations; and, finally, relevance and reliability are facilitated through their comparability and consistency.²⁹ However, the ground realities are far from these definitional objectives of (financial) accounting statements.

Had the market been efficient, there was no significant role of financial accounting, disclosure and regulation; because in such a market information seamlessly flow across and they are considered to be reliable.³⁰ In such a situation, preparers and users of financial statements would have no conflicts of interests.³¹ And, there were no need for accounting discretions and hence negligible scope for accounting manipulations. But as the market is imperfect and inefficient,³² and unpredictable too; so for efficient contracting between firms and their stakeholders, getting rid of information asymmetry, reducing the principal-agency conflict and hence mitigating higher agency cost; accounting, in principle, has an important role to play – i.e., to truthfully represent organisational activities, thereby function as a signalling mechanism for efficient decision-making.³³ However, due to the imperfections in the market, due to the prevalence of information asymmetry, wealth transfer is opportunistically tilted in favour of the company insiders who manipulate information, especially in financial statements, to maximise their utility.³⁴

From the perspectives of Watts and Zimmerman (1978), financial accounting entails keeping an account of wealth transfer between a firm and its: managers (with respect to cost of compensation), fund providers (with respect to cost of capital, including information generation cost) and society (with respect to political costs);³⁵ here we can include social cost too, which involves transfer of wealth from a firm towards those actions that have detrimental effects on society and the environment.³⁶ Through financial accounting manipulation (AM), company decision-makers, particularly the management, present wealth transfer information to various stakeholders in ways that is favourable³⁷ for their efficiency needs,³⁸ e.g., raising cheap capital from market.

“[...] Management is central to any discussion of financial reporting, whether at the statutory or regulatory level, or at the level of official pronouncements of accounting bodies. [...]”³⁹

1.2. Accounting Manipulations – A Curtain Raiser

Accounting manipulation (AM) is a worldwide phenomenon,⁴⁰ which, it seems, has become a norm, rather than an exception, in the contemporary financial reporting.⁴¹ Roughly speaking, AM is mainly done in two ways. One is to prepare and disseminate financial reports prudently with an intent that is not only permissible under the purview of the GAAP, but also realistic.⁴² The other is the deliberate manipulation of the financial information so that they *appear* to be permissible under the GAAP, but are fraudulent. However, even when reported realistically, difficulties may arise in differentiating legitimate managerial discretions as approved by GAAP guidelines and the illegitimate ones.⁴³ According to some researchers, market

participants, including investors, creditors, pensioners, and employees, have borne more than \$500 billion during the past several years, due to fraudulent financial statements.⁴⁴ One of the reasons behind this is the availability of methods to measure income of a firm,⁴⁵ which provide managers with numerous income measurement alternatives to alter income figures.⁴⁶

Technically speaking, AM is a matter of timing and so it is associated with the principle of ‘accrual accounting.’⁴⁷ Healy (1985) defines accruals as “[...] the difference between reported earnings and [actual] cash flows from operations. [...]”⁴⁸ It is vital not only in providing information about the actual earnings of a firm but also the potential earnings that could have gone unnoticed. In this way, accrual accounting complements financial reporting in its aims to give a ‘broader’ picture of the financial states of affairs of a firm.

“[...] According to the FASB, [t]he primary focus of financial reporting is information about an enterprise’s performance provided by measures of earnings and its components [(CON1, para. 43) ...]. Accrual accounting attempts to record the financial effects on an entity of transactions and other events and circumstances that have cash consequences for the entity in the periods in which those transactions, events, and circumstances occur rather than only in the periods in which cash is received or paid by the entity [(CON6, para. 139) ...]. Accrual accounting uses accrual, deferral, and allocation procedures whose goal is to relate revenues, expenses, gains, and losses to periods to reflect an entity’s performance during a period instead of merely listing its cash receipts and outlays. Thus, recognition of revenues, expenses, gains, and losses and the related increments or decrements in assets and liabilities – including matching of costs and revenues, allocation, and amortization – is the essence of using accrual accounting to measure performance of entities [(CON6, para. 145) ...].”⁴⁹

“Information about enterprise earnings and its components measured by accruals accounting generally provide a better indication of enterprise performance than information about current cash receipts and payments. Accrual accounting attempts to record the financial effects on an enterprise of transactions and other events and circumstances that have cash consequences for an enterprise in the periods in which those transactions, events, and circumstances occur rather than only in the periods in which cash is received or paid by the enterprise. It recognizes that the buying, producing, selling, and other operations of an enterprise during a period, as well as other events that affect enterprise performance, often do not coincide with the cash receipts and payments of the period.”⁵⁰

However, practising accrual accounting is tricky. Various acts of recognising financial elements of a firm involve not only managerial judgement, discretion and foresight, but also optimism. Although, managerial optimism usually brings buoyancy and growth to the market, but owing to market imperfections, the preparers of financial reports do not always act rationally. Thus, there are occasions when optimism can become over-optimism, jeopardising the main purpose of accounting – i.e., accountability.

In the accounting community, many support the use of creative and innovative accounting methods under the pretext of market efficiency,⁵¹ ‘[...] which is] concerned with whether prices at any point in time “fully reflect” available information [...],’⁵² and managerial judgements that, they argue, are required in financial reporting.⁵³ Thus, the proponents of efficient market hypothesis argue that AM does not have negative implications.⁵⁴ However, ‘prudent’⁵⁵ adjustment of financial statements is one thing, and myopic manipulation is another. Being prudent is not to be separated

from self-interest, but self-interest that is guided by conscience. According to Adam Smith,

“[...] The arguments of *The Wealth of Nations* seemed to lend a certain sanctity to the self-interested pursuit of gain, by showing that such activity was productive of benefit to the society at large; by demonstrating that the enterprise of individuals was capable, when left free of regulation, of carrying the standard of material well-being to heights hitherto impossible and scarcely calculable. [...]”⁵⁶

However, agents, as already discussed, in the name of doing ‘good’ through accounting manipulations, may actually be doing ‘bad;’ which may be a result of being drifted away from reality and getting guided by illusion.

“[...] In the zeal to satisfy consensus earnings estimates and project a smooth earnings path [an instance of AM], wishful thinking may be winning the day over faithful representation [...]”⁵⁷

Thus, arguments in the name of efficient market hypothesis and thereby giving more and more freedom and leverage to managers to decide how they wish to carry out financial reporting may make accounting more subjective and speculative, rather than objective.⁵⁸ In this regards, Lev (2001) argued,

“[...] Despite widely held beliefs that corporate financial statements convey historical, objective facts, practically every material item on the balance sheet and income statement, with the exception of cash, is based on subjective estimates about future events. [...]”⁵⁹

AM has been defined as an ability to increase or decrease reported net income at will.⁶⁰ As regards to wealth transfer, AM is carried out to alter the earnings per share and debt/equity ratio.⁶¹ Managers, through AM, try to “[...] smooth periodic income, to create ad hoc fluctuations in income, to maximize or minimize reported income and so on. [...]”⁶² According to their styles and scopes, AM has different names in the accounting lexicon, namely: income smoothing, creative accounting, big bath accounting, window dressing, the Street earnings, etc.⁶³

Income smoothing (IS) is “[...] the process of manipulating the time profile of earnings or earnings reports to make the reported income stream less variable, while not increasing reported earnings over the long run. [...]”⁶⁴ Thus, through IS, managers attempt to “[...] mak[e ...] earnings fluctuations less volatile. [...]”⁶⁵ If the financial news is good, managers try to undertake income smoothing “[...] depending on the levels of cash-flows observed. [...]”⁶⁶ Managers generally carry out IS to: have control,⁶⁷ keep their jobs,⁶⁸ increase company stock prices,⁶⁹ obtain more incentives,⁷⁰ etc.

Creative accounting(CA) is “[...] the transformation of financial accounting figures from what they actually are to what report-preparers desire by taking advantage of the existing rules and/or ignoring some or all of them.”⁷¹ In other words, it is “[...] ‘a process whereby accountants use their knowledge of accounting rules to manipulate the figures reported in the accounts of a business’. [...]”⁷² It has been argued that the Anglo-Saxon countries are particularly prone to CA because of the freedom of choice for managers that their accounting systems permit.⁷³ Through CA, managers could mislead investors by presenting what the latter want to see.⁷⁴

However, researchers also advocate for CA, arguing that subjective judgements are needed to make accounting activities meaningful and realistic.⁷⁵

The Big Bath accounting (BB) involves income decreasing accounting measures. ‘[...] For sufficiently “bad” news, the manager under-reports earnings by the maximum, preferring to take a “big bath” in the current period in order to report higher future earnings. [...]’⁷⁶ Managers usually practice BB during management turnovers, through income-reducing discretionary accounting decisions, to: shift the blame to the old management,⁷⁷ reduce the historical basis for future comparison and expectations to present improved future income trends⁷⁸. In the eventuality of not reaching the lower limit of the bonus window, managers also undertake BB in order to make current earnings as low as possible using income-decreasing accruals techniques to improve their future prospects.⁷⁹

Window dressing (WD) does not affect profit of a firm per se; rather its ‘[...] purpose is to make the short-term solvency and liquidity of the business look better than it really was at the end of the year. [...]’⁸⁰ Managers opt for WD during the initial public offerings (IPOs) to project favourable earnings reports for the most interim period ‘[...] to influence the offering price or facilitate the offering. [...]’⁸¹ Many studies also find that corporate social reporting – in which a firm reports its social and environmental performance – as nuances of WD.⁸² Institutional managers may “lock profits” earned throughout the year by switching from risky higher return securities to less risky lower return securities;⁸³ which is known as the January effect⁸⁴ that is attributed to risk-shifting WD.⁸⁵ However, some studies also find strong evidences that reject such motivations behind WD.⁸⁶

Street earnings (SE) – also known as pro-forma earnings, operating earnings, economic earnings, core income, as-if earnings, earnings before bad stuff (EBBS), or ongoing earnings – ‘[...] typically exclude items that are not part of a company’s normal operations and are usually what professional analysts evaluate and forecast. [...] Using discretion, managers] exclude extraordinary items, which is natural, but often [...] exclude other non-recurring items, which is more controversial. [...]’⁸⁷ Firms worldwide are increasingly reporting pro-forma earnings, in stead of GAAP earnings, because by doing so they are able to present better results to the investors many of whom are ignorant about these manipulations, or do not simply care about them as long as they are happy with firms’ ‘look-good-and-feel-good’ earning figures.⁸⁸ Generally, firms with low GAAP earnings try to report SE, whose information-content is low for efficient decision-making.⁸⁹ Managers typically use SE for the over-valuation of company stocks, through attractive earnings numbers for investors,⁹⁰ which is similar to WD.

Thus, all the discussed forms of AM involve some or all of the followings: accruals adjustments, managerial discretion, creative use of the flexibilities provided in accounting standards and guidelines, predictability of performance levels, etc. By having means to manipulate financial data, the pressure ‘to meet your numbers’ seems to be one of the main reasons for the managers to engage in AM.⁹¹ For example,

‘[...] one major U.S. company [...] that failed to meet its so-called “numbers” by one penny [...] lost more than six percent of its stock value in one day.’⁹²

However, these numbers are not just numbers per se. Syntactically, they may be some digits, but the semantics that are embedded in them are far-reaching, because they convey to the market about the short-term performance and long-term potential of a company.

“It is widely accepted that accounting is the *language* of business; it has also been said that the *business* of accounting is language.”⁹³

Through accounting numbers, firms communicate with the market for various reasons; one of which is to attract resources. However, these numbers are crucial not only for the market but also for society because many lives depend on them.

“Numbers in the abstract are just that – numbers. But relying on the numbers in a financial report are livelihoods, interests and ultimately, stories: a single mother who works two jobs so she can save enough to give her kids a good education; a father who labored at the same company for his entire adult life and now just wants to enjoy time with his grandchildren; a young couple who dreams of starting their own business. These are the stories of [...] investors. [...]”⁹⁴

1.2.1. Earnings and Earnings Management, and Their Importance in The Context of Accounting Manipulation

Earnings are considered to be the most vital indicators of accounting numbers;⁹⁵ thus, all types of AM that we have discussed above are concerned with company earnings. This brings us to the field that we are going to zero in on in this dissertation – Earnings Management (EM).

What are earnings?

“[...] E]arnings is a multifaceted concept that embraces many accounting and financial considerations. [...]”⁹⁶ Generally Accepted Accounting Principles (GAAP) define earnings as the net income (or net profit) from continuing operations.⁹⁷ GAAP earnings⁹⁸ are net income⁹⁹ excluding the narrow set of prescribed transactions and/or events that arise out of discontinued operations, extraordinary items that are both unusual in nature and infrequent in occurrence, e.g., events related to natural calamities, and the effects of cumulative changes in accounting practices. However, there are many possibilities to manipulate GAAP earnings, in the name of managing them.

“[...] T]he fact that financial reporting is not an exact science (e.g., Generally Accepted Accounting Principles (GAAP) leave wide areas of discretion), allows managers to make choices in preparing financial reports. While such reports may not violate GAAP, under certain circumstances they may obscure the true condition of the company. Earnings management crosses the line when it is abused to obscure the reality of the company’s situation. [...]”¹⁰⁰

For example, companies in the U.S.A., under current U.S. GAAP rules, are not required to expense the value of employee stock options, an omission (that on many occasions) leads to earnings exaggerations;¹⁰¹ the way pension expenses are treated under the GAPP earnings also provides significant amount of discretions for companies, and hence could lead to GAAP earnings manipulations.¹⁰² One of the latest in such possibilities to tamper with earnings arises out of the ASC 825-10-25.

“While ASC 820 continued in the tradition of incrementally moving towards fair value accounting, ASC 825-10-25 provides a radical leap forward in encouraging voluntary adoption of fair value accounting for financial assets and liabilities within its scope. FASB took a controversial approach by allowing management of qualifying entities, subject to certain limitations, to elect to measure financial assets and liabilities at fair value in the balance sheet and recognize changes in fair value in earnings in the period in which they occur. Management is given an extraordinary amount of discretion in selecting the assets and/or liabilities for which it chooses to make this election. [... According to some FASB board members,] this selective approach would reduce comparability [a vital element of quality of earnings statement] between similar enterprises – and even between different years’ financial statements of the electing enterprise. In addition, the flexibility permitted coupled with early adoption alternatives permitted under the standard provided loopholes that could enable management having questionable motives to financially engineer reported results to avoid recognizing losses on other-than-temporarily impaired investments in current earnings by, in effect, shifting the losses to the transition adjustment to beginning retaining earnings associated with adoption of ASC 825-10-25.”¹⁰³

Thus, reporting by merely complying with the standards does not ensure disclosing true earnings. Although current earnings provide quality earnings reports, their contribution is small towards assessing the value of a firm; which is determined by the present value of future cash payouts (like fair value accounting),¹⁰⁴ usually in the form of dividends, which are generated from future earnings. Changes in current earnings, nevertheless, contain information about future earnings. At the same time, current earnings may contain items like asset write-downs, which are nonrecurring ones, that need to be excluded from reported earnings to give the true value of the firm.

In recent times, in addition to these issues associated with the GAAP earnings, debates surrounding earnings have received even more attention because of Street earnings, through which (public) companies develop and report their own measures while announcing their earnings at different forums, e.g., press releases. They differ from the GAAP earnings because they exclude a variety of nonrecurring, non-cash, and other miscellaneous items. Although GAAP earnings are somewhere within the full reports, the company-defined measures prominently feature in the reports.¹⁰⁵ Here, the main point of contention is whether firms use this practice to exaggerate earnings and mislead investors. Because the omitted items are frequently expenses or other charges against income, which normally exceed GAAP earnings and present a more upbeat representation of a firm’s performance.¹⁰⁶

Thus, as we can see, exclusion of some expenses is on the one hand not totally uncalled for (e.g., expenses in case of asset write-downs), and on the other hand they can also mislead investors (e.g., as in case of Street earnings). Here it is interesting to note that many studies find that excluded expenses, on many occasions, are far from unimportant.¹⁰⁷ They associate higher levels of exclusions with lower future cash flows; and importantly, findings also reveal that investors do not fully appreciate the lower-cash-flow implications at the time of the earnings announcements, suggesting that many investors may be getting misled by the use of Street earnings.

The study by Doyle *et al.* (2003) that examined whether earnings reports exclude items that are truly nonrecurring and thus unimportant for the value of the firm, breaks exclusions into two categories: (a) special or extraordinary items that are nonrecurring but are from a much broader class of events (e.g., restructuring charges, asset write-downs, losses on the sale of assets, etc.), and (b) other exclusions that are

the residual (the difference between total exclusions in the earnings reports and special items). One of their important findings is that when special items and other exclusions are treated separately in the analysis, only other exclusions are statistically associated with lower earnings. This suggests that investors need to carefully examine the nature of each item excluded; the more unclear the excluded item, the more likely its importance for assessing future earnings. On the other hand, some items are unimportant for the value of the firm, and their exclusion is warranted, and under such situations flexibility in the presentation of income components is justified. However, according to them, the distinction between special items and other exclusions is not always obvious. In practice, it is doubtful that any uniform standard could be applied. Although, the FASB issues occasional statements that provide some guidance in this regards, yet, the authors contend that what is truly infrequent or nonrecurring, however, will always be subject to judgment. For example, when firms restructure, they often treat the related severance costs as a special item. Are such costs truly nonrecurring, considering the fact that firms in declining industries may undergo several phases of restructuring?

Earnings management (EM) has become one of the core issues in accounting.¹⁰⁸ “[...] Indeed, “earnings management” has been considered an integral part of every top manager’s job for at least the last two decades. [...]”¹⁰⁹

What is EM?

“[...] Earnings management] is accomplished through managerial discretion over accounting choices and operating cash flows. [...]”¹¹⁰

“[...] Earnings management is] a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process). [...]”¹¹¹

“Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.”¹¹²

“Earnings management is a collection of managerial decisions that result in not reporting the true short-term, value-maximizing earnings as known to management. [...] Earnings management can be [...] Beneficial: it signals long-term value; [...] Pernicious: it conceals short- or long-term value; [...] Neutral: it reveals the short-term true performance. [...] The managed earnings result from taking production/investment actions before earnings are realized, or making accounting choices that affect the earnings numbers and their interpretation after the true earnings are realized.”¹¹³

“There are many ways that accountants and managers can influence the reported accounting results of their organizational units. When such influence is directed at changing the amount of reported earnings, it is known as earnings management. [...]”¹¹⁴

“[...] Earnings management can be defined as any action on the part of management which affects reported income and which provides no true advantage to the organization and may, in fact, in the long-term, be detrimental. [...]”¹¹⁵

“Reported earnings can provide important information about the economic performance of a firm and may serve as a guide to a firm’s value. The usefulness of this information is balanced by the wide scope of managerial judgement inherent in existing accounting rules which govern financial reporting. This provides managers with the opportunity to

present earnings which coincide with their personal interests rather than with those of the firm's various [other] stakeholders, and allows the reporting of corporate performance in ways which may obscure the firm's true economic situation. The fact that users of financial information deem a particular financial reporting measure of importance gives managers one reason to manipulate this variable [...]. Basing managerial compensation on firm performance, measured by accounting variables under the direct control of the very same managers, provide further motivation for manipulation."¹¹⁶

In this way, EM entails accounting practices which aim at: smoothing earnings over the accounting periods, achieving a designated earnings level, revenue growth, optimising operating margins, cash flows from operations, and so forth. As regards to legitimacy, EM activities involve prudent managerial discretions, estimates and judgments, conforming the GAAP. It also involves illegitimate means like: concealing real performance figures, intentionally recognising transactions and other events in non-accounting periods, recording fictitious transactions, etc.

1.3. Literature Review on Earnings Management

Studies concerning EM have been undertaken from different points of view, some of which are:

- (a) Motives/intents behind EM,
- (b) Fraud and EM,
- (c) Techniques used to carry out EM,
- (d) Restrictions to mitigate EM, and
- (e) Critiques on various research works and attempts to improve studies on EM.

1.3.1. Motives/Intents behind Earnings Management

Research on the motives behind EM hovers around 'wealth transfer'¹¹⁷ between firms and their internal and external stakeholders; these studies analyse EM from the collective (organisational) and individual motivations for carrying out EM vis-à-vis the costs (including risks) and benefits that are involved in it. These studies mainly focus upon: incentives, information asymmetry, impression management, social and political costs, and internal motives.

1.3.1.1. Incentives and Earnings Management

There are many studies as regards to stock market incentives, because most of the studies (and the journals in which they have been published) are undertaken in the U.S.A. which is known for high prevalence of public firms with widespread ownership and stock markets.¹¹⁸ This means, investors seek analyst's forecasts about firms, which is one of the main reasons for which managers try to meet or beat analyst forecasts and thereby presenting their respective firms as competitive to reduce the cost of capital. Apart from reducing cost of capital, agency cost also plays an important role in the occurrence of EM because, e.g., firms issue ESOP to their employees in order to keep the agency cost down.

Smith (1992)¹¹⁹ analyses accounting manipulation from the practitioners' perspectives and opines that it as an opportunistic behaviour.

Fudenberg and Tirole (1995)¹²⁰ find that, among others, managers undertake EM for concerns about keeping their jobs.

Watts and Zimmerman (1978) were considered to be the first to analyse managerial opportunism as regards discretionary behaviour against reported earnings that influences contractual outcomes and wealth transfers;¹²¹ similar lines of arguments are taken up by Suh (1990),¹²² Guay *et al.* (1996),¹²³ Christensen *et al.* (1999),¹²⁴ and Bradshaw *et al.* (2001),¹²⁵ among others. Healy (1985)¹²⁶ and McNichols and Wilson (1988)¹²⁷ find bonus plans lead managers to indulge in BB if profits are too low. Gaver *et al.* (1995), while studying the effects of bonus on accounting choices, find no instances of BB; managers inflate profits when they are too low and decrease when too high.¹²⁸ Healy (1985) find managers choose income-decreasing accruals when their bonus plan upper or lower bounds are binding, and income-increasing accruals when they are not binding. Holthausen *et al.* (1995),¹²⁹ reworking on Healy (1985), find, like Healy, managers decrease earnings when their bonuses reach upper bounds; however, they do not find managers to manipulate earnings downwards when earnings are below the minimum necessary for bonus. Findings of McNichols and Wilson (1988) support income decreasing hypothesis as regards EM, but not smoothing hypothesis. Hart and Holmström (1987)¹³⁰, Guidry *et al.* (1999)¹³¹, and Kreps (1990)¹³² view EM as a means to generate higher management compensations.

Matsunaga and Park (2001),¹³³ investigating the effects of missing quarterly earnings benchmarks on the CEOs' annual bonus structures, find that CEO bonus plans provide them with economic incentives to meet quarterly analysts' earnings forecasts and also earnings from the same quarter in the prior year. Bergstresser and Philippon (2006)¹³⁴ find that firms where the CEO compensation is closely linked with the value of firms' stock and option holdings are more likely to use discretionary accruals to manipulate reported earnings. Graham *et al.* (2006), while undertaking survey of CFOs in the U.S.A., find that they, through EM, "[...] sacrifice long-run economic value to deliver shortrun earnings [...]," which is shocking for them.¹³⁵

Dechow and Skinner (2000)¹³⁶ highlight capital market incentives that encourages EM. Cheng and Warfield (2005)¹³⁷ find equity incentives, in the form of stock-based compensation and stock ownership, lead to EM because in such situations manager have more incentives to carry out EM to inflate the value of these shares to be sold in future. Burns and Kedia (2006), while studying CEO compensation contracts, find that "[...]relative to other components of compensation, stock options are associated with stronger incentives to misreport because convexity in CEO wealth introduced by stock options limits the downside risk on detection of the misreporting. [...]"¹³⁸ Ronen *et al.* (2006), analysing the effects of directors' equity incentives on the likelihood of EM, stock prices and firm's value, find that "[...] earnings management distorts the stock price because the market cannot undo the bias in the accounting report. Furthermore, it reduces the firm's value because of its unfavourable effect on the manager's effort. [...]"¹³⁹ Bergstresser and Philippon (2006) provide evidence that the use of discretionary accruals to manipulate reported earnings is more pronounced in firms where CEOs' potential total compensation is more closely tied to the value of stock and option holdings.¹⁴⁰

Kim and Park (2005), studying firms that offer seasoned equities (seasoned equity offerings or SEO)¹⁴¹, find them to be opportunistic and indulge in aggressive accounting decisions by issuing new shares at inflated prices leading to a decrease in the degree of under-pricing.¹⁴²

Baker *et al.* (2003), studying insider trading, find that through downward EM managers decrease earnings in order to inflate the value of stock option grants.¹⁴³ Bartov and Mohanram (2004), find that private information used by senior executives to time abnormally large stock option awards involve EM in order to increase cash payout from these awards, hence suggesting that such stock option awards need to be overseen by the directors.¹⁴⁴

Watts and Zimmerman (1986)¹⁴⁵ find that ex-post managerial discretions are made to increase compensation or to avoid debt covenant violations; using *Positive Accounting Theory* they view managers not only choosing accounting methods to achieve desired accounting numbers that favour them but also burdening the shareholders if such acts are used to solely promoting managers' self interests rather than that of the shareholders'. Healy and Palepu (1990), studying firms' accounting and dividend responses to an increase in the tightness of dividend constraints, opine that "... [a]ccounting-based dividend constraints in lending contracts are imperfect means of mitigating conflicts of interests between stockholders and bondholders since managers have flexibility to make accounting decisions to circumvent the covenants. [... And] accounting-based covenants are effective means for bondholders to restrict firms' dividend policies."¹⁴⁶

Unlike many US studies, Kasanen *et al.* (1996) find strong evidence of earnings management in Finland, where Finnish managers set earnings to satisfy the demand for dividends by keiretsu-like institutional investors and owners with preference for stable dividends.¹⁴⁷

Shuto (2007)¹⁴⁸, studying the relation between discretionary accounting choices and executive compensation in their sample of Japanese firms, find: "[...]the use of discretionary accruals increases executive compensation [... ,] firm managers receiving no bonus adopt income-decreasing accruals and extraordinary items [... ,] negative extraordinary items are strongly associated with no bonus payment [... and there is] association between discretionary accruals and executive bonus varies depending upon the circumstances of the firm. [...]"

Elitzur and Yaari (1995), studying effect of awarding bonus and equity holdings to managers on financial reporting strategy under different degrees of market efficiency in a multi-period setting, find: the choice of compensation scheme by owners tends to affect earnings manipulation and insider trading provides an informative signal about the direction of earnings manipulation.¹⁴⁹

Beneish (1999a)¹⁵⁰, studying consequences of earnings overstatements, finds that managers are more likely to sell their holdings and exercise stock appreciation rights in periods when earnings are overstated.

Schipper (1999)¹⁵¹ views that the values of existing bondholders increase at the expense of new bondholders when earnings are managed.

DeAngelo *et al.* (1994)¹⁵² do not find significant income increasing procedures when he studied to assess potential problems to comply with debt covenant through dividend cuts. DeFond and Jiambalvo (1994)¹⁵³, studying the possibility of a default of the debt covenant, find that EM occurs the year before the default becomes publicly known. Sweeney (1994)¹⁵⁴ find significant manipulations by debt covenants in the event of defaulting.

Dye (1988)¹⁵⁵ find that EM increases remunerations of managers and existing shareholders who want to see the market value of their firm to increase and thereby increasing the possibilities of wealth transfer from new to existing shareholders; this, according to him, creates an external demand for EM.

Pourciau (1993)¹⁵⁶ finds that new CEOs opt for BB in the first and the last years of their tenures.

DeFond and Park (1997)¹⁵⁷ find managers smooth earnings; i.e., managers inflate current earnings when current earnings are lower than expected and future earnings are expected to be higher, and in the opposite case deflate current earnings and carry the adjustments forward to use in the future – for their concern towards job security.

1.3.1.2. Information Asymmetry and Earnings Management

The market is imperfect, so there is information asymmetry between market players. Kyle (1985),¹⁵⁸ Diamond and Verrecchia (1991),¹⁵⁹ and Lambert *et al.* (2008),¹⁶⁰ among others, find as well as predict that more the information asymmetry more will be the cost of capital, i.e., the extent of private information and differences in information across investors affects a firm's cost of capital. Bhattacharya and Spiegel (1991)¹⁶¹ suggest that information asymmetry can lead to losses of transaction and increase the cost of capital as investor protect themselves against potential losses. Many studies have investigated how managers manage earnings in order to convey the inside information about firms' prospects and happenings to outsiders (e.g., shareholders) by opportunistically taking advantage out of information asymmetry and/or genuinely trying to mitigate it. The findings, however, are mixed.

As regards to smoothing, Ball and Watts (1972)¹⁶² sees efficiency of markets as important; Gonedes (1972)¹⁶³ challenges this postulation.

Holthausen and Leftwich (1983),¹⁶⁴ while reviewing research into the economic consequences of voluntary and mandatory choices of accounting techniques and standards, opine that managerial discretion in accounting choice helps in easing information asymmetry to some extent. Suh (1990)¹⁶⁵ views smoothing as attempts to fool the shareholders and investors. Subramanyam (1996)¹⁶⁶, examining if the stock market prices discretionary accruals, finds that discretionary accruals are associated with several performance measures, and concludes that managers' accrual choices increase the informativeness of accounting earnings. Tucker and Zarowin (2006)¹⁶⁷, undertaking an empirical study on EM as an opportunistic managerial disposition or a means of improving informativeness of financial reports, find that “[...] an important effect of managers' use of financial reporting discretion is to reveal more information

about firms' future earnings and cash flows. [...]” Jiraporn *et al.* (2008),¹⁶⁸ investing whether EM is beneficial too because it enhances informative value of earnings by conveying private information to the stockholders and the public, opine that EM, by and large, is “[...] not detrimental.”

Dye (1988)¹⁶⁹ finds that managers taking advantage of information asymmetry with the shareholders while managing earnings; Scott (1997)¹⁷⁰ supports this claim.

Breton and Taffler (1995)¹⁷¹ find that analysts' perception towards creative accounting is deficient and experienced analysts pay more attention to firms' earnings during boom years; importantly, they come up with the “mechanistic or naïve investor hypothesis,” according to which individual stakeholders face difficulties to discern accounting manipulation activities due to their limited skills in these matters and are unwilling or indifferent to engage in detailed analyses to understand them.

As regards to seasoned equity offerings (SEO), there are many studies on EM that have been carried out to mitigate information asymmetry levels. Shivakumar (2000)¹⁷² finds instances of EM around such offerings and opines that issuers' EM activities may not be designed to mislead investors, but may merely reflect the issuers' rational response to anticipated market behaviour at offering announcements. Jo and Kim (2007), while studying disclosure frequency for a sample of SEOs, find: “[...] disclosure frequency is inversely related to earnings management and positively associated with post-issue performance [...], transparency-reducing disclosure is concentrated in firms that substantially, but temporarily, increase disclosure prior to the offering [...] which] exhibit more earnings management and poorer post-SEO stock performance, on average.”¹⁷³ Teoh *et al.* (1998a),¹⁷⁴ while studying SEOs, find that seasoned equity issuers who raise reported earnings by altering discretionary accounting accruals prior to the offering have lower post-issue long-run abnormal stock returns and net income. Yoon and Miller (2002),¹⁷⁵ while studying SEOs and managers indulgence in EM in the year before a planned issue of such offerings in the Korean context, find EM for negative operating cash flow firms.

Aharony *et al.* (1993)¹⁷⁶ do not find evidence of manipulation through the accruals, while studying EM during IPO. Friedlan (1994)¹⁷⁷ find instances of income increasing just before the IPO. Neill *et al.* (1995),¹⁷⁸ while studying EM in the context of IPO, find that there is a relationship between the size of the proceeds and the liberality of accounting policies. Teoh *et al.* (1998b)¹⁷⁹ find positive evidence of EM immediately after the IPO issuing because of, among other things, information asymmetry; they also find managers have more discretion over short term than over long term accruals. DuCharme *et al.* (2001)¹⁸⁰ find that firms engaged heavily in EM in the year of IPO, according to them, “[...] accruals not only reflect the choice of accounting methods but also the effect of recognition timing for revenues and expenses, asset write-downs, and changes in accounting estimates. [...]” Ball and Shivakumar (2008) are of the view that “[...] contrary to popular belief, initial public offering (IPO) firms report more conservatively [...]” that is possible because of higher quality reporting demanded by information users and instances of higher monitoring by auditors, boards, analysts, rating agencies, press, litigants, and to greater regulatory scrutiny,¹⁸¹ in doing so, they question particularly the findings by Teoh *et al.* (1998b)¹⁸² that view inflated earnings by managers to influence IPO pricing.

Hribar *et al.* (2006)¹⁸³ find strong evidence that firms engage in repurchasing stocks¹⁸⁴ to avoid missing analysts' forecasts, which managers undertake as a part of EPS management endeavours whereby they try to reduce some of the negative stock price response. Bens *et al.* (2003),¹⁸⁵ investigating whether corporate executives' stock repurchase decisions are affected by their incentives to manage diluted earning per share (EPS), find that managers use stock repurchases as an EM tool when earnings are below the level required to achieve the desired growth of EPS; the findings of their study, however, are challenged by Larcker (2003)¹⁸⁶ who argues, among other things, that managers are usually extremely myopic and hence ill-equipped to take into consideration many facets that would lead to the desired EPS growth targets.

McAnally *et al.* (2007)¹⁸⁷ find that option grants¹⁸⁸ may encourage some managers, in stead of meeting and/or beating targets, to miss earnings targets (including reported losses, earnings declines and missed analysts' forecasts) so as to engineer stock-price drops, buy such undervalued-stocks, and maximise their stock option incentives.

Dechow and Sloan (1991)¹⁸⁹ find positive evidence of income increasing accounting choices during investigations.

Vafeas *et al.* (2003),¹⁹⁰ studying EM preceding self-tender¹⁹¹ offers for a sample of U.S. firms, find weak evidence as regards to earnings decreases by managers through accruals prior to share repurchases.

Perry and Williams (1994),¹⁹² examining managers' conflicting duties and incentives during management buyouts¹⁹³, find in their sample of management buyouts that managers trim down reported earnings through discretionary accruals in the year before the public announcement of management's intention to buyouts.

Rosner (2003)¹⁹⁴, while examining if failing firms try to alter their financial standings and if auditors detect earnings overstatements undertaken by such firms, find instances of EM with the primary intent to conceal information.

Louis and Robinson (2005),¹⁹⁵ investigating whether managers' discretions to mislead investors and treating them as opportunistic versus EM as an optimal means to communicating managers' optimism about the firm to the market, find that "at the [stock] split¹⁹⁶ announcement, the market construes the pre-split abnormal accrual as a signal of managerial optimism rather than managerial opportunism," and thus can be treated as effective ways of communicating private information.

Shane and Stock (2006),¹⁹⁷ studying analysts' reactions to shifts in earnings for optimal tax planning by firms, find that analysts fail to consider such income-shifts when forecasting future earnings and when such acts are only seen as yet another instance of EM then these firms could be penalised for their tax planning strategies.

Bartov *et al.* (2002)¹⁹⁸ find that firms that meet or beat analysts' current earnings expectations, which is considered as a leading indicator of future performance, enjoy a higher return over the quarter than firms that fail to meet them;

they, however, are of the view that such higher returns remain approximately the same whether earnings figures are attained genuinely or through manipulations, thereby exposing that markets are inefficient.

Schrand and Walther (2000),¹⁹⁹ while studying managers' behaviour in being selective in reporting prior period earnings that have evaluative powers for current period earnings; find that managers, especially in regards the earnings from the sale of plant, property and equipments, are more likely to separately report a prior period gains from such transactions than losses in order to prominently highlight them; according to these authors, such highlighting are done because managers think that "[...] the nonrecurring nature of the prior-period gain/loss will be forgotten unless it is separately announced [...]."

DuCharme *et al.* (2004)²⁰⁰ find that managers artificially inflate earnings prior to stock offers in order to maximise the net benefit of a stock offering to existing shareholders at the expense of new shareholders.

Park and Park (2004)²⁰¹, while examining managers' insider transactions, find: higher current discretionary accruals and increased current-period earnings for firms whose managers sell their ownership in the subsequent period than for other firms (indicating these managers through discretionary accruals would deliberately adjust discretionary accruals to increase current-period earnings before they sell their own firms' shares in the subsequent period; notwithstanding the argument that managers may have adopted passive and opportunistic strategies by trading their shares after higher earnings are reported regardless of EM) and such firms witness post-transaction stock underperformance validating such adjustments to discretionary accruals.

Hand (1989)²⁰² observes that smoothing is done with respect to market expectations and as a matter of fact enhances the value-relevance of earnings if done to mitigate the effects of transitory cash flows and adjust reported earnings towards a more stable trend.

Bradshaw *et al.* (2001)²⁰³ give evidence that analysts and auditors do not alert investors to future earnings problems associated with high accruals.

Christensen *et al.* (1999)²⁰⁴ argue that ex ante motivations for EM decrease the informativeness of earnings.

Despite the fact that in theory smoothing has beneficial attributes, e.g., analysts welcome smoothing because they need not normalise effectively smoothed earnings in their valuation studies, Beidleman (1973)²⁰⁵ opines that "[... i]t remains incumbent on users of reported earnings to determine the extent of normalization by management in assessing the quality of a firm's reported figures."

1.3.1.3. Social and Political Costs and Earnings Management

There are studies done on how managers try to minimise social and political costs through selective financial reporting, especially to counter interferences by government through regulations and tax laws.

Watts and Zimmerman (1978)²⁰⁶, Holthausen and Leftwich (1983)²⁰⁷, Lim and Matolcsy (1999)²⁰⁸, Monem (2003)²⁰⁹, among others find firms are more likely to choose income-decreasing manipulation to reduce political costs because favourable accounting figures may attract regulatory interventions. Monem (2003) argues that managers look for tax avoidance through EM to misinform government when accounting numbers are the bases for tax calculation.²¹⁰ Haw *et al.* (2005),²¹¹ studying EM in China, find that managers indulge in income-increasing techniques in response to the 1996-98 security regulations in China that demands the accounting rate of return on equity (ROE) has to be greater than 10 per cent for three consecutive years for a firm to qualify for stock rights offers.

Visvanathan (1998)²¹² finds that firms manage earnings to minimise income tax.

Liberty and Zimmerman (1986)²¹³, examining if managers decrease reported earnings before and after labour union contract negotiations, find no evidence of lower than expected earnings during negotiations.

Johnston and Rock (2005)²¹⁴, while investigating if firms identified as potentially responsible parties (PRPs) under the Comprehensive Environmental Response, Compensation, and Liability (or Superfund) Act²¹⁵ manipulate earnings to minimise their exposure to Superfund clean-up and transaction costs, find robust evidence that PRPs in their sample of firms used income-reducing discretionary accruals during PRP identification years in an attempt to minimize these costs. Patten and Trompeter (2003), while investigating pre-event environmental disclosure and the extent of EM in response to regulatory threat by studying US chemical firms in the context of the 1984 chemical leak at Union Carbide's Bhopal (India) plant, find significant negative discretionary accruals for 1984 by these firms, and hence argue that "[...] corporate management believes environmental disclosure is an effective tool for reducing exposure to potential [political] regulatory costs and that decisions to manipulate earnings are tied to a larger corporate strategy for dealing with political pressures."²¹⁶ Magnan *et al.* (1999)²¹⁷, studying EM as regards to Canadian firms participating as plaintiffs in antidumping investigations, find evidence that managers of such firms reduce earnings to obtain favourable ruling from the tribunal.

D'Souza *et al.* (2000),²¹⁸ while investigating the determinants of discretionary SFAS No. 106²¹⁹ choices of non-regulated firms in the U.S.A., find that more unionised firms are more likely to adopt this standard with incentives to manage future earnings and reduce labour renegotiation costs.

Han and Wang (1998)²²⁰, while studying EM being used to decrease political visibility, find that oil companies used income decreasing procedures during the Gulf War; especially, oil firms that expected to profit from the 1990 Gulf War used accruals to reduce their reported quarterly earnings, thereby easing the political restriction on sudden price increase of petroleum products.

Jones (1991)²²¹, testing whether firms benefiting from import relief (e.g., tariff increases) indulge in income-decreasing accruals during import relief investigations by U.S. International Trade Commission, opines that managers do so to increase the likelihood of getting import relief and/or increase the amount of relief granted.

Balsam *et al.* (2003),²²² while investigating whether footnote disclosures under Statement of Financial Accounting Standards (SFAS) No. 123 are managed in 1996 (the first year that the disclosure was required), find that when expenses are disclosed instead of recognised, firms seem to manage these expenses when their CEOs' compensations and values of stock option grants are relatively higher in order to reduce public criticism about such compensation practices; this is possible because companies can manage pro-forma stock option expenses under SFAS No. 123 that gives options to firms to expense the estimated fair value of employee stock options.

Trueman (1990)²²³ in the context of managerial motivations for delaying bad news, reasons: extra time is required to undo the bad news through accruals manipulation, management might deliberately delay bad news until other industry-wide bad news are released thereby trying to justify the potential reputation and litigation costs, and firms that delay such news related announcements have high degree of political pressure.

Using game theory to model EM, Bagnoli and Watts (2000) find that '[... i]f aspects of a firm's financial well-being depend on how it compares to similar firms, then firms may wish to manage their earnings in order to reap comparison benefits [...];' in other words, they show that in game theoretic models EM relatively easily emerges and firms engage in EM because they expect their rivals to do so.²²⁴

Fern *et al.* (1994)²²⁵ are of the view that management artificially manages earnings to achieve some 'expected earnings,' e.g., analysts' forecasts, minimise debt covenant violations, etc.

1.3.1.4. Impression/Reputation/Relationship Management and Earnings Management

As we have already discussed that accounting presents the inside story of an organisation to its stakeholders, in order to mainly attract resources. In this regards, healthy-looking accounting reports are vital to create favourable impression and/or reputation, thereby enhancing their social statuses and credibility, putting forth their competitive advantage against their competitors, drawing analysts' attention and favourable comments, reducing cost of capital, influencing favourable credit terms with suppliers, etc. There are studies that look into issues pertaining to both personal and organisational impression/reputation/relationship management as motivations to carry out EM practices.

Degeorge *et al.* (1999),²²⁶ studying EM through empirical explorations in regards to three thresholds: reported positive profits, sustained recent performance, and meeting analysts' expectations in order to influence investors' perception about the firm; find that to report positive profits threshold is the predominant factor for

EM, among other things, to build impression; they, however, argue that the future performance of firms suspect for boosting earnings across these threshold is poorer.

Payne and Robb (2000) are of the view that the more the analysts agree on their predictions about a firm, incentives for managers to meet such consensus-oriented forecast become stronger; if actual earnings are below the forecast, managers use income-increasing measures, and they are higher than the forecast, managers can either choose to employ income-decreasing measures or not to manage earnings (hoping for an increase in stock return).²²⁷ A study based on survey and interview undertaken by Graham *et al.* (2005),²²⁸ among executives to determine the factors that drive reported earnings and disclosure decisions, find that “[...] managers would rather take economic actions that could have negative long-term consequences than make within-GAAP accounting choices to manage earnings. [...]” thus, they are of the view that managers believe: that earnings are important to external stakeholders and that meeting or beating analysts’ expectations as well as prior period earnings are important to build credibility in capital markets and uphold stock price and they do not agree that compensation motivation hypothesis is a reason behind EM.

EM in the context of debt covenants²²⁹ has been taken up by McNichols and Wilson (1988)²³⁰, Press and Weintrop (1990)²³¹, Beneish and Press (1993)²³², Hall (1994)²³³, DeFond and Jiambalvo (1994)²³⁴, Sweeney (1994)²³⁵ and DeAngelo *et al.* (1994)²³⁶; they find, among other factors, managers exercise accounting discretions to avoid debt covenant violations through AM.

Kaszniak (1999)²³⁷ examining whether managers try to achieve projected earnings to avoid shareholder action and loss of reputation for accuracy, finds managers adopt positive discretionary accruals to raise reported earnings when they are likely to fall below the company’s earnings forecasts.

Godfrey *et al.* (2003)²³⁸, studying EM as well as the presentational format of graphs (impression management) in the financial reports of a sample of Australian listed public companies that changed CEOs, suggest that an incoming CEO may be interested in downwards EM in his first year of tenure (and some limited evidence of unfavourable impression management of the key financial variables graphed) and upwards earnings management in the following years (with some evidence of favourable impression management); such “[...] results are strongest for the subsample in which the CEO change was prompted by a resignation rather than a retirement.” Reitenga and Tearny (2003)²³⁹ argue that outgoing and retiring CEOs may be interested in upwards EM to leave a mark of their legacy and/or keep their board membership.

Raman and Shahrur (2008),²⁴⁰ studying EM vis-à-vis firms’ relationships with suppliers and customers, find: industry-level proxies for relationship-specific investments by suppliers/customers are positively associated with the magnitude of discretionary accruals, volatility of earnings, and the frequency of large earnings increases; firm-level proxies for the intensity of relationship-specific investments by actual suppliers are positively related to the magnitude of discretionary accruals; EM in one period is positively related to the magnitude of R&D investments by suppliers and customers in the next period; EM adversely affects the duration of customer-

supplier relationships; implying EM is used opportunistically to influence the perception of suppliers/customers about the firm's prospects.

Burgstahler and Dichev (1997) find strong evidence of EM when earnings decline or are negative; managers use cash flow from operations and changes in working capital to achieve increases in earnings.²⁴¹

Kellog and Kellog (1991)²⁴² find two motivations for EM: to encourage investors to buy firm's stocks and to enhance firm's market value.

Godfrey and Jones (1999)²⁴³ consider EM as a means to achieve improved relations with creditors, employees and investors.

Marnet (2008) succinctly puts loss of reputation as a factor behind EM in the following way: "[... N]either fraud, [fraudulent] intent nor inadequate accounting rules are necessary requirements, at least not initially for producing unreliable financial reports. The fear of a loss of self-esteem and social recognition (status quo), for example, can have a pervasive and distorting influence on cognition and judgement of agents in corporate governance and may result in biased reporting. Risk-seeking behaviour, say in the form of revenue estimates which are unlikely to be met, is more commonplace when a person perceives the possibility of a loss (Kahneman and Tversky, 1979)."²⁴⁴

1.3.1.5 Motives Concerning Internal Aspects of a Firm and Earnings Management

There are also motivations for carrying out EM that are aimed at firms' internal stakeholders like competing managers in multi-divisional firms, who try to meet performance standards in order to attract: recognition, resources (from the HO), to name a few.

Bauman *et al.* (2001),²⁴⁵ while studying EM in relation to the discretionary adjustments associated with the valuation allowance for deferred tax assets, find little evidence that managers practise EM in such situations.

Leone and Rock (2002),²⁴⁶ while investigating accruals of various business units of an MNC, find that managers choose income-decreasing unexpected accruals when the earnings innovations are transitory under the 'ratchet effect'²⁴⁷.

Murphy (2001),²⁴⁸ while investigating the relationship between the nature of performance standards in incentive contracts and earnings smoothing, find that firms that use externally determined standards (those are relatively unaffected by participants, e.g., peer group standards, fixed standards, cost of capital, etc.) are less likely to smooth earnings than those that use internal standards (e.g., budget goals, prior year figures, subjective standards, etc.).

Bar-Gill and Bebchuk (2009),²⁴⁹ while developing a model of causes and consequences of (both legally and illegally) misreporting corporate performance, show "[...] that even managers who cannot sell their shares in the short-term might misreport in order to improve the terms under which their company would be able to

raise capital for new projects or acquisitions [... ; furthermore they claim that their] analysis provides many testable predictions concerning the times, industries, and types of firms where misreporting is likely to occur. The analysis also has implications for corporate governance and executive compensation.”

McNichols and Stubben (2008),²⁵⁰ examining EM in the context of suboptimal (fixed asset) investment decisions by public companies with high and discretionary accruals, find that earnings manipulating firms (that are investigated by the U.S. SEC for accounting irregularities, sued by their shareholders for improper accounting, and restated financial statements) over-invest substantially during the misreporting period and no longer over-invest following the misreporting period; thereby suggesting that EM, in addition to targeting external stakeholders, can also influence internal decisions.

Copeland and Wojdak (1969)²⁵¹ find strong support for accounting for merger to maximise future income through pooling method to maximise income.

Erickson and Wang (1999)²⁵² find that acquiring firms manage earnings upward ahead of the merger agreement; the size of the merger positively influences the degree of income increasing activities.

Louis (2004),²⁵³ while analysing post-merger underperformance of acquiring firms, finds: overstating of earnings by acquiring firms in the quarter preceding a “stock swap announcement” and post-merger underperformance of acquiring firms (attributed to the reversal of the price effects of EM).

Wu (1997),²⁵⁴ while studying management buyout cases, find that managers manipulate earnings downwards prior to management buy-outs that has significant potential monetary benefits for these firms from these earnings manipulations; the findings of this research design also held good when applied to DeAngelo’s (1986) sample.

Healy (1985)²⁵⁵ finds greater instances of voluntary changes in accounting procedures in years following the adoption or modification of a bonus plan.

Furthering the debate between the contradictory finding by Gosman (1974), and Cushing and Deakin (1974), Bremser (1975)²⁵⁶ find weak support for profit maximisation through the use of accounting change for EM.

Fields *et al.* (2001)²⁵⁷, reviewing accounting choice research articles, succinctly put forth: “[...] Although not all accounting choices²⁵⁸ involve earnings management, and the term earnings management extends beyond accounting choice, the implications of accounting choice to achieve a goal are consistent with the idea of earnings management.”

Managers’ behaviour of obscuring the real performance through EM may create agency costs like costs to undo the managed earnings, to resolve misallocations of resources, or to seek for other information, e.g., appointing audit committees to reduce agency costs and to resolve problems arising from information asymmetry and

thereby mitigating the shareholders' concerns as regards their non-optimal decision-making. (see: Xie *et al.*, 2003²⁵⁹).

1.3.2. Fraud and Earnings Management

In most countries, GAAP allow certain degrees of interpretations of its guidelines. This, according to Dechow and Skinner (2000), when followed in reporting, could be erroneous but never fraudulent. Thus, they treat fraud as violation of GAAP. Although the interpretation of fraud is wide-ranging,²⁶⁰ according to NCFR²⁶¹ (1987), fraud is an act that results on accounts of “[...] materially misleading financial statements [...]”²⁶² Manipulation per se may or may not be fraud; rather may be an interpretation (of standards). Nevertheless, illegal acts are instances of fraud.

Some of the EM practices that fall within GAAP are: (a) choice of accounting methods (like, straight line versus reducing balancing depreciation, LIFO versus FIFO valuation of inventory, interpreting consignment sales as ordinary sales, deciding on the useful life of fixed assets), (b) accruals estimation (e.g., understate and/or overstate provisions), (c) real transactions (like, overproductions; timing the R&D expenditures, SG&A, maintenance expenditures; timing of assets disposals). Some examples of EM that are considered to violate GAAP and hence fraudulent are: recording fictitious sales, early recognition of sales, backdating sales invoices, recording fictitious inventory, fabricating false invoices to boost sales figures etc.

Merchant (1987)²⁶³ argues fraud as acts that falsify or alter documents, deleting transactions from records, recording forged transactions or concealing significant information; including accounts manipulations that are related to the interpretation of accounting standards, e.g., the GAAP.

Brown (1999)²⁶⁴, examining meeting and/or beating analysts' forecasts through earnings management for both profits and losses, find greater frequency of profits that either meet or beat analysts' estimates especially by managers of growth firms (rather than those of value firms) and managers report losses if they are too large; importantly, he is of the opinion that EM often is very close to fraud.

Stolowy and Breton (2004)²⁶⁵ are of the view that what is fraud and what is not is still an evolving issue. According to them, since the 4th European Directives was adopted in 1978, if compliance with GAAP does not provide a true and fair view of the financial situation of the firm, the managers must use principles taken from outside GAAP; in such a case, violation of GAAP is no longer fraudulent.

1.3.3. Techniques Used to Detect Earnings Management

Majority of studies uses aggregate accruals to detect EM. They mostly use the Jones (1991) model to: estimate expected accruals, compare those with actual accruals and use the difference as a proxy for detecting earnings management. Nevertheless, there are also other studies using: specific accruals, cost allocation or cost shifting, disclosures and 'real action' to detect EM; the first three refer to altering financial data and the last refers to the (re)structuring transactions in order to increase/decrease reported earnings.

1.3.3.1. Detecting Earnings Management Using Aggregate or Total Accruals

Total accruals from the estimation period to proxy for non discretionary accruals in the event period have been used by Healy (1985)²⁶⁶ and DeAngelo (1986)²⁶⁷ to model frameworks to detect EM. Such research design considers the assumptions that all changes in accruals in the event period are discretionary, non-discretionary accruals remain constant over time; this, erroneously, could say that the firm under study is not managing earnings. For example, Kaplan (1985)²⁶⁸ has commented if a firm is growing then the non-discretionary accruals will be larger, thus they should vary in response to changes in economic conditions due to the nature of the accruals accounting process. However, both models indicate that discretionary accruals to increase. Notably, Healy (1985) is of the view that there could be “[...] errors in measuring [total] discretionary accruals [under various circumstances],”²⁶⁹

The Jones (1991)²⁷⁰ model is based on works by Healy (1985) and DeAngelo (1986). It uses the change in total accruals from a reporting period to proxy for expected non-discretionary accruals in that period. A couple of salient features of this model are: (a) it relaxes the assumption that non-discretionary accruals remain constant over time and, (b) attempts to control for the effect of changes in a firm’s economic circumstances on nondiscretionary accruals.

The Industry Model created by Dechow and Sloan (1991)²⁷¹ is similar to the Jones Model, i.e., it relaxes the assumption that non-discretionary accruals are constant over time. It, however, assumes that variations in the determinants of nondiscretionary accruals are common across firms in the same industry, in stead of attempting to directly model the determinants of nondiscretionary accruals.

Dechow *et al.* (1995) attempt some modifications to the original Jones model with the intention that some discretionary accruals are measured as non-discretionary accruals when part of the revenue also are managed (e.g., managers could accrue revenue that is in fact not yet earned and not yet received in cash, which would lead to a change in revenue, but also to a change in receivables).

1.3.3.2. Detecting Earnings Management through Specific Accruals

Studies that try to detect EM by using specific accruals are frequently linked to specific contexts, specific industries, specific accounting standards, etc. In these studies, researchers focus on specific accruals that are likely to be managed using accounting flexibility to report desired earnings levels.

Marquardt and Wiedman (2004),²⁷² examining specific accruals used to manage earnings by taking into consideration three contexts: equity offerings, management buyouts, and firms avoiding earnings decreases; and find that firms issuing equity appear to prefer managing earnings upward by accelerating revenue recognition and these receivables are unexpectedly high, unexpected accounts receivable to be negative in cases of management buyout context, and likelihood of firms to be less concerned with earnings persistence and therefore more likely to use more transitory and less costly items to avoid earnings decreases.

Dhaliwal *et al.* (2004),²⁷³ investigating whether tax expense is a relevant context to study EM considering the fact that it is one of the last accounts closed prior to earnings announcements, find substantial evidence that firms use reported taxes to manage earnings if managing non-tax sources are insufficient to achieve targets.

Moehrle (2002),²⁷⁴ studying firms' restructuring charges²⁷⁵ as a source of EM, finds evidences that firms reverse parts of restructuring charges in a latter financial quarter in order to increase net income when such reversals help in beating analysts' forecast and avoiding reporting losses.

Gray and Clarke (2004),²⁷⁶ studying EM in the context of disturbances in the financial markets leading to bank loan losses, argue that Allowance for Lease and Loan Losses²⁷⁷ could be potentially used to manage earnings. Schrand and Wong (2003),²⁷⁸ investigating whether firms use the provisions in the SFAS 109²⁷⁹ to value deferred tax assets²⁸⁰ and hence build hidden reserves to manage earnings in the banking industry, find that banks do not use valuation allowance to manage earnings but use the provisions in the SFAS 109 to do so; however, they add, well capitalised banks adopt earnings smoothing through valuation allowances, which are capable of to absorbing the current-period impact on capital.

Beaver *et al.* (2003)²⁸¹ illustrate that property-casualty insurers with small positive earnings understate the loss reserve²⁸² (to beat the target) relative to insurers with small negative earnings because estimating loss reserve requires significant managerial judgments; moreover, they point out, loss reserves are managed across the entire distribution of earnings.

Ramanna (2008)²⁸³, studying the evolution of SFAS 142²⁸⁴ in the context of EM, opine that unverifiable fair-value estimates to account for acquired goodwill could be used opportunistically. This is consistent with: (a) the caveats raised by Watts (2003)²⁸⁵ that "[... FASB attempts to ban] conservatism will change managerial behavior [and lead it towards opportunism] and impose significant costs on investors and the economy in general [...];" (b) the findings of Ramanna and Watts (2008)²⁸⁶ that managers could exploit unverifiable fair-value based discretion provided in SFAS 142 to avoid timely goodwill write-offs in circumstances where they have agency-based motives to do so; (c) Beatty and Weber (2006)²⁸⁷ that managers could use them to manage earnings to influence equity markets; among others. Furthermore, Dietrich *et al.* (2001), studying fair value estimates by UK property firms, find firms that employ external appraisers, produce less biased reports that are more accurate than those who employ internal appraisers. Dietrich *et al.* (2000),²⁸⁸ investigating the reliability of mandatory annual 'fair value estimates'²⁸⁹ for UK investment property, find that managers select among permissible accounting methods to report higher earnings, time asset sales to smooth reported earnings changes, smooth reported net asset changes and boost fair values prior to raising new debt.

Picconi (2006)²⁹⁰, investigating the ability of analysts and investors to fully incorporate the information contained in pension footnotes, under the purview of the FASB Exposure Draft 1025-200,²⁹¹ finds that the Draft addresses problems of information availability, but does not address the information assimilation (another potentially important issue in pension accounting) that hinders both analysts and investors to efficiently incorporate pension information that is already publicly

available, into their forecasts and/or firm valuation; thereby suggesting that mandated increases in information disclosure does not necessarily lead to the absence of EM.

1.3.3.3. Detecting Earnings Management through Cost Allocation and/or Cost Shifting

There are studies concerning if managers indulge in EM activities while shifting costs (i.e., either one group underpays for a service resulting another group overpaying for it or one group pays a smaller share of costs than before resulting in another group paying a larger share of costs than before) or cost allocation (i.e., attributing different costs to their respective cost centres).

Jones and Roberts (2006)²⁹², investigating the use of direct mailings and similar activities by not-for-profit organisations (NPOs) which combine public education efforts with fundraising appeals to allocate the joint costs related to these activities to their programmes, find that NPOs do use joint costs (i.e., shifting costs from one account to another) to mitigate changes in the programme spending ratio (PSR)²⁹³. Roberts (2005)²⁹⁴ does not find evidence as regards stricter regulations (with respect to how and when charities can allocate joint costs, thereby facilitating more funds towards charitable initiatives) decrease PSRs. Trussel (2003)²⁹⁵, while studying the patterns of PSR of a sample of NPOs, has designed a model which can predict with reasonable accuracy whether or not a charity is a potential accounting manipulator.

While investigating if firms shift expenses from 'core expenses' to 'special items' by evaluating extraordinary and exceptional items (EI) in a sample of firms in Hong Kong, Jaggi and Baydoun (2001)²⁹⁶ find that if market expectations were higher than profit before EI and taxes (PBEI) managers adjust PBEI upwards and reduce the gap between reported and expected profits; additionally, if firms had low historical economic performance they were more likely to disclose negative EI. McVay (2006)²⁹⁷, investigating EM in the context of classification of items within income statements in a sample firms in the U.S.A., finds evidence that managers opportunistically shift expenses from core expenses²⁹⁸ to special items that does not change bottom-line earnings, rather overstates core earnings; moreover, she claim that managers do so to meet the analyst forecast earnings benchmark because investors oftentimes are mainly concerned with core financial data and special items tend to be excluded from both pro-forma and analyst earnings definitions.

Beatty and Harris (2001)²⁹⁹, examining realisation of securities gains and losses by banks regarding their subsidiaries, find evidence that banks do use the realisation of securities gains and losses to manage their subsidiaries' earnings and that they also use these figures to manage the earnings of their group. Krull (2004)³⁰⁰, studying delays in transactions in financial statement recognition of U.S. taxes on repatriations by designating foreign subsidiary earnings as permanently reinvested under APB Opinion No. 23 by firms, finds that firms use permanently reinvested earnings to manage earnings with respect to the differences between analyst forecasts and pre-managed earnings, thereby realising investment and tax incentives to reinvest abroad.

1.3.3.4. Detecting Earnings Management through Disclosures

While studying the association between corporate (voluntary) disclosure and managerial discretion over accounting choices, studies have detected instances of EM.

Kasznik and Lev (1995)³⁰¹, analysing firms' disclosures prior to earnings surprises, find that sizeable number of firms do not disclose such news.

Kasznik (1999)³⁰², studying whether managers indulge in EM to mitigate costs associated with management earnings forecast errors, find that managers use discretionary accruals to reduce such errors to get rid of costly legal actions by shareholders; they go on to add that the degrees of accounting discretion affect corporate voluntary disclosure policies.

Balsam *et al.* (2003)³⁰³ find that companies manage pro-forma stock option expenses under SFAS 123 that gives options to firms to expense the estimated fair value of employee stock options. According to them, before 2002, almost none of them indulged in such practices, but instead chose to report the Pro-forma impact of stock option grants in footnotes.

Schrand and Walther (2000)³⁰⁴ while studying managerial discretion in strategically selecting the prior-period earnings amount used as a benchmark to evaluate current-period earnings in quarterly earnings announcements, find managers are more likely to separately announce a prior-period gain from the sale of property, plant and equipment than a loss when it could avoid reporting negative earnings surprises.

Baginski *et al.* (2002)³⁰⁵, studying the association between management earnings forecast disclosures and legal environment in the context of the U.S.A. and Canada, with similar business environments but different legal regimes, find that Canadian firms exhibit greater frequency of Management earnings forecast disclosures than their American counterparts; in the Canadian scenario, consistent with its less litigious environment, managers issue more precise and longer-term oriented forecasts.

Jo and Kim (2007)³⁰⁶, examining the relation between disclosure frequency and EM and its impact on post-issue performance for a sample of seasoned equity offerings, find that disclosure frequency is inversely related to EM and positively associated with post-issue performance. They also find that transparency-reducing disclosure is concentrated in firms that substantially, but temporarily, increase disclosure prior to the offering, and they exhibit more instances of EM and poorer post-SEO stock performance, on average.

Rogers and Buskirk (2009)³⁰⁷, examining changes in the disclosure behaviour of a sample of firms involved in litigations related to disclosure, find no evidence as regards firms which respond to litigations by increasing or improving their disclosures to investors; rather they reduce the level of information provided in the post-litigation phase; i.e., “[...] the litigation process encourages firms to decrease the provision of disclosures for which they may later be held accountable, despite the increased protections afforded by the Private Securities Litigation Reform Act of 1995.”

Hope *et al.* (2009)³⁰⁸, investigating a sample of multinational firms, find that there is a decrease in the event period private information following adoption of SFAS No. 131³⁰⁹, find that firms do not disclose geographic earnings from foreign operations; which, in turn, as they suggest, reduces public trading because of the decrease in public information about the non-disclosure of geographic earnings.

Iatridis and Kadorinis (2009)³¹⁰ find that firms providing voluntary accounting disclosures appear to be less inclined to make use of EM.

1.3.3.5. Detecting Earnings Management through Studying Real Activities

There are studies on EM examining real activities manipulations in order to achieve desired levels of financial numbers. “[...] Real activities manipulation is defined as management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain [earnings] thresholds [...]”³¹¹ Such activities include price cuts and discounts, just-in-time adoption, R&D budget cuts, (re)structuring transactions to avoid the application of certain accounting standards to those transactions, etc.

Roychowdhury (2006)³¹² find that managers manipulate organisational activities (especially, increasing sales through price discounts, overproducing to lower cost of goods sold, reducing discretionary spending thereby improving margins, etc.) to avoid reporting losses and meet annual analyst forecasts to some extent; however, in the presence of sophisticated investors such practices are less employed.

Bartov (1993)³¹³, studying EM from specific items manipulation and income recognition from disposals, finds that highly geared³¹⁴ (aggressive borrowing) and low income firms report higher revenues from asset sales.

Kinney and Wempe (2004)³¹⁵, examining the association of the adoption JIT with EM, find that adoptions are influenced by the interaction of firms’ LIFO reserves with their income smoothing, debt covenant and tax incentives activities; they also find that adoption of JIT is less likely for firms that historically engage in high instances of EM, particularly when such firms have no substantial LIFO reserves.

Mande *et al.* (2000)³¹⁶, studying reasons behind high decreases of R&D expenses among Japanese firms during the 1990s recession, find that firms with reputations of long-term R&D vision showed myopic income-increasing behaviour; they observe that such evidences reflect instances of EM rather than optimal business strategies. Pozza *et al.* (2007)³¹⁷, studying on capitalisation of R&D costs on a sample of Italian listed firms (Italian GAAP allows for the capitalisation of R&D costs), find that firms use cost capitalisation for smoothing earnings; however, they do not find evidences of capitalising R&D costs in order to reduce the risk of violating debt covenants.

Petrovits (2006)³¹⁸, examining managerial discretions used in the strategic use of corporate philanthropy towards charitable causes to achieve financial reporting objectives, finds that firms with high stock price sensitivity and small increases in earnings make the most of income-increasing foundation funding choices (especially

firms with strong equity market incentives to manage earnings, using their charitable foundations as off-balance sheet reserves) and firms with increasing earnings despite of large income-decreasing foundation funding choices in the current year are more likely to increase earnings in subsequent periods (which are consistent with the use of cookie jar reserves and earnings smoothing); she adds that time gaps between pay-ins and pay-outs can lead to EM possibilities. Prior *et al.* (2008)³¹⁹, investigating EM in the context of corporate social responsibility (CSR) from a multinational sample, find a positive impact of EM practices on CSR and a negative impact on financial performance from the combination of EM and CSR; thus, they suggest prudence on the part of the managers and foresightedness on the part of the policy-makers as two ways to constrain EM with respect to activities related to CSR. Chih *et al.* (2008)³²⁰, investigating the concern between EM and corporate social responsibility with a large sample of corporations (CSR) worldwide, opine that “[...] with a greater commitment to CSR, the extent of earnings smoothing is mitigated, that of earnings losses and decreases avoidance is reduced, but the extent of earnings aggressiveness is increased.”

Nelson *et al.* (2003)³²¹, undertaking descriptive experimental studies about how managers attempt to manage earnings, find, among other things, that managers use transaction structuring³²² when accounting rules are very precise and judgements when rules are flexible. They also argue that the following EM practices are generally undertaken as regards real activities: bill-and-hold sales, sale-and-lease-back transactions, recognising reserves (such as loan losses in banks) and asset impairment, capitalising and/or deferring too much or too little, decreasing previous accrual (e.g., deferred tax asset valuation allowance), modifying depreciation, cut-off manipulation, deferring revenue, misestimating percentage-of-completion, income statement classification, avoiding consolidation, etc.

Marquardt and Wiedman (2005)³²³, examining if firms structure their convertible bond transactions to manage diluted EPS, find that firms use contingent convertible bonds (CoCos)³²⁴ to increase diluted EPS (under SFAS 128, such bonds do not have to be part of the denominator of diluted EPS).

1.3.4. Actions/Initiatives to Restrain Earnings Management

EM leads to a gamut of consequences. At the organisational level, firms may manage earnings to enhance their credibility, increase their stock price, reduce political and social costs, etc. At the individual level, executives can alter their compensation plans to their favour, increase values of their stock options, enhance their reputation, etc. However, if EM is perceived as unethical by financial statement users, then managers’ and companies’ reputations negatively get affected and companies’ credibility in the market is damaged. There are also further negative effects too like high litigation costs, decrease in stock prices, heightened regulatory scrutiny, loss of reputation, etc., which in themselves, should be effective to restrain manager to practise EM.

Kaplan (2001)³²⁵, through an experiment on whether shareholders and non-shareholders of a firm perceive EM as more or less unethical depending on the intent and technique of EM, shows that non-shareholders do not always view EM to be unethical and shareholders’ do not always take different intentions behind EM into consideration.

Arya *et al.* (2003)³²⁶ argue that EM per se is not bad, rather they argue for effective regulations that can facilitate prudent EM; “[...] accounting research shows that income manipulation is not an unmitigated evil; within limits, it promotes efficient decisions. [...] E]arnings management and managerial discretion are intricately linked to serve multiple functions. Accounting reform that ignores these interconnections could do more harm than good. [...] The implicit role of regulators is to make earnings management challenging, not impossible. [...]”

Wang and Williams (1994)³²⁷, in contrary to the argument that smoothing is cheating or misleading, view it as an enhancement of the informational value of reported earnings, i.e., firms with smoothed earnings are viewed as being less risky; which can benefit both for existing and prospective investors; moreover, markets prefer smoothed numbers. Ronen and Sadan (1980)³²⁸ argue that smoothing can enhance the ability of external users to predict future income figures. Imhoff (1977)³²⁹ does not find any concrete evidence regarding advantages or disadvantages of smoothed income for a firm or its shareholders. Clikeman (2002)³³⁰ recognises the problems of measuring earnings for knowledge-based firms; while examining the criticism against current accounting practices with respect to their inadequate scope to measure the performance and resources of these firms, he argues that the problem lies in how to properly match expenses with related revenues and, omit assets (like, patents, copyrights, brand names, employee expertise) from corporate balance sheets (valued at nominal amounts when reported); however, he adds, there still could be the possibility to manage earnings if these assets (in the case of knowledge-based companies) are properly valued; finally, he is of the opinion that EM may be necessary to ensure earnings quality which is mostly about repeatability in the case of such firms.

Furthermore, Parfet (2000) is of the view that report preparers act under a high-pressure working environment because of the expectation from them not only to produce continuous improvement in operating performance but also to steadily and reliably increase financial returns and long-term growth in shareholder value, which can cause EM; in this regards, he calls for attention to “[...] the context in which decisions are made, where subtle effects from human perceptions and peer pressures, the complexity of combined factors, and a high-stakes business environment all impact good people who are trying to do their jobs with integrity [...]”;³³¹ he, however, contrasts ‘bad EM,’ i.e., adjustments that are designed to hide real performance from ‘good EM,’ i.e., interventions with prudence.

Moreover, firms could manipulate earnings in connivance with other market players, even through compliance. Shah (1996)³³² describes such endeavours as creative compliance through novel means, e.g., innovative financing schemes from banks; he succinctly puts forth: those with the resources “[...] to resist regulations are unregulatable. [...]” Moreover, Revsine (1991)³³³ opines that ‘foggy’ accounting standards help to carry out accounting manipulations.

Nevertheless, in order to prevent unethical and unlawful EM instances, the accounting standards and procedures need to be well-defined, which is not feasible because there will always be some degrees of choice in accounting practices in the contemporary business environment that is dynamic, complex and global. In this

context, auditors and regulators have vital roles to play. However, the corporate fall-outs at the dawn of this millennium (like the Enron Scandal in which Arthur Anderson was involved) pose more questions than answers with regards to AM. Notwithstanding, researchers study the roles of more developed accounting standards with optimal accounting choices and more efficient regulatory authorities, more versatile auditing, better corporate governance, and more ethical considerations in restraining EM.

1.3.4.1. Earnings Management in Itself is Self-defeating

Various studies point out to the fact that EM in itself could be a restraining factor that, in turn, could be effective in cautioning managers to be watchful about what they do.

Through experimentation, Tan and Jamal (2006)³³⁴ show that although high foresight managers can continue to report smooth earnings in order to present a better-looking picture of firms for shareholders, the use of this form of EM can reduce their firms' productivity and growth; i.e. when EM is used to communicate with shareholders but hampered by strict accounting standards, managers may smooth earnings in the short-run which are damaging for the firm in the long-run.

Liang (2004)³³⁵, undertaking modelling on EM by considering self-interest of managers, owners and social objectives of regulators; finds that various economic trade-offs give rise to endogenous EM and so EM should be understood in its context.

1.3.4.2. More Developed Accounting Standards with optimal accounting choices and More Efficient Regulatory Authorities in Restraining Earnings Management

There are studies on curbing EM through more developed accounting standards with optimal accounting choices and more efficient regulatory authorities.

Dutta and Gigler (2002)³³⁶, theorising an association between EM and voluntary management forecasts in an agency setting, by modelling EM as a window dressing activity undertaken by managers to present to shareholders about the increase in firm's reported earnings but having no impact on the firm's real cash flows; show that it is easier to prevent managers from managing earnings if they are asked to forecast earnings and suggest EM likely to follow high earnings forecasts than low earnings forecasts; importantly, they argue that absence of EM may not lead to optimal incentives for the shareholders, and consider EM could be beneficial "[...] as it reduces the cost of eliciting truthful forecasts."

Ewert and Wagenhofer (2005),³³⁷ while examining the usual claim that enacting tighter accounting standards and disclosing more information to the capital market can enable the accounting statement users to distinguish between accounting and real EM, and assumption that standard setters can only restrict accounting EM; find that in a rational expectations equilibrium model³³⁸, earnings quality increases with tighter standards. However, they identify several consequences that may outweigh this benefit, e.g., (a) managers increase costly real EM because the higher earnings quality increases the marginal benefit from it, (2) tighter standards can increase expected accounting and total EM, and (3) the expected total costs of EM can also increase.

Ramesh and Revsine (2001)³³⁹, examining banks' choice of accounting methods in a new regulatory environment that more closely ties regulatory monitoring to GAAP numbers, find that banks' choice to implement SFAS 106³⁴⁰ is consistent with attempts to balance the increased regulatory costs with benefits from EM. They also suggest that banks strategically choose the adoption timing of both SFAS 106 and SFAS 109³⁴¹ to reduce regulatory costs.

Nelson *et al.* (2002),³⁴² analysing the data obtained using a field-based questionnaire in which auditors from one Big-5 auditing firm described experiences they had with clients who they believe were attempting to manage earnings, find that managers tend to manage earnings by structuring (or not structuring) transactions to achieve a desired result when the related accounting standards are precise (or imprecise), and that auditors are less likely to require adjustment of the attempts in those circumstances.

Lang *et al.* (2006)³⁴³, comparing US firms' earnings with reconciled earnings for cross-listed non-US firms, find: (a) higher nuances of EM in the case of non-US firms, (b) firms reconciling to US GAAP indulge more in EM than those preparing local accounts in accordance with US GAAP, (c) both of these firms practice EM in higher magnitudes than listed US firms, and (d) more evidence of EM in countries having lower investor protection measures "[...] suggesting that SEC regulation does not supplant the effect of local environment [...]" They argue that these evidences of EM are stronger for firms in countries with low investor protection, thereby suggesting that accounting standards, as matters of fact, influence EM occurrences; but U.S. SEC regulations and compliances with US GAAP do not entirely eliminate local GAAP managing trends. Chen *et al.* (2002),³⁴⁴ explaining the earnings gap between local GAAP and IAS even after harmonisation efforts were made in China, find that inadequate supporting infrastructure and low quality auditing are the main reasons behind these continuing gaps; hence, they argued that improved accounting standards in themselves are ill-equipped to counter EM practices. Thus, they advocated for additional supporting infrastructure and quality audit programmes to complement such harmonisation processes in order to mitigate EM. Similar conclusions were drawn by Van Tendeloo and Vanstraelen (2005)³⁴⁵, who investigated in the case of a sample of German companies (Germany is a code-law country with low investor protection) if voluntary adoption of International Financial Reporting Standards (IFRS) is associated with lower instances of EM that have adopted IERS (suggested by Ball *et al.* (2003)) find that these firms do not show different EM behaviour than firms that are reporting under German GAAP. Leuz *et al.* (2003), while studying corporate governance and EM in a cross-continental perspective, find: insiders, in an attempt to protect their private control benefits, use EM to hide 'true performance' of firms from outside stakeholders, especially the investors; they argue that EM would can be curbed by investor protection.³⁴⁶

Baber *et al.* (2006)³⁴⁷, analysing security price reactions to quarterly earnings announcements on firms' disclosure of supplementary balance sheet and/or cash-flow information that could be used to estimate the consequences of EM, argue that investors are capable of interpreting corporate financial reports and correct them for EM when supplementary information are provided in balance sheet and cash-flow statement.

Healy *et al.* (2002)³⁴⁸, using a simulation model that examined the trade-offs between objectivity in accounting for R&D investments and relevance of accounting information, find that R&D investments (in pharmaceutical firms) are capitalised and/or written off when are unsuccessful; and/or amortised over the expected life when successful. Discussions on such trade-offs can also be found in the work of Altamuro *et al.* (2005)³⁴⁹ who, examining if the introduction of Staff Accounting Bulletin (SAB) No. 101 by U.S. SEC (to address its concern that firms were masking true performance by managing earnings using accelerated revenue recognition) would eliminate industry-accepted revenue recognition practices and reduce the quality of reported earnings, find that although it helps to mitigate EM but causes a decline in earnings informativeness.

Dowdell and Press (2004)³⁵⁰, examining accounting reports on in-process research and development costs following the 1998 guidance from U.S. SEC against writing off such costs, opine that SEC scrutiny seems to guide financial reporting practices in the 'right direction.'

Gaver and Paterson (2000)³⁵¹ investigating EM in the context of the failure of firms in the insurance sector in the late 1980s in the U.S.A., mainly arising out of State oversight, find that under-reserving by financially weak insurers declined in the post-accreditation period, and hence argue that "[...]improvements in insurer solvency monitoring related to accreditation by states are associated with a decrease in insurers' proclivities to use accounting discretion to circumvent regulatory oversight."

Hodge (2003), examining whether unprofessional investors' beliefs mirror the U.S. SEC's concerns that earnings quality and auditor independence have declined over time and whether lower perceptions of earnings quality are associated with more analysis and reliance on a firm's audited financial statements when they make investment decisions; validates the U. S. SEC's concerns in regards to the erosion of the perceived earnings quality, perceived auditor independence and the perceived reliability of audited financial information for all publicly traded firms, on the one hand; but, on the other hand, argues that the perceived relevance of audited financial information has increased; finally, contends that "[...] either [...] lower perceptions of earnings quality lead investors to examine more thoroughly a firm's audited financial statements, or [...] more thorough analysis of a firm's financial statements leads investors to lower assessments of the firm's earnings quality."³⁵²

Chen and Yuan (2004)³⁵³, investigating the effects of scrutiny by Chinese regulators to control EM undertaken by firms which try to reach the required 10% return on equity, find that many firms still gain state approval to issue additional shares by using excess amounts of non-operating incomes. Johari *et al.* (2008)³⁵⁴, studying Malaysian firms, find "[...] excessive shareholding beyond 25% by managers may induce managers to manage earnings, [...] a combined chairman-CEO roles (CEO duality) does not influence the practice of earning management [...] and] the minimum composition of one-third independent director, as suggested by the Code of Corporate Governance in Malaysia is not adequate to monitor the management from earnings management practices."

Li *et al.* (2008)³⁵⁵ are of the view that ‘Sarbanes-Oxley Act’³⁵⁶ of 2002 is adequately equipped to constrain EM practices and enhance quality of accounting reports.

Shen and Chih (2005)³⁵⁷, undertaking a study in the banking industry, find: significant evidence of EM (partly attributed towards prospect theory), higher real per capita GDP decreases EM; although they propose higher investor protection and transparency standards in accounting disclosure to mitigate EM, yet they find that stronger enforcement of laws leading to lesser instances of EM holds true for low-income countries only, and not only for high-income countries.

Coppens and Peek (2005)³⁵⁸, analysing earnings distributions of public and private firms in eight European countries to determine instances of EM, find: private firms avoid reporting small losses (even in the absence of pressures to meet capital market expectations) but not so in countries with stronger tax regulations; and susceptibility of public firms to manage earnings to meet capital market expectations.

Based on the findings of Thomas (1989)³⁵⁹, Kinnunen and Koskela (2003)³⁶⁰, using a large sample to study cosmetic EM (CEM), i.e., small upward rounding of reported net income that generates more than expected zeros and less than expected nines as second digit of earnings numbers; find: (a) upward rounding is much more significant on the bottom line than on the top of an income statement and a reversed pattern of CEM for net losses, (b) its dependence on some institutional factors (e.g., CEM decreases with spending on auditing, increases with the latitude of country’s GAAP, depends on country’s cultural values such as power distance, and varies with regards to management bonus schemes), and (c) no significant relationships between CEM and factors like the degree of shareholder protection or the alignment of financial and tax accounting.

Jiang *et al.* (2008)³⁶¹, comparing equity incentives of CEO with that of CFO, find “[...] magnitude of discretionary accruals and the likelihood of beating benchmarks and earnings restatements are more sensitive to the CFOs’ equity incentives than to those of the CEO. [...] E]vidence supports the SEC’s new disclosure requirement on CFO compensation.”

Stein (1989)³⁶², attempting to model inefficient managerial behaviour in the context of a rational stock market, holds the view that managers, who take markets as static, try to mislead the market about the value of their firm through various earnings manipulation efforts. In contrast to Stein’s (1989) view of efficient markets, Ronen *et al.* (2006)³⁶³, investigating the insider trading as indication of EM, argue EM distorts stock prices and reduces the firm’s value; as a part of policy implications, they see their findings to complement the OECD’s 2004 recommendation prohibiting insider trading.

Barton (2001), while studying derivatives and discretionary accruals for the Fortune 500 companies, shows that firms with larger derivative portfolios have lower levels of discretionary accruals; and adds that managers can smooth cash flows through hedging and by increasing/decreasing accruals; “[...] firms holding derivative portfolios with large notional amounts also have lower absolute levels of discretionary

accruals, suggesting that derivatives and discretionary accruals are partial substitutes for smoothing earnings. [...]”³⁶⁴

Beneish (1997)³⁶⁵ finds that Jones model can detect possibilities of opportunistic reporting with high accruals, and can distinguish GAAP violators from aggressive accrualers.

Yu (2008)³⁶⁶, studying the role of information intermediaries on EM, find less occurrences of EM for those firms who are briskly followed by: equity analysts, more experienced analysts, and high-profile brokers.

Othman and Zeghal (2006)³⁶⁷, while examining potential factors that influence EM in different socio-economic environments, namely Anglo-American and the Euro-Continental environments, found earnings management for French firms were specifically linked to contractual debt costs and effective tax rates; however, they also found that Canadian firms show specific incentives matched with a dynamic capital market where issuing equity is a strong motive for EM.

Black *et al.* (1998)³⁶⁸, examining EM through asset sales that allow asset revaluation in Australia, New Zealand and the U.K., find that EM behaviour differed between firms in Australia and New Zealand with that of the U.K. prior to 1993 when their accounting rules differed, but is similar during the 1993-95 period when the U.K. implemented FRS 3³⁶⁹.

Navissi (1999)³⁷⁰, studying manufacturing firms in New Zealand, finds instances of EM under price regulation.

Kinnunen *et al.* (1995), while studying Finnish firms, find that the opportunity for and the use of EM is greater in the core sector.³⁷¹

Chan *et al.* (2005)³⁷², examining if firms reporting material internal control weaknesses³⁷³ under Section 404³⁷⁴ of the Sarbanes-Oxley Act of 2002³⁷⁵ practise EM and lower return-earnings associations compared to other firms, find mild evidence that there are more positive and absolute discretionary accruals for firms reporting material internal control weaknesses than for other firms; they also find mild evidence that firms reporting material internal control weaknesses have lower return-earnings associations than other firms.

1.3.4.3. More Versatile Auditing in Restraining Earnings Management

There are many studies that look into role of more versatile auditing as an effective means to restrain EM practices, which have taken into consideration various auditors’ points of views with respect to the relation between audit characteristics and AM by their clients, increased audit quality leading to increased quality of financial reports and how to enhance quality of audit and use it as a proxy in studying EM.

Nelson *et al.* (2002)³⁷⁶ raise doubts that auditing can curb EM.

Francis *et al.* (1999)³⁷⁷, investigating whether auditing done by one of the Big 6 auditors increases a firm’s endogenous propensity to generate accruals because

high-accrual firms could manage earnings aggressively and opportunistically and hence have incentives to afford for a Big 6 auditor to earn market credibility, find evidence to support this claim; additionally, they find that these firms have high levels of total accruals, and low levels of discretionary accruals too, which is consistent with the assumption that Big 6 auditors constrain aggressive and opportunistic accrual reporting.

Krishnan (2003b)³⁷⁸, investigating auditors' industry expertise in mitigating EM, find that auditing by these auditors can mitigate accrual-based EM effectively than those who do not have expertise. Van Caneghem (2004)³⁷⁹ finds mildly support for such claims; he, using auditor size as a proxy for audit quality in the context of the U.K., also finds no evidence to support that auditing done by Big 5 audit firms decreases EM. Balsam *et al.* (2003)³⁸⁰, examining the association between measures of earnings quality and auditor's industry specialisation, find that clients of industry specialist auditors have lower discretionary accruals and higher earnings response coefficients (ERC)³⁸¹ than clients of non-specialist auditors.

Kim *et al.* (2003)³⁸², investigating if audit effectiveness is influenced by reporting incentives for auditors and managers, find Big 6 auditors are less effective than non-Big 6 auditors when both managers and auditors have incentives to prefer income-decreasing accrual choices. Van Tendeloo and Vanstraelen (2008)³⁸³, studying if auditing by Big 4 audit firms could reduce instances of EM in private and non-listed European firms, find that "[... they] have an incentive to constrain earnings management only in high tax alignment countries, where financial statements are more scrutinized by tax authorities and the probability that an audit failure is detected is higher. [...]" Chung *et al.* (2005)³⁸⁴, using company year observations, find that low-growth companies with high free cash flow will use income-increasing discretionary accruals to offset low or negative earnings; and argue that external monitoring especially by Big 6 auditors and institutional investors with substantial shareholdings could effectively deter managers' opportunistic behaviour in the context of EM.

While studying auditors' independence as a proxy to mitigate EM, Frankel *et al.* (2002)³⁸⁵ find positive correlations between the purchase of non-audit services (from auditing firms) and EM proxies like earnings surprises, discretionary accruals, public criticism in financial reports, restatements, etc.; this is because an auditor loses its independence if it supplies non-audit services like consulting to its client. Ferguson *et al.* (2004)³⁸⁶ find similar results. Chung and Kallapur (2003)³⁸⁷, while assessing if a client is important for an auditor then auditors' independence is compromised and hence audit quality is deteriorated, with a sample of clients of the Big 5 auditing firms; do not find statistically significant correlations between client importance and abnormal accruals. Geiger *et al.* (2005a)³⁸⁸, studying the effect of the so-called auditor-to-client revolving door situations, in which a client hires its senior financial executives directly from its external auditing firm, on audit quality; do not find support for occurrences of EM immediately before or after such hiring when auditor independence is supposedly reduced.

Carey and Simnett (2006)³⁸⁹, studying long audit partner tenures and their effect on audit quality, using data from Australia, where the audit partner can be identified and for a period where partner rotation was not mandatory; find

deterioration in audit quality associated with long audit partner tenure but do not find evidence of an association of long audit tenure with abnormal working capital accruals.

Heninger (2001)³⁹⁰ finds that abnormal accruals are positively correlated to litigation risks for auditors; in such situations, he argues, external stakeholders hold auditors responsible when the management tampers with earnings; which, in turn, implies that auditors need to be vigilant about abnormal income-increasing accruals, especially when the firms they audit are financially distressed or large companies.

Libby and Kinney (2000)³⁹¹, through experiments involving managers from Big 5 audit firms who estimated (audited) reported earnings conditional on analysts' consensus forecast, auditing standards and regulations, and auditor discovery of a quantitatively immaterial earnings overstatement; find that auditors are less likely to judge overstatement correction if it would cause a missed forecast, even for objectively measured misstatements.

Nelson *et al.* (2005)³⁹² find that auditors are more likely to require their client to book reporting misstatement under the approach that makes them look more material; standard setters mandate that auditors require adjustment whenever a misstatement is material under cumulative and current-period approach audit practice to provide quantitative materiality assessments about proposed audit adjustments, they argue.

Caramanis and Lennox (2008)³⁹³, studying audit hours in a sample of firms from Greece, view more auditing frequencies constrain EM.

Davis *et al.* (2009)³⁹⁴, examining the relation between auditor tenure and EM, find that firms (not covered by analysts) with both short (two to three years) and long (13-15 years or more) auditor tenures are more likely to report levels of discretionary accruals that lead to meeting and/or beating earnings forecasts; they suggest that while regulatory mandates for periodic auditor turnover have negative effects, sustained long term auditor-client relationships may be also detrimental to audit quality.

Moehrle *et al.* (2009)³⁹⁵ have synthesised, in an annotated bibliography form, recent regulation-related findings and commentaries in the academic literature.

1.3.4.4. Better Corporate Governance to Restrain Earnings Management

Better corporate governance processes, customs, policies, rules and regulations, and models have also been discussed to restrain EM.

Wasley and Wu (2006)³⁹⁶, studying a relatively recent change in voluntary disclosure practices by management, i.e. the issuance of cash flow forecasts, find that such forecasts are done to signal good news in cash-flow; thus suggesting that different incentives drive firms' disclosure of different financial information.

Fuller and Jensen (2002)³⁹⁷, analysing companies like Enron and Nortel that show the dangers of conforming to market pressures for unrealistic growth targets, opine that CEOs should take more initiatives in setting expectations and forecasts so

that stocks can be traded at close to their intrinsic values, and managers must make their organisations more transparent to investors.

Kamin and Ronen (1978)³⁹⁸, examining the effects of the separation of ownership and control on income smoothing, find that management-controlled firms (particularly management-controlled firms with high barrier to entry) are more likely to be engaged in smoothing for managerial discretion and budgetary slack.

Klein (2002)³⁹⁹, examining whether audit committee and board characteristics are related to EM, finds negative relations between: audit committee and Board independence with abnormal accruals; additionally she finds that reductions in board or audit committee independence are followed by large increases in abnormal accruals with the most pronounced effects occurring when either the Board or the audit committee is comprised of a minority of outside directors; she opines that effective monitoring of the corporate financial accounting needs boards structures to be less influenced by the CEO.

Kim and Yi (2006)⁴⁰⁰, while studying EM in South Korea, find that when ownership structures of firms becomes more disperse and firms are publicly traded, they manage earnings. Katz (2006)⁴⁰¹, studying the change in EM and conservatism, finds that privately owned firms engage less in upward EM and recognise losses more promptly, than public owned firms. Cornett *et al.* (2008)⁴⁰² find that governance variables, and not incentives – like institutional ownership of shares and, presence of independent outside directors and institutional investor representation on the board – mitigate the use of discretionary accruals and hence reduce EM.

Cornett *et al.* (2006)⁴⁰³ find that institutional ownership of shares, institutional investor representation on the board of directors, and independent outside directors on the board have significant impact in mitigating EM. Park and Shin (2004)⁴⁰⁴, investigating the effect of board composition on EM in Canada, find that the presence of outside directors on the Board does not reduce abnormal accruals or earnings declines; however, the presence of directors from financial intermediaries do reduce EM; further reduction is achieved by active institutional shareholders on the Board. Peasnell *et al.* (2000) find that the composition of the BOD reduces EM instances.⁴⁰⁵

Coles *et al.* (2006)⁴⁰⁶ are of the view that transparency holds one of the keys to mitigate EM; in this regards, they find evidence of abnormally low discretionary accruals in the period following announcements of cancellations of executive stock options up to the time the options are reissued.

Dempsey *et al.* (1993)⁴⁰⁷ find that when management and ownership are separate, high levels of EM through extraordinary items take place.

Hwang and Kim (2008)⁴⁰⁸, studying the social ties between auditors and senior executives, find that “[...] measures of social ties between the CEO and members of the audit committee are associated with higher levels of earnings management [...]”

Peasnell *et al.* (2006)⁴⁰⁹, investigating EM in the UK with respect to the Board and audit committee monitoring, find negative correlation between EM and the proportion of outsiders on the board (however, little evidence on the presence of

outside directors' and income-decreasing abnormal accruals was found in the situation when pre-managed earnings are higher) and no evidence as regards the existence of an audit committee influencing the level of either income-increasing or income-decreasing practices; nevertheless, they find that the monitoring role of outside directors in relation to income-increasing EM is more pronounced in the cases where audit committees exist.

Lee *et al.* (2007)⁴¹⁰, while studying EM in the context of organisational structure, especially higher relatedness between divisions, more transactions between them and the existence of complementarity between them; find EM is positively associated with organisational relatedness; they also find those with high proportion of outside directors and high institutional equity ownership have less pronounced instances of EM.

Ahn and Choi (2009)⁴¹¹, examining the role of corporate governance under monitoring by banks on the borrowing firms' behaviour, find that instances of EM by bank-dependent firms generally decreases as the strength of bank monitoring increases and, collateral and loan types are significantly associated with EM, while refinancing and loan purposes have no association. Dittmann *et al.* (2010)⁴¹², analysing the role of bankers on the boards of German non-financial companies, find that banks that are represented on a firm's board promote their own business as lenders and as M&A advisors, act as financial experts who help firms to obtain funding, and so on; they, however, find little evidence that in the presence of bankers instances of EM decrease. Markarian and Parbonetti (2009)⁴¹³, examining financial interlocks and conflicting interest between banks and industrial companies in the context of EM, in a sample of Italian firms; find that the presence of bankers on the Boards of industrial firms mitigate EM but the presence of industrial executives on the Boards of banks does not; this suggests that industrial firm executives who hold a Board position in a bank, effectively capture the monitoring process; they argue for monitoring and lending to be kept separate, in line with the regulatory/litigation environment found in the USA.

Marnet (2007)⁴¹⁴ suggests that “[...] strictly numerical measures are not a reliable guide to the quality of corporate governance [...]” in general and EM in particular.

Arlen and Caryl (1992)⁴¹⁵ are under the impression that risk of the loss of reputation led concealment of firm's real financial states could be effectively mitigated by aligning the interests of the senior management of the firm with firm's long-term interests.

1.3.4.5. External Factors to be Considered in Restraining Earnings Management

Studies on external factors like educating the investors have been done to investigate their impacts in curtailing instances of EM.

Goel and Thakor (2003)⁴¹⁶, studying greater earnings volatility and informational asymmetry in the market, argue that the uninformed traders, when their number swells in the market, push the managers to smooth earnings that are related to

“[...] managerial compensation contracts, uncertainty about the volatility of earnings, and ownership structure.”

Revsine (1991), while presenting empirical evidences that substantiate that “[... m]anagers, shareholders, auditors, and standard setters all derive benefits from selective financial representation [...],” argues that educating the public about the losses of financial representation can mitigate EM; “[... p]art of the blame rests with accounting educators since misrepresentation issues receive little attention in most university courses and few academics try to alert the public as abuses unfold. [...]”⁴¹⁷ According to Schipper (1989)⁴¹⁸, concentrated accounting information user groups with substantial sophistication are likely to constrain EM practices.

Entwistle and Phillips (2003)⁴¹⁹, commenting on Smith’s (2003) work that suggests that the accounting profession must return to its traditional ethical values, opine that by merely addressing ethical issues might fall short of dealing with EM; drawing from the findings of Parfet (2000), they point out: the issue of mounting challenges being faced by accountants should be looked into, efforts on making students aware about earnings management (versus manipulation) should be initiated, and, finally, the investing public should be alerted about what is EM and what is not.

1.3.4.6. More-Ethical-Considerations in Restraining Earnings Management

In line with Smith’s (2003)⁴²⁰ view that the accounting profession must return to its traditional ethical values and raise its ethical standards, many researchers consider ethics as important to mitigate instances of EM; e.g., there are studies that find that ethical perspectives are increasingly being integrated into accounting education.⁴²¹

Elias (2002)⁴²², studying EM in the context of ethics, finds mixed reaction from accountants towards EM, and suggests that “[...] *attention should be paid to an individual’s moral philosophy and time horizon if the objective is to reduce earnings management occurrence.*”

Fischer and Rosenzweig (1995),⁴²³ after undertaking a survey among students and practitioners of accounting on to what extent they accept EM, suggest “[...] changes in accounting education curriculum and ethics awareness programs in business which might: increase students’ and practitioners’ sensitivity to the ethical ramifications of earnings management.”

From experimental findings, Kaplan and Ravenscroft (2004)⁴²⁴ are of the view that colleagues of managers who manage earnings make ethical judgments about them and that these judgments can affect their willingness to work with these managers and assist them in their careers.

Kaplan *et al.* (2007)⁴²⁵, through an experiment on EM with a sample of management students who have experience in accounting, find that social costs are imposed on managers when they manage earnings in ways that are detrimental to organisational goals. While pointing out to social cost, these authors cite two important sources: Cohen and Prusak (2001)⁴²⁶ who are of the opinion that high social capital results in better financial results and, Noreen (1988)⁴²⁷ who suggests that unethical behaviour is a manifestation of the decline in ethical norms.

Fischer and Rosenzweig (1995)⁴²⁸ are of the view that explicit ethical codes which include policies on EM could be adopted and made a 'living' presence in the day-to-day business environment; furthermore, they also suggest that ethical analyses of specific EM instances could be included as case studies in professional and business publications in order help to decrease the occurrences of 'accounting dissonance'⁴²⁹ that practitioners encounter between their professional ideals and organisational pressures to increase profits, which can help to increase the satisfaction and retention of accounting practitioners with high professional ideals.

Macintosh (1995)⁴³⁰, critiquing on various studies that are done from ethics perspectives on issues hovering around accounting manipulation, opine that most of them investigates mere 'socially acceptable' behaviour, not ethics per se.

1.3.5. Various Research Attempts to Improve Studies on Earnings Management

There has been a long history concerning attempts that have been undertaken regarding accounting choices and flexibilities (discretionary accruals, accounting procedure changes, specific components of discretionary accruals, components of cash flows, etc.), ethics in business, nature of accounting manipulations (accounting or real activity manipulation), regulatory environment (e.g., disclosure), industry characteristics (like nature of competition), firms' internal characteristics (like governance, audit and insider trading activities), and so forth to study the issues related to EM, create models that can predict/reveal EM practices, and fine-tune the existing EM models. For instance, since the 1960s, accounting research on matters involving the determinants and implications of accounting choice have been carried out.⁴³¹ One notable example in this regards is Simpson (1969)⁴³² who studied AM before the development of the accrual method; they were known as creative accounting. In this section, let us discuss various studies that have taken into consideration methodological issues and analytical models as regards EM.

Researchers mostly analyse: (a) accounting methods while studying EM because they think accounting manipulations are supposedly less costly to carry out than real-activity manipulations, (b) the existing flexibility in accounting standards; and have found out that they do not affect actual cash-flows and they seemingly do not have significant impact on growth of a company. Many empirical studies examine accruals manipulations because they are less likely to be detected as something that in principle are instances of outright wrongdoing than, say, changing accounting methods that have to be explained in the financial reports of firms; and they can be easily complied with GAAP guidelines. The accruals that are thought to be manipulated are most often referred to as discretionary accruals (also known as unexpected or abnormal accruals). Although there is little progress in determining new models to measure EM, the Jones and Modified Jones models seem to be the subject of improvement efforts by various researchers.

Dechow *et al.* (1995)⁴³³, evaluating alternative accrual-based models for detecting EM, model the Modified Jones model and argue that it is more effective in detecting EM although, according to them, none is really foolproof. Jeter and Shivakumar (1999)⁴³⁴ find that Jones model is inadequate for detecting EM for extreme cash flows. Young (1999)⁴³⁵ finds that discretionary accruals generated by the Healy model are associated with the highest level of predictable measurement

error and emphasises the need for further developments in relation to the measurement of EM.

Beneish (1999a⁴³⁶) studying firms that are subjected to accounting enforcement actions by the U.S. SEC, does not find that managers indulged in earnings overstatements for concerns about debt covenant violations or the cost of external financing; and suggests that further studies on managers' trading behaviour could throw more light on EM. Beneish (1999b)⁴³⁷, studying a sample of earnings manipulators, finds significant prevalence of EM, identifies their distinguishing characteristics, and calls for further examination of distortions in financial reports.

Lev (2003)³⁸, commenting on the state of affairs in the 1990s when reported earnings deteriorated considerably, feels that although EM is pervasive, but it is hard to detect except for egregious cases; he suggests that "[...] we must think seriously about reforms that will change the incentives for earnings manipulations and will make corporate financial reports more truthful and revealing." Lev *et al.* (2005)⁴³⁹ are of the view that "[...] accruals do not improve the prediction of cash flows, beyond current cash flows, and improve only marginally the prediction of earnings. This latter improvement, however, appears to be economically insignificant. Thus, the objective difficulties of generating reliable estimates and projections in a volatile economy, and their extensive misuse by managers appear to offset the positive role of estimates in conveying forward looking information to investors."

Burgstahler and Dichev (1997)⁴⁴⁰ and Degeorge *et al.* (1999)⁴⁴¹ have developed an alternative method to detect EM, in combination with discretionary accruals. In this method, reported earnings are distributed around certain earnings benchmark (zero earnings, last quarter's earnings, etc.). Assuming a smooth probability distribution, the expected number of observations in an interval is the average of the two adjacent intervals. The difference between the expected number and the actual number of observations, divided by the estimated standard deviation of the difference, indicates whether there is a significant discontinuity in a certain interval. According to them, discontinuities around the previously mentioned earnings benchmarks are indications of EM. Burgstahler (1999)⁴⁴², in addition to supporting the findings of Burgstahler and Dichev (1997), develops a model that shows how higher marginal benefits of EM in the vicinity of zero can lead to the avoidance of earnings decreases and/or losses; additionally, they find that the marginal benefit of EM is higher in the vicinity of zero.

McNichols' (2000)⁴⁴³ argues against using aggregate accruals models because of the ambiguity surrounding how accruals behave in the absence of EM. She puts forth the following points, in the context of existing models, that give biased results: (a) they often measure discretionary accruals within one industry under the assumption that firms manage earnings because they expect their competitors to do so, thus there are more likelihood of understating discretionary accruals because the average level of discretion exercised by the industry is included in these analyses; and (b) the assumptions that no EM happen during the prediction/estimation period and a test/event period might be difficult to be maintained in calculating discretionary accruals considering the wide range of motives behind EM. She suggests, "[...] future progress in the earnings management literature is more likely to come from

application of specific accrual and distribution-based tests than from aggregate accruals tests.”

Kothari *et al.* (2005)⁴⁴⁴, examining and comparing the specification and power of tests based on performance-matched discretionary accruals with tests using traditional discretionary accrual measures like the Jones and Modified-Jones models, find that the former type tests “[...] enhance the reliability of inferences from earnings management research when the hypothesis being tested does not imply that earnings management will vary with performance, or where the control firms are not expected to have engaged in earnings management.”

McDaniel *et al.* (2002)⁴⁴⁵ find that financial literates assess earnings quality differently than financial experts; experts highlight its importance more than literates, whereas literates emphasise more on nonrecurring items than are the experts.

Healy and Wahlen (1999)⁴⁴⁶, while undertaking studies on the usefulness of the research on EM for standard setters, contend that research has neither enabled standard setters to curb EM nor to provide them with evidences on EM practices.

Furthermore, although the Jones and modified Jones model are popular models to detect earnings management, researchers argue that they need to be improved with respect to the following points: (a) time-series versus cross-sectional design, (b) balance sheet versus cash flow statement to calculate accruals, (c) the use of performance matching, and (d) linear versus non-linear models.

Bartov *et al.* (2000)⁴⁴⁷, examining the association between discretionary accruals and audit qualifications, find that the Cross-sectional Jones Model and the Cross-sectional Modified-Jones Model to detect earnings management are superior to their time-series counterparts.

Hribar and Collins (2002)⁴⁴⁸, examining the impact of measuring accruals as changes in successive balance sheet accounts as opposed to measuring them directly from the statement of cash-flows, argue that using the balance sheet approach to predict accruals leads to estimation errors when non-operating events occur, such as acquisitions and accounting changes.

Ball and Shivakumar (2006)⁴⁴⁹, while investigating the role of accrual accounting in the asymmetrically timely recognition of unrealised gains and losses, argue that using linear models to predict accruals leads to poor results because they do not take into account the loss recognition asymmetry and, show that nonlinear models that incorporate timelier loss recognition (conservatism) explain more variation in accruals than linear specifications.

Philipps *et al.* (2003)⁴⁵⁰, while using the deferred tax expenses next to discretionary accruals to detect EM, find that these expenses are incrementally useful beyond total accruals and abnormal accruals derived from two Jones-type models in detecting earnings management to avoid a small loss or an earnings decline.

Bernard and Skinner (1996)⁴⁵¹, analysing the articles by Subramanyam (1996) and Kasanen *et al.* (1996) which throw light on why managers manipulate accounting

accruals, suggest that “[in stead of relying on ...] sophisticated statistical techniques applied to large databases to try and offset [... the] informational disadvantage [that the researchers have in comparison to managers] [... a] potentially fruitful alternative [...] may be to analyze financial statements in more detail, much as analysts do, in the hope of uncovering more convincing evidence about how and why managers exercise their accounting discretion.”

Ayers *et al.* (2006)⁴⁵², while investigating whether the association between discretionary accruals and beating earnings benchmarks hold for comparisons of groups segregated at other points in the distribution of earnings, changes in earnings and earnings surprises; find positive correlation between discretionary accruals and beating the earnings benchmark extends to other points (they call pseudo targets) in the distribution of both earnings and earnings changes, which means that a mere positive association between discretionary accruals and meeting or beating earnings targets is not sufficient to conclude that discretionary accruals detect EM.

Dechow *et al.* (2003)⁴⁵³ are of the view that, since both small profit firms and small loss firms show similar positive discretionary accruals, it is unlikely that they are the only explanation for the kink in the earnings’ distribution. They argue that researchers have to consider other explanations, such as real action to beat the benchmark and the effect of the denominator.

Sunder (1997)⁴⁵⁴ is of the view that some of the reasons behind weak and inconsistent empirical results on EM are: (a) use of unreliable empirical proxies for managed and unmanaged portions of earnings, (b) the tendency to focus on one accounting instrument of EM at a time, (3) a narrow interpretation of EM, and (4) managers’ incentives to hide activities related to EM.

There are also research on improving the analyses of EM by studying distribution of earnings as done by firms to manipulate earnings.

Durtschi and Easton (2005)⁴⁵⁵ suggests that the shape of earnings distribution is, in itself, not enough to evidence EM.

Jacob and Jorgensen (2007)⁴⁵⁶ support the findings of Burgstahler and Dichev (1997) that discontinuities around zero and prior year earnings in histograms of earnings are responsible for EM.

Lo (2008)⁴⁵⁷, discussing some existing literature on EM particularly zeroing in on Ball and Shivakumar (2008), advocates for further research by taking different but complementary perspectives (crime scene investigator) for understanding EM better.

1.3.6. Summary of the Literature Review on Earnings Management

Various motivations to manage earnings arise from the managements’ efforts to achieve earnings targets and personal benefits (like incentives and enhance their personal reputations), and partly from pressures on management from inside (e.g., the BOD) and outside (e.g., capital markets) sources to enhance value of a firm and hence attract investments. Apart from the management, the auditors also are involved it, due to their concern about keeping their clients; however, the fall of Arthur Anderson in

the wake of Enron collapse, has put serious question marks on the credibility of auditing. We also saw that regulatory bodies and standard setters are also involved, albeit indirectly, in EM because of setting ‘market friendly’ standards as regards disclosures, reporting flexibility, etc. Customers, suppliers, competitors, the press, public interest groups, trade unions, governments, market analysts, investors, individual (share- and bond- holders and buyers) and institutional investors (like banks), academics and so forth are also involved in the process of EM. Thus, a whole spectrum of socio-economic actors and networks, with their ‘interests,’ are involved in the EM phenomenon. As Revsine (1991) has noted:

“[...] Financial reporting rules [...] are often arbitrary, complicated and misleading. [...] However,] the problem is not accidental, but in stead results from contrived and flexible reporting rules promulgated by standard setters who have been “captured” by the intended regulatees and others involved in the financial reporting process. [...] Regulatees desire such rules because the resulting latitude allows them flexibility in depicting their performance. [...] Interestingly, other participants – shareholders, auditors, standard setters/public policy makers, and even academics – frequently derive simultaneous benefits from these misrepresentations. [...]”⁴⁵⁸

1.4. The Stakeholders’ Profile in The Earnings Management Phenomenon

Now, let us segregate various stakeholders and their stakes, who are involved in EM. Depending on their varying degrees of proximity and magnitude of involvement in EM, they have varying levels of interests, needs, opportunities and (conflicting and collaborative) relationships in different EM activities. However, it is the management which is directly involved in EM, which bends/breaks accounting rules in order to meeting their own interests in the name of safeguarding the stakeholders’ interest.⁴⁵⁹

Various stakeholders in the EM process can be categorised into: management, gatekeepers or monitors and users.⁴⁶⁰ Management reports earnings to attract resources, users use earnings for decision making, and gatekeepers assigns the credibility and informational value of reported earnings.⁴⁶¹ Management prepares the financial statement, which generally comprises of the CEO and managers.⁴⁶² Gatekeepers are: the auditors who participate in the preparation of accounting reports, the Board that monitors management on behalf of the shareholders, and external agencies like analysts, investment bankers, credit agencies, press, institutional owners, and regulators.⁴⁶³ And, the users are: investors (shareholders and bondholders, and potential share and bond buyers), lenders, employees, customers, suppliers, competitors, regulators, buy-side analysts⁴⁶⁴, sell-side analysts⁴⁶⁵, present and potential competitors, intermediaries like brokers and underwriters⁴⁶⁶, press, trade union, local community, public interest groups, among others.⁴⁶⁷

Managers who carry out EM is under the impression that markets are inefficient and investors are prone to cognitive biases.⁴⁶⁸ They manage earnings to minimise: social and political costs (e.g., minimising regulatory costs and taxation, environmental obligations), cost of capital (e.g., issuing new shares, minimising debt covenant violations); and maximise their compensation (bonus plan and stock options). The potential wealth transfers in these three cases are: between society and the firm in the first case, fund providers and the firm in the second and managers and the firm in the third. Apart from these economic motives, managers also use EM as a signalling mechanism to communicate with the other stakeholders, by either taking advantage out of information asymmetry or mitigating them by reporting fairly. Thus, for the management the potential gains from EM are: decreasing in cost of capital, signalling thereby retaining existing and attracting potential investors, keeping their jobs, managing their remunerations, respecting the debt covenants, easing regulatory investigations, minimising income tax, reducing the cost of shares in a management buy-out, improving relationships with creditors, employees and investors, stabilising dividends, minimising socio-political cost. The potential losses from detrimental EM are job terminations, reputation damages, and even convictions in felony and fraud charges.

REGULATORS AND THE LEGAL SYSTEM

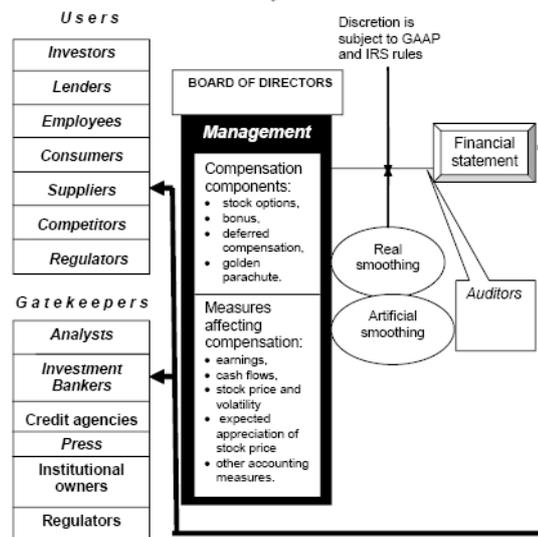


Fig. 1 The accounting scene and the relationships between management and other stakeholders

Investors – (existing and potential) shareholders and bondholders – have different attitudes towards EM because they have different interests regarding wealth transfers. Initial shareholders want to increase their wealth. Existing shareholders want to increase market value of their shares. Controlling shareholders want to reduce cost of capital and volume of transactions. Some of the potential gains for existing non-controlling shareholders are to increase market values of shares and reduce the cost of transaction. Existing bondholders are interested to increase market values of their bonds and to control employee claims. Banks and financial institutions are interested in repayment of their loans. The potential negative aspects of EM for investors could be loss of confidence in the market in the case of controlling shareholders; ‘unjust’ wealth transfer from the new to the existing shareholders; ‘unjust’ wealth transfer from existing bond holders to actual shareholders; wealth of potential bondholders increases the value of actual bondholders, financial institutions lose their loaned money, to name a few.

Source: Joshua Ronen and Varda (Lewinstein) Yaari, *EARNINGS MANAGEMENT: Emerging Insights in Theory, Practice, and Research* (New York, NY: Springer, 2008), 42.

Financial analysts issue recommendations and forecasts about firms' earnings. They forecast the reported numbers including the effects of manipulations. Thus, they have their credibility and marketability at stake. Furthermore, if management does a 'proper' job in regards to manage earnings 'prudently' then their workload becomes less cumbersome.

Auditors have contradictory goals because they, on one hand, need to satisfy their clients; and at the same time have to audit properly to avoid loss of credibility in the market. In the post-SOX era, in principle, they have even more responsibilities.

The Board members gain the confidence of the shareholders to continue in the Board and also avoid legal litigations when EM adversely affects the firm's prospects. At the same time, they also need to be sentient about the 'right' way of presenting firms' financial and operational performance reports.

For the employees, EM can be important to keep their jobs and increase their remunerations. At the same time they need to be careful about negative consequences in the events of felonies and frauds.

Suppliers are concerned with keeping their clients.

Clients of the firm can look towards assured and continuous services and warranty.

Members of the regulatory bodies (like the SEC) could face public outcry and impeachment in the event of wrong-doings in the events when their statutes are responsible for EM excesses. For the government, EM related firm mismanagement can spell decreased tax collection and less jobs for the population; its popular standing may also be at stake if the consequences arising out of EM are far-reaching.

The local community and society as a whole can be affected by job prospects and production of wealth, which are linked to sound financial status of firms.

Electronic and mass media (or the press) could gain good public approval and increased circulation if it reports EM activities timely.

Public interest groups and trade unions could be interested in EM in order to safeguard interests of the employees in particular and society in general.

Academics can get kudos for theorising EM.

In a nutshell, the stakeholders in EM are very diverse, ranging from managers to the general public. And, second, EM is a dynamic phenomenon, involving inter- and intra-firm relationships, structural aspects of giving accounts (e.g., GAAP), evolving among various human motives (economic, social, cultural, ethical, etc.), to name a few.

1.5. A Summary of Our Discussion until Now

We started this discussion by making a case for accounting as a vital means of showing firms' accountability. By giving accounts in a timely and realistic manner, managers disseminate firms' operational and financial information to various stakeholders to attract resources and, and in the process effecting societal wellbeing. After this, we discussed AM with the idea that manipulating accounts is neither 'good' nor 'bad' intrinsically, but instrumentally – or, the way it is carried out. The role of AM is paramount to realistically present firms' financial facts and figures, considering the uncertainties that are involved in the contemporary business world. However, to be realistic, it needs to be done prudently, following the tenets of the *Smithian* prudence that emphasise on taking care of the self-interest while being guided by conscience. Going further, we discussed various kinds of AM. While doing so, we zeroed in on the importance of earnings for firms to remain competitive in the market. Then we discussed what is EM and, why and how it is practised by undertaking an extensive literature review on it. EM is an intentional action, involving managerial discretions, having the purpose to achieve a desired goal which although looks to be organisational on its surface but has personal interests of the managers and other decision-makers of a company underneath it; and it is undertaken with the help of accounting techniques that may or may not be ethical and/or legal. We discussed that EM is of two types namely, accounting-based EM and real-activity-based EM; the former is undertaken using various flexibilities that are permitted by accounting statutes and guidelines (e.g., the GAAP) (e.g., by manipulating discretionary accruals to alter financial reports) and, the latter involves altering operational practices (e.g., underinvesting in R&D, advertising, employee training, etc.) that are used to achieve immediate benefits at the expense of future profits. EM is mainly carried using income smoothing and big-bath accounting. Here, let us be sentient about the point that many of the discussions that we have come across in the literatures on EM are based upon the tenets of neo-classical economics like cost and benefit analyses, rationality based on hedonism and self-utility-maximisation, and so forth. The motivations behind EM have been primarily studied by embarking on the neo-classical version of rationality that treats people as *Homo-Economicus*⁴⁶⁹, who reason their actions with the intention to protect and further their self-interest, and seek self-utility maximisation. (See Figure 1.2.)

Most of the research on (human) motivations behind EM is based on the neo-classical paradigm which considers people as *Homo-Economicus* – Wo/man is rational in the sense that s/he is self-interested⁴⁷⁰ and wants to maximise her/his self-utility. In real life, people behave in ways that violate rationality under these assumptions.⁴⁷¹ As a result, we can come across various paradoxes in human behaviour concerning their theoretical underpinnings (because of biases and heuristics in decision-making), which has also led to many debatable issues in the field of management studies.⁴⁷² These paradoxes arise because *Homo Economicus* is only “[... a]n [...] approximation to *Homo Sapiens* [i.e., the Modern Man...],”^{473,474} and “[...] *Homo Economicus* will [ultimately] evolve into *Homo Sapiens* [i.e., wo/men in their totality]. [...]”⁴⁷⁵

It has been contended by Polanyi (1944) that the (modern) market has evolved from the concept of surplus production exchange that was the main mode of transaction in the erstwhile subsistent societies by those self-sufficing households who

produced extra.⁴⁷⁶ In this way, the market is embedded inside society and thus only a part of society.

“The outstanding discovery of recent historical and anthropological research is that man’s economy, as a rule, is submerged in his social relationships. He does not act so as to safeguard his individual interest in the possession of material goods; he acts so as to safeguard his social standing, his social claims, his social assets. He values material goods only in so far as they serve this end. Neither the process of production nor that of distribution is linked to specific economic interests attached to the possession of goods; but every single step in that process is geared to a number of social interests which eventually ensure that the required step to be taken. These interests will be very different in small hunting or fishing community from those in a vast despotic society, but in either case the economic system will be run on noneconomic motives.”⁴⁷⁷

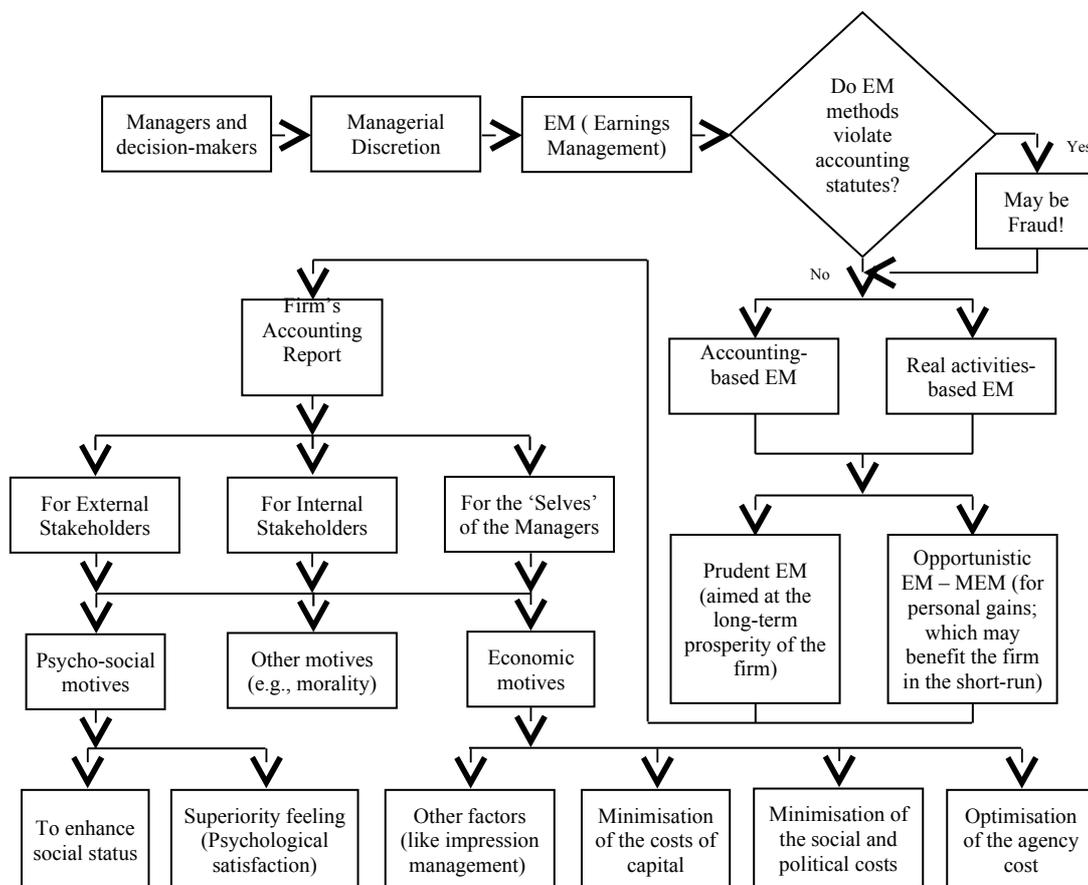


Figure 1.2. The Earning Management Phenomenon and the (Human) Motives behind It

Furthermore, corporations, the economic organisations, are creations of man’s “[...] economic (social) action [...]”⁴⁷⁸ (see: Figure 1.3); are embedded in society by various relationships, collaborations, partnerships, networks, and so on,⁴⁷⁹ and operate more as social (than economic) institutions. An individual as an organisational functionary is only a *fractional*-individual; along with acting as an economic agent, s/he is a holistic socio-economic actor having an array of (human) traits like, empathy, morality, compassion, benevolence, commitment, adventurousness, risk-taking-ness, malevolence, recklessness, greed, and the list goes on; which also very much present inside her/him even when s/he is inside the organisational boundaries. Thus, the

formal/organisational representation of wo/man, as done by the neo-classical thinkers, is, in itself, paradoxical.

“[...] From the standpoint of organization as a formal [economic] system, persons are viewed functionally, in respect to their *roles*, as participants in assigned segments of the cooperative system [that is the organisation]. But in fact individuals have a propensity to resist depersonalization, to spill over the boundaries of their segmentary roles, to participate as *wholes*. The formal systems [...] cannot take account of the deviations thus introduced, and consequently break down as instruments of control when relied upon alone. The whole individual raises new problems for the organization, partly because he brings with him a set of established habits as well, perhaps, as commitment to special groups [e.g., her/his family] outside the organization.”⁷⁴⁸⁰

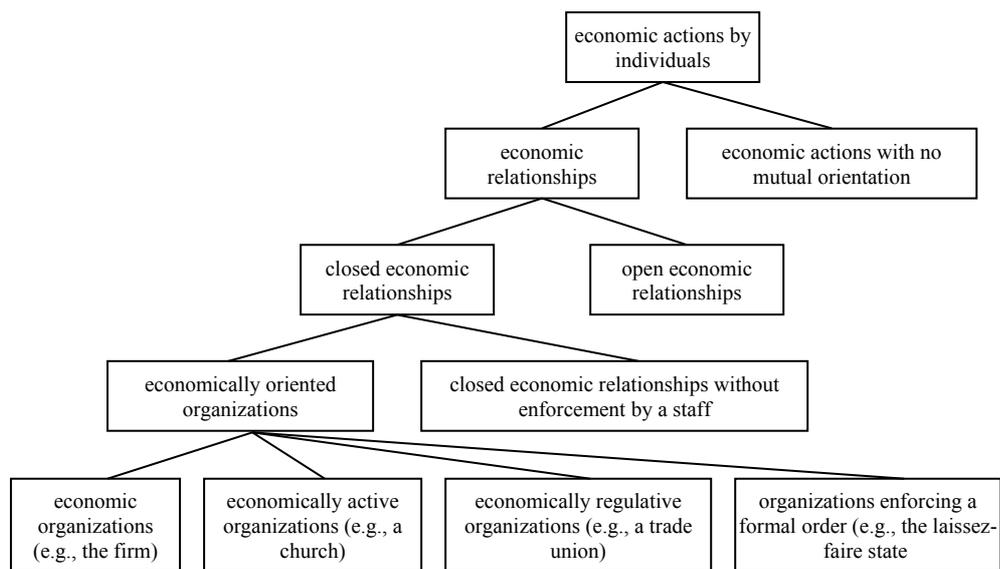


Figure 1.3. How Economic Actions by Individuals Become Economic Organisations

(Source: Richard Swedberg, *Max Weber and the idea of economic sociology* (Princeton, New Jersey: Princeton University Press, 2000), 40.)

Keeping in mind that organisational functionaries do not act as *Homo-Economicus* but as *Homo-Sapiens*, on the virtue of a wide range of socio-economic traits; it is important to study organisational practices in their social circumstances along with economic contexts. And in this regards, EM is not an exception.

1.6. Raising the Curtains for the Next Chapter

“[...] Companies manage earnings when they ask: “How can we best report desired results?” rather than “How can we best report economic reality (the actual results)?”⁴⁸¹

Various discussions, debates and modelling endeavours concerning EM, as we saw, are primarily undertaken with the notion of wo/man as a *Homo-economicus*; wherein it is argued that people are rational in the neo-classical sense, who act to safeguard and further their self-interest and maximises self-utility. It is also argued that (rational in the neo-classical sense) organisational functionaries carry out EM in order to achieve some desired targets (i.e., meeting the earmarked accounting numbers);

however, they also are aware that other (rational in the neo-classical sense) market players are going to discount earnings that they project in their financial statements. This makes it a vicious cycle because even if earnings figures are ‘true,’ there is a concern (in an organisation) that the market is going to discount it too; which, in a sense, gives more motivations to manage earnings!

In the light of the aforesaid argument, Shivakumar (2000)⁴⁸², among others, is of the opinion that EM can result from the rational expectations of agents, whereby managers manage earnings as rationally responding to market’s mistrust towards reported earnings and subsequent discounting of firms’ values (in market); Fudenberg and Tirole (1995)⁴⁸³, Arya *et al.* (1998)⁴⁸⁴, Christensen *et al.* (2002)⁴⁸⁵ look at EM as rational equilibrium behaviour arising from the preparers’ dilemma about how the financial information will be used and thus prompting utility-maximising economic agents, like the managers, to manage earnings to safeguard their self-interests; Liang (2004)⁴⁸⁶ finds that EM facilitates efficient allocation of compensation risk across periods can arise from rational economic trade-offs between managers and stakeholders. In other words, it is ‘rational’ to manage earnings.

Although seeing people as rational agents (in the neo-classical sense) is considered as an important step forward in apparently making accounting a study with (sic) scientific rigour (mainly because it eases human-behaviour modelling endeavours); yet the introduction of neo-classical economics into accounting has led to the erosion of its accountability rigour. In this regards, Williams (2004)⁴⁸⁷ notes that accounting as a positivist economic science is one of the possible causes behind financial misrepresentations and frauds. Thus, along with the appearance of scientific rigour, neo-classical economics has distanced accounting from what it was originally meant for – an instrument of accountability. In the next chapter, we are going to undertake a critique on the neo-classical notion of rationality, debating it from the perspectives of psychology, sociology and economics, including the mainstream economics; in order to investigate the following: what it is to be rational?

* * *

2. Rationality – A Critique from an Economic-Psycho-Sociological Perspective

‘[...] The cause of the origin of a thing and its eventual utility, its actual employment and place in a system of purposes, are worlds apart; whatever exists, having somehow come into being, is again and again reinterpreted to new ends, taken over, transformed, and redirected by some power superior to it; all events in the organic world are a subduing, a *becoming master*, and all subduing and becoming master involves a fresh interpretation, an adaptation through which any previous “meaning” and “purpose” are necessarily obscured or even obliterated. [...] To understand the demonstrable purpose, the utility of a thing, a form, or an institution, was also to understand the reason why it originated. [...]’⁴⁸⁸

As a research tradition, accounting is generally considered to be a science of rationality.⁴⁸⁹ There are eclectic points of view in this regards by the founders of social sciences, particularly of sociology and economics. According Max Weber, accounting is “[...] the prerequisite[e ...] of modern capitalism [...]”⁴⁹⁰ He “[...] considers accounting to be at the heart of the rationalization of society under capitalism [...]”⁴⁹¹ “[... He] reject[s ...] the idea that capitalism was a matter of greed or acquisitiveness. Instead, he argue[s ...], capitalism should be understood as the continuous pursuit of profit by means of ‘rational, capitalistic enterprise’ (Weber, 1930, p. 17). Economic action, according to him, is capitalistic in so far as it depends on an expectation of *profit* through the utilization of opportunities for exchange. And this ‘rational’ pursuit of profit require[s, ...] as its counterpart[,] calculations in terms of capital [...]”⁴⁹² The rational endeavour of profit-making through the calculative practices of bookkeeping, according to Weber, is the crux of the capitalistic enterprise – the modern rational, formal organisation.⁴⁹³ Adam Smith was under the impression that accounting based on prudence – the main theme of Smithian rationality – in joint stock companies is difficult to accomplish, because “[... t]he directors of [... joint stock] companies, however, being the managers rather of other people’s money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery [i.e., corporation or joint stock company] frequently watch over their own. [...]”⁴⁹⁴ Karl Marx identified the importance of book-keeping as an essential part of the capitalistic process; “[... i]n Volume II of Capital, where Marx deals with the costs of circulation, namely those associated with the transformations of the forms of capital from commodities into money, and from money into commodities, he addresses the issue of the labour-time expended in bookkeeping. A part of the variable capital has to be used, he argued, to ensure that the process of circulation can continue. Bookkeeping is depicted as a deduction from the productive process, albeit an essential part of the circulation process. The machinery of the office, which includes labour power, thus mirrors the movement of value through the productive process (Marx, 1974b, p. 136). In so far as capital seeks its own reproduction, this deduction from what Marx regards as the real process of production is an essential part of the capitalistic process [...]”⁴⁹⁵ Georg Simmel looked at the ‘organisational man’ as living in “[...] money economy [that] has filled the days of so many people with weighing, calculating and numerical determinations with a reduction of qualitative values to quantitative ones [...]”⁴⁹⁶ Moreover, he treated accounting as “[...] stand[ing] for a value without being one [...]”⁴⁹⁷ thus, considered accounting as an rational, objective and inanimate endeavour. In this regards, he argued, “[...] Rationalisation [... is] the desire to reduce everything to signs and formulae [... that] leads from the immediate sensual type of apperception to the mediated intellectual type: the category of the qualitative is superseded by that of the quantitative, or – expressed in the language of art – the

symbol is displaced by the definition, by analysis.”⁴⁹⁸ Emile Durkheim, while commenting on the swift transition from traditional to modern society (that is based on features like division of labour), opined, “[...] Profound changes have been produced in the structure of our societies in a very short time; they have been freed from the segmental type with a rapidity and in proportions such as have never before seen in history. Accordingly, the morality which corresponds to this social type has regressed, but without another developing quickly enough to fill the ground that the first left vacant in our consciences. [...]”⁴⁹⁹ On reflecting these words, we can find how farsighted they are with respect to the deterioration of corporate ethics in the recent past,⁵⁰⁰ and particularly the financial scandals that rocked the corporate world at the dawn of this millennium. Werner Sombart (1967) considers double-entry bookkeeping as an important, rational means of modern capitalism, through which “[...] possibilities and stimulants were created so that the ideas inherent in the capitalistic economic system could come to full development. [...]”⁵⁰¹ While contending that rationality is an offshoot of economic activity, Joseph Schumpeter said, “[...] Capitalism develops rationality and adds a new edge to it in two interconnected ways. First it exalts the monetary unit – not itself a creation of capitalism – into a unit of account. That is to say, capitalist practice turns the unit of money into a tool of rational cost-profit calculations, of which the towering monument is double-entry bookkeeping. [...] We will notice that, primarily a product of the evolution of economic rationality, the cost-profit calculus in turn reacts upon that rationality; by crystallizing and defining numerically, it powerfully propels the logic of enterprise. [...] Second, rising capitalism produced not only the mental attitude of modern science, the attitude that consists in asking certain questions and in going about answering them in certain way, but also the men and the means. [...]”⁵⁰²

One of the central features of all these arguments is that accounting has a role in the rationalisation process of society, including organisations. This, as we visualise, is due to the *rationalising qualities* (RQs) that accounting objects (AOs) are endowed with. (We argue that similar to the things and beings in the natural world which have qualities like physical, chemical, biological, etc., AOs have RQs). AOs, e.g., financial statements (FSs), accounting guideline statutes (AGSs, e.g., GAAP), audit reports, analysts’ forecasts, and so on, prepared by their methodologies, rules, do’s and don’ts, calculating procedures, numbers and figures, texts and footnotes, *have* RQs in them, which manifest when they come in contact with their users who reason their actions and make informative decisions as a result of using them. Also, by definition, accounting and AOs enable rational decision-making. accounting is a “[...] multifaceted activity which not only records and classifies information but also provides an input to the [rational] decision-making processes of enterprises [...]”⁵⁰³ “[...] *Accounting* [objects ...] *provide quantitative information, primarily financial in nature, about economic entities* [one of the first stages of the rationalisation process] *that is intended to be useful* [one of the intermediate stages of the rationalisation process] *in making economic decisions, in making reasoned choices among alternative courses of action* [the latter stage of the rationalisation process].”⁵⁰⁴

Here we encounter two issues: first, is accounting all about *quantitative* numbers and figures? And second, which kind/s of reasoning do AOs induce into decision-making? As regards the first, King (2006) notes that definitions of accounting that attempt to explain it as a strict economic phenomenon, concerned with mere quantitative aspects, are myopic.⁵⁰⁵ This is because many non-quantitative,

non-economic aspects are involved in accounting, say social and cultural values, that influence decision-makers in some way or other. However, the second problem, i.e., the kind/s of reasoning that accounting (information) infuse into decision-making, is not simple and straightforward, mainly because rationality itself is a complex. In this chapter, we are going to critique the neoclassicist' notion of rationality (NRR), from the perspectives of sociology, psychology and economics, including mainstream economics.

The dominant school of thought in contemporary economics is the neoclassical paradigm, according to which rational wo/men are self-interested hedonists and utility maximisers.⁵⁰⁶ Reflecting on this, a couple of issues come to the fore. Are company decision-makers merely utility maximising hedonists? Or, are they some sorts of 'stimulus-response-reinforcement humanoids,' who respond to a stimuli, say accounting numbers, when they encounter them, make informed decisions to achieve desired results, reinforce the degrees of hedonism that they receive them, and rationalise their future behaviour based on this reinforcement? They have relevance in the context of accounting manipulations, as we saw in the last chapter. Since the 1980s when the importance of firm performance-related pay (e.g., bonuses and commissions) increased in the 1980s and continued in the 1990s,⁵⁰⁷ company decision-makers have increasingly behaving in ways that are self-interest fulfilling; as a result, there has been numerous high-profile white-collar crimes and corporate frauds that have taken place especially in the last two decades.⁵⁰⁸ In this regards, Williams (2004)⁵⁰⁹ notes that accounting as a positivist economic science is one of the possible causes behind financial misrepresentations and frauds and he goes on to add that accounting needs to be unshackled from the neo-classical economics in order to once again become what it was originally meant to be – a science of accountability.

“[...] T]he crisis in the academy [...], the crisis in accounting education [...], and the crisis in practice epitomized by the Enron fiasco are interconnected. They are the result of the historical inter-connections of accounting practice, education and scholarship, and the questionable values that shaped their parallel developments. [...] T]hese accounting problems are really problems with Professional accountants and that recovering accounting as a worthy endeavor requires that intellectually we dissociate it from [the neo-classical paradigm ...].”⁵¹⁰

Interestingly, the viewpoints of Cooper *et al.* (1981) also resonates this point, which says: strict (neoclassical) rationality based accounting is tantamount to “the technology of foolishness.”⁵¹¹

Before delving further, let us discuss what is it to be rational, from a commonsense perspective. To be rational – having its roots in Middle English *racional*, from Anglo-French *racional* from Latin *rationalis* – means to have the understanding relating to reasons.⁵¹² The history of rationality dates back to the days of the ancient Greeks. Several pre-Socratics like Plutarch and Porphyry opined that animals have a natural endowment of reason and intellect, and in this way they argued for the existence of rationality in animals.⁵¹³ According to Aristotle, rationality refers to a person acting on the basis of reason, and exercising rationality is to act virtuously.⁵¹⁴ This Aristotelian version of rationality is intimately related to the Socratic question: “[...] how one should live [...],”⁵¹⁵ which is not a trivial question, as Aristotle has discussed in the *Nicomachean Ethics*.

“The truth, however, in questions about action is judged from what we do and how we live, since these are what control [the answers to such questions]. Hence we ought to examine what has been said by applying it to what we do and how we live; and if it harmonizes with what we do, we should accept it, but if it conflicts we should count it [mere] words.”⁵¹⁶

In the context of accounting, Aristotle’s wisdom is important because he treats rational actions as bearers of accountability towards others;⁵¹⁷ we have already discussed that through accounts-giving, organisations try to manifest their accountability towards organisational stakeholders, and we also have deliberated that accounting consists of rational activities. However, rationality, as we will see, is not a simple and straightforward concept. Thus, the process of rationalisation needs to be explored further.

“[...] Processes of rationalization should be addressed, as should the mythical, symbolic, and ritualistic roles of accounting [...].”⁵¹⁸

The notion of rationality has been debated from many perspectives. In this chapter, we are going to look at it from an *economic-psycho-social* perspective. Why we have chosen to undertake a (literature) review from this perspective is because we are discussing (manipulative) earnings management, which is an economic activity, being carried out by people having psyche and taking place in organisations that are parts of society.

2.1. Rationality and Economics

“Economic models underlie accountants’ basic view of the world. What we try to account for, what we leave out of our system, who we account for, how we think of values and profits, how we think people act, and how we think the whole system (market) works are all derived from economic thought. [...]”⁵¹⁹

“The neoclassical paradigm is a utilitarian, rationalist, and individualist paradigm. It sees individual as seeking to maximize *their* utility, rationally choosing the best means to serve their goals. They are the decision-making units; that is, they render their own decisions. The coming together of these individuals in the competitive marketplace, far from resulting in all-out conflict, is said to generate maximum efficiency and well-being. The notion of a community, to the extent that it is included in this paradigm, is often seen as a result of the aggregation of individual rational decisions. [...]”⁵²⁰

As we know neo-classical economics is the dominant school of thought in contemporary accounting, which is based on rational (economic) decision-making. However, NNR is simply tenable in the real-world.

“[...] The assumption of ‘rational behaviour’ plays a major part in modern economics. Human beings are assumed to behave rationally, and given this special assumption, characterizing rational behaviour is not, in this approach, ultimately different from describing actual behaviour. [...] However,] it might not necessarily make sense to assume that people would *actually* behave in the rational way characterized. [...] The coolly rational types may fill our text books, but the world is richer.”⁵²¹

Contemporary economics closely follows Lionel Robbins’ methodological guidelines.⁵²² According to Robbins (1932)⁵²³, economics is not concerned with production, exchange, distribution, or consumption as such; instead, it entails the

means and ends of human action. It is “[...] the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses [...]”⁵²⁴ and “[...] the study of the allocation of scarce resources among unlimited and competing uses. [...]”⁵²⁵ And as we know, contemporary economics is highly influenced by the neoclassical paradigm.⁵²⁶ Earlier neoclassical economists, notably Alfred Marshall and Vilfredo Pareto, strongly argued that economics should be concerned more with the deliberative and calculative aspects of human behaviour. In this regards, Marshall (1949) contended, “[...] T]he side of life with which economics is especially concerned is that in which man’s conduct is most deliberate. [...]”⁵²⁷ Pareto (1909 [1971]) considered “[...] economics as being concerned with ‘logical’ actions, namely those where means are logically related to ends. [...]”⁵²⁸ Moreover, Pareto (1935)⁵²⁹ *also* argued for studying the “non-logical” actions from the sociological perspectives, along with the economic ones. Thus,

“[...] f]rom both the Marshallian and the Paretian points of view [both neoclassicists], economics was not an all-encompassing social science. It was concerned with particular kinds of activities or behaviour [i.e., the economic kind].”⁵³⁰

As regards the scope of economics, Marshall held the viewpoint that “[...] e]conomics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisite of wellbeing. [...] Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man. For man’s character has been moulded by his every-day work, and the material resources which he thereby procures, more than by any other influence unless it be that of his religious ideals.”⁵³¹ Furthermore, Crouch (1979) argued that “[...] a human being is a *purposeful* animal and the purpose is to maximize enjoyment of life. [...]”⁵³² Dyke (1981) supports this and contends, “[...] All actions are directed toward the gain of pleasure or the avoidance of pain. [...]”⁵³³ (In economic analyses, happiness, satisfaction and pleasure are used as synonyms.⁵³⁴) Here it is relevant to mention Jevons (1871), one of the early neoclassical economists, according to whom agents make choices in order to *maximise* their happiness.

“[...] T]he object of economics is to maximize happiness by purchasing pleasure, as it were, at the lowest cost of pain. [...]”⁵³⁵

Supporting hedonism as one of the main objective behind human behaviour and action, Mill (1836) argued that individuals act rationally in the pursuit of wealth creation, labour avoidance and pleasure-seeking.⁵³⁶ Moreover, Galt contended that “[...] m]an has been called a rational being, but rationality is a matter of choice – and the alternative his nature offers him is: rational being or suicidal animal.... All that which is proper to the life of a rational being is the good; all that which destroys it is the evil.... By the grace of reality and the nature of life, man – every man – is an end in himself, he exists for his own sake, and the achievement of his own happiness is his highest moral purpose.”⁵³⁷

According to Friedman (1953), rationality is one of the defining features of economics, especially neoclassical economics.⁵³⁸ However, to ascertain whether a behaviour is rational or not, is a contentious issue.⁵³⁹

'[...] Economics [...] is founded on the rational man premise [...] Even most non-“mainstream” economists who are uneasy with both the methods and conclusion of neoclassicism unhesitatingly adopt assumptions about human behavior that are increasingly questioned elsewhere [...]'⁵⁴⁰

Furthermore, the dictionary meaning and historical underpinnings of rationality, i.e., to be rational is to be logical and to use reasons while acting, differ from that of economists', particularly neoclassical economists', who define acts with motives to maximise one's utility from her/his choice as rational, and not *any* other motivations.

'[...] T]he term “rational” has long had in economics a much more specific meaning than its general dictionary signification of “agreeable to reason; not absurd, preposterous, extravagant, foolish, fanciful, or the like: intelligent, sensible.” As it is well known, the rational man of economics is a maximizer, who will settle for nothing than the best. [...] It is this concept of rationality that is economics' main export commodity in its trade with the other social sciences. It is no novelty in those sciences to propose that people behave rationally – if that term is taken in its broader dictionary sense. Assumptions of rationality are essential components of virtually all the sociological, psychological, political, and anthropological theories which I am familiar. What economics has to export then is not rationality, but a very particular and special form of it – the rationality of the utility maximizer, and a pretty smart one at that. [...]'⁵⁴¹

“[...] Maximizing rationality is closely connected with the rationalist tradition, usually traced from Plato and Descartes, that sees reason as conscious, logical deduction from explicit premises. The criterion for economic rationality is thus the logical consistency of the agent's actions with his or her (explicit) knowledge and preferences. And since, even under conditions of subjective uncertainty, that knowledge and those preferences logically imply a best course of action, the agent is rational only when he or she selects that particular best course.”⁵⁴²

However, there are arguments against utility maximisation as the key criterion of rationality, because there are umpteen instances when people do not meet this in the real-world.⁵⁴³

Furthermore, it has been said that egoism and utilitarianism exhausts all possible alternatives of rational human motivation.⁵⁴⁴ In this regards, there are two predominant views that ascribe rationality to behaviour: internal consistency of choice and maximisation of self interest.^{545,546} The notion of internal consistency of choice comprises of axioms, e.g., the weak and strong axioms of revealed preference, which are '[...] “internal” to the choice function [representing individual choices by formalising maximisation problems wherein an individual makes choices from each feasible set of alternatives, which maximise her/his own preference relations] in the sense that they require correspondence between different parts of a choice function, without invoking anything *outside* choice (such as motivation, objectives, and substantive principles) [...]'⁵⁴⁷ But, internal consistency is not enough to regard an action as rational because, Sen (1987) notes, choice consistency “[...] must depend on the *interpretation* of those choices and on some features external to choice as such (e.g. the nature of our preferences, aims, values, motivations). [...] Although it is argued that a person maximises her/his utility function, but] the person's ‘utility function’ does not tell us that it is his or her utility in any independently defined sense (such as happiness or desire-fulfilment) that the person is in fact trying to maximize.”⁵⁴⁸ In this context, Becker (1976)⁵⁴⁹ and March (1978)⁵⁵⁰ argued that consistency is at best *a* necessary but not sufficient condition for rationality because consistency does not essentially entail reasoning or conscious decision-making.

Maximisation of self interest as an indicator of rationality is based on arguments like “[...] we live in a world of reasonably well-informed people acting intelligently in the pursuit of their self-interests [...]”⁵⁵¹

“Adam, Adam, Adam Smith
Listen what I charge you with!
Didn't you say
In a class one day
That selfishness was bound to pay?
Of all doctrines that was the Pith.
Wasn't it, wasn't it, wasn't it, Smith? [...]”⁵⁵²

However, Sen (1987) looks at the neoclassicists' narrower versions on rationality as illogical and impractical.

“[...] It may not be quite as absurd to argue that people always *actually* do maximize their self-interest, as it is to argue that *rationality* must invariably demand maximization of self-interest. Universal selfishness as *actuality* may well be false, but universal selfishness as a requirement of rationality is patently absurd [...]”⁵⁵³

In this regards, reflecting on Adam Smith's works, he contends that economists oftentimes misrepresent the Smithian prudence and defines rationality in terms of exclusive motivations like that of maximising utility.

“[...] While many admirers of [Adam] Smith do not seem to have gone beyond this bit about the butcher and the brewer, a reading of even this passage [concerning the butcher-brewer-baker illustration] would indicate that what Smith is doing here is to specify why and how normal transactions in the market are carried out, and why and how division of labour works, which is the subject of the chapter in which the quoted passage occurs. But the fact that Smith noted that mutually advantageous trades are very common does not indicate at all that he thought self-love alone, or indeed prudence broadly construed, could be adequate for a good society. Indeed, he maintained precisely the opposite. He did not rest economic salvation on some unique motivation.”⁵⁵⁴

These nuances of narrowing down of otherwise broader views about human motivations, according to Sen (1987), have distanced economics from studying other important aspects concerning human behaviour, e.g., morality and ethics. This, he argues, is a paradox because economics, since Aristotle, among other things, was envisioned as a branch of ethics and, moreover, the father of modern economics Adam Smith was a Professor of Moral Philosophy at the University of Glasgow.⁵⁵⁵

Moving further, according to Tilly and Tilly (1998), there are three broad perspectives concerning people that have dominated the theoretical landscape of economics: neoclassical, Marxist, and institutionalist.⁵⁵⁶ The neoclassical view (of economics), however, “[...] play[s] a key role in major theories in all contemporary social sciences [...]”⁵⁵⁷ which is based on rational, optimising, laboratory simulated human behaviour.⁵⁵⁸

“Neoclassical theorists approach work with a startling degree of naturalism. According to this view, *homo sapiens* is *homo economicus*. Rational maximizing economic behavior has been characteristic through out history [...]”⁵⁵⁹

In other words, the neoclassical economists mainly study rationality by analysing how individuals formulate their utility levels and try to maximise their payoffs.⁵⁶⁰ Going by them, it seems that a rational agent is a *sort* of ‘calculative’ person.

2.1.1. Calculability and Rationality

Noyes (1948)⁵⁶¹ argued that one of the main characteristics of rationality is the agent’s capacity to calculate the consequences of her/his decisions – the ability to calculate means towards an end and vice versa, also known as “instrumental rationality.” Thus, economic calculation has an important connection with rational behaviour.⁵⁶² The neoclassicists primarily treat rationality as calculable, which is based on their all-inclusive, mono- or single attribute oriented utility function aimed at maximising hedonism,⁵⁶³ they undertake this from three vantage points, namely: “[... first,] pleasure of self, [... second,] the satisfaction the actor gains from his or her own consumption as well as that of others [... that] includes satisfactions derived out of benevolent acts[,] and [third,] discharging community minded duties [... which] sometimes [is] referred to as the interdependent utility [... i.e.,] utility as a formal attribute, a common denominator, according to which all specific quests for satisfaction can be ranked [using mathematical tools]”⁵⁶⁴ Thus, the ability to calculate in order to maximise one’s utility is considered important in rational actions.

2.1.1.1. Utility Maximisation and Rationality

[...] The neoclassical paradigm assumes that people seeks to “maximize” one utility [...] identified as the individual’s pleasure or interests [...].⁵⁶⁵

The concept of utility is widely used in neoclassical economics.⁵⁶⁶ It, in economics, is considered as a measure of the relative satisfaction and/or gratification from the consumption of goods and services. Moreover, the utility they derive from them may be real, abstract, even nothing.⁵⁶⁷ It is believed that Jeremy Bentham developed the concept of utility in the 18th century, which is characterised as “[...] narrowly self-oriented and straightforwardly hedonistic [...]”⁵⁶⁸ Myerson (1991) argues that a rational decision-maker should make decisions consistently in pursuit of his own objectives – the objective of always choosing the option that maximises his expected utility or payoff that is measured on a utility scale.⁵⁶⁹

Since the time of Bentham, the concept of utility has undergone many changes. Of all, in contemporary economics, the cardinal and ordinal conceptions of utility are important. By cardinal utility, the magnitude of utility differences is treated as an ethically or behaviourally significant quantity; on the other hand, ordinal utility captures only ranking and not strength of preferences. However, since the work of Vilfred Pareto (1916), neoclassical economics has treated utility as an ordinal concept, retreated from using cardinal utility functions as the basic objects of economic analysis, and, in the process, favoured considering agent preferences over choice sets.⁵⁷⁰ Notwithstanding, as Little (1950) has noted, utility in the real-world, has little or no meaning.

[...] The important word ‘utility’ has undergone [...] a [sea] change. For Bentham ‘utility’ referred to some power in objects to create satisfaction in people. With Marshall and Pigou it was roughly equivalent to ‘desiredness’. It was a relation between men and things, although, strictly speaking, maximization of utility could only mean

maximization of anticipated satisfaction. But nowadays economists talk of cardinal and ordinal utility systems. In such statements the word ‘utility’ does not refer to any power in objects or any real relation. It need not refer to anything. A cardinal utility system is an abstract system in which ‘utilities’ are subject to the operations of addition and multiplication. In ordinal utility systems these processes are excluded.”⁵⁷¹

So much so that Samuelson (1983) sees utility as an “[...] empty convention [...] and as] meaningless in any operational, empirical sense. [...]”⁵⁷² However, utility *is* an important factor at least in the neoclassical paradigm, and many of its theories and axioms as based on utility.

As per the expected utility (EU) theory, “[...] each person’s preferences may be represented by a utility function defined on the domain of alternatives. [...]”⁵⁷³ It studies preferences, concerning uncertainty, taking into account: (mathematical) relation among the size of payoffs, the probability of their occurrences, factors concerning risk aversion factors, and the different degrees of utility that people (with different assets or personal preferences) attach to the same payoff.⁵⁷⁴ Bernoulli (1738)⁵⁷⁵ is credited with the theorisation of EU and von Neumann and Morgenstern (1944)⁵⁷⁶ with its axiomatisation. Von Neumann and Morgenstern’s (1944) arguments on full rationality are based on the assumption that a rational preference is one that satisfies mathematical conditions like completeness, transitivity and so on; and that von Neumann-Morgenstern EU functions can represent every preference relation over a finite set of events. According to this theory, a rational agent is one who chooses an action to maximise the von Neumann-Morgenstern EU function.⁵⁷⁷ Another formalisation attempt as regards utility is the “Subjective Expected Utility” (SEU),⁵⁷⁸ developed by Savage (1954),⁵⁷⁹ which takes into account a utility function and its subjective probability distribution. In the case of SEU, agents maximise the expected value of a utility function based on her/his degree of belief about the uncertainties of an outcome and/or proposition.

However, Nau (2007)⁵⁸⁰, among others, have criticised these theoretical models because they mainly emphasise on normative requirements like behavioural consistencies, and not describe the ‘actual’ decision-making in the real-world. For example, O’Donoghue and Rabin (2005)⁵⁸¹ argue that the existence of heterogeneous actors limits the effectiveness of the representative agent models like the EU and the SEU. Simon (1955⁵⁸², 1961) proposed the concept of bounded rationality because although agents are “[...] intendedly rational, but only limitedly so [...]”⁵⁸³

The notions of EU and SEU have also been criticised as regards traditional economic activities. For example, there are interesting debates in the context of gift-giving. On the one hand, defending the neoclassicists, Lipsey and Steiner (1975) note that “[... in neoclassical economics, i]ndividuals are assumed to be narrowly selfish and devoid of any altruistic motives. This is not so. If, for example, the individual derives utility from giving his money away to others, this can be incorporated into the [economic] analysis, and the marginal utility that he gets from a dollar given away can be compared with the marginal utility that he gets from a dollar spent on himself [...]”⁵⁸⁴ On the other hand, Boulding (1981) criticises neoclassicists’ analyses that do not treat a gift as an instance of altruism or fellow-feeling but only having “interdependent utility,” i.e., a giver’s utility rises when s/he perceives the receiver’s consumption of her/his gift.⁵⁸⁵ In other words, the views concerning people as utility maximising agents, do not take into consideration *other* factors that are relevant as

well as important in preference formation. And, their inapplicability to the real-world makes them merely tautological and trivial. As Stigler (1966) has commented, “[...] a reason, we would be saying, can always be found for whatever we observe man to do [...] and this] turn[s] utility into a tautology [...]”⁵⁸⁶ Moreover, according to Bowie and Simon (1977):

“[...] In classical view, [...] an agent] is a satisfaction maximizer, i.e., he is a rational egoist. [...] This assumption is so obviously contrary to the fact that economists have turned it into a tautology. Any [...] agency] behavior is by definition an attempt to maximize satisfaction. [...] In this sense, theorising agency behaviour has become] utterly trivial [...]”⁵⁸⁷

Utility maximisation is also a debatable issue in welfare economics. Bentham argued that welfare improves when the greatest good is secured for the greatest number of people – utilitarianism. Thus, following utilitarianism, welfare of an economy is measured by aggregating the utilities of the individuals in the economy.⁵⁸⁸ Pareto argued that any change that makes at least one individual better off and no one worse off, is an improvement in social welfare; i.e., a situation is efficient or optimal if it is impossible to make one person better off except by making someone else worse off.⁵⁸⁹ Bergson (1938)⁵⁹⁰ developed a social welfare function analogous to consumers’ utility function, which ranks alternative situations in which different individuals enjoy different utility; he claimed that such an approach helps to examine the conditions of social welfare maximisation.⁵⁹¹ Even in regards to ethicality of actions, “[...] w]elfare is [of] the view that the only things of intrinsic value for ethical calculation and evaluation of states of affairs are individual utilities. [...]”⁵⁹²

However, there are arguments against such utilitarianism based arguments that claim that personal wellbeing is best represented by utility.⁵⁹³ For example, Hicks (1939)⁵⁹⁴ and Kaldor’s (1939)⁵⁹⁵ Kaldor-Hicks efficiency (potential Pareto superiority) proposes that if gains by virtue of a change can compensate the losers in the process of the change, then it constitutes an improvement in social welfare. In some situations, especially in situations involving ethical calculations as proposed by Sen (1985a), a person can be seen “[...] from two different perspectives, viz., well-being and agency, neither of which can subsume the other [...]”⁵⁹⁶

“People have aspects other than well-being. Not all their activities are aimed at maximizing well-being (nor do their activities always contribute to it), no matter how broadly we define well-being within the limits of that general concept. There are goals other than well-being, and values other than goals [...] It can be argued that something so central to human life – indeed to out being persons – cannot fail to be intrinsically relevant to moral analysis.”⁵⁹⁷

Building on this, Sen (1985a) argues that as a result of the interaction between agency and wellbeing, we can see undertakings like commitment or allegiance to groups, which would otherwise be absent.

“[...] The well-being aspect of a person] covers the person’s achievements and opportunities in the context of his or her personal advantage, whereas [...] the agency aspect of a person] goes further and examines achievements and opportunities in terms of other objectives and values as well, possibly going well beyond the pursuit of one’s own well-being [...] and] pays more complete attention to the person as a *doer*. The distinction does not, of course, entail that a person’s agency is independent of his or her well-being [...] The utilitarian treatment of the person suffers from a failure to distinguish between

these different aspects, and from trying to motivate normative evaluation on the basis of the well-being aspect alone.”⁵⁹⁸

“[...] The basic link between choice behavior and welfare achievements in the traditional [economic man] models is severed as soon as commitment is admitted as an ingredient of choice.”⁵⁹⁹

The importance of agency and wellbeing is lost, according to Sen (1987), in models exclusively built on self-interest and utility maximisation assumptions, i.e., a person’s agency must be entirely devoted to his own wellbeing; once self-interest centred motivation behind human action is removed from such models, it becomes possible to recognise the *indisputable* fact that a person’s agency, as a matter of fact, can be directed towards goals that are not exclusively concerned with her/his own welfare.⁶⁰⁰

“[...] On the one hand, utility addresses well-being, but on the other it ignores] the agency aspect, or actually fails to distinguish between the agency aspect and the well-being aspect altogether, something of real importance *is* lost.”⁶⁰¹

Moreover, self-wellbeing is only one part of the *totality* of the human nature, and the people who strictly *calculate* how to maximise their utilities may be termed, according to Sen (1977e), as “rational fools.”

‘[...] A person described [through economic theory of utility, which relates to the theory of rational behaviour] may be “rational” in the limited sense of revealing no inconsistencies in his choice behavior, but if he has no use for these distinctions between quite different concepts, he must be a bit of a fool. The purely economic man is indeed close to being a social moron. Economic theory has been much preoccupied with this rational fool decked in the glory of his one all-purpose preference ordering. To make room for the different concepts related to his behavior we need a more elaborate structure.’⁶⁰²

2.1.1.2. Preference Ranking and Rationality

By preference, economists refer to choosing between alternatives and the possibility of ranking them on the basis of utilities they provide. Neoclassical analyses assume that preferences, that make up a person’s utility function, are relatively stable and logically consistent.⁶⁰³ In this regards, Pareto (1909)⁶⁰⁴ and, Hicks and Allen (1934)⁶⁰⁵ argued that agents who can consistently rank various choice alternatives are rational. As Tobin (1971) has noted:

‘[...] Economic theory is usually predicted on the premise that, given their schedules of preferences for goods and services and leisure, individuals behave consistently and “rationally.” [...]’⁶⁰⁶

Economists consider reflexivity, transitivity, completeness and continuity as the necessary and sufficient conditions for agents to perform preference ranking. According to Pareto (1909), for example, “[...] among the infinite number of systems of indices [for rationality] which we can have, we must retain only those which have the following property, namely, that if in passing from I to II the man experiences more pleasure than in passing from II to III, the difference between the indices of I and II is greater than the difference between the indices of II and of III [...]”⁶⁰⁷ Walsh (1970)⁶⁰⁸, Hirshleifer (1976)⁶⁰⁹, Alchian and Allen (1977)⁶¹⁰, among others, are of the view that utility is nothing but individual’s preference rankings. According to

Hirshleifer (1976), “[...] What modern economists call ‘utility’ reflects nothing more than the *rank ordering of preference* [...]”⁶¹¹

However, rationality based on individual preferences in general and preference ranking in particular, is not free from criticisms. According to Etzioni (1988), the neoclassicists do *not* account for the formation of preferences.⁶¹² Sen (1994) argues that, in stead of preference per se, behaviours are “menu-dependent.”

[...] Many social behaviours involve] more complex considerations of ethics and epistemology [...] and payoffs are evaluated from] not just the *actual* outcomes [...] that will emerge, but also the anticipated [...] alternative outcomes [...] – “the opportunity set” or “the menu,” which the person reckons she *can* have through different choices of her strategy (given her presumptions about the other’s behavior)[, i.e., the “form of individual preference].”⁶¹³

Furthermore, Sen (1994) contends that preference has two components: choice-salient and wellbeing centred; the former accounts for an individual’s choice as maximising his goal (an objective function) based on her/his preference ordering and the latter payoffs from it (gain and benefits arising out of preference ordering).⁶¹⁴ Although many fundamental theorems of economics, e.g., the “fundamental theorem of welfare economics,” assume them to be the same, Sen (1994) notes that they are different.

“A divergence between choice and well-being can easily arise when behavior is influenced by some motivation other than the pursuit of one’s own interest or welfare (e.g., through a sense of commitment or respect for duty). [...] Can people have reason to act other than the extent to which their own well-being is directly or indirectly enhanced by it? [...]”⁶¹⁵

According to Sen (1977e, 2005), in the case of commitment or “[...] a sense of obligation going beyond the consequences [...],”⁶¹⁶ we can see the relevance of both these components, in the case of which agents do not try to maximise only the immediate consequences of their action. Thus, preference ranking is not a simple and straightforward act, involving some mundane and mechanical calculations that the neoclassicists deem it to be.

Tilly and Tilly (1998) note that preference ranking is problematic, from two aspects. One, that various theories of neoclassical economics assume that individual preferences “[...] are determined outside the economy, and thus outside the world of work [...]”⁶¹⁷ And second, that “[...] the neoclassical firm – the key economic unit other than individual consumers or workers – acts single-mindedly to maximise the owner’s or stockholders’ profits. [...]”⁶¹⁸ Looking at the first, if preferences are shaped outside work and choices arising out of them are consistent, then why do organisations spend money for employee motivation programmes?

2.1.2. Rational Choice Theory and Rationality

[...] Rationality is] the discipline of subjecting one’s choices – of actions as well as of objectives, values and priorities – to reasoned scrutiny. Rather than defining rationality in terms of some formulaic conditions [...] such as satisfying some prespecified axioms of “internal consistency of choice,” or being in conformity with “intelligent pursuit of self-interest,” or being some variant of maximising behaviour [...] rationality is [...] the need to subject one’s choices to the demands of reason.”⁶¹⁹

According to Rational Choice Theory (RCT), also known as social exchange theory, rational agents reason before deciding by undertaking costs-benefits analyses, in order to maximise their utilities.⁶²⁰ It also involves consistency in preferences and choices, as noted by Becker and Murphy (1988), i.e., “[... r]ational [... agents] maximize utility from stable preferences as they try to anticipate [and calculate] the future consequences of their choices. [...]”⁶²¹

According to Savage (1954)⁶²² and Thompson (1967),⁶²³ a rational choice entails two kinds of calculative guesses: future consequences of current actions and future preferences for those consequences. However, as March (1978) has argued, these evaluations are problematic because of the presence of (future) uncertainties.

“[...] Theories of rational choice are primarily theories of these two guesses and how we deal with their complications. Theories of choice under uncertainty emphasize the complications of guessing future consequences. Theories of choice under conflict or ambiguity emphasize the complications of guessing future preferences”⁶²⁴

Apart from contextual ambiguities, Simon (1955, 1957⁶²⁵) also has criticised the RCT on the basis that traditional choice rationalisation ignores or *simply* discounts cognitive limitations and biases.

“[...] The RCT [Rational Choice Theory] assumption requires actors to infer facts about the world by applying principles of deductive logic that make use of all known, relevant information, and the complete ordering of their preferences. [...]”⁶²⁶

2.1.2.1. Revealed Preference Theory and Rationality

Attempting to make decision-making more objective (and rational), Samuelson (1947)⁶²⁷ postulated the Revealed Preference Theory (RPT);⁶²⁸ which has been discussed and further enriched by Houthakker (1950),⁶²⁹ Little (1957)⁶³⁰, Sen (1971⁶³¹, 1973⁶³²), among others. One of the fundamental assumptions behind RPT is that individuals do reveal their *real* preferences through their actual choices.⁶³³ Thus, according to the RPT, as agents’ preferences are revealed as a result of their choices, so that it is possible to determine the best possible strategy for them. In the RPT, utility maximisation and observed choice are treated synonymously. This practice of analysing behaviour is not only adopted in economics, but also in other branches of social sciences.⁶³⁴

‘[...] In the revealed preference approach a] person’s choices are considered “rational” [...] if and only if these choices can *all* be explained in terms of some preference relation consistent with the revealed preference definition, that is, if all his choices can be explained as the choosing of “most preferred” alternatives with respect to a postulated preference relation [...]’⁶³⁵

However, Robertson (1952) criticised the RPT because of its methodological styles to model human behaviour entailing inferences, speculations and constructions.

“[...] T]he logicians and behaviorists, having tasted the blood of cardinal utility, were spurred to fresh efforts of purgation, which have resulted [...] in the development of the doctrine of ‘revealed preference.’ Dare I [Robertson] confess that when I first heard this term [...] I thought that perhaps to some latter-day saint, in some new Patmos off the coast of Massachusetts, the final solution of all these mysteries had been revealed in a new apocalypse? But alas! it does not mean that; all it means is that we are to construct

an account of the consumer's behavior simply by observing, or rather imagining ourselves to observe, all the acts of choice which he performs in the market, without making any assumption about what goes on in his mind when he makes them [...]"⁶³⁶

Sen (1973) also criticises the RPT on similar grounds.

"[...] The thrust of the revealed preference approach has been to undermine thinking as a method of self-knowledge and talking as a method of knowing about others. In this[, ...] we have been prone, on the one hand, to overstate the difficulties of introspection and communication, and on the other, to underestimate the problems of studying preferences revealed by observed behaviour."⁶³⁷

However, it seems that Samuelson was aware of such concerns, as he had said the following:

"[...] T]he individual guinea-pig, by his market behaviour, reveals his preference patterns – if there is such a consistent pattern [...]"⁶³⁸

"If there is such a consistent pattern" is the catch phrase!

Another line of argument against RPT comes from the fact that a choice may have many latent considerations and compromises. In this regards, Sen (1973) argues that "[... p]eople may be induced by social codes of behaviour to act as if they have different preferences from what they really have [...]"⁶³⁹ According to him, acts like sympathy and commitment are interesting as regards revealed preferences. While sympathy may arise from someone's concern for others directly affecting her/his welfare; commitment, usually closely connected to a person's morals, involves actions that yield lower expected welfare than other alternatives. Thus, in such kinds of acts, revealed preference may *not* reveal anything at all. For instance, Sen (1977e) argues that "[...] commitment does involve [... a] counterpreferential choice, destroying the crucial assumption that a chosen alternative must be better than (or at least as good as) the others for the person choosing it [...]"⁶⁴⁰ In a similar vein, Fox (1974) claims that commitment indeed plays a pivotal role in work motivations, societal relations and cultures.⁶⁴¹ In other words, factors like moral guidelines, professional compulsions, societal norms, etc. can influence choice, over and above self-welfare motivations.

'In what is called "rational choice theory" (a misleading name, since it takes such a puny view of reason and rationality), the focus is on characterizing rationality of choice as maximization of self-interest. [...] The incorporation of one's "self" in reasoned choices can be a very difficult issue, since considerations of one's own "self" may enter the calculations involved in quite different ways (not merely in terms of what can be seen as one's own "interest"). [...]"⁶⁴²

As Sen (1977e) has quipped, "[...] To run an organization *entirely* on incentives to personal gain is pretty much a hopeless task."⁶⁴³

As regards empirical studies, Kagel *et al.* (1975) argue that interpretations of their are difficult on the basis of only observing individual choices, *even* while undertaking experiments under extremely simplified and controlled conditions.⁶⁴⁴ The RPT is also criticised on the basis of the real-world behavioural patterns like "preference reversals,"⁶⁴⁵ that reveals that economically *irrelevant* framings change choices, even in straightforward choice options.⁶⁴⁶ To explain anomalies as regards

RPT, there are attempts to consider preferences as emergent, not predetermined, phenomena. For instance, according to Thaler and Shefrin (1981), “[... t]he individual at a point in time is assumed to be both a farsighted *planner* and a myopic *doer*. [... S/he has] two sets of preferences that are in conflict at a single point in time [... as if s/he is] a two-self economic [wo/]man [....]”⁶⁴⁷ However, Etzioni (1988) argues that they need to explain it further because “[... although they have argued that a] person has to be viewed as an organization that consists of a planner and a doer; the doer is completely selfish and myopic; and the planner is concerned with a lifetime utility – a concept that is not further explained.”⁶⁴⁸ Similar attempts to regard choices as involving multiple-purposes have been discussed by Siegel *et al.* (1964)⁶⁴⁹, Ofshe and Ofshe (1970)⁶⁵⁰, Alhadeff (1982)⁶⁵¹, Margolis (1982)⁶⁵², Lindenberg (1983)⁶⁵³, among others. In this context, Etzioni (1988) opines that “[...] many neoclassicists [...] do not deny that there are some truly [... other than self-interest] elements [in our choices]”⁶⁵⁴ According to Sen (1977), we need to *transcend* the narrow version of rationality as generally assumed in the neoclassical economics in order to capture the richness and realness of the human being.

“[...] A structure is not, of course, a theory, and alternative theories can be formulated using this structure. [...] T]he structure demands much more information than is yielded by the observation of people’s actual choices [....] It gives a role to introspection and communication [.... I]t [...] illustrate[s] that once we give up the assumption that observing choices is the only source of data on welfare, a whole new world opens up, liberating us from the informational shackles of traditional approach.”⁶⁵⁵

“[...] A more fruitful approach [to study human behaviour] may lie in permitting the possibility that the person is *more* sophisticated than the theory allows [....]”⁶⁵⁶

2.1.3. Self Interest and Rationality

“[...] The first principle of Economics [...] is that every agent is actuated only by self-interest. [...]”⁶⁵⁷

Self-interest has a fundamental role in theorising neoclassical economics; i.e., people, first and foremost, are selfish is its dominating assumption. The view that agents are actuated *only* by self interest was pioneered by Edgeworth (1881), which is a dominant assumption in various neoclassical economics modelling efforts.⁶⁵⁸ The neoclassicists refer to Adam Smith’s butcher-brewer-baker illustration in order to justify this. However, as Witztum (2005) has argued, it is a *mistake* to infer that Smith in this illustration, meant that agents are inherently self-interested utility maximisers;⁶⁵⁹ all that Smith referred to is that we need to be aware that everyone has a ‘self.’ It also has been *erroneously* assumed that Adam Smith’s notion of prudence is self-interest or self-love. On the contrary, the *Smithian* prudence (SP) is much broader in scope, which, by and large, refers to actions governed by conscience and self-command (that restrains an agent from acting in a self-centric manner even if s/he has the perfect knowledge), observes Sen (1986b).

“[...] I]t is not strictly accurate to identify ‘prudence’ with ‘self interest’. In fact, [Adam] Smith saw prudence as ‘the union of’ the two qualities of ‘reason and understanding’ on the one hand, and ‘self-command’ on the other [...] the latter being the Stoic concept of which Smith makes much use [... In *Smithian* view, s]elf-interest and self-love form a substantially narrower motivation than prudence.”⁶⁶⁰

In *The Theory of Moral Sentiments*, Smith has argued that inside every person, a moral being is juxtaposed with a rational agent.

“How selfish soever man may be supposed, there are evidently some principles in his nature which interest him in the fortune of others and render their happiness necessary to him though he derives nothing from it except the pleasure of seeing it [...]”⁶⁶¹

As pointed out by Sen (1987)⁶⁶², the following quote in Smith’s *An Inquiry Into the Nature and Causes of the Wealth of Nations*, which oftentimes has been quoted *outside* of its context, where the wo/man is portrayed *as if* s/he predominantly is a self-interested utility maximising (rational) agent, is the root cause of mistaking prudence for self-interest.

“[...] ‘It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages [...]”⁶⁶³

And in the process, Sen (1987) contends, actual human action is frequently taken to be based *solely* on self-interest by many, if not most, economists.⁶⁶⁴

While studying behaviour, the neoclassicists assess actions from their consequences, evaluate the ends rather than the means, consider only those consequences that have relevance with someone’s self-interest and leaves aside the rest; which, as Sen (1977e) contends, can be challenged on the basis of the dictionary meaning of rationality that stands for “[...] the power of being able to exercise one’s reasons [...]”⁶⁶⁵ Moreover, according to McPherson (1984a), modelling behaviour on the basis of self-interest is also at odds with real-world happenings.

“[...] What is odd [with neoclassical economics ...] is the desire to derive everything from self-interest as if that were a natural or necessary starting point. It is a peculiar feature of the sociology of the present-day economics profession that this odd ambition should be so prevalent [...]”⁶⁶⁶

Interestingly, Sen (1977e) quips that analysing human choices like the neoclassicists do will make every action, whatsoever, as having self-interest in it.

“[...] It is possible to define a person’s interest in such a way that no matter what he does he can be seen to be furthering his own interests in every isolated act of choice [...]”⁶⁶⁷

In line with Adam Smith, Amartya Sen like mainstream economists, are of the view that self-interest is a *multifaceted* concept. Discussing its role on preferences and choices, Sen (1995) distinguishes three components of private behaviour: self-centred welfare (i.e., a person’s welfare depends only on her/his own consumption), self-welfare goals (i.e., her/his only goal is to maximise her/his own welfare), and self-goal choice (i.e., her/his choices must be based on the pursuit of her/his own goals).⁶⁶⁸ According to Sen (1985), while the former two have been widely referred to and used by economists, self-goal choice has received less attention.⁶⁶⁹ However, it is an important component in human behaviour, Sen (1985) contends; for example, a person may select a goal considering priorities of others which may be due to rule- or norm-based conduct, communal commitments, her/his disposition to cooperate, and so on; hence s/he may systematically depart from self-seeking ends.⁶⁷⁰

“The feature that is hardest to deal with is that of *self-goal choice*. Indeed, that a person can be expected to choose whichever alternative course of action is best suited to serve his or her goals (including moral objectives, if any), given other things on which he or she has no control (including the choices of others), might seem to be entirely reasonable – perhaps even unexceptionable [... For example] the use of self-goal choice on the part of a community of people with diverse goals may lead to each person’s goals being less fulfilled than they would have been had the persons followed a different rule of behaviour [... as in issues concerning] social conduct.”⁶⁷¹

Sen (2002) further discusses about *another* important aspect of private behaviour – individual reasoning and self-scrutiny, i.e., “[... a] person is not only an entity that can enjoy one’s own consumption, experience and appreciate one’s welfare, and have one’s goal, but also an entity that can examine one’s values and objectives and choose in the light of those values and objectives [...] We can ask what we want to do and how, and in that context also examine what we should want and how. We might or might not be much moved by moral concerns or by social reasons, but neither are we prohibited from entertaining these questions, in shaping our values and if necessary revising our objectives in that light.”⁶⁷² This component of private behaviour, as we can see, is based on *Smithian* prudence, whereby an agent acts under self-command, and *sacrifices* her/his own utility for the sake of others, e.g., as in cooperative acts.

“[...] The nature of man in [...] current economic models continues [...] to reflect the particular formulation of certain general philosophical questions posed in the past [by modelling him as a self-seeking egoist]. The realism of the chosen conception of man is simply not a part of this inquiry.”⁶⁷³

Occurrences of cooperation in the real-world, *even* in the instances where cooperation is normally not expected, challenge the neoclassicist’s notion of rationality (NNR). “[... C]ooperation is often found even in *non-repeated* games [... and] in one-off real-life situations. It could, of course, be the case that the real goals of a person are not the ones that they believe they are trying to maximize. But it is also possible that people clearly understand their goals, wish to maximize them, but nevertheless take note of other people’s goals, due to a recognition of the nature of mutual interdependence of the achievements of different people in [... different] situations [...]”⁶⁷⁴ Here, Sen (1987) views human behaviour as ultimately a *social* matter, and opines that agents “[...] thinking in terms of what ‘we’ should do, or what should be ‘our’ strategy, may reflect a sense of identity involving recognition of other people’s goals and the mutual interdependencies involved. Even though other people’s goals may not be incorporated in one’s own goals, the recognition of interdependence may suggest following certain rules of behaviour, which are not necessarily of intrinsic value, but which are of great *instrumental* importance in the enhancement of the respective goals of the members of that group.”⁶⁷⁵ Moreover, he refers to Adam Smith who also has pointed out, among other things, the instrumental importance of rules of conduct in human action: “[...] ‘Those general rules of conduct, when they have been fixed in our mind by habitual reflection, are of greater use in correcting misrepresentation of self-love concerning what is fit and proper to be done in our particular situation’ [...]”⁶⁷⁶ Thus, Sen’s interpretation of Smith conveys that to cooperate is *also* an important part of behaviour, ignored by the NNR.

“[...] The central point is to give fuller recognition to the “instrumental” role of behavior in achieving results in a society – a role that cannot be captured in the standard characterization of rationality.”⁶⁷⁷

Furthermore, we can also find nuances of complex activities and situations such as “[...] pursuing industrial relations, achieving productivity within enterprise, and a variety of other economic exercises [...] where] behaviour [based on rules of conduct] may well be important [...]”⁶⁷⁸ Thus, Sen (1987) contends that externalities like sympathy and commitment may have to be considered as rational actions and incorporated into economic analyses, in stead of ascribing rationality *mainly* to actions that are strictly self-interest motivated.^{679,680} Here, it is pertinent to ponder over the 2008 Global Financial Meltdown, which is a rebuttal to various models that take self-interest into consideration in its narrower interpretations.

‘The most compelling rebuttal of the rational model, paradoxically, was delivered by the ultimate rationalist, Alan Greenspan. “I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders,” the former Fed chairman told Congress last October [2008]. [...] That’s why Greenspan didn’t see it coming, argues Daniel Kahneman, a Princeton professor who is often described as the father of behavioral economics. His [Greenspan’s] rational-actor model wouldn’t let him.’⁶⁸¹

2.1.3.1. Individualism and Rationality

“[...] The neoclassical paradigm sees free-standing [atomistic] individuals, rendering decisions on their own [...]”⁶⁸²

‘Economic individualism assumes a pain-pleasure hedonism. The individual attempts to maximize his “utilities,” or, negatively, to avoid losses. All this, of course, might be something like an accurate (if not very significant) explanation of individual behavior, were there some recognition of the source of the “pleasures” and “pains.” Traditional economic individualism, as a theory of social behavior, has stumbled upon this problem, but chiefly has placed the motivation within the individual. Thus[,] well-understood self-interest is phrased in exclusively economic terms, and its source is found in some sort of acquisitive instinct or in the satisfaction of biological needs. This turns out therefore to be not only a focus of interest and value in the individual, but an emphasis upon material acquisition and consumption as the sole significant goal of individual behavior. [...] Economic individualism thus appears as both a theory and a doctrine. As a theory, it attempts to explain social behavior in terms of a rational, self-interested, acquisitive “economic man.” As a doctrine it maintains that such an orientation of individual behavior in society is good and proper, for it leads to social individual values.’^{683,684}

Neoclassicists celebrate individualism – i.e., individuals exist as independent, self-motivating agents, each acting in a rational, self-interested way to maximise her/his utility (Tilly and Tilly, 1998)⁶⁸⁵ – on the basis of Arrow’s (1950) *Impossibility Theorem*.⁶⁸⁶ That one cannot meaningfully aggregate from individuals up to a group gives them the space to argue that as group behaviour cannot be meaningfully analysed, so individuals should be the units of analysis. However, Arrow (1982) does not fully subscribe to the neoclassical paradigm; rather, according to him, “[...] rationality theorem as applied by most economists is] a weak hypothesis, not easily refuted and therefore not very useful as an explanation, though not literally a tautology [...]”⁶⁸⁷ Furthermore, despite actions being generally collective,⁶⁸⁸ neoclassical economics focuses on individualism. However, as Etzioni (1988) has pointed out, people are social being and they have group, communal and social traits.

“[...] I]ndividuals are not free-floating atoms within the society and the economy, nor do they relate to one another mainly on the basis of their personal attributes; their relations

are shaped to a significant extent by their place in various social structures, which are forms their collectivities acquired [...]"⁶⁸⁹

In regards to individualism, although Adam Smith and Friedrich August Hayek have made cases in its favour, but not in the neoclassicists' sense. Like, Smith has advocated that through individualism, an agent, as a matter of fact, can do more 'good' to society, *but* at the same time being guided by (Smithian) prudence.

"[...] By directing [...] industry in such a manner as its produce may be of the greatest value, he [an agent] intends only his own gain, and he is in this [economic activities], as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it the worse case for the society that it was no part of it. By pursuing his own interest [guided by prudence], he frequently promotes that of the society more effectually than when he really intends to promote it [...]"⁶⁹⁰

Moreover, Hayek has suggested that "true individualism" is a reality in *its* social settings, which is not about individualised agents who act only for their own interests.

"[...] The fundamental attitude of true individualism is one of humility towards the processes by which mankind has achieved things which have not been designed or understood by any individual and are indeed greater than human minds. The great question [...] is whether man's mind will be allowed to continue to grow as a part of this process or whether human reason is to place itself in chains of its own making [...]. What individualism teaches us is that society is greater than the individual only in so far as it is free. In so far as it is controlled or directed, it is limited to the powers of the individual minds which control or direct it. If the presumption of modern minds which will not respect anything that is not consciously controlled by individual reason, does not learn in time where to stop, we may, as Edmund Burke warned us, "be well assured that everything about us will dwindle by degrees, until at length our concerns are shrunk to the dimensions of our minds."⁶⁹¹

Thus, individualism as preached by the neoclassicists, treating agents as means towards their own self-interest oriented ends, is only a distorted version of individualism in its *true* sense. That is, in addition to individual wellbeing, societal wellbeing is *also* an offshoot of individualism.

"[...] There are] extreme differences of conception regarding the "individual" – to take one word in discussions of coöperation and of organizations and their functions. On the one hand, the discrete, particular, unique, singular individual person with a name, an address, a history, a reputation, has the attention. On the other hand, when the attention transfers to the organization as a whole, or to remote parts of it, or to the integration of efforts accomplished by coördination, or to persons regarded in groups, then the individual loses his preëminence in the situation and something else, non-personal in character, is treated as dominant. [...] In such situations [...] many issues regarding the individual] find wide disagreement and uncertainty [...]"⁶⁹²

Notwithstanding, the NNR looks at morality based communal living as a thing of the past, *even if* they occur in our day to day lives, note Fennegan (1995)⁶⁹³ and, Onyeiwu and Jones (2003)⁶⁹⁴. In this context, according to Hirsch (1976), such approaches have made the management of socio-economic systems cumbersome.

"The social morality that has served as an understructure for economic individualism has been a legacy of the precapitalist past. This legacy has diminished with time and with the corrosive contact of the active capitalist values – and more generally with the greater anonymity and greater mobility of industrial society. The system has thereby lost outside support that was previously taken for granted by the individual. As individual behaviour

has been increasingly directed to individual advantage, habits and instincts based on communal attitudes and objectives have lost out. The weakening of traditional social values has made predominantly capitalist economies more difficult to manage [...] Yet at the same time, the continued expansion of material output in response to autonomous market forces brings increasing problems in its wake, predominantly of social crowding and intensified positional competition. Thus, the responses of isolated individuals to the situation that faces them have become a less sure guide to promoting the individuals taken together. Management of the system has become more necessary, but the entrenchment of the individualist ethos makes it more difficult. The problem of success joins and exacerbates the problem of the depleted legacy. The two problems interact so as to make each other worse.”⁶⁹⁵

“There is no encouragement for any belief that an organism can be designed for any purpose other than the most-effective pursuit of [its] self-interest. As a general rule, a modern biologist seeing an animal doing something to benefit another assumes either that it is manipulated by the other individual or that it is being subtly selfish.... Nothing resembling the golden rule or other widely preached ethical principles seems to be operating in living nature. It could scarcely be otherwise, when evolution is guided by a force that maximizes genetic selfishness [...]”⁶⁹⁶

2.1.4. Ethics and Morality, and Rationality

“[...] The life of money-making is one undertaken under compulsion, and wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else [...]”⁶⁹⁷

Neoclassical paradigm, contends Etzioni (1988), disregards “the moral dimension” of action and actively opposes its inclusion in its analyses.⁶⁹⁸

“[...] Generally [...] individuals’ altruistic, publicly interested goals have been given little attention [in neoclassical economics]. This reflects [...] that such goals are so empirically unimportant as to allow the use of Occam’s Razor in positive models, or well-founded apprehensions that these goals are unusually difficult to identify, measure, and analyze [...]”⁶⁹⁹

Under the duress of positive economics, Sen (1987) notes, the importance of ethical side of human behaviour is generally ignored or overlooked, even if it is ‘good’ for the market.⁷⁰⁰

“[...] To a large extent, we conduct our research by grubbing around in the underbrush of business looking for evidence of opportunistic behavior and of contractual counter-measures against such behavior. We need to keep in mind that while our models presume that businessmen are opportunistic and that we can find (statistically significant) examples of such opportunism and of counter-measures taken against such opportunism, it does not follow that businessmen generally are or should be opportunistic. It would be a mistake to wittingly or unwittingly inculcate in the next generation of accountants and managers the notion that it is foolish, naive or abnormal for businessmen to feel constrained in their actions by ethical considerations. At least some varieties of ethical behavior are not to be scorned; they are a necessary lubricant for the functioning of the markets.”⁷⁰¹

Furthermore, Baier (1969), debating on value of a thing and that of a human being, is under the impression that “[...] e]conomists draw the indispensable distinction (largely lost to sociologists) between, on the one hand, the *value* of things, and on the other, the values of individuals or societies [...]”⁷⁰² However, these

values, in addition to human productivity, can also be moral and ethical. In this regard, Sen (1987) argues that as economics is supposed to study behaviour of “real people” with *values*, so it is strange that the neoclassicists consider agents to be unaffected by moral and ethical aspects.⁷⁰³ Noreen (1988), comparing altruism with ethical utilitarianism, says that “[... a]ltruistic behavior is motivated either by a fundamental concern for the welfare of others or by the desire to feel good by helping others. Utilitarian ethical behavior, on the other hand, has to do with voluntary compliance with rules that are, in some sense, in the individual’s self-interest [...]”⁷⁰⁴ Debating on concerns towards the others as an important part of ethics, Sen (1997) contends that “[...] morality is not merely a matter of having one set of goals rather than another, but also of the relation between action and conduct, on the one hand, and goals, aims, values, etc. on the other. The issue of the correspondence between goals and choice arises not merely in the general context of consequentialism [...] but also in that of assessing the action implications of one’s own goals in the light of the goals of others [...]”⁷⁰⁵ Taking a similar stand, March (1978) is under the impression that rational choices are not simple, one-dimensional, one-time, and even mono-purpose events but they involve “[...] complexities of preference processing [...] and are linked to] ethics [...] and] aesthetics [among others...]”⁷⁰⁶ Furthermore, Dasgupta (2009)⁷⁰⁷ argues that people’s judgments are influenced not only by their interests but also by their values. Interestingly, Sen and Williams (1982) propose that people’s beliefs about how other people behave could influence their action.⁷⁰⁸ Thus, Sen (1987) contends, “[...] ethical deliberations cannot be totally inconsequential to actual human behaviour [...]”⁷⁰⁹ And, a person can have ethical preferences along with individualistic self-interest oriented ones, argues Harsanyi (1955).

“[...] Owing to a greater awareness of the importance of external economies and diseconomies [...] each individual’s utility function is now regarded as dependent not only on [...] a] particular individual’s economic (and noneconomic) conditions but also on the economic (and other) conditions of all other individuals in the community – in the same way as a social welfare function is dependent on the personal conditions of all individuals [...] An] individual prefers (or rather would prefer) on the basis of impersonal social considerations alone [which is known as his ethical preferences ...] and [his subjective preferences ...] express what he actually prefers, whether on the basis of his personal interests or on any other basis [...]”⁷¹⁰

As regards the coexistence of self-interest and values, Sen (1974) suggests that preference ranking can also be guided by moral judgements;⁷¹¹ Sen (1977) terms this as “meta-ranking” of an action-set.⁷¹²

‘[...] A meta ranking may include *inter alia* the specification of a particular action ranking as the “most moral,” but insofar as actual behavior may be based on a compromise between claims of morality and the pursuit of various other objectives (including self interest), one has to look also at the relative moral standings of those action rankings that are *not* “most moral.”’⁷¹³

Furthermore, according to Phelps (1975), even if there are evidences of unethical practices in socio-economic transactions, one also can find “[...] the prevalence of altruistic behavior: a producer may advertise his product truthfully when he need not, a labor union may refrain from breaking the law when it could do so for a net gain, [...] a benevolent butcher may abstain from short-weighting [...]”⁷¹⁴ However, they are only treated as externalities by the neoclassicists. As regards organisational behaviour, although the (orthodox) theory of the firm⁷¹⁵ considers

profit as the single over-arching goal that organisations try to pursue,⁷¹⁶ yet Cyert and March (1963)⁷¹⁷, Pfeffer (1981)⁷¹⁸, Mosen *et al.* (1968)⁷¹⁹, Jensen and Meckling (1976)⁷²⁰, Herendeen and Schechter (1977)⁷²¹, Bailey and Boyle (1977)⁷²², Donaldson and Lorsch (1983),⁷²³ Arrow (1975), McKean (1975), among others, suggest that firms, in addition to profit-maximisation, have other goals too (e.g., corporate philanthropy).

“[...] It can be argued that the presence of what are in a slightly old-fashioned terminology called virtues in fact plays a significant role in the operation of the economic system [... T]he process of exchange requires or at least is greatly facilitated by the presence of several of these virtues (not only truth, but also trust, loyalty, and justice in future dealings) [...].”⁷²⁴

Ethical behaviour exists, McKean (1975) notes, in economic transactions as core transactional attributes, not as externalities.

“[...] Unwritten agreements and trust (that is, confidence in each other’s voluntary compliance) [... play] pervasive roles in business and social intercourse. Written contracts in business hit only the highspots of agreements; like the bulk of the iceberg, an enormous portion of such mutual understandings is unseen [...]. Many small, yet in the aggregate highly significant, instances of trust exist [...] without the pressure of competition or the threat of a lawsuit [...].”⁷²⁵

As a consequence, there are new developments in the neoclassicists’ study programmes on human behaviour. For example, in the case of incorporating externalities into various economic analyses, Etzioni (1988) opines that “[... m]orality is a major way externalities are “introduced” into one’s deliberations and decision-making, albeit often in conflict with the pleasure utility [...].”⁷²⁶ According to Lincoln and Kalleberg (1990), hard work, commitment, loyalty and similar moral aspects of rational action are “[... n]o longer [...] perceived to be irrational anachronisms [...] but are treated as] values [that] facilitate the creation of an enterprise community and motivate employees to subordinate their personal or class interests to those of the firm [...].”⁷²⁷ Akerlof (1970) argues that trust in transactions has important bearings of business efficiency.⁷²⁸ In this regards, Hirshleifer (1977) claims that “[...] altruism economizes on the costs of policing and enforcing agreements. [...].”⁷²⁹ Importantly, Arrow (1974) emphasises that *conscientious* actions lead to effective functioning of social systems, including the market.

“[...] Certainly one way of looking at ethics and morality [...] is that these principles are agreements, conscious or, in many cases, unconscious, to supply mutual benefits [...]. Societies in their evolution have developed implicit agreements to certain kinds of regard for others, agreements which are essential to the survival of the society or at least contribute greatly to the efficiency of its working [... T]he fact that we cannot mediate all our responsibilities to others through prices [...] makes it essential in the running of society that we have what might be called “conscience”, a feeling of responsibility for the effects of one’s actions on others [...].”⁷³⁰

“It appears to be a matter of fact, that the circumstance of utility, in all subjects, is a source of praise and approbation: ... it is inseparable from all the other social virtues, humanity, generosity, charity, affability, levity, mercy and moderation.”⁷³¹

In addition to economic incentives there are also other benefits from ethics; they are mainly analysed from the instrumental aspects of ethical behaviour. Olson (1965) argues that people’s altruistic deeds are motivated by their desire to “[...] win

prestige, respect, friendship, and [... similar] social and psychological objectives [...]"⁷³² Becker (1974) reasons that "[... a]pparent "charitable behavior can be [... motivated by a desire to avoid scorn of others or to receive social acclaim [...]"⁷³³ Andreoni (1990) opines that "[...] social pressure, guilt, sympathy, [...] desire for 'warm glow' [and such nuances of 'impure altruism,' as Andreoni views them] may play important roles in the decisions of agents [including altruistic decisions]"⁷³⁴ Notwithstanding, seminal works like *On Ethics and Economics* by Sen (1987) have argued that economics and ethics *can* coexist, complementing each other.

"[...] If you and I are conducting a transaction which on my side is purely economic, I am furthering your purposes, partly or wholly perhaps for my own sake, perhaps entirely for the sake of others, but certainly not for your sake. What makes it an economic transaction is that I am not considering you except as a link in a chain, or considering your desires except as the means by which I may gratify those of some one else – not necessarily myself. The economic relation does not exclude from my mind every one but me, it potentially include every one but you. You it does indeed exclude, and therefore it emphasises, though it does not narrow or tighten, the limitations of the altruism of the man who enters into it; for it calls our attention to the fact that, however wide his sympathies may be, they do not urge him to do any particular effort or sacrifice for the sake of the person with whom he is dealing at the moment. An economic relation may be entered equally well from egoistic or altruistic motives; but as long as it remains purely economic, it must remind us that no man's altruism is indiscriminating to the extent of lavishing itself upon all persons or all purposes at all times. Short of this, clearly the most altruistic person may enter into a relation with another man, the purpose of which is to further the good of those who are other than himself, and also other than the person with whom he is dealing. In that case his action is altruistic because it is inspired by a desire for the good of some one other than himself, and the relation is economic because it is entered into for the sake of some one other than his correspondent."⁷³⁵

Furthermore, debating on intrinsic and instrumental aspects of an action with respect to its consequences, Sen (1987) contends that "[... t]he case for consequential reasoning arises from the fact that activities have consequences. Even activities that are intrinsically valuable may have *other* consequences. The intrinsic value of any activity is not an adequate reason for ignoring its instrumental role, and the existence of instrumental relevance is no denial of its intrinsic value. To get an overall assessment of the ethical standing of an activity it is necessary not only to look at its own intrinsic value (if any), but also at its instrumental role and its consequences on other things, i.e. to examine the various intrinsically valuable or disvaluable consequences that this activity may have [...]"⁷³⁶ Continuing further, he states that "[... t]o ignore consequences is to leave an ethical story half told. Consequentialism, however, demands more than the telling of the story. It demands, in particular, that the rightness of actions be judged entirely by the goodness of consequences, and this is a demand not merely of taking consequences into account, but of ignoring everything else [... However, c]onsequential analysis may be taken to be necessary, but not sufficient, for many moral decisions."⁷³⁷

However, there are also attempts to treat ethical behaviour as superfluous and absurd. For example, according to Schelling (1968) "[...] "ethical man" may be as much of an abstraction as "economic man" or "rational man," and to judge an ethic by what life would be like in a world peopled exclusively by ethical men may be but a theoretical exercise [...]"⁷³⁸ In this context, Nagel (1975) does *not* entirely agree with arguments that ethical undertakings are merely narrow *quid pro quo* instances of self-interest centred, calculative, rational acts.

“[...] When one person donates money to his old college, or gives blood, or gets at the end of the line to buy subway tokens, or cleans up a campsite after he has used it, he may explain such behavior by saying that he has benefitted from similar behavior by others. This has the look of a straight exchange, but it is not; he benefits from like actions from others, but neither those actions nor the benefit are contingent on what he himself is doing now. And if you point out that his likelihood of receiving blood in the future if he should need it is not significantly increased by giving today, that will rightly be dismissed as irrelevant. He is not under the illusion that he is engaged in a trade. What is the correct account of the motive for such behavior? It is not simple self-interest, or simple altruism either, for the explanation does refer to benefits received. The person is making a contribution to a practice or institution in the knowledge that it benefits him and is dependent for survival on contributions from people like him. He is not willing to be a free rider because it would be unfair [...]”⁷³⁹

In a similar vein, Rawls (1971) echoes his opposition towards attempts to reduce altruistic actions to mere rational ones in the neoclassicists’ sense.

“[...] W]hen a number of persons engage in a mutually advantageous cooperative venture according to the rules, and thus restrict their liberty in ways necessary to yield advantages for all, those who have submitted to these restrictions have a right to similar acquiescence on the part of those who have benefitted from their submission [...]”⁷⁴⁰

Although ethics have important bearings on economics, it has also been argued that economics assumes human behaviour as having instrumental value; so what it describes is only a part of it.⁷⁴¹ Such methodological issues make economics prone to overlooking many important aspects of behaviour that are intrinsic in nature.

2.1.4.1. Sense of Responsibility and Rationality

“No snowflake in an avalanche ever feels responsible [...]”⁷⁴²

“[...] A good starting point for [... the] analysis [... of the relevance and reach of consequential evaluation in practical reason] is the need to take responsibility of the person making a choice. The demands of responsibility of the person making a choice (of actions, strategies, or other decision variables in practical reason) relate both to (1) the discipline of *evaluation*, and to (2) the discipline of *choice* based on that evaluation. Because of these disciplines, consequential evaluation can [...] systematically combine very diverse concerns, including taking responsibility for the nature of one’s action (and related considerations that have figured prominently in the deontological literature), without neglecting other types of consequences (on which some of the narrower versions of consequential reasoning – such as utilitarianism – have tended to concentrate) [...]”⁷⁴³

People often act unselfishly, both in real life and laboratory settings (e.g., in the case of the Prisoner’s Dilemma).⁷⁴⁴ In these instances, by reasoning their actions, agents not only take care of their own interests, but also *take* responsibility of their actions that inherently have ramifications for others, as we have discussed above. In this sense, feeling the sense of being responsible is also a part of human reasoning. Sen (1977) argues that nuances of sense of responsibility can be found out at many walks of life, e.g., business behaviour in oligopolies, familial responsibilities, etc.⁷⁴⁵ Margolis (1982) opines that rational actions *also* include those acts that have sense of responsibility.⁷⁴⁶ Interestingly, Wicksteed (1933) claims that agents can undertake selective altruism in business transactions that could arise out of sense of responsibilities towards others. As Barnard (1938) has pointed out:

“[... R]esponsibility is the property of an individual by which whatever morality exists in him becomes effective in conduct [and action].”⁷⁴⁷

2.1.5. Freedom and Rationality

“For the efficiency of an army consists partly in the order and partly in the general; but chiefly in the latter, because he does not depend upon the order, but the order depends upon him. All things [...] are ordered together in some way, but not in the same way; and the system is not such that there is no relation between one thing and another. There is a definite connexion. Everything is ordered together to one end; but the arrangement is like that in a household, where the free persons have the least liberty to act at random, and have all or most of their actions preordained for them, whereas the slaves and animals have little common responsibility and act for the most part at random.”⁷⁴⁸

“[...] Any economic model will [...] harbor an implicit view as to how man’s free choices become realized as economic activity [...]”⁷⁴⁹

Notwithstanding the NNR that assumes rational actions as bounded by self-interest and utility maximisation, and therefore not free, Sen (2002), as regards the contentious topic of rationality with respect to freedom, argues that it is possible to subject one’s *own* values as well as choices to the demands of reason and critical scrutiny; and claims that freedom cannot be assessed independently of an individual’s reasoned preferences and valuations, just as rationality, in turn, requires freedom of thought. According to him, “[... i]n mainstream economic theory, the term “rational choice” has been used in [three] different ways [... namely,] internal consistency of choice; [...] self-interest maximization; and [...] maximization in general.”⁷⁵⁰ However, he cautions that “[...] reasons for choice [...] can have much diversity [than just for mere utility and/or self-interest maximisation], and it would be a mistake to try to eliminate that diversity by some definitional trick, or by some arbitrary empirical assumption[s] of complex instrumentality. Reason need not be second-guessed out [or subordinate to something else] in defining rationality.”⁷⁵¹

Furthermore, Sen (2002) contends that there exists a “reciprocity” between rationality and freedom – i.e., to be rational is to be free, and vice versa.⁷⁵² According to him, “[... r]ationality as the use of reasoned scrutiny cannot but be central to the idea and assessment of freedom [... R]ationality, in its turn, depends on freedom. This is not merely because without some freedom of choice, the idea of rational choice would be quite vacuous, but also because the concept of rationality must accommodate the diversity of reasons that may sensibly motivate choice. To deny that accommodation in favor of conformity with some preselected mechanical axioms (in the form of alleged requirements of “internal consistency of choice”), or with some prespecified “appropriate” motivation (such as the canonical selection of “self-interest maximization” as an exclusive guide, rejecting all other concerns that people have) would involve, in effect, a basic denial of *freedom of thought*. Our motives are for us to choose – not of course, without reason, but unregimented by the authoritarianism of some context-dependent axioms or by the need to conform to some canonical specification of “proper” objectives and values. The latter would have had the effect of arbitrarily narrowing permissible “reason for choice,” and this certainly can be the source of a substantial “unfreedom” in the form of an inability to use one’s reason to decide about one’s values and choices.”⁷⁵³ As in the classical model where “[...] deliberation is always about means, never about ends [...],”⁷⁵⁴ in social sciences,

including economics, rationality *should* assume that agents are free and autonomous to choose their own values and preferences, argues Parsons (2007).⁷⁵⁵

As regards freedom being narrowly interpreted in neoclassical economics, Sen (1987) argues that utilitarianism, its main philosophical school of thought,⁷⁵⁶ constrains agents from acting freely because it is assumed that they act eyeing on the ends of their actions. Debating on agents' freedom in choosing appropriate means to accomplish wellbeing, he states that "[...] the utilitarian conception provides a defective (and systematically biased) view of well-being, and the limitations of the different interpretations of utility (e.g. happiness, desire-fulfilment) were analysed in that context. While being happy is a momentous achievement, it is not the only achievement that matters to one's well-being [...]. Also, while desire is often a good indicator of the valuable nature of what is desired, the metric of desire can be a very inadequate reflection of value – indeed even if what the person himself or herself actually values, not to mention what he or she would value on serious and courageous reflection, freed from the limitations imposed by unfavourable circumstances. This limitation is particularly serious in the context of interpersonal comparisons of well-being."⁷⁵⁷ Continuing further, he reasons that "[...] a person's freedom can be seen as being valuable in addition to his or her achievements [...]. Freedom may be valued not merely because it assists achievement, but also because of its own importance, going beyond the value of the state of existence actually achieved. If, for example, all the alternatives other than the one actually chosen were to be eliminated, this need not affect achievement (since the chosen alternative can still be chosen), but the person clearly has less freedom, and this may be seen as a loss of some importance. [...]"⁷⁵⁸ Moreover, Sen (1987) thinks that in mainstream economics, achieving goals counts more than anything else, and freedom to achieve them is only treated as having instrumental implications.⁷⁵⁹ In this regards, drawing on Adam Smith, Sen (2002) has succinctly put forth that:

[Adam] Smith also emphasized connection between consciously moral motivation [with intrinsic value] and the use of good moral conduct as general behavioral norms accepted in the society [with instrumental values]: "Many men behave very decently, and through whole of their lives avoid any considerable degree of blame, who yet perhaps, never felt the sentiment upon the propriety of which we found our approbation of their conduct, but acted [in a boundedly rational manner] merely from regard to what they saw were the established [and institutionalised] rules of behavior" [...]"⁷⁶⁰

2.1.5.1. Boundedly Rational and Rationality

"Does the end justify the means?
That is possible. But what will
Justify the ends? To that question,
Which historical thought leaves pending,
Rebellion replies: the means."⁷⁶¹

"[...] Our senses can never carry us beyond our own situations [...]"⁷⁶²

Debates abound as regards behavioural analyses under the rubrics of the NNR that ignore many factors, both cognitive and environmental, that are parts and parcels of decision-making. Although it is impossible to take all of them into account while studying behaviour, yet discounting most of them as mere externalities as the neoclassicists normally do, is tantamount to telling only half of the story. In this

context, Simon (1978) noted that economics, because of its disproportionate focus on ends of actions, under the duress of utilitarianism, has neglected studying many of the behavioural process oriented variables that are behind human behaviour.

“[... A]lmost all human behavior has a large rational component but only in terms of the broader everyday sense of rationality, not the economists’ more specialized sense of maximization[; moreover] economics itself has not by any means limited itself to the narrower definition of rationality. [... Additionally, e]conomics has largely been preoccupied with the *results* of rational choice rather than the *process* of choice [...].”⁷⁶³

Here, Sen (2002) argues that “[... i]ndividuals may not be full maximizers in their actual behavior and may be restrained for various reasons [...].”⁷⁶⁴ Hayek (1944) viewed rationality as a limiting trait of an individual – “[...] only the individuals concerned in each instance can fully know [... the] circumstances [of time and place] and adapt their actions to them [...],”⁷⁶⁵ which makes common or socially held knowledge fallible. Although, rationality implies that “[...] agents are not in fact stupid [...],”⁷⁶⁶ yet “Camus (1951) argued that man was not [cognitively] smart enough to be rational, a point made in a different way at about the same time by [...] Simon (1957) [...].”⁷⁶⁷ Constraining factors like cognitive, cultural, social, moral, organisational, communal, familial, religious, etc., can restrict the decision-making exclusively based on self-interest and utility maximisation. For instance, Schelling (1984) argues that insufficient self-command over reasons or weakness of willpower can lead to departures the NNR type behaviours,⁷⁶⁸ Sen (2002) looks at it as “bounded willpower.”⁷⁶⁹ Moreover, Stigler (1961) views asymmetric information as one of the reasons to doubt the applicability of NNR in the real-world.⁷⁷⁰

Herbert A. Simon is considered to be the founder of the notion of bounded rationality (BR), which implies that due to people’s partial information about the real-world, limited cognitive capacities and restricted time to act, rationality can only be possible in a restricted sense. The theory of administrative behaviour, developed by Simon (1945)⁷⁷¹, is considered to be the first step towards BR; it is a human behaviour modelling endeavour that takes into account the cognitive and situational limitations involved in organisational decision-making processes and recommends for administrative structures that aims to simplify tasks, thereby easing decision-making activities and, in the process, leading to predictable actions.

“[...] If ‘complex economic organization is explained in large measure as a response to the problems that are posed by the basic attributes of human actors’ (Williamson, 1999: 35), then understanding these basic attributes may enable observers to provide better predication of human behaviour in a corporate setting [...].”⁷⁷²

March and Simon (1958), discussing BR in the context of stable and predictable organisational behaviour, contended that “[... o]rganization will have structure [...] insofar as there are boundaries to rationality. [...] If there were not boundaries to rationality or if the boundaries varied in a rapid and unpredictable manner, there could be no stable organization structure [...].”⁷⁷³ Commenting on the significance of rationality in getting rid of uncertainty and thereby infusing predictability in the context of organisational behaviour, Thompson (1967) has said, “[...] A newer tradition enables us to conceive of the organization as an open system, indeterminate and faced with uncertainty, but subject to criteria of rationality and hence needing certainty [...]. O]rganizations cope with uncertainty by creating certain parts

specifically to deal with it, specializing other parts in operating under conditions of certainty, or near certainty [...]”⁷⁷⁴

Before Simon, it was Barnard (1938) who had argued that cognitive limitations could be compensated by deliberately designing rational organisations with specific ends and goals,⁷⁷⁵ as per him, organisational rationality as intended to achieve and maintain coordination.

‘[...] Most of [...] the observable actions of human beings] are determined or directed by their connection with formal organizations. [...] Formal organization is that kind of coöperation among men that is conscious, deliberate, purposeful. Such coöperation is omnipresent and inescapable nowadays, so that it is usually contrasted only with “individualism,” as if there were no other process of coöperation. Moreover, much of what we regard as reliable, foreseeable, and stable is so obviously a result of formally organized effort that it is readily believed that organized effort is normally successful, that failure of [formal] organization is abnormal [...]’⁷⁷⁶

However, (1955, 1957, 1959) was the first to discuss BR, in more formalised manner.⁷⁷⁷ BR is a practical way of studying human behaviour in the light of the limiting aspects pertaining to human knowledge and computational capacities. Moreover, Williamson (1975) argued that BR, along with cognitive limitations, arises out of constraints related to language, i.e., the way people articulate themselves.

“[...] Bounded rationality refers to human behavior that is ‘*intendedly* rational, but only *limitedly* so’ (Simon, 1961, p. xxiv). [...] It involves neurophysiological limits on the one hand and language limits on the other. The physical limits take the form of rate and storage limits on the powers of individuals to receive, store, retrieve and process information without error. [...] Language limits refer to the inability of individuals to articulate their knowledge or feelings by the use of words, numbers or graphics in a way which permit them to be understood by others [...]’⁷⁷⁸

According to Heiner (1983), behaviours based on BR are often treated as alternatives to the economic model of behaviour.⁷⁷⁹ Commenting on external uncertainties in limiting rational decision-making, Arrow (1974) opines that “[... u]ncertainty means that we do not have a complete description of the world which we fully believe to be true. Instead, we consider the world to be in one or another of a range of states. Each state of the world is a description which is complete for all relevant purposes. Our uncertainty consists in not knowing which state is the true one [...]”⁷⁸⁰ Moreover, as argued by Knight (1921), “[... w]hen uncertainty is present and the task of deciding what to do and how to do it takes the ascendancy over that of execution, the internal organization of the productive group is no longer a matter of indifference or a mechanical detail. Centralization of this deciding and controlling function is imperative, a process of “cephalisation,” [an evolutionary trend in the animal kingdom toward centralisation of neural and sensory organs in the head or anterior region of the body] such as has taken place in the evolution of organic life, is inevitable, and for the same reasons as in the case of biological evolution [...]”⁷⁸¹ In other words, through BR people simplifies the enormous complexities as regards decision-making arising out of the uncertainties in the real-world. However, analytical economics, hardly treat them as rational. In this context, according to Knight (1921), “[...] the more general principles of analytic economics are simply the principles of economic behavior, of the effective achievement of ends by use of means, by individuals and groups, irrespective of social and political forms. Even under a ‘pharaoh’, combining absolute sovereignty with outright ownership of men

themselves as well as the land and goods, much the same choices and decisions would have to be made to make activity effective rather than wasteful and futile; and the abstract principles of economy and of organization are the same regardless of who makes the choices or what means and techniques are employed or what ends are pursued. [...]”⁷⁸² Here it is relevant to cite Polanyi’s (1948)⁷⁸³ “poly-centric order” or “spontaneous order,” which refers to spur-of-the-moment or unplanned ordering in the real-world, e.g., in a marketplace, that agents bring about; each participating in the order making process in a particular situation, simultaneously being aware about the fact that s/he is acting on the basis of the partial knowledge that s/he has about that situation. Here, it is safe to say that such *purposeful* actions, arising out of agents’ partial knowledge are the results of BR.

“[...] There is no reason why a polycentric order in which each element is guided only by rules and receives no orders from a centre should not be capable of bringing about as complex and apparently as “purposive” an adaptation to circumstances as could be produced in a system where a part is set aside to perform such an order on an analogue or model before it is put into execution by the larger structure. In so far as the self-organizing forces of a structure as a whole lead at once to the right kind of action (or to tentative actions which can be retracted before too much harm is done) such a single-state order need not be inferior to a hierarchic one in which the whole merely carries out what has first been tried out in a part. Such a non-hierarchic order dispenses with the necessity of first communicating all the information one which its several elements act to a common centre and conceivably may make the use of more information possible than could be transmitted to, and digested by, a centre [...]”⁷⁸⁴

The central feature of BR is the notion of “satisficing.” (In a strict sense, this is not optimising, as Sen (2002) has pointed out.⁷⁸⁵) Simon replaced an agent’s goal to maximise her/his utility with satisfice, in contrast to traditional theories.⁷⁸⁶ According to Simon (1957), people, restricted by cognitive and environmental constraints, are able to *quasi-maximise* their utilities because “[...]the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world. [...]”⁷⁸⁷ As boundedly rational, they behave as “satisficers” and not maximisers – i.e., they explore all the alternatives at their disposal until they reach ‘sufficiently’ acceptable levels of satisfaction; however, if after a ‘prolonged’ search, they do not, they *normally* decrease their aspiration level and then search for other alternatives.⁷⁸⁸ Importantly, as per Simon (1978)⁷⁸⁹, BR is rational, not irrational.

“[...] A]lmost all human behavior has a large rational component, but only in terms of the broader everyday sense of rationality, not the economists’ more specialized sense of maximization [...]”⁷⁹⁰

In regards to the feasibility of the NNR, Simon (1978, 1985) thinks that it is simply *untenable* in real-world, which he terms as “substantive rationality”⁷⁹¹ (SR). By SR, the economists imply: people are maximising agents; they are well informed; their goals are unambiguous; they are self-interest oriented and ignore ethics, and the ends justify the means. Instead, Simon (1976⁷⁹², 1978⁷⁹³) proposed “procedural rationality” (PR), a type of BR, by which agents decide on the bases of their own rules and procedures, taking into consideration cognitive and environmental constraints. Simon thinks that “[... PR is] a more feasible aim than substantive rationality [...]”,⁷⁹⁴ because people generally assess and interpret information that they have before deciding. According to March (1978), it is “[...] calculative and intentional

rationalit[y]”⁷⁹⁵ Doyle (2001) considers it as “[...] concerning respectively rationality of the result and of the process by which the result was obtained [...]”⁷⁹⁶

There are interesting arguments as regards BR. Langlois (1990) argues that limitations concerning cognitive, contextual, socio-cultural, etc. make agents “[...] not boundedly rational but boundedly skilful. Rationality, in this alternative formulation, is a matter of doing the best one can with what one is given, which includes one’s knowledge and information-processing abilities [...]”⁷⁹⁷ According to Scott (2000), “[... as per] rule-based or “procedural” rationality[, ... a] behavior is rational if specified procedures are followed, irrespective of outcome [which is as if people are some algorithm-following, if-then-else logical prototypes who act and do not reschedule their modus operandi if they feel that their actions are not leading them towards their desired consequences]”⁷⁹⁸ Interestingly, Langlois (1986) argues that PR is another version of rationality, aiming at maximisation of utility. In this context, he elaborates that even if Simon (1976, 1978a, 1978b) has distinguished substantive rationality from that of procedural, but “[... his] analysis involves the recognition that individuals often face very complicated decision-problems that they cannot be expected to solve instantly and optimally; such individuals are afflicted with bounded rationality, and they must “*satisfice* because they have not the wits to maximize” /Simon 1957, p. xxviii, emphasis in original). As a consequence, Simon recommends a reduced emphasis on the optimality of particular courses of action (substantive rationality) and greater emphasis on the effectiveness of the procedures used in the choosing (procedural rationality). Simon’s critique of maximizing rationality is well taken. Nonetheless, I [Langlois] will argue that his idea of procedural rationality, if taken literally, is misplaced. The problem with maximizing rationality, if taken literally, is misplaced. The problem with maximizing rationality (if I [Langlois] may put the matter somewhat mysteriously) is not that it is substantive, but precisely the opposite – that it is *too procedural*.”⁷⁹⁹ Continuing further, Langlois (1986) says, “[... One of John Elster’s (1983, p. 75) interesting line of reasoning in regards to procedural rationality, substantial rationality and satisficing behaviour, in the context of bounded rationality, is the general argument for satisficing.] This approach is indeed general in that it effectively extends to *all* choice situations the dilemma of the rational problems without solution. If rationality consists only in the optimal adjustment of means to ends, then rationality must presuppose some framework of means and ends within which the optimization is to take place. But where do these frameworks come from? As a logical matter, they cannot themselves be explained as a result of maximizing choice. For if the choice of frameworks *were* the result of maximizing within some higher framework, the choice of that higher framework would remain unexplained – and so on ad infinitum (Winter 1964, pp. 262-4; Kirzner 1982, pp. 143-5). If we insist that the economic agent is rational only insofar as he or she makes consistent logical choices, then we must consign an important aspect of his or her behavior – the perception of new alternatives and possibilities [as in the case of entrepreneurs] – to the realm of the nonrational. [...]”⁸⁰⁰ Thus, although BR is more realistic than the NNR, yet it, as Scott (2008) has argued, is cognitively limited; and hence, once again, problematic.⁸⁰¹ As Williamson (1985) has noted:

“[... B]ounded rationality and opportunism [...] are [both] intended as concessions to ‘human nature as we know it’. Admittedly, the resulting conception of human nature is stark and rather jaundiced. [...]”⁸⁰²

2.1.6. Empiricism⁸⁰³ versus Formalism⁸⁰⁴, and Rationality

“There is a fundamental paradox at the core of economics, its models and methods. Economics rules. But its practitioners, economists, are frequently reviled.”⁸⁰⁵

“[...] Everybody in [...] the economists’] universe is rational. [...]”⁸⁰⁶

“[...] Economics is the science of thinking in terms of models joined to the art of choosing models which are relevant to the contemporary world. [...]”⁸⁰⁷

“[...] The idea of *one* basis for [everyday] life and another for science is from the very outset a lie [...]”⁸⁰⁸

According to Keynes (1890), “[... a] *positive science* may be defined as a body of systematized knowledge concerning what is[; ... whereas] a *normative* or *regulative science* is a body of systematized knowledge relating to the criteria of what ought to be, and concerned therefore with the ideal as distinguished from the actual [...]. The object of a positive science is the investigation of *uniformities*, of a normative science the determination of *ideals*, of an art the formulation of *precepts*.”⁸⁰⁹ As regards rationality, although Simon (1986) contends that the notion of rationality is vital in understanding and explaining (economic) behaviour, he cautions that rationality in its narrower avatar like the NNR, fail to comprehend behaviour in its real-world settings.⁸¹⁰ In this context, Simon (1972) argues that we must *first* know whether a theory is normative or descriptive because the former deals with how people *ought* to behave and the latter how they *actually* behave in the real-world.

“[...] Rationality denotes a style of behavior that is appropriate to the achievement of given goals, within the limits imposed by given conditions and constraints. Theories of rational behavior may be normative or descriptive – that is, they may prescribe how people or organizations should behave in order to achieve certain conditions, or they may purport to describe how people or organizations do, in fact, behave [...]”⁸¹¹

The neoclassical economics is considered as a positive and normative science,⁸¹² i.e., along with describing it also prescribes. However, this is antithetical to the spirit of science because if the same body of knowledge is the creator of it and at the same time its ‘caretaker,’ then it may describe a phenomenon in such a way that prescription of the same remains within its theoretical and methodological ambits; this, as we have discussed, happens in various economic modelling endeavours where economists take into account only those features of a behaviour that is within the explanatory power of their axioms, and the rest are either discarded or explained away as externalities. To add to this confusion is Milton Friedman’s (1953) *The Methodology of Positive Economics*, wherein he emphasises positivism under the guise of ‘normativism.’ For instance, he argues that “[... v]iewed as a body of substantive hypotheses, [economic] theory is to be judged by its predictive power for the class of phenomena which it intended to “explain.” [...]”⁸¹³ This is dicey considering the fact that there could always be a thin line between prediction and prescription. As Sen *et al.* (1986) have argued, along with prediction, a foundational feature of economics is to prescribe.

“Prediction is not the only exercise with which economics is concerned. Prescription has always been one of the major activities in economics, and it is natural that this should have been the case. Even the origin of the subject of political economy, of which economics is the modern version, was clearly related to the need for advice on what is to be done on economic matters. Any prescriptive activity must of course, of course, go

well beyond pure prediction, because no prescription can be made without evaluation and an assessment of the good and the bad.”⁸¹⁴

And it is also not unusual with the neoclassical economics, which, for example, prescribes the norms of rationality, among other things. Economists, in spite of being aware of their highly unrealistic assumptions about human nature, defend their normative and positivistic models; for example, Friedman (1962)⁸¹⁵ defends them under the pretext that they work, i.e., they generate valid predictions.⁸¹⁶ In regards to economic theories, according to Friedman, what matters is their narrow predictive *success*, not overall predictive *adequacy*.⁸¹⁷ This is also abysmally true considering the fact that in the real-world, economic predictions are unreliable, Sen *et al.* (1986) comment.

“A role of prediction in economics involves a fundamental tension. On the one hand, much of economics is concerned with prediction. On the other, economic predictions are notoriously unreliable. It is, in fact, tempting to see the economist as the trapeze-performer who tends to miss the cross-bar, or as the jockey who keeps falling off his horse [...]”⁸¹⁸

Sen (2002) claims that research on rationality, in its broader sense, is also useful to understand “[...] what others are doing and why, and also what they know, what we can learn from what they know, and so on.”⁸¹⁹ As a result of such arguments there is surge as regards conducting experiments by economists. In the process, Friedman’s methodological views probably do not command the same near unanimity that they used to; nevertheless, they are still enormously influential, and they still serve as a way of avoiding awkward questions concerning simplifications, idealisations, and abstraction in economics rather than responding to them.⁸²⁰ In this context, Boland (1979), commenting on the arguments that many philosophers of science have almost universally rejected Friedman’s position, contends that most of them are failed attempts not because Friedman is right but “[...] a]ny effective criticism must deal properly with Friedman’s instrumentalism. Presenting a criticism that ignores his instrumentalism will always lead to irrelevant critiques such as those of Koopmans, Rotwein, and De Alessi. None of these critics seems willing to straightforwardly criticize instrumentalism. [...] Friedman makes this all the more difficult by giving us, likewise, an instrumentalist argument in support of instrumentalism itself. Thus, refuting or otherwise successfully criticizing only some of the Friedman’s reasons will never defeat his own view. Since Friedman never explicitly claims that his argument is intended to be logically sufficient defense of instrumentalism, one cannot expect to gain even by refuting its “sufficiency.” Yet it would be fair to do so, since “sufficiency,” is the only logical idea that instrumentalism uses. Such a refutation, however, is unlikely, since it would seem to require a solution to the problem of induction. [...] The repeated attempts to refute Friedman’s methodology have failed, I think, because instrumentalism is its own defense and its *only* defense.”^{821,822}

Since the time the term “neoclassical economics” was born in the 1900,⁸²³ it has oftentimes been criticised for its excessive emphasis on abstractions and remoteness from real-world. For instance, as contended by Suranyi-Unger (1939), “[...] r]emoteness from reality” is one of the oldest indictments which economists have had to fight from the very beginnings of modern economic theory. [...]”⁸²⁴ Because of too many abstractions in economics based on rationalism⁸²⁵, Coase, a proponent of empiricism, labelled it as “blackboard economics.”⁸²⁶

“[... W]hen economists find that they are unable to analyze what is happening in the real world, they invent an imaginary world which they are capable of handling. It was not a procedure that I [Coase] wanted to follow in the 1930s. It explains why I tried to find the reason for the existence of the firm in factories and offices rather than in the writings of economics, which I irreversibly labeled as ‘bilge’ [...].”⁸²⁷

In regards to the survival of faulty theories in economics, Simon (1986) opined that “[... even in economics] bad theory survives; [however] it does not predict very much, and when it does, it predicts incorrectly [...].”⁸²⁸ According to Rosenberg (1983), the NNR is an abstract term having little relevance in the real-world.

‘Much of the mystery surrounding the actual development of economic theory – its shifts from formalism, its insulation from empirical assessment, its interest in providing purely formal, abstract possibilities, its unchanged character over a period of centuries, the controversies about its cognitive status – can be comprehended and properly appreciated if we give up the notion that economics any longer has the aims or makes the claims of an empirical science of human behavior. Rather we should view it as a branch of mathematics, one devoted to examining the formal properties of a set of assumptions about the transitivity of abstract relations: axioms that implicitly define a technical notion of “rationality,” just as geometry examines the formal properties of abstract points and lines. This abstract term “rationality” may have far more potential interpretations than economists themselves realize, [...] but rather less bearing on human behavior and its consequences than we have unreasonably demanded economists reveal.’⁸²⁹

According to Etzioni (1998), “[...] It is very widely agreed that the purpose of a theory *is* to explain. Otherwise, when predictions prove to be valid, we do not know why, and hence are unable to foretell under what conditions they will continue to hold or fail, or may need to be adapted.”⁸³⁰ However, two major criticisms against neoclassical economics are: excessive formalism and abstractionism in its theories and models, and low priority to verify them in the real-world. Regarding excessive formalism, Knight (1935) has cautioned that “[...] while under certain circumstances it is necessary to assume conditions of perfect economic rationality, the “economic model” of human action could never in any meaningful sense be said to describe the actual conduct of human beings, or to approach the ability to “predict” conduct in the “scientific” sense [...]”⁸³¹ because, as he points out, beliefs and preferences that explain actions may also be based on mistakes and ignorance. Thus, even if neoclassicists’ say that their theories explain, a question arises: Explain what? Why this question arises here is because according to Kahneman (2003), self-interest and utility, and also rationality, as used by contemporary economists, have changed with advances in behavioural studies.⁸³² Are the economists aware of this? In this context, Blaug (1998) quips: “[...] “No Reality, Please. We’re Economists.””⁸³³

Furthermore, it has been argued that the appeals of the neoclassical economics are as follows: ease to create models, simple and uniform assumptions about human nature, parsimonious theorisation, predictions based on maximising behaviour, to name a few. However, many of these models fail in the real-world; these failures occur not because they are wrong, but they do not approach the problem in the right manner. For example, the neoclassicists claim that every action that is not self-interest and utility maximisation oriented, is irrational. But irrational in which sense? There can be many other factors except self-interest and many objectives apart from utility maximisation involved in a decision-making process. In this regards, Langlois (1986) has offered some interesting thoughts. According to him, “[... i]n modern

economics, [...] the agent is rational when he or she maximizes according to subjectively defined preferences and perceived alternatives. In practice, however, most models assume that the agent is also objectively rational, in the sense that perceived alternatives are in fact the “true” alternatives or (what amounts to the same thing) that all agents perceive the alternatives – and sometimes even the probability distributions over relevant states of the world – identically.”⁸³⁴ Importantly, he argues that “[...] an important distinction between what is nonrational (in that it is not based on fully specified and complete evidence, and thus cannot be placed in the form of a deduction from explicit premises) and what is irrational (in that it is contrary to logical arguments) [... is missed] if one clings to the neoclassical definition of rationality, since one assumes, in effect, that evidence is always complete. The distinction becomes important when we look at its flip side: It cannot be not irrational (i.e., not contrary to logical argument) to act on the basis of incomplete evidence – and, therefore, the agent can be rational (in a nonneoclassical sense) even in an open-ended world [...]”⁸³⁵ In other words, the NNR fail to address the issues of what is irrational, i.e., logically fallacious according to the neoclassicists, and what is non-rational, i.e., not rational from evidence in the real-world.

“[...] By precluding attention to non-rational elements of human behaviour, economists leave themselves no mechanism for learning about the crude and messy empirical world that so defies their models. Economists put a heavy price for the very simplicity and elegance of their models: empirical ignorance, misunderstanding, and, relatedly, unrealistic and bizarre policy recommendations [...]”⁸³⁶

Moreover, Sen (2002) argues that even non-calculative, instinctive action *has* elements of *reasoning* in it; Polanyi’s (1948) “spontaneous order” could be an illustration in this regards. As regards instinctive actions as rational, Sen (2002) further states that “[... a]s Adam Smith has argued, our “first perceptions” of right and wrong “cannot be the object of reason, but of immediate sense and feeling,” but even these instinctive assessments cannot but rely – if only implicitly – on our reasoned understanding of close connections between conduct and consequences in “a vast variety of interests.” [...]”⁸³⁷ Moreover, as Griswold (1999) has noted, “[... Adam] Smith’s method and rhetoric appeal continually to our experience in and of this or that situation, our sense of what is important to our individual lives and to our role in the human drama.”⁸³⁸ Smith, he claims, had recognised the *limits* of reason.

“Reason may show that this object [any particular object] is the means of obtaining some other which is naturally either pleasing or displeasing, and in this manner may render it either agreeable or disagreeable for the sake of something else. But nothing can be agreeable or disagreeable for its own sake, which is not rendered such by immediate sense or feeling. If virtue, therefore, in every particular instance, necessarily please for its own sake, and if vice as certainly displeases the mind, it cannot be reason, but immediate sense and feeling, which in this manner, reconciles us to the one, and alienates us from the other. [...]”⁸³⁹

In this regards, Williams (2004) states that “[... e]conomics has succeeded in creating an imaginary social world described by a system of mathematical equations which allegedly explain the well-ordered behaviour of humans pursuing exclusively their own, narrowly understood, self-interests to the optimal benefit of all [...]”⁸⁴⁰ And, representation of the reality through economic models depends on their empirical usefulness.⁸⁴¹ Calabresi and Melamed (1972) argue that models *in principle* cannot capture the richness of the human nature.

“[...] Framework or model building has two short-comings. The first is that models can be mistaken for the total view of phenomena [...] The second is that models generate boxes into which one then feels compelled to force situations which do not truly fit [...]”⁸⁴²

As regards mathematical formalisation of models without relevant empirical data, there are criticisms on the ground that science unlike mathematics needs supporting data from the real-world to be considered as credible.

“[...] Unlike mathematics, science requires substantive concepts [...]”⁸⁴³

Moreover, Hey (1997) opines that in the name of modelling, there are possibilities that people and groups could be promoting their vested interests, without any real addition to the body of existing knowledge.

‘[...] Many of the [journal] submissions do not appear to be written in order to further economic knowledge [...] It is [...] disheartening that so many economists seem to be playing the “journal game”, i.e., producing variations on a theme that are uninteresting and which do not enlighten. A large number of purely theoretical contributions come into this category. On the other hand, the key theoretical pieces shed light in areas where it is needed. I fear, however, that few economists ask themselves what are the crucial economic problems facing the society. If they did so, they might well produce more relevant material [...] It often appears that the model has been constructed for no other purpose than to produce a result which is a stylised fact of the author. That may be an interesting exercise but it needs to be supplemented with a discussion of whether this particular explanation for the stylised fact is useful and better than the alternative explanations. Simply producing a model that comes up with a desired result is a test of the cleverness of the author, not a test of the relevance of the theory [...]’⁸⁴⁴

In a similar vein, Solow (1997) remarks that model-building in economics unfortunately has become more of a guesswork.

“[...] Today, if you ask a mainstream economist a question about almost any aspect of economic life, the response will be: suppose we model that situation and see what happens [...] There are thousands of examples; the point is that modern mainstream economics [i.e., neoclassical economics] consists of little else but examples of this process [...]”⁸⁴⁵

Taking an extreme view, Blaug (1997) states that “[...] modern economics is sick; economics has increasingly become an intellectual game played for its own sake and not for its practical consequences.”⁸⁴⁶ Blaug (1998) also criticises the modelling endeavour as “the disease of formalism in economics”⁸⁴⁷ that do not take into consideration the real-world happenings. Commenting on the scientific rigour of economics, Michael Simon (1982) opines that economics to be considered as a *real* science must explain various departures from prescribed behaviour that we observe in real-world.

“Economic models, so far as they are based on projections of economic indicators rather than on observations of what people do, neither describe nor purport to describe actual human behavior. When an economic model fails to yield correct predictions[, ...] this is no falsification of any theory of human behavior. Explanations in economics [...] only *presume* that people will act in certain ways and that they are motivated by certain kinds of considerations [...] Economics is a science of the collective results of action, not a science of action itself [...] In order for economics to be a specifically human science,

rather than a science of the behavior of things that just happen to be run by humans, it would have to be capable of explaining economic phenomena in terms of, and on the level of, the behavior of human individuals and human groups. It would need to show what it is about humans that makes economic processes possible [...] It would have to [...] explain why economic principles and projections sometimes fail. Just as it is a mark of an adequate physical science that it can explain why certain physical laws [...] do not hold under certain conditions, so it may be demanded of a social science that it be capable of explaining departures from the laws of economics.”⁸⁴⁸

Selten (2001) is of the view that every *strong* version of the rationality principle, like the NNR, has *weak* empirical underpinnings.

“Modern mainstream economic theory is largely based on an unrealistic picture of human decision making. Economic agents are portrayed as fully rational Bayesian maximizers of subjective utility. This view of economics is not based on empirical evidence, but rather on the simultaneous axiomization of utility and subjective probability. [...]”⁸⁴⁹

Interestingly, Boettke and Storr (2002) argue that the popularity of other tools and methodologies to study human behaviour like ethnography is a direct consequence of the general *mistrust* towards excessive formalism and unrealistic assumptions that modelling endeavours use.

‘INCREASINGLY, scholars are becoming dissatisfied with economic theories that fail to consider the social, political, historical and cultural context in which actors find themselves and that fail to endow individuals with customs, values and beliefs. Economic anthropologists, for instance, have been deeply critical of economics’ “vain search for generalizations” and have instead stressed the superiority of ethnographic over statistical data and of context-specific analysis over attempts of universal theorizing. [...]”⁸⁵⁰

As a result of the gap that economics has created for itself vis-à-vis the real-world, Donaldson (1984) argues that there is “[...] a growing suspicion that in fact economists may not be good at dealing with the real problems which face us [...]”⁸⁵¹ In this backdrop, the interest towards experimental economics is on the rising.⁸⁵² “[...] Experimental economics provides a whole new way of testing and applying economic models [...]”⁸⁵³ by systematically infusing “[...] experimental techniques [...] to the analysis of basic economic behavior [...]”⁸⁵⁴

“Practical reasoning [...] leads to (or modifies) intentions, plans, and decisions. Theoretical reasoning in the corresponding technical sense leads to (or modifies) beliefs and expectations. There is also the possibility that reasoning of either sort leaves things unchanged [...] Any given instance of reasoning may combine both theoretical and practical reasoning [...]”⁸⁵⁵

“Rational choice theories on decision-making and behavioural decision theories would seem to be located on opposite poles of a wide spectrum of possible choice behaviour. Individuals might at times be largely rational. Nevertheless, evidence from behavioural economics, psychology, decision theory cognitive psychology, and related fields demonstrates that the standard economic model overstates the rationality of the economic actor, pointing to the possibility that ‘at the individual level EU [expected utility] maximization is more the exception than the rule’ [...]”⁸⁵⁶

On various methodological issues concerning economic analyses, there are also meaningful debates. Hausman (2010) argues that economic theories *rarely*

postulate the existence of unobservable entities or properties in human behaviour, e.g., factors like beliefs and desires arising out of social interactions, apart from other variants of “everyday unobservables;”⁸⁵⁷ this, according to him, is a result of less attention that economics methodologists pay to various debates within philosophy of science, e.g., the tension between realists and anti-realists as discussed by van Fraassen (1980)⁸⁵⁸ and Boyd (1984)⁸⁵⁹.

‘[... S]cientific theories do, as a practical matter, go beyond empirical descriptions: in fact, they are even used to provide scientific explanations. For van Fraassen, this is simply the difference between the epistemic and the pragmatic dimensions of science. Empirical adequacy is an epistemic criterion, but theory acceptance is based on a much broader set of evaluative standards that include pragmatic considerations. The pragmatic virtues that a theory might have include: simplicity, elegance, usefulness, and the ability to provide scientific explanations. Such things are part of applied science; they “are specifically human concerns, a function of our interests and pleasures, which make some theories more valuable or appealing to us than others” (van Fraassen 1980, p.87) [...].’⁸⁶⁰

Continuing his argument, Hausman (2010) argues that “[... m]ethodologists have, on the other hand, vigorously debated the goals of economics, but those who argue that the ultimate goals are predictive (such as Milton Friedman) do so because of their interest in policy, not because they seek to avoid or resolve epistemological and semantic puzzles concerning references to unobservables [...].”⁸⁶¹ In spite of this, Hausman (2010) notes that there are promising trends that are evolving out of the economists’ growing interests towards philosophy of science. Here, he observes that “[... n]evertheless there are two important recent realist programs in economic methodology. The first, developed mainly by Uskali Mäki, is devoted to exploring the varieties of realism implicit in the methodological statements and theoretical enterprises of economists (see Mäki 1990a, 1990b, 1990c, 2007). The second, which is espoused by Tony Lawson and his co-workers, mainly at Cambridge University, derives from the work of Roy Bhaskar (1978) (see Lawson 1997 and Fleetwood 1999). In Lawson’s view, one can trace many of the inadequacies of mainstream economics (of which he is a critic) to an insufficient concern with ontology. In attempting to identify regularities on the surface of the phenomena, mainstream economists are doomed to failure. Economic phenomena are, in fact, influenced by a large number of different causal factors, and one can achieve scientific knowledge only of the underlying mechanisms and tendencies, whose operation can be glimpsed intermittently and obscurely in observable relations. Mäki’s and Lawson’s programs obviously have little to do with one another, though Mäki (like Mill, Cartwright, and Hausman) shares Lawson’s and Bhaskar’s concern with underlying causal mechanisms.’⁸⁶²

While maintaining that economics cannot escape from being rules- and principles-bound, Hands (2001)⁸⁶³ is under the impression that the general methodological rules are of little use in analysing real-world deviations; moreover, he advocates for a naturalistic view of methodology, and is sceptical of prescriptions that are not based on detailed knowledge. However, Mirowski (1988⁸⁶⁴, 1989⁸⁶⁵, 1992⁸⁶⁶, 1994⁸⁶⁷) is critical about different attempts that try to naturalise economics using analogies from the natural sciences. For example, Mirowski (1994) quips:

“[...] If someone in economics appropriates a metaphor from (say) physics, it can only be because that person is operationalizing the insight that there is a direct isomorphism of phenomena involved; the metaphor can fail only in not being sufficiently *literal* [...].”

Utility didn't turn out to be actually manifestation of potential energy? Too bad, but nice try. Firms don't actually possess anything like a gene? Better luck next time."⁸⁶⁸

In other words, various attempts in economics to use concepts from natural sciences and mathematical tools to model human behaviour have been criticised on the basis that natural sciences and social sciences deal with two fundamentally *different* entities, and so economists as social scientists should be *prudent* and *careful* in borrowing ideas from the former in explaining social phenomena.

"Science is like fiction, you see. We make up stories, we sketch out narratives, we try to find some pattern beneath events. We are interested observers. And we like to go on with the story, we like to advance, we like to make progress. Even though they are stories told in the dark.

But you have your equations. Your mathematics –

Oh. Mathematics. Mathematics is like language. No one knows where it came from. No one really knows how it works. More horses and fishes. Horses and fishes trapped in signs. ...

Oh my God, he said. I am sorry.

Don't be sorry. There's nothing to be sorry about. I chose this life."⁸⁶⁹

As regards tension between the theorists and the empiricists in the context of economic theories, there are some insightful arguments. Denouncing Robbins' (1932) propositions those are excessively deductive, Hutchison (1938) has criticised purely theoretical economics as unscientific, and instead advocates for empirical testability of these propositions to make them scientific.

'[...] "If the finished propositions of a science, as against the accessory purely logical or mathematical propositions used in many sciences, including Economics, are to have any empirical content, as the finished propositions of all sciences except of Logic and Mathematics obviously must have, then these propositions must *conceivably* be capable of empirical testing *or be reducible to such propositions* by logical or mathematical deduction.... [T]heir truth or falsity, that is, must make some conceivable empirically noticeable difference, or some such difference must be directly deducible therefrom" [...]'⁸⁷⁰

Latis (1976) argues that the "theory of the firm"⁸⁷¹ is inadequate to explain some market situations; e.g., neoclassical theory concerning sellers' behaviour does not lead to empirically testable results.⁸⁷² Mainstream economists, like Amartya Sen, have begun to acknowledge the contribution from behavioural scientists, including psychologists. For instance, Sen (2002) states that "[...] various empirical works including the pioneering contributions of Kahneman, Slovic and Tversky, have provided extensive evidence to the effect that the actual behavior of people may depart from systematic maximization of their goals and objectives [...]"⁸⁷³ Hausman (2010), while noting the fact that there is already a *shift* in mainstream economics towards empirical modelling from strictly principle-oriented modelling, expresses his scepticism towards their sincerity. According to him, "[...] A century ago economists talked of their work in terms of "principles," "laws," and "theories." Nowadays the standard intellectual tool or form is a "model." Is this just a change in terminological fashion, or does the concern with models signal a methodological shift? What are models? [...]"⁸⁷⁴ Here lies the importance of the philosophy of science, according to Hausman (1992b)⁸⁷⁵, in addressing them.

'[...] Economists talk about their own work in many ways. They write, for example, about "principles," "models," theories," "assumptions," and "definitions and make use of

previous works by epistemologists and philosophers of science. To interpret their comments and to describe accurately what they have done, one needs to know a great deal of philosophy of science. How else is one to decide whether microeconomic theory is even a theory?⁸⁷⁶

Cross (1983) raises doubts over various inferences that are drawn from real-world data to independently validate different maximisation hypotheses.

[...] When we defend the maximization paradigm by pointing out to the similarity between its predictions and observed behavior, we often overlook the fact that the empirical “success” of many economic models is principally derived from accommodating adjustments in complementary hypotheses [...] Market data are used to make inference about the nature of preferences, expectations, and production functions through the mediating assumption of maximizing behavior, and unless these inferences are independently validated, it is impossible to uncover violations of the intermediary hypothesis [...].⁸⁷⁷

Moreover, Machlup (1952) argues that little testing and considerable manipulation is done with empirical data by neo-classicists while validating their hypotheses.⁸⁷⁸ Interestingly, Leontief (1985) finds that fifty percent of all the articles published in the *American Economic Review* during the 1970s were purely mathematical, without any empirical data, twenty two percent had manipulated data, and two out of the four or five articles having direct observations were concerned with pigeons or mice.⁸⁷⁹

As regards to theory building from empirical data there are scepticism oriented optimism. First, there are many reasons for doubting the validity of empirical findings. Pruitt and Kimmel (1977), for instance, argue that experiments lack the real-world flavour; “[...] experimental games usually place people in an *unfamiliar strategic environment* [...] Well-rehearsed habits of analysis and behavior are not readily available, and subjects must innovate [...] They engage in cool calculation and view their opponent in impersonal terms [...] In such a setting, conventional social norms, attitudes, sentiments, and most social motives have relatively little impact on behavior because they seem irrelevant to the task at hand [...]”⁸⁸⁰ In this context, while countering the argument that a theory of rationality under completeness and transitivity is weak because it says nothing about belief or what rationality implies under uncertainty, Levi (1986)⁸⁸¹ argues that there is nothing irrational about having incomplete preferences in situations involving uncertainty. In other words, this implies, at least from the hindsight, that sometimes it is rational to be irrational!

Discussing if parsimony is a virtue in a theory, Hirschman (1984)⁸⁸² supports the inclusion of more variables (if it is needed) because, “[...] parsimony in theory construction can be overdone [as in the case of maximising satisfaction as the solo overarching utility, assumed by the neoclassicists] and something is sometimes to be gained by making things *more complicated* [...]”⁸⁸³ It has also been argued that traditional theory has largely ignored the incredible complexity of human nature. According to Hirschman (1984), “[...] a person address[es ...], criticiz[es ...], or persuad[es ...] someone, but this someone is [...] the *self* rather than a supplier or an organization to which one belongs [and in this sense has metapreferences; i.e., s/he judges his preferences from two points of view, that of agency and wellbeing ...]”⁸⁸⁴ In other words, “[...] men and women have the ability to step back from their “revealed” wants, volitions, and preferences, to ask themselves whether they really want these wants and prefer these preferences, and consequently to form

metapreferences that may differ from their preferences [...].⁸⁸⁵ As human behaviour can also be based on non-utilitarian, non-self-wellbeing oriented, deontological reasoning, Hirschman (1984) urges to consider “public morality” as an important element in economic analyses because people live in society, not in isolation. Thus, it is normal for people to practice benevolence, service to community, and even self-sacrifice.⁸⁸⁶ However, McPherson (1984b) cautions that discussions on “metapreferences” from the deontological reasoning perspective, even under the shadowy presence of the neoclassical paradigm, are nothing but disapproving them.⁸⁸⁷ According to Etzioni (1988), such discussions hovering around multiple motivations behind actions pose ‘[...] two questions: can the various sources of valuations be reconciled, summed up in one supra-utility, or are they sources of irreducible, different valuations? [...] Second, [...] do these] authors [advocating for multiple utilities] seek the source of other “utilities” [? ...]’⁸⁸⁸ Are maximising utility and self-interest the appropriate indicators to testify rationality in human behaviour? Or, is it another case of parsimonious idea to formalise human behaviour by taking only them into consideration? Is preference all about safe-guarding one’s own self-interest? One of the main contentious issues in economic theorisation and formalisation is: how much simplification, generalisation and abstraction will realistically represent human behaviour?⁸⁸⁹ For example, interpreting preference as it is generally done in economics, i.e. if a person prefers x to y then s/he thinks her/himself as better off with x than with y, is simplistic. Here, Sen (1973) opines that even if preferences arise out of self-interest, they *also* have welfare judgement in them; thus, a gamut of complex relationships in society makes various real-world phenomena more complex in nature than just maximising payoffs and hence more difficult to fathom and carry out empirical work.⁸⁹⁰

“[...] Much of the empirical work on preference patterns seems to be based on the conviction that [choice] behaviour is the major source of information on a person’s preferences. That behaviour is a major source of information on preference can hardly be doubted, but the belief that it is the only basis of surmising about people’s preferences seems extremely questionable. [...] And] interpretation of behaviour [is difficult too ...] The idea that behaviour is the one real source of information is extremely limiting for empirical work [...]”⁸⁹¹

There are many such issues, questions, problems as regards how to meaningfully incorporate empirical data in order to refine economic theories, including the NNR; unfortunately, there are not easy solutions to them.

Notwithstanding, empirical studies are important, for one basic reason that there are many findings, which reveal that people *do* violate standard economic axioms, hence the NNR. “Preference reversal,”⁸⁹² as postulated by Lichtenstein and Slovic (1971, 1973⁸⁹³), Tversky and Thaler (1990)⁸⁹⁴, implies that people may not be good at evaluating their own preferences; which means agents may not have stable, well-defined preferences that are the *basic* requirements of the NNR. According to Marwell (1982), “[... t]he fact seems to be that under the conditions described by the theory as leading to free riding, people often cooperate instead [...]”⁸⁹⁵ Rabin (1998) argues that “[...] people depart from pure self-interest to pursue “other-regarding” goals such as fairness, reciprocal altruism, and revenge.”⁸⁹⁶ Strikingly, Johansen (1977) contends that many of deviations from the NNR in real-world are required for the survival of society.

“[...] Economic theory [...] tends to suggest that people are honest only to the extent that they have economic incentives for being so. This is a homo economicus assumption which is far from being obviously true, and which needs confrontation with observable realities. In fact, a simple line of thought suggests that the assumption can hardly be true in its most extreme form. No society would be viable without some norms and rules of conduct. Such norms and rules are necessary for viability exactly in fields where strictly economic incentives are absent and cannot be created [...]”⁸⁹⁷

On the bases of failures of perception rationality and process rationality, McFadden (1999)⁸⁹⁸ argues that preference is less relevant for decision-making. According to Archer and Tritter (2000)⁸⁹⁹, Rabin (2002)⁹⁰⁰, Parisi and Smith (2005)⁹⁰¹, among others, violations of rational preference choice models are due to strong dependence of choice and preference upon informational processing considerations and situational factors. Kahneman (1994) is under the impression that there may exist an “[...] explicit distinction between two notions of utility. The experienced utility of an outcome is the measure of the hedonistic experience of that outcome. [...] The decision utility of an outcome, as in modern usage, is the weight assigned to that outcome in a decision. [...]”⁹⁰² This suggests that, while deciding, people may not be aware about their utility functions. In this regards, Rabin (2002)⁹⁰³ argues that framing effects of choices may influence preferences. Contrary to Green *et al.* (1994)⁹⁰⁴, Phelps and Pollak (1968)⁹⁰⁵, Akerlof (1991)⁹⁰⁶, O’Donoghue and Rabin (2001)⁹⁰⁷, 2005⁹⁰⁸, suggest that preferences are frequently time-inconsistent. O’Donoghue and Rabin (2005) state that especially inter-temporal preferences are time inconsistent, i.e., discounts on short-term incremental delays are treated more seriously than long-term ones. Similar findings are reported by Loewenstein and Thaler (1989)⁹⁰⁹, Ainslie and Haslam (1992)⁹¹⁰, Rachlin (2000)⁹¹¹, Chung and Herrnstein (1967)⁹¹², Ainslie (1975)⁹¹³, 2001⁹¹⁴, Mazur (1987)⁹¹⁵, Loewenstein and Prelec (1992)⁹¹⁶, Loewenstein (1996)⁹¹⁷, Strotz (1955)⁹¹⁸, Phelps and Pollak (1968). O’Donoghue and Rabin (2003)⁹¹⁹ opine that the behaviours of time-inconsistent agents are more influenced by short-run incentives, rather than long-run benefits. Kahneman and Tversky (1979)⁹²⁰ states that, in stead of maximising utility, agents ‘calculate’ gains and losses from “mental reference points” that are time and situation dependent. The central message from all these is that people do not behave in a predictable way; moreover, they do not have uniform preferences and predictable patterns of choices. As Rabin (2002) has opined, agents may not always, not even primarily, act in accordance with the axioms of the rational choice model. In a nutshell, people do not behave in the manner prescribed by the NNR. One of the plausible ways forward, according to Rabin (2002) is to explore how to integrate economics with psychology.

‘The misunderstanding is that the social sciences aim at *explaining* individual behavior [...] The social sciences do in fact nothing of the sort. If conscious action can be “explained,” this is a task for psychology but not for economics [...] or any other social science [...]”⁹²¹

2.2. Psychology and Rationality

“All economics involves psychology. Bayes’ rule, the rational expectations assumption and the theory of revealed preference are all psychological assumptions about how people form expectations and what motivates them. The question for economics is not whether to include or exclude psychology, but rather what type of psychology to include.”⁹²²

Economics has paid little attention to behaviour from the psychological perspective, which has led to somewhat *simplistic* assumptions about human nature.⁹²³ In this regards, many recent works, theoretical as well as experimental, challenge many fundamental assumptions behind rationality and advocate to mainstream the psychological aspects of economic decisions, because, as Shafir and LeBoeuf (2002) have noted, “[...] people often violate tenets of rationality in inadvisable ways. [...]”⁹²⁴ According to Mitchell (1924 [1930]):

‘[...] T]he idea that one can divorce psychology from economics, constitutes the “grand error” of neoclassical economics [...]’⁹²⁵

In economics, the psychological aspects of behaviour are *reduced* to fit in to assumptions of standard theories in economics that are based on substantive rationality, thereby considering an agent as a utility maximising hedonist. Here, Loewenstein (2000) contends that “[...] w]hen Jeremy Bentham (1789) first proposed the construct of utility, emotions figured prominently in his theory. Because Bentham viewed utility as the net sum of positive over negative emotions, he devoted a substantial part of his treatise on utility to a discussion of the determinants and nature of emotions. When neoclassical economists later constructed their new approach to economics upon the foundation of utility, however, they rapidly became disillusioned with utility’s psychological underpinnings and sought to expunge the utility construct of its emotional content [...]”⁹²⁶ As a result, it is argued, we witness deviations from standard economic axioms and violation of them, in real-world.

There are arguments and counterarguments in this regards. According to Rosenberg (1988), “[...] i]t seems so obvious that citing the desires and beliefs explains the actions that nothing further need be said or could be said, for that matter.”⁹²⁷ By this, he means that our readings of human motivations are too narrow and so we should probe deeper into rationality. Moreover, Rosenberg (1992)⁹²⁸ argues that economics can *only* make imprecise generic predictions because it is built around folk psychology⁹²⁹; and he further adds that complex economic theories are valuable only as applied mathematics, not empirical theory.⁹³⁰ Winch (1958⁹³¹, 1972⁹³²) and von Wright (1971)⁹³³, among others, raises the issue of causality in regards to rationality in human actions; they are of the view that by merely giving a reason, say rational agents are utility maximising hedonists, fails to explain the causal attributes behind an agent’s action. Davidson (1963)⁹³⁴ contends that what distinguishes the reasons that explain an action from those that fail to do so is that the former address the causality of an action. Furthermore, according to Rosenberg (1976⁹³⁵, 1980⁹³⁶), although the account of rationality within economics differs in some ways from the folk psychology people tacitly invoke in everyday explanations of actions, questions over causality of action still persist. Apart from methodological and causal issues, psychological analyses of economic behaviour has also been discussed from cognitive, experimental and empirical, social, cultural, organisational perspectives.

In this section, I am going to critique rationality based on psychoanalysis, biases and heuristics. They reveal the fact that the ‘rational’ wo/man behaves in a multitude of ways that are far more *effective*, if not efficient in the neoclassicists’ sense, and convenient in decision-making activities in the real-world.

2.2.1. Psychoanalysis and Rationality

“[...] Psychoanalytic rationality is not just an intellectual act, but an activity full of emotions.”⁹³⁷

The works of Sigmund Freud, the founder of psychoanalysis, have revolutionised the Western world’s concept of the “rational wo/man.” According to La Piere (1959), Freud “[...] had the unusual distinction of providing the twentieth century with a new and very radical idea of man, and of living to see that idea rise to a position of dominance in the thought of Western peoples [...]”⁹³⁸ Freud’s interesting line of thinking is that people do not have rational control over many of their actions, which, to a larger extent, are the results of their *subconscious* drives and instincts.⁹³⁹ In this sense, Freud’s work reveals the complex nature of human rationality.

Jacobs (1992) has analysed Freud’s work in an insightful manner. According to him, Freud’s model of the mind entails extra- or non-rational elements, in addition to ‘rational’ ones. In this view, although reasoning occurs in the conscious mind – the ego – but this is only a small part of the whole process; this is because the mind *also* contains the *supposedly* irrational elements namely the id and the superego, which lie outside the conscious realm.⁹⁴⁰ Moreover, as per psychoanalysis, all actions can be termed as rational considering the host of factors that are involved.

“[...] All behavior is, after psychoanalytic explanation, completely rational in the sense that we come to understand fully why the agent, *given his circumstances*, did what he did [...]”⁹⁴¹

Treating every behaviour as rational, from the subject’s point of view, given her/his situation, psychoanalysts’ notion of rationality is *antithetical* to that of the neoclassicists’. Here, Jacobs (1992) argues that even apparently rational mental activities may be motivated by internal urges and/or external forces. Continuing further, he makes an interesting observation. That is, Freud’s thoughts have expanded the *scope* of rationality in two ways, that are: (a) irrational and non-rational aspects in an action need to be explained further, and (b) various repressed and unconscious motivations, memories and feelings underlying neurotic symptoms (arising out of the said aspects) in people need to be explained, using psychoanalysis, and attempts need to be made to integrate them into *the* rational self.⁹⁴² In this way, Jacobs (1992) claims, the non-rational and/or irrational behaviours can be analysed as *special* cases of rationality. Because, he says, in Freud’s words:

“[...] Where id was, there ego shall be [...]”⁹⁴³

Moreover, Lovejoy (1961) opines that “[...] man’s “reason” has, at most, a secondary and very small influence upon his conduct and irrational and nonrational feelings and desires are the real efficient causes of all, or nearly all, of man’s actions. [...]”⁹⁴⁴

However, there are critiques and criticisms as regards considering irrationality and non-rationality as some *other* forms of rationality. Mullane (1971) argues that the psychoanalytic way of treating all behaviour as rational is “[...] unsound, and [...] the common-sense distinction between rationality and irrationality is justified [...]”⁹⁴⁵ Simon (1978)⁹⁴⁶ criticised psychoanalytic rationality because it mainly attempts to explain an action based on functional reasons behind it; instead, he has advocated for considering substantive and procedural rationality in explaining human behaviour.

2.2.2. Biases and Rationality

“That all our knowledge begins with experience there can be no doubt [...] But though all our knowledge begins with experience, it is by no means follows that all arises out of experience. For, on the contrary, it is quite possible that our empirical knowledge is a compound of that which we receive through impressions [à posteriori knowledge], and that which the faculty of cognition supplies from itself [à priori knowledge ...]”⁹⁴⁷

“The human understanding when it has once adopted an opinion draws all things else to support and agree with it. And though there be a greater number and weight of instances to be found on the other side, yet these it either neglects and despises, or else by some distinction sets aside and rejects, in order that by this great and pernicious predetermination the authority of its former conclusion may remain inviolate.”⁹⁴⁸

Bias, or cognitive bias, refers to subjective perspectives with one-sided knowledge, partial judgement, prejudiced point of view, and so on. “[... C]ognitive bias generally refers to limited cognitive capacity [...],”⁹⁴⁹ which is similar to Simon’s BR. A biased individual is seen as non-rational and/or irrational from the neoclassicists’ points of view. In stead of logical reasoning, decision-making is done with other factors those are ignored in the NNR. Loewenstein *et al.* (1993)⁹⁵⁰ and Babcock *et al.* (1995)⁹⁵¹ opine that it is difficult to avoid biases in the real-world; according to them, people at best tend to significantly underestimate their proneness to bias. Some notable studies on biases have been done by Tversky and Kahneman (1974)⁹⁵², Miller and Ross (1975)⁹⁵³, Kahneman and Tversky (1979)⁹⁵⁴, Nisbett and Ross (1980)⁹⁵⁵, Fischhoff (2002)⁹⁵⁶, among others.

Biases in decision-making and behaviour arise out of: bandwagon effect⁹⁵⁷, base rate fallacy⁹⁵⁸, bias blind spot⁹⁵⁹, choice-supportive bias⁹⁶⁰, confirmation bias⁹⁶¹, congruence bias⁹⁶², contrast effect⁹⁶³, *déformation professionnelle*⁹⁶⁴, denomination effect⁹⁶⁵, distinction bias⁹⁶⁶, endowment effect⁹⁶⁷, experimenter’s or expectation bias⁹⁶⁸, extraordinarity bias⁹⁶⁹, focussing effect⁹⁷⁰, framing⁹⁷¹ and framing effect⁹⁷², hyperbolic discounting⁹⁷³, illusion of control⁹⁷⁴, impact bias⁹⁷⁵, information bias⁹⁷⁶, interloper bias⁹⁷⁷ and consultation paradox⁹⁷⁸, irrational escalation⁹⁷⁹, just-world phenomenon⁹⁸⁰, loss aversion⁹⁸¹, sunk-cost effect⁹⁸², mere exposure effect⁹⁸³, money illusion⁹⁸⁴, moral credential effect⁹⁸⁵, need for closure⁹⁸⁶, negativity bias⁹⁸⁷, neglect of probability⁹⁸⁸, normalcy bias⁹⁸⁹, not invented here tendency⁹⁹⁰, omission bias⁹⁹¹, outcome bias⁹⁹², planning fallacy⁹⁹³, post-purchase rationalisation⁹⁹⁴, pseudo-certainty effect⁹⁹⁵, reactance⁹⁹⁶, restraint bias⁹⁹⁷, selective perception⁹⁹⁸, Semmelweis reflex⁹⁹⁹, status quo bias¹⁰⁰⁰ (or loss aversion, system justification), Von Restorff effect¹⁰⁰¹, wishful thinking¹⁰⁰², zero-risk bias¹⁰⁰³. Biases in probability and belief are due to: ambiguity effect¹⁰⁰⁴, anchoring effect¹⁰⁰⁵ (or insufficient adjustment), attention bias¹⁰⁰⁶, authority bias¹⁰⁰⁷, availability heuristic¹⁰⁰⁸, availability cascade¹⁰⁰⁹, belief bias¹⁰¹⁰, clustering illusion¹⁰¹¹, capability bias¹⁰¹², conjunction fallacy¹⁰¹³, disposition effect¹⁰¹⁴, Gambler’s fallacy¹⁰¹⁵, Hawthorne effect¹⁰¹⁶, hindsight bias¹⁰¹⁷ (or I-know-it-all-along effect),

illusory correlation¹⁰¹⁸, Ludic fallacy¹⁰¹⁹, neglect prior base rates effect¹⁰²⁰, observer-expectancy effect¹⁰²¹, subject expectancy effect¹⁰²², optimism bias¹⁰²³, ostrich effect¹⁰²⁴, over-confidence effect¹⁰²⁵, positive outcome bias¹⁰²⁶ (also valence effect), Pareidolia¹⁰²⁷, primacy effect¹⁰²⁸, recency effect¹⁰²⁹, peak-end rule¹⁰³⁰, disregard of regression towards the mean¹⁰³¹, selection bias¹⁰³², stereotyping¹⁰³³, sub-additivity effect¹⁰³⁴, subjective validation¹⁰³⁵, telescoping effect¹⁰³⁶, Texas sharpshooter fallacy¹⁰³⁷, well travelled road effect¹⁰³⁸. Social biases occur as a result of: actor-observer bias¹⁰³⁹, fundamental attribution error¹⁰⁴⁰, ego-centric bias¹⁰⁴¹, Forer effect¹⁰⁴², Barnum effect¹⁰⁴³, false consensus effect¹⁰⁴⁴, fundamental attribution error¹⁰⁴⁵, group attribution error¹⁰⁴⁶, positivity effect¹⁰⁴⁷, negativity effect¹⁰⁴⁸, halo effect¹⁰⁴⁹, physical attractiveness stereotype¹⁰⁵⁰, herd instinct¹⁰⁵¹, illusion of asymmetric insight¹⁰⁵², illusion of transparency¹⁰⁵³, illusory superiority¹⁰⁵⁴ (also known as auperiority bias, Lake Wobegon effect, better-than-average effect, superiority bias, Dunning-Kruger effect), in-group bias¹⁰⁵⁵, just-world phenomenon, notational bias¹⁰⁵⁶, out-group homogeneity bias¹⁰⁵⁷, projection bias¹⁰⁵⁸, self-serving bias¹⁰⁵⁹ (also behavioural confirmation effect), group-serving bias¹⁰⁶⁰, self-fulfilling prophecy¹⁰⁶¹, system justification¹⁰⁶², trait ascription bias¹⁰⁶³, ultimate attribution error¹⁰⁶⁴. Memory errors are attributed to: consistency bias¹⁰⁶⁵, cryptomnesia¹⁰⁶⁶, ego-centric bias¹⁰⁶⁷, false memory¹⁰⁶⁸, hindsight bias, reminiscence bump¹⁰⁶⁹, rosy retrospection¹⁰⁷⁰, self-serving bias, suggestibility¹⁰⁷¹, betrayal aversion¹⁰⁷², and so on.

Many factors give rise to biases. Visceral factors like hunches, gut feelings, intuitions and instincts could give rise to biases as discussed by Schelling (1984)¹⁰⁷³, Loewenstein (1996)¹⁰⁷⁴, Loewenstein and Lerner (2003)¹⁰⁷⁵. Lord *et al.* (1979)¹⁰⁷⁶, Nisbett and Ross (1980)¹⁰⁷⁷, Ross and Nisbett (1991)¹⁰⁷⁸ discuss prior beliefs of agents in the formation of biases. Affective elements in people can lead to biases, argue Slovic *et al.* (2002)¹⁰⁷⁹, 2004¹⁰⁸⁰, 2007¹⁰⁸¹); according to them, “[...] “affect” means the specific quality of “goodness” or “badness” (i) experienced as a feeling state (with or without consciousness) and (ii) demarcating a positive or negative quality of a stimulus [...]”¹⁰⁸² Staw (1976)¹⁰⁸³ finds that agents can be over-committed to prior decisions, even if they bore negative consequences in past.

Biases arising out of pressure towards conforming with group norms and superiors have been discussed by Asch (1955)¹⁰⁸⁴, Milgram (1963)¹⁰⁸⁵, Janis (1972)¹⁰⁸⁶, 1982¹⁰⁸⁷). Archer and Tritter (2000)¹⁰⁸⁸ deliberate on the contextual and cultural factors entailed in biases. Miller (1976)¹⁰⁸⁹ finds that people tend to feel more responsible to successes than failures, leading to biased behaviour. According to Klein and Kunda (1993)¹⁰⁹⁰, people’s superiority perception about themselves can give rise to biases.

Biases owing to inter-temporal inconsistencies of choice have been discussed by Strotz (1955-56)¹⁰⁹¹, Schelling (1978)¹⁰⁹², Thaler (1981)¹⁰⁹³, Laibson (1997)¹⁰⁹⁴, Kunda (1987)¹⁰⁹⁵, Jones and Nisbett (1971)¹⁰⁹⁶, Nisbett and Ross (1980)¹⁰⁹⁷, among others; a major finding from their studies is that individuals may interpret the same information differently in different situations and/or orders of information presentation. Furthermore, Lichtenstein and Slovic (1971)¹⁰⁹⁸, Tversky and Kahneman (1974)¹⁰⁹⁹, Wilson *et al.* (1996)¹¹⁰⁰ postulate the “anchoring effect,” which refers to the adjustment of someone’s assessment, higher or lower, based upon previously presented external information or an “anchor.”

Confirmation bias, i.e., “[...] the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand [...]”¹¹⁰¹ has been discussed by Nickerson (1998)¹¹⁰². Kuhn (1970)¹¹⁰³ discusses confirmatory bias and belief preservation in the development of science; people (scientists) tend to pay less attention to new information which contradicts their prior beliefs, ideas and opinions; i.e., they readily accept evidences confirming their points of views and critically scrutinise disconfirming ones. McHoskey (1995)¹¹⁰⁴ and Snyder (1984)¹¹⁰⁵ argue that biased actions could also arise out of reinforced prior beliefs and selective interpretation of information. Festinger (1957)¹¹⁰⁶ has postulated the “theory of cognitive dissonance,” which stands for motivational accounts that arise from selective attention and differential weighting of information; i.e., people have a tendency to reduce cognitive conflict and resist changing their attitudes, beliefs, and behaviours, or justify or rationalise them. Rabin’s (1998)¹¹⁰⁷ “hypothesis-based filtering”¹¹⁰⁸ reveals that confirmatory bias arises out of selective scrutiny of evidence; findings from the empirical studies by Lord *et al.* (1979)¹¹⁰⁹, Hastorf and Cantril (1954),¹¹¹⁰ among others, agree with this.

“[...] Hamilton (1981) defined illusory correlations as the erroneous perception of association between two variables or events.”¹¹¹¹ Smedslund (1963)¹¹¹², Chapman (1967)¹¹¹³, Chapman and Chapman (1967¹¹¹⁴, 1969¹¹¹⁵, 1971¹¹¹⁶), Nisbett and Ross (1980)¹¹¹⁷ argue that people can have “illusory correlations” between events when, as a matter of fact, they are uncorrelated or correlated to lesser degrees. According to Bruner and Potter (1964)¹¹¹⁸, “[... in decision-making i]nterference may be accounted for partly by the difficulty of rejecting incorrect hypotheses based on substandard cues [...]”¹¹¹⁹

A central theme of rationality says that more information is better for decision-making because it allows a Bayesian updater¹¹²⁰ to improve assessments.¹¹²¹ However, Tversky and Kahneman (1974)¹¹²² argue that “anchoring” can occur as a natural part of the assessment process itself, even when weak evidence is used to form the initial hypothesis that could lead to difficulties in correctly interpreting subsequent (better) information that contradicts it. Brown and Carpenter (2000)¹¹²³, and Shafir *et al.* (1993)¹¹²⁴ find instances of anchoring in consumer behaviour. Tversky and Kahneman (1974)¹¹²⁵, Simonson and Tversky (1992)¹¹²⁶, focussing on anchoring and adjustment behaviour, show that more information may actually lead to less accurate decisions and that irrelevant choices arising out of them may bias decision-makers.

Wilson and Schooler (1991)¹¹²⁷, Griffin and Tversky (1992)¹¹²⁸, Braun and Yaniv (1992)¹¹²⁹ argue that process of learning may lead to judgemental errors in decision-making because a positive correlation between expertise and over-confidence; this can lead to ignoring new knowledge and stopping further learning.

An individual may give low value to her/his achievements, while comparing his/her subjective expectations and their situational interpretations. For example, Festinger (1957)¹¹³⁰ discussed how an agent compares her/his situation with that of others may lead to biases. Atkinson (1964)¹¹³¹ viewed them arising out of how s/he compares outcomes against her/his expectations; as per Kahneman and Tversky (1982)¹¹³², from how s/he compares actual outcomes with her/his imagined outcomes. Loss aversion by Kahneman and Tversky (1979)¹¹³³ and risk aversion by Kahneman and Tversky (1979¹¹³⁴, 1982¹¹³⁵) are some of the notable concepts in this regards.

Kogan and Wallach (1964)¹¹³⁶ and Yates (1992)¹¹³⁷ argue that as risk is pervasive in our lives, so biases in decision-making are not irrational and/or non-rational. Perloff and Fetzer (1986)¹¹³⁸ find that individuals who have not been victimised by negative life events feel relatively at ease with risks than others. Contrary to the general idea that people prefer controllable risks over less dangerous uncontrollable ones, Klein and Kunda (1994)¹¹³⁹ find that people's preference for controllable risks reduces when they take risk for another person rather than for themselves and that such preferences are stronger when the ability required to control outcomes is induced by "I am above average" mentality.

Messick *et al.* (1985)¹¹⁴⁰, Liebrand *et al.* (1986)¹¹⁴¹, Tyson (1990)¹¹⁴², Morgan (1993)¹¹⁴³ find that individuals have self-enhancing biases; for example, they perceive themselves to be more ethical, better on desirable attributes, and make unrealistically positive self-evaluations about themselves. As regards cognitive dissonance, Festinger (1957)¹¹⁴⁴ and, Sherman and Gorkin (1980)¹¹⁴⁵ find that people often prefer to avoid or distort information that challenge comfortable beliefs about themselves and their abilities. Biases arising out of the Ostrich Effect (OE) is a typical case in which people seek less of information that contradicts their optimism about future. People derive utility from beliefs. Research in this regards shows that people who hold optimistic beliefs about the future and positive views of themselves, are both happier (Diener and Diener, 1995¹¹⁴⁶; Scheier, *et al.*, 2001¹¹⁴⁷; Petersen and Bossio, 2001¹¹⁴⁸) and healthier (Baumeister, *et al.*, 2003¹¹⁴⁹), but not necessarily wiser (Alloy and Abramson, 1979¹¹⁵⁰; Karlsson *et al.*, 2009¹¹⁵¹). This is the fallacy of ostrich-like willful blindness. OE centric bias is particularly important in speculative fields like the stock markets.

Behavioural sciences suggest that Bayesian updating is only one tool out of many that agents use in refining their judgement. In this regards, Offerman and Sonnenmans (1998)¹¹⁵², while undertaking an experimental study where learning from one's own experience is compared to Bayesian updating, find that although people learn from their experiences but they fall *significantly* short of ideal Bayesian updating. According to them, "[... u]sually individual judgmental learning displays systematic biases against the ideal Bayesian model [... P]eople learn both from experience and by imitating successful others."¹¹⁵³

In a nutshell, as noted by Bazerman and Neale (1992), biases arise out of: "[... (1) [competitive and winning at all cost oriented] irrationality escalating your commitment to an initial course of action, even when it is no longer the most beneficial choice[; ... (2)] assuming your gain must come at the expense of the other party, and [in the process] missing opportunities for tradeoffs that benefit both sides[; ... (3)] anchoring your judgements upon irrelevant information , such as an initial offer[; ... (4)] being overly affected by the way information is presented to you [as a result of framing; ... (5)] relying too much on readily available information, while ignoring more relevant data[; ... (6)] failing to consider what you can learn by focusing on the other side's perspective[; ... (7) and finally,] being overconfident about attaining outcomes that favour you [...]"¹¹⁵⁴

Among various types of biases, I would like to discuss self-serving bias and attribution bias further, which are important in the context of the neoclassicists' assumption that people act *mainly* out of self-interest.

2.2.2.1. Self-serving Bias

“[...] Self-serving bias can affect our perception in much the same way that a flawed eyeglass lens distorts vision. [...]”¹¹⁵⁵

According to Miller and Ross (1975),¹¹⁵⁶ the self-serving bias is a human tendency to take credit for success but deny responsibility for failure.

“The self-serving bias refers to a tendency for people to take personal responsibility for their desirable outcomes yet externalize responsibility for their undesirable outcomes. [...]”¹¹⁵⁷

Shepperd *et al.* (2008)¹¹⁵⁸ argue that “[... a]lthough self-serving attributions occasionally reflect a calculated attempt influence audience perceptions or a desperate attempt to defend a desirable self-view, in many instances, they are not calculated, not deliberate, not intentional, and probably not even conscious [...]”¹¹⁵⁹ Babcock and Loewenstein (1997)¹¹⁶⁰ argue that, irrespective of their experience and learning, people are prone to self-serving bias. This has far-reaching implications for management theory and practice. For example, Prentice (2000)¹¹⁶¹ has argued that quality of auditing could be adversely affected by it.

“[W]hen individuals face tradeoffs between what is best for themselves and what is morally correct, their perceptions of moral correctness are likely to be biased in the direction of what is best for themselves [...] It seems likely that the judgments of auditors, who ostensibly represent the interests of the shareholders but are hired (and fired) by the people they audit, are likely to be blinded to some degree by the incentive for client retention.”¹¹⁶²

Rabin (1995)¹¹⁶³ hypothesises that individuals whose moral dispositions serve as internal constraints will avoid seeking advice that could interfere with their self-interest. Dahl and Ransom (1999)¹¹⁶⁴ find its relevance to tithing behaviour. Haisley and Weber (forthcoming) argue that “[...] people can adopt a favorable view of ambiguous risks relative to ones with known probabilities, contrary to the usual attitude of ambiguity aversion, when doing so permits justification for unfair behaviour. [...]”¹¹⁶⁵

Self-service bias has interesting empirical findings with respect to a particular type of personality – people who self-monitor themselves. Arkin *et al.* (1979)¹¹⁶⁶ find that people having high self-monitoring tendencies assume significantly greater responsibility for success than failure under scrutiny, but assume only *somewhat* more responsibility for success than failure when not; whereas, people having low self-monitoring tendencies assume more responsibility for success than for failure when not under scrutiny, but assume *no more* responsibility for success than for failure under scrutiny. This implies that when externally scrutinised, high self-monitors are prone to self-serving bias, whereas, interestingly, low self-monitors are indifferent.

“[...] According to Snyder (1979), high self-monitors are especially concerned with projecting a positive image of themselves to others and are highly responsive to situational cues in order to do so. High self-monitors strive to perform whatever

behaviour is most appropriate in a particular situation. In contrast, low self-monitors are less interested in projecting a positive self-image than they are in expressing their true attitudes and beliefs. They are less sensitive to situational cues and are less concerned with projecting self-images that others will respect. [...]"¹¹⁶⁷

Furthermore, deliberating upon the assumption that people often use consensus information (that reveals the power of forces at work in situations of interest to elicit one type of behaviour and not another) and other sorts of base rates when making social judgments in novel situations, Krosnick and Sedikides (1990)¹¹⁶⁸ find that "[... h]igh self-monitors are more responsive to complimentary consensus information [which are self-serving] than are low self-monitors, and low self-monitors are more responsive to threatening consensus information than are high self-monitors [...]"¹¹⁶⁹ furthermore, they suggest that "[...] theories of social judgment and decision making should pay greater attention to disposition-based and situation-based heterogeneity among people in terms of reasoning styles and motives."¹¹⁷⁰

In studies on decision-making, Kunda's (1987¹¹⁷¹, 1990¹¹⁷²) postulations on the concept of self-serving bias are widely used. As Marnet (2008) has noted, "[... People generally over-estimate personality or dispositional factors and under-estimate situational factors while judging actions of others and t]his can be applied to decision-making in corporate governance. Agents may frequently convince themselves of the correctness of their actions. The notion of self-serving inference (Kunda, 1987, 1990) is a fundamental construct in social cognition which plays into this. When there is enough ambiguity to permit this, people have no difficulty in seeing what they want to see. And what they want to see is typically something that is in their self-interest, not a threat to either their self-esteem or career prospects. Such a threat is stressful, and, in group decision-making, upsets cohesion. It is normal, and to a certain degree healthy, therefore, to resist it. This can be one reason why anti-social behaviour in business settings may frequently be less the product of base moral corruption than of the ability of normal people in stressful environments to distort and rationalize their judgement and action."^{1173,1174} Moreover, people generally look for immediate gains rather than long-term ones and, act with limited information and resources that they normally can access and manage, which is one of the main reasons for the occurrence of self-serving biases in behaviour; this, according to Jolls *et al.* (2000), is not surprising if we consider men/women to be boundedly, not fully, rational.¹¹⁷⁵

"In human judgement and choice making, myopia often trumps foresight, the immediate typically dominates the important, and people tend to have a preference for gratification sooner than later [...]"¹¹⁷⁶

2.2.2.2. Attribution Bias

"We might as well give up the fiction
That we can argue any view.
For what in me is pure Conviction
Is simple Prejudice in you. [...]"¹¹⁷⁷

Attribution bias is a cognitive motivational bias that determines who and/or what was responsible for an event or action, as a result of which people's judgement may be *distorted* with respect to factors that actually cause them. Heider (1958)¹¹⁷⁸, Jones and Davis (1965)¹¹⁷⁹, Kelley (1967)¹¹⁸⁰, Ross (1977)¹¹⁸¹, Bradley (1978)¹¹⁸², Nisbett and

Ross (1980)¹¹⁸³, Tetlock and Levi (1982)¹¹⁸⁴, among others, have studied attribution bias, and argued its inevitability in decision-making.

“[...] People make attributions for the purpose of developing an organized and meaningful view of the world in which they live. [...]”¹¹⁸⁵

Bradley (1978)¹¹⁸⁶ finds that people’s causal attributions are affected by the degree of public scrutiny of their behaviour; this finding has relevance, as we have discussed, in management accounting and earnings management. Thus, they could be determined by situational factors. In this regards, he argues “[...] under certain conditions, esteem needs may be best served by making counterdefensive attributions [...]”¹¹⁸⁷ More recently, Doukas and Petmezas (2007)¹¹⁸⁸ and Billett and Qian (2005)¹¹⁸⁹ find that over-confident managers tend to credit the initial success of mergers and acquisitions to their own abilities and may become overconfident and engage in more such deals which could be non-rational or irrational acts.

In regards to explaining factor those are not under their control, agents may resort to attributing their successes and/or failures, mostly the latter, to external forces. One of the plausible reasons for this is conservatism. Shiller (2006) states that “[... a]ccording to a psychological principle of conservatism [bias], people are slow to change their opinions [and behaviour ...]”¹¹⁹⁰ As argued by Edwards (1968)¹¹⁹¹, conservatism is a source of attribution bias because people tend to be slow to change, prefer to anchor their beliefs on the ways things have always been done. In the process, they could be slow in adjusting their beliefs and responses to new evidences and may attribute their failure to “I have always done in that way!” “[...] Our reasoning is conservative in the sense that we start with our present view and try to improve it by getting rid of inconsistency and by increasing its coherence in ways that helps us answer questions in which we are interested (Rawls 1971; Goodman 1965; Peirce 1931-58; Quine and Ullian 1970; Dewey 1938) [... which] favors beliefs that we already have over propositions that we do not already accept [...] An alternative idea would restrict the conservative bias to certain “foundational” beliefs, such as beliefs about your most immediate experience and beliefs based on the recognition of self-evident truths (Descartes 1637; Foley 1987; Alston 1989; Chisholm 1982).”¹¹⁹² In specific cases, conservatism and representativeness heuristic are complementary mechanisms. In this regards, Barberis *et al.* (1998)¹¹⁹³ have argued that they are complementary because, for example, an investor tends to under-react when confronted with, say, a positive earnings surprise.

There are also criticisms against using biases to explain human behaviour. Harman (2004) cautions that attribution bias could lead to more and more instances of irrational behaviour (and their legitimisation).

“[...] But there is a compelling argument for conservatism and against special foundationalism – namely that special foundationalism leads inevitably to skepticism, and that again one will not be able to learn much of anything if one cannot rely on one’s other nonfoundational beliefs (Harman 2003) [...] It would be deeply irrational to reason in a way that leads to skepticism. Any skeptical system gives to wrong results about what one should believe.”¹¹⁹⁴

Mitchell (2002)¹¹⁹⁵ criticises behavioural analyses of decision making and argues that not all deviations from rational models could be attributed to biases and heuristics, nor

observed deviations always present themselves with the same magnitude. Nevertheless, he agrees that cognitive and environmental factors do affect behaviour.

“[...] Differences in education, training, cognitive capacity, thinking dispositions, sex, and cultural background across individuals appear to be reliably associated with different levels of cognitive performances. Furthermore, emotional differences, developmental differences, and different forms of mental processing appear to be associated with different levels of cognitive performance within individuals. Therefore, depending on the characteristics of the individual and the system of thought activated in a particular decision-making situation, the behaviour of different group of individuals and the behaviour of the same individual over time may vary considerably, from perfect rationality to seeming irrationality [...]”¹¹⁹⁶

On how to make people *more* rational, Camerer and Hogarth (1999)¹¹⁹⁷, and Seidenfeld (2001)¹¹⁹⁸, among others, suggest that de-biasing, training in statistical methods, incentives, accountability, to name a few, may lead to better (rational) performance; but their effectiveness, as Shafir and LeBoeuf (2002)¹¹⁹⁹ have noted, are not clear. In this context, (Wright, 1984)¹²⁰⁰ argues that without an adequate understanding of the underlying processes in decision-making, efforts at de-biasing will continue to give confusing results. In this regards, in the context of behavioural accounting, Shanteau (1989) notes that “[...] unless more convincing evidence is offered, there does not appear to be much future for the heuristics and biases approach in behavioral auditing research. Instead, the emphasis should be on research which addresses the unique concerns of accountants and auditors.”¹²⁰¹

2.2.3. Heuristics and Rationality

“[...] Cognition is the art of focusing on the relevant and deliberately ignoring the rest [...]”¹²⁰²

“[...] Most people [...] woefully muddled information processors who often stumble along ill-chosen short-cuts to reach bad conclusions [...]”¹²⁰³

Heuristic, its Greek root comes from “eureka” that means find or discovery,¹²⁰⁴ is introduced into decision-making and problem solving studies by Polya (1945)¹²⁰⁵.¹²⁰⁶ It stands for experience-based techniques that help in finding, problem solving and learning in order to quickly reach optimal solutions.¹²⁰⁷ According to Newell and Simon (1963), heuristic methods are rules of thumb, intelligent guesses, intuitive judgements or simply common sense.¹²⁰⁸ In other words, heuristics are general *fast-and-frugal* ways of decision-making.

“A heuristic is essentially a procedure for problem solving that functions by reducing the number of possible alternatives and solutions and thereby increases the chance of a solution [...]”¹²⁰⁹

In other words, people often make snap judgments using quick and parsimonious decision rules known as heuristics or cognitive heuristics.

“[...] The function of heuristics is not to be coherent. Rather, their function is to make reasonable, adaptive inferences about the real social and physical world given limited time and knowledge [...]”¹²¹⁰

Fiedler and Schmid (1996) consider that heuristics are important for decision-making because they: (a) enable a decision-maker to gain cognitive economy (by letting her/him to use less mental resources) and, (b) prepare her/him for a changing environment and thus instilling confidence on to her/him.¹²¹¹

According to Stillings *et al.* (1998), the most fundamental heuristic is the trial and error method.¹²¹² Some of the other well known heuristics are: anchoring and adjustment heuristic¹²¹³, availability heuristic¹²¹⁴, representativeness heuristic¹²¹⁵, naïve diversification¹²¹⁶ (also diversification heuristic), escalation of commitment¹²¹⁷ (sunk-cost fallacy), affect heuristic¹²¹⁸, peak-end rule, scarcity heuristic¹²¹⁹, similarity heuristic¹²²⁰, contagion heuristic¹²²¹, familiarity heuristic¹²²², social proof¹²²³ (also informational social influence, herd behaviour), recognition heuristic¹²²⁴, effort heuristic¹²²⁵, take-the-best heuristic¹²²⁶, fluency heuristic¹²²⁷, simulation heuristic¹²²⁸, judgemental heuristic¹²²⁹. Interestingly, Gigerenzer and Todd (1999) term heuristics oriented decision-making as “ecological rationality.” (See: Figure 2.1.) According to them, as uncertainty and disorder are normal in real-world, so it is *rational* to adapt to these situations and act effectively.

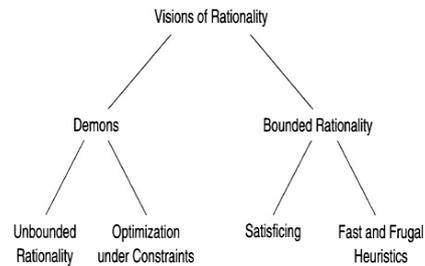


Figure 2.1 Visions of Rationality

Source: Gerd Gigerenzer and Peter M. Todd, “Fast and Frugal Heuristics: The Adaptive Tool Box,” In *Simple Heuristics that Make Us Smart*, (eds.) Gerd Gigerenzer, Peter M. Todd, and the ABC Research Group (Oxford, UK: Oxford University Press, 1999), 7. 3-34

“Traditional definitions of rationality are concerned with maintaining internal order of beliefs and inferences [...] But real organisms spend most of their time dealing with the external disorder of their environment, trying to make the decisions that will allow them to survive and reproduce (Tooby & Cosmides, 1998). To behave adaptively in the face of environmental challenges, organisms must be able to make inferences that are fast, frugal and accurate. These real-world requirements lead to [the conceptualisation of] ecological rationality [...]”¹²³⁰

“We use the term “ecological rationality” to bring environmental structure back into bounded rationality. A heuristic is ecologically rational to the degree that it is adapted to the structure of an environment [...] Thus, simple heuristics and environmental structure can both work hand in hand to provide a realistic alternative to the ideal of optimization, whether unbounded or constrained.”¹²³¹

Scholars also consider some acts as “cognitive errors” rather than heuristics. For example, “[... since financial economists ...] tend to relate their hypotheses to the rationality postulate, they see the utilization of such heuristics as deviations from rationality and they call those “cognitive errors” rather than using the psychologists’ more positive word, “heuristics” (cf. Shefrin 2000).”¹²³²

Research on heuristics is mainly influenced by the experimental works of Amos Tversky, Daniel Kahneman and their colleagues in the fields of judgment and decision-making, which has spread beyond academic psychology into other disciplines like political science.¹²³³ They have argued that people make use of heuristics to ease decision-making in novel and unfamiliar situations. Although they are quite useful, effective and economic, they also lead to severe, systematic and

predictable errors that violate standard normative axioms of economics, like the Bayes theorem.¹²³⁴ As Tversky and Kahneman (1971) have noted, such errors are found both in case of naïve subjects and experts.

Tversky and Kahneman (1971)¹²³⁵ find that people apply the “law of small numbers” in decision-making by which they expect future events to be like past ones, even when they have few past events to refer to and rely on. Kahneman and Tversky (1972)¹²³⁶ and, Tversky and Kahneman (1974)¹²³⁷ argue that “representativeness heuristic” is used to “[...] assess the likelihood of an event by how well it captures the salient properties of the process producing it. Although sometimes useful, this heuristic will produce biases whenever features that determine likelihood are insufficiently salient (or when irrelevant features capture people’s attention). As a result, predicting behavior of people relying on representativeness requires both a subjective understanding of how they judge salience and a normative understanding of what features really matter. Bias arises when the two are misaligned, or when people apply appropriate rules ineffectively.”¹²³⁸ Tversky and Kahneman (1974)¹²³⁹ also have discussed availability heuristic, adjustment and anchoring heuristics those are widely used in decision-making. Kahneman and Frederick (2002)¹²⁴⁰ claim that cognitive heuristics work by a process called “attribute substitution,” *without* the conscious awareness of a person; s/he substitutes a more easily calculated heuristic attribute while judging a complex phenomenon; this explains cases in which judgments fail to show regression towards the mean.¹²⁴¹

Herbert A. Simon is one of the pioneers in the study of heuristics. Simon (1956a, 1990) puts forth the concept of “satisficing,” i.e., “[...] the shortcut of setting an adjustable aspiration level and ending the search for alternatives as soon as one is encountered that exceeds the aspiration level [...]”¹²⁴² Klein (1998)¹²⁴³ supports it. Additionally, Simon (1978) argued that “[...] in satisficing model search terminates when the best offer exceeds an aspiration level that itself adjusts gradually to the value of the offers received so far [...]”¹²⁴⁴ Moreover, Simon (1956a)¹²⁴⁵ proposed the “psychological environment” (comprising external factors) that influences behaviour; here, he argues that if the structure of the heuristic is adapted to that of the environment, then simple heuristics perform well. Furthermore, Newell and Simon (1981)¹²⁴⁶ argued that intelligence is the ability to use task-simplifying heuristics.

The General Problem Solver (GPS), a computer programme intended to work as a universal problem solving machine, created in 1957 by Simon, Shaw and Newell, is one of the first attempts to study the application aspects of heuristics.¹²⁴⁷ The GPS generated heuristics, based on “means-end analysis,”¹²⁴⁸ enable decision-makers to solve problems efficiently. It is concerned with analysing available operations, estimating what inputs are acceptable and required for outputs, and creating subgoals that lead closer to the final goal. “Newell and Simon’s [(1972)] model of problem solving was generated from computer simulation and from participants’ think-aloud responses as they worked through problems. According to the model, the problem solver perceives both *initial state*, the state at which he or she originally is, and the *goal state*, the state that the problem solver would like to achieve. Both of these states occupy positions within the *problem space*, the universe of all possible actions that can be applied to the problem, given any constraints that apply to the solution of the problem (Simon, 1999a; Sternberg, 1999) [...]. According to Newell and Simon’s (1972) model, problem solving is a search through a series of states within a problem

space; the solution to a problem lies in finding the correct sequence of actions for moving from one (initial) state to another (goal) state (Newell and Simon, 1972): Simon, 1999a; Sternberg, 1999) [...] A variety of heuristics can be used for changing one state into another [...]”¹²⁴⁹ Furthermore, Newell and Simon (1972)¹²⁵⁰ also postulate the “generate and test heuristic,” which involves arbitrary generation of solutions until the intended solution is found out. All these findings and suggestions mean that to be rational is also to be adaptable in real-world.

“[...] The mind and the environment are like a husband and wife who must come to terms with each other by mutual adaptation. However, owing to focus on coherence in much research on reasoning and decision-making, the couple has become estranged [...]”¹²⁵¹

In regards to strategy selection and behavioural adaptation, there are interesting lines of thought. Payne *et al.* (1993)¹²⁵² emphasise that a multitude of strategies are available to a decision-maker and s/he chooses among them depending on their costs, accuracy (given constraints), and time pressure. Chi *et al.* (1988)¹²⁵³ argue that strategy selection depends on the problem type and the expertise level of decision-makers. Bedard and Chi (1992)¹²⁵⁴ find that experts are better problem solvers than novices because they have better knowledge, which, among other things, make them better organised. Gentner (1983)¹²⁵⁵ puts forward “structure-mapping theory” as a heuristic, which means that some people map one situation to another analogous but unfamiliar one for problem-solving. Contrary to the widely held belief that more information is better for decision-making, Wilson and Schooler (1991)¹²⁵⁶ argue that sometimes people act effectively by relying on their intuition rather than reasoning. Davis *et al.* (1994)¹²⁵⁷ find that sometimes forecast of stock earnings decreases in its accuracy as new information are added, which may be due to poor information integration (between new and existing ones). McKenzie (1994)¹²⁵⁸ and, Ambady and Rosenthal (1992)¹²⁵⁹ claim that, at times, simple intuitive strategies do well on Bayesian inferences. Hammond (1996a) is under the impression that the performance of heuristics should be based on measures “[...] that relates decision-making strategies to the external world rather than to internal consistency, such as accuracy, frugality, and speed, [which] are called correspondence criteria [...]”¹²⁶⁰ Driver and Humphries (1988)¹²⁶¹ argue that in social situations, including some competitive games and predator prey interactions, it can be advantageous to behave *inconsistently* and *unpredictably* in order to avoid capture or loss.

Furthermore, culture has a vital role in heuristics, because it has “[...] representational, directive, and affective functions [...]”¹²⁶² towards behaviour. “[...] Culture is described as a very large pool of information passed along from generation to generation, composed of learned “programs” for action and understanding [...]”¹²⁶³ D’Andrade (1981) argues that “[...] in the process of repeated social transmission and use, cultural programs come to take forms which have a good “fit” to the natural capacities and constraints of the human information processing system.”¹²⁶⁴ Moreover, “[...] in the cognitive paradigm, what a creature does is, in large part, a function of the creature’s internal representation of its environment.”¹²⁶⁵ Here, D’Andrade (1984) puts forth the notion of “cultural meaning system” on the basis of which a particular group defines which behaviour is acceptable; This could be viewed as cultural rationality, i.e., culture specific rational behaviour. Moreover, D’Andrade (1987)¹²⁶⁶ discusses about “folk model of the mind,” by which he implies that people use common-sense reasoning in everyday life. Interestingly, according to D’Andrade

(1992)¹²⁶⁷, motives are “goal-schemas,” i.e., “[...] a schema is [...] a procedure by which objects or events can be identified on the basis of simplified pattern recognition [...],”¹²⁶⁸ some of which are shaped by cultural underpinnings of the group and community to which an individual belongs to.

Although fastness and frugality in decision-making are defining features of heuristics, yet Gigerenzer and Todd (1999) have postulated a *kind* of heuristic called the “fast and frugal heuristic” (FFH) which refers to narrowing down alternatives that at least satisfies their objectives in situations where they have limited time and inadequate knowledge.

“[...] Satisficing is a way of making a decision about a set of alternatives that respect the limitations of human time and knowledge: It does not require finding out or guessing about all the options and consequences the future may hold, as optimization under constraints does. However, some forms of satisficing can still require a large amount of deliberation on the part of the decision maker, for instance to set an appropriate aspiration level in the first place, or to calculate how a current option compares to the aspiration level (Simon, 1956b). Rather than let unrealistic mental computation slip back into our picture of human rationality, we narrow our focus still more to concentrate on fast and frugal heuristics for decision making.”¹²⁶⁹

FFH is a departure from the norms of inductive reasoning and mainly based on the concept of BR. It takes into account limitations arising out of limited time, knowledge and cognitive capacity. With it, people employ quick and crude procedures that are less than perfect but *work* effectively in real-world by enabling an agent to be more adaptive. Technically speaking, FFH implies that agents use non-compensatory strategies¹²⁷⁰ in judgments and take one cue into account in their reasoning; which also means that sometimes judgment relies solely on recognition.

“[...] Standard models of optimization, whether constrained or unbounded, assume that there is a common currency for all beliefs and desires, namely, quantitative probabilities and utilities. Although this is a mathematically convenient assumption, the way we look at the world does not always confirm to it. Some things do not have a price tag, and cannot be reduced to and exchanged for any common currency (Elster, 1979). Love, true friendship, military honors, and PhD’s, for example, are supposed to be priceless, and therefore incommensurable with items for sale in a shopping mall. When reasons cannot be converted to a single currency, the mind has little choice but to rely on a fast and frugal strategy that bases its decision on just one good reason [...]”¹²⁷¹

Oppenheimer (2003)¹²⁷², while investigating “recognition heuristic,”¹²⁷³ an FFH, argues that agents’ judgments do not conform to the recognition heuristic because confusion with other cues could also lead to similar judgments. Newell *et al.* (2003)¹²⁷⁴, examining the use of “take-the-best heuristic,”¹²⁷⁵ another FFH, question the predictive power of the FFH studies. Edwards and vonWinterfeldt (1986) contend that “[... t]he whole issue of how good human intuitive performance is may be more or less irrelevant to the broader question of human intellectual competence, because if the problem is important and the tools are available people will use them and thus get right answers. Indeed, this is the main difference between experimenters and subjects in experiments on the cognitive illusions.”¹²⁷⁶

There are interesting debates as regards people using heuristics as a decision-making tool. Thorngate (1980)¹²⁷⁷ and Hogarth (1981) agree that heuristics let people to be adaptive, especially in dynamic situations. However, Hogarth (1981) argues

that “[...] the more serious criticism [against heuristics] is the failure to specify conditions under which people do or do not perform well. [...] He further adds that] insufficient attention has been paid to the effects of feedback between organism and environment [...]”¹²⁷⁸ Fischhoff (1999)¹²⁷⁹ argues that heuristics themselves are *imperfect* strategies. Contrary to the popular belief that superior performance within contextual domains originates solely from innate abilities, Ericsson and Charness (1994)¹²⁸⁰ argue that exceptional performance develops mainly, though not exclusively, from rigorous preparation. Dunbar (1995¹²⁸¹, 1997¹²⁸²) posits that the “use of analogy” in problem-solving is based on deep underlying similarities between the familiar and unfamiliar situations, and hence does not depend on heuristics. For example, he finds that over fifty per cent of analogies, generated at weekly meetings in a molecular biology laboratory, were based on deep structural similarities between problems. On the contrary, Gentner *et al.* (1993)¹²⁸³ find that laboratory scientists also sometimes rely on superficial features using analogies. Here, Blanchette and Dunbar’s (2000)¹²⁸⁴ findings are important, which reveal that such (wrong) observations regarding participants’ use of superficial features in problem-solving through analogy can be due to the kind of paradigm used by researchers to study analogies. Fischhoff *et al.* (1979) argue that “[...] people know or can figure out somewhat more than what they have been given credit for in the past [...]”¹²⁸⁵ Furthermore, Slovic *et al.* (1977), Jungermann (1983), Wallsten (1983), Anderson (1987) feels that heuristics research has not been able to develop appropriate theories. According to Wallsten (1983), “[...] w]e have now reached the point where it is necessary to develop theories of problem representation and of judgment [...] The research on heuristics should rely less on individual word problems, and more on the systematic manipulation of features in a manner determined by the theory under consideration.”¹²⁸⁶ Interestingly, Jungermann (1983) argues:

“[...] Research on judgment and decision making has been driven too much by a concern for errors relative to a normative standard the validity of which one can doubt with good arguments. [...] This may lead to the] avoid[ance ... of] the term rationality in psychology at all [...]”¹²⁸⁷

Thus, overindulgence in hypotheses-proving attitudes of researchers can distance them, as we have already discussed, from the actualities of the real-world. As, Etzioni (1988) has noted:

“[...] Social scientists [including psychologists] are too quick to be satisfied with correlations; a theory is to be evaluated by how much of its subject the theory explains, assuming that the subject itself is not trivial.”¹²⁸⁸

Before we start to critique rationality from the sociological perspective, let us briefly put some thoughts in regards to why it is important to understand the sociologists’ arguments on rationality. According to Lewin (1951)¹²⁸⁹, behaviour is a function of people and their social environments (i.e., their ‘situatedness’ in society). This is also the basis of social psychology, which studies attitude and behaviour of people in the presence of others.¹²⁹⁰ Colman *et al.* (2008)¹²⁹¹ argue that people tend to reason from collective perspectives. Moreover, various study programmes on group reasoning, including empirical ones aimed at investigating biases and heuristics as regards social cognition and social dynamics aspects of people, also have resulted in behavioural models like social utility model (or transformational model); which

attempts to study people as *Homo sociologicus*, notes Van Lange (1999)¹²⁹². After all, as Simon (1957) has argued, the wo/man is *also* a social being.

“[... Herbert A. Simon’s 1957 book *Models of Man: Social and Rational* is] concerned with laying foundations for a science of man that will comfortably accommodate his dual nature as a social and a rational animal. [...]”¹²⁹³

2.3. Sociology and Rationality

“[... M]any economists would separate economics from sociology upon the basis of rational or irrational behaviour [...]”¹²⁹⁴

‘[... I]t is becoming increasingly obvious from the research conclusions of other disciplines (*psychology, philosophy, political science, and sociology* in particular) that the simplistic notion of “*economic man*” posited so often in economic literature, is more fancy than fact [...]’¹²⁹⁵

“Some of the issues also call for going beyond what are often taken to be boundaries of economics – into political, social and philosophical matters. These boundaries are often defined very narrowly, involving partitions that classical economists, such as [Adam] Smith and [Karl] Marx, would not have easily recognized. Some of the modern economics seems indeed to be based on the corset-maker’s old advice: ‘If madam is entirely comfortable in it, then madam most certainly needs a smaller size.’”¹²⁹⁶

“[... E]conomics is not only an object of social inquiry, but also as a tool of social inquiry [...]”¹²⁹⁷

Economics is a “[... s]ocial science that analyzes and describes the consequences of choices made concerning scarce productive resources [... It] is the study of how individuals and societies choose to employ those resources: what goods and services will be produced, how they will be produced, and how they will be distributed among the members of society [...]”¹²⁹⁸ The word ‘economics’ has its roots in Greek ‘*oikos*’ meaning family, household, and/or estate, and ‘*nomos*’ meaning custom and/or law; Thus, economics stands for ‘household management’ or ‘management of the state.’¹²⁹⁹ Sociology “[...] focuses upon the inter-relationships among and within the various institutions into which human beings form themselves. [... Importantly, it is] the study of social situations *as they are*, not as they ‘ought’ to be [...] The concern of sociologists is with *understanding* what they study, not with evaluating [or making judgements about] it [...]”¹³⁰⁰ Thus, sociology is the study of society *as it is*, and not as it ought to be. In regards to the connection between economics and sociology, Reisman (1976)¹³⁰¹ notes that even if Adam Smith treated people as Robinson Crusoe like single individuals, yet he acknowledged that people do not live, for that matter behave, in isolation but in social situations; however, the neoclassicists only have taken the Robinson Crusoe aspect of his argument, ignoring the social angle.

“[... Adam Smith] saw economic actions as forming only one strand in a massive interdisciplinary pattern, and stressed interconnection (of individuals and of academic disciplines) rather than intellectual isolation [... H]e believed his massive social aggregate to be in the process of change, and sought to predict the direction in which it was evolving [... Also h]e was an economic determinist, convinced that social and institutional phenomena are principally emanations of a country’s habitual manner of working and earning a living [... Thus, he] saw society as an aggregate of Robinson Crusoes, living together and not in isolation, and interacting with one another in

institutions and according to norms accepted by all participants as proper [...] Such an approach is broader than that usually taken by the economist [...]"¹³⁰²

Noting the importance of sociological analysis of organisations, Castro (1996) states that "[... a] sociological perspective helps us to stand back from the organizations, interrelationships, and ideas that inform our daily lives so as to see them from the outside. The ability to do that – to deconstruct our situation sociologically as well as historically – is a prerequisite to the ability to reconstruct it ethically [...]"¹³⁰³

In regards to rationality, contemporary sociologists have quite eclectic points of view. According to Tilly and Tilly (1998), the broad theoretical paradigms in sociology are: rational-actor, Marxist, and structural theories; although Weberian and functional paradigms are noteworthy too, but they are not very prominent.¹³⁰⁴ The rational actor paradigm is the dominant school of thought in contemporary sociology, which is highly influenced by the RCT. This is not unusual, considering the fact that "[... e]conomics has been one of the idea-exporting disciplines since the 1970s. Rational choice models have expanded not only into the traditional problems of sociology but also of political science, law, and public policy. In philosophies like Rawl's, it even penetrates the turf of philosophy."¹³⁰⁵

However, irrational behaviour in the neoclassicists' sense is expected rather than an aberration because people are not purely utility maximising hedonists.

"[... P]eople typically do not render rational decisions [...] Decisions may be regarded as more or less rational, but rarely are they highly rational [in the neoclassicists' sense]."¹³⁰⁶

Etzioni's (1986) argues that "[...] there is no single agreed upon definition of rationality [as the neoclassicists claim ...]"¹³⁰⁷ Moreover, according to Etzioni (1988), "[...] people have conflicted selves and that they often act inconsistently, non-rationally or irrationally, or rely on institutions to shore up their "higher" self to deal with their "lower" self, these phenomena are expected rather than surprising."¹³⁰⁸ In this regards, he adds, "[...] far from being limited to economic power, economic actors frequently use political power (their leverage over government) to advance their economic goals [...]"¹³⁰⁹ According to Posner (1973), "[...] rationality means little more to an economist than a disposition to choose, consciously or unconsciously, an apt means to whatever ends the chooser happen to have [...]"¹³¹⁰ Furthermore, Levine (1982) remarks that "[...] broad statements about rationality *tout court* [...] are simply unsupported [...]"¹³¹¹ In this regards, comparing rational behaviour to a product, Etzioni (1986) states that:

"[... N]on-rational behavior is natural; rational conduct is artificial, it must be manufactured [... Thus] it has a cost. The fact that resources must be sacrificed to gain rationality provides empirical evidence that rational behavior is a product."¹³¹²

There are also arguments hovering around the fact that the neoclassical paradigm and its underlying philosophy of utilitarianism has done a disservice to reasoning in general and rationality in particular. For instance, Hirschman (1996) argues "[... p]reviously, reason and revelation had been called upon to define the ends as well as the means of human action and reason was credited with being able to shape such guiding concepts as liberty or equality or justice. But with the utilitarian

philosophy and self-interest-oriented capitalist practice in the saddle, reason come to lose this power [...]"¹³¹³ Scott (2000) argues that "[... r]ational choice theory adopts a methodological individualist position and attempts to explain all social phenomena in terms of the rational calculations made by self-interested individuals."¹³¹⁴ Emphasising on ethical aspects of rationality, Castro (1996) is under the impression that "[... e]thical reasoning [...] cannot be altogether divorced from information about what has actually happened in the world and what is happening there now."¹³¹⁵

Post-modern scholars like Foucault (1991b) "[... does not] believe [that] one can speak of an intrinsic notion of 'rationalization' without on the one hand positing an absolute value inherent in reason, and on the other taking the risk of applying the term empirically in a completely arbitrary way [... He] think[s] one must restrict one's use of this word to an instrumental and relative meaning [... According to him, t]he ceremony of public torture isn't in itself more irrational than imprisonment in a cell; but it's irrational in terms of a type of penal practice which involves new ways of calculating its utility, justifying it, graduating it, etc. One isn't assessing things in terms of an absolute against which they could be evaluated as constituting more or less perfect forms of rationality, but rather examining how forms of rationality inscribe themselves in practices or systems of practices, and what role they play within them, because it's true that 'practices' don't exist without a certain regime of rationality."¹³¹⁶ This, I think, is important in two ways: first, it suggests that there no need to have a Pharaoh who commands what is rational and what is not (as the neoclassicists do); and second, it suggests that rationality is an *emergent* phenomenon which is embedded not only in time-space constraints of situations but also in the praxes that an individual *chooses*, being guided by her/his own way of sense-making of the real-world. However Foucault also has noted, practices are *bounded* by "a certain regime of rationality," thus *not* emerging on their own; and, this is interesting considering the fact that presently the *dominant* regime of rationality is the one advocated by the neoclassical paradigm.

An interesting example of rationality in practice is "McDonaldization." Ritzer (2004), taking cues from the fast-food chain *McDonalds*, discusses four elements of rational actions that have emerged through "McDonaldization" of society, which are: efficiency or "[...] the optimum method for getting from one point to another [...];"¹³¹⁷ calculability or "[...] the quantitative aspects of the products [... which] is equivalent to quality; a lot of something, or the quick delivery of it, means it must be good [...];"¹³¹⁸ predictability or "[...] the assurance that products and services will be the same over time and in all locales [and workers' behaviour too ...];"¹³¹⁹ and, control or "[... making] the people [customers and employees] who enter the world of McDonalds [...] to do what management wishes them to do [...]"¹³²⁰ Interestingly, Ritzer (2004) is of the view that "the irrationality of rationality" – the fifth dimension of "McDonaldization" – arises out of: inefficiency (long queues at checkouts), higher costs and false friendliness (by the staff), disenchantment, health and environmental hazards, homogenisation of products and systems, and dehumanisation of society.¹³²¹ McDonaldization, as Ritzer (2004) has noted, is not only confined to fast-food restaurants but has also spread in to other segments of the market like education, healthcare, and so on. Thus, the process of McDonaldization basically refers to "[...] the process by which the principles of the fast-food restaurant are coming to dominate more and more sectors of American society as well as of the rest of the world [...]"¹³²² Furthermore, Ritzer (1983 [2004]) considers McDonaldization as a

dominant mode of rationalisation of society in the same way as Max Weber did with bureaucracy and formal rationality. According to him,

“Weber demonstrated in his research that the modern Western world has produced a distinctive kind of rationality. Various types of rationality had existed in all societies at one time or another, but none had produced the type what Weber called formal rationality [especially in bureaucratic institutions]. This sort of rationality I refer to when I discuss McDonldization or the rationality process in general.”¹³²³

2.3.1. Max Weber, Bureaucracy and (Formal) Rationality¹³²⁴

“Marx and Engels associated the emergence of modern society above all with the development of capitalism; for Durkheim it was connected in particular with industrialization and the new social division of labour which this brought about; for Weber it had to do with the emergence of a distinctive way of thinking, the rational calculation which he associated with the Protestant Ethic (more or less what Marx and Engels speak of in terms of those ‘icy waves of egotistical calculation’).”¹³²⁵

“[Max] Weber is widely regarded as a founding figure, often as *the* founding figure, of sociology [...]”¹³²⁶ Even if the Weberian paradigm is no more a dominant school of thought in sociology, as Tilly and Tilly (1998) have noted, his views still enjoy considerable clout as regards various sociological undertakings on rationality. Weber (1922 [1968]) has postulated that an ‘[...] a]ction is “social” [only] insofar as its subjective meaning takes account of behavior of others and is thereby oriented in its course [...],’¹³²⁷ where as an ‘[...] a]ction will be said to be “economically oriented” so far as, according to its subjective meaning, it is concerned with the satisfaction of a desire for “utilities” (*Nutzleistungen*). “Economic action” (*Wirtschaften*) is any peaceful exercise of an actor’s control over resources which is in its main impulse oriented towards economic ends. “Rational economic action” requires instrumental rationality in this orientation, that is, deliberate planning. We will call autocephalous economic action [or economic action that is independent of external authority] is an “economy” (*Wirtschaft*), and an organized system of continuous economic action an “economic establishment” (*Wirtschaftshetrieb*).”¹³²⁸ Furthermore, ‘[...] t]he definition of economic action [...] cannot be based directly on “consumption needs” and the “satisfaction” of these needs, but must, rather start out on the one hand from the fact that there is a *desire* (demand) for utilities [...] and on the other hand from the fact that *provision* is being made to furnish the supplies to meet this demand [...]”¹³²⁹ Moreover, “[...] e]conomic action is primarily oriented to the problem of choosing the *end* to which a thing shall be applied; technology, to the problem, given the end, of choosing the appropriate *means* [...]”¹³³⁰ In other words, Weber (1922 [1968]) argued that economic actions are based on utility and “means-ends rationality.”¹³³¹

Although the concept of utility is central to Weber’s concept of economic action, yet he considered it differently than the neoclassicists. According to him, utility has the following characteristics: the used (or instrumental) value of an object, larger than mere “satisfaction of wants,” the presence of chance (i.e., an element of “economic opportunity” in the real-world’s uncertain contexts and contingencies), a thing has more in it than its economic value, and economic utility does not subsume utility per se.¹³³²

‘[...] By “utilities” (*Nutzleistungen*) will always be meant the specific and concrete, real or imagined, advantages (*Chancen*) of opportunities for present or future use as they are

estimated and made an object of specific provision by one or more economically acting individuals. The action of these individuals is oriented to the estimated importance of such utilities as means for the ends of their economic actions. [...] Utilities may be the services of non-human or inanimate objects or of human beings. Non-human objects which are the sources of potential utilities of whatever sort will be called “goods.” Utilities derived from a human source, so far as this source consists in active conduct, will be called “services” (*Leistungen*). Social relationships which are valued as a potential source of present or future disposal over utilities are, however, also objects of economic provision. The opportunities of economic advantage are made available by custom, by the constellation of interest. Or by conventional or legal order for the purposes of an economic unit, will be called “economic advantages.” [...] Contrary to the neoclassical paradigm [t]he categories of goods and services do not exhaust those aspects of the environment which may be important to an individual for economic purposes and which may hence be an object of economic concern. Such things as “good will,” or the tolerance of economic measures on the part of individuals in a position to interfere with them, and numerous other forms of behavior, may have the same kind of economic importance and may be the object of economic provision and, for instance, of contracts. It would, however, result in a confusion of concepts to try to bring such things under either of these two categories. This choice of concepts is thus entirely determined by consideration of convenience [...]. [I]t would be equally imprecise if all *concrete* objects of life and of everyday speech were without distinction designated as “goods,” and the concept of a good were then equated to that of a material utility. In the strict sense of utility, it is not a “horse” or a “bar of iron” which is an economic “good,” but the specific ways in which they can be put to desirable and practical uses; for instance the power to haul loads or to carry weights, or something of the sort. Nor can we, in the present terminology, call *goods* such potential future advantages (*Chancen*) which appear as objects of exchange in economic transactions, as “good will,” “mortgage,” “property.” Instead, for simplicity’s sake, we shall call the services of such potential powers of control and disposal over the utilities of goods and services, promised or guaranteed by the traditional or legal order, “economic advantages” (*Chancen*) or simply “advantages” wherever this is not likely to be misunderstood. [...] The fact that only active conduct, and not mere acquiescence, permission, or omission, are treated as “services” is a matter of convenience. But it must be remembered that it follows from this that goods and services do not constitute an exhaustive classification of all economically significant utilities.”¹³³³

In other words, utility, in Weber’s view, is an “advantage” for users, which is measured by the user her/himself, depending on how a good or service is used. Thus, unlike the neoclassicists, Weber’s views of utility is not predetermined and absolute but emergent and relative.

Furthermore, according to Brubaker (1984), “[... t]he idea of rationality is a great unifying theme in Max Weber’s work [...] His methodological investigations emphasize the universal capacity of men to act rationally and the consequent power of social science to understand as well as to explain action. His political writings are punctuated by passionate warnings about the threat posed by unchecked bureaucratic rationalization to human freedom. And his moral reflections build on an understanding of the truly human life as one guided by reason [...] Rationality, then, is an *idée-maîtresse* in Weber’s work, one that links his empirical and methodological investigations with his political and moral reflections. The notion of rationality, however, is far from unequivocal; Weber himself repeatedly calls for attention to its multiplicity of meanings. [...]”¹³³⁴

“[...] Weber (1930) notes that r]ationalism is an historical concept which covers a whole world of different things. [...]”¹³³⁵

Thus, in Weber's view, rationality is a multifaceted concept, which is similar to Adam Smith who views rationality as multidisciplinary. Insofar we have gotten a sense of the philosophical underpinnings of Weber's views on rationality. Now, let us discuss Weber's views on human behaviour and action.

Weber argues that there are four *types* of action, namely: (a) purposeful or goal-oriented actions (*zweckrational*) in which means and ends are rationally chosen; (b) value-oriented actions (*wertrational*) in which a goal may not be rational but pursued with rational means; (c) emotional or affective motivations oriented actions, which are anchored in various emotional states of the actor rather than in rational aspects of means and ends; and (d) traditional actions, which are guided by customary habits.¹³³⁶ Furthermore, Weber classified rationality into: (a) practical (evaluating means to accomplish ends), (b) theoretical (abstract and/or logical concepts that attempt to describe, explain, and/or understand the world in terms of models built out of empirical observations and data), (c) substantive (people compare their actions against customs and values and try to act morally; but Weber considered it problematic in modern society because practical means-ends rationalisation of social life makes it difficult for people to lead ethical lives), and, (d) formal (a broader form of rationality, which characterises bureaucratic organisations with institutionalised rules, laws and regulations).¹³³⁷ Among them, substantive and formal rationalities have been extensively debated.

“[...] When Weber refers to rationalization of the modern world, he has mainly in mind the increasing importance of formally and substantively rational institutions [...]. Because formal rationality in the economic field also requires formally rational law and administration, [...] subsumption under rules [or means] is in fact a general feature of formal rationality [...]. Substantively rational action is guided by its consequences [or ends [...]. Yet even though the formal or substantive rationality of institutions must be sharply distinguished from the instrumental rationality or value rationality of individuals, rational institutions (in either sense) may presuppose the rationality (in either sense) of the individual agents that make up the staff of these institutions [...].”¹³³⁸

Weber (1922 [1968]) argued that formal rationality involves calculations of means and ends, whereas substantive rationality involves broader than economic values. “[...] The term “formal rationality of economic action” will be used to designate the extent of qualitative calculation or accounting which is technically possible and which is actually applied. The “substantive rationality” [...] is the degree to which the provisioning of given groups of persons (no matter how delimited) with goods is shaped by economically oriented social action under some criterion (past, present, or potential) of ultimate values [...] regardless of the nature of these ends [...]. A system of economic activity will be called “formally” rational according to the degree in which the provision for needs, which is essential to every rational economy, is capable of being expressed in numerical, calculable terms, and is so expressed. In the first instance, it is quite independent of the technical form these calculations take, particularly whether estimates are expressed in money or in kind. The concept is thus unambiguous, at least in the sense that expression in money term yields the highest degree of formal calculability. Naturally, even this is true only relatively, so long as other things are equal.”¹³³⁹ “[...] The concept of “substantive rationality,” on the other hand, is full of ambiguities. It conveys only one element common to all “substantive” analyses: namely, that they do not restrict themselves to note the purely formal and (relatively unambiguous fact that action is based on “goal-oriented” rational calculation with the technically most adequate available methods, but apply certain

criteria of ultimate ends, whether they be ethical, political, utilitarian, hedonistic, feudal (*ständisch*), egalitarian, or whatever, and measure the results of the economic action, however formally “rational” in the sense of correct calculation they may be, against these scales of “value rationality” or “*substantive goal rationality*.” There is an infinite number of possible value scales for this type of rationality, of which the socialist and communist standards constitute only one group. The later, although by no means unambiguous in themselves, always involve elements of social justice and equality. Others are criteria of status distinctions, or of the capacity for power, especially of the war capacity, of a political unit; all these and many others are of potential “substantive” significance. These points of view are, however, significant only as bases from which to judge the *outcome* of economic action. In addition and quite independently, it is possible to judge from an ethical, ascetic, or esthetic point of view the *spirit* of economic activity (*Wirtschaftsgesinnung*) as well as the *instruments* of economic activity. All of these approaches may consider the purely “formal rationality” of calculation in monetary terms as of quite secondary importance or even as fundamentally inimical to their respective ultimate ends, even before anything has been said about the consequences of the specifically modern calculating attitude. There is no question in this discussion of attempting value judgements in this field, but only of determining and delimiting what is to be called “formal.” In this context the concept “substantive” is itself in a certain sense “formal;” that is, it is an abstract, generic concept.¹³⁴⁰ According to Weber (1922 [1968]), even if substantive rationality broader, taking many cognitive and environmental factors into account, yet formal rationality is more common in the real-world because it is practical. Brubaker (1984) argues that “[... t]he distinction between formal and substantive rationality implies that what is rational from one point of view may be non-rational or irrational from another, and vice versa. The implications of this relational, ‘perspectivist’ (Kalberg, 1980, p. 1155) conception of rationality are clear – and sobering. To the extent that people share ends and beliefs, they can agree on their judgements of rationality and irrationality; but to the extent ends and beliefs diverge, so too will judgements of rationality and irrationality. According to Weber, social life is marked by perennial, indeed intensifying conflict over ends [...] and beliefs [...]”¹³⁴¹ Other scholars who have debated on formal and substantive rationalities are Mannheim (1935 [1940]), Henderson and Parsons (1947)¹³⁴², Bentham (1974)¹³⁴³, Mommsen (1974)¹³⁴⁴, among others.

It is interesting to note that there are parallels between Weber’s and Karl Mannheim’s views on rationality. That is, Mannheim’s “substantial rationality” has its counterpart in Weber’s “substantive rationality,” and “functional rationality” with that of “formal rationality.” Mannheim (1935 [1940])¹³⁴⁵ argued that “[... ‘s]ubstantial rationality’ is ‘an act of thought which reveals intelligent insight into the interrelations of events in a given situation’, whereas ‘functionally rational’ is ‘a series of actions’ ‘organized in such a way that it leads to a previously defined goal, every element in this series of actions receiving a functional position and rôle’ (p. 53). Mannheim discovers that ‘functional rationalization by no means increases substantial rationality’ but has, on the contrary, a ‘paralysing effect on the capacity for rational judgement’ (p. 58). Indeed, such judgement is concentrated in few ‘organizers’, and this in turn helps to account for the ‘appeal to the leader’ (p. 59).”¹³⁴⁶ That is, although functional rationality eases decision-making, yet it weakens the rationalisation process because reasoning is done by the few for the masses. Furthermore, according to him, values become subordinate to efficiency when

rationality refers to efficiency as in the case of functional rationality. “[...] In the planned society ‘the religious focus’ is allowed to be what it ought to be, ‘a way of interpreting life from the centre of some paradigmatic experience’ (p. 146). ‘If these paradigmatic experiences evaporate’, Mannheim writes, [...] it is obvious that the problem of values contains nothing but the adjustment character of human conduct. Right or wrong only means efficiency, and there is no answer to the question: Efficiency for what? [P. 146; cf. p. 167] [...] In other words: ‘rationality that is functional for what?’ a question that can be answered only by substantial rationality, which continues to be lacking [...] – but which is needed most urgently because we ‘have a new and extremely dangerous antagonist ... Mechanized Barbarism’ [...]”¹³⁴⁷ Mannheim’s words have important implications for the NNR because rationality in its broader sense means the use of reasoning in actions in order to accomplish some goals; but they should not exclusively be based on self-interest focussed utility maximisation.

Furthermore, according to Weber, welfare comes from *the* “gain spirit” aspect of rational behaviour. Moreover, like Adam Smith, he stressed on value based motivation should guide economic behaviour.

“[...] While the major factors leading to capitalist development in the West were rational accounting and technology and law, these alone did not account for the full development of Western capitalism. In fact, Weber maintained that an additional element must have been present in the West which failed to develop in the East. This element, he believed, is the ‘gain spirit’ which was based on rationalization of the conduct of everyday life in general and a rationalistic economic ethics in particular [...] By ‘gain spirit,’ Weber meant a system of conduct based on ethical norms which govern commercial activity and which served to bring the economic and religious spheres together [...]”¹³⁴⁸

Thus, although Weber spoke about means-ends rationality as the predominant form of rationality, yet he did not consider rationality to be exclusively based on utility maximisation and self-interest, as the neoclassicists do. Importantly, he was aware of the fact that rationalisation does not automatically promote human and social welfare; for which, according to him, people ought to have *value-based gain spirit*.¹³⁴⁹

“[...] Long-term rationalization processes [according to Weber] are [...] rooted in values rather than in interests [...]”¹³⁵⁰

It is interesting to note that, like the Kahnemans in (behavioural) economics, unlike the neoclassicists, Weber considered (means-end) rationality as a dynamic, transforming and emergent phenomenon. Bureaucracy, according to him, is such a *transformational* form of rationality in which practical (means-end) rationality – “[...] the methodological attainment of a particular given practical ends through the increasingly precise calculation of adequate means [...]”¹³⁵¹ – dominates all other forms of rationality.

“[...] Weber holds the view that, while all human action is governed by what he calls a ‘means-end rationality,’ this rationality is subjected to change from one historical period to another. For instance, during an earlier period of history, the means and ends of action were governed by [...] ethical standards which regulated the means and ends of action according to principles or values which were largely fixed. As societies became more modern, however, the ethical restrictions on the means and ends of action were replaced by a purely technical means for obtaining ends. As a consequences of this, Weber believed that the ‘means and ends’ of action became re-organized so that at some points

the ‘means’ became ‘increasingly more precise in calculating the methodical attainment of given practical ends.’ [...] Weber’s point here is that as the new ‘practical rationality’ become dominant by the end of the nineteenth century, its purpose was to eliminate all previous ethical restrictions on action by an orientation to the world based on an active mastery of reality. In the case of bureaucratic means of administration and the sphere of the office, this tended to lead to the development of a system of rationality that was separate from everyday rationality [... According to] Weber [...] bureaucracy [is ...] a triumph of one form of rationality over another [i.e., its predecessors]”¹³⁵²

Moreover, Weber (1922 [1968]) argued that bureaucracy is the socio-economic archetypical manifestation of formal rationalism; and its proliferation in society lies in its efficiency.¹³⁵³

“[...] The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization.”¹³⁵⁴

The word bureaucracy has its roots in ‘bureau,’ which means an office and/or a workplace where people work.¹³⁵⁵ Weber considered bureaucracy as more rational and efficient form of organising than other alternatives that came before it.¹³⁵⁶ An administrative system is bureaucratic if it is characterised by “[...] hierarchy (each official has a clearly defined competence within a hierarchical division of labour, and is answerable for its performance to a superior); continuity (the office constitutes a full-time salaried occupation, with a career structure that offers the prospect of regular advancement); impersonality (the work is conducted according to prescribed rules, without arbitrariness or favouritism, and a written record is kept of each transaction); expertise (officials are selected according to merit, are trained for their function, and control access to the knowledge stored in the files) [...]”¹³⁵⁷ In other words, ‘[...] t]he administrative structure under legal authority is called a *bureaucracy*; it is a structure characterized by a belief in rules and legal order in the carrying out of organizational tasks. Weber argued that legal-bureaucratic authority had become the dominant organizing principle in modern society, displacing the ad hoc, patriarchal, and patrimonial forms of organization. “The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic mechanism compares with other organizations exactly as does the machine with the non-mechanical modes of production” (Gerth and Mills, 1958, p. 214) [... T]he bureaucratic forms of administration had penetrated all institutions [...] The spread of bureaucratization was spurred by the general trend of the rationalization of social life.”¹³⁵⁸ On the proliferation of bureaucracy, Weber (1948) reasoned that “[... p]recision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs – these are raised to the optimum point in the strictly bureaucratic organizations, and specially in its monocratic form [...]”¹³⁵⁹ Fayol (1937) contends that in a bureaucratic organisation, “[... t]o prepare the operations is to *plan* and *organize*; to see that they are carried out is to *command* and *coordinate*; to watch the results is to *control* [...]”¹³⁶⁰ Merton (1940) argues that “[... a] formal, rationally organized social structure involves clearly defined patterns of activity in which, ideally, every series of actions is functionally related to the purposes of the organization [...]”¹³⁶¹ According to Blau (1965), bureaucracy is “[... a] type of organization designed to accomplish large scale administrative tasks by systematically coordinating the work of many individuals [...]”¹³⁶² Gouldner’s (1955) has postulated the following kinds of bureaucratic set-ups: “punishment-centered” bureaucracy (i.e. enforcement of rules though sanctions

and coercion), “mock” bureaucracy (i.e. rules are imposed on a group by some outside agency) and “representative bureaucracy” (i.e. enforcement of rules through education and persuasion). According to Pugh *et al.* (1969)¹³⁶³, “[...] the concept of a single bureaucratic type is no longer useful, since bureaucracy takes different forms in different settings.”¹³⁶⁴ Parsons (1960)¹³⁶⁵ and Etzioni (1964)¹³⁶⁶, among others, use the term organisation in stead of bureaucracy in order to minimise confusion, because they have argued that the latter, after all, has an “organised” structure.

In spite of its superiority over all other forms of rationality, bureaucracy, however, has its critics, including Weber himself. Weber (1905 [1952]) warned that the rationalist order under capitalism is like an “iron cage” which has imprisoned the mankind; which has achieved a self-momentum which is irreversible and perhaps will continue until “[...] the last ton of fossilized coal is burnt [...]”¹³⁶⁷ Furthermore, Aldrich (2008) argues that once fully established, “[...] bureaucracy is among those social structures which are the hardest to destroy. Bureaucracy is *the* means of carrying “community action” over into rationally ordered “societal action.” [...]”¹³⁶⁸ In this context, Gerth and Mills (1958) contends that “[...] as an instrument for “societalizing” relations of power, bureaucracy has been and is a power instrument of the first order – for the one who controls the bureaucratic apparatus [...]”¹³⁶⁹ Aldrich (2008) also argues that “[...] the central feature of the bureaucratizing process is to think of it as the exercise of control on the basis of the rational use of information [...] A concern for maximizing efficiency [...] leads to the creation of organizational models very much like Weber’s conception of bureaucracy [...]”¹³⁷⁰ Blau (1963) argued that Weber was mainly concerned with regulative, efficiency and goal achievement aspects of bureaucracy; hence he ignored the fact that in the course of its operation new elements, like misuse of power, arise in the internal structures of bureaucracy and its adaptive forms, that influence its subsequent operations and inhibit rational goal attainment.¹³⁷¹ Similarly, Jacob (1966) also contended that Weber’s obsession with the functional utility of rational-legal bureaucratic systems was crucial for his failure to pay attention to the internal characteristics of bureaucratic institutions that are too rigid to adapt and thus inhibiting rational goal achievement.¹³⁷² Thompson (1967)¹³⁷³ thinks that bureaucracy mainly facilitates organisational management, however, does not do much in letting people comprehend the underlying rationalisation process. This could be due to most, if not all, people under a bureaucratic setting work rather than reason. Moreover, because of its excessive reliance on rules and procedures, bureaucracy, according to Selznick (1948¹³⁷⁴, 1957¹³⁷⁵), is oftentimes visualised as a formal *mechanical* system in which people behave like machines. As a result, humanistic values are easily lost within bureaucratic ethos, as Hummel (1976)¹³⁷⁶ has pointed out. Interestingly, Hummel (1976) also argues that bureaucracy is discomforting to people because it is alien to the human nature.

“[...] First, bureaucracy – whether public or private – is an entirely new way of organizing social life. It succeeds society, just as society has succeeded community. Second, bureaucracy, a world into which we are recruited, differs from society, the world into which we are born, in five ways (1) socially, (2) culturally, (3) psychologically, (4) linguistically, and (5) power-politically. Bureaucracy is a new society and a new culture.... Third, bureaucracy, because it differs from society in these five ways, poses special difficulties for people depending on where they stand [...]”¹³⁷⁷

Here, Granovetter and Tilly (1988) note that “[... o]ur encrusted and reified sense that one task is for orderlies, another for nurses, and yet another for doctors [like in a bureaucratic system ...] is the result of legal, political, and economic struggles, just as are the names of the professions themselves”¹³⁷⁸ Some specific concerns against bureaucracy are that: it restricts human freedom, it is paradoxical to the spirit of organisation, it concentrates power and in the process creates conflicts, and its rational structure also has irrational features.

2.3.1.1. Bureaucracy and Freedom

“[...] Today it is primarily the capitalist market economy which demands that the official business of administration be discharged precisely, unambiguously, continuously, and with as much speed as possible. Normally, the very large, modern capitalist enterprises are themselves unequalled models of strict bureaucratic organization [...]”¹³⁷⁹

We have discussed that, within bureaucratic settings, (formal) rational action comprises of general rules, hierarchy, full-time officials, specialised training, among others; which implies that in these organisations people are *constrained* by time, space, position and knowledge. Arguing that bureaucracy stifles freedom, Parsons (1937) reasoned that “[... a]bove all bureaucracy involves discipline [...] It is the fitting of individual actions into a complicated pattern in such a way that the character of each and its relation to the rest can be accurately controlled. [...]”¹³⁸⁰ According to Gouldner (1955), even “Weber [himself] thought of bureaucracy as a Janus-faced organization. On the one side, it was administration based on expertise; while on the other, it was administration based on discipline. In the first emphasis, obedience is invoked as a means to an end; an individual obeys because the rule or order is felt to be the best known method of realizing some goal [...] In his second conception, Weber held that bureaucracy was a mode of administration in which obedience was an end in itself. The individual obeys the order, setting aside judgements either of its rationality or morality, primarily because of the *position* occupied by the person commanding. The content of this order is not examinable.”¹³⁸¹ In this way, to abide by the rules and regulations of a bureaucratic setting is both intrinsic as regards the organisational behaviour *itself* and instrumental with respect to organisational functioning; which implies the lack of freedom in bureaucracy.¹³⁸²

However, Preston (1987)¹³⁸³ argues that the notion that bureaucracy stifles freedom arises due to defining freedom inadequately and considering the rigid view of bureaucracy; “[... p]roperly conceived, bureaucracy can provide greater opportunities for freedom than was ever offered by the conformity of traditional institutions or the inequality and uncertainty of the market.”¹³⁸⁴

2.3.1.2. Bureaucracy and the Informality-of-Formality

“[...] T]he informal aspects of bureaucracies are more important to their efficient functioning than are the formal aspects that Weber stressed [...]”¹³⁸⁵

Bureaucracy structures formalised, rules based organisations. However, in addition to formal ones, Blau (1955) finds informal aspects like cooperation in bureaucratic workplaces. He, while undertaking field studies in government departments, finds that informal attribute like cooperation between co-workers increase job efficiency.¹³⁸⁶ Such attributes, according to him, are not mere deviations or acts of non-rationality

and/or irrationality but are consistent behavioural patterns which gradually become norms of bureaucracy.¹³⁸⁷ Elaborating Blau's points of view in the context of rational-irrationality and irrational-rationality in bureaucratic organisations, Clegg and Dunkerley (1980) state that, "Blau's concern in his empirical investigation of *The Dynamics of Bureaucracy* (1955) was principally with the question of rationality in organizations. He suggests that Weber's work on bureaucracy implies a myth that rationality can come only from the top of the organization. This, of course, was the basic view of the scientific management writers [...] Blau argues that implicit in Weber's model (and that of the scientific managers) is the notion that an individual will behave rationally only if his work task is so structured as to deprive him of discretion and judgement, so that prescribed nature of the role is as enforced as possible [...] In an empirical study, Blau, in spite of formal arrangement in organisations] found that if, in fact, there was co-operation between officials and if little account was taken of the statistical recording devices, then those officials tended to be more productive than others who adhered firmly to the prescribed [formal] system of assessment. Thus, the competition that was supposed to engender efficiency was less effective in doing so than the spirit of co-operation that sometimes arose."¹³⁸⁸

Here it is imperative to recall the *Hawthorne Studies*, the main force behind the spread of relational management movement in the mid 20th Century, whose findings reveal, among other things, the importance of informal aspects of work culture, like cooperation, and their role in minimising some of the dysfunctional and inefficient facets of organisations, e.g. unfair competition between employees (that are so common in bureaucratic organisations). Taking cues from them, Roethlisberger and Dickson (1939), the first authors to publish comprehensively Hawthorne experiments in 1937, have suggested that workers *do* have informal organisations inside their formal parent organisations; which they create as mechanisms of social control. This, interestingly, suggests that workers get motivated not only by objective working conditions but also social relationships; moreover, these *seemingly* meaningless informal workplace attributes like cooperation are actually some methods that workers use to protect them from outside interferences and internal indiscretions.¹³⁸⁹

"[...] The members of informal groups or cliques in (bureaucratic) organisations [...] elaborate [...] spontaneously and quite unconsciously, an intricate [and informal] social organization around their [formalised] collective beliefs and sentiments [...]"¹³⁹⁰

Weber (1947) argued that "[... m]odern organizations typically define members contractually [...]"¹³⁹¹ Furthermore, according to him, organisations are created to distinguish members from non-members, i.e., some are allowed to participate in the organizational activities and others not.¹³⁹² Such "[...] boundary maintenance[, according to him,] includes stripping away or attempting to control those aspects of personal identity and external commitments that would interfere with rational decision making [...]" Emotional attachments cloud judgement and may lead people into "irrational" decisions [...]"¹³⁹³ To the contrary, Mumby and Putnam (1992) suggest that "[...] such] *bounded rationality* isolates and suppresses "the emotional/physical self from the process of organizing." They argued for an alternative model of *bounded emotionality*, in which "nurturance, caring, community, supportiveness, and interrelatedness [i.e., informal workplace attributes] are fused with individual responsibility [i.e., formal work place attributes] to shape organizational experiences." [...]"¹³⁹⁴ In other words, bureaucracies are too much

formal for people, who along with being rational are emotional and humane too. Furthermore, job specialisation, according to Moore (1977), is “[... a]n outstanding feature of the type of organization that may be properly called *bureaucratic*[...]”¹³⁹⁵ It supports rational behaviour and enhances efficiency. However, Udy (1959a)¹³⁹⁶ is of the view that such specialisations, over and above a threshold, leads to hierarchical differentiation and concentration of power, in the name of proper coordination. Interestingly, according to him, organisations with kinship or obligations oriented informal membership have more instances of such hierarchies than those having voluntary agreements or contractual memberships.

It is argued that positive employee attitude, among other things, depends on personalised informal relationship at workplace.¹³⁹⁷ However, Perrow (1979)¹³⁹⁸, in opposition to human relations model of management that links positive attitude to better job performance (as proposed by, for example, Hackman and Oldham (1980)¹³⁹⁹) argues that there is little empirical evidence that satisfied employees work more. Furthermore, job and organisational designs aimed at giving “[...] greater meaning to work and fostering a sense of participation and membership in the enterprise [...],”¹⁴⁰⁰ it is also argued, are attempts to increase efficiency through informal means. They have different names. Dore (1973)¹⁴⁰¹ calls them as “welfare corporatism,” Ouchi (1981)¹⁴⁰² “Theory Z,” Friedman (1977)¹⁴⁰³ “responsible autonomy,” Halaby (1986)¹⁴⁰⁴ the “job satisfaction/organizational commitment” (JSOC) paradigm. However, Edwards (1979)¹⁴⁰⁵ argue that they are mere attempts of bureaucratic control;” Burawoy (1983) treats them as “hegemonic despotism.” Thus, scholars have *mixed* opinions as regards the informal aspects of organisations, including bureaucratic ones. Nevertheless, it is safe to say that formal work attributes of bureaucracy can be found in informal organisations and informal work features can influence the running of formal, bureaucratic organisations.

2.3.1.3. Bureaucracy and, Concentration of Power and Conflict

“[...] On the one hand, [Weber ...] noted bureaucracy’s impact in the leveling of social differences, while on the other hand [... it tends to concentrate] the means of administration in the hands of a few [...]”¹⁴⁰⁶

It is argued that bureaucracy bestows power with a few individuals who are up in the organisational hierarchy and makes *the* many at the bottom mere pawns. In this context, taking a tough stand on hierarchical and bureaucratic structures that are prevalent in society, including organisations, Marx and Engels (1976 [1845-48]) have pointed out that:

“[...] Social relations are closely bound up with productive forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. The hand-mill gives you society with the feudal lord; the steam-mill society with the industrial capitalist [...]. The same men who establish their social relations in conformity with the material productivity, produce also principles, ideas, and categories, in conformity with their social relations [...]. Thus the ideas, these categories, are as little eternal as the relations they express. They are historical and transitory products [...]. There is a continual movement of growth in productive forces, of destruction in social relations, of formation in ideas; the only immutable thing is the abstraction of movement – *mors immortalis*.”¹⁴⁰⁷

Furthermore, it has also been argued that dysfunctions are direct outcomes of hierarchy, because of uneven distribution of power in bureaucratic organisations. Dimock (1959) argued that procedures and rules in bureaucratic organisations lead to centralised decision-making; hence giving rise to delays, red-tapism, shrugging off of personal responsibility, corruption, power-mania among functionaries, etc.¹⁴⁰⁸ Jacob (1966) is concerned with extraordinary degrees of power that lie with the leaders in bureaucratic systems.

“[...] Bureaucratic rule is an evil which, once established is almost ineradicable: It distorts the play of social forces by suppressing its enemies and stimulating its sycophants. Either way it makes gradual reform difficult or even impossible and invites violent revolution as a rule at a high cost of human lives and material resources [...]”¹⁴⁰⁹

According to Strauss (1961), oftentimes, in the name of accomplishing organisational goals, actors get obsessed with amassing power.¹⁴¹⁰ In this regards, Jackall (1996) contends that “[... t]he hierarchical structure that is the linchpin of bureaucracy dominates the way managers think about their world and about themselves. Managers do not see or experience authority in any abstract way; instead, authority is embodied in their personal relationships with their immediate bosses and in their perceptions of similar links between other managers up and down the hierarchy. When managers describe their work to an outsider they almost always first say [about to whom they are reporting or in which organisation they are working ...] and only then proceed to describe their actual work functions. Such a personalized statement of authority relationships seems to contradict classical notions of how bureaucracies function but it exactly reflects the way authority is structured, exercised, and experienced in corporate hierarchies.”¹⁴¹¹ Furthermore, he continues, “[...] the commitments made to top management [from their subordinates] depend on the pyramid of stated objectives given to superiors up the line. At each level of the structure, there is typically “top side” pressure to achieve higher goals and, of course, the CEO frames and paces the whole process by applying pressure for attainment of his own objectives. Meanwhile, bosses and subordinates down the line engage in a series of intricate negotiations – managers often call these “conspiracies” – to keep their commitments respectable but achievable.”¹⁴¹² As a result, “[...] the subordinate must symbolically reinforce at every turn his own subordination and his willing acceptance of the obligations of fealty [...]”¹⁴¹³ In this way, bureaucracy led power clustering in the hands of a few also leads of loss of freedom of *the* many.

Moreover, Jackall (1996) is under the impression that the powerful few in a bureaucratic setting normally give credit for success mostly to themselves rather than where it is due. This becomes a breeding ground for organisational conflict. In this regards he contends, “[... i]t is characteristic of [the formal monocratic system of authority, as in a bureaucracy ...] that details are pushed down and credit is pulled up [...] One gives credit [...] not necessarily where it is due, although one always invokes this old saw, but where prudence dictates [...] A superior may share some credit with subordinates in order to deepen fealty relationships and induce greater efforts on his behalf. Of course, a different system obtains in the allocation of blame [where the unknown, distant employees are usually made the scapegoats and the known get scot-free].”¹⁴¹⁴ For example, “[... i]n all companies that [... Jackall (1996) has] studied, the most common topic of conversation among managers up and down the line is speculation about their respective CEO’s plans, intensions, strategies, actions, style, public image, and ideological leanings of the moment [...] And] stories

and rumours circulate constantly about the social world of the CEO and his immediate subordinates [...]”¹⁴¹⁵ And, in the process, Jackall (1996) cautions, emerges a “[...] basic rule [....that] management takes care of itself [...] in good times and bad.”¹⁴¹⁶ These managerial overconfidence can lead to inefficiencies. Here it is imperative to say that Weber, it seems, had foreseen this and suggested for using prudent measures as regards employee selection and promotion in bureaucratic organisations.

“[...] For an effective bureaucratic system i)ndividuals are recruited and promoted on the basis of technical expertise and competence, rather than on personal relationships or luck [...]”¹⁴¹⁷

“[...] W]ho plans the planner? [...] is] a question that [is very crucial in organisations, including bureaucratic ones ...]”¹⁴¹⁸ because, as Moore (1946) has noted, “[...] m]ost breadwinners have jobs or “positions,” not trades or firms or businesses; they work for an employer, who may be an individual or a corporation or governmental agency. Even if the employer is an individual, the man who “meets the payroll” is very likely not the one who gives the worker his daily supervision; the supervisor is also an employee, and probably his supervisor in turn.”¹⁴¹⁹ Thus, if reasoning function is left only in the hands of managers, who are *also* employees, then it *could* also lead to inefficiency, as Adam Smith had foretold .

“[...] The directors of [...] joint stock] companies however, being the managers rather of other people’s money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own [...]”¹⁴²⁰

Furthermore, it is argued that Weber did not take many aspects of the real-world into consideration while emphasising on written and published rules that according to him facilitates prediction of behaviour and activity coordination. For example, as Olsen (2008) has noted, in the latter part of the Twentieth Century, sociologists criticised Weber for his lack of foresight as regards some of the actual happenings inside bureaucratic organisations like conflicts, formation of cliques, favouritism and nepotism, rules being sidestepped by the powerful, slow decision-making due to problems associated with organisational chains of command, etc.¹⁴²¹

There are also interesting discussions with respect to the dialectic nature of power in bureaucratic organisations. For instance, Blau (1964) has argued that rather than surrendering themselves on to rigid structures of power and/or waiting for their turn to get power from continuously evolving ‘unidirectional’ power patterns, people also use *the* dialectic aspects of power in their day-to-day functioning in bureaucratic organisations. According to him “[...] m]en are frequently confronted by dilemmas posed by conflicting forces and incompatible requirements. While social differentiation, and especially multiple social supports of superior status, resolves dilemmas for individuals, the differentiated status structure tends to give rise to new conflicting forces. The political organization of a society[, e.g., bureaucracy] can be derived from the social transactions among organized collectivities in it, just as the formal organisation of a collectivity can be derived from the processes of integration and differentiation, as well as exchange and competition, within it. Since social forces often have contradictory implications, creating new imbalances in the course of restoring some balance, and since rigidities in social structures may require opposition forces to gather momentum before they can effect adjustments, the dynamics of social

structure is characterized not so much by continuously adjusted equilibrium states as by intermittent reorganizations in a dialectical pattern.”¹⁴²² Macintosh (1995)¹⁴²³, while discussing about profit manipulation behaviour in large (bureaucratic) organisations, contends the existence of the “dialectic of control.” As regards dialectics of power, Berger and Luckman (2002) argues that “[... e]xternalization[, ...] objectivation [and internalisation] are [three] moments in a continuing dialectical process. [...] *Society is a human product. Society is an objective reality. Man is a social product.* [...] Only with the appearance of a new generation can one properly speak of a social world.”¹⁴²⁴ Thus, they are under the impression that social phenomena, including power, are dialectic, rather than static or monotonic. Moreover, March and Simon (1958) discusses about “bilateral monopoly,” or reciprocal interdependence, between firms and employees, when employees have firm-specific skills.¹⁴²⁵

2.3.1.4. Bureaucracy and, Rational-Irrationality and Irrational-Rationality

“[...] The growing rationality of life, which Weber believed to be an irreversible historical trend, is again merely another of those evolutionary biases to which Weber was still subject, although he did so much to destroy any unilinear, evolutionary schema of history. At any rate, in these days no one will easily speak of the growing rationality of the world. Paradoxically, one of the most important of Weber’s contributions to sociology has been his insistence on the fundamental and inescapable area of irrationality in social life at all times.”¹⁴²⁶

Merton (1957)¹⁴²⁷, Gouldner (1954)¹⁴²⁸ and Selznick (1953)¹⁴²⁹ caution that with its preoccupation with logical procedures, bureaucracy could lose the sight of substantive organisational goals. They caution not all that is rational produces efficiency and everything that is irrational and/or non-rational leads to inefficiency. For example, Gouldner (1954) finds that anxiety concerning promotion, wage-increase or job-insecurity, may produce greater motivation and inter-personal competition as a result of which productivity could increase; thereby suggesting that such apparently so-to-say non-rational and/or irrational traits like anxiety could also increase efficiency. As Jackall (1996) has noted:

“[...] Just as managers must continually please their boss, their boss’s boss, their patrons, their president, and their CEO, so must they prove themselves again and again to each other. Work becomes an endless round of what might be called probationary crucibles. Together with the uncertainty and sense of contingency that mark managerial work, this constant state of probation produces a profound anxiety in managers, perhaps the key experience of managerial work. It also breeds, selects, or elicits certain traits in ambitious managers that are crucial to getting ahead.”¹⁴³⁰

Furthermore, Merton (1957) argues that certain professional requirements in bureaucratic organisations can be inefficient.¹⁴³¹ For instance, the conceptions like Veblen’s (1904)¹⁴³² “trained incapacity”¹⁴³³ and Marcuse’s (1964)¹⁴³⁴ “managerial one dimensionality”¹⁴³⁵ can lead to over-conformation to technical matters and depersonalisation of organisational relationships, among others, which can reduce productivity and efficiency.

The following words from Brubaker’s (1984) aptly summarise the Weberian notion of rationality: “In some respects, rationalization is morally disabling, hindering individuals from leading meaningful and autonomous lives. The ever-widening reach

of capitalism and bureaucracy, for example, threatens to curtail individual freedom from without, while the steady diffusion of a purely instrumental (*zweck-rational*) orientation erodes ultimate value commitments and thereby threatens to subvert individual autonomy from within. Yet in other respects, rationalization is morally enabling. The extension of scientific knowledge about man and nature, in particular, affords man the opportunity to achieve the special kind of moral dignity that Weber associates with the ethic of responsibility. At the heart of Weber's moral reflections, in short, is a deeply ambivalent attitude toward the processes of rationalization that have shaped and continue to shape the modern world.¹⁴³⁶ In other words, Weber was aware about the intricacies involved in rationality and did not simply explain it away as the neoclassicists have done.

“[...] If this essay [*The Protestant Ethic and the Spirit of Capitalism*] makes any contribution at all, may it be to bring out the complexity of the only superficially simple concept of the rational.”¹⁴³⁷

2.3.2. Institutionalisation and Rationality

“[...] Norms and values of behaviour [in the context of organisational culture in their wider institutional environment] tend to be internalized, to a greater or lesser extent, by people, as part of tacit knowledge, assimilated in socialization and habituation. [...]”¹⁴³⁸

Institutions have crucial roles in the social construction of reality,¹⁴³⁹ including the reality concerning rationality. In social theory, institutionalisation stands for the process of creating a *system* of particular values and norms, specific modes of behaviour, etc., within an organisation, social system, or society as a whole.¹⁴⁴⁰ Weber argued that institutionalisation has a great role in the rationalisation of society.¹⁴⁴¹ Moreover, Parsons (1990)¹⁴⁴² argues that economic motives are *socially* conditioned, in the sense that they lead to “institutionalized motivation” or “institutionalized individualism,” i.e., “[... which] is not the direct utilitarian conception of “the rational pursuit of self-interest” but a much broader conception of the self-fulfillment of the individual in a social setting in which the aspect of solidarity [...] figures at least as prominently as does that of self-interest in the utilitarian sense [...]”¹⁴⁴³ In this context, social construction of reality, i.e., how social phenomena (including behaviour) develop in social contexts,¹⁴⁴⁴ is relevant to zero in on.

Berger and Luckmann (1966)¹⁴⁴⁵ discuss three interlinked processes underlying social constructions of reality: habituation, institutionalisation and sedimentation; which address the issues involving the development, predictability and stability of behaviour. The reproduction of social arrangements requires habituation, i.e., the development of habits in imposing a social order; “[...a]ll human activity is subject to habituation. Any action that is repeated frequently becomes cast into a pattern, which can then be reproduced with an economy of effort and which, *ipso facto*, is apprehended by its performer *as* that pattern. Habituation further implies that the action in question may be performed again in the future in the same manner and with the same economical effort. This is true of non-social as well as social activity [...]”¹⁴⁴⁶ Institutionalisation refers to the process by which people experience a behavioural trend in the real-world and accept it as an objective reality. They further add that “[... a]n institution has a history that antedates the individual's birth and is not accessible to his biographical recollection [...]” The institutions, as

historical and objective facilities, confront the individual as undeniable facts [...] Since institutions exist as external reality, the individual cannot understand them by introspection. He must “go out” and learn about them, just as he must to learn about nature. This remains true even though the social world, as a humanly produced reality, is potentially understandable in a way not possible in the case of natural world.¹⁴⁴⁷ And finally, sedimentation, according to them, occurs when we retain information selectively, according to its relevance to us; and, “[...e]very human institution is, as it were, a sedimentation of meanings or, to vary the image, a crystallization of meanings in objective form [...]”¹⁴⁴⁸ Thus, institutionalisation is a part of the process of constructing the social reality; and, institutionalisation originates from institutions or organisations which exists in their objective reality, i.e., in the real-world.

Scott (1981) views an organisation as an agglomeration of rational, natural and open systems. By rational system, he, like Parsons and Smelser (1956)¹⁴⁴⁹ and Blau and Scott (1962)¹⁴⁵⁰, means that “[...] organizations [are ...] formally established for the explicit purpose of achieving certain goals [...]”¹⁴⁵¹ By natural system he considers organisations as “[...] collectives whose participants are pursuing multiple interests, both disparate and common, but recognize the value of perpetuating the organization as an important resource [...]”¹⁴⁵² this implies that they consist of participants who have common interest in the survival of the system and to achieve this *end*, they engage in activities both formally and informally, individually as well as collectively. By open system he refers to organisations as “[...] system[s] of interdependent activities linking shifting coalitions of participants; the systems are embedded in – dependent on continuing exchanges with and constituted by – the environment in which they operate [...]”¹⁴⁵³ i.e., organisations exist as a part of the system and unfolds itself dynamically.¹⁴⁵⁴ Thus, according to Scott (1981), the rational system refers to formal rules and predefined goals, the natural system to organisations as a social system where participants act in order to fulfil their individual goals as a result of accomplishing organisational goals, and the open system to organisations as coalitions of people with varying interests that are influenced by their environments.

“[...] Organizations are goal-directed, boundary-maintaining, activity systems [...]”¹⁴⁵⁵

Thus, organisations are systems having objectives, boundaries that make them organisations with their own norms and members, and they have an activity set that helps them to realise their objectives.

One of the goal of an organisation is to function efficiently, which can be achieved by either focussing on its internal core competencies, or by importing external strategies and structures that are more efficient than its own and integrating them into its activity set. The latter is a case of institutionalisation through isomorphism that stands for structural similarities between organisations. According to DiMaggio and Powell (1983¹⁴⁵⁶, 1991¹⁴⁵⁷), organisational isomorphism refers to creating similar organisations under coercive, mimetic and normative processes.¹⁴⁵⁸ Following Bourdieu’s (1971a¹⁴⁵⁹, 1973¹⁴⁶⁰) and, Bourdieu and Wacquant’s (1992)¹⁴⁶¹ conception of “field” (a social arena), they claim that these processes, in addition to economic factors, are also influenced by relational, cultural and social ones.¹⁴⁶² In this context, Oberschall and Leifer (1986) argue that although efficiency in terms of “[...] eliminating costly externalities with the least possible transaction costs [... is treated

by new institutional economics as one of the main reasons behind the emergence and persistence of various institutions, yet] power relations, goal ambiguity and the institutional relativism of choice render efficiency problematic. The sociological criterion of reproducibility may be more relevant where these features hold [...]'¹⁴⁶³ As regards rationalisation of society, including social institutions, Mayer and Rowan (1977) observes that “[... m]any formal organizational structures arise as reflections of rationalized institutional rules [...]. Formal organizations are generally understood to be systems of coordinated and controlled activities that arise when work is embedded in complex networks of technical relations and boundary-spanning exchanges. But in modern societies formal organizational structures arise in highly institutionalized context [...]. Organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts or organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures.”¹⁴⁶⁴ However, Selznick (1967) cautions that “[... i]n what is perhaps its most significant meaning, “to institutionalize” is to *infuse with value* beyond the technical requirements of the task at hand [...].”¹⁴⁶⁵

Berger and Luckmann (1966) argues that “[... t]he institutional world requires legitimation, that is, ways by which it can be “explained” and justified. This is not because it appears less real. [... T]he reality of the social world gains in massivity in the course of its transmission. This reality, however, is a historical one [...]. It, therefore, becomes necessary to interpret [... the] meaning [of an institution ...] in various legitimating formulas [...].”¹⁴⁶⁶ Similarly, Scott (2008) argues that “[... f]or cultural-cognitive theorists, [for whom institutions are automatically legitimated because of shared understanding between institutional members,] compliance occurs in many circumstances because other types of behavior are inconceivable; routines are followed because they are taken for granted as “the way we do these things.”¹⁴⁶⁷ In this way, he opines that “[... i]nstitutions constrain and regularize behavior [...].”¹⁴⁶⁸ According to Selznick (1949), “[... especially significant are the constraints that arise from] commitments enforced by institutionalization [...]. Because organizations are social systems, goals or procedures tend to achieve an established, value-impregnated status. We say that they become institutionalized.”¹⁴⁶⁹ In other words, legitimation of an organisational way of doing things involves explanation (what it is what it is not), justification (why it is superior to other competing ones) and popularisation (i.e., attracting attention of its future members).

After legitimation, the next logical step for institutionalisation to happen is integration of an organisational culture into society. According to Berger and Luckmann (1966), along with legitimation, “[... d]e facto [...] institutions *are* integrated [into society]. But their integration is not a functional imperative for the social processes that produce them; it is rather brought about in a derivative fashion. Individuals perform discrete institutionalized actions within the context of their biography. This biography is a reflected-upon whole in which the discrete actions are thought of not as isolated events, but as related parts in a subjectively meaningful universe whose meanings are not specific to the individual, but socially articulated and shared. Only by way of this detour of socially shared universes of meaning do we arrive at the need for institutional integration [...]. This has far reaching implications for any analysis of social phenomena. If the integration of an institutional order can be

understood only in terms of the “knowledge” that its members have of it, it follows that the analysis of such “knowledge” will be essential for an analysis of the institutional order in question. It is important to stress that this does not exclusively or even primarily involve a pre-occupation with complex theoretical systems serving as legitimations for the institutional order. Theories also have to be taken into account, of course. But theoretical knowledge is only a small and by no means the most important part of what passes for knowledge in a society. Theoretically sophisticated legitimations appear at particular moments of an institutional theory. The primary knowledge about an institutional order is knowledge of the pretheoretical level. It is the sum total of “what everybody knows” about a social world, an assemblage of maxims, morals, proverbial nuggets of wisdom, values and beliefs, myths, and so forth, the theoretical integration of which requires considerable intellectual fortitude in itself, as the long line of heroic [...] On the pretheoretical level, however, every institution has a body of transmitted recipe knowledge, that is, knowledge that supplies the institutionally appropriate rules of conduct [...] Such knowledge constitutes the motivating dynamics of institutionalized conduct. [...] Since this knowledge is socially objectivated *as* knowledge, any radical deviance from the institutional order appears as a departure from reality [...] The deviants] share an inferior cognitive status within the particular social world [...] Knowledge [...] is at the heart of the fundamental dialectic of society. It “programs” the channels in which externalization produces an objective world. It objectifies this world through language and the cognitive apparatus based on language, that is, it orders it into objects to be apprehended as reality. It is internalized again *as* objectively valid truth in the course of socialization. Knowledge about society is thus a *realization* in the double sense of the world, in the sense of apprehending the objectivated social reality, and in the sense of ongoingly producing this reality.”¹⁴⁷⁰ In other words, through integration an organisation’s way of doing things are induced into its individual and/or organisational. Thus, member or actors hold the key in the institutionalisation process; it is after all they who practice *a* way of doing things and not another.

Scott (2008) notes that actors “[...] assume [...] leading roles in the creation and tending of institutions [...]”¹⁴⁷¹ According to Berger and Luckmann (1966), roles arise as a common understanding of actions or ways of doing things that are associated with particular actors.¹⁴⁷² Schütz (1932 [1967])¹⁴⁷³ has discussed this process at length in his discussion of “the world of contemporaries as a structure of ideal types.” As regards this, Berger and Luckmann (1966) argue that “[... w]e can properly begin to speak of roles when this kind of typification occurs in the context of an objectified stock of knowledge common to a collectivity of actors [...] Institutions are embodied in individual experience by means of roles [...] The institution, with its assemblage of “programmed” actions, is like the unwritten libretto of a drama. The realization of the drama depends upon the reiterated performance of its prescribed roles by living actors [...] Neither drama nor institution exists empirically apart from this recurrent realization.”¹⁴⁷⁴ Hence, they claim, “[...] the relationship between man, the producer, and the social world, his product, is and remains a dialectical one. That is, man (not, of course, in isolation but in his collectivities) and his social world interact with each other. The product acts back on the producer [...]”¹⁴⁷⁵ In spite of this dialectic nature of the relationship between actors and the real-world, we should not forget the fact that agents only have partially overlapping goals, as argued by Mayo (1945)¹⁴⁷⁶ and Barnard (1938)¹⁴⁷⁷; which could lead to the problem of cooperation between them. While Simon (1945)¹⁴⁷⁸ thinks that complete cooperation

is impossible in organisational contexts, Etzioni (1965)¹⁴⁷⁹ and Weick (1969)¹⁴⁸⁰ are of the view that cooperation is an offshoot of the interaction between individual autonomy and collective interests.

In an institutionalisation process, actors accept and, in the process, get indoctrinated with institutional ethos. In this regard, Pugh and Hickson (1993) argues that a central issue in the context of rational models of organizations is that “[...] why do people in organizations conform to the orders given to them and follow the standards of behaviour laid down for them? [...]”¹⁴⁸¹ One of the plausible explanations to this, as per Etzioni (1961), lies in the different degrees of compliance within organisations; according to him, “[... compliance is] the relation in which an actor behaves in accordance with a directive supported by another, actor’s power and to the orientation of the subordinated actor to the power applied [...]”¹⁴⁸² Moreover, Richmond (1961)¹⁴⁸³ has discussed about the sense of status and security that an individual derives from being a member of an institution, and following its norms, values and customs. Economically speaking, Coase (1937)¹⁴⁸⁴, Williamson (1975)¹⁴⁸⁵, Ouchi (1980)¹⁴⁸⁶ view organisations as mediating mechanisms between its members at lower than the market costs, which is another reason for institutionalisation to occur. Moreover, there are also arguments concerning the role of sanctions in inducing behaviour. Scott (1971), in this regard, argues that “[... a] person ‘internalizes’ or learns a norm to the extent that (other things being equal) he conforms to it at a spatial or temporal remove from sanctions. He learns through sanctions applied by his social environment. Once the norm is learned, the emergence of deviant behaviour following the termination of sanctions is slow. But the learning of norms is never complete, and always involves the expectation that sanctions will be applied. Thus, even when norms are thoroughly learned, when moral commitment is strong and a sense of obligation is reported as keenly felt, the maintenance of both conscience and conformity depends on the existence of sanctions [both perceived and actual].”¹⁴⁸⁷ In a nutshell, people accept institutional ethos for a variety of reasons namely, power, economic benefits, sense of status and security, fear of sanctions, to name a few.

Hinings and Greenwood (2002)¹⁴⁸⁸ are against generalisation attempts as regards institutionalisation. According to them, as there are various types of organisations and each type exhibits its distinctive features, so analysing them through the lenses of institutionalisation may not tell much about them, but about the culture that has institutionalised them. In a similar vein, Mayntz (1964) suggests that “[... o]nce we get down to the question *which* of its features or properties a particular organization can or should keep invariant against *which* external influences, and *what kinds* of regulating mechanisms can serve this purpose, we must obviously leave the level of general propositions for all organizations and are forced to take historically specific conditions into account [...]”¹⁴⁸⁹ This, however, does not come without caveats. For example, Simon (1969)¹⁴⁹⁰ viewed the study of organisational behaviour and administrative functioning as “artificial” sciences because “[...] objectivity and truth are evasive and no order exists beyond that which is created in the minds of persons and that which is imposed upon the organization by persons [...]”¹⁴⁹¹ Moreover, in regards to particular modes of rationality being institutionalised, Weber was concerned about the institutionalisation of the means-ends rationality as the main mode of reasoning in the process of rationalisation of society.

“[...] Although Weber identified rationalization as a universal, historical process involving emancipation from tradition, he saw this potential as being undermined by an institutionalization of an instrumental or purposive, means-end rationality [...].”¹⁴⁹²

Akin to Weber’s maxim that “[...] bureaucracy represents the institutionalization of rationalism [in society...]”¹⁴⁹³, Taylor’s Scientific Management is an instance of the institutionalisation of rational processes across the shop-floor; in its extreme view, in the first half of the 20th Century, employees, especially the shop-floor workers, are considered as some self-interested agents who could be influenced by incentive schemes (an utility maximising conception) in order to increase shop-floor productivity and organisational efficiency.

“[...] One of the appeals of scientific management was its comprehensive and rational (critics would say ‘mechanistic’) approach to all the functions and processes within an organization [...].”¹⁴⁹⁴

2.3.3. Taylorism and Scientific Management, and Rationality

“[...] As long as some people are born lazy or inefficient, and others are born greedy and brutal, as long as vice and crime are with us, just so long will a certain amount of poverty, misery, and unhappiness be with us also. No system of management, no single expedient within the control of any man or any set of men can insure continuous prosperity to either workmen or employers. Prosperity depends upon so many factors entirely beyond the control of any one set of men, any set, or even any one country, that certain periods will inevitably come when both sides must suffer, more or less [...]. Under scientific management the intermediate periods will be far more prosperous, far happier, and more free from discord and dissension. And also, that the period will be fewer, shorter and the suffering less [...].”¹⁴⁹⁵

“THE principal object of management should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each employé [...]. The majority [...] believe[s] that the fundamental interests of employés and employers are necessarily antagonistic. Scientific management, on the contrary, has for its very foundation the firm conviction that the true interests of the two are one and the same; that prosperity for the employer cannot exist through a long term of years unless it is accompanied by prosperity for the employé, and *vice versa*; and that it is possible to give the workman what he wants – high wages – and the employer what he wants – low labor cost – for his manufacturers.”¹⁴⁹⁶

Frederick W. Taylor is the founding father of Scientific Management movement, also known as Taylorism. According to him, the time-motion study in physics can be applied to factory operations and to formalise and rationalise shop-floor activities to increase human efficiency, which entails “[...] accurate and scientific study of unit times [...]”¹⁴⁹⁷. According to Anastasi (1964), Scientific Management aims “[...] to increase productivity by improving performance of workers [...]”¹⁴⁹⁸. Moreover, “[...] logically, Taylorism belongs to the chain of development of management methods and the organization of labor, and not to the development of technology, in which its role was minor. [...]”¹⁴⁹⁹. Scientific Management, according to Peter F. Drucker, is not concerned with technology; indeed, it took tools and techniques largely as given,¹⁵⁰⁰ and let the management to do the “right” things using them.

Taylor argued that management is a true science and there is “one right way” to perform a job. Only the “first class, right kind of worker” should be selected by the management for a job. Management, along with providing technical supervision,

should also train workers; ironically, the it is not responsible for the execution of work. To increase labour efficiency, Taylor (1911) suggested that we should try: to point out to the workers about the great loss an economy incurs because of inefficient actions; to convince the reader of work manuals that the solution to this problem is Scientific Management, not charismatic (informal) leadership; to convince others, especially the workers, that the best management is a product of defined laws, rules, and principles, or in other words, scientific formalisations.¹⁵⁰¹ To accomplish these objectives, Taylor suggested: division of labour according to the planning function (of the manager) and the doing function (of the worker); job measurement by “unit times” – i.e., task scheduling that informs workers what is expected from them; incentive schemes based on target achievement; to give emphasis on individual efficiency, not group’s (because people are essentially driven by self-interest); optimum work schedules (because although workers get motivated by wages, they loathe to over-work); to focus on the “higher-order” needs of the management and “lower-order” needs of the workers (e.g., commitment and cooperation are managerial traits, whereas immediate gratifications rather than future rewards motivates workers); decision-making to be solely done by the management (because managers, not workers, know what is best for the organisation); banning trade unions (because they slow down efficiency); and scientific methods for operations. In this way, Taylor emphasised the role of the management, and not the workers’, in achieving efficiency. As Braverman (1974) has pointed out, ‘[...] Management [according to Taylor] could be only a limited and frustrated undertaking so long as it left to the worker any decision about the work. His “system was simply a means for management to achieve control of the actual mode of performance of every labour activity [i.e., the division of labour], from the simplest to the most complicated [...]’¹⁵⁰²

According to Taylor, efficiency is a function of rational acts (like, adhering to standard rules of the shop-floor), and non-rational and irrational actions causes inefficiency. For example, according to him, as regards the latter, soldiering¹⁵⁰³ is ‘[...] the greatest obstacle to the attainment of [the maximum productivity ...] is the slow pace which [... workers] adopt, or the loafing or “soldiering,” marking time, as it is called [... which may arise due to] the natural instinct and tendency of men to take it easy [... and] from more intricate second thought and reasoning caused by their relations with other men [... known as] systematic soldiering [...] The natural laziness of men is serious, but by far the greatest evil from which both workmen and employers are suffering is the systematic soldiering which is almost universal under all of the ordinary schemes of management and which results from a careful study on the part of the workmen of what they think will promote their best interests.’¹⁵⁰⁴ Braverman (1974) interprets such observations as follows: “Taylor, always, took the view that workers, by acting in this fashion [soldiering], were behaving rationally and with an adequate view of their own best interests [...]”¹⁵⁰⁵ Here, one may argue that workers could be motivated by incentives that are appropriately arranged to create drive and block soldiering, but in real-world, an organisation could have poor management, thereby making it *rational* for a worker to indulge in soldiering.¹⁵⁰⁶ In such situations, soldiering could be rational from the point of view of workers, but non-rational or irrational as per the management. Thus, rationality in real-world could be a *relativistic* concept, having one meaning for an individual and another for others, depending on their spatial and temporal ‘locatedness’ and states of mindset.

“Whether the factory is productively efficient or not, the worker [a contractual employee] will feel himself to be an alien there. A man will find it compelling to appropriate, not materially or juridically, but in thought, the places and objects with which he spends his life. A cook says “my kitchen,” a gardener says “my lawn,” and this is as it should be. Legal property is one of the ways to create this feeling, and the perfect social organization would be the one which, by the use of this and other methods, would give a proprietary feeling to all human beings. A worker, except in rare cases, cannot regard anything in the factory as belonging to him in this way. The machines are not his. He uses one or the other depending on which order he receives. He serves them. He does not make them serve him. They are not for him a means of creating something. He is there to make sure that they are fed the materials they require. The relationship between what he is doing and what else is being done at that place remains a mystery to him.”¹⁵⁰⁷

Furthermore, there are also criticisms against Taylor’s claim that scientific management increases individual efficiency by indoctrinating them with ‘rational’ shop-floor norms. Fayol (1916 [1949])¹⁵⁰⁸ argued that better management is not just improving the labour efficiency and the planning of subunits of organisations, as postulated by Taylor; rather it is the need for managers to learn and get trained administratively. In other words, efficiency is not only an outcome of increased labour efficiency but also the managerial effectiveness arising out of their human relationships. According to Moore (1946), “[...] *efficiency involves the adoption of the means most suited to securing a particular end, without reference to sacrifice of other ends (cost) and without any restriction on the selection of means except that of intrinsic relationship to the end [...]*”¹⁵⁰⁹ Aldrich (1979)¹⁵¹⁰ views Taylorism as incomplete because it does not take the dynamics of the external environment into consideration. Yuchtman and Seashore (1967)¹⁵¹¹ argue that while efficiency has relevance with internal dynamics of an organisation, but *effectiveness* mainly lies in an organisation’s ability to impress upon its environment in attracting scarce resources, which is not accounted for by Taylor. Hill (1981) thinks that programmes like quality circles are effective means to improve efficiency, by eliciting collective inputs from various employees irrespective of their rank-and-file. According to him, “[... t]he most far-reaching transformation of conventional employment relationships in modern capitalism can be found in large-scale Japanese corporations, which combine paternalism and bureaucracy in a unique synthesis [...]”¹⁵¹² Criticising Taylorism severely, Braverman (1974)¹⁵¹³ argues that the “degradation of work” is a direct consequence of applying rational, scientific management to jobs.

Burrell and Morgan (1979)¹⁵¹⁴, Knowles and Saxberg (1967)¹⁵¹⁵, Mayo (1949¹⁵¹⁶, 1933¹⁵¹⁷), Herzberg (1966¹⁵¹⁸, 1964¹⁵¹⁹, 1959¹⁵²⁰) and McGregor (1960)¹⁵²¹ have criticised the “economic man” models in Taylor’s writings; especially they have argued that the *homo economicus* is an unrealistic and morally questionable image of human nature. Interestingly, Morgan (1997) views economic man as a “laughable caricature,”¹⁵²² and Donaldson (1995,¹⁵²³ 1990¹⁵²⁴) suggest to dispatch the economic man into a “realm of fairy tales.” Wagner-Tsukamoto (2008)¹⁵²⁵ argues that Taylor’s conceptualisation of the manager and worker – i.e., the latter as self-interested and the former as “heartily cooperative” – is inherently conflicting; and thinks that this is a conceptually paradoxical.

Maintaining organisational orders and process routines that Taylorism celebrates, is also criticised because they are *simply* untenable in the real-world. For instance, in the sphere of the (capital) economy, according to Knudsen and Swedberg (2007), the concept of order refers to a “[...] ‘general prescription for how to act in

the sphere of the economy, with the purpose of making a profit' [...]"¹⁵²⁶ In other words, it refers to "[...] a prescription for how to act, that is "exemplary" or "obligatory" [...]"¹⁵²⁷ However, this is futile if we take into account the contextual factors that are inevitable in the real-world. Furthermore, according to Moore (1947), the sources of "failed actions" are: ignorance, error, immediate results seeking, and unpredictability,¹⁵²⁸ which do occur in real-world. Similarly, according to Merton (1936)¹⁵²⁹, the "unanticipated consequences of purposive social action" that weaken efficiency of human action arise out of: (a) imperfect knowledge; (b) cognitive limitations, e.g., "[...] error may in fact arise where the person attempting to achieve some particular end [...] is in possession of the essential facts, but errs in his weighting of the factors or his inferences drawn from them [...]" To maintain that error and ignorance are the same thing would be to argue the false position that "facts speak for themselves" and necessarily indicate the course to be followed without exercise of reason [...]"¹⁵³⁰ and, (c) the entailment of "imperious immediacy of interest" that emphasises the attainment of immediate results irrespective of the long-term goals (arising out of organisational "ritualism"). Interestingly, Moore (1997) argues that, in addition to improving man-and-machine efficiency, organisational effectiveness lies in strategic considerations of social contexts and contingencies.

"Effectiveness of industrial management, as distinct from efficiency, rests [...] in part upon gradual elimination of the disturbing factors of ignorance and error, but more especially upon the recognition of the relevant social circumstances (including even plans of management), the operation of which may either facilitate or hinder programs deemed sound on mechanical [and narrow rational] grounds."¹⁵³¹

2.3.4. Social *Embeddedness* of Economic Activities and Rationality

"[... T]he importance of technical information in the economy is an especially significant case of an irreducibly social category in the explanatory apparatus of economics."¹⁵³²

Before starting our discussion on social embeddedness (SE), it is important to distinguish between sociation and socialisation; the former refers to a community and the latter is learning the customs and values of a community. As Blau (1964) contends, "[... A]ll sociation rests on a relationship's effect which survives the emergence of the relationship [...]"¹⁵³³ "Sociation" – which is not socialisation – is Kurt Wolff's rendering of Georg Simmel's German term, "*Vergesellschaftung*."¹⁵³⁴ According to Simmel, an individual is a member of many specific groups. In his view, modern society comprises of complex web of interactions and relations between individuals, which introduces "*Vergesellschaftung*" or "sociation". Sociation is "[...] the particular patterns and forms in which men associate and interact with one another. [...]"¹⁵³⁵ Thus, socialisation leads to sociation; both of which are important in discussions on SE.

According to Wilson (1989)¹⁵³⁶, neoclassical paradigm studies inter-firm transactions by linking firms through arm's-length ties, whereby all relationships are assumed as self-interested, profit-seeking behaviour, even if there are examples of ongoing ties and existence of implicit contracts between firms. Macneil (1978)¹⁵³⁷ views them as based on self-interest and profit maximisation rather than any emotional commitments or altruistic attachments.

"[...] Neoclassicists tend to see exchanges as the prime basis of social organization and to view the market as a system unto itself [...]"¹⁵³⁸

Notwithstanding, Moore (1946)¹⁵³⁹ argues that the industrial plant is a complex social organisation, which has undeniable relation with society. Moreover, according to the “human relation” management movement, an offshoot of the *Hawthorne Study*, the manager, among other things, should emphasise on social cooperation for efficiency.¹⁵⁴⁰ It also has been argued that market is *dug in* society, and various social structures have an effect on market forces – i.e., “[...] economic action is embedded in structures of social relations [...]”¹⁵⁴¹

“Organizations have their roots in larger social systems [...]”¹⁵⁴²

Blau and Scott (1962) argue that there is a dialectic relationship between an organisation and its environment; i.e., “[... t]he boundary between an organization and its social context is never entirely clear [...] The social environment influences organizations [... and] organizations influence their environment [...]”¹⁵⁴³ In this context, Aldrich (1979) contends that “[... a] definition [of the economic organisation] should highlight the *social* nature of organizations – they are products of, and constraints upon, social relations [...]”¹⁵⁴⁴ This concept is the starting point of economic-sociology, which “[...] examines the embeddedness of economic action as a derived variable [of analysis]”¹⁵⁴⁵ While textbook economics assumes that actors are not connected to one another, i.e., actors are atomistic; economic sociology, according to Smelser and Swedberg (1994), assumes that actors are linked to and influenced by others.¹⁵⁴⁶ “Economic sociology conceives individual exchange as embedded in noneconomic social relationships [...]”¹⁵⁴⁷ Here, Etzioni (1988) cautions that such a programme of studying human behaviour does not come without caveats; “[... socio-economics] seeks to integrate elements of economics and of other social sciences into one theoretical system, but not to fuse them [...] As one draws on several disciplines one inevitably sacrifices some detail and even precision in the quest for scope [...]”¹⁵⁴⁸

Social embeddedness of economic activities was first envisioned by Polanyi (1944)¹⁵⁴⁹ and then refined by Granovetter (1985)¹⁵⁵⁰ in his notion of “embeddedness in networks;” the latter argues that economic actions are “embedded” in social relations and networks – i.e., social structures – in stead of society *as such*.

[... M]ost behavior [, including economic ones,] is closely embedded in networks of interpersonal [social] relations [... Behaviours like m]anagers who evade audits and fight over transfer pricing [... act] nonrationally in some strict economic sense, in terms of a firm’s profit maximization; but when their position and ambitions in intrafirm networks and political coalitions are analyzed, the behavior is easily interpreted [...] That such behavior is rational or instrumental is more readily seen, moreover, if we note that it aims not only at economic goals but also at sociability, approval, status, and power. Economists rarely see such goals as rational, in part on account of the arbitrary separation that arose historically, as Albert Hirschman (1977) points out, in the 17th and 18th centuries, between the “passions” and “interests,” the latter connoting economic motives only. This way of putting the matter has led economists to specialize in analysis of behavior motivated only by “interest” and to assume that other motives occur in separate and nonrationally organized spheres; hence Samuelson’s much quoted comment that “many economists would separate economics from sociology upon the basis of rational or irrational behaviour” [...] The notion that rational choice is derailed by social influences has long discouraged detailed sociological analysis of economic life and led revisionist economists to reform economic theory by focusing on its naïve psychology.

My [Granovetter's] claim here is that however naïve that psychology may be, this is not where the main difficulty lies – it is rather in the neglect of social structure.¹⁵⁵¹

Polanyi (1944)¹⁵⁵², while discussing on the social make-ups of economic life, opined that the embeddedness of economic action in pre-industrial societies are supplanted in modern life by the logic of efficient markets. Schumpeter (1950)¹⁵⁵³, deliberating the effect of inter-firm networks on economic actions, claimed that rather than undertaking cost optimisation, firms could perform better by innovating and organising a shifting network of talent, products and resources. According to Selznick (1948), SE is an outcome of anti-Taylorism and institutional isomorphism.

“[... R]ational action systems are inescapably [... embedded] in an institutional matrix, in two significant senses: (1) the action system – or the formal structure of delegation and control which is its organizational expression – is itself only an aspect of a concrete social structure made up of individuals who may interact as *wholes*, not simply in terms of their formal roles within the system; (2) the formal system, and the social structure within which it finds concrete existence, are like subject to the pressure of an institutional environment to which some over-all adjustment must be made. The formal administrative design can never adequately or fully reflect the concrete organization to which it refers, for the obvious reason that no abstract plan or pattern can – or may, if it is to be useful – exhaustively describe an empirical totality [...].”¹⁵⁵⁴

Along with inter-firm networks, Granovetter (1985)¹⁵⁵⁵ also considers the inter-individual networks and argues that actions are embedded in networks of social relations; neither this has been recognised by the neoclassicists nor Polanyi (1944). White (1981¹⁵⁵⁶, 2001¹⁵⁵⁷), Burt (1992)¹⁵⁵⁸, Swedberg (1997)¹⁵⁵⁹, Uzzi (1997)¹⁵⁶⁰, Baker *et al.* (1998)¹⁵⁶¹, DiMaggio and Louch (1998)¹⁵⁶², and Podolny (2001)¹⁵⁶³, among others, have also contributed to the literature on SE.

Aldrich (1999) argues that rationality emphasises the “[...] embeddedness of organizations in their [larger social] environments.”¹⁵⁶⁴ This view is also logical if we take an extended view of economic activities. For example, Granovetter (1993)¹⁵⁶⁵ argues that that by fusing together social and economic factors, one can find that relationships continue to exist even after one-time economic transactions; this is important because unlike the neoclassicists’ assumptions that agents become strangers after the completion of a transaction is hard to believe in the real-world because there always exists another time when agents need each other again. In this context, Granovetter (1985)¹⁵⁶⁶ argues that we should focus on what is proper-socialisation in the context of economic activities, i.e., actors are engaged by ongoing social relations. This is important because, according to him, SE could be undermined by two related points of view: first, the under-socialisation view that considers markets consisting of atomised individuals and “[... various classical and neoclassical] theoretical arguments disallow by hypothesis any impact of social structure and social relations [on them ...],”¹⁵⁶⁷ and second, the over-socialisation view in which “[...] people [are treated] as overwhelmingly sensitive to the opinions of others and hence obedient to the dictates of consensually developed systems of norms and values, internalized through socialization, so that obedience is not perceived as a burden [...].”¹⁵⁶⁸

“A fruitful analysis of human action requires us to avoid the atomisation implicit in the theoretical extremes of under- and oversocialized conceptions. Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy.

Their attempts at purposive action are instead embedded in concrete, ongoing system of social relations [...]¹⁵⁶⁹

Etzioni (1988) has propounded the “I&We paradigm” of a person, in which he views that rational, self-interested preferences interact with communitarian and social wellbeing. Similar to Granovetter’s (1985) proper socialised view of a person, he argues that “[... t]here is a close link between the oversocialized [...], undersocialized [...], and properly socialized (I&We) view of the person, and the varying assumptions about the intellectual capacity of the human race, “the rationality of man.” The undersocialized view is closely linked to the enlightenment notion, which is very sanguine about an individual’s ability to reason. It assumes that people set their own goals, in neatly patterned ways, and the ways they pursue their goals are open to evidence and to inferences drawn logically – i.e., that people abide, in effect, by the same principles that scientists are expected to follow but often do not. An individual may err in his or her decisions, but when “exposed to valid norms for logical, scientific, and statistical thinking, he will bow down before them, acknowledge his errors, and seek to reform his practices.” [...] This assumption is the core of the neoclassical paradigm. [...] The oversocialization school is linked to what has been called the “romantic” view, that holds that the foundation of knowledge is to be found in the particular culture to which a person belongs. The world is not out there to be discovered, to be known, but is created by “man” (as a collectivity). Not merely ideas and practices, but also the frameworks of thinking, what is considered factual, and logic itself are “beyond the scope of deductive and intuitive reasons ... neither rational nor irrational but rather nonrational.” [...] What is logical to a member of one culture is not to a member of another. [...]”¹⁵⁷⁰ Etzioni (1988) continues, “[...T]he I&We paradigm (one of the larger possible set of deontological paradigms) [...] highlights the assumption that individuals act within a social context, that this context is not reducible to individual acts, and, most significantly, that the social context is not necessarily or wholly imposed. Instead, the social context is, to a significant extent, perceived as a legitimate and integral part of one’s existence, a We, a whole of which the individuals are constituent elements.”¹⁵⁷¹

According to Berger and Luckmann (1966), behaviour is an offshoot of social interactions, social roles and social structures;¹⁵⁷² however, they have not addressed the drivers behind human actions. Here, Swedberg (2000) argues that self-interest drives behaviour; “[... t]hat people have interests, and that these interests play a crucial role in determining their behavior, has all too often been ignored by sociologists, or at least pushed into the background.”¹⁵⁷³ He has further added that “[... w]hile the economists have started out from the idea of interests and tried to develop a way of taking social behavior into account, sociologists have typically done the opposite and developed various ways to “embed” economic action and interests in the social structure.”¹⁵⁷⁴ Nevertheless, Schelling’s (1971, 1972, 1978) Tipping Model,¹⁵⁷⁵ Granovetter’s (1985) Social Networks are important modelling efforts on human behaviour, not exclusively devoted to self-interest and utility maximisation. Coleman’s (1990) efforts in synthesising the RCT and sociology are paramount too; he provides theories for linking the individual behaviour to that of organisation’s and then to society as a whole.¹⁵⁷⁶

Zukin and DiMaggio (1990)¹⁵⁷⁷ have segregated SE of economic actions into the following types: structural, cognitive, political, and cultural; according to them,

the first type is concerned with how the quality and network architecture of material exchange relationships influence economic activities, and the last three reflect the social constructionist perspectives on SE. Moreover, Granovetter (2005) claims that social networks enable efficient economic activities because they create effective communication, put in place policing mechanisms and enhances trust levels between transacting agents.

“[...] Social structure, especially the form of social networks, affects economic outcomes for three main reasons. First, social networks affect the flow and the quality of information. Much information is subtle, nuanced and difficult to verify, so actors do not believe impersonal sources and instead rely on people they know. Second, social networks are an important source of reward and punishment, since these are often magnified in their impact when coming from others personally known. Third, trust, the confidence that others will do the “right” thing despite a clear balance of incentives to the contrary, emerges, if it does, in the context of a social network.”¹⁵⁷⁸

Etzioni (1988) also has underscored the fact that trust is paramount in socio-economic transactions.

“[...] Trust [...] is pivotal to the economy, and not merely social relations, as without it [most transactions, including economic ones, won't take place]”¹⁵⁷⁹

Empirical findings in regards to SE also reveal that social relations *in fact* have commercial ramifications. In this regards, Hirschman (1970)¹⁵⁸⁰ is under the impression that firms do not get any direct feedback when they lose customers; this view is based on the neoclassical paradigm, which treats people and firms as atoms, acting on their own. To the contrary, Helper (1990) argues that the embedded model is more efficient in the real-world.¹⁵⁸¹ In her study on the embedded relationships between automakers and their suppliers, she reasons that firms in the automobile industry engage with each other and get direct feedback. According to Powell (1990)¹⁵⁸², market transactions take place through either loose collections of individuals who maintain impersonal and constantly shifting ties, or stable network partners who maintain close relationships. According to Bazerman and Neale (1992), negotiation between agents is seen as “[...] a multiparty decision making activity where the individual cognitions of each party and the interactive dynamics of multiple parties [and hence their relationships] are critical elements [...]”¹⁵⁸³ Uzzi (1996)¹⁵⁸⁴ contends that “[...] firms organized in networks have higher survival chances than do firms which maintain arm's-length market relationships [...]”¹⁵⁸⁵ and further adds that the extended network of ties has a profound effect on a firm's performance, even when the extended network is unknown to it or beyond its control. Uzzi (1997) argues that SE is an emergent phenomenon; “[...] in networks of close ties, motivation is neither purely selfish or cooperative but an emergent property of the social structure within which actors are embedded and that rationality is neither purely rational or boundedly rational, but expert [...] Together, the emergent character of motives and the expanded nature of information processing sets embeddedness apart from other logics of exchange and situates social structure as a precondition to all these psychological processes.”¹⁵⁸⁶ From the findings of his ethnographic fieldwork, he finds that “[...] embeddedness creates economic opportunities that are difficult to replicate via markets, contracts, or vertical integration”¹⁵⁸⁷

From the organisational human resources point of view, SE has bearings on morality and power. According to Parsons (1937, 1951), from the perspective of

functionalism¹⁵⁸⁸, legitimate power can be gained from socialisation; “[...] the acts of individuals are, in effect, evaluated in terms of their contribution to the social order, which in turn is introduced into the individuals via socialization, and reinforced by social control. [...] Typically authority in this context is viewed as legitimate power. [...]”¹⁵⁸⁹ “Durkheim [as cited in Kohlberg (1968, p. 486)] argue[s ...] that morality is a system of rules and values provided by society, embedded in its culture, and that individual children acquire these as part of the general transmission of culture [...]”¹⁵⁹⁰ This is why Castro (1996) argues that entry level management staffs and middle managers should be thoroughly aware about morality; “[... t]he pivotal problem come not for top leadership regarding whom the importance of at least the appearance of moral probity seems essential – see Bennis and Nanus (1985), and DePree (1989) – but for entry level and middle managers [...]”¹⁵⁹¹

Furthermore, SE accounts for the increase in efficiency that cannot be estimated by economic calculations. Dore (1983)¹⁵⁹², Smitka (1991)¹⁵⁹³, Gerlach (1992)¹⁵⁹⁴, Lincoln *et al.* (1996)¹⁵⁹⁵ argue that trust and personal ties, rather than explicit contracts, leads to predictability in behaviour that reduces the monitoring cost and also facilitate pooling more resources from outside, as in the cases of Japanese automakers and Italian knitwear sector. Helper (1990)¹⁵⁹⁶ finds that close relationship between firms in the auto industry is an offshoot of their intimate knowledge about each other in regards to tacit and propriety know-how. Larson (1992)¹⁵⁹⁷ and Lazerson (1995)¹⁵⁹⁸ find that successful entrepreneurial business networks are outcomes of knowledge transfer and learning among transacting parties.

SE suggests that social relations also influence the cost of capital. While examining the extent to which the presence of representatives of financial institutions on firms’ boards of directors affect borrowing decisions, Sterns and Mizruchi (1993) find that “[...] once established, a financial interlock provides both a firm and a financial institution with an ongoing opportunity to coopt one another. In addition, the interlock may increase the firm’s access to funds by reducing the governance costs involved in the borrowing transaction. Overall [...] results suggest firms benefit from financial interlocks. What the firm’s management loses in autonomy from having the financier on the board, it gains in increased access to external funds.”^{1599,1600} Uzzi (1999) has investigated how SE can influence which firms get capital and at what cost; according to him, “[...] *firms that embed their commercial transactions with their lender in social attachments receive lower interest rates on loans. At the network level, firms are more likely to get loans and to receive lower interest rates on loans if their network of bank ties has a mix of embedded ties and arm’s-length ties [...]*”¹⁶⁰¹ Abolafia (1996)¹⁶⁰², using ethnographic research to uncover organisational norms and beliefs that historically have influenced stock, bond, and futures markets in the U.S.A., argues that far from being the natural markets of neoclassical thinking, these systems of exchange are results of idiosyncratic social institutions that are produced, reproduced, and challenged by market-makers.

As regards geographical locations of firms, there are interesting discussions hovering around SE. Leung (1993) finds that “[...] relationships between firms, both preexisting social-institutional and subsequent transactional, are important locational and structural determinants of vertically disintegrated activities [...]”¹⁶⁰³ Lazerson (1995), while studying the “putting-out”¹⁶⁰⁴ or domestic system of production, where trust among transacting agents is very important, claims that such forms of transaction

“[...] represent [...] attractive alternative[s] to the centralized factory under certain technological, market, institutional, and social conditions [and, leads to faster market response rates, improved economies of scale and reduced transaction costs]”¹⁶⁰⁵ In stead of narrow short-term gain maximisation and dependency exploitation strategies, Romo and Schwartz (1995)¹⁶⁰⁶ and Dore (1983)¹⁶⁰⁷ find that decisions concerning firms’ locations in the case of regional production networks are based on firms’ strategic thinking to developing long-term, cooperative ties.

SE also has a vital role in building and sustaining customer and supplier relations. Moorman, *et al.* (1992), while studying the role of trust between users and providers of market research data, find that “[...] trust and perceived quality of interaction contribute most significantly to research utilization, with trust having indirect effects through other relationship processes, as opposed to important direct effects on research utilization [...]”¹⁶⁰⁸ Podolny (1994), while studying alternative organisational response to market uncertainty, argues that “[...] in order to avoid the problems posed by market uncertainty and forestall market failure, organizations adopt a more social orientation, taking the social structural position of potential exchange partners as cues and adhering to a principle of exclusivity in selecting exchange partners [...]”¹⁶⁰⁹

Furthermore, SE has implications on organisational restructuring. According to Palmer *et al.* (1995), who have investigated the 1960s predatory firm takeovers in the U.S.A., “[... c]onsistent with the “embeddedness” perspective [...] the likelihood of acquisition [...] is] influenced by a firm’s position in the resource-dependence network of the economy as well as the position of its managers and directors in the firm’s ownership structure and in the social network of business elite. Specifically, firms run by central managers and directors were less susceptible to predatory takeover – ownership relationships dominated over ties among business elite [...]”¹⁶¹⁰

As regards to the correlation between SE and firm survival rates, Baum and Oliver (1992)¹⁶¹¹ find that SE has positive effects on initial growth in number and long-run survival prospects of firms, in particular industry sectors. Although Uzzi (1996)¹⁶¹² has similar findings, he thinks that expecting too much from SE in this regards could also be counterproductive; “[...] *embeddedness is an exchange system with unique opportunities relative to markets and that firms organized in networks have higher survival chances than do firms which maintain arm’s-length market relationships. The positive effect of embeddedness reaches a threshold, however, after which point the positive effect reverses itself.*”¹⁶¹³

Despite all these arguments in support of SE, there are also criticisms against it. One of the main accusations is that SE generates economic inefficiencies. Peterson and Rajan (1994)¹⁶¹⁴ argue that social relations have minimal effects on economic transactions and, as a matter of fact, create inefficiencies by hiding various transactions from the market analyses. Portes and Sensenbrenner (1993)¹⁶¹⁵, while studying immigrant enterprises in the U.S.A., discuss negative aspects of the notion of social capital among these entrepreneurs; according to them, higher social capital could lead to the loss of individual freedom (for community cohesion) and increase the cost towards community solidarity. Interestingly, they also opine that “[... s]ocial capital is generated by individual members’ disciplines compliance with group expectations. However, the motivating force in this case is not value convictions [...]”

but the anticipation of utilities associated with “good standing” in a particular collectivity. As with reciprocity exchanges, the predominant orientation is utilitarian, except that the actor’s behavior is not oriented to a particular other but to the web of social networks of the entire community.¹⁶¹⁶ According to Uzzi (1997):

“[... Granovetter’s (1985) work, in its present form] lacks its own concrete account of how social relations affect economic exchange [...].”¹⁶¹⁷

2.3.4.1. Social Exchange Theory and Rationality

“RCT [Rational choice theory] wants to replace *Homo sociologicus* with *Homo economicus*, because the former is regarded as a cultural or structural ‘dope’ [...].”¹⁶¹⁸

By *Homo sociologicus*, Dahrendorf (1968) refers to a conceptualisation of the human being people whose actions and behaviours are determined by her/his social roles.¹⁶¹⁹

“Social science has [...] presented to us with at least two new and highly problematical creatures whom we are unlikely ever to encounter in our everyday experience. One is the much-debated *homo oeconomicus* of modern economics [... or the] thoroughly rational man [... The other is the] psychological man (as Philip Rief called him) [...] who even if he always does good may also want to do evil – the man of invisible motives [...]. In general, economists and psychologists have not been prepared to face the contradiction between their artificial human being and the real one; their critics have usually belonged only marginally to the profession. Perhaps their attitude is right, for what we have apparently grown so accustomed to *homo oeconomicus* and psychological man that a protest against these concepts is rarely heard. But our acceptance of the “men” of economics and psychology does not make the dilemma they stand for any less real. Moreover, with the rapid development of social science two new scientific “men” are coming into being: the men of sociology and political science [... –] *homo sociologicus* and *homo politicus* [...].”¹⁶²⁰

In other words, the concepts of *Homo economicus* and the psychological man can be further enriched by the introduction of the *Homo sociologicus*. This has important bearings on the “social exchange theory” (SET).

Homas (1958) is widely credited with the theorisation of SET; utilitarianism holds the guiding principles of the SET. In SET, human interactions in negotiated exchanges are analysed on the bases of cost-benefit analyses and comparisons of alternatives.¹⁶²¹ Commenting on cost-benefit aspects of behaviour, Homans (1958) posits that [... s]ocial behavior is an exchange of goods, material goods but also non-material ones, such as the symbols of approval or prestige. Persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to them. This process of influence tends to work out at equilibrium to a balance in the exchanges. For a person engaged in an exchange, what he gives may be a cost to him, just as what he gets may be a reward, and his behavior changes less as profit, that is, reward less cost, tends to a maximum [...].”¹⁶²² Such interpretations concerning social exchange are similar to the NNR view of the rational action, and tantamount to the view of a person as a utility-maximising hedonist.

However, Blau (1964) has treated socio-economic exchanges as socially embedded. According to him, “[... s]ocial exchange, broadly defined, can be considered to underlie relations between groups as well as those between individuals; both differentiation of power and peer group ties; conflicts between opposing forces

as well as cooperation; both intimate attachments and connections between distant members of a community without direct social contacts [...]”¹⁶²³ Moreover, has reasoned that “[...]ot all human behavior is guided by considerations of exchange, though much of it is, more than we usually think. Two conditions must be met for behavior to lead to social exchange. It must be oriented toward ends that can only be achieved through interaction with other persons, and it must seek to adapt means to further the achievement of these ends [...]”¹⁶²⁴ Importantly, contrary to Homas (1958), Blau (1964) argued that some social exchanges cannot be calculated by strict price mechanisms; “[...] social exchange [for example, trust ...] is superimposed upon [...] strictly economic transaction[s ... and i]n contrast to economic commodities, the benefit involved in social exchange do not have an exact price in terms of a single quantitative medium of exchange, which is another reason why social obligations are unspecific [...] The obligations individuals incur in social exchange [...] are defined only in general, somewhat diffused terms [...]”¹⁶²⁵ This line of thought is a direct negation to the neoclassicists’ assumptions of people. Furthermore, there is no denying of the fact that Blau (1964) supported analyses of behaviour on the basis of rationality, irrespective of whether reasoning was a motivation, yet he also argued that people whose actions are not aimed *solely* at obtaining specific material advantages “[...] are not necessarily] irrational but may mean that it is *wertrational* rather than *zweckrational*, that is, oriented to the pursuit of ultimate values rather than the pursuit of immediate rewards [...]”¹⁶²⁶ He reasons this in the following manner: “[...] A basic reward people seek in their associations is social approval, and selfish disregard for others makes it impossible to obtain this important reward [...]”¹⁶²⁷ Furthermore, according to Thibaut and Kelley (1959)¹⁶²⁸, people engage in social exchanges because of *various* motives: anticipated reciprocity, expected rise in reputation, power and prestige, altruism, direct rewards, etc. Miller (2002)¹⁶²⁹ criticises the SET on the grounds that: (a) it reduces human interactions into purely (economic) rational processes; (b) it postulates the formation of linear relationships, which, once again may not always be the case; (c) it assumes that the ultimate goal of a relationship is intimacy, which may not always be the case; (d) it emphasises freedom and transparency as important facilitators in relationship building between interacting parties/agents which at times may not be the best option.

“[...] V]arious types of social and economic exchange do have consequence for the meanings and structures of freedom [...]”¹⁶³⁰

2.3.5. Freewill and Sovereign Action, and Rationality

“For Voltaire, reason served to liberate men from superstition, bigotry, and intolerance. For Montesquieu, reason applied to the study of political forms could enable men to devise a constitution which realizes the greatest possible freedom. For Diderot, to follow the laws of reason was to shake off the yoke of authority and tradition [...] For Kant, rationality is a property of human subjects that appears when their mental powers are developed to the point of achieving cognition according to principles [...] and] rationality in the form of practical reason (a kind of subjective rationality) promotes both human autonomy (a kind of subjective freedom) and civil liberty (a kind of external or objective freedom).”¹⁶³¹

“[...] Freedom is to think differently than what one already knows [...]”¹⁶³²

Are rational agents sovereign enough to act freely? According to one view, no free action could be rational. For example, Strawson (1986) argues that “[...] to be a free

agent is to be capable of being *truly responsible* for one's actions [... and] to be capable of being truly responsible for one's actions is to be capable of being truly deserving of praise and blame for them [...]"¹⁶³³ On the basis of this, Strawson (1995) opines that no free, i.e., undetermined, action is rational.¹⁶³⁴ Yet there is another view that all free actions must be rational. For example, according to Kane (1996) "[... i]f the action did have such a sufficient reason for which the agent was not responsible, then the action, or the agent's will to perform it, would have its source in something that the agent played no role in producing [... U]ltimately responsible agents must not only be the sources of their actions, but also of their *will* to perform the actions [...]"^{1635,1636} Taking a middle path, Vollmer (2004) argues that "[...] there is no necessary connection between freedom and rationality. Some free actions are rational, others are not."¹⁶³⁷

Interestingly, there is another view that considers money as a promoter of not only rationality by enabling people to be calculative but also freedom by letting people to keep their *selves* out of socio-economic transactions, whatsoever. "[...] Simmel [... has proposed] a new mode of rational activity manifest in the pervasive utilization of money as a generalized medium of exchange. Money, Simmel writes, favors the ascendance of intellectuality over emotional responses. Being a quantitative measure, the repeated use of money required the development of calculative skills and habits. Being a strictly instrumental possession – money is the absolute tool, the means flexible enough to serve any end whatsoever – its habitual use requires that considerable energy be devoted to the rational analysis of costs and benefits, means and ends [... M]oney promotes freedom in the sense of individualized self-development, by providing an effective means of differentiating between the subjective center and the objective achievement of a person. Individuals' performance may be paid for with money while their persons remain outside the transaction. Conversely, individual persons can be supported as such by monetary contributions from anonymous others, while their specific performances remain free from financial considerations. Further in this vein Simmel argues that the separation of workers from their means of production (for which "a money economy paved the way"), while viewed by some as the focal point of social misery, may rather be viewed "as a salvation" insofar as it provides conditions for the liberation of the worker as a human subject from the objectified technical apparatus of productivity ([1907] 1978: 337) [...]"¹⁶³⁸ However, Simmel also argued that there are negative consequences arising out of situation with excessive freedom and rationalisation because they are sources of alienation of *the self* from its surrounding.¹⁶³⁹

Debating on the freewill and freedom of the neoclassicists' rational agent, De Uriarte (1990) opines that such an agent is a "programmed individual" who craves to maximise her/his utility; implying that s/he does not have a freewill at all, or if s/he has then it has no relevance to socio-economic activities because what it does are just mathematical operations involving computations and estimations, like ranking preferences.

"[...] If an individual acts so as to maximize utility, then that person must follow a rule that reliably leads him to a certain utility maximizing combination [in the case of a transaction] But if this is to be a theoretically adequate generalization, it must also structure the actions of the agent in *predictable* ways so that when conditions change, [... transacting] patterns change – otherwise we would not be in possession of a scientifically verifiable theory. In a word, this rule would render all actions of the agent to be

reactions, properly speaking [...] But what then is left of the freedom this agent possesses? He did not apparently bring it with him to the market. If he were indeed rational in the economic sense, he simply could not. From the moment the agent selects and ranks preferences, the entire range of possible economic actions in the marketplace is defined. In the market, where all economic events, decisions, and actions transpire, the agent is not free in fact but programmed. He is programmed to maximize utility. Thus individual freedom encompasses, but in no genuine sense goes beyond, the selection and ordering of preferences and the decision to enter the marketplace. From thereon out the agent passively, programmatically, responds to the vicissitudes of the market. The agent himself, however, is not capricious but calculating. There is no room for the agent's creative expression in the economic sphere. The agent is free only to alter his preferences, an inherently non-social and non-economic act. Therefore the individual's free will is essentially non-economic as well."¹⁶⁴⁰

Furthermore, Latsis (1976b) opines that it is paradoxical the manner in which neoclassical economics *lumps* agents' freewill and their "situational determinism"¹⁶⁴¹ oriented behaviour.¹⁶⁴² According to him, such agents are "[...] just puppets which do not act – they merely react."¹⁶⁴³ Interestingly, Tönnies (1955) debates that agents act by taking into consideration a complex notion of rationality that is a combination of "rational will" and "natural (free) will," which entails general intentions, specific ends and appropriate means, and serves as an instrument for coping with the real-world.¹⁶⁴⁴ He argued that people *only* have "imaginary freedom;" i.e., "[...] in defining his rational will as disposal of means [in the neoclassical sense], man transforms a piece of his imaginary freedom into its very opposite. His own master otherwise, man becomes, in thus pledging himself, his own debtor and servant. [... In the process, there is the] absence of freedom in relation to one's self, i.e., self-compulsion [...]"¹⁶⁴⁵ In other words, the *rational-will* is the "[...] negative of (subjective) freedom [and free-will, because actions arising out of it involve] diminution of individual power [...]"¹⁶⁴⁶ According to Searle (2001), in most rational actions there are gaps between motivation and action, which is the "[...] "freedom of the will" [...]"¹⁶⁴⁷ Moreover, even though all rational activities presupposes freewill, freedom, he argues, is possible only where one has a choice among both rational and irrational options.

Furthermore, Barnes (2000) argues that an agent acts rationally not only on the basis of the NNR but also the knowledge s/he acquires from his connections with social contexts and contingencies; and in this sense her/his actions are *not* free but contingent upon many factors, including the fact that s/he, in addition to being a calculating utility maximising agent, is a *Homo sociologicus* having social relations and associations that influence her/his behaviour.

"Calculative actions are not mere manifestations of the rationality of 'the individual'. Reflection on the role of knowledge in calculation may enrich our understanding of what is involved. Stocks of knowledge are carried by collectives as part of their culture, and different collectives carry different stocks. When an individual makes a rational calculation, the outcome will depend on which stock of knowledge is drawn upon, how much it has been assimilated, how it is utilised. The calculation will reflect not the fixed and given rationality of 'the individual' but her contingent involvement in specific social relations and social processes. Moreover, because of this involvement, routine reference to a calculated action as freely chosen action is no longer possible. Or rather, it is no longer possible unless free choice may properly be imputed to an agent who, far from acting independently, acts rationally only by acting as she is authorised to act as a *member*."¹⁶⁴⁸

2.3.6. Individualism and Rationality

“Economic individualism is given added support in the value system of our society by the prevalence of individualistic [atomistic] notions in other fields of activities [...]”¹⁶⁴⁹

In its quest to spread its own model of rationality, the neoclassical paradigm advocates for individualism at the cost of communalism. According to Bourdieu (1998b), in the work-sphere, “[... the notion of separatedness of the individual from group, community and/or society] comes through the setting of individual objectives; individual appraisal interviews; personal increments or bonuses based on individual competence or merit; individualized career paths; strategies of ‘responsibilization’ [...] all methods of rational control which, while imposing over-investment in work [...] combine to weaken or destroy collective references and solidarity [...]”¹⁶⁵⁰ Furthermore, Archer and Tritter (2000)¹⁶⁵¹ argue that one of the major thrusts of the RCT is to destroy collective solidarity, whatsoever, and encourage individualism; because, among other things, it emphasises on objective and measurable aspects of behaviour. Castro (1996), looking at it from the organisational context, states, “[... i]n highly coordinated hierarchical enterprises] career success is a pivotal goal and [...] success is often dependant on narrowly defined performance measures [...]”,¹⁶⁵² which promotes individualism at workplaces. At the social level, Mannheim raises the issues concerning the rationalisation of society and whether society should be studied at the individual or “organic” level. According to him, this is important considering the fact that there is a “[...] spread of atomi[stic] individualism to the masses [or society]”¹⁶⁵³

However, Moore (1946) argues, “[... d]espite the ubiquity of individualistic conceptions in our culture, there are fairly obvious and rather stringent limitations to the extension of individualism in any society. No society can be so tolerant or so naïve as to develop *every* human capacity to its ultimate, or to place no barriers upon the fulfilment of unbridled appetites. The human organism is plastic, and its capacities and potentialities are extremely varied. Some special abilities [...] must clearly be limited and regulated; various outstanding skills such as superior cunning and effective trickery and deceit must be regarded as inimical to the stability of society. In short, *all special abilities must be in conformity with the requirements of social order in general, and of a given social order in particular.* This constitutes the ultimate difficulty of attempting to reason from the nature and worth of the individual to the social organization and culture of a society [...] In other words, it is a scientific impossibility to attempt to construct a society with the sole aim of complete and universal individualism in all its forms. Yet in our society this has been more often a theoretical than a practical difficulty, for the conception of the nature of the individual has been pretty clearly linked with a particular kind of social organization which gave meaning to that conception. Thus we have not in fact looked with the same favor upon the development of individual aesthetic or mystical talents as we have upon shrewd economic rationality. It is only in the disordered and perilous households of certain believers in the wrongness of repressions and inhibitions that children develop their personalities in directions of property destruction and sudden death. It is thus not the complete and unrestrained individual who is the center and measure of modern industrial society, but rather the individual whose character most closely conforms to the ideals established in traditional doctrine.”¹⁶⁵⁴

Furthermore, as regards if people are free to act as individuals in their own rights, one aspect of the Marxist school of thought in regards to rationality is worth mentioning – i.e., the emphasis on community and class rather than the individual. Marx and Engels (1845-1846 [1958]) are of the view that the history of all hitherto existing society is the history of “class struggles.”¹⁶⁵⁵ Moreover, “[... i]n contrast with the neoclassical notion of individual preferences, Marxists stress *class consciousness* – collective consciousness of a class’s interest [...] One more diverging from neoclassical thought, Marxists hold that ideology is rooted in the economy: One’s consciousness is shaped by one’s material situation [...] For example,] Marxists reject the technological determinism implicit in the neoclassical model of wage setting. They argue instead that a combination of class struggle and custom set the overall wage level at “the cost of existence and reproduction of the worker” [...].”¹⁶⁵⁶

However, “[... u]nlike Marx [...] Durkheim did not perceive the workplace to be rent by conflicts of interests among its constituent parties, since a presumption that conflict is the normal state of affairs in work organizations would seriously compromise the argument that they represent major sources of moral authority in society [...].”¹⁶⁵⁷ Durkheim (1933) assumed organisations, like the family, as “continuous as life,” with no discontinuity of interests, as the basis for social solidarity. However, he also recognised that there still remain differences of interests between owners and employees; so rules are required to govern employees. Furthermore, according to Durkheim (1902-1903 [1961]; 1924 [1953])¹⁶⁵⁸, although “moral imperatives” of people change spatially and temporarily, yet they are ingrained inside human nature and motivate people to do ‘good’ towards each other, knowingly or unknowingly, which he perceives as instances of normal behaviour. However, he cautions that when we ignore them, when our conduct is guided by egotistic self-interest or individual desires and appetites, we easily become disillusioned, frustrated, and, in extreme cases, depressed and despondent even to the point of suicide. Our failure to adhere to genuine moral ideals and values, Durkheim cautions, has grave consequences towards the moral fabric of society. Since moral values, beliefs, and sentiments are realised through the acts of our daily behaviour, they should never be taken for granted.

Thus, it is safe to say that individualism is unsupportable in its unbridled form that the neoclassicists’s argue through NNR. However, it is not totally irrelevant with respect to the communal in the Marxist sense.

2.3.6.1. Methodological Individualism and Rationality

“[...] T]he high specificity of structure and coordination within organizations – as contrasted with the diffuse and variable relations *among* organizations and among unorganized individuals – marks of the individual organization as a sociological unit comparable in significance to the individual organism in biology [...].”¹⁶⁵⁹

Methodological individualism (MI, also known as “singularism”) rejects the idea that a group or an organisation can be treated as an autonomous decision-making unit. It implies that a proper explanation of a social phenomenon is grounded in individual motivations and behaviour. The methodological individualists argue that social sciences should ground their theories in individual action. Weber (1922 [1968])¹⁶⁶⁰ and Schumpeter (1909¹⁶⁶¹) are considered to be its founding fathers; other notable MI scholars are Hayek (1948¹⁶⁶², 1952b¹⁶⁶³) and von Mises (1949)¹⁶⁶⁴. According to

Weber (1922 [1968]), ‘[... i]t is necessary to know what a “king,” an “official,” an “entrepreneur,” a “procurer,” or a “magician” does, that is, what kind of typical action, which justifies classifying an individual in one of these categories, is important and relevant for an analysis, before it is possible to undertake the analysis itself [...]. But it is only this analysis itself which can achieve the sociological understanding of the actions of typically differentiated human (and only human) individuals, and which hence constitutes the specific function of sociology. It is a tremendous misunderstanding to think that an “individualistic” *method* should involve what is in any conceivable sense an individualistic system of *values*. It is as important to avoid this error as the related one which confuses the unavoidable tendency of sociological concepts to assume a rationalistic character with a belief in the predominance of rational motives, or even a positive valuation of rationalism. [...] The real empirical sociological investigation begins with the question: What motives determine and lead the individual members and participants [in communities...] to behave in such a way that the community came into being in the first place and that it continues to exist? [...]’¹⁶⁶⁵ Although Weber acknowledged the importance individual as the unit of analysis in studies concerning rationality, yet contrary to Herbert A. Simon, ‘[... he] often treat[ed ...] groups and organizations – status groups, communities, nation-states, and so on – as if they are stable and unitary actors [... H]e regarded “economic man,” and perhaps even the Kantian subject, as a relatively recent, and specifically Western, historical product [...]’¹⁶⁶⁶ Furthermore, Weber, in stead of accepting the *Homo economicus* as *the* trademark bearer of rationality, espoused a deeper subjectivist understanding of individual human agents whose actions are confronted by complex social phenomena – i.e., an actor is “[...] subjective [individual] but situated human agency [...]”¹⁶⁶⁷

Arrow (1994)¹⁶⁶⁸, Udéhn (2001¹⁶⁶⁹, 2002¹⁶⁷⁰), Hodgson (2007)¹⁶⁷¹, Kincaid (2008)¹⁶⁷², among others, have criticised neoclassical economics’ attempts to analyse collective actions in terms of rational utility maximising *individualised* agents. For example, Arrow (1994) contends that “[... i]t is a touchstone of accepted economics that all explanations must run in terms of the actions and reactions of individuals [...]. However,] social variables, not attached to particular individuals, are essential in studying the economy or any other social system and that, in particular, knowledge and technical information have an irremovably social component, of increasing importance over time.”¹⁶⁷³ Ulrich (1996) argues that the neoclassicists by their assumption about people as utility-maximising self-enclosed selfish agents, do not leave much room for empirical studies.

‘[...] As defined by neoclassical economics and generally accepted as one of its axiomatic presuppositions, methodological individualism is a much more specific concept than the mere idea that all social phenomena are a result of individual actions and therefore have to be explained from them in the last analysis [...]. According to today’s neoclassical economics, methodological individualism means a certain model of human rationality – the so-called “rational-actor model” of a man strictly behaving as a maximizer of his individual self-interest, which is nothing else than the purely calculating rationality of homo oeconomicus. Starting from this axiomatic base, economics is not – or not immediately, at least – an empirical science but the “pure” logic that explains social interaction between individuals who are “mutually disinterested” [...]’¹⁶⁷⁴

In this regards, Kincaid (2008)¹⁶⁷⁵ poses the following questions: “[...] Can a theory of individual economic behaviour capture everything we want to explain about the

economy in principle? To what extent do our accounts of individual economic behaviour trump or constrain other economic explanations that are not directly about individuals? Are non-individual economic entities real, and what is their relation to individual behaviour? [...]” Taking an extreme viewpoint, Hodgson (2007) calls for the abandonment of the term MI altogether, because of its ambiguity vis-à-vis the *actual* human nature.

“[...] attempts to start simply from individuals must actually start from individuals plus institutions [...] However, [...] the explanation of the emergence of institutions can start from some kind of institution-free ensemble of (rational) individuals in which there is supposedly no rule or institution to be explained [is problematic]. Consequently, the project to explain the emergence of institutions on the basis of given individuals runs into difficulties, particularly with regard to the conceptualization of the initial state of nature from which institutions are supposed to emerge (Hodgson, 1998) [...] The broader version, where explanations are supposed to be in terms of individuals and relations between them, turns out to be equivalent to the proposition that explanations of social phenomena should be in terms of both individuals and social structures. There is nothing wrong with this proposition. But why call it methodological individualism, when structures and individuals are given equal status as elements in the explanation? If we wish to criticise notions that adequate explanations should be in terms of structures alone, then we should not adopt a term that connotes the mistaken idea that explanations can or should be in terms of individuals alone [...] At the very minimum, the term ‘methodological individualism’ should not be used as an ill-defined mantra. If it is to be employed, then it must be much more clearly defined, overcoming the ambiguities in past usage. After over fifty years of widespread use of the term, advocates of ‘methodological individualism’ have been remarkably negligent in explaining its meaning. In fact, its usage is riven by deep contradiction and persistent vagueness. Given the deep conceptual problems and confusions surrounding the term, it might best be abandoned.”¹⁶⁷⁶

2.3.7. Contingency and Context Dependency of Behaviour, and Rationality

“[...] In economics, as perhaps in no other science, a lack of awareness of the relativity of time leads to an error of appropriate modeling. While economists need a method to study both past and present *for the sake of future*, it routinely employs a method suited for either the study of the unalterable past [...] or a world in which events are independent of temporal context, as in the normal sciences [...]”¹⁶⁷⁷

“What is success when the possibility of failure continues to constitute its structure?”¹⁶⁷⁸

“[...] *Having a good reason* is not in the ordinary stock sense of ‘mental’ (where ‘mental’ contrasts with ‘physical’ and every human property is either one or the other) a mental event or state at all. It is rather a social status which certain ‘mental’ events or states enjoy in virtue of their owners’ particular place in some particular context.”¹⁶⁷⁹

Actions, even if they are rational, are influenced by their contexts and contingencies; in this sense, they are context-and-contingency dependant. Parsons (1937) argued that a rational actor takes these environmental factors into account before choosing the best course of action. According to him, “[...] Action is rational in so far as it pursues ends possible within the conditions of the situation, and by the means of which, among those available to the actor, are intrinsically best adapted to the end for reasons understandable and verifiable by positive empirical science [...]”¹⁶⁸⁰ Moreover, the *so-called* irrational and/or non-rational activities like coordinated actions are mainly called so because they deviate from rationality axioms in the sense that actors take the environmental factors into consideration. However, they are

inevitable in the real-world, including organisational life, as noted by March (2008); who also has observed that these considerations are important considering the cognitive limitations of people, including the rational actors.

“[...] Organizations are systems of coordinated action among individuals and groups whose preferences, information, interests, or knowledge differ. Organizational theories describe the delicate conversion of conflict into cooperation, the mobilization of resources, and the coordination of effort that facilitate the joint survival of an organization and its members [...] Effective control over organizational processes is limited, however, by the uncertainties and ambiguities of life, by the limited cognitive and affective capabilities of human actors, by complexities of balancing trade-offs across time and space and by threats of competition.”¹⁶⁸¹

Interestingly, similar to the assumptions in psychoanalytic rationality, Scott (2008) argues that subjective perception of these environmental factors must be taken into account while explaining a behaviour.

“[...] To understand or explain any action, the analyst must take into account not only the objective conditions [including the environmental factors], but the actor’s subjective interpretation of them [...]”¹⁶⁸²

2.3.8. Knowledge Limitations and Rationality

“One is led to reflect that in economics, as elsewhere, any original improvement in our knowledge of reality is only made possible by withdrawing from it. Under the immediate pressure of reality, in its particular or everyday aspects, we cannot hope to escape from the tyranny of the conventional categories through which we view it. To see the problems in the obvious and to find the familiar strange is an indispensable, if unnatural, step to take.”¹⁶⁸³

“[...] T]he uncertainties about economics are rooted in our need for a better understanding of the economics of uncertainty; our lack of economic knowledge is, in good part, our difficulty in modelling the ignorance of the economic agent.”¹⁶⁸⁴

“[...] O]ur knowledge is imperfect [...] that it is fragmented and that it is uncertain. [...]”¹⁶⁸⁵ In this context, contemplating on the means and ends issues that economics tries to solve, Richardson (1998) opines that the theoretical problem of estimations and allocations of resources is *less* physical and *more* epistemological in nature. In order to substantiate his point, he reasons that “[...] t]he economic problem is concerned with the adaptation of means to ends [...] The practical problem which our theoretical system would most closely represent would be that facing a single mind to which all the relevant knowledge regarding means and ends were known with certainty and as a whole; that which confronts us is entirely different. Knowledge, in the world as we know it, is neither centralized nor certain, but is dispersed, frequently in the form of subjective and conflicting estimates, among many minds. In consequence, the actual economic problem is more fundamental and more complex than the theoretical problems of formal [...] economics; its essence is not the allocation of ‘given’ resources among ‘given’ ends, but the integration and improvement of our knowledge regarding them; it is concerned, in other words, to ensure that the fullest use will be made of the relevant knowledge which is dispersed among many minds and that the estimates according to which allocative decisions are taken will tend in the long run to the best available.”¹⁶⁸⁶ Thus, one of the assumptions by the neoclassicists that people have the perfect knowledge is refuted by arguments

that hold knowledge as dispersed in the real-world. In this context, Shane (2000) discusses that opportunities that only entrepreneurs are able to spot and not others, provides further support that behaviour is constrained by cognitive limitations and environmental factors; i.e., '[... n]eoclassical economics' assumption of public knowledge about opportunities means that all opportunities must be equally "obvious" to everyone. Because any given entrepreneur can discover the complete set of opportunities that occur in response to a given technological change, neoclassical economics argues that entrepreneurs select between different opportunities through a process of maximization (Khilstrom and Laffont 1979, Evans and Jovanovic 1989). However, Kirzner (1973, p. 33) explains that once the assumption of complete information is relaxed, the discovery of opportunity cannot be understood through "mechanical computation" because any given individual cannot identify all possible opportunities. If any given entrepreneur cannot necessarily discover more than one commercial application for any given technological change, then entrepreneurs cannot actively select (let alone maximize) between alternative opportunities (Kirzner 1985).¹⁶⁸⁷ In other words, the assumption that everything is common knowledge and thus every agent has perfect knowledge about society, including the market, on the basis of which s/he decides, falls short to account for some real-world happenings like only "true" entrepreneurs discover opportunities and exploit them while others do not. Here it is relevant to cite Castro (1996), according to whom, "[...] what anyone of us can truly know is limited, distorted by self-interest and social convention, and constrained by our awareness of the difficulties which would likely follow from an effort to convince others of the value of new understandings we might come to. Nevertheless, [scholars ...] believe that at least some of us, whatever our own defenses of those with whom we could communicate, are obliged to acknowledge our ignorance, and to struggle, however incompletely, for greater understanding."¹⁶⁸⁸

Moving forward from imperfect knowledge to how knowledge is formed, Parsons (1968a)¹⁶⁸⁹ argued that all knowledge is conceptually formed and that all observations is conceptual schemes – whether they are implicit or explicit – which is true not only as regards sophisticated scientific observations but of the simplest commonsense statements of facts. This has bearings on Hayek's (1937) lines of reasoning, who, while discoursing the credibility of the findings in empirical studies, is not enthusiastic that formal economic analyses could be able to generate much knowledge about the real-world goes on.

"[...] While addressing] the question to what extent formal economic analysis conveys any knowledge about what happens in the real world [...] the empirical element in economic theory – the only part which is concerned, not merely with implications but with causes and effects, and which leads therefore to conclusions which, at any rate in principle, are capable of verification [...] – consists of propositions about the acquisition of knowledge [... Moreover, by] stressing the nature of the empirical propositions of which we must make use [...] to explain] the real world [...] we should become clear about what the questions of fact are on which the applicability of our argument to the real world depends, or, [...] at what point our argument, when it is applied to phenomena of the real world, becomes subject to verification [... The past economists had] so mixed up [...] the *a priori* and the empirical [propositions], of which every realistic economist makes constant use, that it is frequently quite impossible to see what sort of validity they claimed for a particular statement. More recent work has been freer from this fault – but only at a price of leaving more and more obscure what sort of relevance their arguments had to the phenomena of the real world [...]"¹⁶⁹⁰

Notwithstanding, even if we would argue that we can understand the real-world by interpreting empirical data, then also we face another roadblock, i.e., according to Heidegger (1962)¹⁶⁹¹, interpretation and understanding, which are two vital components of knowledge, are never the same.

There is a close association between rational actions and having action-relevant knowledge. In this context, Hebermas (1984) opines, “[... t]he close relation between knowledge and rationality suggests that the rationality of an expression depends on the reliability of the knowledge embodied in it [...]”¹⁶⁹² However, he argues that behaviour cannot be termed rational on the basis of self knowledge because such knowledge are fallible, hence suggests that rational actions must undergo objective verifications. To be objective, according to him, a judgement must be based on a validity claim “[...] that has the same meaning for observers and non-participants as it has to the acting subject himself [...]”¹⁶⁹³ Here, the neoclassicists may argue that their criteria of rationality can effectively be defended against criticisms because the NNR ascribes rationality to an action based on some standard assumptions and axioms. Here lies the profundity of Hebermas’s (1984) arguments who is aware of the difficulties involved in such arguments; that is, “[... w]ho is [...] to judge what is ‘better’ in the defence against criticism [...]”¹⁶⁹⁴ Importantly, he goes on to say that to be rational is not only to be knowledgeable but also to be aware that there is also more knowledge in the real-world.

‘When we use the expression “rational” we suppose that there is a close relation between rationality and knowledge. Our knowledge has a propositional structure; beliefs can be represented in the form of statements. I shall presuppose this concept of knowledge without further clarification, for rationality has less to do with the possession of knowledge than with how speaking and acting subjects *acquire and use knowledge*. In linguistic utterance knowledge is expressed explicitly; in goal-directed actions an ability, an implicit knowledge is expressed; this know-how can in principle also be transformed into a know-that [...]”¹⁶⁹⁵

In regards to the type of knowledge that neoclassical economics generates, Bevir (2008) has rendered some illuminating thoughts. According to Bevir (2008), the neoclassicists, both from ontological and epistemological points of view, deals with rationality by using deductive approach that leads to the formation of deductive knowledge about it, i.e., knowledge that is/are obtained by reasoning from general principles to the specific ones and hence the arguments from such knowledge follows *a priori* from the inherent nature of the concepts involved. According to him, “[...] Rational choice extends modes of knowing linked to neoclassical economics [...] Let us begin by considering epistemology. Rational choice is rightly described as a deductive approach: it derives models as deductions from axioms (Elster 1986; Monroe, 1991). Yet, epistemology has as much to do with the nature and justification of valid knowledge as the procedures by which models or explanations are constructed. We should consider, therefore, how rational choice theorists justify their axioms and how they justify applying a model to any particular case. The axioms are usually justified empirically by the claim that they, or usually the models to which they give rise, correspond to facts about the world. Similarly, the application of models to explain particular cases depends on empirical claims about the beliefs and preferences of the actors standing in relation to one another as the models suggest [...] Next consider ontology. The axioms of rational choice are micro-level assumptions about individual action. Rational choice theorists often believe that these

assumptions account not only for individual action but also for the institutions that arise out of these actions. Their micro theory invokes beliefs and preferences in a way that suggests they have no qualms about ascribing existence to unobservable objects. Yet their emphasis on the micro-level often implies that they do not want to ascribe an independent existence or causal properties to objects such as institutions and structures [...] Rational choice champions deductive models [...] Rational choice too rejects historical narratives in favour of formal explanations that straddle time and space.”^{1696,1697} Nevertheless, knowledge through inductive approach is *also* important for furthering the scope of economics as a social science because as we have discussed, the real-world does not consist of representative agents, but heterogeneous ones as regards their cognitive capacity and knowledge. Thus, in behavioural study programmes, agent and situation specific observations can on the one hand provide legitimacy to the existing theories by expanding their scope and on the other hand they could also uncover enriching and insightful new perspectives of human nature. Even if knowledge out of inductive reasoning lacks the rigour and apparent logical structure in comparison to deductive reasoning, yet Johnson (1996) views that “[... w]e may deduce a prediction from a body of scientific theory, but in practice there are competing theories each with often contradictory predictions. The experimental phase then become a process of sorting out the data (i.e., the statistical results) and answering the question of which theory *best explains* the data and why [needing inductive reasoning]. New data may very well change our notion of which theory is the best explanation.”¹⁶⁹⁸ Furthermore, in stead of depending on disciplines in natural sciences, especially physics, economics also can be immensely benefited from non-normative disciplines in social sciences, she argues.

“[...] If economists need a big brother to admire, it should probably not be the physicist. Economists are more like geologists or paleontologists, telling stories of the Pacific plate or the panda’s thumb. There is no prediction, no experiment. There is just mucking about in libraries and computing centers, thinking the stories through and checking to see if they square with historical facts laid up in archives. If economists need a big brother, he could come from these historical sciences, or from history itself.”¹⁶⁹⁹

However, pursuing objective knowledge in social sciences, as Max Weber has noted, is not an easy undertaking.

“[...] There is not absolutely ‘objective scientific analysis of ‘social phenomenon’ [...]; without the researcher’s *value based ideas*, there is no principle informing the selection of subject-matter and no meaningful knowledge. [...] In this respect, scientific findings in the field of culture *depend* on ‘subjective’ preconditions. [...]”¹⁷⁰⁰

2.3.9. Deontology and Rationality

“One thing, however, might as well be said now: if political economy does not seriously face up to the ethical a priori of the politico-economic communication community, it will hardly be able to contribute to the solution of what, in the 21st century, will be the key problem as regards political order: the epochal challenge of integrating the obstinate systemic dynamism of our economic activities into the overall context of the practical daily life lived by a democratic society of critical citizens – and this means: to embed market economy into ethically rational politics on a national as well as an international, global level.”¹⁷⁰¹

In his seminal work *On Ethics and Economics*, Sen (1987) argues that economics *ought* to be a moral science – an (economic) agent should not only be rational but also

moral. Moreover, as economics is concerned with human activities, going by Sen (1987), it should also broaden our understanding as regards morally ‘right’ actions. In this context, Hursthouse (2006) contends that “[...] when we want to understand the concept of right action, the concept of virtuous agent and thereby the virtues, should be our [...] focus.”¹⁷⁰² Thus, role of virtues is crucial in rational acts. In this regards, Von Wright (1963)¹⁷⁰³, Wallace (1978)¹⁷⁰⁴, Foot (1978)¹⁷⁰⁵, Taylor (1996¹⁷⁰⁶, 2006¹⁷⁰⁷), among others, have postulated “self-regarding virtues” and “other-regarding virtues.” When an agent’s actions are influenced by the latter, s/he is concerned about how her/his actions would benefit others; whereas the neoclassicists’ agent acts on the basis of the former taking her/his needs into consideration in decision-making.

“The vices [...] are the opposites of the virtues. This does not imply that every vice can be neatly paired off with a virtue. But it does imply that where virtues are thought to be beneficial, vices are harmful; while virtues are thought to contribute to human good and to be needed in human life, vices on the contrary are corruptive of such good and are an obstacle to human flourishing [...]. Both may [...] be classified according to who precisely benefits or is harmed by the exercise of a particular virtue or vice, whether or not its exercise requires a certain type of motivation, or what sorts of unfortunate human inclination they respectively counterbalance or encourage. So we may for instance identify a class of ‘social virtues’ necessary for the smooth running of society; a class of ‘other-regarding virtues’ the exercise of which is intended to benefit particular persons other than the agent herself, and where each exercise has to be motivated by concern for that other in order to count as an instance of a relevant virtue; and a class of what are sometimes labelled ‘self-regarding virtues’, which do not require such motivation and which, while they may or may not benefit others, are thought to profit primarily the agent herself [...]. The vices may be grouped similarly: some may be undermining of a harmonious life in society, some may harm individuals other than the person acting viciously, and some may be destructive mainly of that person herself.”¹⁷⁰⁸

Notwithstanding virtues or vices, the “rightness” and/or “appropriateness” of rational acts in the neoclassical paradigm is based on utilitarian ethics, based on consequences of actions,¹⁷⁰⁹ wherein ends justify the ethicality behind an action.¹⁷¹⁰ As Harrison (1971) notes:

“The rational moral rules for men to adopt, then – rational in the sense of being the right means to man’s ends – are those rules about what actions are or are not to be done which is necessary that mankind should have for their own welfare and preservation. If mankind does not have rules and at the very least approximate roughly to this standard, he will certainly perish, and the farther away from this standard his moral rules are, the more miserable and unsatisfactory his life will be. In more technical language, the only rational set of moral rules for men is broadly utilitarian one, and any departure from a roughly utilitarian standard must be due to mistakes about matters of fact, or prejudices in favour of thinking that certain moral rules which have been handed down by tradition are part of the nature of things. The least that can be said for a policy of saying that these actions are not to be done which are contrary to the general interest is that, so long as it is based upon adequate knowledge of matters of fact, it, by definition, cannot possibly do any harm!”¹⁷¹¹

If the outcome of an action provide the greatest ‘goods’ to the greatest numbers of people, then it is invariably good, which is known as the “interest-neutral” or “collective-interest” oriented utilitarianism, the philosophy behind welfare economics.¹⁷¹² However, as we have already discussed, utilitarianism as a concept has been criticised by even mainstream economists like Amartya Sen. In regards to its role in supporting economics as a moral, social science, utilitarianism has also been debated by classical economists like Schumpeter (1954), according to whom, “[...]”

t]he essential point to grasp is that utilitarianism [... is] nothing but another natural-law system [...] The programme of deriving, by the light of reason, ‘laws’ about man in society form a very stable and highly simplified human nature [...]”¹⁷¹³

Furthermore, Ulrich (1996) argues that the utilitarian ethics fall short of realistically addressing issues involving the “rights” and the “wrongs” in the face of conflicting interests that are common in the real-world. According to him, “[... a]s regards utilitarianism, it has [...] become indisputable that it cannot provide any adequate solutions to the problems it neglected from the start: the problem of conflicting interests, i.e. of a just balance of interests [...] Owing to the subliminally maintained communistic fiction of a definable social maximum, utilitarian calculus mutually sets off individual costs and benefits, so what matters is not their interpersonal distribution, but only the maximization of the (fictitious) common weal. This is why utilitarianism – even in its more refined form of Pareto optimality – is incompatible with liberal ideas of inviolable individual liberty and equality of opportunity which are appropriate to a modern liberal and democratic society.”¹⁷¹⁴ Furthermore he adds, “[... a]ccording to today’s neoclassical economics, methodological individualism means a certain *model of human rationality* – the so-called “rational-actor model” of a man strictly behaving as a maximizer of his individual self-interest, which is nothing else than the purely calculating rationality of *homo oeconomicus*. Starting from this axiomatic base, economics is not [...] an empirical science but the “pure” logic that explains social interaction between individuals who are “*mutually disinterested*” [...]. Therefore neoclassical economics is methodologically closed against “the moral dimension” (Etzioni 1988) of human action, whereas for the classics, especially for Adam Smith (1979), “moral sentiments” as an integral part of a comprehensive explanation of social reality as well as of political economy.”¹⁷¹⁵

As regards how to ensure that agents pursue ethical and moral actions in an utilitarian set-up, Adam Smith has taken a systemic approach and proposed for judicial frameworks as the (ultimate) guarantor of economic fair-play and hence ethics. In this regards, he opined that “[...] “exact administration of justice [...] as far as possible has to protect every member of the society from the injustice or oppression of every other member of it” [...]”¹⁷¹⁶ Moreover, he also contended that “[... j]ustice [...] is the main pillar that upholds the whole [socio-economic] edifice. If it is removed, the great, the immense fabric of human society [...] must in a moment crumble into atoms [...]”¹⁷¹⁷ His emphasis on justice to safeguard human welfare demonstrates that Smith was aware of the possibilities that fair-play and ethics in economic transactions may be sidestepped by the narrow utility maximising and self-interest oriented (rational) agents, which may be due to conflicting interests between them; that economics as a discipline may ignore the study of moral actions and instead get overly fixated on modelling simplified versions of human behaviour by considering people as utility maximising hedonists; and, hence had suggested for a justice framework in the economic system that can curb unethical practices. However, we should not forget that even the systems are created by individuals, including self-interested ones. In this regards, it is relevant to refer Bohnen (1964)¹⁷¹⁸, according to whom, the neoclassicists’ subscription of interest-neutral utilitarian ethics (i.e., most happiness for most people who are affected by an action) can be yet another eyewash to continue with their version of the “rational man” and thereby

persisting with their assumption that utilitarian calculus as a matter of fact leads to ethical actions.

Furthermore, observing that “[... d]uring much of modern moral philosophy the predominant systematic theory has been some form of utilitarianism [...],”¹⁷¹⁹ Rawls (1971) argues that many of its implications are opposing to our moral convictions and sentiments; as a result, according to him, is that “[...] we often seem forced to choose between utilitarianism and intuitionism [... and in the process we are likely to] settle upon a variant of the utility principle circumscribed and restricted in certain ad hoc ways by intuitionistic constraints [... which] is not irrational; and there is no assurance that we can do better. But this is no reason not to try [... and suggests] to generalize and carry to a higher order of abstraction the traditional theory of the social contract as represented by Locke, Rousseau, and Kant. [... According to Rawls,] among all the traditional theories of justice, the contract theory is the one “which best approximates our considered judgments of justice[, by which he aims to ...] offer an alternative systematic account of justice that is superior [...] to the dominant [... utilitarian school of thought].”¹⁷²⁰ Thus, like Adam Smith, Rawls also has taken a systemic approach to guarantee ethical action in society by proposing legally binding contacts.

However, systems can merely be used in a mechanical sense, discounting and/or ignoring the environmental contexts and contingencies. This is what neoclassicists do in their modelling efforts, treating people as *mainly* mono-utility oriented hedonists whose only goal is to maximise their self-welfare oriented self-benefit maximisation and ethics as *mere* externalities. Importantly, *the* feeling and/or affective aspects of action hardly find any mentioning in their models because they, as we have already discussed, are treated as irrational traits. However, feelings are key constituents of intentions that are behind actions and; moreover, they, as Etzioni (1988) has point out, are not irrational per se when used as *strategic* means to serve an agent’s ‘situatedness’ in the real-world, safeguarding her/his long-term goals/ends.

[...] The goals people pursue, such as happiness or wealth, are not universal, or stable over time, but are greatly varied and changing, and often cannot be arranged into neat overarching mono-utility – in part, because people are members of divergent social collectivities that conflict with one another; in part, because to some extent, individuals do develop their own goals that conflict with those of their collectivities. Hence one cannot simply dismiss normative-affective factors [comprising of attributes arising out of what people acquire from their communities and surroundings, and their inner moral and emotive developments that make them to behave while they pursue their goals] which arises as either reflected in “the utility” (or in preferences) or as captured by constraints, the way neoclassicists tend to do, but must seeks to understand the dynamics of the forces that determine a person’s socialization, as well as his or her deviation or rebellion against a socially prescribed set of goals. [...] Most important for the study of choice is the notion that means, selected to realize goals, are often chosen partially or even solely on normative-affective grounds, and not only on the bases of logical/empirical considerations [...]. Normative-affective factors also interrupt reasoning, distort cognitive frameworks, and cut short the search for the best means. At the same time, [they ...] also serve to render some decisions more effective [...]. And they ensure that other decisions will be not merely efficient but also caring, fair, and will otherwise serve goals that transcend self-interest. Thus, normative-affective factors are not inherently “bad,” as they set aside, correct, or balance logical-empirical considerations.¹⁷²¹

Furthermore, policing people by building systems may fall short of achieving the desired goal of encouraging ethical actions; because people's needs and interests are not stable spatiotemporally, which, moreover, can lead to conflict of interests, resulting in cutting corners as regards morality. For example, some 'powerful' echelons in society and/or organisations can exploit it to further their own pursuits of utility maximising hedonism.

“Human goals are many, not all of them commensurable, and in perpetual rivalry with one another. To assume that all values can be graded on a single scale, so that it is a mere matter of inspection to determine the highest, seems to me to falsify our knowledge that men are free agents, to represent moral decision as an operation which a slide rule could, in principle, perform ... the system builders ... deprive men, in the name of some remote, or incoherent, ideal, of much that they have found to be indispensable to their life as unpredictably self-transforming human beings.”¹⁷²²

The abovementioned arguments are not just speculations considering the fact that, as Sen (1987) has remarked, the nature of economics “[...] has been substantially impoverished by the distance that has grown between economics and ethics. [...]”¹⁷²³ Arguing in a similar vein, but in a normative tone, Hirschman (1996) is under the impression that the self-interest model of man has lived its time and we must seriously look into the ethical standards of the past and incorporate them into our study programmes on human behaviour; “[...] since human behavior, allegedly guided by self-interest, had not yet had clearly disastrous effect, it was tempting to conclude: (a) that such norms, in effect, have been adhered to tacitly; (b) that they must somehow predate the market society in which self-interest alone rules; and (c) that the survival of such norms is now threatened. In the circumstances, the idea that capitalism lived on time (and morals) borrowed from earlier ages surfaced naturally enough once again.”¹⁷²⁴ Ulrich (1996) contends that ethical issues are ill-analysed as undertaken from the utilitarian perspective because the ends do not always justify the means. Moreover, he contends that there are important *intrinsic* aspects in (rational) actions in addition to instrumental ones as regards ethics, which may not be adequately addressed following a functionalist approach. According to him,

‘Utilitarian ethics cannot supply an adequate idea of ethical rationality because it embodies a purely *teleological* code of ethics, i.e. it defines the value of an action or of an institutional rule exclusively from the point of view of their consequences, or more precisely, from the point of view of their benefits with respect to what is good in ethical terms (which is certainly an important factor of ethics). Basically, this represents a version of purposive rationality in the sense of Max Weber’s *Zweckrationalität*. In my [Ulrich’s] view, ethics may not be argued from the purely functional point of view of its usefulness – which would be a reduction of morality to interest. Rather, ethics deals essentially with normative demands made on us, which are valid because of their intrinsic human value and because of our reflection on this (*deontological* ethics). [...] Many actions in order to be justified need Kantian deontological perspective, which is ... a]bove and beyond any calculation of individual utility in the sense of “rational self-interest”, [...] focuses on a rational insight into the intrinsic human value[s] ...’¹⁷²⁵

Going by the arguments by mainstream economists like Sen, Hirschman, among others, and business ethics scholars like Ulrich, it is more or less certain that economics should do more towards the study of ethics. In this context, Alexander (2008) notes: “A common reaction to the problems of utilitarianism and its consequentialist structure is to propose a deontological ethics as an alternative perspective [...]”¹⁷²⁶

It is oftentimes very difficult, if not impossible, to predict the outcome of an action in the real-world, notes Etzioni (1988), and hence utilitarian ethics is fallible in analysing many actions that are context and contingency dependent; this, according to him, could be overcome by employing deontology.

“[...] Deontology uses as the criterion for judging the morality of an act, not the ends it aspires to achieve, nor the consequences, but the moral duty it discharges or disregards. Deontologists point out that consequences, the hallmark of utilitarians, often cannot be predicted. Hence, treat others as you seek to be treated – as an end, and not as a means. It is a judgement one must make long before the consequences of one’s act are known. Deontologists are also fond of pointing out that utilitarians would regard two acts that yield the same outcome as equivalent, even if one of them involved a transgression (say, deception), and the other did not. Clearly, we say, the act without deception is superior. [...]”¹⁷²⁷

In the recent past, deontological ethics or deontology – in which, contrary to ends, means justify the ethicality of an action – a major school of thought in ethics – has been widely referred to while debating the ethicality of a rational action.

“The essence of the deontological position is the notion that actions are *morally right when they conform to a relevant principle or duty*. (The term deontology is derived from the Greek *deon* which means binding duty.) Deontology stresses that the moral status of an act should not be judged by its consequences, the way utilitarians do, but by the “intention.” [...]”¹⁷²⁸

Immanuel Kant’s *Theory of Ethics* is considered to be one of the important foundations of deontology, in which he has argued that to act in a morally right way, people *must* act from the perspective of duty or *deon* and, importantly, the consequences of actions do not make them right or wrong but the motives behind them.¹⁷²⁹

“[...] As per the deontologists] a major source of conflict in the self is commitment to discharge one’s duties, and, more generally, to act morally. There is more to life than a quest to maximize one’s satisfaction [i.e., utility].”¹⁷³⁰

Actions based on deontology are “duty-obligation-rule bound”¹⁷³¹ and underscore the fact that actions are to be judged by the *intentions* of actors – i.e., intent with which an action is conceived, initiated and executed. Intentions behind an action is important in the sense that human beings are bestowed with the capability to reason; so before acting, it is *normal* that they reason, both unconsciously (like Freud has argued) as well as consciously; and this process of reasoning is a part of the intentions of an agent that goes into action. However, it is hard to accept that people reason by only taking into consideration their own well-being, as assumed in the case of NNR.

There are also interesting empirical results with respect to deontology in the context of organisational behaviour. Hawkins and Cocanougher (1972)¹⁷³², Goodman and Crawford (1974)¹⁷³³, Hollon and Ulrich (1979)¹⁷³⁴, Arlow and Ulrich (1980)¹⁷³⁵, Stevens (1984)¹⁷³⁶, Kraft and Singhapakdi (1991)¹⁷³⁷, Dabholkar and Kellaris (1992)¹⁷³⁸, Harris and Sutton (1995)¹⁷³⁹, Angelidis (1999)¹⁷⁴⁰, Wimalasiri (2001)¹⁷⁴¹, Ritter (2006)¹⁷⁴², among others, find that business professionals are more tolerant to unethical business practices than management students. This difference in judging, as Hunt and Vitell (1986¹⁷⁴³, 2006¹⁷⁴⁴) have suggested, are due to variations in perception

between professionals and students as regards real-world actualities. Ulrich and Thielemann (1993)¹⁷⁴⁵ find, from their empirical studies in Switzerland, that, contrary to widely held beliefs, a majority of managers are not ethical opportunists. However, Castro (1996) says that ethical analysis of these behaviours cannot be totally successful and may even be dysfunctional in different organisational contexts because, among other things, “[...] most managers have reason to believe that they cannot, in important sense, ought not, inquire very deeply into whether or not they should do what they normally do [....]”¹⁷⁴⁶ The reasons behind this could be “trained incapacity,” “managerial one dimensionality,” and similar factors. In this regards, Kanter (1977)¹⁷⁴⁷ suggests that corporate blind spots are acquired through a mostly unconscious process of adaptation, which she calls “homosocial reproduction.” Braverman (1974)¹⁷⁴⁸ and Levitan and Johnson (1983)¹⁷⁴⁹, in a tradition that goes back to Marx and Engels, argue that what appears to be narrow one-dimensionality or the displacement of substance with (managerial) process is centrally a means of “co-opting blue-collar people.” Ellul (1954)¹⁷⁵⁰ and Scott and Hart (1973)¹⁷⁵¹ are under the impression that unethical practices *are* due to the abandonment of spiritual and moral values under the duress of the mechanisation of society. Arendt (1964)¹⁷⁵² calls these abandonment as the “banality of evil;” importantly, Arendt (1979)¹⁷⁵³ argues that such banality will inevitably be widespread in a world where *most* people are focused on doing rather than thinking. Maccoby (1976)¹⁷⁵⁴ and Jackall (1988)¹⁷⁵⁵ discuss the pretence of technical expertise and the effect of superficial optimism required to play the “managerial game” as main barriers to leading principled life. Jackall (1988), Munro (1998)¹⁷⁵⁶, Weaver *et al.*(1999)¹⁷⁵⁷, among others, argue work pressures (e.g., very long work-hours) and regular occurrences of crises can lead to the occurrences of unethical practices. Thus, even if deontological analysis of an action is a holistic way of analysing human behaviour, yet all the aforementioned opinions and findings suggest that it is a tough task ahead.

However, deontology also has its critiques too. Deontological ethics consider morality as independent of desires and consequences and demand unconditional performance of an action for its own sake, based on the categorical imperatives, or the universal laws (e.g., telling the truth is good); as Kant believed that by using reason one could determine whether a rule or principle was categorical or not and as all human beings are rational, having the capability to reason, so the same categorical imperatives will hold for everyone – Kantian absolutism. However, such rigid definitions of ethical acts, as if they are some commandments from the scriptures, have limited application in the real-world. For example, Alexander (2008) argues that the do’s and don’ts list of the deontological ethics in their rigid forms is hard to comply with in the real-world.

“[...] However, pure deontology is as little defensible as utilitarian consequentialism. Often, both in personal life as well as in public affairs, people have to make ‘hard choices’ between conflicting values. There is no single established hierarchy of norms which could be applied to all consuming situations. Also, in the real world not everybody complies with the highest norms of morality [....]”¹⁷⁵⁸

Rawls (1971)¹⁷⁵⁹ proposes “contractualism”, as an alternative to deontology,¹⁷⁶⁰ whereby morally wrong acts can be discouraged and/or forbidden by creating suitable contractual agreements between transacting parties who should comply with some guidelines and principles therein. McCain (1991b)¹⁷⁶¹ postulates a *relativistic* conception of rationality that, he claims, is consistent both with a wider range of

moral values and with limited human cognitive capacity. Ulrich (2008)¹⁷⁶² postulates the “integrative economic ethics,” by which he means that the social norms that have become subordinated to the market laws, are needed to be analysed within economics and then reflected upon in the light of ethical reason. Furthermore, One of the main difficulties with deontology is that it does not take into consideration outcome of an action as an important factor in evaluating the moral appeal of an action. There is no denying that one should solely rely on outcome (as in utilitarianism), it is problematic to ignore the outcome altogether. For instance, Sen (2009)¹⁷⁶³, favouring consequentialism, however not in the neoclassicists’ sense nor like the utilitarianism in its narrower version – ‘[...] a consequence is more than just the aftermath [of an action or event [...]’¹⁷⁶⁴ – a proposes a ‘broad consequentialist approach’ by which he implies that actions be judged not only on the basis of welfare, but also on conformity as regards their intrinsic qualities, rules and laws, norms and values, and, importantly, human *capabilities* that led to them. Although he does not outright reject deontology, but he opines that it can pragmatically be fused together with consequentialism.

“[...] C]onsequence-based arguments are often seen as being concerned with outcomes (and in some cases interpreted to be concerned *only* with outcomes) [...] The outcome is meant to be the state of affairs that result from whatever decision variable we are concerned with, such as action or rule or disposition. Even though the possibility of describing any state of affairs ‘in its entirety’ is not credible (we can always add some more detail, if necessary by using a magnifying glass aimed at events and actions), the basic idea of a state of affairs can be informationally rich, and take note of all the features that we see as important [...] In my [Sen’s] earlier work decision theory and rational choice, I have argued for the importance of paying particular attention to ‘comprehensive outcomes’ that include actions undertaken, agencies involved, processes used, etc. *along with* the simple outcomes seen in a way that is detached from processes, agencies and relations – what I have been calling ‘culmination outcomes’ [...] This distinction can be central to certain problems in economics, politics, sociology, and in the general theory of rational decisions and games [...] As it happens, the distinction is also crucial in assessing the reach of consequence-based reasoning, since a consequence is more than just the aftermath [of an action or event]. The appraisal of comprehensive outcomes can be an integral part of the assessment of state of affairs, and can thus a crucial building block in consequential evaluation [...] In such an analytical methodology t]here is nothing to prevent a general deontological approach from taking considerable note of consequences, even if the approach begins with the importance of independently identified duties [...] While consequences – even culmination outcomes – are taken seriously among other concerns, there is no defense [... in Sen’s broad consequentialist approach] of the standard version of consequentialism as it emerged from two centuries of work led by the utilitarian school [...]”¹⁷⁶⁵

However, Sen’s (2009) conceptualisation of an ethical paradigm based on consequentialism is another way of advocating deontology if we consider the fact that he also emphasises on rule-and-law bound actions.

Even if consequences are important in judging an action and the ‘Kantian categorical imperatives’ are untenable in the real-world, the deontological ethics is important in judging the morality-side of an action; this is because our action is a product of both our behaviour *as well as* intentions. And to be a human is to have ‘humanly’ intentions. In this regards, reflecting on the fact that human beings are higher order species in the animal kingdom, Etzioni (1988) poses the following questions: ‘[...] The debate over whether or not it is productive to assume one overarching utility is a debate over what motivates behavior. It is all explainable by one basic motive (or a “mono utility”), pleasure or self-satisfaction, or are people torn

between conflicting forces, especially their pleasures [for self] and their duties [towards others]? Are we basically, but another species in the animal kingdom, or have we a nobler self, in continuous struggle with our baser part?"¹⁷⁶⁶ Echoing similarly, Chisholm (2001) thinks that human being is more than just the neoclassicists' rational 'creature,' because it has been bestowed with both consciousness and reasoning capability.

"Contingent substances that are living are superior in intrinsic value to those that are not ... Living substances that are capable of consciousness are superior in intrinsic value to those that are not ... Living substances that are rational are superior in intrinsic value to those that are not."¹⁷⁶⁷

In this context, Castro (1996) opines that "[... t]he Socratic tradition suggests that ethics be pursued through an insistence on confronting both personal and institutionally mediated defenses against recognizing what would otherwise be clearly visible. [...]"¹⁷⁶⁸

"We are not arguing about just any old question. Our question is: *How should life be lived?*"¹⁷⁶⁹

Deontology, along with its rigid categories about what is 'good' and what is 'bad', atleast holds some of the answers to the problem of how to encourage *the* ethics in action.

2.4. A Summary of Our Discussion until Now

"[...] What can be said at all can be said clearly; and whereof one cannot speak thereof one must be silent [...]"¹⁷⁷⁰

In order to ascertain what it is to be rational, we undertook a critique on rationality. We started with some insights from some of the founders of modern social sciences as regards accounting as a means by which decision-makers rationalise their action. Hence we argued that accounting objects have *rationalising qualities*. Then, we critiqued the NNR version of rationality from a socio-psycho-economic (SPE) perspective. We did this because: first, the neoclassical paradigm is the dominant school of thought in social sciences at present and, second, the SPE perspective is relevant in the context of EM which is an economic activity, undertaken by people having affective and cognitive traits, and organisations to which these people belong are parts of society.

It is said that economics is the dominant discipline in accounting. Economics, mainly the neoclassical economics, is considered as a mathematical social science. Speaking from the viewpoint of economics, a rational agent is calculative, i.e., while acting s/he tries to maximise her/his utility . However, Sen (1985a) thinks that decision-making involves two aspects: wellbeing and agency; the former is concerned with an agent's self-interest and the latter consists of the higher order human traits (e.g., benevolence). The neoclassical economics heavily undermines the agency and as a result, human behaviour is modelled *as if* people are utility maximising hedonists; who, Sen (1977e) argues, are akin to "rational fools" or social morons, because hedonism is *only* one aspect of the human nature. The neoclassicists contend that preference ranking is one of the means that rational agents use to calculate utility.

However, in stead of preference, Sen (1994) argues that most of our behaviour are “menu dependent,” i.e., a person chooses on the basis of a ‘menu’ of criteria rather than one criterion; by which an agent takes into account not only the actual outcome but also anticipated outcomes including wellbeing of others.

The Rational Choice Theory (RCT), also known as social exchange theory, is the major theoretical underpinning of the NNR; which is based on the premise that an agent reasons her/his behaviour on the basis of cost-benefit estimations in order to maximise her/his utilities; which, Becker and Murphy (1988) contends, involves consistency in preferences and choices. Moreover, a rational choice, as Savage (1954) has argued, involves guesswork concerning: future consequences of current actions and future preferences arising out of them. According to Simon (1955, 1957), they are problematic because they ignore/discount cognitive limitations and biases, and contextual factors. Furthermore, it is argued that Samuelson’s (1947) Revealed Preference Theory (RPT) is an attempt to make decision-making more objective. RPT’s main assumption is that individuals *do* reveal their ‘real’ preferences through their actual choices that maximise their utilities. However, Robertson (1952), Sen (1973, 1977), among others, criticise the RPT because it involves guesswork while inferring preferences from actual choices which they argue can also be different. In other words, in many cases people do not adhere to the NNR. An example here is “preference reversal.”

Behaviour based on self-interest is a major theoretical assumption in neoclassical economics. That people are selfish, a concept pioneered by Edgeworth (1881), is extensively used in various behavioural models. This is erroneously attributed to Adam Smith’s butcher-brewer-baker illustration that often is quoted outside of its context. In this regards, Sen (1986b) argues that the *Smithian prudence* is based on self-interest governed by self-command. Furthermore, mainstream economists like Sen are of the view that self-interest is multifaceted. In this context, while discussing the role of self-interest in preferences and choices, Sen (1985, 1995, 2002) classifies *four* components of private behaviour: self-centred welfare (a person’s welfare depends only on her/his own consumption), self-welfare goals (her/his only goal is to maximise her/his own welfare), self-goal choice (her/his choices must be based on the pursuit of her/his own goals) and, individual reasoning and self-scrutiny (a person not only enjoys her/his own consumption and looks for her/his own welfare, but also acts on the basis of her/his values and takes into consideration other’s wellbeing). According to Sen (1985), the neoclassicists are excessively fixated with the first two components. This, according to Sen (1987), is an inadequate portrayal of human nature because in the real-world (also in laboratory experiments) people often take other’s interests into consideration; for example, we find instances of cooperation in non-repeated games, one-off real-life situations, and so on. Thus, Sen (1977) criticises that human behaviour in the real-world seems not be a part of the neoclassicists’ inquiry. Furthermore, the neoclassical paradigm assumes free-standing and atomistic individuals, rendering decisions on their own; although Smith (1776) and Hayek (1948) have emphasised on individualism, they have not done so by considering that people are mere hedonists.

It is argued that economic activities lead to wealth creation. However, according to Aristotle, people ultimately seek happiness out of wealth. In other words, wealth-creation is not an end in itself, but a means to achieve other higher-

order human needs (mainly happiness). However, the neoclassical paradigm mainly treats people as self-interested utility maximising agents, often overlooks their moral and ethical sides, and actively opposes their inclusion in behavioural models. Sen (1987) argues that this is done mainly to make economics a positivistic science. In this regards March (1978) and Harsanyi (1955) also contend that an agent can have ethical preferences along with self-interest oriented ones; in the real-world, this can give benefits like reduced costs of enforcements, suggests Hirshleifer (1977). In this context, Sen (1974, 1977) claims that many of our preference ranking endeavours also have elements of our moral judgments in them, which he terms as the “meta-ranking” of an action-set that takes into account ethics in decision-making. Therefore, Sen (1987) argues, economics and ethics can coexist, complementing each other. Although Arrow (1973), Laffont (1975), among others, argue that ethics is taken as an externality into economic decision-making; Rawls (1971) and Nagel (1975) do not entirely agree with such arguments that ethical undertakings are merely narrow *quid pro quo* instances of self-interest centred, calculative, rational acts. Moreover, according to Bernard (1938), responsible behaviour is the external manifestation of morality, which, Sen (1977) notes, can be seen in many spheres of the real-world, e.g., behaviour in oligopolies, familial responsibilities, etc.

Sen (2002) contends that there exists reciprocity between rationality and freedom. However, neoclassical economics treats actions to be dependent on their ends, not their means. In this regards, Simon (1985) argues that the neoclassical rationality, which he calls substantive rationality, is simply untenable in real-world. Instead, Simon (1945, 1955, 1957) postulates “bounded rationality” (BR) – people are intendedly rational, but limitedly so. In other words, they “satisfice” rather maximise their utilities, and accept the *sufficiently* satisfying outcomes. This is in line with Adam Smith’s point of view, according to which “our senses can never carry us beyond our own situations.” Thus, “full rationality” is an impossibility, which has been supported by Hayek (1944), Williamson (1975), Arrow (1974), Sen (1987, 2002), among others. An example of BR is “procedural rationality” (PR). Here, it is interesting to note that Simon (1978) treats BR as rational, not irrational. We are boundedly rational due to: uncertainties in the real-world, cognitive limitations, socio-cultural norms, etc. However, Williamson (1985) and Scott (2008) argue that BR underestimates the *true* human nature. Langlois (1986) criticises PR on the basis that it is yet another version of utility maximisation.

Economists, in spite of being aware of their highly *unrealistic* assumptions concerning human nature, defend their normative and positivist models. For example, Friedman (1962) defends them under the pretext that they generate valid predictions. But, modelling human behaviour using mathematical formalisation, without relevant empirical groundings, have been criticised by Knight (1935), Simon (1972, 1986), Rosenberg (1983), Donaldson (1984), Langlois (1986), Coase (1993b), Blaug (1998), Williams (2004), Hausman (2010), among others. Etzioni (1988) opines that “unlike mathematics, science requires substantive concepts.” Mirowski (1988, 1989, 1992, 1994) is critical about different attempts to formalise economics using analogies from natural sciences. Michael Simon (1982) argues that to be considered as a ‘real science,’ economics must explain various behavioural departures from axiomatic prescriptions that we observe in real-world. Hausman (2010) argues that economic theories *rarely* take into consideration the unobservable affective aspects behind human action that arise as and when people interact with each other in various socio-

economic settings. Here, Selten (2001) is of the view that every strong version of the rationality principle has weak empirical underpinnings. In addition to predicting behaviour, Sen (2002) thinks that rationality, in its broader sense, is also useful to understand “what others are doing and why, and also what they know, what we can learn from what they know, and so on.” Moreover, contrary to the commonsense notion of rationality, Sen (2002), building on Adam Smith’s view that links conduct with consequences, argues that even an instinctive action has elements of reasoning in it. Furthermore, although parsimony is a virtue in theory building, Hirschman (1984) thinks that we should include more variables when it is needed to explain a phenomenon realistically. In this regards, recent works by Humphreys (2009), Mäki (2009), Bicchieri (2009), among others, have raised the issue of how much simplification, generalisation, idealisation and abstraction can adequately portray *real* human behaviour? According to Leontief (1985), 50 per cent of all the articles published in the *American Economic Review* during the 1970s were purely mathematical, without any empirical data, 22 per cent had manipulated data, and two out of the four or five articles that had direct observations were concerned with pigeons or mice. With this backdrop, it is heartening to see that there is a surge towards experimental economics in the recent past; which, according to Castro and Weingarten (1973) and Colander (2000), among others, can provide a whole new way of testing and applying economic models by systematically applying experimental techniques to analyse human behaviour. Additionally, Hausman (2010) notes that there are promising trends in studying behaviour, e.g., economists’ growing interests towards philosophy of science.

Contrary to the NNR, behavioural experiments find that people do not act in accordance with the axioms of the RCT, always. Some examples in this regards are: preference reversal and framing effect (Tversky, 1990; Rabin 2000); less information is better than more for many real-world decision-making scenarios (Tversky and Kahneman, 1974); pursuance of other-regarding goals (Rabin, 1998); less relevance of preference in decision-making (McFadden, 1999); role of situational factors on decision making (Kahneman and Tversky 1979; Archer and Tritter, 2000; Rabin, 2002; Parisi and Smith, 2005); existence of two notions of utility namely, “experienced utility” and “decision utility” (Kahneman, 1994); time-inconsistency of preference (Phelps and Pollak 1968; Akerlof, 1991; O’Donoghue and Rabin 2001, 2005; Loewenstein and Thaler 1989); and so on. Interestingly, Levi (1986) argues that there is nothing irrational about having incomplete preferences in situations involving uncertainty. Thus, there are growing acceptance that the NNR is usually not followed in its *strict* sense in the real-world, i.e., people do violate standard theories of economics. However, Cross (1983) raises doubts over various inferences that are drawn from real-world data to independently validate different maximisation hypotheses in inadvisable ways. There are valid reasons to suspect the validity of empirical findings. Pruitt and Kimmel (1977), for instance, argue that experimental settings are too unfamiliar and artificial for people to reveal their ‘true’ nature. Hands (2001) is under the impression that the general methodological rules are of little use in analysing real-world deviations; moreover, he advocates for a naturalistic view of methodology, and is sceptical of prescriptions that are not based on detailed knowledge. And, Hausman (2010) doubts the sincerity behind studying human behaviour, empirically.

As regards the concept of utility, Loewenstein (2000) contends that even the founding father of utility Jeremy Bentham viewed utility as having emotional and psychological elements. Here, Mitchell (1924 [1930]) has opined that the “grand error” of neoclassical economics is its sidestepping the psychological correlates of behaviour, which has led to somewhat simplistic assumptions about human nature. Furthermore, Rosenberg (1976, 1980, 1992) argues that economics can only make imprecise generic predictions because it is built around folk psychology. Thus, like Hayek (1948), Rabin (2002) advocates for exploring possibilities to integrate economics with psychology in order to study human behaviour as it is.

The psychoanalytic rationality – based on Freud’s concept of psychoanalysis – is an important school of thought as regards human rationality because it is one of the first attempts by psychologists to study what is rational and what is not. According to Freud, people do not consciously control many of their actions, but subconsciously do so. This implies, we can treat actions as rational from the actor’s point of view. This, according to Jacobs (1992), has two important implications: (a) we should properly address the irrational and non-rational forces behind an action and, (b) using psychoanalysis, we should try to comprehend various unconscious motivations underlying them, and, if possible, integrate them into the rational self. However, Mullane (1971) argues that to treat all behaviour as rational, as psychoanalysis does, is unsound. Simon (1978) criticises psychoanalytic rationality because it is based on crude functional reasoning.

In stead of logical reasoning, many of our actions are subjected to biases, which are ignored by NNR. Nonetheless, they influence decision-making (Heider, 1958; Jones and Davis, 1965; Kelley, 1967; Ross, 1977; Bradley, 1978; Nisbett and Ross, 1980; Tetlock and Levi, 1982; Loewenstein *et al.*, 1993; Babcock *et al.*, 1995). Irrespective of their experience and learning, people are prone to behave in biased manners (Babcock and Loewenstein, 1997). Biases arise out of: visceral factors like hunches, gut feelings, intuitions and instincts (Schelling, 1984; Loewenstein, 1996; Loewenstein and Lerner, 2003); prior beliefs (Lord *et al.*, 1979; Nisbett and Ross, 1980); affective elements (Slovic *et al.*, 2002, 2004, 2007); over-commitment (Staw, 1976); pressure towards conforming with group norms, superiors’ orders, etc. (Asch, 1955; Milgram, 1963; Janis, 1972, 1982); contextual and cultural factors (Archer and Tritter, 2000); tendency to feel more responsible to success than failure (Miller, 1976); self enhancing tendencies like superiority complex (Klein and Kunda, 1993; Messick *et al.*, 1985; Liebrand *et al.*, 1986; Tyson, 1990; Morgan, 1993; Festinger, 1957; Sherman and Gorkin; 1980); inter-temporal inconsistencies of choice (Strotz 1955-56; Schelling, 1978; Thaler, 1981; Laibson 1997; Kunda, 1987; Jones and Nisbett 1971; Nisbett and Ross, 1980); anchoring effect (Lichtenstein and Slovic, 1971; Tversky and Kahneman, 1974; Wilson *et al.*, 1996); confirmation to prior beliefs (Festinger, 1957; Nickerson, 1998; Kuhn, 1970; Rabin, 1998; McHoskey, 1995); illusory correlations between events (Smedslund, 1963; Chapman, 1967; Chapman and Chapman, 1967, 1969, 1971; Nisbett and Ross, 1980); inadequate learning (Wilson and Schooler, 1991; Griffin and Tversky, 1992; Braun and Yaniv, 1992; Offerman and Sonnenmans, 1998); comparison between expected versus actual outcomes (Atkinson, 1964; Kahneman and Tversky, 1982); inter-subjective comparison (Festinger, 1957); loss aversion (Kahneman and Tversky, 1979); risk aversion (Kahneman and Tversky 1979, 1982; Kogan and Wallach, 1964; Yates 1992; Perloff and Fetzer, 1986; Klein and Kunda, 1994); Ostrich Effect (Karlsson *et al.*,

2009), and so on. Among various types of biases, self-serving bias and attribution bias are important in the context of self-interest – a defining feature of the NNR. The self-serving bias, according to Miller and Ross (1975), is a human tendency whereby people take credit for success but deny responsibility for failure. And, attribution bias may distort decision-making because people try to analyse who and/or what was responsible for an event.

Contextual and situational forces can give rise to biases; for instance, Bradley (1978) finds that people's causal attributions are affected by the degree of public scrutiny towards them. Attribution bias potentially can give rise to non-rational and/or irrational acts, contend Harman (2004), Doukas and Petmezas (2007), Billett and Qian (forthcoming), among others. Notwithstanding, Mitchell (2002) criticises behavioural approaches to decision-making, instead argues that not all deviations from rational models could be attributed to biases and heuristics. On how to make people 'more rational,' Camerer and Hogarth (1999), and Seidenfeld (2001) suggest that de-biasing, training in statistical methods, incentives, accountability, etc., may lead to better (rational) performance. However, their effectiveness, as Shafir and LeBoeuf (2002) have noted, are not clear. (Wright, 1984) argues that without an adequate understanding of the underlying processes in decision-making, efforts at de-biasing will continue to give confusing results.

Heuristics lead to optimal solutions quickly, which, according to Newell and Simon (1963), are rules of thumb, intelligent guesses, intuitive judgements or simply common sense. They enable people to make decisions in fast and frugal manners; which, Gigerenzer and Todd (1999) argue, are rational – “ecological rationality.” However, Shefrin (2000) cautions that every action that is fast and frugal is not an instance of heuristics, rather can be a “cognitive error.” Although they are quite useful, effective and economic, yet they can lead to severe, systematic and predictable errors as regards standard normative axioms of economics both in the cases of naïve as well as expert agents, notes Tversky and Kahneman (1971).

Some of the reasons behind the occurrence of heuristics are: people generally “satisfice,” not maximise, their utilities (Simon, 1956a, 1990); a decision-maker chooses a strategy depending on its cost, accuracy (given constraints), and time pressure (Payne *et al.*, 1993); a decision-maker selects a strategy depending on the problem type and her/his expertise level (Chi *et al.*, 1988; Bedard and Chi, 1992; Driver and Humphries, 1988); some people map one situation to another analogous but unfamiliar situation for problem-solving (Gentner, 1983); sometimes people act effectively by relying on their intuition rather than reasoning (Wilson and Schooler, 1991); communal and cultural factors (D'Andrade, 1981, 1984, 1987, 1992); and so on. Fischhoff (1999) argues that heuristics themselves are imperfect strategies. Oppenheimer (2003), Newell *et al.* (2003), Edwards and vonWinterfeldt (1986), among others, raise the predictive power of behavioural models based on heuristics. Hogarth (1981) argues that heuristics do not specify conditions under which people do or do not perform well. Contrary to the popular belief that innate abilities make people efficient users of heuristics, Ericsson and Charness (1994) and Dunbar (1995, 1997) find evidences that exceptional performance develops mainly, though not exclusively, from rigorous preparation. Slovic *et al.* (1977), Jungermann (1983), Wallsten (1983), Anderson (1987), among others, have criticised research on heuristics and biases because they do not have theoretical underpinnings.

Notwithstanding, the use of biases and heuristics are inevitable in the real-world because people are social beings and so their behaviour is a function of people and their environments or their *situatedness* in society (Lewin, 1951; Simon, 1957).

Hausman (2010) opines that economics along with being an object of social enquiry, is also a method to unravel various societal goings on; this augurs well with the historical definition of economics that says that it stands for the management of social institutions. Furthermore, while economics explains the consequences of choices concerning scarce productive resources, sociology is concerned with the study of inter-relationships in various transactions in society, including the economic ones. Thus, the role of sociology in economics is paramount.

In regards to rationality, Posner (1973) argues that economists' treatment of rational actions, especially considering the NNR as the Pharaoh of rationality, makes almost every behaviour as rational because every behaviour can be easily explained away as another instance of utility maximisation. Etzioni (1988) thinks that actions may be regarded as more or less rational, but hardly they are highly rational in the sense of the NNR. He also argues that far from being limited to economic power, people frequently act using other kinds of powers, e.g., political power, to advance their economic goals. Interestingly, Etzioni (1988) contends that to manifest behaviour following the NNR is tantamount to manufacturing a 'product' called rationality that is devoid of human-like features. Foucault (1991b) doubts whether rationality is a rigid phenomenon, as the neoclassicists deem it to be. Instead, he views rationality as an emergent phenomenon that evolves taking into consideration many external and internal factors during decision-making (of course, adhering to some guidelines, e.g., social norms). In contemporary social sciences, these guidelines are mainly laid down by the neoclassical paradigm.

Utility is central to Weber's (1922 [1968]) thoughts on economics, which however has broader meaning than that of the neoclassicists'. According to him, utility has an used value (or advantage), is more than just satisfaction of wants, and depends on external contexts and contingencies. Furthermore, he emphasises on the "means-ends rationality," i.e., choosing the ends given the means and vice versa. Although the idea of rationality is a great unifying theme in Max Weber's work, yet, unlike the neoclassicists, he treats it as a concept having a multiplicity of meanings. In this context, he classifies rationality as: (a) practical (evaluation of means to accomplish ends), (b) theoretical (attempts to understand real-world in terms of models built out of empirical observations and data), (c) substantive (people try to act morally; but Weber considered it problematic in modern society because the means-ends rationalisation of social life makes it difficult for people to lead ethical lives), and, (d) formal (a broader form of rationality, more common in real-world, which characterises bureaucratic organisations with institutionalised rules, laws and regulations). According to Weber, the "gain spirit" that is embedded in rational behaviour, has led to the prosperity of the Western world. However, as Kalberg (1980) notes, Weber views the long-term rationalisation processes as rooted in values rather than self-interest. Furthermore, bureaucracy is the socio-economic archetypical manifestation of formal rationalism. It, according to Weber, is an "efficient administrative system" which is characterised by hierarchical structures, continuity of employment, impersonality of occupational positions, and expertise of people. In addition to the rationalisation of social life, the spread of bureaucratic organisations is

due to the fact that they are considered more efficient than the others that came before it.

There are also criticisms against bureaucracy. Weber (1952 [1905]) warns that the rationalist order under capitalism is like an “iron cage” which has imprisoned the humanity. Thompson (1967) thinks that it mainly facilitates organisational management rather than understanding the underlying rationalisation process. Hummel (1976) argues that humanistic values are easily lost within bureaucratic ethos; interestingly, he also notes that bureaucracy is antithetical to human nature. Parsons (1937) and Gouldner (1955) argue that rule-bound behaviour curtails freedom in bureaucratic organisations. Contrary to the fact that bureaucratic organisations are awash with formal behaviour, Blau (1955) finds informal dealings like cooperation in bureaucratic workplaces. Roethlisberger and Dickson (1939) suggests that workers usually have their ‘own’ informal organisations inside formal organisations. Marx and Engels (1976 [1845-48]) argue that power remains at the top of the hierarchy in bureaucratic organisations. Dimock (1959), Strauss (1961) and Jackall (1996) view bureaucracy leading to centralised decision-making and uneven distribution of power, which can lead to dysfunctional consequences. Contrary to the idea that power is either rigidly held or continuously evolve in unidirectional manners in bureaucracies, March and Simon (1958), Blau’s (1964), Macintosh (1995), Berger and Luckman (2002) argue that power is dialectic in nature.

Furthermore, it is argued that not all that is rational produces efficiency and everything that is irrational and/or non-rational leads to inefficiency. Merton (1957), Gouldner (1954) and Selznick (1953) caution that with its preoccupation with logical procedures, bureaucratic decision-making can lose the overall socio-economic picture, and in the process be myopic. Gouldner (1954) finds that irrational traits like anxiety concerning promotion, wage-increase or job-insecurity, may, as a matter of fact, produce greater motivation and inter-personal competition; as a result, productivity can in fact increase. Merton (1957) argues that certain expertise in bureaucratic organisations can lead to inefficiency due to “trained incapacity,” “managerial one-dimensionality,” and so on. Aldrich (1979) argues that once fully established, it is very hard to replace bureaucracy, which can hinder creative and innovative approaches from emerging. Interestingly, Gouldner (1955) notes that Weber himself thought that bureaucracy is a Janus-faced organisation wherein human behaviour get transformed and institutionalised as rule-following and, in the process, people tend to obey orders without judging and/or examining their rationality, morality or content.

Institutionalisation, according to Craib (1992), stands for the creation of a system of particular values and norms, specific modes of behaviour, etc. Weber, Habermas (1985) notes, argues that institutionalisation has a great role in the rationalisation of society. Parsons (1990) argues that economic motives are socially conditioned, especially in the sense of “institutionalized motivation” or “institutionalized individualism.” DiMaggio and Powell (1983, 1991) argue that isomorphism – i.e., creation of similar organisations – leads to institutionalisation. Berger and Luckmann (1966) discuss three interlinked processes underlying social constructions of reality: habitualisation, institutionalisation and sedimentation; which address the issues involving the development, predictability and stability of behaviour in society. Furthermore, they argue that the process of institutionalisation needs explanation in order to be accepted and, legitimisation and justification in order to

make it accepted (among people); and in the process gets ingrained into society. They also contend that it is an evolving dynamic phenomenon; thus, not rigid like the NNR. Pugh and Hickson (1993) argue that a central issue in the context of rational models of organisations is: why do people in organisations conform to the orders given to them and follow the standards of behaviour laid down for them? Some of the reasons this regards, they contend, are: compliance degrees, power, status, economic benefits, security needs, fear of sanctions, and so on. Thus, even if institutionalisation facilitates the rationalisation process, yet it is not all about complying with the NNR, because people have other motivations to act, along with safeguarding their self-interest and maximising their individual utilities.

Taylorism is a special case to institutionalise the shop-floor, with the tenets of scientific management. Similar to the assumptions of the NNR, Taylor argues that management is a true science and there is 'one right way' to do a job. Furthermore, he also considered efficiency as a function of rational acts (like adhering to standard rules of production), and non-rational and irrational traits of people cause inefficiency. In this regards, he treated soldiering – the tendency of workers to purposefully work well below their capacity – as irrational and/or non-rational. However, if a worker is underpaid, then soldiering could be rational from her/his point of view, but irrational and/or non-rational from the point of view of the management. In other words, rationality in real-world is relative, having different meanings for different people. Moreover, scientific management, Taylor claims, increases individual efficiency by indoctrinating them with rational shop-floor norms; however, Fayol (1916 [1949]) views efficiency as not only an outcome of increased labour efficiency but also improved human relations, which is contrary to NNR. Differentiating efficiency from effectiveness and emphasising on the latter, Yuchtman and Seashore (1967) have argued that effectiveness mainly lies in an organisation's ability to impress upon its environment in attracting scarce resources, which is not addressed by Taylorism. Criticising Taylorism severely, Braverman (1974) argues that the 'degradation of work' is a direct consequence of applying rational-scientific management style to the jobs that are untenable in real-world. Interestingly, Moore (1997) argues that effectiveness primarily lies in strategic considerations of social contexts in which decisions are made, along with efficiency.

Polanyi (1944) envisions that economic activities are socially embedded, which is refined further by Granovetter (1985) in his notion of "embeddedness in networks" of social relations. Schumpeter (1950) also argues that efficient organisations take into consideration social factors, along with economic ones, especially in strategy making. Blau and Scott (1962) argues that organisations have their roots in larger social systems. Uzzi (1997) argues that some aspects of embeddedness create economic opportunities that are difficult to replicate via market and organisational mechanisms. Granovetter (2005) claims that social networks affect economic outcomes by: influencing flow and the quality of information, being sources of reward and punishment, generating trust between transacting parties. Powell (1990) argues that market transactions take place through either loose collections of individuals who maintain impersonal and constantly shifting ties, or stable network partners who maintain close relationships. Various empirical findings in regards to social embeddedness also reveal that social relations have some commercial aspects that fail to get estimated in usual economic calculations. Some examples in this regards are: enhanced efficiency through informal information sharing (Helper, 1990), reduced

transaction costs arising out of the development of trust and personal ties (Dore, 1983; Asanuma, 1985; Smitka, 1991; Gerlach, 1992; Lincoln *et al.*, 1996), reduced cost of capital (Sterns and Mizruchi, 1993), effective strategy (Leung, 1993), better customer relationship (Moorman, *et al.*, 1992), organisational restructuring (Palmer *et al.*, 1995), firm survival rates (Baum and Oliver, 1992). Notwithstanding, Peterson and Rajan (1994) argue that social relations have minimal effects on economic transactions and, as a matter of fact, create inefficiencies by hiding various transactions from the market analyses. Portes and Sensenbrenner (1993) claim that it curtails individual freedom and increases cost on accounts of community solidarity.

The Social exchange theory (SET), theorised by Homans (1958), considers that all human relationships are based on cost-benefit analyses and the comparison of alternatives. Like the RCT, it also underlines the fact that people are utility maximising agents. Although Blau (1964) contends that social exchanges arise out of various relations between people and groups, yet he disregards that all human behaviour is guided by considerations of exchange. Moreover, according to him, some social exchanges, e.g., trust, are superimposed upon economic transactions; and argues that approaches based on cost-and-benefit analyses to study social exchanges are futile undertakings because most of them cannot be quantified in monetary terms. Thibaut and Kelley (1959) are under the impression that people engage in social exchanges because of a variety of reasons like anticipated reciprocity, expected rise in reputation, power and prestige, altruism, direct rewards, and so on. Miller (2002) criticises the SET because it: (a) reduces human interactions into purely (economic) rational processes; (b) postulates the formation of linear relationships, which, once again may always not be the case; (c) assumes that the ultimate goal of a relationship is intimacy, which may not always be true; (d) emphasises freedom and transparency as important facilitators in relationship building between interacting parties/agents, which is not the best option every time.

Are rational agents sovereign enough to act freely? In this regards, Strawson (1986) argues that no free action is rational. On the contrary, according to Kane (1996), all free actions must be rational. Taking a middle path, Vollmer (2004) argues that there is, as a matter of fact, no necessary connection between freedom and rationality. Interestingly, Simmel (1907 [1978]) contends that money not only promotes rationality by enabling people to be calculative but also keeps themselves out of transactions (making them independent). De Uriarte (1990) opines that the neoclassicists' agent is only a "programmed individual" who craves to maximise her/his utility; he reasons that such an individual does not have free will at all, or if s/he has then it has no relevance to socio-economic activities because what it does are just mathematical operations involving computations and estimations, e.g., preference ranking. Latsis (1976b) feels that it is paradoxical the way the neoclassicists lump agent's free will and his behaviour; this is because of the presence of situational forces that may not be under the control of the agent. According to him, the neoclassicists' agents are like puppets who react, do not act. Tönnies (1955) opines that "rational-will" is not free-will because it reduces human capability by compelling him to behave predictably. Moreover, Barnes (2000) argues that rational acts, both in the sense of the neoclassicists and otherwise, are not free but contingent on many factors.

The NNR undermines the collective make-up of organisations. Some of the prominent arguments in this regards are: Bourdieu's (1998b) reasoning on the rationale behind setting individual objectives in organisations; Archer and Tritter's (2000) arguments against the RCT that undermine collective solidarity; Castro's (1996) analyses of narrowly defined performance measures in highly coordinated hierarchical enterprises, to name a few. Mannheim raises the issues concerning the rationalisation of society and whether society should be studied at the individual or "organic" level. In this regards, methodological individualists, like Weber (1922 [1968]) Schumpeter (1908, 1909), Hayek (1948), among others, argue that social sciences should be grounded in individual action. However, Moore (1946) argues that in the long-run, there is always a limit to individualism. Furthermore, Arrow (1994), Udéhn (2001, 2002), Hodgson (2007), Kincaid (2008), among others, criticise the neoclassicists' attempts to analyse collective actions in terms of rational utility maximising individualised agents. For example, Arrow (1994) contends that social factors that are not attached to particular individuals, are essential to study an economy. Kincaid (2008) questions if we, in principle, can explain an economy through theories based on individual economic behaviour.

Parsons (1937) and March (2008) argue that actions, including rational ones, are context-and-contingency dependant. Scott (2008) argues that in order to understand or explain an action, one must account for not only the objective conditions that includes the environmental factors, but also the actor's subjective interpretation of them; this can be seen as an argument against the neoclassical paradigm that assumes agents to be homogeneous.

The theoretical problem of estimation and allocation of resources is less physical and more epistemological in nature, argues Richardson (1998); he reasons it on the basis that our knowledge is imperfect, fragmented and uncertain. Shane (2000) argues that the neoclassicists' assumption that public knowledge about opportunities must be equally 'obvious' to everyone is fallible; according to him only some people are better equipped to exploit them, like the entrepreneurs, not everyone. According to Parsons (1937 [1968a]), all knowledge, including scientific and rational knowledge, is conceptually formed and that all observations are made in terms of conceptual schemes, which is true not only of sophisticated scientific observations but also of the simplest commonsense statements of facts; so they are not adequate to explain the real-world. Hayek (1937) is sceptical that we may *never* be able to generate much knowledge about the real-world from formal economic analyses. Notwithstanding, even if one argues that we can understand the real-world by interpreting empirical data, then also we face another roadblock, i.e., interpretation and understanding, two vital components of generating knowledge, are never the same, argues Heidegger (1962). Bevir (2008) argues that all that the neoclassical paradigm generates is knowledge based on deductive reasoning, which is adequate to prove their axioms. However, knowledge from inductive reasoning is also important because the real-world does not only consist of representative, homogeneous agents. Furthermore, Johnson (1996) argues that apart from disciplines in natural sciences economics can also get immensely benefited from non-normative disciplines in social sciences. According to Hebermas (1984), rationality depends on the reliability of the knowledge embodied in it. He further argues that behaviour cannot be termed rational on the basis of self-knowledge because such knowledge can be fallible, hence he calls for objective verification of rationality. However, he questions the authenticity of

such verifications on the grounds that who is better equipped to judge others. In this context, Weber (1973) notes that pursuing objective knowledge in social sciences is not an easy undertaking.

Sen (1987) argues that the chasm that has grown between economics and ethics, under the influence of neoclassical economics, has, as a matter of fact, considerably impoverished economics. Arguing against the utilitarian ethics that appropriates the ‘rightness’ of an action in the neoclassical paradigm, Rawls (1971) argues that many of the implications of utilitarianism are opposed to our moral convictions and sentiments. In regards to conflicting interests between agents, Ulrich (1996) argues that the utilitarian ethics fails to realistically address issues involving ethics. In this regards, Adam Smith advocates for building a system of justice that could guarantee economic fair-play. Arguing in similar vein, Rawls (1971) has proposed for contracts as the guarantor of morality. However, these systemic solutions may not address the problem adequately because, as we know, systems are created by individuals, including utility maximising hedonists, who can create systems that serve their own purposes. Bohnen (1964) reasons that although the neoclassicists propose the ‘interest-neutral utilitarian ethics,’ i.e., most happiness for most numbers of people, yet it is another way to project the neoclassicists’ version of the ‘rational wo/man’ and thereby continuing with the assumption that utilitarian calculus can lead to ethical actions. Schumpeter (1954) argued that utilitarianism is basically another natural-law system, which, by theorising human behaviour in the real-world through various ‘axiomatic laws,’ portrays a very stable and highly simplified human nature. Reflecting on the fact that human beings are higher order species in the animal kingdom, and critiquing the neoclassicists’ approach of assuming one over-arching utility, i.e., self-satisfaction, Etzioni (1988) ponders if models on human behaviour that consider them as hedonists, can *really* account for the higher-order traits that people have. Furthermore, he argues that it is oftentimes very difficult to predict the outcome of an action in the real-world, and hence utilitarian ethics is fallible; this, according to him, could be overcome by employing deontology. To act in a morally-right way, people must act from the perspective of duty, argues Immanuel Kant in the *Theory of Ethics*. This is the central premise of deontology. By emphasising on means and motives behind an action, deontology is contrary to the utilitarian ethics. There are also criticisms to the deontological ethics, mainly hovering around the rigid manner in which deontology explains the ethical aspects of an action. Instead, Rawls (1971) proposes contractualism; McCain (1991b) postulates relativistic conception of rationality; Ulrich (2008) conceptualises integrative economics ethics, Sen (2009) advocates for a broad consequentialist approach. Castro (1996) argues that ethical actions should be pursued irrespective of its implications towards individual and institutional interests, building his arguments around the Socratic question: “How should life be lived?”

Thus, arguments by mainstream economists, psychologists and sociologists reveal that the notion of *Homo economicus* – human behaviour that is dominated by economic motives, guided by attributes like self-interest and utility maximisation, and based on utilitarianism – is far from being an actual agent. Such a ‘creature’ does not exist; if it does then, as Keynes (1955) notes, it need not be conceived as a pure egoist.¹⁷⁷¹ Because of the impossibility to conceive the human being as a *Homo economicus*, this conception has metamorphosed into various avatars like “plain economic man” (Homans, 1961)¹⁷⁷², “rational man” (Coleman, 1986)¹⁷⁷³, “rational

egoist” (Hechter and Kanazawa, 1997)¹⁷⁷⁴, “the opposite of homo sociologicus” (Abell, 1992)¹⁷⁷⁵, “Restricted, Resourceful, Expecting, Evaluating, Maximizing Man” (Lindenberg, 1992)¹⁷⁷⁶, “Resourceful, Evaluative, Maximizing Model” (Jensen and Meckling, 1994)¹⁷⁷⁷, or even “boundedly rational model” (Simon, 1955). As regards all these modelling attempts, as Knight (1964) notes, there is a caution: “[... While t]he old economists employed the concept of an economic man deliberately and intelligently; for [the neoclassicists ...] he is literally the man in the street.”¹⁷⁷⁸ Thus, most of these modelling transformations of the rational wo/man, under the neoclassical paradigm, are similar attempts to portray people as self-interest oriented utility-maximisers. In this context, as Sen (1977e) has pointed out, people who are rational, in the neoclassical sense, are nothing but some forms of caricature of the human being – they are “Rational Fools.”

[... T]he assumption that when asked a question, the individual gives that answer which will maximize his personal gain. How good is this assumption? I [Sen] doubt that in general it is very good. (“Where is the railway station?” he asks me. “There,” I say, pointing at the post office, “and would you please post this letter for me on the way?” “Yes,” he says, determined to open the envelope and check whether it contains something valuable.) [...]’¹⁷⁷⁹

2.5. Raising the Curtains for the Next Chapter

[...] That the world is *not* the epitome of eternal rationality is conclusively shown by the fact that the particle of the world with which we are acquainted – our human rationality – is not any too reasonable. [...] For] even in the wisest, reason is the exception: chaos and necessity and swirling stars – *that* is the rule. [...] Taking everything into consideration, one thing is impossible: rationality [...].’¹⁷⁸⁰

Borrowing from Weber, accounting is central in the rationalisation of the capitalistic society, including its socio-economic activities and institutions. Accounting objects (AOs) like financial statements (FSs), GAAPs, etc., have rationalising qualities (RQs) that help decision-makers to reason their actions. RQs manifest themselves as and when the AOs come in contact with their users. For example, GAAP are employed when: managers prepare FSs, regulatory and law enforcement authorities verify their authenticity, certified auditors audit companies, judges settle down litigations related to accounting misappropriation cases, and so on; the RQs in GAAP (e.g., reporting with prudence) manifest themselves and thereby help users to rationalise their decision-making activities, such as, when managers prepare FSs they use GAAP to not only present financial information through some prescribed mathematical formulae and calculations but also reason them. Similarly, FSs are used when: managers plan subsequent years’ budget allocations, employees calculate their bonuses/incentives, shareholders estimate their dividends, regulatory and law enforcement authorities verify their authenticity, certified auditors audit companies, market analysts give their projections about company’s future profitability, creditors and financial institutions assess returns as well as investment opportunities, competitors evaluate their strategies, and so on; the RQs in FSs (e.g., relevance for decision usefulness) show up and facilitate rational actions in these instances too, such as: investors are able to reason their (share) portfolio management strategies by taking into consideration profitability prospects of companies, sales managers strategise their advertisement budgets outlays, and so on.

However, the process of rationalisation is far from simple and straightforward. In this regards, let us look at the following example in the context of earnings management (EM). Preparers of FSs reason their actions by giving an account of financial information prudently, which is one of the foundational principles of GAAP. However, as we know, GAAP also provide reporting flexibilities. Thus, even if GAAP are fairly clear in their definition of operating cash flow yet there are *considerable* flexibility permitted in its calculation like, companies can include an increase in overdrafts¹⁷⁸¹ in reporting quarterly or annual operating cash flows; however, the resulted cash flow although may look healthy yet is not generated by sustainable sources because amounts borrowed in that manner need to be repaid.¹⁷⁸² In this manner, even if it is tempting to say that GAAP can help managers to act rationally as regards reporting companies' financial matters prudently, yet there are also other features embedded in GAAP like 'reporting flexibility,' which can be 'misused' in the name of rational decisions. As a matter of fact, GAAP have the flexibility feature in order to make reporting not only truthful but also realistic considering various contingencies in the market; thus, it should be used to report the 'actual figures' of a company's true financial status and at the same time should also be realistic in addressing the promising future trends, with the help of Smithian-prudence based reasoning and foresight. However, foresight may: get overly influenced by NNR; self-interest and utility maximisation, in the process, become the twin focus of (human) reasoning; and get transformed into mere speculation. A notable example in this regards is the Enron Scandal.

Enron Scandal is one of the biggest cases involving accounting misappropriation, particularly managing earnings. As we know, EM can be carried out using features of reporting flexibility – in a rational manner in the sense of the Smithian prudence – to project the realistic performance of a company; only then it is deemed as EM by regulators. However, it can also be done by reinterpreting, may be twisting, these flexibility features in ways that further hedonism at the cost of a firm's sustainability; which is an instance of manipulative EM (MEM). This is what caused the Enron Scandal. Enron's earnings were excessively managed by its decision-makers to meet and beat analysts' forecast, because their remunerations largely depended on its performance in the capital market. In other words, they wanted more money (may be in order to quell their desire to have more money).

Here a question crops up regarding human rationality: do decision-makers rationalise their actions based on a sense of deprivation? In other words, do they carry out MEM to overcome their deprivation levels. But, they are mostly well off, both in terms of money and social status; in this sense, they should not have absolute deprivations! Then what do they want with more money? In the next chapter, we are going to investigate if (relative) deprivation is a reason behind the reason – the Causal History of reason – to carry out MEM.

3. Turning Expectations from Relative Deprivation into Motivations to Manipulate Earnings (in stead of Managing Them)! An Empirical Study Based on a Real Case

Abstract

Although lawful, the widespread use of earnings management in financial reporting, as noted by Arthur Levitt (the former Chairman of the US SEC), gives reasons to believe that companies may be indulging in illegally manipulating earnings in stead of managing them prudently. What motivate it are not straightforward because the nature of human motivation is complex. Although, earnings management is deemed an intentional action, wherein company decision-makers use managerial discretions and judgements to achieve desired earnings numbers; yet nothing has been said beyond this. In this empirical study, based on a real case, using vignettes in a Web-survey as the method of investigation (i.e., a mix of qualitative and quantitative approaches); we have attempted to study relative deprivation – i.e., people’s reaction to objective situations depends on their subjective comparisons – as one of the causes behind decision-makers’ reasoning process to manipulate earnings. Our findings are mixed in the sense that while answering if relative deprivation causes earnings management to stray into earnings manipulations, the respondents have rendered varied levels of support to it under two different situations. Notwithstanding, we have some interesting findings as regards relative deprivation effecting manipulative earnings management practices that can potentially set the roadmap for future research on causal correlates behind managing earnings, including manipulating them.

3.1. Introduction

“[... O]bservation and description must be the starting points for scientific research. Observations are the building blocks for subsequent scientific activities, such as classification, measurement and theory building. [...] They] are also necessary for testing the generalizability and limits of any theory.”¹⁷⁸³

The Corporate World had not seen anything like his spectacular rise and sudden fall. Even if his childhood and adolescence were marred by abject poverty and deprivation, yet his stupendous entrepreneurial success was extraordinary in the annals of the business history. He pursued cut-throat competition, created business opportunities where they were inexistent, structured a ruthless corporate culture where success implied meeting and beating analysts’ forecasts, fiercely lobbied and influenced policy-makers in creating favourable business conditions, and so forth. In the process, his company became the seventh largest on the Fortune 500 list, that to only in less than fifteen years of its founding. But only after a couple of months of this success saga, he filed for its bankruptcy; the tremors of which were far-reaching. Markets across the globe tumbled. Tens of thousands of employees not only lost their jobs but also benefits worth billions of dollars. When the company was dwindling, he and his confidants kept everything a secret, to artificially keep its share prices high. In doing so, they amassed billions of dollars by offloading their shares before things became known and the prices plunged. A number of financial institutions paid hundreds of millions of dollars in fines and penalties for their shady transactions with

it. Its collapse also destroyed a top auditing and consulting firm, which was accused of obstructing justice by destroying documents related to the case. Its traders pled guilty of wire fraud. All in all, the ripple effects of these events put numerous question-marks on the future of capitalism based on free-markets.¹⁷⁸⁴ He, including his confidants, were ultimately either convicted of or pleaded guilty to many charges for questionable business practices, fraud, felony, conspiracy, and so on. Tragically, he died of a massive heart attack after his conviction. Yes, this is the story of Kenneth Lay, the founder of Enron, and one of the masterminds behind the Enron Scandal involving outrageous instances of accounting misappropriations including manipulative earnings management (MEM) practices.

Hardly a month goes by without the surfacing of unethical and illegal financial reporting involving earnings management (EM).¹⁷⁸⁵ Even if permissible under accounting statutes and guidelines, its widespread use, noted by Arthur Levitt (the ex-Chairman of US SEC), has led to an erosion in the quality of earnings; hence, deteriorated the quality of financial reporting. In stead of meeting its main purpose to represent the financial situation of a company in a realistic manner,¹⁷⁸⁶ EM “[...] reflects negative due diligence of managers in their fiduciary duty to the shareholders [...] and] represents socially undesirable behaviour as well as illegal activities.”¹⁷⁸⁷ Generally speaking, managers manage earnings to meet firm and individual performance related objectives like: increasing executive incentives,¹⁷⁸⁸ being concerned with job security,¹⁷⁸⁹ enhancing reputation,¹⁷⁹⁰ reducing cost of capital,¹⁷⁹¹ decreasing social-political costs,¹⁷⁹² meeting performance standards,¹⁷⁹³ undertaking strategic decision-making (like mergers and acquisitions,¹⁷⁹⁴ investment decisions,¹⁷⁹⁵ etc.), and so on. By definition, it entails the intention to adjust earnings (or net profits) through managerial discretions (Copeland, 1968¹⁷⁹⁶; Beidleman, 1973¹⁷⁹⁷; Holthausen and Leftwich, 1983¹⁷⁹⁸; Healy, 1985¹⁷⁹⁹; DeAngelo, 1986¹⁸⁰⁰; Merchant, 1987¹⁸⁰¹; Schipper, 1989¹⁸⁰²; Fischer and Rosenzweig, 1995¹⁸⁰³; Healy and Wahlen, 1999¹⁸⁰⁴; Phillips *et al.*, 2003¹⁸⁰⁵; Ronen and Yaari, 2008¹⁸⁰⁶). Moreover, “[...] c]ompanies manage earnings when they ask: “How can we best report desired results?” rather than “How can we best report economic reality (the actual results)?”¹⁸⁰⁷ Thus, it is an *intentional* action because it involves human discretion and desire.

3.2. Intentional Action

“[...] T]o act is to modify the shape of the world; it is to arrange means in view of an end; it is to produce an organized instrumental complex such that by a series of concatenations and connections the modification effected on one of the links causes modifications throughout the whole series and finally produces an anticipated result. But this is not what is important. [...] Rather, w]e should observe first that an action is on principle intentional. [...]”¹⁸⁰⁸

From the perspective of the philosophy of mind¹⁸⁰⁹, intentionality rationalises an intentional action, which has its underlying intentions, motives and purposes – a set of attitudes (Bentham, 1780;¹⁸¹⁰ Brentano, 1874 [1973],¹⁸¹¹ Husserl, 1900-1901/1913 [1970]¹⁸¹², 1928 [1964]¹⁸¹³, 1948 [1973]¹⁸¹⁴; Sartre, 1939¹⁸¹⁵, 1963¹⁸¹⁶; Føllesdal, 1978¹⁸¹⁷; Searle, 1983¹⁸¹⁸, 1984¹⁸¹⁹, 1992¹⁸²⁰, 1998¹⁸²¹, 2002¹⁸²², 2004¹⁸²³; Bell 1990¹⁸²⁴; Dummett 1993¹⁸²⁵, Crane, 1998¹⁸²⁶). According to Searle (1992), intentionality has two fundamental aspects: the Background and the Network. The former is a set of

capacities that help people to perform an action, which in themselves are not intentional (e.g., a manager’s knowledge of accounting methods is essential to carry out MEM); and, the latter is an individual’s set of beliefs, desires, and other intentional states that are necessary for any particular intentional state to make sense (e.g., carrying out MEM and achieving company targets could enable a manager to gain financially).¹⁸²⁷ In this way, an intentional action is preceded by a belief or desire which is intentional in the sense that it is directed towards meeting a (desired) target – i.e., a disposition to behave – which, in turn, is a part of other desires (e.g., to be rich may be one of them, to have higher social status may be another) and beliefs – the Network; the Background is a necessary condition for the Network. Thus, an intentional action consists of the Intentionality, the Background, the Network, and a disposition to behave (see: Figure 1).

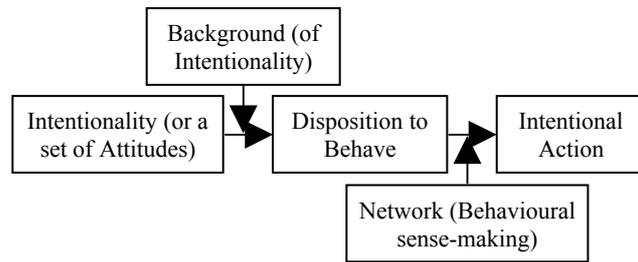


Figure 1. Intentional Action from the Perspective of Searle’s Notion of the Philosophy of Mind

From the perspective of social-psychologists, an intentional action describes why an individual acted the way s/he did (Anscombe, 1957¹⁸²⁸; Heider, 1958¹⁸²⁹; Bruner, 1990¹⁸³⁰; Malle and Knobe, 1997b¹⁸³¹; Gopnik, 1998¹⁸³²; Malle, 1999¹⁸³³). According to Malle (1999), it has the following domains: causal history of reasons (CHR), reasons behind the action itself, intention to achieve an objective, and enabling factors to undertake it.¹⁸³⁴ The CHR refers to factors that reveal what led up to the reasons behind an action (Hirschberg, 1978¹⁸³⁵; Locke and Pennington, 1982¹⁸³⁶; Malle, 1999, 2001¹⁸³⁷, 2005; Wilson, 1997¹⁸³⁸; O’Laughlin and Malle, 2002¹⁸³⁹). They describe environmental factors like the context, background or origin of reasons; are not constrained by subjectivity or rationality rules that apply to reasons themselves; and go beyond a person’s reasons behind her/his action. Along with citing personal traits behind reasons, CHR explanations also include childhood experience, culture, past behaviour, current psychological states, and situational cues that trigger a particular reason (Malle, 1999; 2005¹⁸⁴⁰). However, an agent may *not* be aware about the CHR while acting intentionally (Malle *et al.*, 2000). Second, reasons underlie actions (Davidson, 1963¹⁸⁴¹; Buss, 1978¹⁸⁴²; Locke and Pennington, 1982; Read, 1987¹⁸⁴³; Audi, 1993¹⁸⁴⁴; Malle, 1999). Common reason types are: desire, belief and valuing (their behaviour explanation distribution is as follows: 50 per cent towards desire, 40 and 10 towards belief and valuing respectively).¹⁸⁴⁵ When people explain their own behaviour, they use belief reasons to justify their actions as rational;¹⁸⁴⁶ whereas observers tend to use desire reasons to explain the behaviour of others.¹⁸⁴⁷ The minimal reasons that make actions intentional are: an agent’s desire for an outcome and her/his belief that the (intended) action will lead to the (desired) outcome.¹⁸⁴⁸ Enabling factors explain issues and questions related to how an action

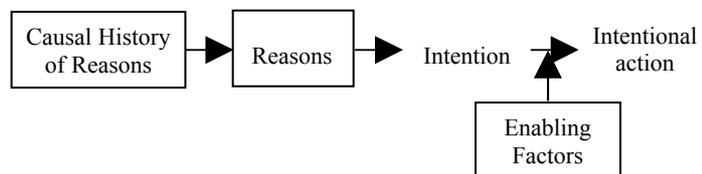


Figure 2. Malle’s Social-Psychological Conceptualisation of the Domains of Intentional Action: Causal History of Reasons, Reasons, and Enabling Factors (Source: Bertram F. Malle, “Folk Explanations of Intentional Action,” *Intentions and Intentionality: Foundations of Social Cognition*, (eds.) Bertram F. Malle, Louis J. Moses, and Dare A. Baldwin (Cambridge, MA, USA: The MIT Press, 2001), 266.)

was possible in the first place; they include: skill, effort, persistence, opportunity, removed obstacles, etc. They take for granted the individual's intention and reason to behave. Although, they are necessary to perform an intentional action, i.e., without them an action only be deemed as an attempt and not a complete action (Turnbull, 1986¹⁸⁴⁹; McClure and Hilton, 1997¹⁸⁵⁰); among them, skill is considered as paramount to make an action intentional (Malle and Knobe, 1997a¹⁸⁵¹; Mele, 2001¹⁸⁵²). Although they do not clarify what motivate people to act, they certainly show how it was possible that the intentional action was successfully performed (Malle, 2005¹⁸⁵³). In a nutshell, “[...] the concept of intentionality [...] accounts for] how it was possible that a given action occurred (enabling factor explanations), why the agent intended to act that way (reason explanations), and what lay in the background of these reasons (causal history of reason explanations. [...])”¹⁸⁵⁴

Explaining intentional actions by tracing the reasons behind them involves complex issues like: whether they justify people's actions or they cause them (Rosenberg, 1988);¹⁸⁵⁵ when and why people use CHR or enabling factors in stead of reason explanations (Malle, 2001¹⁸⁵⁶); why reasons and the underlying desires, beliefs, and valuing are not always considered as effecting intentional actions (Kane, 1996)¹⁸⁵⁷; and so on. To explain an intentional action, Weber (1904),¹⁸⁵⁸ Knight (1935b)¹⁸⁵⁹, and Machlup (1969a)¹⁸⁶⁰ have argued that social science should provide us with an understanding from an agent's point-of-view – a view from the inside. However, an agent's own account of reasons on many occasions are either inadequate or irrational explanations of actions (Anscombe, 1957; Natanson, 1963¹⁸⁶¹; Broadbeck, 1968¹⁸⁶²; Krimerman, 1969¹⁸⁶³; Rabinao and Sullivan, 1979¹⁸⁶⁴; Braybrooke, 1987¹⁸⁶⁵; Fay, 1987¹⁸⁶⁶; Rosenberg, 1988; Kunda, 1990; Little, 1991¹⁸⁶⁷; Martin and McIntyre, 1994¹⁸⁶⁸; Searle, 2004; Tanney, 2005). ‘Much social science is devoted to ferreting out the “real reasons” from the ones people offer to explain or excuse their actions. [...] However] the question is, how do real reasons explain the actions they bring about? Is it because of the logical argument that we can reconstruct that reasons can justify people's actions, or is it because reasons cause their actions? Does the action-justifying character of reasons make them a special subclass of causes, or does it make reasons a different sort of explainer entirely.’¹⁸⁶⁹ Hence, reasons do not adequately explain intentional actions mainly because of the difficulties involved in ascertaining whether they cause or explain them. It is argued that an intentional action, any action for that matter, takes place in a social setting which may be probed further to infer what caused it before it is actually reasoned.¹⁸⁷⁰ “[...] Decision making [...] cannot be disentangled from social context, which shapes preferences and therefore what an individual perceives as rational. A full theoretical explanation of the action of any social actor needs to take into account, to the greatest extent possible, its situated character: individual activity, choices, and action occur within a multilayered social context that affects interpretation and meaning at the local level. [...])”¹⁸⁷¹

As regards intentional actions as socially situated, let us rewind the Enron Scandal and focus on an important statement Kenneth Lay made while undergoing trial on fraud and felony charges; which can throw further light on the intentional action, MEM in our case, that was one of the main factors leading to the Enron bankruptcy. During a legal hearings, Lay had tried to defend his questionable behaviour that led to the Enron bankruptcy, saying: “We had realized the American Dream and were living a very expensive lifestyle [...]. It's the type of lifestyle that's

difficult to turn on and off like a spigot [...].”¹⁸⁷² American Dream is important here because Lay, it has been argued, was a victim of it (Choo and Tan, 2007¹⁸⁷³). Thus, here arises a question: “Was Enron the work of a few bad men, or a dark shadow of the American Dream?”¹⁸⁷⁴

3.2.1. American Dream and Intentional Action

Broadly speaking, the American Dream (AD) is about achieving (socio-economic) success (Hochschild, 1995¹⁸⁷⁵).¹⁸⁷⁶ According to AD, anyone, irrespective of her/his upbringing, can become successful through hard-work and dedication.^{1877,1878} Though it is credited with bringing prosperity to millions, it also has been blamed for the ever-mounting societal expectations and over-inflated personal desire to be rich and famous, hence spreading a sense of deprivation among people, the rich and the poor alike.¹⁸⁷⁹ The desire to aspire and acquire more, and in the process becoming more successful, can become an obsession, i.e., a perpetual desire, in people in such a society (because of the constant pressure to be successful continuously).¹⁸⁸⁰ This “culture of competition” is one of the factors that gives rise to the mindset to aspire for and acquire more wealth and social status.¹⁸⁸¹

Desire is considered as the primary motive behind an intentional action (Searle, 1983¹⁸⁸²), because it is normally directed at a goal – *the* end of an action (Dretske, 1988¹⁸⁸³). Thus, in the case of an AD centric society, the desire to succeed can become an end in itself (which may lead to illegal actions like those committed by Lay). Interestingly, desire is strongly embedded in a society’s shared knowledge base (Bruner, 1990); which mainly concerned with the mindset of becoming successful in monetary terms in such a society.¹⁸⁸⁴ Success is a relative concept as people desire to be successful with respect to others with whom they compare their (financial and social) status with.¹⁸⁸⁵ And, in a society dominated by the AD, the measures of success change with time,¹⁸⁸⁶ making people to continuously desire more to exceed their past success levels; which can lead to further levels of cravings and hence deprivation, leading to a vicious cycle of aspiring more than before. This has global implications at present because our contemporary world is greatly influenced by Westernisation and/or Americanisation and hence the tenets of AD are widespread worldwide;¹⁸⁸⁷ which is particularly relevant with respect to organisational decision-making because of the constant pressure on companies to better their past levels of success. As one purpose of EM is to inflate earnings, thereby making companies look more lucrative, company decision-makers (hereafter decision-makers) can use the managing earnings route time and again to achieve desired earnings numbers, impress the market and remain (sic) successful. However, in doing so, they may sidestep prudent means, as Levitt (1998) has noted, and instead employ illegal means (e.g., MEM). In the process, they may rationalise the adoption of MEM to achieve the success that they desire and get rid of their (relative) deprivation, if EM does not let them to achieve their goals.

3.3. Relative Deprivation

Contrary to 'Organisation Wo/man' as a depersonalised¹⁸⁸⁸ entity,¹⁸⁸⁹ and that (formal) organisations exist independent of particular human beings;¹⁸⁹⁰ human action, behaviour and motivation guide organisational functioning.¹⁸⁹¹ People resist depersonalised representations of themselves; instead, they tend to act as *wholes* (Selznick, 1948¹⁸⁹²). That is, "[...]he formal systems cannot take account of the deviations introduced [by looking at organisations as depersonalised arenas, where people are represented by their formal organisational roles], and consequently break down as instruments of control when relied upon alone. The whole individual raises new problems for the organization, partly because he brings with him a set of established habits as well, perhaps, as commitment to [and conflict with ...] groups outside the organization."¹⁸⁹³

MEM entails an intention that culminates in the behaviour to manipulate earnings fraudulently. Behaviour is often a matter of habit which is often difficult to change.¹⁸⁹⁴ Thus, habit is one of the keys to study behaviour. According to Selznick (*Ibid.*), habits have their origins in society. Thus, aspects pertaining to an individual's upbringing and dwelling in a particular kind of society are to be explored further in order to unravel the causal correlates of MEM. Furthermore, desire (or want) is an important kind of reason behind an intentional action, which influences habit formation.¹⁸⁹⁵ As a result, to explain habit, we need to know her/his desires which, however, are relative. "[...] Our wants [and desires ...] have their origin in society, we do not measure them in relation to the objects which serve for their gratification. Since they are of a social nature, they are of a relative nature. [...]"¹⁸⁹⁶

Desire and deprivation are interlinked. To feel deprived of something, it is necessary that an individual actually desires it; which, in turn, can lead to the desire to overcome the deprivation (arising out of that unfulfilled desire).¹⁸⁹⁷ That is, Desire to have something → Deprivation of not having it → Desire (reason) to overcome this deprivation. The study of deprivation has important bearings with Merton's (1938)¹⁸⁹⁸ work on social structure and anomie, that centres around a person's class position (based on her/his income) in society and his deprivation levels (see also: Merton, 1995¹⁸⁹⁹). However, "[...] a person's sense of contentment [and deprivation] depend [...] not on objective conditions, but on the subjective perceptions and comparisons of self to others. [...]"¹⁹⁰⁰ Relative Deprivation (RD)¹⁹⁰¹ school of thought deems deprivation as relative, and not absolute or objective.¹⁹⁰² "[...] If A, who does not have something but wants it, compares himself to B, who does have it, then A is 'relatively deprived' with reference to B. Similarly, if A's expectations are higher than B's, or if he was better off than B in the past, he may when similarly placed to B feel relatively deprived by comparison with him. [...] Relative deprivation should always be understood to mean a *sense* of deprivation; a person who is 'relatively deprived' need not be 'objectively' deprived in the more usual sense that he (sic) is demonstrably lacking something."¹⁹⁰³ Thus, the RD scholars approach deprivation from the perspective of the *self-defined* class position that people ascribe to themselves *subjectively*, placing them within a stratified hierarchy, and actively constructing their status with reference to reference groups¹⁹⁰⁴ (Runciman, 1966¹⁹⁰⁵, 1989¹⁹⁰⁶). People may compare themselves to other people and feel personally deprived – egoistic RD – or consider themselves as members of a group and compare with other groups to feel collectively deprived – fraternalistic RD (Runciman, 1966).

The Relative Deprivation Theory (RDT) is used to explain human behavioural paradoxes in social sciences (Tyler *et al.*, 1997¹⁹⁰⁷; Kwantes *et al.*, 2005¹⁹⁰⁸). Its central proposition is that people feel deprived “[...] when they perceive a discrepancy between the standard of living they are currently enjoying and the standard they believe they should be enjoying. [...]”¹⁹⁰⁹ Moreover, it assumes that “[...] people’s reactions to objective circumstances depend on their subjective comparisons. [...]”¹⁹¹⁰ Since Stouffer *et al.* (1949)¹⁹¹¹ coined the term to explain the unexpected relationships between one’s level of satisfaction and her/his position in an organisation (the American Army), researchers have attempted to theorise RD; most notable among them are: Davis (1959)¹⁹¹², Runciman (1966)¹⁹¹³, Gurr (1970)¹⁹¹⁴, and Crosby (1976¹⁹¹⁵, 1982¹⁹¹⁶). Recent research works on RD have been immensely influenced by Crosby’s work, concerning egoistic RD^{1917, 1918} According to her Five Factor Model: “[...] an individual feels resentment [or deprivation] about failure to possess something (X) only when he sees that similar others possess X, he wants X, he feels entitled to possess X, he thinks that possession of X is feasible, and he does not blame himself for his failure to possess X. [...]”¹⁹¹⁹ And her Two Factor Model postulates that: only two preconditions are necessary and sufficient for egoistical RD namely wanting and entitlement. People feel resentful about not possessing something if (a) they want it and, (b) feel entitled to have it. If someone feels entitled to have something but does not desire it, then this state is not sufficient to produce RD. Thus, according to Crosby, RD is a psychological state, relative between two parties, where one person or group possesses something while the other does not; the latter not only feels entitled to but also desires it. (We will discuss more on why we used Crosby’s RDT as the theoretical underpinning of our study in the Study Methodology section).

3.3.1. Relative Deprivation and White-Collar Crime

“[...] R]elative deprivation equals discontent: discontent plus lack of [...] solution equals crime. [...]”¹⁹²⁰

It has been argued that “[...] c]entral to most theories of crime [...] is the idea that [...] both perceived and actual] inequality is criminogenic. [...]”¹⁹²¹ RD causes people to feel disgruntled, who may commit crimes, including white-collar crimes (Toch, 1979¹⁹²²; Blau and Blau, 1982¹⁹²³; Lea and Young 1984¹⁹²⁴; Meier, 1984¹⁹²⁵; Young and Matthews, 1992¹⁹²⁶; Young, 1997¹⁹²⁷, 1999¹⁹²⁸); because on many occasions, people simply lack legitimate means to overcome such discontents.¹⁹²⁹ In line with this, RDT proposes that individuals who commit crimes are reacting at a system in which they feel a lack of control over their relative economic or social position; even individuals who could earn a better living through legal endeavours will be predisposed to criminal acts if they *perceive* unjustified deprivation relative to a reference group as in the case of white-collar crimes (Allen, 1996¹⁹³⁰; Cohen, 2000; Falk, 2010).

“[...] R]elative deprivation [...] is central to an understanding of white-collar crime and other forms of unethical behavior among higher socioeconomic groups. [...]”¹⁹³¹

“Relative deprivation is related to a good deal of white-collar crime in that some who have high-prestige occupations and good incomes may nevertheless resort to stealing because their expectations are not achieved relative to those who matter to them. [...]”¹⁹³²

White-collar crime is “[...] a crime committed by a person of respectability and high social status in the course of his occupation. [...]”¹⁹³³ Contrary to the commonsense notion of crime, people who are better-off commit more sophisticated and serious (white-collar) crimes (Sutherland, 1949¹⁹³⁴, 1983¹⁹³⁵; Chambliss, 1964¹⁹³⁶, 1978¹⁹³⁷; Runciman, 1966; Reiman, 1979¹⁹³⁸; Box, 1981a¹⁹³⁹, 1983¹⁹⁴⁰; Braithwaite, 1981-82¹⁹⁴¹). “[...] If arrest records were brought in line with the real incidence of crime, it is likely that those who are well off would appear in records far more than they do at present, even though the poor would still probably figure disproportionately in arrests for crimes people fear. In addition to this [...] those who are well off commit acts that are not defined as crimes and yet that are as harmful or more so than the crimes people fear. Thus, if we had accurate picture of who is really dangerous to society, there is reason to believe that those who are well off would receive still greater representation. [...]”¹⁹⁴² Even if EM is legal, MEM is oftentimes practised in the name of EM, which was forewarned in 1998 by Arthur Levitt, the ex-Chairman of the US SEC.

“Increasingly, [...] the motivation to meet Wall Street earnings expectations may be overriding common sense business practices. Too many corporate managers, auditors, and analysts are participants in a game of nods and winks. In the zeal to satisfy consensus earnings estimates and project a smooth earnings path [through creative accounting practices which includes earnings management, wishful thinking may be winning the day over faithful representation. [...] As a result, I fear that we are witnessing an erosion in the quality of earnings, and therefore, the quality of financial reporting. [...] EM] may be giving way to [MEM ...]; [...] integrity may be losing out to illusion.”¹⁹⁴³

MEM (which is often practised in the name of EM) is a white-collar crime (Pontell and Calavita, 1992¹⁹⁴⁴; Frankel, 2006¹⁹⁴⁵; Nelken, 2007¹⁹⁴⁶; Rezaee, 2007¹⁹⁴⁷; Rezaee and Riley, 2010¹⁹⁴⁸). Since the Enron Scandal, in spite of the promulgation of a gamut of initiatives notably more vigilance and regulatory measures, like the Sarbanes-Oxley Act of 2002; it is argued that not much has improved regarding the proliferation of MEM. “[...] Ken Brown of the Wall Street Journal suggested that “despite the bursting of the stock-market bubble, the discrediting of analysts’ research and exposure of a slew of accounting tricks that companies use to make their financial figures look better, the earnings management game [i.e., MEM] is still alive [...]” Legislation changed little. Professor Lawrence D. Brown said, “I don’t believe there’s been a change’ since the passage of the Sarbanes-Oxley Act [...] and other reforms.” [...]”¹⁹⁴⁹

As already mentioned, RD mainly stems from an individual’s social interaction, categorisation and comparison. In the case of the Enron Scandal, Kenneth Lay simply could not realise where to stop his fraudulent activities. This is blamed on the influence of the AD worldwide that can make people, including decision-makers, obsessed with the striving for (socio-economic) success (at all cost).

“The possibility of relative deprivation rests on the infinite expansiveness of the American Dream [...]. Once one can reasonably anticipate absolute success [...] then one is tempted to anticipate more and more success, even if less and less reasonably. As one achieves more, one seeks even more (*pace* the economists’ assumption of the diminishing marginal returns to utility). [...] People may eventually reach an equilibrium, through either astonishing achievements or, more likely, scaling down their

hopes. But in the meantime they run the risk of becoming more dissatisfied as they become more successful.¹⁹⁵⁰

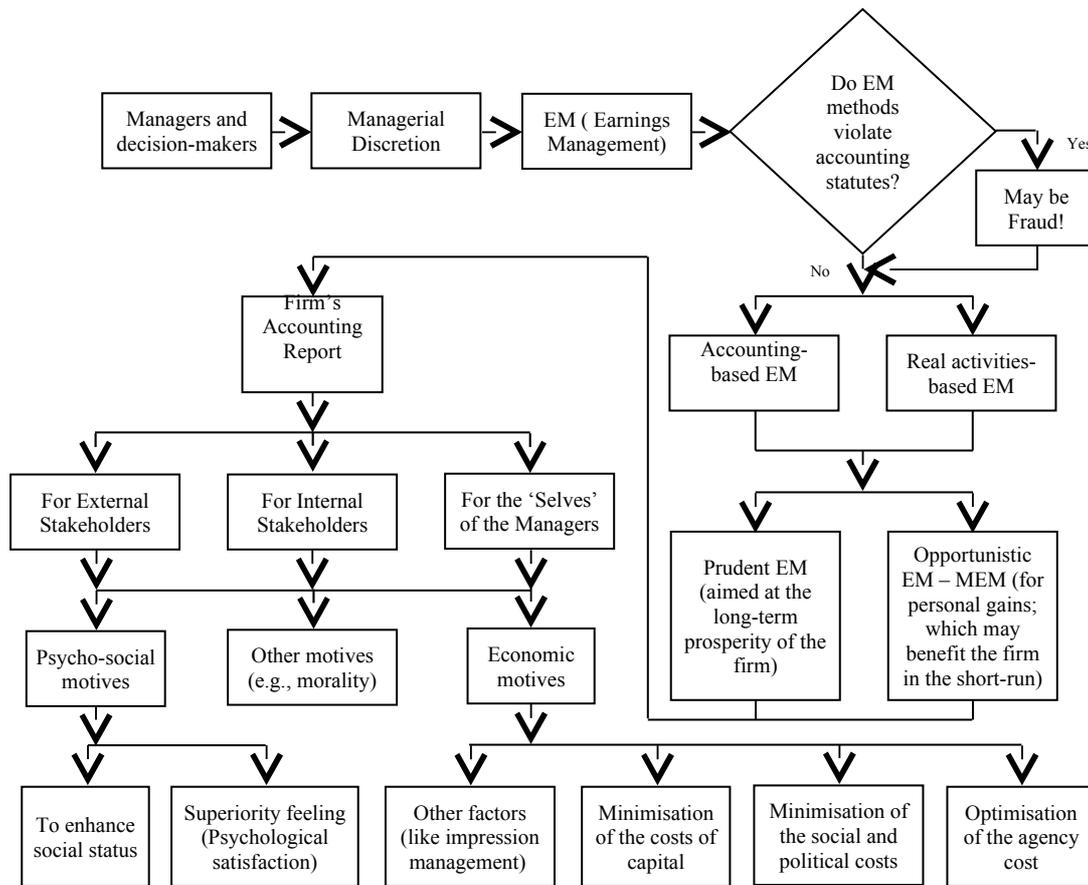


Figure 3. The Earning Management Phenomenon and the (Human) Motives behind It

Thus, more success breeds more discontent. This also seems to be logical if we consider that measuring success, especially monetary success, is a never-ending phenomenon. When money (or cash) represent accounting numbers by which decision-makers evaluate (individual and organisational) success, problems start to crop up because when we measure wealth in cash what is enough is simply beyond our rational reach. ‘[...] Once you begin to measure [or take an account of] wealth in cash, enough doesn’t exist.... Accounting is familiar with the categories of “more” or “less” but doesn’t know that of “enough”! [...]’¹⁹⁵¹ Moreover, in the case accounting manipulations, a perception of loss – an instance of RD – can infuse risk-seeking in decision-makers who, as a result, may carry out MEM.

‘[...] Neither fraud, [fraudulent] intent nor inadequate accounting rules are necessary requirements, at least not initially for producing unreliable financial reports. The fear of a loss of self-esteem and social recognition (status quo), for example, can have a pervasive and distorting influence on cognition and judgement of agents in corporate governance and may result in biased reporting. [...] Drawing from Kahneman and Tversky (1979), risk-seeking behaviour, say in the form of revenue estimates which are unlikely to be met, is more commonplace when a person perceives the possibility of a loss [...]’¹⁹⁵²

And, things worsen if the white-collar criminals, in the quest to quell their RD, aspire for more and more and, by that, continue their nefarious designs with an intention to fool others, thereby feeling superior. “[...S]ometimes individuals’ motivation for crime may have originally been relative deprivation [...]. However, as they found themselves successful at this crime, they began to gain some secondary delight in the knowledge that they are fooling the world, that they are showing their superiority to others. [...]”¹⁹⁵³ Hence, RD can motivate decision-makers to manipulate earnings, which can become an obsession with them; in the process, they may carry out bigger and bolder forms of fraud and felony for various economic (to be rich), social (to enhance social status) and psychological (to feel superior than others) motives. (See: Figure 3.)

3.4. What is at Stake for The Accounting Community?

[...] There is a crisis of confidence today about corporate earnings reports and the credibility of chief executives. And it’s justified. For many years, I’ve [Warren Buffett] had little confidence in the earnings numbers reported by most corporations. I’m not talking about Enron and WorldCom – examples of outright crookedness. Rather, I am referring to the legal, but improper, accounting methods used by chief executives to inflate reported earnings. [...] To clean up their act on these fronts, C.E.O.’s don’t need “independent” directors, oversight committees or auditors absolutely free of conflicts of interest. They simply need to do what’s right. [...] The attitudes and actions of C.E.O.’s are what determine corporate conduct. [...] C.E.O.s want to be respected and believed. They will be – and should be – only when they deserve to be. [...]”¹⁹⁵⁴

Through accounting, a firm gives accounts¹⁹⁵⁵ about itself to its stakeholders – shareholders, employees, regulators, auditors, suppliers, customers, the general public, and society in general – and through this accounts-giving endeavour, it tries, in principle, to manifest its accountability towards them.¹⁹⁵⁶ By facilitating this, accounting professionals gain privileged position in society (Loeb, 1971; Armstrong, 1985¹⁹⁵⁷; Williams, 2004¹⁹⁵⁸). “[...] Society gives the [accounting] professions broad latitude in controlling themselves. In return for their unique position, [...] accountants] have certain obligations to the larger community. The professional accountant has obligations to three distinct groups: his clients, his colleagues, and the public (society). [...]”¹⁹⁵⁹ Moreover, “[... i]n most nations today, the accounting profession has been granted near monopoly on accounting and auditing services, legitimated on the basis that accountants will act in an objective, unbiased and professional manner so that society at large can ‘count on’ the financial information produced for public consumption. But if these data are tainted by earnings management [MEM], then the public trust is violated. [...]”¹⁹⁶⁰ Thus, MEM can seriously jeopardise the obligation that accountants have towards society and result in the removal of their privileged social status because if accountants through MEM present a false image of the firm, their credibility can be questioned.

Referring to Goode (1957)¹⁹⁶¹, any profession that fails to regulate the professional behaviour of its members, risks the loss of its autonomy. Thus, if accountants fail to discharge their accountability related responsibility towards society, they risk losing their privileged social status. It has greater implications in the context of our contemporary society dominated by the AD, because there is the danger that social pressure to be rich and famous can affect the morale of professionals who still adhere to workplace ethics.

“[... T]he context in which decisions are made, where subtle effects from human perceptions and peer pressures, the complexity of combined factors, and a high-stakes business environment all impact good people who are trying to do their jobs with integrity. [...]”¹⁹⁶²

3.5. Study Methodology

“In every [...] phenomenon] there is inexhaustible meaning; the eye sees in it what the eye brings means of seeing. [...]”¹⁹⁶³

The methodological issues that we are going to address centre around why have we adopted: (a) Crosby’s RDT (as our theoretical basis), (b) cross-sectional design, (c) practitioner-centric study, (d) Web-survey, and (e) vignettes?

3.5.1. Why Crosby’s Relative Deprivation Theory?

The purpose of our study is to investigate if RD motivate decision-makers to undertake MEM. From the hindsight, people who influence and facilitate MEM usually do not have deprivation in an absolute and/or objective sense. That is, they do not compare themselves against demographic statistics like income or job title; they have affluent lives. Rather, they want more and aspire for *more* success continuously (as in societies dominated by the AD).¹⁹⁶⁴ Moreover, one cannot study white-collar crimes, for that matter MEM, without looking into the profile of the offenders.¹⁹⁶⁵ Here a question that crops up is: Why are we focussing on the egoistic (individual or interpersonal) RD and not fraternalistic (group or inter-group) RD?

The levels of analysis is important for establishing correlations between behaviour and RD (Runciman, 1966; McPhail, 1971¹⁹⁶⁶; Long, 1975¹⁹⁶⁷; Newton *et al.*, 1980¹⁹⁶⁸; Useem, 1980¹⁹⁶⁹; Walker and Pettigrew, 1984¹⁹⁷⁰; Finkel and Rule, 1986¹⁹⁷¹; Hogg and Abrams, 1988; Kelly and Breinlinger, 1996¹⁹⁷²; Smith and Ortiz, 2001¹⁹⁷³). People may compare themselves with other individuals and feel personally deprived – egoistic RD (Mark and Folger, 1984¹⁹⁷⁴; Kawakami and Dion, 1992¹⁹⁷⁵); or they may treat themselves as members of one group and feel collectively deprived with respect to another group – fraternalistic RD (Pettigrew, 1964¹⁹⁷⁶; 1967¹⁹⁷⁷; Vanneman and Pettigrew, 1972¹⁹⁷⁸; Walker and Mann, 1987¹⁹⁷⁹). They emphasise on subtle distinctions between levels of analysis that are empirically confusing (Kawakami and Dion, 1992; Smith *et al.*, 1994¹⁹⁸⁰). Findings reveal that fraternalistic RD causing collective action is moderate at best; i.e., RD may be necessary but not sufficient condition for collective action (Guimond and Dubé-Simard, 1983¹⁹⁸¹; Wright *et al.*, 1990¹⁹⁸²; Klandermans, 1997¹⁹⁸³; Foster and Matheson, 1999¹⁹⁸⁴; Grieve and Hogg, 1999¹⁹⁸⁵; Hogg, 2001¹⁹⁸⁶; Hogg, 2006¹⁹⁸⁷). A possible explanation is that people act to benefit their respective groups only when they acknowledge their personal wellbeing lies in the communal wellbeing (Bowles and Duelli Klein, 1983¹⁹⁸⁸; Stanley and Wise, 1983¹⁹⁸⁹; Lerner, 1986¹⁹⁹⁰; Kimmel, 1989¹⁹⁹¹). Furthermore, once groups respond to mitigate fraternalistic RD, RDT resembles the social identity theory¹⁹⁹², because it reflects group behaviour as motivated by a need to establish, maintain or restore a positive aspect of the ‘social self’ (Walker and Pettigrew, 1984; Tougas and Veilleux, 1988¹⁹⁹³; Skevington and Baker, 1989¹⁹⁹⁴; Smith *et al.*, 1994; Fajak and Haslam, 1998¹⁹⁹⁵; Schmitt *et al.*, 2003¹⁹⁹⁶; van Zomeren *et al.*, 2008¹⁹⁹⁷). Thus, as fraternalistic

RD may not necessarily lead to collective action and a person may identify him/herself as her/his social self while experiencing fraternalistic RD, we adopted the egoistic RD as our level of analysis.

We found Crosby's RDT to be relevant and logical in the context of MEM because it emphasises on both the feeling of entitlement and desire for it as the prerequisites for RD to occur. This should not come as a surprise if we consider why some decision-makers (like Kenneth Lay) encourage the practice of MEM, and not others. Those who do, not only feel entitled to have more wealth (by pursuing MEM) but also desire to have more of it.

3.5.2. Why Cross-Sectional Design?

Before discussing our choice of cross-sectional design, let us discuss why we have not used longitudinal design. First, longitudinal studies require either repeated surveys over time or one-time surveys that ask respondents over a long time.¹⁹⁹⁸ Second, although they provide greater causal inferences because they establish temporal priority (i.e., cause is earlier in time than the effect),¹⁹⁹⁹ there also are counterarguments against it on the ground that they are weaker in terms of causal attribution because over time "[...] many intervening variables may influence the effects [...]."²⁰⁰⁰ Third, they are not only costly but also subject to non-response over time, incomplete data and recall biases.²⁰⁰¹

Thus, we have used cross-sectional design in which measures are more or less taken in a relatively quicker time.²⁰⁰² However, underlying this design is the assumption that model parameters are stable and constant, which are debateable because constructs used often vary across firms and over time; which, in turn, can lead to erroneous parameter estimates and conclusions.²⁰⁰³ Due to these limitations, a strong theory is required to make causal inferences in the case of cross-sectional designs (Van der Stede *et al.*, 2005²⁰⁰⁴; Mathieu and Taylor, 2006²⁰⁰⁵). This holds good in our case because RDT postulates that RD can lead to white-collar crimes. In this sense, we have a germane theoretical basis that people in the corporate decision-making sphere can indulge in white-collar crimes (e.g., MEM) to overcome RD inside them (Frankel, 2006; Rezaee and Riley, 2010). Moreover, accounting research mainly uses cross-sectional design and most of them have a theory testing focus (Van der Stede *et al.*, 2005, Kihn, 2010²⁰⁰⁶).

3.5.3. Why Practitioner-centric Survey?

Our study is based on the opinion of practitioners in the field of corporate finance and accounting. Considerable gaps often exist between the normative postulates of researchers and the actual practices of managers.²⁰⁰⁷ This is because the latter do not rigorously adopt research findings while making decisions,²⁰⁰⁸ and the former seldom turn towards managers for framing their research questions.²⁰⁰⁹ Thus, there is a growing concern that researchers should heed to the needs of the practitioners.²⁰¹⁰ In this regards, Boehm (1980)²⁰¹¹ argued that 'what is' factors underlying organisational behaviour are more important than 'what should be' factors in behavioural modelling endeavour. Moreover, as "[...] advances to the management accounting field originated in practice [and ...] will continue to come from practice [...]",²⁰¹² so more empirical studies are needed for its advancement (Zimmerman, 2001²⁰¹³; Howard and

Stout, 2006²⁰¹⁴; Stout *et al.*, 2006²⁰¹⁵; Watson *et al.*, 2007²⁰¹⁶; Sorensen, 2009²⁰¹⁷). Additionally, keeping in mind one of the main purposes of using surveys in doing research in management accounting is to describe practice (Shields, 1997²⁰¹⁸), we approached practitioners to understand if RD has a role to play in the practice of MEM.

3.5.4. Why Web-survey?

We have used the survey method because we have tried to explain the intention to carry out MEM by decision-makers having RD.²⁰¹⁹ However, a survey mode is more than a medium of communication – it is also a “bundle of methodologies,”²⁰²⁰ since many procedures are not equally suited to different modes. Considering the ubiquitous nature of the Information Technology in society and its growing impact on surveys,²⁰²¹ we chose Web-survey for our study.²⁰²² Incidentally, most of our respondents were also accessible via the Internet, which was another reason for employing it.²⁰²³

Although there are disadvantages of using Web-surveys,²⁰²⁴ yet they decrease errors (e.g., there is less likelihood of recording errors – or, wrongly recording answers given by respondents – because of the absence of interviewers) and improve the response rates in the case of studies on sensitive issues.²⁰²⁵ This has important bearings for our study because MEM is in fact a sensitive issue. Apart from the sensitive nature of our research topic, there are also other advantages for which we used the Web-survey. First, as our respondents comprise of middle and higher level managers who are usually busy, Web-surveys are appropriate because they take less time to complete.²⁰²⁶ Second, threats to internal validity (i.e., the variation in the dependent variable is related to variation in the independent variable) is easier to control,²⁰²⁷ this is important in our case because we investigated if there was a relation between MEM (dependent variable) and RD (independent variable). Third, finding professionals who would like take a survey involving sensitive issues (i.e., MEM) related to their profession is difficult; in such a situation, Web-surveys are effective.²⁰²⁸ Fourth, they have the advantage over other survey modes in terms of improved unit non-response^{2029, 2030} and enhanced quality of response because “[...] while increasing the response it may diminish the quality of response if employees are guarded in their response or distrust promises of anonymity and/or confidentiality. In this case, the researcher may be better served with a distancing mechanism [... like] using [...] public [e-]mail. [...]”²⁰³¹ Fifth, web-surveys are almost always self-administered^{2032, 2033} which, incidentally, produces higher reporting of socially undesirable behaviour,²⁰³⁴ and lower degrees of socially desirable answers,^{2035,2036} this was highly relevant in our case because as MEM is a sensitive issue, our respondents would have felt uncomfortable to answer questions related to it in the presence of an interviewer. Sixth, seeing the questions in a self-administered mode, rather than hearing them from an interviewer, mitigates the effects of question order to make it easier for respondents to use the full range of categories in the (rating and ranking) scales.²⁰³⁷

In a nutshell, we adopted a self-administered Web-survey because: first, we dealt with a sensitive issue (MEM) and, second, we asked the respondents about their feelings, attitudes, beliefs and so on about MEM vis-à-vis RD.

3.5.5. Why Vignettes?

Vignettes are “[...] short descriptions of a person or social situation that contain precise references to what are thought to be the most important factors in the decision-making or judgement-making processes of respondents. [...]”²⁰³⁸ They “[...] can be particularly illuminating with respect to managerial implications; an appropriately constructed and relevant [vignette] can help management discern where specific action is necessary. [...]”²⁰³⁹ Importantly, they are useful to study managerial ‘intentions to behave’ or attitudes, by digging deeper into various decision-making realms.²⁰⁴⁰ Vignettes are more effective than direct-question-based studies because they: (a) facilitate respondent involvement in a non-threatening manner, especially in studies pertaining to sensitive issues;²⁰⁴¹ (b) provide greater realism,²⁰⁴² by offering “[...] a range of situational or contextual factors [...]”²⁰⁴³ that “[...] approximate real-life decision making situations [...]”;²⁰⁴⁴ (c) mitigate social desirability responses,²⁰⁴⁵ particularly when questions are phrased in a third rather than first person tone;²⁰⁴⁶ (d) improve construct validity by directing “[...] respondent attention upon specific features of the research question [...]”;²⁰⁴⁷ (e) ease difficulties of studying business decisions in real situations;²⁰⁴⁸ (f) impart standardised stimuli to all respondents – as in constant-variable-value vignette (CVVV) where all respondents read the same vignettes and respond to the same stimuli – which enhances internal validity, measurement reliability and ease of replication, because CVVVs control otherwise randomised behaviour (of the respondents);²⁰⁴⁹ and so forth. Therefore, we used CVVVs in our Web-survey.

3.6. Study Design

The design issues that we are going to address are: (a) research tools used (including issues related to sampling and various means that we used to enhance response rates), (b) research schema (including study parameters and inferences), and (c) linking the Enron Scandal with the research schema.

3.6.1. Research Tools Used

We have used vignettes in a Web-survey to elicit response. In this section, let us discuss the reasons for using them and the design issues that we have adhered to.

3.6.1.1. Design Issues Concerning the Vignettes

We used CVVVs in our study. Despite their advantages, there are also disadvantages using them, namely: (a) they do not provide a common reference because respondents “[...] may differ in their perceptions of the available alternatives, the factual consequences of those alternatives to different groups and the probability that the consequences will occur [...]”;²⁰⁵⁰ (b) for low-detail CVVVs “[...] if respondents must have a fact before they can reach a judgment [...], they must invent that fact [...] and] every fact that is left to the respondent’s invention is a variable that is outside the researcher’s control [...]”;²⁰⁵¹ (c) closed-ended responses concerning vignettes only can summarise their judgments but cannot reveal the sequence of thoughts behind their behaviour,²⁰⁵² nor their assessment criteria;²⁰⁵³ (d) they may lead to social desirability biases because “[... i]t may be easier for subjects to misrepresent their

attitudes than to misrepresent what behavior they have or have not engaged in [...],”²⁰⁵⁴ and even the promise of anonymity may fail to reduce such biases;²⁰⁵⁵ and so on. We incorporated the following recommendations related to CVVV design in order to mitigate them. First, we used “[...] several related vignettes [...] to make an interpretation of individual bias more supportable than determinations made on the basis of a single situation. [...]”²⁰⁵⁶ Second, we used vignettes with a third-person’s tone to reduce social desirability bias.²⁰⁵⁷ Third, we undertook pre-testing the vignettes in order to fit them into the respondents’ native way of doing things;²⁰⁵⁸ three other purposes of pre-testing were to assess how far the vignettes were believable,²⁰⁵⁹ to be sure that they did not overload the respondents with too many details,²⁰⁶⁰ and to ensure that their tones were confined to RD and MEM.²⁰⁶¹ Fourth, as manipulated variable in our study was RD, which often gets unnoticed by respondents, we highlighted it by portraying the RD level of the main character of the vignettes in more details.²⁰⁶² Fifth, we took care to avoid framing effects by making all the vignettes structurally equivalent so that variations, whatsoever, in wording did not change their objective information, nor the respondents’ perception about them.²⁰⁶³

Now let us throw some light on the subject matters of the vignettes. The vignettes were based on Kenneth Lay (Enron’s founder), hovering around the Enron Scandal. We used the Enron Scandal because it is a high-profile case involving rampant accounting manipulations in the recent times; and Lay’s life story because it is a classic case of a man who, in spite of having higher degrees of RD in his childhood and adolescent years due to abject poverty and extreme hardship, while being raised in a society dominated by the AD, reached incredible success levels both professionally and personally.

We used three inter-related vignettes that were followed up with questions concerning RD and MEM. Before we discuss about the contents of the vignettes, here it is imperative to state that we concealed the real event (the Enron Scandal) and the real character of our study (Lay) from the respondents; we addressed Lay and Enron hypothetically – i.e., Ken for Kenneth Lay and X for Enron – in order not to bias their responses. The first vignette was a portrayal of the gross accounting misappropriations (MEM) – mainly discussing Lay’s role in them – that led to the Enron bankruptcy. In the second vignette, we discussed how Lay created enabling conditions to undertake MEM using his economic clout, socio-political networks and astute organisational skills. The third vignette described Lay’s childhood and adolescence years that were marred by difficult living conditions that led to the development of RD in him, which continued further in his life because he went on to live and work in a society dominated by the AD.

3.6.1.2. Design Issues Concerning the Web-Questionnaire

We adopted various design recommendations to our Web-questionnaire (see: Appendix 1) in order to minimise the following types of errors: sampling error, coverage or sample errors, non-response errors, measurement errors, and errors arising out of other factors like satisficing, social desirability, etc.

Our level of analysis was the ‘individual level’²⁰⁶⁴ because, in addition to the fact that we have tried to correlate egoistic RD with MEM, “[...] it is at the individual level that crucial value judgements [regarding questionable organisational practices]

must be made and follow-up actions taken if conscious, rational decisions are to guide [...] decision making. [...]²⁰⁶⁵

Our sample frame consisted of company finance and accounting professionals, which we drew using purposive, expert and snowball samplings.^{2066,2067,2068} As our sample size was small, we emphasised on lowering non-sampling errors, especially non-response rates, because they are some of the main contributors to the total survey error. We did so by designing a user-friendly questionnaire,²⁰⁶⁹ following a conventional format (similar to that normally used in paper questionnaires),²⁰⁷⁰ sending a brief description about our study along with the cover letter to the respondents,²⁰⁷¹ following up with them,²⁰⁷² promising to share the study findings with them,²⁰⁷³ minimising response satisficing and enhancing data quality,²⁰⁷⁴ and similar non-statistical strategies which enhance response rates.^{2075,2076}

As our study involved a sensitive issue (motivations behind MEM), we ensured confidentiality to the respondents. As our survey was Web-based, we emphasised on confidentiality rather than anonymity because, especially in the case of the Web-surveys, anonymity may not assure respondents that their identities cannot be traced back.²⁰⁷⁷

In the questionnaire, there were eight Web-pages. The first four had questions about the respondents': (a) profession, (b) past and present levels of RD, and (c) demography.²⁰⁷⁸ Through the questions related to RD, we introduced and explained the concept of RD to our respondents. The Web-page#5, 6 and 7 had vignettes constructed from the Enron Scandal and follow up questions. In the Web-page#8, we first disclosed about the Enron Scandal and then asked general questions about MEM vis-à-vis RD.

As we elicited responses concerning attitudes, we employed the Likert scale.²⁰⁷⁹ While phrasing the questions, we mapped theoretical constructs onto respondents' profession, which generally increases the response quality because they encode things in respondents' native ways.²⁰⁸⁰ We provided definitions of key terms at the beginning of questions to standardise their meanings, thereby mitigating the wordings evoking prototypes or exemplars that could lead to biases and errors.²⁰⁸¹ In the case of memory-retrieval questions, like those that asked information about the respondents' childhood and adolescence years; we, at the beginning of questions, provided reference period markers to improve internal consistency of responses.^{2082,2083} We used forced-choice type questions because they lead to: higher reliability and validity,²⁰⁸⁴ and, lesser instances of satisficing and non-response errors.²⁰⁸⁵ We used relative frequencies in the case of memory retrieval events with ranking scales,²⁰⁸⁶ and absolute frequencies in the case of perception and attitude oriented questions with rating scales.²⁰⁸⁷ Furthermore, we used bipolar (e.g., high to low), specifying the poles, in stead of unipolar (e.g., not at all important to extremely important) scales, with numeric labels, in the case of personal questions where memory retrieval was required,²⁰⁸⁸ and both unipolar and bipolar scales in the case of evaluative questions concerning the vignettes.²⁰⁸⁹

Furthermore, to minimise response errors, we presented the answer choices appropriately. We used a series of radio buttons because all the response options were visible at the same time.²⁰⁹⁰ While creating the order of answers, we ensured

that the most commonly chosen answers came last.²⁰⁹¹ We did not provide open-ended answer options.²⁰⁹² We did not provide answer-editing option to the respondents.²⁰⁹³

We mainly used cognitive interviews²⁰⁹⁴ and respondent debriefings²⁰⁹⁵ to test and evaluate questions. For example, we used probes like ‘What do you think about ...,’ ‘Do you think it could have been done in another way; if yes, please tell us how?’ and so on, during the pilot survey stage in order to test, evaluate and modify the questionnaire.

Finally, we sent prior emails to get their approval before sending them the survey-invitation, including the Web-link to the questionnaire in order to minimise the non-response rates.

3.6.2. Study Schema

Based on the Figure 4, we studied the correlation between MEM and RD. There are five parameters concerning MEM as an intentional action that we investigated, from the perspective of: Searle’s notion of the philosophy of mind (see: Figure 1) and Malle’s Social-psychological conceptualisation of the domains of intentional action (see: Figure 2). Now, let us elucidate them.

First, we considered RD that a person experiences in an AD dominated society, arising out of the craving to have more wealth and social status, as the CHR that influences the reasoning process behind MEM. Second, we regarded the following as the reasons behind the Intentionality to undertake MEM: desire to be rich and have higher social status, belief that MEM can fulfil this desire, and valuing MEM as one of the best possible ways to fulfil the desire to be rich and enhance social status. Third, the Intentionality of the decision-makers who practise/influence MEM comprises of the Background (e.g., accounting skills and capacities) and the Network (e.g., other beliefs like their indulgence in MEM can overcome their RD, that MEM is just another type of EM, etc.). Fourth, enabling factors facilitate MEM (e.g., lobbying with policy-makers and regulators to create favourable accounting statutes and regulations that help them to carry out MEM, influencing auditors to hide questionable practices, etc.).²⁰⁹⁶ Fifth, the intentional action, i.e., MEM whereby managers employ managerial discretions to meet the desired financial numbers.

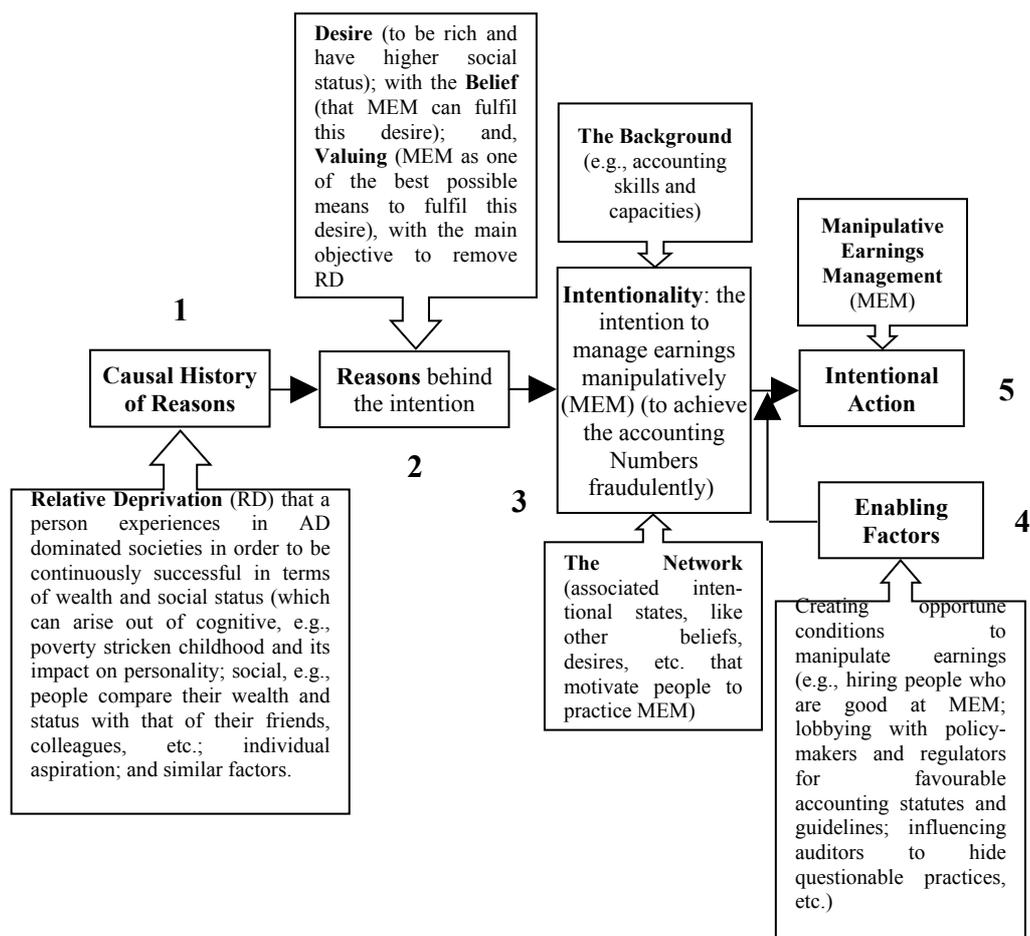


Figure 4. Manipulative Earnings Management – An Intentional Action Arising out of Intentionality, Enabling Factors, Reasons and Relative Deprivation (Insights are adopted from: Searle (1983, 1984, 1992) on intentionality; Malle (1999, 2001, 2005) on intentional actions; Crosby (1976, 1982) on relative deprivation)

3.6.3. Linking the Enron Scandal with the Study Schema

The case that we used in the study was the Enron Scandal, and how RD is causally related to the practice of MEM. Enron’s founder Lay was born and brought up in abject poverty, which is an important factor that had created immense material deprivation in him,^{2097,2098} because “[...] family income and poverty status are powerful determinants of the cognitive development and behaviour of children [...]”²⁰⁹⁹ Moreover, children’s responses to inequality are remarkably similar to those found in adults.²¹⁰⁰ As Lay grew up in the U.S.A., the country of the origin of AD, this had important bearings with our study. Apart from higher demands to be rich and have higher social status, the Americans who are poor and have low social status are seen as weak and lazy because the concept of AD presumably gives equal opportunities to every one to be successful.²¹⁰¹

Furthermore, the pernicious effects of deprivations in early childhood can persist in people in their adulthood.²¹⁰² Some people may accept to live with it if things do not change as they grow up – survival strategy,²¹⁰³ whereas, others may be motivated to change their situations with effort and persistence.²¹⁰⁴ Lay, we think, belonged to the latter category. The motivation to get rid of RD which was a

combination of his childhood and adolescent RD levels and the RD that he experienced owing to living and working in the U.S.A., could have influenced him and rationalised his aspirations to have higher socio-economic status, continuously. As a result, his desires knew no limits and his aspirations to be more rich and have higher social status grew unabated, until Enron busted due to the rampant instances of accounting misappropriations. His intention to manage earnings manipulatively could have arisen due to the Background (of his Intentionality) comprising the business acumen and expertise that he had in managing companies for very long periods. Additionally, he had created enabling factors (to carry out MEM) through his socio-economic-political affiliations. The Network (of his Intentionality), the other important factor behind an intentional act, we think, comprised of other associated beliefs like: MEM was just another way of managing earnings; Enron's finance and accounting team of experts could effectively carry out MEM; Arthur Anderson (Enron's auditing and consulting firm) could conceal all those misappropriations; his political links could come to his rescue in adversities; his actions were required to further the spirit of AD, and so on. All of these beckons the following question: Was (the white-collar criminal) Kenneth Lay a victim of RD?

3.7. Study Findings and Discussion:

'[...] S]ocial scientists may counter if someone asserts that what they describe does not resemble real people: "We do not paint persons – we paint images of persons." For sociologists are inhabitants of two worlds: one that is made for them and the one in which they live; they interpret the world they inhabit. By a powerful metaphor, sociologists do so by constructing "mechanisms." A mechanism is a set of interacting parts – an assembly of elements producing an effect not inherent in any one of them. A mechanism is not so much about "nuts and bolts" as about "cogs and wheels" [...] – the wheelwork or [human] agency by which an effect is produced. But a mechanism or inner workings is an abstract, dynamic logic by which social scientists render understandable the reality they depict.'²¹⁰⁵

Before discussing the findings, let us first know our sample frame. It consisted of 39 professionals in the field of corporate finance and accounting – 1 from Australia, 1 from Canada, 3 from England, 15 from India, 1 from Iran, 7 from Italy, 2 from The Netherlands, and 9 from the U.S.A. (We sent 50 invitations; thus, our response rate was 78 per cent.) Their professional and demographic details are as follows: (i) Number of years of experience: 16 with less than 5 years, 10 with 5-10 years, and 13 with more than 10 years; (ii) Main professional responsibility: 8 prepare financial reports, 14 plan, supervise, and/or evaluate financial performance, and 17 do auditing and/or consulting; (iii) Gender: 11 females and 28 males; (iv) Age: 8 of our respondents are less than 35 years old, 28 between 35-50 years, and 3 above 50 years; and (v) Nationality/Place of domicile: 16 from developing and 23 from developed countries. Furthermore, the frequency of constructs related to the respondents' RD are as follows: (vi) Respondents' RD levels in the past (i.e., their childhood and adolescent years): 7 low, 23 medium and 9 high; and, (vii) Respondents' RD levels in comparison to others they are associated at present: 4 low, 22 medium and 13 high.²¹⁰⁶

We used four sets of questions to elicit response, namely: (a) three related to the vignettes with perception-questions asking what the respondents perceived about the event presented; and, (b) one related to general questions with opinion-questions soliciting their opinion. (Although, perception-questions invariably involve opinion

of the respondents in their final response, yet we have, for convenience sake, made a distinction here between the question types to distinguish perception-questions which were strictly associated with vignettes from the opinion-questions as done in opinion surveys that did not have vignettes preceding it.) The statements of these questions served as the inferences of our study. In the data analysis, we found out how far these inferences were supported by the responses against them, using descriptive statistics.

A basic assumption of all standard statistical tests is that the sample is obtained by a random procedure.²¹⁰⁷ However, we employed descriptive statistics to analyse our dataset because we used non-random sampling. We estimated the mode²¹⁰⁸ to ascertain to what extent an inference was supported or not, because we used ordinal scales²¹⁰⁹ (in the answer choices). Furthermore, in our sample frame, 23 respondents were obtained through purposive and expert sampling and 16 through snowball sampling. To cross-validate the results, we, along with examining how far the inferences were supported at the overall level, i.e., by taking into consideration all the 39 responses, we also examined how far they were supported in the case of the two sampling methods that we used.²¹¹⁰

3.7.1. Findings from Vignette#1 Concerning the Reason Types behind the Intention to Manipulate Earnings

The Vignette#1 (V1) was a description of the accounting misappropriations (including MEM) in the Enron Scandal, which mainly discussed Lay's role in them. Using V1, we asked perception-questions about various reason types – desire, belief and valuing – that were behind Lay's intention to carry out MEM. Here, we focussed on the following issues. Do decision-makers carry out MEM because of their: (a) desire to be rich and enhance social status; (b) belief that MEM could fulfil this desire; (c) valuing that MEM is one of the best means to fulfil this desire?

As regards the desire to be rich and enhance social status as a reason behind (Lay's intention to carry out) MEM: overall, 22 respondents answered 'Yes,' 11 'May be yes,' and 6 'No;' in purposive and expert sampling, 12 respondents answered 'Yes,' 8 'May be yes,' and 3 'No;' in snowball sampling, 10 respondents answered 'Yes,' 3 'May be yes,' and 3 'No.' Thus, the modal value was 'Yes;' and there was support to I1: *The desire to be rich and enhance their social status can be the reason behind the decision-makers' intention to carry out MEM.* As to the belief that MEM could fulfil the desire to be rich and enhance social status as a reason behind (Lay's intention to carry out) MEM: overall, 27 answered 'Yes,' 11 'May be yes,' and 1 'No;' in purposive and expert sampling, 15 respondents answered 'Yes,' 8 'May be yes,' and 0 'No;' in snowball sampling, 12 respondents answered 'Yes,' 3 'May be yes,' and 1 'No.' Thus, the modal value was 'Yes;' and there was support to I2: *The belief of decision-makers that MEM can help them to fulfil the desire to be rich and enhance their social status can be a reason behind their intention to carry out MEM.* In respect of the valuing of MEM as one of the best possible ways to fulfil this desire as a reason behind (Lay's intention to carry out) MEM: overall, 17 answered 'Yes,' 16 'May be yes,' and 6 'No;' in purposive and expert sampling, 10 respondents answered 'Yes,' 8 'May be yes,' and 5 'No;' in snowball sampling, 7 respondents answered 'Yes,' 8 'May be yes,' and 1 'No.' Thus, the modal value was 'Yes' for the former two and 'May be Yes' for the latter; and there was mixed support to I3: *The valuing by decision-makers that MEM is one of the best possible ways to fulfil the*

desire of to be rich and enhance their social status can be a reason behind their intention to carry out MEM.

The main findings from V1 are: the belief and desire reasons behind carrying out MEM are supported; mixed support towards the valuing reason. However, there is a paradox involved here. While explaining their own action, people use belief reasons; whereas observers (the respondents, in our case) tend to use desire reasons to explain the behaviour of others (Lay, in our case). This brings an interesting dimension to the fore, i.e.: did the respondents, while answering the questions concerning V1 (for that matter 2 or 3), visualise themselves in the place of Ken (Lay)? And, hence they supported both belief and desire reasons behind the intention to carry out MEM? If this is so, does this then imply: finance and accounting professionals, as Levitt (1998) notes, could be manipulating earnings in the name of managing them? We are going to revisit this when we will discuss the main finding of the final section concerning general questions.

3.7.2. Findings from Vignette#2 Concerning the Importance of Enabling Factors for Managing and Manipulating Earnings

The Vignette#2 (V2) was a description of how Lay created and nurtured enabling factors, i.e., opportune conditions, to carry out MEM using his economic clout, socio-political networks and astute organisational skills. Using V2, we asked perception-questions about the importance of enabling factors both for managing and manipulating earnings, and focussed on what is the importance of enabling factors: (a) for EM; and, (b) to carry out MEM?

Regarding the importance of enabling factors for EM: overall, 24 answered 'High,' 14 'Medium,' and 1 'Low;' in purposive and expert sampling, 17 respondents answered 'High,' 6 'Medium,' and 0 'Low;' in snowball sampling, 7 respondents answered 'High,' 8 'Medium,' and 1 'Low.' Thus, the modal value was 'High' for the former two and 'Medium' for the latter; and there was mixed support to I4: *Enabling factors are important for EM.* With respect to the importance of enabling factors (that Lay created) to carry out MEM: overall, 25 answered 'High,' 11 'Medium,' and 3 'Low;' in purposive and expert sampling, 16 respondents answered 'High,' 5 'Medium,' and 2 'Low;' in snowball sampling, 9 respondents answered 'High,' 6 'Medium,' and 1 'Low.' Thus, the modal value was 'High;' and there was support to I5: *Enabling factors are important to carry out MEM.*

The main finding of V2 is: enabling factors are more important to carry out MEM than for EM. This raises two important questions. First, decision-makers manipulate earnings when they have the support of enabling factors. As a consequence, decision-makers need advanced or sophisticated enabling factors like favourable accounting statutes and guidelines beforehand to manipulate earnings. This is probably is the reason for which the existing accounting guidelines, in the name of favourable business policies in the national as well as international spheres, have flexibility concerning financial reporting procedures; which provide decision-makers with the necessary scope that they need to carry out MEM. This reflects the concerns that Revsine (1991) has raised, i.e., "[...]inancial reporting rules [...] are often arbitrary, complicated and misleading. [...] However,] the problem is not accidental, but in stead results from contrived and flexible reporting rules

promulgated by standard setters who have been “captured” by the intended regulatees and others involved in the financial reporting process. [...] Regulatees desire such rules because the resulting latitude allows them flexibility in depicting their performance. [...] Interestingly, other participants – shareholders, auditors, standard setters/public policy makers, and even academics – frequently derive simultaneous benefits from these misrepresentations. [...]”²¹¹

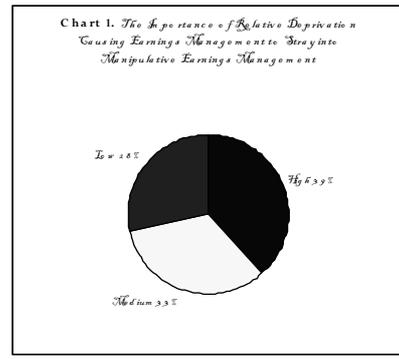
3.7.3. Findings from Vignette#3 Concerning the Influence of RD in Manipulating Earnings

The Vignette#3 (V3) portrayed: (a) the high levels of RD that Lay experienced in his childhood and adolescence (or formative) years, mainly due to his family that had low socio-economic status in a society dominated by the AD; and, (b) the continuation of RD in his adult life due to the fact that he lived and worked in that society. Using V3, we asked perception-questions, considering RD as a CHR that influenced Lay’s intentions to carry out MEM. Here, we focussed on the following issues. First, if a person already has (absolute) deprivations because of his poor and low social-status familial background, and s/he grow up in a society that gives prominence to people with high socio-economic status; does s/he develop RD due to societal pressures? Second, whether decision-makers having RD in their formative years, are more likely to carry out MEM? Third, do decision-makers carry out MEM when they live and work in places dominated by the AD? Fourth, how important is RD in causing EM to stray into MEM?

As regards if a person who is born in and brought up by a poor household in a society that gives importance to people with higher socio-economic status, develop RD: overall, 23 answered ‘Yes,’ 12 ‘May be yes,’ and 4 ‘No;’ in purposive and expert sampling, 10 respondents answered ‘Yes,’ 9 ‘May be yes,’ and 4 ‘No;’ in snowball sampling, 7 respondents answered ‘Yes,’ 9 ‘May be yes,’ and 0 ‘No.’ Thus, the modal value was ‘Yes’ for the former two and ‘May be Yes’ for the latter; and there was mixed support to I6: *If a person from a low socio-economic status family grow up in a society that gives importance to people having high socio-economic status, s/he may develop RD.* Whether the formative year’s RD influence the decision-makers’ intentions to carry out MEM: overall, 17 answered ‘Yes,’ 18 ‘May be yes,’ and 4 ‘No;’ in purposive and expert sampling, 15 respondents answered ‘Yes,’ 6 ‘May be yes,’ and 2 ‘No;’ in snowball sampling, 8 respondents answered ‘Yes,’ 6 ‘May be yes,’ and 2 ‘No.’ Thus, the modal value was ‘May be Yes’ for the former and ‘Yes’ for the latter two; and there was mixed support to I7: *RD experienced by decision-makers’ in their formative years may motivate them to carry out MEM.* As regards whether living and working in a society dominated by the AD, influence the practice of MEM: overall, 18 answered ‘Yes,’ 14 ‘May be yes,’ and 7 ‘No;’ in purposive and expert sampling, 14 respondents answered ‘Yes,’ 4 ‘May be yes,’ and 5 ‘No;’ in snowball sampling, 4 respondents answered ‘Yes,’ 10 ‘May be yes,’ and 2 ‘No.’ Thus, the modal value was ‘Yes’ for the former two and ‘May be Yes’ for the latter; and there was mixed support to I8: *RD arising out of living and working in societies dominated by the AD may motivate decision-makers to carry out MEM.* As regards the importance of RD causing EM to stray into MEM: overall, 15 answered ‘High,’ 13 ‘Medium,’ and 11 ‘Low;’ in purposive and expert sampling, 9 respondents answered ‘High,’ 6 ‘Medium,’ and 8 ‘Low;’ in snowball sampling, 6 respondents answered ‘Yes,’ 7 ‘May be yes,’ and 3 ‘No.’ (See: Chart 1.) Thus, the modal value

was ‘High’ for the former two and ‘Medium’ for the latter; and there was mixed support to I9: *RD can cause EM stray into MEM*.

The main finding of V3 is that I9: RD may cause EM stray into MEM – the central debate concerning our research – had mixed support. This doesn’t augur well for RDT because RD is important to study the unethical behaviour like MEM among people having high socio-economic status, including decision-makers, whose RD often arise out of their unfulfilled desires with respect to others/that who/which matter to them. However, as we are going to see in the next section, when we put the same question in another manner – by framing it using a different concept in a different context – the respondents supported it.



3.7.4. Findings Regarding Some General Questions Pertaining to White-collar Criminals having RD and their Modus Operandi with Respect to MEM

In the final section of the Web-questionnaire, the general questions section (GQS), we first disclosed the real identities of Ken and X, the hypothetical person and company we used in the vignettes, as Kenneth Lay and Enron respectively. Thereafter, we asked five general questions pertaining to MEM. First, EM strays into MEM when decision-makers having RD: (i) overemphasise on their directional goals (also involving their desire to get rid of RD) in stead of accurate goals, i.e., manipulating as opposed to managing earnings; and, (ii) are in a hurry to achieve their directional goals. Second, MEM is an instance of biased (human) decision-making process, whereby decision-makers avoid information that are in opposition to their directional goals (to remove RD). Third, while carrying out MEM, decision-makers with RD may overestimate their finance and accounting skills. Fourth, decision-makers with RD may carry out bigger and bolder forms of MEM once they find themselves successful at this.

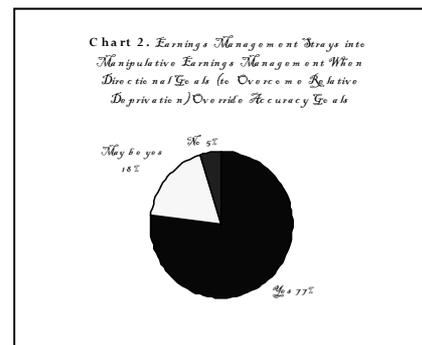
3.7.4.1. Does RD Oriented Directional Goals Lead to MEM?

Goals drive people to act. People tend to be accurate and logical following accuracy goals, and use those beliefs and strategies that are considered most appropriate to achieve them; whereas they tend to arrive at a particular conclusion in the case of directional goals, and use those beliefs and strategies that are considered most likely to yield a desired result.²¹¹² And, the desired result can be the desire to be rich and enhance social status, which, as we know, arise out of living and working in an AD dominated society.

When earnings are managed following prudent means and appropriate accounting methods to achieve a desired earnings number – EM – it involves accuracy goals; whereas, if done fraudulently, using inappropriate ways to achieve a desired earnings number – MEM – it involves directional goals. For example, a company decision-maker may want more remunerations to overcome an RD arising out of her/his desire to be rich and have higher socio-economic status. As large portions of her/her remunerations are linked to financial performance of the company that s/he works for, s/he fixes an earnings target that would enable her/him to receive

the desired income. When s/he does not expect to receive this amount through fair means even after managing earnings using appropriate accounting techniques, s/he may turn towards foul means, MEM, to achieve her/his goals. (Some of the questionable means used in the Enron fall out were the creation of many special purpose entities to hedge risks and the adoption of mark-to-market accounting to hypothetically hike earnings.) In the case of Enron, although Kenneth Lay was extremely rich and was very famous, and in this sense had no absolute deprivation whatsoever in terms of his socio-economic status; he, it seems, had a perpetual sense of deprivation to be more rich and have more fame that must have motivated him to carry out MEM. Thus, directional goals of decision-makers centred around mitigating RD may cause EM to stray into MEM. Furthermore, if some decision-makers are in a hurry to overcome RD, they may adopt foul means like MEM if fair means do not enable them to overcome it. In this context, it has been argued that white-collar criminals like Lay want nothing more than success, as we all want; but they are in a hurry and adopt those means and strategies that facilitate achieving it,²¹¹³ as in the case of directional goals. Keeping them in mind, we enquired if decision-makers who carry out MEM: (i) do so when their directional goals (to overcome RD) override accuracy goals; i.e., they manipulate earnings in stead of managing them, and (ii) are in a hurry to achieve their directional goals.

First, as to whether EM strays into MEM when directional goals (to overcome RD) override accuracy goals: overall, 30 answered ‘Yes,’ 7 ‘May be yes,’ and 2 ‘No;’ in purposive and expert sampling, 19 respondents answered ‘Yes,’ 3 ‘May be yes,’ and 1 ‘No;’ in snowball sampling, 11 respondents answered ‘Yes,’ 4 ‘May be yes,’ and 1 ‘No.’ (See: Chart 2.) Thus, the modal value was ‘Yes;’ and there was support to I10: *EM can stray into MEM when directional goals (to overcome RD) overshadow accuracy goals.* Secondly, in the context of whether decision-makers who carry out MEM are in a hurry to achieve their directional goals to remove RD: overall, 24 answered ‘Yes,’ 13 ‘May be yes,’ and 2 ‘No;’ in purposive and expert sampling, 15 respondents answered ‘Yes,’ 7 ‘May be yes,’ and 1 ‘No;’ in snowball sampling, 9 respondents answered ‘Yes,’ 6 ‘May be yes,’ and 1 ‘No.’ Thus, the modal value was ‘Yes;’ and there was support to I11: *Decision-makers who carry out MEM are in a hurry to achieve their directional goals that may remove RD.*



3.7.4.2. Biased (Human) Decision-Making and MEM

It is difficult to avoid biased decision-making in the real-world; people at best tend to underestimate their proneness to biases.²¹¹⁴ Ostrich effect is a phenomenon that lead to instances of biased decision-making where people may delay acquiring information or ignore them, even when doing so degrades the quality of decision making, particularly, if they are in opposition to their plans and ideas.²¹¹⁵ Although Lay was forewarned by some of his management team members about the excessive accounting misappropriations practised in Enron, yet he ignored them and pursued with MEM, and continued with sophisticated forms of accounting manipulation techniques. Keeping this in mind, we investigated if MEM is an instance of biased

decision-making, whereby people avoid information that are in opposition to their directional goals to remove RD; to which: 30 answered ‘Yes,’ 6 ‘May be yes,’ and 3 ‘No;’ in purposive and expert sampling, 20 respondents answered ‘Yes,’ 2 ‘May be yes,’ and 1 ‘No;’ in snowball sampling, 10 respondents answered ‘Yes,’ 4 ‘May be yes,’ and 2 ‘No.’ Thus, the modal value was ‘Yes;’ and there was support to I12: *Decision-makers with RD, while managing earnings, are susceptible to the Ostrich Effect, thereby insulating themselves (like an ostrich), avoiding information that are in opposition to their desired goals, and, in the process, carry out MEM.*

3.7.4.3. The Background (of Intentionality) and Enabling Factors, and MEM

Accounting knowledge and expertise are the enabling factors – the Background (of Intentionality), in Searle’s words – which are necessary, but not sufficient, conditions behind MEM. Keeping this in mind, we investigated: if decision-makers with RD are prone to overestimating their finance and accounting skills while carrying out MEM; to which: overall, 21 answered ‘Yes,’ 10 ‘May be yes,’ and 8 ‘No;’ in purposive and expert sampling, 11 respondents answered ‘Yes,’ 6 ‘May be yes,’ and 6 ‘No;’ in snowball sampling, 10 respondents answered ‘Yes,’ 4 ‘May be yes,’ and 2 ‘No.’ Thus, the modal value was ‘Yes;’ and there was support to I13: *Decision-makers with RD are prone to overestimating their finance and accounting skills while carrying out MEM; this may be an offshoot of I12.*

3.7.4.4. Practising MEM to Overcome RD Can Become an Obsession

Sometimes the motivation for MEM may have originally been RD. But as decision-makers find themselves successful at this, they gain some secondary satisfaction because they think they can fool the world by the virtue of their ability to use their finance and accounting skills, thereby feeling superior to others.²¹¹⁶ As we have discussed, Lay, even after becoming highly rich and famous, continued to set higher earnings targets and carried out bigger and bolder forms of MEM to achieve them. Keeping this in mind, we investigated: if decision-makers with RD may carry out bigger and bolder forms of MEM once they find themselves successful at this; to which: overall, 22 answered ‘Yes,’ 11 ‘May be yes,’ and 6 ‘No;’ in purposive and expert sampling, 14 respondents answered ‘Yes,’ 4 ‘May be yes,’ and 5 ‘No;’ in snowball sampling, 8 respondents answered ‘Yes,’ 7 ‘May be yes,’ and 1 ‘No.’ Thus, the modal value was ‘Yes;’ and there was support to I14: *Decision-makers with RD can carry out MEM to initially overcome their RD initially but may get obsessed with it if they start to gain secondary satisfaction arising out of their feeling of superiority over others.*

3.7.5. Let Us Look Critically at the Main Findings of the General Questions Section Concerning the Role of RD on MEM vis-à-vis the Findings from the Vignettes!

Are decision-makers who carry out MEM in a hurry to overcome RD? In addition to overcoming RD, do they carry out MEM in order to gain secondary satisfaction out of their ability to fool people, arising out of their perception that they have superior

capability to use (sic) finance and accounting skills? Is this perception an outcome of the overestimation of these skills? Are decision-makers with RD, who carry out MEM prone to the Ostrich Effect? The answer to all these questions centres around the central theme of our research: does RD cause EM to stray into MEM? And, as we discussed in the section 7.3, the respondents rendered mixed support towards this. However, this is not the end of the discussion because we are going to put forth the final arguments below.

The salient finding of the Section 7.4 is: the respondents have supported the I10 – EM can stray into MEM when directional goals (to overcome RD) overshadow accuracy goals. However, the I9 (in V3) – RD may cause EM stray into MEM – had mixed support. The question corresponding to I9 in the Web-questionnaire was Question#19 (Q19) and I10 was Question#20 (Q20). Q19 was the last question in the V3 section and the very next section was the GQS in which Q20 was the first question. Thus, they were adjacent questions (though in different Web-pages) with very similar content and intent. Then, what made the respondents to change their answers?

This anomaly, from the hindsight, can be attributed to the question-answer framing effect. As we know, Q19 was a perception-question and in this sense involved how the respondents' perceived Lay's questionable behaviour as he was portrayed in the vignettes. Whereas Q20 was a (general) opinion-question, not bounded by any prior storyline. Moreover, the answer choices in the case of Q19 were rating scales and Q20 verbal opinion types. Thus, question-answer framing may be an explanation for this anomaly. But, this begs further questions. Did the respondents feel threatened by the sensitivity of the issue i.e., EM, for that matter, MEM, involving their profession in the case of I9? This, however, may not be the case because we used vignettes precisely for this reason; i.e., vignettes are used to elicit answer on sensitive issues without involving respondents directly in them, thereby making them to feel less threatened. Thus, if they did not feel threatened, why did they render mixed support I9 (concerning Q19 that was not about them)? Here, let us recapitulate the main finding of V1. As we know, the respondents supported the fact that it was the belief reason that was behind Lay's intention to manipulate earnings. However, people as observers (the respondents in our case) tend to use the desire reason to explain the behaviour of others (Ken alias Lay, in our case), while they use belief reasons to explain their own action. Thus, did the respondents visualise themselves in the place of Lay while answering Q19 and hence somehow felt threatened? May be, they did (which needs further investigation); hence they cited belief (of decision-makers that MEM can fulfil the desire to be rich and enhance social status) as the reason behind the intention to carry out MEM. But, why did they feel threatened? Did it have something to do with RD? Here, let us look at shaded portions of Table 1, which reveals that in the case of the majority of the respondents' RD in their childhood and adolescent years, RD level which was: (a) low had either become medium or high; (b) medium had either become high or had remained medium; (c) high had remained either high or become medium. The majority of the respondents (30 out of 39, which

Table 1. Past Versus Present RD levels of the Respondents

RD in their childhood and adolescent years (on which they do not have any control)	Their levels RD at present (on which they have control)		
	Low	Medium	High
Low	1	4	2
Medium	1	13	9
High	2	5	2

is 77% of our sample frame) had either medium or high levels of RD at present which had either increased from their past levels or remained the same. Thus, was the word ‘deprivation’ (for that matter, RD) too repulsive for them that they wanted to avoid in the context of EM and MEM (because majority of them had medium and high levels of RD)? And, do finance and accounting professionals in fact manipulate earnings in the name of managing them, while living and working in our contemporary AD dominated society? Although answering these questions are not easy, but, Arthur Levitt’s words are worth pondering over here: “[...] Managing [earnings] may be giving way to manipulation; [...] integrity may be losing out to illusion.”

Furthermore, it is imperative here to mention that we disclosed about the real event behind and true identity of the main character in the vignettes – i.e., the Enron Scandal and Kenneth Lay – only after the respondents completely answered all the vignette related questions. So, while answering the questions pertaining to the vignettes, they did not know that ‘Ken’ (the main character in the vignettes) who they encountered was actually Kenneth Lay, and the accounting misappropriation event about which they read was the Enron Scandal. (Moreover, we did not provide the edit option in the Web-survey whereby they could have returned to the section that they had already answered to modify them because instant reactions are more stable over time with respect to perception questions.) Thus, they might have supported I10 after knowing the event. This begs more questions. Does it imply that people tend to give ‘candid judgements’ in the case of events with greater magnitudes like the Enron Scandal, and not so in the case of smaller unknown events? Did they not realise that RD could also be a factor behind directional goals (hence the similarities between I9 and I10)? And, so on.

In spite of all these, it is evident that directional goals can cause EM to stray into MEM; and, RD can be a factor behind them because they are, after all, goals through which decision-makers try to achieve some desired goals that may also include the goal to get rid of RD which may arise out of reasons like the desire to be rich and have higher social status.

3.7.6. The Inference Tree:

Now that we have analysed the dataset and discussed its findings, let us map the inferences with the research schema. Figure 5 is the schematic representation of them – the Inference Tree.

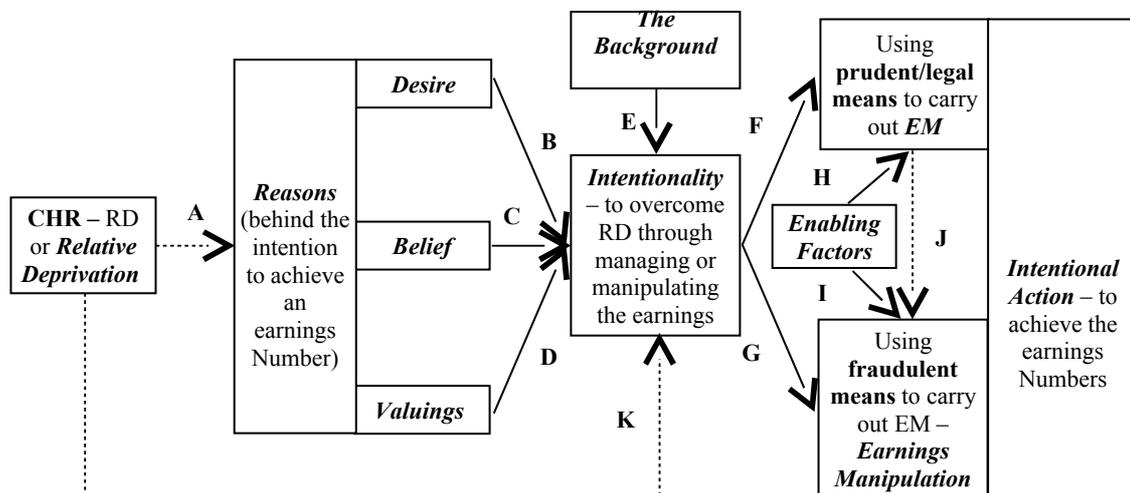


Figure 5. The Inference Tree: Set of Inferences from the Study

3.7.6.1. The Inference Set in the Context of RD Leading to MEM:

A-B (I1): The desire of to be rich and enhance their social status can be a reason behind the intention of decision-makers to carry out MEM. (Supported)

A-C (I2): The belief of decision-makers that MEM can help them to fulfil the desire to be rich and enhance their social status can be a reason behind their intention to carry out MEM. (Supported)

A-D (I3): The valuing by decision-makers that MEM is one of the best possible ways to fulfil the desire of to be rich and enhance their social status can be a reason behind their intention to carry out MEM. (Mixed support)

E-G (I13): Decision-makers with RD are prone to overestimating their finance and accounting skills while carrying out MEM. (Mixed support)

K-G (I7): RD experienced by decision-makers' in their formative years may motivate them to carry out MEM. (Supported)

K-F-J (I9 and I10): RD can cause EM stray into MEM. (Mixed Result: Mixed support, when asked directly, in the case of Q19 in the V3 in the case of I9: RD can cause EM stray into MEM; but supported in the case of the Q20 in the general questions section in the case of I10: EM can stray into MEM when directional goals (to overcome RD) overshadow accuracy goals.)

3.8. Study Shortcomings and Limitations

The very notion of RD as a cause behind questionable behaviour has been debated on the ground that why some people having discontent (arising out of RD) do not indulge in such behaviour. Apart from this, there are other shortcomings and limitations too, which pertain to: (a) theoretical and (b) methodological issues. The former are concerned with the theories of intentional action and RD that we have adopted in our study, and the latter with the Web-questionnaire design and the use of vignettes. We are going to discuss the former first and the later next.

The non-occurrence of questionable behaviour when people feel discontented may be explained by Crosby's RDT that emphasises on both the feeling of entitlement and desire for it as the prerequisites for RD to occur in people; when they cannot remove it through permissible actions, they resort to questionable actions. Besides, although, increasing instances of RD are outcomes of the expansiveness of the AD in society, including corporations, yet not all decision-makers resort to fraudulent means to meet the desired earnings numbers. That is, instances of MEM of the magnitude of the Enron Scandal do not happen often. Again, this may have some connections with the RD level of analysis that we have considered in our study – egoistic RD. That is, decision-makers may believe themselves as members of one group and experience fraternalistic RD with respect to another group. However, not all of them carry out MEM to overcome RD because the group that they belong to may be, say, law-abiding, thus restraining them to adopt illegal means (MEM) while reporting earnings.

However, our study is silent about these issues. Had we expanded our study to take them also into account, we could have faced various problems during study implementation stage, e.g., more number of vignettes leading to longer questionnaire and hence higher non-response rates.

We undertook this dissertation with the premise that MEM is an intentional action, and RD is a CHR (causal history of reasons) that motivates decision-makers to carry MEM out. Subsequently, we conducted an empirical study from the perspectives of social psychology, using Bertram Malle's model of intentional action. In doing so, we, however, addressed the notion of intentional action in a rather simplified manner. This is because an intentional action, drawing upon John Searle's views on (human) intentionality, is preceded by its corresponding belief or desire which is a part of a whole range of other desires and beliefs – the Network. To be rich may be one desire, to have higher social status may be another, and they are parts of the Network. But, in our study we lumped them together. Thus, we could have conducted this study by segregating various desires and beliefs (and valuing) behind the intention to carry out MEM and investigated them separately. However, had we not kept things simple, we could have faced problems again like more number of vignettes leading to longer questionnaire and hence higher non-response rates.

There are further theoretical issues involved as regards the level of analysis of RD – egoistic RD – that we have used as the CHR behind the intention to carry out MEM. As we know, organisational practices, including MEM, cannot be carried out by one single decision-maker in isolation. Rather it is a group-work, done by a group of individuals working closely with each other. Apart from Lay, Jeffrey Skilling (former President of Enron) and Andrew Fastow (former Chief Financial Officer of Enron) were the other main convicts in the Enron Scandal; they both, it can be inferred from their life stories, were also victims of RD.^{2117,2118} Thus, here lies a problem with respect to using egoistic RD as the level of analysis: was the Enron Scandal not an instance of fraternalistic RD where a group of individuals (comprising Lay, Skilling and Fastow, among others) acted together to overcome RD? The answer could be yes, but it is not known against whom they were comparing themselves apart from the fact that, as Lay had said in one of his hearings, they were furthering the spirit and ethos of the AD.

It has been argued that '[...] white-collar offender acted "self-servingly" to further private interests or the interests of a group of persons in a corporation and the possibility that the person may have acted on behalf of the corporation with the intention of protecting or enhancing the interests of the corporation. [...]'²¹¹⁹ In this sense, it can be said that our investigation is mute about the organisational interest that white-collar criminals (like Lay) pursue along with their self-interest. However, along with achieving earning numbers through MEM and thereby accomplishing organisational interests, e.g., lowering the cost of capital; they also take care of their self-interest, e.g., getting more incentives, enhancing their reputation by being parts of successful organisations, etc.

Now, let us discuss about the shortcomings and limitations related to study methodological issues. Our sample size is small which was due to the difficulty in finding practitioners who were willing to participate in the study. Furthermore, we used non-probability sampling, which implies that our respondents are not

representative of the population that we were interested in generalising our results to. They imply that the inferences that we have drawn cannot be hypothesised in concrete terms; and at best they are tentative. Hence, the generalisability of our finding needs further study using either random sampling or qualitative methods (e.g., interviewing).

Although there is an advantage of using expert sampling (we used as one of the first strategies to build our sample frame) because we have some acknowledged experts to substantiate the study findings, yet the disadvantage is that even they can be wrong – after all, they only responded to what they learnt from the vignettes. Moreover, although we got additional respondents and increased the size of the sample frame using snowball sampling, but it can be criticised on the ground that they (the additional respondents) could have been influenced by those respondents who introduce us to them, whereby they could have rendered biased responses.

As far as the questionnaire design is concerned, we asked questions related to respondents' profession, past and present levels of RD and demography at the beginning of the questionnaire (and we have mentioned the rationale behind doing so). However, it could have led to response biases like social desirability bias, when they responded to RD as influencing the intention behind carrying out MEM.

Although we used vignettes to elicit response on a sensitive issue like MEM, there are arguments against the use of vignettes on the ground that not enough is known about how respondents respond to questions related to vignettes and their behaviour in real life-situations (i.e., had they been in situations depicted in the vignettes).²¹²⁰ In this regards, Finch (1987) noted, “[...] asking about what a third party ‘ought’ to do in a given situation is not the same thing as asking respondents what they themselves think they ought to do. [...]”²¹²¹ Thus, in order to account for this, in addition to asking questions exclusively pertaining to the vignettes; we also asked general questions on the role of RD behind the intention to carry out MEM. As we have already seen, there were differences as regards their response to perception- and opinion-questions. To probe deeper into this issue, we think, there is a need to employ qualitative methods (e.g., interviewing).

3.9. Conclusion (Including Implications and Future Research Directions)

“[...] It is a pity that] we let our research methods dictate the subject matter, rather than the converse. [...]”²¹²²

The literature on EM, including MEM, is mainly based on the standard theories in social sciences like social exchange theory, rational choice theory, etc. The discussions therein hover around typical cost-benefit analysis, considering the organisational wo/man as a rational agent in the neoclassical sense. Agents (including decision-makers) rationalise their actions by undertaking cost-benefit calculations to safeguard and further their self-interest, and maximise their utility. These studies mainly take factors like cost of capital, social and political costs, agency cost (arising out of undoing manipulated earnings), etc. into consideration while analysing the motivations behind EM and MEM. However, decision-makers are not mere *homo economicus* as deemed by the neoclassical paradigm; rather, they are *homo sapiens*,

who bring with themselves entire personalities – comprising of a gamut of psychological, social and economic traits – into organisations. This has been extensively debated by social scientists, especially behavioural economists, cognitive and social psychologists, and economic-sociologists. As a result, there are a plethora of findings which reveal that: agents systematically violate the axioms of standard economic theories; they are boundedly, hence limitedly, rational; while making decisions, they often use heuristics and are prone to biases; economic actions are socially embedded; and so on. Thus, merely explaining MEM by looking at decision-makers as if they simply are *homo economicus* is akin to telling only a part of the whole story. Keeping this in mind, we undertook this empirical study to throw more light onto the motivations behind the intention to carry out MEM.

“[...] Foundational questions in accounting are far from settled. [...]”²¹²³

As MEM involves managerial discretions, we described it as an intentional action, using theoretical inputs from Searle’s notion of Intentionality (philosophy of mind) and Malle’s concept of intentional action (social psychology). In doing so, we argued that decision-makers carry out MEM with the following types of reasons: (a) the desire to be rich and enhance their social status; (b) the belief that MEM could fulfil it; and, (c) the valuing that MEM is one of the best means to achieve it. In other words, the desired goals, i.e., to achieve company accounting numbers, are preceded by reasons that entail decision-makers’ desires, beliefs and valuings. Then, we went a step further and discussed RD, arising out of the degree of mismatch between what people want and what they get; and investigated its role as a ‘reason behind the reasoning’ – causal history of reasons (CHR) – in the MEM phenomenon. Specifically, we examined the following: whether RD cause EM to stray into MEM, or not.

Why we emphasised on the desire to become rich and enhance social status as causing RD is because of the notion of the American Dream (AD) is considered as one of the major causes behind the rise in RD worldwide. AD deems material achievements – i.e., being financially rich and socially famous – as the measures of success. Drawing upon the literatures on RD and white-collar crime, we put forth that societal pressures arising out of the AD have raised the levels of RD; as a result of which there has been rising instances of white-collar crime, including MEM, across the corporate corridors. Keeping this in mind, we would like to argue that our study is important for the accounting community, at least, in two ways.

First, considering that economic activities are social-embedded, a pragmatic analysis of human behaviour in the accounting field needs to take into account how business organisations are situated in the contemporary society dominated by the AD. The tenets of AD are no more confined to the frontiers of the U.S.A. and companies worldwide are subject to its assumptions concerning what success is. Therefore, our analysis concerning the role of RD (an offshoot of the AD) as the CHR underlying the intention to carry out MEM is important.

And second, the accounting community has a privileged status in society on the virtue of its role in making organisations accountable to their stakeholders and society as a whole. Our study is an attempt to probe into what has/have made accounting to stray away from its traditional function concerning organisational

accountability. We discussed this in the light of the widespread use of EM and MEM by decision-makers in financial reporting activities (particularly, since the early 1980s when their incentives were made directly coupled with company performance in general and reported earnings in particular); which, in turn, has seriously dented the quality of financial reports. This can seriously jeopardise the privileged status that accountants enjoy in society. Moreover, MEM involves the nexus between various members in the accounting community – regulators, decision-makers, auditors, analysts, shareholders, and even academics – which is more worrisome because they in one way or other either encourage or ignore EM and MEM because it serves their interest; the policy makers are also involved here. However, as already mentioned, people are more than mere *homo economicus*. Thus, to probe deeper, we have attempted this study from an economic-psycho-sociological perspective because MEM is an economic activity, carried out by people with psyche (cognitive and affective traits), and take place in organisations that are parts of society.

We have got four sets of findings. One, the respondents supported that belief and (that MEM can fulfil their desire to be rich and enhance social status) and this desire reasons behind the intention to carry out MEM. This is paradoxical because respondents were asked to comment on the modus operandi of the main character in the vignettes (Kenneth Lay), and not about their own. In such a situation, people typically attribute the action (of others) towards the belief reason. Does this imply that while answering this section, the respondents visualised their ‘professional selves’ as resembling with that of Lay’s and in this sense answered about their own (belief) reason behind their intention to carry out EM (and MEM)? This needs further investigation.

Two, the respondents considered that enabling factors (like having: knowledge in company finance and accounting methods, access to accountants who have prior experience in MEM, the influence over regulators and policy-makers to create opportune conditions to carry out MEM, etc.) are important to manipulate earnings. This seems logical considering the fact that to manipulate earnings needs opportune conditions which are created by enabling factors.

Three, the respondents rendered mixed support towards the following inferences: one, a person with low socio-economic familial status is likely to feel relatively deprived, when s/he grows up in a society that gives more importance to people having higher socio-economic status (acknowledging the fact that societal pressures may have bearings in the development of RD in the formative years of people); two, RD experienced in one’s childhood and adolescence years may motivate her/him to carry out MEM; three, RD arising out of living and working in societies dominated by the AD may motivate decision-makers to carry out MEM; and, four, RD can cause EM stray into MEM. From the hindsight, they may imply that they did not considered past and present RD as having influence on the motivation to carry out MEM. However, this may not be as simple as it looks because the current RD levels most of them are in the medium and high levels. Moreover, their current RD levels in comparison to their past levels have either remained as it was or increased. Thus, the respondents might have given socially desirable responses thereby rendering mixed support to these inferences. Or, was RD a term that they loathed to hear? This needs further research.

Four, the respondents supported the following: EM can stray into MEM when directional goals (to meet earnings numbers, receive more remunerations and overcome RD) overshadow accuracy goals (to manage earnings prudently). Paradoxically, as we mentioned above, they rendered mixed support to RD causing EM to stray into MEM. Two of the plausible reasons behind this may be: question-answer framing effect (people answer differently under different situations) and to the fact that people give candid opinions in the case of well-known, high-stake incidents (as in the case of Enron Scandal). They also supported that decision-makers with RD are prone to biases arising out of the Ostrich Effect, i.e., avoiding information that are in opposition to their desired directional goals. Related to this, the respondents supported the following inferences: decision-makers with RD are prone to overrating their finance and accounting skills while carrying out MEM; and, they are in a hurry to achieve their directional goals to remove RD. These findings are important because people, in fact, are subject to biases (and heuristics) while making decisions. Furthermore, they supported decision-makers with RD can carry out MEM to initially overcome their RD but may get fascinated by it if they start to gain secondary satisfaction like feeling superior to others; this sounds more troubling. Having summarised the study findings, let us now see in which manner they have implications for the future accounting research.

Contextual factors related to growing up and living in an AD dominated society is vital for the development and spread of RD and the occurrence of white collar crimes like MEM. As accounting is a practice entailing human values and intentions, it is a social, not a natural, phenomenon.²¹²⁴ The interaction between context and decision-makers' desires (and intentions) can influence their behaviour (Haynes and Kachelmeier, 1998²¹²⁵). This has been investigated in behavioural accounting (BA).²¹²⁶ Thus, we think, BA is one of the germane areas in which our study can find applications.

The earliest BA research was based on human behaviour within organisations from social and psychological perspectives.²¹²⁷ However, the interest towards BA has declined considerably over time. Whatever research on BA is done at present, they have mostly been reduced to some statistical significance testing programmes rather than discussing the real issues before the accounting community, which is often due to the influence of the neoclassical paradigm on the contemporary accounting research.²¹²⁸ Furthermore, as accounting generally concerns financial activities, BA has become subservient to behavioural finance which has established itself as a field based on mathematical formalisation under the neoclassical economics.²¹²⁹ (Although it may be argued that neoclassical economics dominates social sciences only in the U.S.A., but it is spreading its influence worldwide.²¹³⁰) Moreover, BA research is complicated because it is difficult to study accounting from psychological and sociological perspectives. This is because, one, “[... s]ocial scientists do not have a theory (rules and laws) for how people they study determine what counts as an action, because the determination derives from situationally defined (context dependent) skills [...]; ”²¹³¹ and, second, BA lacks coherent themes mainly due to “[...] the tendency of each study [in behavioural sciences] to open a new line of enquiry. [...]”²¹³²

Notwithstanding, in the recent management literature, there are some notable critiques against the neoclassical paradigm. “[...] In essence, social scientists carry an

even greater social and moral responsibility than those who work in the physical sciences because, if they hide ideology in the pretense of [positivistic] science, they can cause much more harm. [... According to Sumantra Ghoshal] this is precisely what business school academics have done over the last 30 years. [...]"²¹³³ For example, it has been argued that even after more than three decades of extensive research, financial reporting is no better (and may be worse) than it was before.²¹³⁴ In this context, it has been argued that accounting as a positivist economic science is one of the possible causes behind the financial misrepresentations and frauds that we have witnessed in the recent past.²¹³⁵ The unreality of neoclassicists' premise concerning people as self-interested, utility maximising agents – who have been criticised as “laughable caricatures,”²¹³⁶ or “rational fools or social morons”²¹³⁷ – makes it highly susceptible to empirical uncertainties. As a result, we can see that “[... r]esearch practices which lower the power of tests have sometimes been accepted in accounting research without consideration of their implications [...].”²¹³⁸ Importantly, a large number of studies in BA, i.e., more than 70 per cent of the published articles in issues in *Accounting Education*, *Behavioral Research in Accounting*, and *Journal of Management Accounting Research* published during 1993-97; lacks statistical power.²¹³⁹ Here comes a question: is statistically significant findings all that a research should aim at?

‘Many academics and statisticians believe that any [... study] which is not based on probability sampling [in order to generate statistically significant results] is unacceptable. They argue that even if something “works” we should not embrace it unless there is a sound statistical/mathematical theory to explain how and why it works. They forget perhaps that Newton had no theory to explain how gravity worked; he just showed that it did. Medical scientists tell us we know very little about how and why many pharmaceutical products work; we accept and use them because clinical trials show us that they work, even if we do not know why.’²¹⁴⁰

There are some strong arguments against statistical significance tests. It has been contended that “[... t]he error rate for inference using the significance test is greater than the error rate using a coin toss to replace the empirical study. [...]"²¹⁴¹ Moreover, researchers publish faulty interpretations of their studies in leading (economics) journals in the name of statistical significance tests.²¹⁴² “[... R]eliance on significance testing is logically indefensible and retards the research enterprise by making it difficult to develop cumulative knowledge. [...]"²¹⁴³ Cohen (1988) argues that the null-hypothesis is, as a matter of fact, “nil hypothesis.”²¹⁴⁴ So much so that American Psychological Association (APA) is considering banning significance tests based on the null hypothesis from its journals.²¹⁴⁵ In the context of accounting it has been argued that “[... c]ertain behavioral accounting research may have even lower statistical power than psychological research [which often uses student subjects] given the difficulty of accessing large numbers of accounting professionals to serve as research subjects. [...]"²¹⁴⁶ In a nutshell, there are rising concerns against statistical significance as the only test of scientific rigour behind research programmes.

The crucial test of any research paradigm is the extent to which it defines the field, establishes the research agenda, and becomes a core metaphor for the discipline.²¹⁴⁷ With this in mind, we would like to argue that our findings although are not statistically significant, but have the possibility to further research endeavours concerning accounting in general and the intention to manage and manipulate earnings in particular. In the context of BA, Colville (1981) argues that “[...] the

study of the behavioural aspects of accounting has largely failed to develop into a coherent theoretical or practical body of knowledge. In an attempt to overcome this state of affairs, there is an increasing trend to employ organizational and sociological theory as a basis for research, as opposed to psychology and social psychology which informed earlier conceptual thinking and research. [...]”²¹⁴⁸ However, MEM, for that matter EM, is an intentional action and hence *intrinsically* involves the human mind or consciousness. And, we can ill-afford to ignore its importance in accounting, including EM. “[...] If we are looking for phenomena that are intrinsically intentional [like EM] but inaccessible in principle to consciousness, there is nothing there. [...]”²¹⁴⁹ And, unfortunately, consciousness is often ignored in studies in social sciences that are related to decision-making.

“[...] Decision making [is...] in one way or another crucially related to consciousness. [...] More than anything else, it is the neglect of consciousness that accounts for so much barrenness and sterility in psychology, philosophy of mind, and cognitive science.”²¹⁵⁰

Thus, we think before proceeding any further, we need to first *redefine* the BA field; exploring how to incorporate human consciousness into it, taking cues from the philosophy of mind. This is particularly important in the case of accounting which is a people-, not matter-, centric science.²¹⁵¹ In this sense, it is a socio-psychological, not natural, science. Thus what we need is a sort of “paradigm shift” in our approach because, paraphrasing Einstein, we can not solve problems by using the same kind of thinking we used when we created them. And empirical studies, which are very important to unravel the underlying reality behind various phenomena, are no exceptions in this regards.

Empiricism emphasises the roles of evidence and (direct) experience as paramount to study events. “[...] In scientific explanations, we are characteristically trying to say what causes what. [...]”²¹⁵² However, “[...] in spite of our modern arrogance about how much we know, in spite of the assurance and universality of our science, where the mind is concerned we are characteristically confused and in disagreement. [...]”²¹⁵³ In the philosophy of mind, empirical studies on mental states, including intentional states, are based on behavioural evidences, testable objectively by the third-person perspectives by *competent* observers.²¹⁵⁴ Here, the following question may arise: “[...] Why should we assume that all the facts in the world are equally accessible to standard, objective, third-person tests? [...]”²¹⁵⁵ This is because there are phenomena that are intrinsically subjective, and hence resist being knowable to observers, including researchers, solely on the basis of their behavioural manifestations.²¹⁵⁶ However, we can have indirect means to know them by, first, observing a behaviour; second, comparing it with our own; and, third, by analysing if “[...] the causal bases of [...] what is observed] are virtually identical with the causal bases of [the our own ...] experiences. [...]”²¹⁵⁷ In this way, “[...] we have a certain Background ways of behaving, certain Background capabilities, and these are constitutive of our relations to the consciousness of other people. [...]”²¹⁵⁸

Intentionality, or the disposition to behave (e.g., to manage and/or manipulate earnings), is an important feature of consciousness; which is often erroneously ascribed to the structural and functional aspects of the brain.^{2159,2160} Although they look *as if* they are intentional, they are not because brain and brain processes are “[...] in principle inaccessible to consciousness [...]”²¹⁶¹ Thus, the brain and its functioning are not mental and hence do not belong to the philosophy of mind.

Rather, we have two levels of intentionality, namely: a conscious intention and a deep unconscious rule.²¹⁶² “[... T]he result [can ...] be conscious[, e.g., in the case of MEM, accounting rules are flouted for financial gains ...], though the means [and reasons] for achieving it [may be ...] unconscious[, e.g., in the case of MEM, how and why accountants break rules ...]. But the unconscious aspect has all the earmarks of intelligent behavior. [...]”²¹⁶³ This brings to the fore what can be known and what should be inferred about (human) intentionality.

“[...] Parts of the world are caught in our ethnographies, our histories and our statistics. But other parts are not, or if they are then this is because they have been distorted into clarity. [...] If much of the world is vague, diffuse or unspecific, slippery, emotional, ephemeral, elusive or indistinct, changes like a kaleidoscope, or doesn’t really have much of a pattern at all, then where does this leave social science? How might we catch some of the realities we are currently missing? Can we know them all? *Should* we know them? Is ‘knowing’ the metaphor we need? And if it isn’t, then how might we relate to them? [...]”²¹⁶⁴

Thus, ‘to know’ involves knowing not only what is knowable but also what is not, which is important in the context of intentionality as it involves both the conscious and the unconscious (the Background). In the context of accounting, we need to reflect over Shapiro’s (1997) views in particular, according to which “[... a]bsolute epistemological objectivity [... in financial reporting] is not possible because all accounting judgements are made from a point of view, subject to various measurement biases, motivated by personal factors, and within a certain historical context. [...]”²¹⁶⁵ In stead of absolute epistemological objectivity, Shapiro (1997) argues for a pragmatic, inter-subjective, and consensus view. And, trying to promote a clarification of the philosophical bases of financial reporting, Shapiro (1998) describes truth and reality, in Rortian²¹⁶⁶ terms, as “[...] what is good [enough] for us to believe [...],”²¹⁶⁷ and advocates that the “[... accounting] community needs some common assumptions and definitions in order to conduct a constructive and intelligible debate about issues that are significant to its members [...]”²¹⁶⁸ which has relevance with the Background postulated by Searle (1992). Here it is imperative to mention that these arguments may be antithetical to the very claim that accounting facilitates rational decision-making in the neoclassical sense. However, to be rational is not all about self-interest and utility maximisation, as argued by the neoclassicists; rather there are more than that, which may also involve unconscious reasoning processes. In this context, it is also helpful to zero in on the “ex-post rationalisation of past behaviour” that decision-makers may carry out.²¹⁶⁹ For example, Kenneth Lay argued that by indulging in (sic) creative accounting, expanding Enron and leading a lavish lifestyle; he had realised the American Dream (AD). Thus, what people do is/are as important as why they do it/them; this is especially important in the context of contemporary accounting practices that is increasingly influenced by managerial discretions. Here, we think that the philosophy of mind can be helpful to know what is knowable and what is not in the context of the (human) intention behind undertaking accounting activities.

To conclude, in this dissertation we investigated the role of RD behind decision-makers’ intentions to carry out MEM. In other words, we studied MEM from the social and psychological perspectives, in addition to the economic perspective. We have argued that MEM is not only an economic phenomenon but also a social and psychological phenomenon. Therefore, it needs to transcend the

mundane and stereotypical neoclassicists' notion that people are *homo economicus*. Furthermore, we are of the opinion that research in accounting, especially in BA, can further be enriched by the philosophy of mind. After all, the main purpose of accounting is: to hold organisations accountable towards their stakeholders and society through accounts-giving. In this sense it deals with the social and, more importantly, mental (not physical) aspects of the underlying accounts-giving mechanisms. In debating so, we argued that there is a need to first redefine the accounting research arena in stead of trying to explain away various organisational goings on with the premise that the 'accounting wo/man' is the neoclassicists' self-interested, utility maximising agent. Else, we are afraid, accounting may lose its purpose and rigour, and in the process become a textbook science devoid of real-world applicability.

“[...] Each August, we [academics] come to talk with each other; during the rest of the year we read each others' papers in our journals and write our own papers so that we may, in turn, have an audience the following August: an incestuous, closed loop.”²¹⁷⁰

And, in the long run, accounting may stray away from its role of giving accounts and holding organisations accountable to their stakeholders and society, and become a discipline of mere numbers and figures; akin to (contemporary) economics which in stead of being a discipline based on the moral and ethical values that underline various goods and services transactions undertaken by people, as envisioned by Adam Smith, has unfortunately become a field that is mainly concerned with hedonism and utility maximisation attributes of the human agency.

* * *

Endnotes 1:

¹ John Roberts and Robert Scapens, "Accounting Systems and Systems of Accountability: Understanding Accounting Practices in Their Organizational Contexts," In *Anthony Giddens: Critical Assessments*, Volume 4, (eds.) Christopher G. A. Bryant and David Jary (London: Routledge, 1997), 245.

² For example, see: Christopher S. Chapman, David J. Cooper, and Peter B. Miller, "Linking Accounting, Organizations, and Institutions," In *Accounting, Organizations, & Institutions: Essays in Honour of Anthony Hopwood*, (eds.) Christopher S. Chapman, David J. Cooper, and Peter B. Miller (Oxford: Oxford University Press, 2009), 1-29.

³ See, for example: Mark J. Nigrini, "An Assessment of the Change in the Incidence of Earnings Management Around the Enron-Andersen Episode," *Review of Accounting and Finance* 4(1) (2005): 92-110.

⁴ This description about earnings management is an offshoot of the learning from many essays and articles, and some books on accounting manipulation and earnings management, that I have gone through; especially the followings, and not exhausting other researchers: Ronald M. Copeland, "Income Smoothing," *Journal of Accounting Research* (Supplement) 6(3) (1968): 101-16; Carl R. Beidleman, "Income Smoothing: The Role of Management," *The Accounting Review* 48(4) (October 1973): 653-67; Robert W. Holthausen and Richard W. Leftwich, "The Economic Consequence of Accounting Choice: Implications of Costly Contracting and Monitoring," *Journal of Accounting and Economics* 5(1) (April 1983): 77-117; Paul M. Healy, "The Effect of Bonus Schemes on Accounting Decisions," *Journal of Accounting and Economics* 7(1-3) (April 1985): 99; Linda Elizabeth DeAngelo, "Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts Of Public Stockholders," *The Accounting Review* 61(3) (July 1986): 400-20; Katherine Schipper, "Commentary on Earnings Management," *Accounting Horizons* 3(4) (December 1989): 91-102; Ahmed Riahi-Belkaoui, *The Coming Crisis in Accounting* (New York: Quorum Books, 1989); Jennifer J. Jones, "Earnings Management During Import Relief Investigations," *Journal of Accounting Research* 29(2) (Autumn 1991): 193-228; Lawrence Revsine, "The Selective Financial Misrepresentation Hypothesis," *Accounting Horizons* 5(4) (December 1991): 16-27; Kenneth A. Merchant and Joanne Rockness, "The Ethics of Managing Earnings: An Empirical Investigation," *Journal of Accounting and Public Policy* 13(1) (1994): 79-94; Patricia M. Dechow, Richard G. Sloan, and Amy P. Sweeney, "Detecting Earnings Management," *The Accounting Review* 70(2) (April 1995): 193-225; Paul M. Healy and James M. Wahlen, "A Review of the Earnings Management Literature and Its Implications for Standard Setting," *Accounting Horizons* 13(4) (December 1999): 365-83; Patricia M. Dechow and Douglas J. Skinner, "Earnings Management: Reconciling The Views of Accounting Academics, Practitioners, and Regulators," *Accounting Horizons* 14(2) (June 2000): 235-50; Baruch Lev, "Corporate Earnings: Facts and Fiction," *Journal of Economic Perspectives* 17(2) (Spring 2003): 27-50; Joshua Ronen and Varda (Lewinstein) Yaari, *Earnings Management: Emerging Insights in Theory, Practice, and Research* (New York, NY: Springer, 2008).

⁵ John Roberts and Robert Scapens, 1997, *op. cit.*, 238

⁶ Christopher S. Chapman, *et al.*, 2009, *op. cit.*, 1.

⁷ "An account is a linguistic device employed whenever an action is subjected to valuative inquiry. [...]" (Source: Marvin B. Scott and Stanford M. Lyman, "Accounts," *American Sociological Review* 33(1) (February 1968), 46-62.)

⁸ Norman Belding Macintosh, *Accounting, Accountants and Accountability: Poststructuralist Positions* (New York, NY: Routledge, 2002); John Roberts and Robert Scapens, 1997, *op. cit.*, 236.

⁹ Angela T. Hall, Michael G. Bowen, Gerald R. Ferris, M. Todd Royle, and Dale E. Fitzgibbons, "The Accountability Lens: A New Way to View Management Issues," *Business Horizons* 50(5) (September-October 2007): 405-13.

¹⁰ Jeremy F. Dent, "Accounting and Organizational Cultures: A Field Study of the Emergence of a New Organizational Reality," *Accounting, Organizations and Society* 16(8) (1991): 707.

¹¹ Rolland Munro, "Alignment and Identity Work: The Study of Accounts and Accountability," In *Accountability: Power, Ethos and the Technologies of Managing*, (eds.) Rolland Munro and Jan Mouritsen (London: International Thomson Business Press, 1996): 6.

¹² Harold Garfinkel, *Studies in Ethnomethodology* (Malden, MA, USA: Blackwell Publishing Ltd., 2003), 33.

¹³ Rolland Munro, 1996, *op. cit.*, 5.

¹⁴ Richard J. Boland, Jr. and Ulrike Schulze, "Narrating Accountability: Cognition and the Production of the Accountable Self," In *Accountability: Power, Ethos and the Technologies of Managing*, (eds.) Rolland Munro and Jan Mouritsen (London: International Thomson Business Press, 1996): 62-3.

¹⁵ "[... T]he processes of accountability [...] provide a clear explanation of how ethos comes to be produced and reproduced [...]" (Source: Rolland Munro, 1996, *op. cit.*, 13.)

¹⁶ Rolland Munro, "Alignment and identity work: the study of accounts and accountability," In *Accountability: Power, Ethos and the Technologies of Managing*, (eds.) Rolland Munro and Jan Mouritsen (London: International Thomson Business Press, 1996), 7-13.

¹⁷ Joshua Ronen and Varda (Lewinstein) Yaari, 2008, *op. cit.*, xiii.

¹⁸ John C. Coffee, "Gatekeeper failure and reform: The challenge of fashioning relevant reforms," Columbia Law and Economics Working Paper No. 237, 2003; 46, 65-6; accessed at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=447940, on: 25th July 2009.

¹⁹ Arthur Levitt (U.S. SEC), "Remarks by Chairman Arthur Levitt, Securities and Exchange Commission: The "Numbers Game," NYU Center for Law and Business, New York, N.Y., September 28, 1998; downloadable at: <http://www.sec.gov/news/speech/speecharchive/1998/spch220.txt>, accessed on 15th May 2009.

²⁰ Lynn E. Turner, "Speech by SEC Staff: The State of Financial Reporting Today: An Unfinished Chapter III;" June 21, 2001, accessed at: <http://www.sec.gov/news/speech/spch508.htm>, on 25th July 2009.

²¹ Warren Buffett, "Who Really Cooks the Books?" *The New York Times* (July 24, 2002), accessed at <http://www.nytimes.com/2002/07/24/opinion/24BUFF.html>, on 30 July 2009.

²² Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago, IL, USA: University of Chicago Press, 1970).

²³ Amitai Etzioni, *The Moral Dimension: Toward a New Economics* (New York, NY: The Free Press, 1988), 1.

²⁴ For an insightful critique the narrower version of economics, as undertaken in neoclassical economics, see: Amartya Sen, *On Ethics and Economics* (Oxford, New York, NY: Basil Blackwell, 1987), 1-28.

²⁵ “[... In game theoretic discussions,] a decision-maker [or agent] is *rational* if he makes decisions consistently in pursuit of his own objectives. [...] We assume that each player’s [agent’s] objective is to maximize the expected value of his own pay-off, which is measured in some utility scale. [...]” (Source: Roger B. Myerson, *Game Theory* (Cambridge, MA, U.S.A: Harvard University Press, 1991).

²⁶ Donna J. Wood, *Business and Society* 2nd Edition (New York, NY: Harper Collins, 1994).

²⁷ Trueblood Report (AICPA, 1973, 13), quoted in: Andrew Higson, *Corporate Financial Reporting: Theory and Practice* (Thousand Oaks, CA: Sage Publications, Inc., 2003), 67.

²⁸ See Figure 1.4, at: Jan Bebbington, Rob Gray, Richard Laughlin, *Financial Accounting: Practice and Principles*, Third Edition (London: Thomson Learning, 2001), 8.

²⁹ Charles J. Woelfel, *Financial Statement Analysis: The Investor’s Self-Study Guide to Interpreting & Analyzing Financial Statements* (New York, NY: McGraw-Hill Professional, 1994), 4-6.

³⁰ See: Ross L. Watts and Jerold L. Zimmerman, “The Demand for and Supply of Accounting Theories: The Market for Excuses,” *The Accounting Review* 54(2) (April 1979): 273-305; Ross L. Watts and Jerold L. Zimmerman, *Positive Accounting Theory* (New Jersey: Prentice-Hall, Inc., 1986); Robert W. Holthausen and Richard W. Leftwich, 1983, *op. cit.*, 77-117.

³¹ See: Ross L. Watts and Jerold L. Zimmerman, “Towards a Positive Theory of The Determination of Accounting Standards,” *The Accounting Review* 53(1) (January 1978): 112-34; Clifford W. Smith and Jerold B. Warner, “On Financial Contracting: An Analysis of Bond Covenants,” *Journal of Financial Economics* 7(2) (June 1979): 117-61; Robert W. Holthausen and Richard W. Leftwich, 1983, *op. cit.*; Ross L. Watts and Jerold L. Zimmerman, 1986, *op. cit.*.

³² Although Fama (1970) holds the view that, by and large, markets are efficient (Eugene F. Fama, “Efficient Capital Markets: A Review of Theory and Empirical Work,” *The Journal of Finance* 25(2) (Papers and Proceedings of the Twenty-Eighth Annual Meeting of the American Finance Association New York, N.Y. December, 28-30, 1969) (May 1970): 413.), there are others who do not agree with him. See, for example, for arguments against market efficiency on the account of: ambiguity of the word efficiency: Richard R. West, “On the Difference Between Internal and External Efficiency,” *Financial Analyst Journal* 31(6) (November-December 1975): 30-34; accounting changes: A. Rashad Abdel-khalik and James C. McKeown, “Understanding Accounting Changes in an Efficient Market: Evidence of Differential Reaction,” *The Accounting Review* 53(4) (October 1978): 851-68; market-based accounting research: Baruch Lev and James A. Ohlson, “Market-Based Empirical Research in Accounting: A Review, Interpretation, and Extension,” *Journal of Accounting Research* 20 (Supplement) (1982): 249-322; quality of information: Thomas S. Y. Ho and Roni Michaely, “Information Quality and Market Efficiency,” *Journal of Financial and Quantitative Analysis* 23(1) (March 1988): 53-70; stock price overreactions: Bruce N. Lehmann, “Fads, Martingales, and Market Efficiency,” *The Quarterly Journal of Economics* 105(1) (February 1990): 1-28; information efficiency: Russell J. Lundholm, “What Affects the Efficiency of a Market? Some Answers from the Laboratory,” *The Accounting Review* 66(3) (July 1991): 486-515; bounded rationality: J. Richard Dietrich, Steven J. Kachelmeier, Don N. Kleinmuntz, and Thomas J. Linsmeier, “Market Efficiency, Bounded Rationality, and Supplemental Business Reporting Disclosure,” *Journal of Accounting Research* 39(2) (September 2001): 243-68; accounting choice: Thomas D. Fields, Thomas Z. Lys, and Linda Vincent, “Empirical Research on Accounting Choice,” *Journal of Accounting and Economics* 31(1-3) (September 2001): 255-307; traders’ action immediacy: Jeffrey A. Busse and T. Clifton Green, “Market Efficiency in Real Time,” *Journal of Financial Economics* 65(3) (September 2002): 415-37; overvaluation of stocks (especially owing to the human tendency to avoid short-term pain in favour of long-term benefits): Michael C. Jensen, “Agency Costs of Overvalued Equity,” *Financial Management* 34(1) (Spring 2005): 5-19.

³³ This signalling perspective was first postulated by: Robert W. Holthausen and Richard W. Leftwich 1983, *op. cit.*

³⁴ The opportunistic behaviour perspective, it is said, was first articulated by: Ross L. Watts and Jerold L. Zimmerman, *op. cit.*

³⁵ Ross L. Watts and Jerold L. Zimmerman, 1978, *op. cit.*, 114.

³⁶ The issue of social cost is not straightforward. See, for some of its major debateable aspects: Ronald Coase, “The Problem of Social Cost,” *The Journal of Law and Economics* 3 (October 1960): 1-44.

³⁷ Favourable does not mean only projecting operational and financial optimism and achievements concerning a firm, but also aspects of pessimism and shortcomings concerning it.

³⁸ Efficiency is a broad concept; here I use it for economic efficiency.

³⁹ Maurice Moonitz, *Obtaining Agreement on Standards: Studies in Accounting Research No. 8* (Sarasota, Florida: American Accounting Association, 1974), 64.

⁴⁰ William A. Niskanen, “Don’t Count Too Much on Financial Accounting,” In *After Enron: Lessons for Public Policy*, (ed.) William A. Niskanen (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2005), 50-51.

⁴¹ Margaret M. Blair, “Shareholder Value, Corporate Governance, and Corporate Performance: A Post-Enron Reassessment of Conventional Wisdom,” In *Corporate Governance and Capital Flows in a Global Economy*, (eds.) Peter Cornelius and Bruce Mitchell Kogut (New York, NY: Oxford University Press, 2003) 62.

⁴² Aggressive accounting is an extreme case under this style of accounting, if done with prudence.

⁴³ Patricia M. Dechow and Douglas J. Skinner, 2000, *op. cit.*, 241.

⁴⁴ Zabihollah Rezaee, “Causes, Consequences, and Deterrence of Financial Statement Fraud,” *Critical Perspectives on Accounting* 16(3) (April 2005): 277.

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- ⁹⁹ Net income is the difference between total sales and both total costs and total expenses from operations plus income or less losses from other sources. Total costs comprise the cost of goods sold, including depreciation of plant, equipment, and other capital goods. Total expenses comprise selling, general, and administrative expenses and include financing costs and taxes.
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- ⁹⁵⁵ Richard Nisbett and Lee Ross, *Human Inference: Strategies and Shortcomings of Social Judgement* (Englewood Cliffs, NJ, USA: Prentice-Hall, 1980).
- ⁹⁵⁶ Baruch Fischhoff, “Heuristics and Biases in Application,” In *Heuristics and Biases: The Psychology of Intuitive Judgment*, (eds.) Thomas Gilovich, Dale W. Griffin, and Daniel Kahneman (New York, NY: Cambridge University Press, 2002): 730-48.
- ⁹⁵⁷ To act or believe because many other people act or believe similarly. (See, for example: Richard L. Henshel and William Johnston, “The Emergence of Bandwagon Effects: A Theory,” *The Sociological Quarterly* 28(4) (Winter 1987): 493-511; Herbert A. Simon, “Bandwagon and Underdog Effects and the Possibility of Election Predictions,” *The Public Opinion Quarterly* 18(3) (Autumn 1954): 245-53.)
- ⁹⁵⁸ To ignore available statistical data in favour of particulars (See, for example: Laura Macchi, “Pragmatic Aspects of the Base-rate Fallacy,” *The Quarterly Journal of Experimental Psychology A: Human Experimental Psychology* 48A(1) (February 1995): 188-207.
- ⁹⁵⁹ Not to compensate for one’s own cognitive biases
- ⁹⁶⁰ To remember one’s choices as better than they actually were; a tendency to attribute, both correctly and incorrectly, more positive features to an option we selected than to a rival we did not (See, for example: Mara Mather and Marcia K. Johnson, “Choice-Supportive Source Monitoring: Do Our Decisions Seem Better to Us as We Age?,” *Psychology and Aging* 15(4) (December 2000): 596-606.)
- ⁹⁶¹ To search for or interpret information in a way that confirms one’s preconceptions; also stands for the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand (See, for example: Raymond S. Nickerson, “Confirmation Bias: A Ubiquitous Phenomenon in Many Guises,” *Review of General Psychology* 2(2) (June 1998): 175-220.)
- ⁹⁶² To test hypotheses exclusively through direct testing, in contrast to tests of possible alternative hypotheses (See, for example: Manuel G. Calvo and M. Dolores Castillo, “Mood-Congruent Bias in Interpretation of Ambiguity: Strategic Processes and Temporary

Activation,” *The Quarterly Journal of Experimental Psychology A: Human Experimental Psychology* 50A(1) (February 1997): 163-82.)

⁹⁶³ To enhance or diminish a weight or other measurement when compared with a recently observed contrasting object (See, for example: Norbert Schwarz and Herbert Bless, “Constructing Reality and Its Alternatives: An Inclusion/Exclusion Model of Assimilation and Contrast Effects in Social Judgement,” In *The Construction of Social Judgments*, (eds.) Leonard L. Martin and Abraham Tesser (Hillsdale, NJ, USA: Lawrence Erlbaum Associates, Inc., 1992), 217-45.)

⁹⁶⁴ To look at things according to the conventions of one’s own profession, forgetting any broader point of view; a distortion of judgement resulting from highly selective professional training, results in a distortion in the way the world is perceived (See, for example: Scott Highhouse, Alison Broadfoot, Jennifer E. Yugo, and Shelba A. Devendorf, “Examining Corporate Reputation Judgments with Generalizability Theory,” *Journal of Applied Psychology* 94(3) (May 2009): 782-89.)

⁹⁶⁵ To spend more money when it is denominated in small amounts (e.g. coins) than large amounts (e.g. bills) (See, for example: Priya Raghbir and Joydeep Srivastava, “Effect of Face Value on Product Valuation in Foreign Currencies,” *Journal of Consumer Research* 29(3) (December 2002): 335-47.)

⁹⁶⁶ To view two options as more dissimilar when evaluating them simultaneously than when evaluating them separately (See, for example: Christopher K. Hsee and Jiao Zhang, “Distinction Bias: Misprediction and Mischoice Due to Joint Evaluation,” *Journal of Personality and Social Psychology* 86(5) (May 2004): 680-95.)

⁹⁶⁷ To demand much more to give up an object than to be willing to pay to acquire it (See, for example: Daniel Kahneman, Jack L. Knetsch, and Richard H. Thaler, “Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias,” *The Journal of Economic Perspectives* 5(1) (Winter 1991): 193-206.)

⁹⁶⁸ To believe, certify, and publish data by experimenters that agree with their expectations for the outcome of an experiment, and to disbelieve, discard, or downgrade the corresponding weightings for data that appear to conflict with those expectations (See, for example: Theodore X. Barber and Maurice J. Silver, “Fact, Fiction, and the Experimenter Bias Effect,” *Psychological Bulletin* 70(6, Part 2) (December 1968): 1-29.)

⁹⁶⁹ To value an object more than others in the same category as a result of an extra-ordinariness of that object that does not, in itself, change the value

⁹⁷⁰ They occur when people place too much importance on one aspect of an event; causes error in accurately predicting the utility of a future outcome.

⁹⁷¹ To an approach or description of the situation or issue that is too narrow

⁹⁷² To draw different conclusions based on how data (or stimuli) is presented (See, for example: Amos Tversky and Daniel Kahneman, “The Framing of Decisions and the Psychology of Choice,” *Science* 211(4481) (30 January 1981): 453-58.)

⁹⁷³ To have a stronger preference for more immediate payoffs relative to later payoffs, where the tendency increases the closer to the present both payoffs are

⁹⁷⁴ Tendency of people to believe that they can control or at least influence outcomes that they clearly cannot (See, for example: Gerald R. Salancik and James R. Meindl, “Corporate Attributions as Strategic Illusions of Management Control,” *Administrative Science Quarterly* 29(2) (June 1984): 238-54.)

⁹⁷⁵ To overestimate the length or the intensity of the impact of future feeling states (See, for example: Bibb Latané, The Psychology of Social Impact,” *American Psychologist* 36(4) (April 1981): 343-56.)

⁹⁷⁶ To seek information even when it cannot affect action

⁹⁷⁷ To value third party consultation as objective, confirming, and without motive

⁹⁷⁸ To conclude that solutions proposed by existing personnel within an organisation are less likely to receive support than from those recruited for that purpose

⁹⁷⁹ To make irrational decisions based upon rational decisions in the past or to justify actions already taken (See, for example: Helga Drummond, “Is Escalation Always Irrational?,” *Organization Studies* 19(6) (November 1998): 911-29.)

⁹⁸⁰ Also called the just-world theory, just-world effect or just-world hypothesis, refers to the tendency for people to believe, incorrectly, that the world is just and so therefore people get what they deserve (See, for example: Leo Montada and Melvin J. Lerner (eds.), *Responses to Victimizations and Belief in a Just World* (New York, NY: Plenum Press, 1998).)

⁹⁸¹ The disutility of giving up an object is greater than the utility associated with acquiring it (See, for example: Daniel Kahneman *et al.*, 1991, *op. cit.*)

⁹⁸² To persist with (irrational) decisions due to attachment to (sunk) costs that are irrecoverable

⁹⁸³ To express undue liking for things merely because of familiarity with them (See, for example: Angela Y. Lee, “The Mere Exposure Effect: An Uncertainty Reduction Explanation Revisited,” *Personality and Social Psychology Bulletin* 27(10) (October 2001): 1255-66.)

⁹⁸⁴ To concentrate on the nominal (face value) of money rather than its value in terms of purchasing power (See, for example: Eldar Shafir, Peter Diamond, and Amos Tversky, “Money Illusion,” *The Quarterly Journal of Economics* 112(2) (May 1997): 341-74.)

⁹⁸⁵ An individual’s track record as a good egalitarian individual can establish an unconscious ethical certification, endorsement, or license within that individual and this will increase their likelihood of making less egalitarian decisions later; this could occur even when the individual’s audience is unaware of her/his previously established moral credential. (See, for example: Angela J. Krumm and Alexandra F. Corning, “Who Believes Us When We Try to Conceal Our Prejudices? The Effectiveness of Moral Credentials With In-Groups Versus Out-Groups,” *The Journal of Social Psychology* 148(6) (December 2008): 689-710.)

⁹⁸⁶ To reach a verdict and/or answer in important matters, so as to escape the feeling of doubt and uncertainty; which could get aggravated by decision-maker’s personal context (e.g., time or social pressure) (See, for example: Arie W. Kruglanski, Antonio Pierro, Lucia Mannetti, and Eraldo De Grada, “Groups as Epistemic Providers: Need for Closure and The Unfolding of Group-Centrism,” *Psychological Review* 113(1) (January 2006): 84-100.)

- ⁹⁸⁷ To give more attention to and give more weight to negative than positive experiences or other kinds of information (See, for example: Tiffany A. Ito, Jeff T. Larsen, N. Kyle Smith, and John T. Cacioppo, "Negative Information Weighs More Heavily on The Brain: The Negativity Bias in Evaluative Categorizations," *Journal of Personality and Social Psychology* 75(4) (October 1998): 887-900.)
- ⁹⁸⁸ To completely disregard probability when making a decision under uncertainty
- ⁹⁸⁹ To refuse to plan for, or react to, an unforeseen event or disaster which has never happened before
- ⁹⁹⁰ To ignore that a product or solution already exists, because its source is seen as adversary or inferior
- ⁹⁹¹ To judge harmful actions as worse, or less moral, than equally harmful omissions (inactions) (See, for example: Ilana Ritov and Jonathan Baron, "Protected Values and Omission Bias," *Organizational Behavior and Human Decision Processes* 79(2) (August 1999): 79-94.)
- ⁹⁹² To judge a decision by its eventual outcome instead of quality of the decision at the time it was made (See, for example: Mark E. Peecher and M. David Piercey, "Judging Audit Quality in Light of Adverse Outcomes: Evidence of Outcome Bias and Reverse Outcome Bias," *Contemporary Accounting Research* 25(1) (Spring 2008): 243-74.)
- ⁹⁹³ To underestimate task-completion times
- ⁹⁹⁴ To persuade oneself through reasoning that a purchase was a good value
- ⁹⁹⁵ To make risk-averse choices if the expected outcome is positive, but make risk-seeking choices if negative (Daniel Kahneman and Amos Tversky (eds.), *Choices, Values, and Frames* (Cambridge, UK: Cambridge University Press, 2000).)
- ⁹⁹⁶ To do the opposite of what someone wants you to do out of a need to resist a perceived attempt to constrain your freedom of choice
- ⁹⁹⁷ To overestimate one's capacity for impulse control (Loran F. Nordgren, Frenk van Harreveld, and Joop van der Pligt, "The Restraint Bias: How the Illusion of Self-Restraint Promotes Impulsive Behavior," *Psychological Science* 20(12) (): 1523-28.)
- ⁹⁹⁸ Refers to the process of categorising and interpreting information in a way that favours one category or interpretation over another (See: http://www.blackwellreference.com/public/tocnode?id=g9781405131995_chunk_g978140513199524_ss28-1, accessed on 8th January 2010.)
- ⁹⁹⁹ To reject new evidence that contradicts an established paradigm (W. Edwards, "Conservatism in human information processing," In *Formal Representation of Human Judgment*, (ed.) B. Kleinmütz (New York, NY: John Wiley and Sons, 1968), 17-52.)
- ¹⁰⁰⁰ Daniel Kahneman *at al.*, 1991, *op. cit.*, 193.
- ¹⁰⁰¹ To remember an item that 'stands out like a sore thumb' than other items
- ¹⁰⁰² The formation of beliefs and the making of decisions according to what is pleasing to imagine instead of by appeal to evidence or rationality
- ¹⁰⁰³ To prefer to reducing a small risk to zero than a greater reduction in a larger risk
- ¹⁰⁰⁴ To avoid options (or possibilities) for which missing information makes the probability seem unknown
- ¹⁰⁰⁵ To rely too heavily, or 'anchor,' on a past reference or on one trait or piece of information when making decisions
- ¹⁰⁰⁶ To neglect of relevant data when making judgments of a correlation or association
- ¹⁰⁰⁷ To value an ambiguous stimulus according to the opinion of someone who is seen as an authority
- ¹⁰⁰⁸ To make a judgement based on what we can remember, rather than complete data
- ¹⁰⁰⁹ A self-reinforcing process in which a collective belief gains more and more plausibility through its increasing repetition in public discourse (or 'repeat something long enough and it will become true').
- ¹⁰¹⁰ An effect where someone's evaluation of the logical strength of an argument is biased by the believability of the conclusion
- ¹⁰¹¹ To see patterns where actually none exist
- ¹⁰¹² To believe that the closer average performance is to a target, the tighter the distribution of the data set
- ¹⁰¹³ To assume that specific conditions are more probable than general ones
- ¹⁰¹⁴ To sell assets that have increased in value but hold assets that have decreased in value
- ¹⁰¹⁵ To think that future probabilities are influenced by past events, when in reality they are unchanged; can result from an premature conceptualisation of the 'law of large numbers,' e.g., if one has flipped heads with this coin five times consecutively, then the chance of tails coming out on the sixth flip is much greater than heads.
- ¹⁰¹⁶ To perform or perceive differently when one knows that s/he is being observed
- ¹⁰¹⁷ To see past events as if they were predictable (See, for example: Hal R. Arkes, David Faust, Thomas J. Guilmette, and Kathleen Hart, "Eliminating the Hindsight Bias," *Journal of Applied Psychology* 73(2) (May 1988): 305-07.)
- ¹⁰¹⁸ Inaccurately supposing a relationship between a certain type of action and an effect (See: Amos Tversky and Daniel Kahneman, 1974, *op. cit.*)
- ¹⁰¹⁹ The analysis of chance-related problems according to the belief that the unstructured randomness found in life resembles the structured randomness found in games, ignoring the non-gaussian distribution of many real-world results
- ¹⁰²⁰ To neglect known odds when re-evaluating odds in light of weak evidence
- ¹⁰²¹ When a researcher expects a given result and therefore unconsciously manipulates an experiment or misinterprets data in order to find it
- ¹⁰²² The Subject-expectancy effect, is a form of reactivity that occurs in scientific experiments (and medical tests) when a research subject (and a patient) expects a given result and therefore unconsciously affects the outcome, or reports the expected result.
- ¹⁰²³ The systematic tendency to be over-optimistic about the outcome of planned actions
- ¹⁰²⁴ To ignore an obvious (negative) situation (See, for example: Niklas Karlsson, George Loewenstein, and Duane Seppi, "The Ostrich Effect: Selective Attention to Information," *Journal of Risk and Uncertainty* 38(2) (April 2009): 95-115.)
- ¹⁰²⁵ Excessive confidence in one's own answers to questions; e.g., for certain types of question, answers that people rate as '99% certain' turn out to be wrong 40% of the time. (See, for example: Asher Koriat, Sarah Lichtenstein, and Baruch Fischhoff, "Reasons for

Confidence,” *Journal of Experimental Psychology: Human Learning and Memory* 6(2) (Mar 1980): 107-18.)

¹⁰²⁶ A tendency in prediction to overestimate by decision-makers the probability of good things happening to them (See, for example: Jonathan Baron and John C. Hershey, “Outcome Bias in Decision Evaluation,” *Journal of Personality and Social Psychology* 54(4) (April 1988): 569-79.)

¹⁰²⁷ A vague and random stimulus (often an image or sound) is perceived as significant, e.g., seeing images of animals or faces in clouds, or hearing hidden messages on records played in reverse

¹⁰²⁸ To weigh initial events more than subsequent events (See, for example: Edward E. Jones, Leslie Rock, Kelly G. Shaver, George R. Goethals, and Lawrence M. Ward, “Pattern of Performance and Ability Attribution: An Unexpected Primacy Effect,” *Journal of Personality and Social Psychology* 10(4) (December 1968): 317-40.)

¹⁰²⁹ To weigh recent events more than earlier events (See, for example: B. E. Cushing and S.S. Ahlawat, “Mitigation of Recency Bias in Audit Judgement: The Effect of Documentation,” *Auditing* 15(2) (Autumn 1996): 110-22.)

¹⁰³⁰ To judge our past experiences almost entirely on how they were at their *peak* (pleasant or unpleasant) and how they ended; other information is not lost, but seldom is used. (See, for example: Kahneman, Daniel, and Richard H. Thaler, “Anomalies: Utility Maximization and Experienced Utility,” *Journal of Economic Perspectives* 20(1) (Winter 2006): 221-34.)

¹⁰³¹ To expect extreme performance to continue

¹⁰³² A distortion of evidence or data that arises from the way that the data are collected

¹⁰³³ To expect a member of a group to have certain characteristics without having actual information about that individual

¹⁰³⁴ To judge probability of the whole to be less than the probabilities of the parts

¹⁰³⁵ A perception that something is true if a subject’s belief demands it to be true; s/he may also assign perceived connections between coincidences

¹⁰³⁶ The effect that recent events appear to have occurred more remotely and remote events appear to have occurred more recently

¹⁰³⁷ To select or adjust a hypothesis after the data is collected, making it impossible to test the hypothesis fairly; e.g., firing shots at a barn door or drawing a circle around the best group, and declaring that to be the target

¹⁰³⁸ To underestimate the duration taken to traverse oft-travelled routes and over-estimate the duration taken to traverse less familiar routes

¹⁰³⁹ To attribute one’s own action to external causes, while attributing other people’s behaviours to internal causes (It tends to be more pronounced in situations where the outcomes are negative; essentially, people tend to make different attributions depending upon whether they are the actor in a situation or the observer.)

¹⁰⁴⁰ Fundamental attribution error is the tendency for people to emphasize certain qualities or dispositions of others rather than giving proper weight to the situational aspects which have brought about a given behavior. A person will conclude that someone else has acted in a certain way because they are that ‘type’ of person. However, when an individual is assessing their own behavior they are more likely to attribute their action to a situational circumstance rather than attribute it to their character.

¹⁰⁴¹ It occurs when people claim more responsibility for themselves for the results of a joint action than an outside observer would.

¹⁰⁴² Named after psychologist B.R. Forer, a type of subjective validation, due to which a person can be ready to accept some general or vague description of their personality as being unique to them, even though the exact same description would apply equally well (or equally badly) to everyone.

¹⁰⁴³ A common reference point as to why people believe the advice of psychics and astrologers – not to mention many other nice things said about them.

¹⁰⁴⁴ To overestimate the degree to which others agree with them

¹⁰⁴⁵ To over-emphasise personality-based explanations for behaviours observed in others while under-emphasizing the role and power of situational influences on the same behaviour

¹⁰⁴⁶ The group attribution error occurs between different groups rather than different individuals. Group members are more likely to attribute the decisions of their own group to its decision rules, while they tend to attribute the decisions of another group to its members’ attitude. (Scott T. Allison and David M. Messick, “The Group Attribution Error,” *Journal of Experimental Social Psychology* 21(6) (November 1985): 563-79.)

¹⁰⁴⁷ The tendency of people, when evaluating the causes of the behaviors of a person they like or prefer, to attribute *positive* behaviors to the person’s inherent disposition and negative behaviors to situations surrounding the behaviors.

¹⁰⁴⁸ The tendency of people, when evaluating the causes of the behaviors of a person they dislike, to attribute positive behaviors to the situations surrounding the behaviors and negative behaviors to the inherent disposition of that person.

¹⁰⁴⁹ The tendency for a person’s positive or negative traits to spill over from one area of their personality to another in others’ perceptions of them

¹⁰⁵⁰ The tendency to assume that people who are physically attractive also possess other socially desirable personality traits

¹⁰⁵¹ To adopt the opinions and follow the behaviours of the majority to feel safer and to avoid conflict

¹⁰⁵² People perceive their knowledge of their peers to surpass their peers’ knowledge of them.

¹⁰⁵³ People overestimate others’ ability to know them, and they also overestimate their ability to know others.

¹⁰⁵⁴ Overestimating one’s desirable qualities, and underestimating undesirable qualities, relative to other people

¹⁰⁵⁵ To give preferential treatment to others they perceive to be members of their own groups

¹⁰⁵⁶ A form of cultural bias in which the notational conventions of recording data biases the appearance of that data toward (or away from) the system upon which the notational schema is based

¹⁰⁵⁷ Individuals see members of their own group as being relatively more varied than members of other groups

¹⁰⁵⁸ To unconsciously assume that others share the same or similar thoughts, beliefs, values, or positions

- ¹⁰⁵⁹ The tendency to claim more responsibility for successes than failures; may also manifest itself as a tendency for people to evaluate ambiguous information in a way beneficial to their interests; taking credit for personal success but blaming external factors for personal failure (See, for example: Todd R. Kaplan and Bradley J. Ruffle, "Self-Serving Bias," *The Journal of Economic Perspectives* 12(2) (Spring 1998): 243-44; Linda Babcock and George Loewenstein, 1997, *op. cit.*, 109-26.)
- ¹⁰⁶⁰ Group members make dispositional attributions for their group's successes and situational attributions for group failures, and vice versa for outsider groups (See: Donald M. Taylor and Janet R. Doria, "Self-Serving Bias and Group-Serving Bias in Attribution," *Journal of Social Psychology* 113(2) (1981): 201-11.)
- ¹⁰⁶¹ To engage in behaviors that elicit results which will (consciously or not) confirm existing attitudes. (See: John M. Darley and Paget H. Gross, "A Hypothesis-Confirming Bias in Labelling Effects," In *Stereotypes and Prejudice: Essential Readings*, (ed.) Charles Stangor (Psychology Press, 2000), 212.)
- ¹⁰⁶² To defend and bolster the status quo, and resist change even at the expense of individual and collective self-interest
- ¹⁰⁶³ The tendency for people to view themselves as relatively variable in terms of personality, behaviour and mood while viewing others as much more predictable
- ¹⁰⁶⁴ A person is likely to make an internal attribution to an entire group instead of the individuals within the group
- ¹⁰⁶⁵ Incorrectly remembering one's past attitudes and behaviour as resembling present attitudes and behaviour
- ¹⁰⁶⁶ A form of misattribution where a memory is mistaken for imagination
- ¹⁰⁶⁷ Recalling the past in a self-serving manner, e.g. remembering one's examination grades as being better than they were
- ¹⁰⁶⁸ Confusion of imagination with memory, or the confusion of true memories with false memories
- ¹⁰⁶⁹ The effect that people tend to recall more personal events from adolescence and early adulthood than from other lifetime periods
- ¹⁰⁷⁰ To rate past events more positively than they had actually rated them when the event occurred
- ¹⁰⁷¹ A form of misattribution where ideas suggested by a questioner are mistaken for memory
- ¹⁰⁷² Betrayal aversion strongly decreases people's willingness to trust. (See for example: Iris Bohnet and Richard Zeckhauser, "Trust, Risk and Betrayal," *Journal of Economic Behavior* 55(4) (December 2004): 467-84; Iris Bohnet, Fiona Greig, Benedikt Herrmann, and Richard Zeckhauser, "Betrayal Aversion: Evidence from Brazil, China, Oman, Switzerland, Turkey, and the United States," *American Economic Review* 98(1) (March 2008): 294-310.)
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- ¹⁰⁸² *Ibid.*, 397.
- ¹⁰⁸³ Barry M. Staw, "Knee-Deep in The Big Muddy: A Study of Escalating Commitment to A Chosen Course of Action," *Organizational Behavior and Human Performance* 16(1) (June 1976): 27-44.
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- ¹²¹⁵ A rule of thumb wherein people judge the probability or frequency of a hypothesis by considering how much the hypothesis resembles available data as opposed to using a Bayesian calculation. (See: Amos Tversky and Daniel Kahneman, 1974, *op. cit.*)
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points out that the structure of wealth systematically transmits inequalities and unequal opportunities through generations despite the spirit of AD. (See: Heather Beth Johnson, *The American Dream and The Power of Wealth: Choosing Schools and Inheriting Inequality in the Land of Opportunity* (New York, NY: Routledge, 2006).

¹⁸⁷⁹ William Greider, "The Future of the American Dream," *The Nation* (May 25, 2009), accessed at: <http://www.thenation.com/doc/20090525/greider>, on 20th March 2010.

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¹⁸⁸⁸ Depersonalisation is a state in which there is the feeling that thoughts and acts elude the self and become aliens with respect to one's personality. (See: Daphne Simeon and Jeffrey Abugel, *Feeling Unreal: Depersonalization Disorder and the Loss of the Self* (New York: Oxford University Press, Inc., 2006).

¹⁸⁸⁹ See, for example: Frederick Winslow Taylor, *The Principles of Scientific Management* (New York, NY: Cosimo, Inc., 2006); William H. Whyte, *The Organization Man* (Philadelphia, PA, USA: University of Pennsylvania Press, 2002); Alan Harrington, *Life in the Crystal Palace* (New York, NY: Alfred A. Knopf, Inc., 1959); Michael Maccoby, *The Gamesman: The New Corporate Leaders* (New York: Simon & Schuster, Inc., 1976).

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¹⁸⁹² Philip Selznick, "Foundations of the Theory of Organisation," *American Sociological Review* 13(1) (February, 1948): 26.

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¹⁸⁹⁶ Karl Marx (1849, 33), quoted in: Heinz Holländer, "On the Validity of Utility Statements: Standard Theory versus Duesenberry's," *Journal of Economic Behavior & Organization* 45(3) (July 2001): 239.

¹⁸⁹⁷ See: Faye Crosby, "A Model of Egoistical Relative Deprivation," *Psychological Review* 83(2) (March 1976): 85-113; Faye Crosby, *Relative Deprivation and Working Women* (New York, NY: Oxford University Press, 1982).

¹⁸⁹⁸ Robert K. Merton, "Social Structure and Anomie," *American Sociological Review* 3(5) (October 1938): 672-82.

¹⁸⁹⁹ Robert K. Merton, "Opportunity Structure: The Emergence, Diffusion and Differentiation of a Sociological Concept, 1930s-1950s," In *The Legacy of Anomie Theory: Advances in the Criminological Theory*, Volume 6, (eds.) Freda Adler and William S. Laufer (New Brunswick, NJ, USA: Transaction Publishers, 2000), 3-78.

¹⁹⁰⁰ Kenneth L. Dion, "Responses to Perceived Discrimination and Relative Deprivation," In *Relative Deprivation and Social Comparison*, The Ontario Symposium, Volume 4, (eds.) James M. Olson, C. Peter Herman, and Mark P. Zanna (Hillsdale, NJ, USA: Lawrence Erlbaum Associates, Inc. Publishers, 1986), 159.

¹⁹⁰¹ The term Relative Deprivation was first used by Stouffer *et al.* (1949) in their seminal work *The American Soldier: Adjustment During Army Life*. (Source: Michael A. Hogg and Graham M. Vaughan, *Social Psychology*, Fifth Edition (Essex, England: Pearson Education Limited, 2008), 394.)

¹⁹⁰² Some examples of absolute deprivation are impaired health status, low levels of wealth, etc. which are compared based on objective differences. Whereas, RD occurs when individuals or groups subjectively perceive themselves as unfairly disadvantaged with others who they perceive as having similar attributes, deserving similar rewards. However, many types of deprivation are seen as absolute because RD is often confused with it. (See: Jock Young, "Relative Deprivation," In *The Sage Dictionary of Criminology*, (eds.) Eugene McLaughlin and John Muncie (London: Sage Publications Ltd., 2006), 350.)

¹⁹⁰³ W. G. Runciman, *Relative Deprivation and Social Justice : A Study of Attitudes to Social Inequality in Twentieth-Century England* (London : Routledge & Kegan Paul, 1966), 10-11.

¹⁹⁰⁴ The concept of reference group (RG) – consisting of people, group, aspiration level, etc. – is important in studying RD because a person or group feel deprived in comparison to it. People compare themselves with RG in order to estimate their (socio-economic) positions with respect to the unit. People choose reference groups by trying to create and maintain a superior social identity to positively distinguish themselves from others (social identity theory) and categorising themselves in order to gain enhanced levels of self-identity depending on social networks and contexts (self-categorisation theory). Furthermore, RG is not concerned with only functionalist ways of studying people and their behaviour because it depends on many factors for comparison like age, gender, marital status, ethnic group, occupation, income, education, hobby and interest, prestige group and many such comparisons. Thus, RD is limited in terms of the possible RGs that people choose for comparisons, which can vary over time and in different situations, e.g., globalisation and rising instances of people spending their time on the Internet is already increasing the number of possible RGs and, changing aspiration levels and hence RD.

¹⁹⁰⁵ W. G. Runciman, 1966, *op. cit.*

¹⁹⁰⁶ Walter G. Runciman, *Confessions of a Reluctant Theorist: Selected Essays of W.G. Runciman* (Hemel Hempstead, Hertfordshire, UK: Harvester Wheatsheaf, 1989).

¹⁹⁰⁷ Tom R. Tyler, Robert J. Boeckmann, Heather J. Smith, and Yuen J. Huo, *Social Justice in a Diverse Society* (Boulder, CO, USA: Westview Press, 1997).

¹⁹⁰⁸ Catherine T. Kwantes, Sherry Bergeron, and Ritu Kaushal, "Applying Social Psychology to Diversity," In *Applied Social Psychology: Understanding and Addressing Social and Practical Problems*, (eds.) Frank W. Schneider, Jamie A. Gruman, and Larry M. Coutts (Thousand Oaks, CA, USA: Sage Publications, Inc., 2005), 349.

¹⁹⁰⁹ Rupert Brown, *Group Processes: Dynamics within and between Groups*, Second Edition (Malden, MA, USA: Blackwell Publishing, Inc., 2004), 233.

¹⁹¹⁰ Iain Walker and Heather J. Smith, "Fifty Years of Relative Deprivation," In *Relative Deprivation: Specification, Development, and Integration*, (eds.) Iain Walker and Heather J. Smith (Cambridge, UK: Cambridge University Press, 2002): 1.

¹⁹¹¹ Samuel A. Stouffer, Edward A. Suchman, Leland C. DeVinney, Shirley A. Star, and Robin M. Williams, Jr., *The American Soldier: Adjustment During Army Life*, Volume 1 (Princeton, NJ, USA: Princeton University Press, 1949).

¹⁹¹² Davis (1959) was first to formulate the Relative Deprivation Theory (RDT) by proposing: comparisons with in-group versus out-group members lead to different kinds of emotional reactions; i.e., comparisons with in-group members can produce feelings of RD or relative gratification (depending on whether one's outcomes are worse or better than the referent person's), whereas comparisons with out-group members can produce feelings of relative subordination or relative superiority. Thus, Davis explicitly limited the concept of RD to comparisons with "similar others" (in-group members) who possess some desired object to which the deprived perceiver feels entitled.

¹⁹¹³ Runciman (1966) introduced a distinction between egoistical versus fraternal deprivation, both of which are presumably "relative" in the sense described above. Egoistic deprivation refers to the perception that one's own outcomes all below a subjective standard (usually based on other individual's outcomes), whereas fraternal deprivation refers to the perception that one's reference group as a whole is deprived (usually relative to other groups). He also proposed that feelings of RD will not occur unless individuals think it is "feasible" that they (or their group) should have the desired object. The precise meaning of "feasibility" in this context is somewhat unclear (e.g., it can be interpreted as referring only to future hopefulness or as additionally implicating perceptions of entitlement and "what might have been"), a confusion that has led to some theoretical controversy. Finally, Runciman pointed out that comparisons with one's own outcomes in the past can produce feelings of RD – a possibility that removes the necessity of social comparisons.

¹⁹¹⁴ Gurr (1970) proposed a theory of rebellion, wherein three types of deprivation namely aspirational, decremental and progressive were distinguished, based different ways that people's expectations or perceived entitlements can exceed their capabilities and/or actual outcomes. In each type, though, the essential process was postulated to be the same: People feel deprived when they perceive that they are unlikely to obtain the outcomes to which they feel entitled to. Thus, unlike Runciman (1966), Gurr proposed that deprivation is more likely to occur when people believe that it is not feasible for them to obtain their desired outcomes.

¹⁹¹⁵ Faye Crosby, 1976, *op. cit.*

¹⁹¹⁶ Faye Crosby, 1982, *op. cit.*

¹⁹¹⁷ Originally conceived by Runciman (1966), people may compare themselves to other people and feel personally deprived – egoistic RD; this is different from fraternalistic RD in the sense that people may consider themselves as members of a group and compare with other groups to feel collectively deprived.

¹⁹¹⁸ James M. Olson and Neal J. Roese, "Relative Deprivation and Counterfactual Thinking," In *Relative Deprivation: Specification, Development and Integration*, (eds.) Iain Walker and Heather J. Smith (Cambridge, UK: Cambridge University Press, 2002), 265.

¹⁹¹⁹ Faye Crosby, 1976, *op. cit.*

¹⁹²⁰ John Lea and Jock Young, *What is to be Done about Law and Order?: Crisis in the Eighties* (Harmondsworth, UK: Penguin, 1984), 88.

- ¹⁹²¹ Leo Carroll and Pamela I. Jackson, "Inequality, Opportunity and Crime Rates in Central Cities," *Criminology* 21(2) (May 1983): 179.
- ¹⁹²² Hans Toch (ed.), *Psychology of Crime and Criminal Justice* (New York, NY: Holt, Rinehart, and Winston, 1979).
- ¹⁹²³ Judith R. Blau and Peter M. Blau, "The Cost of Inequality: Metropolitan Structure and Violent Crime," *American Sociological Review* 47(1) (February 1982), 114-29.
- ¹⁹²⁴ John Lea and Jock Young, 1984, *op. cit.*, 88.
- ¹⁹²⁵ Robert F. Meier, *Major Forms of Crime* (Beverly Hills, CA, USA: Sage Publications, Inc., 1984), 33.
- ¹⁹²⁶ Jock Young and Roger Matthews, *Rethinking Criminology: The Realist Debate* (London, Sage Publications Ltd., 1992), 133.
- ¹⁹²⁷ Jock Young, "Left Realist Criminology: Radical in Its Analysis; Realist in Its Policy," In *Oxford Handbook of Criminology*, (eds.) Mike Maguire, Rod Morgan, and Robert Reiner, Second Edition (Oxford, UK: Oxford University Press, 1997), 488.
- ¹⁹²⁸ Jock Young, *The Exclusive Society: Social Exclusion, Crime and Difference in Late Modernity* (London: Sage Publications Ltd., 1999), 48.
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- ¹⁹³¹ Deborah Vidaver Cohen, "Ethics and Crime in Business Firms: Organizational Culture and the Impact of Anomie," In *The Legacy of Anomie Theory: Advances in Criminological Theory*, Volume 6, (eds.) Freda Adler and William S. Laufer (New Brunswick, NJ, USA: Transaction Publishers, 2000), 193.
- ¹⁹³² Gerhard Falk, *The American Criminal Justice System: How It Works, How It Doesn't, and How to Fix It* (Santa Barbara, CA, USA: Praeger, ABC-CLIO, LLC, 2010), 30.
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- ¹⁹³⁴ Edwin H. Sutherland, *White Collar Crime* (New York, NY: Dryden Press, 1949).
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- ¹⁹³⁸ Jeffery Reiman, *The Rich Get Richer and The Poor Get Prison: Ideology, Class, and Criminal Justice*, Eighth Edition (Boston, MA, USA: Allyn & Bacon, 2006).
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²⁰⁶⁴ Using individual level of analysis, of course, restricts accessing multiple respondents that would weaken the generalisability of the study because an organisation is more than the belief of a single individual. However, in our case, multi-respondent corroboration of measures was difficult considering the confidentiality that we assured to respondents.

²⁰⁶⁵ John M. Kline, *Ethics for International Business: Decision Making in A Global Political Economy* (Abingdon, Oxon, UK: Routledge, 2005), 5.

²⁰⁶⁶ The list of Fortune 500 companies is one of the most popular 'identifiable sample frames' used in business and management studies worldwide (Yang *et al.*, 2006). We first sent survey-enquiries to accounting and finance professionals in this list using (Microsoft Excel) simple random sampling method. However, we did not get a single response. Thus, we used convenience and snowball sampling.

²⁰⁶⁷ Our sample frame consists of company finance and accounting professionals, which we have drawn using purposive sampling; in which sampling is done with a purpose in mind, i.e., researchers would have one or more specific predefined groups they are seeking. In particular, we used a mix of expert and snowball sampling methods. Expert sampling involves the assembling of a sample of persons with known or demonstrable experience and expertise in some area, in our case the experts that we looked for had experience in company finance and accounting. In snowball sampling, researchers begin by identifying someone who meets the criteria for inclusion in their study, in our case this someone was a professional having experience in company finance and accounting; they then ask her/him to recommend others who s/he may know who also meet the criteria, as we did. Even if results from 'probability (random) sample' is more representative than 'non-probability (non-random) sample,' we used the latter because in management accounting probability sampling of target population is difficult, time consuming, and expensive. Moreover, Web-surveys are oftentimes conducted with non-probability samples. As an important part of snowball sampling, we used 'corporate endorsement' by requesting corporate insiders, who took our survey and were satisfied with it, to influence their colleagues were also interested to take it.

²⁰⁶⁸ While sampling, we created a sampling frame that reasonably maximised the likelihood of variation in the independent variables like gender, nationality, age, numbers of years of experience, type of job responsibility and, their past of present levels of RD.

²⁰⁶⁹ As user-friendly questionnaires improves response rates. As regards this, we used Web-pages using simple HTML format that could be easily downloadable with no fancy features, using white background and black font, and so on. (See, for example: Don A. Dillman, Michael D. Sinclair and Jon R. Clark, "Effects of Questionnaire Length, Respondent-Friendly Design, and a Difficult Question on Response Rates for Occupant-Addressed Census Mail Surveys," *Public Opinion Quarterly* 57(3) (Autumn 1993): 289-304.)

²⁰⁷⁰ Following a conventional format in the Web-surveys is important because respondents tend to take a Web-survey to be like filling-up paper questionnaires. (See, for example: Don A. Dillman, 2007, *op. cit.*, 85.)

²⁰⁷¹ Sharing the purpose of a study programme with respondents increases response rates. (See, for example: Don A. Dillman, 2007, *op. cit.*, 158-59.)

²⁰⁷² Follow-up reminders increase response rates. (See, or example: Don A. Dillman, 2007, *op. cit.*, 158, 252-53, 334-35.)

²⁰⁷³ Seymour Sudman and Edward Blair, "Sampling in The Twenty-First Century," *Journal of the Academy of Marketing Science* 27(2) (April 1999): 269-77.

²⁰⁷⁴ In comparison to other personalised modes to conduct survey (e.g., face to face interviews), data collection in Web-surveys suffers from lower quality of data. This is because, among other things, respondents try to satisfice in this impersonal mode of survey, which is a function of motivation, ability, and task difficulty. Respondent motivation and ability are inversely related to the satisficing probability. Non-response is a function of authority (i.e., the respondent's position in an organisation), capacity (i.e., her/his access to information or knowledge about what is being asked) and motivation (i.e., her/his propensity to reveal information being sought) to respond. Among these three factors, researchers could enhance the capacity and motivation. Along with creating a user friendly questionnaire design, defining key terms, and so on to enhance their ability to take the survey; we also tried some other means to motivate the respondents, which are as follows: before sending the URL embedded survey-invitation email, we briefly communicated our research agenda with all the potential respondents mainly to convey them the message that they as practitioners had important roles in our theory-building process; we promised to share our results them; we complied with the time they required to complete the survey; and, to the last but not the least, we expressed our gratitude and thankfulness in advance for their interest in our survey and wished them a pleasant survey-taking experience (see: for example: Artur Baldauf, Heribert Reisinger, and William C. Moncrief, "Examining Motivations to Refuse in Industrial Mail Surveys," *Journal of the Market Research Society* 41(3) (July 1999): 345-53.)

²⁰⁷⁵ Wim A. Van der Stede *et al.*, *op. cit.*, 2005.

²⁰⁷⁶ In management accounting, response rates are usually low. Initially, we aimed at a sample size of 200 respondents because a minimum of 200-300 respondents seem to be able to achieve a certain degree of validity. However, there was no response from anyone in the random list comprising the Fortune 500 companies. Moreover, regarding what is the optimum sample size to use the most practical advice is to use a sample size which has proven effective in other research using similar measures, samples and methods to the proposed study; but, in our case, we did not find any prior studies on EM vis-à-vis RD. Thereafter, we earmarked 200 respondents as our sample size, and approached the respondents who we could access through purposive and snowball sampling. Although we targeted 200 professionals as our sample frame, but we sent survey-invitations to 50 respondents because before sending the actual invitation, we sent them e-mails requesting them to take the survey in order to minimise unit non-response error. Finally, we directly and indirectly received confirmation from 50 respondents who were willing to participate in the survey. Before sending the final Web-survey invitation, we sent them emails enquiring if they would like to take the survey because we wanted to maintain a healthy response rate; if the response rate drops below 50 per cent, the survey should be regarded with significant caution as a basis for precise quantitative statements about the population from which the sample was drawn.

²⁰⁷⁷ See, for example: Thomas A. Buchman and John A. Tracy, "Obtaining Responses to Sensitive Questions: Conventional Questionnaire versus Randomized Response Technique," *Journal of Accounting Research* 20(1) (Spring 1982): 264.

²⁰⁷⁸ Although personal questions are asked later, we asked them in the first part. Here, we have three explanations. One, we wanted to explain the concept of RD to the respondents by linking it to their personal lives; after all, people understand a concept better from

instances that have been personally experienced by them (see, for example: Benjamin Bradley, *Psychology and Experience* (Cambridge, UK: Cambridge University Press, 2005), 17-45). Two, people become fatigued with time, when they take a survey; so it is always advisable to introduce new concepts during the initial phase (see, for example: Ian Brace, 2008, *op. cit.*, 37). Three, had we asked them about their (personal) levels of RD after they finished opining/commenting on the questionable acts pertaining to EM of the main character in our vignettes, they, we were afraid, could have drawn comparisons between themselves with him (after all, they are corporate finance and accounting professionals), and in the process, could have refrained from answering those questions.

²⁰⁷⁹ Ian Brace, 2008, *op. cit.*, 73.

²⁰⁸⁰ See, for example: Ann Swidler, "Culture in Action: Symbols and Strategies," *American Sociological Review* 51(2) (April 1986): 273-86.

²⁰⁸¹ See, for example: David R. Schaefer and Don A. Dillman, "Development of a Standard E-mail Methodology: Results of an Experiment," *Public Opinion Quarterly* 62(3) (Fall 1998): 378-97.

²⁰⁸² We provided reference periods at the beginning of questions so that respondents did not construct their reference periods before knowing ours. (See, for example: Nora Cate Schaeffer and Stanley Presser, "The Science of Asking Questions," *Annual Review of Sociology* 29 (August 2003): 65-88.)

²⁰⁸³ See, for example: Deborah Freedman, Arland Thornton, Donald Camburn, Duane Alwin, and Linda Young-DeMarco, "The Life-History Calendar: A Technique for Collecting Retrospective Data," In *Sociological Methodology*, Volume 18, (ed.) Clifford C. Clogg (Washington, DC, USA: American Sociological Association, 1988), 37-68.

²⁰⁸⁴ See, for example: Dave Bartram, "Increasing Validity with Forced-Choice Criterion Measurement Formats," *International Journal of Selection and Assessment* 15(3) (September 2007): 263-72.

²⁰⁸⁵ Jolene D. Smyth, Don A. Dillman, Leah Melani Christian, and Michael J. Stern, "Comparing Check-All and Forced-Choice Question Formats in Web Surveys," *Public Opinion Quarterly* 70(1) (Spring 2006): 66-77.

²⁰⁸⁶ Relative frequencies express how respondents compare themselves with and rank against others, which is difficult to report in an absolute metric, e.g., past levels of deprivation of the respondents and socio-economic condition of people they knew. (See, for example: Nora Cate Schaeffer and Stanley Presser, 2003, *op. cit.*, 65-88.)

²⁰⁸⁷ Absolute frequencies in the case of attitude oriented questions, e.g., to assess various motivations of the main character in the vignettes that might have led him to indulge in MEM. (See, for example: Leandre R. Fabrigar and Jon A. Krosnick, "Attitude Measurement and Questionnaire Design," In *The Blackwell Encyclopedia of Social Psychology* (ed.) Antony S. R. Manstead and Miles Hewstone (Malden, MA, USA: Blackwell Publishing, 2004), 44.)

²⁰⁸⁸ Bipolar scales reinforce each other and appear clearer to respondents than other combinations of verbal and numeric labels (See, for example: Norbert Schwarz, Bärbel Knäuper, Hans-J. Hippler, Elisabeth Noelle-Neumann, and Leslie Clark, "Rating Scales Numeric Values May Change The Meaning of Scale Labels," *Public Opinion Quarterly* 55(4) (Winter 1991): 570-82). In personal questions concerning current socioeconomic status, we used bipolar scales with verbal labels because unipolar items, among other things, tend to irritate respondents who see questions that present negative and positive dimensions separately as repetitive or inappropriate (See, for example: Ron S. Kenetta, "On the Planning and Design of Sample Surveys," *Journal of Applied Statistics* 33(4) (May 2006): 405-15). In both these cases, we provided middle labels. However, providing a middle point (in a bipolar scale) can prompt more respondents to choose it (See, for example: Stanley Presser and Howard Schuman, "The Measurement of a Middle Position in Attitude Surveys," *Public Opinion Quarterly* 44(1) (Spring 1980): 70-85.) Notwithstanding, we provide it because: providing an even number of answer categories and excluding a middle alternative may force honestly neutral respondents to choose from among the directional answer categories (See, for example: Colm O'Muircheartaigh, Jon A. Krosnick, and Armin Helic. 2000. "Middle Alternatives, Acquiescence and the Quality of Questionnaire Data." 2000; downloadable at: http://harrisschool.uchicago.edu/about/publications/working-papers/pdf/wp_01_3.pdf, accessed on 18th May 2010); a midpoint decreases the proportion of respondents reporting 'don't know' and vice versa (See, for example: G. Kalton, Julie Roberts, and D. Holt, "The Effects of Offering a Middle Response Opinion with Opinion Questions," *Journal of the Royal Statistical Society, Series D (The Statistician)* 29(1) (March 1980): 65-78); a middle alternative in rating scales reduces the amount of random measurement error and does not affect validity (See, for example: Colm O'Muircheartaigh, Jon A. Krosnick, and Armin Helic, "Middle Alternatives, Acquiescence, and The Quality Of Questionnaire Data," 2000; downloadable at: http://harrisschool.uchicago.edu/about/publications/working-papers/pdf/wp_01_3.pdf, accessed on 21st May 2010); and, it has been argued that respondents who placed themselves at the midpoint belonged there (See, for example: Neil Malhotra, Jon A. Krosnick, and Randall K. Thomas, "Optimal Design of Branching Questions to Measure Bipolar Constructs," *Public Opinion Quarterly* 73(2) (Summer 2009): 318. 304-24).

²⁰⁸⁹ We used bipolar scales in those cases where our respondents gave their opinion about the cognitive factors that caused the main character's behaviour and action. Whereas, when they assessed the non-cognitive, environmental and societal factors, we used unipolar rating scales. We have used both scales in these questions because: bipolar items assume more about the evaluative continuum than unipolar items do (in the questions related to cognitive factors), and it is sometimes difficult to determine appropriate opposites to label the endpoints of bipolar scales (in the questions related to non-cognitive, environmental and societal factors) (See, for example: Robert F. DeVellis, *Scale Development: Theory and Applications*, Second Edition, Applied Social Research Methods Series, Volume 26 (Thousand Oaks, CA, USA: Sage Publications, Inc., 2003).).

²⁰⁹⁰ As regards the GUI elements for responding, there are three common elements used in the Web-survey: a series of radio buttons; a drop box with none of the options initially displayed until the respondent clicks on the box; and a scrollable drop-box with some visible options that require the respondent to scroll up/down to see the remainder of the options. In using a series of radio buttons, all the response options are visible at the same time. Such presentations are important because visibility has a more powerful effect in Web-surveys. Importantly, they also minimise biases arising out of satisficing, i.e., if all the response options are not visible at the same time, the respondents tend to choose the best one only from the visible options and tend to ignore others for which they have to use additional effort, e.g., scrolling down the list (of options). (See, for example: Mick P. Couper, Roger Tourangeau, Fred G. Conrad, and Scott D.

Crawford, "What They See Is What We Get: Response Options for Web Surveys," *Social Science Computer Review* 22(1) (February 2004): 111-27.)

²⁰⁹¹ This minimises the occurrence of satisficing. (Neil Malhotra, "Completion Time and Response Order Effects in Web Surveys," *Public Opinion Quarterly* 72(5), Special Issue; Web Survey Methods (December 2008): 914-34.)

²⁰⁹² Open-ended answers typically result in poor or incomplete answers, particularly in Web-surveys (See, for example: James D. Wright and Peter V. Marsden, "Survey Research and Social Science: History, Current Practice, and Future Prospects," In *Handbook of Survey Research*, Second Edition, (eds.) James D. Wright and Peter V. Marsden (Bingley, UK: Emerald Group Publishing Limited, 2010), 3-26.)

²⁰⁹³ In the case of questions related to perceptions and attitudes, as in our case, requires respondents to quickly answer based on their instant reactions; which are more stable over time. So, once the respondents answered a Web-page and moved to the next, we did not give them the option to return to and edit their answers. (Ian Brace, 2008, *op. cit.*, 21; see also: Roger Tourangeau, Lance J. Rips, and Kenneth Rasinski, *The Psychology of Survey Response* (Cambridge, UK: Cambridge University Press, 2000).)

²⁰⁹⁴ Gordon B. Willis, *Cognitive Interviewing: A Tool for Improving Questionnaire Design* (Thousand Oaks, CA, USA: Sage Publications, Inc., 2005).

²⁰⁹⁵ Elizabeth Nichols and Jennifer Hunter Childs, "Respondent Debriefings Conducted by Experts: A Technique for Questionnaire Evaluation," *Field Methods* 21(2) (May 2009): 115-32.

²⁰⁹⁶ Some of the Background attributes are also enabling factors, e.g., accounting knowledge and skills, without which an intentional action (e.g., MEM) would not be possible.

²⁰⁹⁷ <http://www.referenceforbusiness.com/biography/F-L/Lay-Ken-1942.html>, accessed on 15th March 2010.

²⁰⁹⁸ UNICEF, *Poverty and Children: A Perspective*; downloadable at: http://www.unicef.org/videoaudio/PDFs/Poverty_and_Children_a_Perspective.pdf, accessed on 15th April 2010.

²⁰⁹⁹ Greg J. Duncan, Jeanne Brooks-Gunn, and Pamela Kato Klebanov, "Economic Deprivation and Early Childhood Development," *Child Development* 65(2), Children and Poverty (April 1994): 315.

²¹⁰⁰ Kate E Pickett and Richard G Wilkinson, "Child Wellbeing and Income Inequality in Rich Societies: Ecological Cross Sectional Study," downloadable at: <http://www.bmj.com/cgi/content/full/335/7629/1080>, accessed on 15th April 2010.

²¹⁰¹ Robert Walker and Claire Collins, "Families of the Poor," In *The Blackwell Companion to The Sociology of Families*, (eds.) Jacqueline Scott, Judith Treas, and Martin Richards (Oxford, UK: Blackwell Publishing Ltd., 2004), 208-9.

²¹⁰² See, for example: William Goldfarb, "Effects Of Psychological Deprivation In Infancy And Subsequent Stimulation," *American Journal Psychiatry* 102 (July 1945): 18-33; David Skuse, "Extreme Deprivation in Early Childhood – I. Diverse Outcomes for Three Siblings from an Extraordinary Family," *Journal of Child Psychology and Psychiatry* 25(4) (October, 1984): 523-41; David Skuse, "Extreme Deprivation in Early Childhood – II. Theoretical Issues and a Comparative Review," *Journal of Child Psychology and Psychiatry* 25(4) (October, 1984): 543-72; David Fergusson, Nicola Swain-Campbell, and John Horwood, "How Does Childhood Economic Disadvantage Lead To Crime?," *Journal of Child Psychology & Psychiatry* 45(5) (2004): 956-66; Michael Rutter, Julia Kim-Cohen, and Barbara Maughan "Continuities and Discontinuities in Psychopathology Between Childhood and Adult Life," *Journal of Child Psychology and Psychiatry* 47(3-4) (2006): 276-95.

²¹⁰³ John Lea and Jock Young, 1984, *op. cit.*

²¹⁰⁴ People consciously act to enhance their social identity – Social Identity Theory. (See: Henri Tajfel and John Turner, "An Integrative Theory of Intergroup Conflict," In *The Social Psychology of Intergroup Relations*, (eds.) William G. Austin and Stephen Worchel (Monterey, CA, USA: Brooks-Cole Publishers, 1979), 94-109.)

²¹⁰⁵ Gudmund Elster, "Real Virtuality," In *Social Mechanisms: An Analytical Approach to Social Theory*, Studies in Rationality and Social Change, (eds.) Peter Hedström and Richard Swedberg (Cambridge; UK: Cambridge University Press, 1998), 74.

²¹⁰⁶ Constructs are latent variables. A latent variable cannot be measured directly, as in the case of (human) perception, but only through measurable indicator variables. Additionally, there are many reasons, e.g., social desirability bias, for which such variables may not elicit objective response. In such cases indicator variables (asked in the form of questions) are used to form constructs; combining a set of them, a researcher can create a measure of single construct. We created the constructs concerning RD by analysing the socio-economic status of the other people that the respondents in the past, i.e., their childhood and adolescent years, were and, currently, are familiar with (with respect to them). Others can have poor (P), at par (A) or rich (R) economic status (ES) and low (L), at part (P) or high (H) social status (SS) in comparison to the respondents. We labelled respondents' degrees of RD as low, medium and high. A person who is familiar with others having socio-economic status as: (a) L-P, A-P and L-A has low; (b) L-R, A-A and H-P has medium; and H-A, A-R and H-R (with respect to her/him) has high degrees of RD.

²¹⁰⁷ This is in line with prior research that have found out that samples have often been analysed assuming data are randomly sampled, when in fact the assumption is not justified. (See, for example: Donald P. Cram, Vijay Karan, and Iris Stuart, "Three Threats to Validity of Choice-Based and Matched Sample Studies in Accounting Research," *Contemporary Accounting Research* 26(2) (Summer 2009): 477-516.)

²¹⁰⁸ The mode conveys more meaning in the case of ordinal variables. (See, for example: T.W. Anderson and Jeremy D. Finn, *The New Statistical Analysis of Data* (New York, NY: Springer-Verlag New York, Inc., 1996). 73; see also: S. S. Stevens, "On the Theory of Scales of Measurement," *Science* 103(2684) (June 1946): 679. 677-80.)

²¹⁰⁹ Psychometricians like to theorise that psychometric tests produce interval scale measures attitudes (See, for example: Frederic M. Lord and Melvin R. Novick, *Statistical Theories of Mental Test Scores* (Reading, MA, USA: Addison-Wesley, 1968); Alexander von Eye, "Book Reviews: Ordinal Measurement in The Behavioral Sciences," *Applied Psychological Measurement* 29(5) (September 2005): 401-03) but there is little evidence to suggest that such attributes are anything more than ordinal for most psychological data (See, for example: Norman Cliff, *Ordinal Methods for Behavioral Data Analysis* (Mahwah, NJ, USA: Lawrence Erlbaum Associates, Inc. 1996); Norman Cliff and John A. Keats, *Ordinal Measurement in the Behavioral Sciences* (Mahwah, NJ, USA: Lawrence Erlbaum Associates, Inc., 2003); Joel Michell, "Is Psychometrics Pathological?," *Measurement: Interdisciplinary Research & Perspectives* 6(1)

(January 2008): 7-24).

²¹¹⁰ <http://www2.uiah.fi/projects/metodi/152.htm>, accessed on 11th January 2010. (See also: Gerhard Blickle, Alexander Schlegel, Pantaleon Fassbender, and Uwe Klein, "Some Personality Correlates of Business White-Collar Crime," *Applied Psychology: An International Review* 55(2) (2006): 231.)

²¹¹¹ Lawrence Revsine, "The Selective Financial Misrepresentation Hypothesis," *Accounting Horizons* 5(4) (December 1991): 16-17.

²¹¹² Ziva Kunda, "The Case for Motivated Reasoning," *Psychological Bulletin* 108 (3) (November 1990): 480-98.

²¹¹³ Edward Alsworth Ross, "The Criminaloid," In *White Collar Criminal: The Offender in Business and Professions*, (ed.) Gilbert Geis (New Brunswick, NJ, USA: Transaction Publishers, 2007), 27.

²¹¹⁴ See, for example: Linda Babcock, George Loewenstein, Samuel Issacharoff, Colin Camerer, "Biased Judgments of Fairness in Bargaining," *The American Economic Review* 85(5) (December 1995): 1337-43.

²¹¹⁵ Niklas Karlsson, George Loewenstein, and Duane Seppi, "The Ostrich Effect: Selective Attention to Information," *Journal of Risk and Uncertainty* 38(2) (April 2009): 95-115.

²¹¹⁶ See, for example: Ezra Stotland, "White Collar Criminals," *Journal of Social Issues* 33(4) (Fall 1977): 179-96.

²¹¹⁷ Jeff Skilling was highly successful before joining Enron, a Harvard M.B.A., consultant and one of the youngest partners of McKinsey & Company in their energy and chemical consulting practices. Even when he was a student, people who met him knew he would do something big; thus he was ambitious since the beginning. His contract at Enron was heavily dependant on company performance. He was a Darwinist, a practicing neoclassicist, and one of his favourite books was Richard Dawkins' *The Selfish Gene*; who was the main architect behind Enron's highly competitive and ruthless corporate culture where success implied meeting or beating analysts' forecasts. For him, human nature was seen in terms of: greed and competition, and money as the greatest motivator of all. He hired graduates, mostly from a group of long-established eastern United States colleges and universities widely regarded as high in scholastic and social prestige, with a hunger for money that matched his. He was passionately involved with Enron; people recollect that he bullied his decisions on to others, and most of the times conveyed a message that "[...] I know the answer, and I'm right. I'm Jeff Skilling. And I'm Enron – are we all clear here? [...]" (Source: Bethany McLean and Peter Elkind, *The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron* (New York: Portfolio, 2003), 164.) For him work and money were everything; he spent minimal time at social gatherings, was mostly uninvolved in community matters and hardly had any friend. After leaving Enron, he became involved in social life. He started his own foundation and became a significant patron to other charities. However he took exotic family vacations in the name of promoting charitable deeds. Although he donated handsomely to educational institutions, his personal philanthropy has some of the feel of a true believer in his theories of how business and markets should work; e.g., he donated hefty sums of money to "[...] Junior Achievement, the training ground for potential new young Skillings of the world [...]" (Source: Rick Cohen, "The Enron Family Philanthropies," *The Nonprofit Quarterly* (December 1, 2007), accessed at:

<http://www.nonprofitquarterly.org/cohenreport/2007/12/01/the-enron-family-philanthropies/>, on 19th March 2010.) In a nutshell, Jeffery Skilling, as Tilly and Tilly (1988) have noted, is a typical personality type that confers to the neoclassicists' notion of rationality that views "[...] *homo sapiens* [... as] *homo economicus*. [...]" (See also: Mike Tolson and Alan Bernstein, "Skilling Energized Enron but Draws Suspicion after its Fall," *Houston Chronicle* (February 15, 2004), accessed at:

<http://www.chron.com/disp/story.mpl/special/enron/1249343.html>, on 19th March 2010; Frank Pellegrini, "Skilling: The CEO Who Wasn't There," *Time* (February 07, 2002), accessed at: <http://www.time.com/time/nation/article/0,8599,201536,00.html#ixzz0jTHdZIK>,

on 17th March 2010; Kurt Eichenwald and Diana B. Henriques, "Enron Buffed Image to Shine even as It Rotted from Within," *The New York Times* (February 10, 2002), accessed at: <http://www.nytimes.com/2002/02/10/business/businessspecial3/10COLL.html?pagewanted=1>, on 17th March 2010; Mike Tolson, "Skilling: A Private Man's Public Ordeal: The Former CEO is One of the Most

Enigmatic Figures in the Enron Saga," *Houston Chronicle* (January 23, 2006), accessed at:

<http://www.chron.com/disp/story.mpl/special/enron/trio/3607493.html>, on 20th March 2010; Kurt Eichenwald, *Conspiracy of Fools: A True Story* (New York: Broadway Books, 2005), 78; Alex Gibney (Director), "Enron – The Smartest Guys in the Room," Documentary Movie, watched at: <http://www.youtube.com/watch?v=o5cINtt7PgM>, on 11th March 2010; Ronald R. Sims and Johannes Brinkmann,

"Enron Ethics (Or: Culture Matters More than Codes)," *Journal of Business Ethics* 45(3) (July 2003): 243-56; C. William Thomas, "The rise and fall of Enron: When a Company Looks too Good to be True, It usually is.," *Journal of Accountancy* 193(4) (April 2002): 41-53; Jerry W. Markham, *A Financial History of Modern U.S. Corporate Scandals: From Enron to Reform* (New York: M.E. Sharpe, Inc., 2006), 51-52.)

²¹¹⁸ Andrew Fastow was a mediocre person in his pre-Enron life; he was neither a good student nor a successful professional. His professional track records had traces of unethical intentions; for instance, it is alleged that while on training in one of his former organisations – the Continental Bank – he was reprimanded by a superior for talking to colleagues about using insider information to make a profit trading in the stock of the Coastal Corporation, one of the bank's major clients. Everything that he did, his co-workers revealed, he was always concerned about how that would affect his career; money was his highest reward. This may not come as a surprise because he was a mere plodding loan consolidator, before joining Enron. He was again and again trying to prove himself in Enron. Enron appointed him as its CFO in 1998, but only after considering several outside candidates; he took it as if there was a lack of confidence in him, according to his former colleagues. This could be one of the reasons for which he became even more creative and more bold in his larger and more complex deals from 1999 to 2001; thereby increasing violating the materiality convention within accounting, which, as a matter of fact, is oftentimes abused in various instances of EM. As these deals became more voluminous to comply with Skilling's aggressive growth targets, there lesser returns and the hard assets behind the first partnerships were later supplanted by stock or guarantees from Enron. Oftentimes, he was complaining that others were getting rewarded for his works and he was not getting credit for them; in spite of the facts that if his perks and benefits were disproportionately higher than many others in the industry and his lavish lifestyle. Furthermore, his social cravings were equally high. He and his wife Lea were so passionate about modern art that not only they promoted its cause (like donating large sums of money to art museums), but also the collected contemporary arts for themselves as well as for Enron's offices; his wife was in charge of Enron's art purchases. The Fastow couple was big donors to charitable causes and, according to the U.S. Justice Department, founded the Fastow Family Foundation into which they channelled U.S.\$

4.5 millions that was generated from a U.S.\$25,000 investment in one of his deals; Part of the Fastows' rise in the Houston art world was connected to the grant-making of their family foundation, which gave Lea a seat on the board of trustees of Houston's Contemporary Arts Museum. They were involved in community programmes like religious congregation's education programmes in non-traditional lines with his outside the box thinking abilities. (See: Bill Sapito, "How Fastow Helped Enron Fall," *Time* (Sunday, Feb. 10, 2002), accessed at: <http://www.time.com/time/business/article/0,8599,201871,00.html>, on 15th March 2010; Bill Sapito, "How Fastow Helped Enron Fall," *Time* (Sunday, Feb. 10, 2002), accessed at: <http://www.time.com/time/business/article/0,8599,201871-2,00.html>, on 15th March 2010; Bill Sapito, "How Fastow Helped Enron Fall," *Time* (Sunday, Feb. 10, 2002), accessed at: <http://www.time.com/time/business/article/0,8599,201871-3,00.html>, on 15th March 2010; David Barboza, "Enron's Many Strands: Fallen Star; From Enron Fast Track to Total Derailment," *The New York Times* (October 3, 2002); accessed at: <http://www.nytimes.com/2002/10/03/business/enron-s-many-strands-fallen-star-from-enron-fast-track-to-total-derailment.html?pagewanted=L>, on 21st March 2010; Jerry W. Markham, *A Financial History of Modern U.S. Corporate Scandals: From Enron to Reform* (New York: M.E. Sharpe, Inc., 2006), 53; <http://www.justice.gov/archive/dag/speeches/2002/100102dagpressconference.htm>, accessed on 22nd March 2010; Bethany McLean and Peter Elkind, *The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron* (New York: Portfolio, 2003), 365)

²¹¹⁹ Gerhard Blickle, Alexander Schlegel, Pantaleon Fassbender, and Uwe Klein, "Some Personality Correlates of Business White-Collar Crime," *Applied Psychology: An International Review* 55(2) (2006): 221.

²¹²⁰ Although some studies have concluded that responses to vignettes will reflect how individuals actually respond in reality (Rahman, 1996), yet there are others who argue otherwise (Faia, 1980; West, 1982; Carlson, 1996; Hughes, 1998). (Michael A. Faia, "The Vagaries of the Vignette World: A Document on Alves and Rossi," *American Journal of Sociology* 85(4) (January 1980): 951-54; West (1982), cited in: Janet Finch, 1987, *op. cit.*, 113; Bonnie E. Carlson, "Dating Violence: Student Beliefs About Consequences," *Journal of Interpersonal Violence* 11(1) (March 1996): 3-18; Naila Rahman, "Caregivers' Sensitivity to Conflict: The Use of Vignette Methodology," *Journal of Elder Abuse & Neglect* 8(1) (August 1996): 35-47; Rhidian Hughes, "Considering the Vignette Technique and Its Application to a Study of Drug Injecting and HIV Risk and Safer Behaviour," *Sociology of Health and Illness* 20(3) (May 1998): 381-400).

²¹²¹ Janet Finch, 1987, *op. cit.*, 113.

²¹²² John R. Searle, 1992, *op. cit.*, 247.

²¹²³ Joel S. Demski, John C. Fellingham, Yuji Ijiri, and Shyam Sunder, "Some Thoughts on the Intellectual Foundations of Accounting," *Accounting Horizons* 16(2) (June 2002): 166.

²¹²⁴ As we know managerial discretions – mental facts – are normally based on the actual and potential performance levels – physical facts – of an organisation. Both physical and mental facts are required for the construction of social reality. Intentional mental facts like how to manage earnings (through prudent or fraudulent means) may become social facts when they are recognised by many individuals. Social facts are facts which are generally agreed upon, and which have collective intentionality. (Source: John R. Searle, *The Construction of Social Reality* (New York, NY: Free Press, 1995).

²¹²⁵ Christine M. Haynes and Steven J. Kachelmeier, "The Effects of Accounting Contexts on Accounting Decisions: A Synthesis of Cognitive and Economic Perspectives in Accounting Experimentation," *Journal of Accounting Literature* 17 (1998): 97-136.

²¹²⁶ See, for example: Robert Libby, "The Role of Knowledge and Memory in Audit Judgement," In *Judgement and Decision-making Research in Accounting and Auditing*, (eds.) Robert H. Ashton and Alison Hubbard Ashton (Cambridge, UK: Cambridge University Press, 1995), 176-206.

²¹²⁷ See, for example: Andrew C. Stedry, *Budget Control and Cost Behavior* (Englewood Cliffs, NJ, USA: Prentice-Hall, 1960); Jacob G. Birnberg and Raghu Nath, "Implications of Behavioral Science for Managerial Accounting," *The Accounting Review* 42(3) (July 1967): 468-79.

²¹²⁸ See, for example: Sara Ann Reiter, "Economic Imperialism and the Crisis in Financial Accounting Research," *Critical Perspectives on Accounting* 9(2) (April 1998): 143-71; Paul F. Williams, J. Gregory Jenkins, and Laura Ingraham, "The Winnowing away of Behavioral Accounting Research in the US: The Process for Anointing Academic Elites," *Accounting, Organizations and Society* 31(8) (November 2006): 783-818.

²¹²⁹ Richard Whitley, "The Transformation of Business Finance into Financial Economics: The Roles of Academic Expansion and Changes in U.S. Capital Markets," *Accounting, Organizations and Society* 11(2) (1986): 171-92.

²¹³⁰ Fabrizio Ferraro, Jeffery Pfeffer, and Robert I. Sutton, "Economics Language and Assumptions: How Theories Can Become Self-Fulfilling," *Academy of Management Review* 30(1) (2005): 11.

²¹³¹ Bent Flyvbjerg, *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again* (Cambridge, UK: Cambridge University Press, 2001), 42.

²¹³² Jacob G. Birnberg, "Empirical Research in Behavioral Accounting," *Management International Review* 13(2/3) (1973): 71.

²¹³³ Sumantra Ghoshal, "Bad Management Theories Are Destroying Good Management Practices," *Academy of Management Learning & Education* 4(1) (March 2005): 87.

²¹³⁴ See, for example: Norman B. McIntosh, Teri Shearer, Daniel B. Thornton, and Michael Welker, "Accounting as Simulacrum and Hyperreality: Perspectives on Income and Capital," *Accounting, Organizations and Society* 25(1) (January 2000): 13-50; Yuji Ijiri, "U.S. Accounting Standards and Their Environment: A Dualistic Study of Their 75-Years of Transition," *Journal of Accounting and Public Policy* 24(4) (July-August 2005): 255-79; Ross L. Watts, "What Has The Invisible Hand Achieved?," *Accounting and Business Research, International Accounting Policy Forum* (2006), 51-61 (downloadable at: <http://folders.nottingham.edu.cn/staff/zalzae1/ATP/articles/Wattsinvisiblehand.pdf>, accessed on 10th October 2010).

²¹³⁵ See, for example: Paul F. Williams, "Recovering Accounting as a Worthy Endeavor," *Critical Perspectives on Accounting* 15(4-5) (May-July 2004): 513-17.

²¹³⁶ Mary S. Morgan, 'The Character of "Rational Economic Man",' *Dialektik* 1 (1997): 77, 91.

- ²¹³⁷ Amartya K. Sen, "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," *Philosophy and Public Affairs* 6(4) (Summer 1977e): 317-44.
- ²¹³⁸ David Burgstahler, "Inference from Empirical Research," *The Accounting Review* 62(1) (January 1987): 212.
- ²¹³⁹ Susan C. Borkowski, Mary Jeanne Welsh, and Quinke (Michael) Zhang, "An Analysis of Statistical Power in Behavioral Accounting Research," *Behavioural Research In Accounting* 13 (2001): 63-84.
- ²¹⁴⁰ Humphrey Taylor, "Does Internet Research Work?" *International Journal of Market Research* 42(1) (2000): 51.
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- ²¹⁴⁴ Jacob Cohen, The earth is round ($p < .05$)," *American Psychologist* 49(12) (December 1994): 997-1003.
- ²¹⁴⁵ Patrick E. Shrout, "Should Significance Tests be Banned? Introduction to a Special Section Exploring the Pros and Cons," *Psychological Science* 8(1) (January 1997): 1-2.
- ²¹⁴⁶ Susan C. Borkowski *et al.*, 2001, *op. cit.*, 71.
- ²¹⁴⁷ See, for example: Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago, IL, USA: University of Chicago Press, 1970).
- ²¹⁴⁸ Ian Colville, 'Reconstructing "Behavioural Accounting"', *Accounting, Organization and Society* 6(2) (1981): 119.
- ²¹⁴⁹ John R. Searle, 1992, *op. cit.*, 228-29.
- ²¹⁵⁰ *Ibid.*, 227.
- ²¹⁵¹ See, for example: Brian P. Shapiro, "Objectivity, Relativism, and Truth in External Financial Reporting: What's Really at Stake in the Disputes?," *Accounting, Organizations and Society* 22(2) (February 1997), 167-85.
- ²¹⁵² John R. Searle, 1992, *op. cit.*, 237.
- ²¹⁵³ *Ibid.*, 247.
- ²¹⁵⁴ *Ibid.*; 71, 72.
- ²¹⁵⁵ *Ibid.*, 73.
- ²¹⁵⁶ *Ibid.*, 75.
- ²¹⁵⁷ *Ibid.*
- ²¹⁵⁸ *Ibid.*, 77.
- ²¹⁵⁹ Although it is argued that activities underlying an (intentional) action take place in the structure (or architecture) of the brain and the 'seeking tendency' behind them to achieve something explains their functional characteristics, yet Searle (1992, *op. cit.*, 232) argues that this is erroneous because it ignores "[...] who is supposed to be performing these operations? [...]"
- ²¹⁶⁰ John R. Searle, 1992, *op. cit.*, 229.
- ²¹⁶¹ *Ibid.*, 230.
- ²¹⁶² *Ibid.*, 235.
- ²¹⁶³ *Ibid.*, 235.
- ²¹⁶⁴ John Law, *After Method: Mess in Social Science Research* (Abingdon, Oxon OX, UK: Routledge, 2004), 2.
- ²¹⁶⁵ Brian P. Shapiro, 1997, *op. cit.*, 167.
- ²¹⁶⁶ For Rorty the "[...] the substitution of objectivity-as-intersubjectivity for objectivity-as-accurate-representation is the key pragmatic move. [...]" (Source: Richard Rorty, "Does Academic Freedom have Philosophical Presuppositions," *Academe* 80(9) (November-December 1994): 63.)
- ²¹⁶⁷ Brian P. Shapiro, "Toward a Normative Model of Rational Argumentation for Critical Accounting Discussion," *Accounting Organizations and Society* 23(7) (October 1998): 657.
- ²¹⁶⁸ Brian P. Shapiro, "Objectivity, Relativism, and Truth in External Financial Reporting: What's Really at Stake in the Disputes?," *Accounting, Organizations and Society* 22(2) (February 1997), 167.
- ²¹⁶⁹ This insightful remark is from the email correspondence that I had with Prof. Brian P. Shapiro, Associate Professor of Accounting, UST Opus College of Business, University of St. Thomas, USA.
- ²¹⁷⁰ Donald C. Hambrick, 1994, *op. cit.*, 13.

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Appendix 1

Web-Survey Questionnaire

Webpage1

1. How many years of experience do you have in financial accounting?

Less than 5 years

5-10 years

More than 10 years

2. In your present organisation, what is your main professional responsibility?

Preparing Reports (R)

Planning, Supervising and/or Evaluating (PSE)

Auditing and/or consulting (AC)

Webpage2

Relative Deprivation (RD) is a phenomenon that involves situations in which a person or group does not have something which they think they are entitled to, while another person or group possesses it. RD is often confused with absolute deprivation (AD); AD implies lack of basic necessities with respect to a fixed standard such as the amount of food necessary for survival.

3. Please recollect various situations and experiences in your life before you turned 19-20 years old. On a scale of 1- 3, where 1 represents low and 3 high, how would you like to rate the frequency with which you encountered situations and experiences involving instances of Relative Deprivation?

1

2

3

4. Please think about various situations and experiences in your present life. On a scale of 1- 3, where 1 represents low and 3 high, how would you like to rate the frequency with which you encounter situations and experiences involving instances of Relative Deprivation?

1

2

3

Webpage3

A rich person is someone who has substantial amount of wealth and better economic condition with respect to others in her/his surrounding.

5. Please remember your neighbours, friends and relatives, whom you knew and mingled with before you turned 19-20 years old. Some of them were economically poorer than your family and some richer. On an average, how would you rate their economic condition in comparison to that of your family?

Rich

At par

Poor

6. Please think about your colleagues, neighbours, friends and acquaintances, and relatives, whom you know and mingle with at present. Some of them are economically poorer than you and some richer. On an average, how would you rate their economic condition in comparison to that of yours?

Rich
At par
Poor

Social status is the honour or prestige attached to one's rank and position in society (one's social position); it can arise from one's occupation, wealth, lifestyle, family background, talents, skills, etc.

7. Please remember your neighbours, friends and relatives, whom you knew and mingled with before you turned 19-20 years old. Some of them had higher social status than your family and some lower. On an average, how would you rate their social status in comparison to that of your family?

High
At par
Low

8. Please think about your colleagues, neighbours, friends and acquaintances, and relatives, whom you know and mingle with at present. Some of them have higher social status than you and some lower. On an average, how would you rate their social status in comparison to that of yours?

High
At par
Low

Webpage4

9. Your gender?

Male
Female

10. Your age?
Less than 35 years
35-50 years
More than 50 years

Webpage5

Please read the illustration below.

This is the story about Ken who was an incredibly successful man. After completing his higher studies in economics, he worked for some of companies and government agencies in the energy sector. (Energy was the lifeline of the society where he lived.) In the mid eighties, when the country's energy sector was undergoing large-scale deregulations, he took over an energy company – X – where he was serving as the CEO, through a shrewd move. Ken positioned X as a New Economy company, continuously set higher earnings benchmarks as its performance indicators, and mainly focussed on healthy financial reporting to impress the market. In the process, X's financial reporting was heavily influenced by creative accounting practices that involved adjusting company earnings.

X's reported earnings most of the times exceeded analysts' forecasts and its shares dictated capital market movements. Ken was one of the highest paid executives in the country; his compensations were highly dependent on X's financial performance. Apart from being rich, he was also famous. He had strong social and political ties, developed mainly through large amounts of money that he donated to political parties and, civic and charitable causes. In the market, he was treated as a role model by many professionals and business leaders; in the political sphere, his opinions were widely sought by the country's policy-makers. Additionally, he had a charming and affable personality. With his professional cravings, personal charm, social charisma and political connections, he led X to become one of the top ten publicly-held companies in the country; that to, only within fifteen years of its founding. By then, there were tens of thousands of employees, operations in more than forty countries, and millions of shareholders worldwide.

Although X's growth was staggering, many questionable strategies and off-the-book deals surrounded it. Among them, two were notable: the creation of special purpose entities (SPEs) and the adoption of mark to market accounting (MMA). On the hindsight, nothing was wrong or illegal about them; they, as a matter of fact, are creative accounting techniques, permitted by the Generally Accepted Accounting Principles (GAAP). As many of X's products/services were based on novel concepts, creating SPEs was strategic to hedge X against risks. Secondly, with such a range of innovative product/services, MMA was an appropriate means to realistically represent X's financial situations. However, the concepts of SPE and MMA were grossly abused. This was mainly due to X's SPEs, most of which had built-in questionable features: they dealt with hypothetical products/services; X's shares and bonds were used as collaterals

to obtain loans for them; X's decision-makers were either their owners or managers; and so on. In other words, they operated not as SPEs but subsidiaries of X. In such a situation, MMA mainly served X in hiding its debts and losses, inflating its profits and asset values, and, in the process, deceiving the market. Thus, although they started with managing earnings, X's top decision-makers, including Ken, undertook large scale earnings manipulation activities. (Earnings management (EM) involves strategies to adjust company earnings so that reported earnings match a pre-determined target, through prudent means like including (future) receivables in current revenues. However, earnings manipulations are activities where speculative decisions grossly override prudent means, e.g., undertaking accounting for subsidiaries as if they are SPEs.)

Some of X's employees tried to bring those irregularities to Ken's notice, but they were ignored. Ken was primarily obsessed with achieving targets at all cost. He simply did not pay any attention to information and suggestions that were in opposition to them. Moreover, X's auditors, from a reputed audit firm, also helped those irregularities by giving clean audit reports; this is because in addition to receiving large auditing fees, they also got millions from consulting activities in X, which they did not want to lose by antagonising Ken.

In this way, with the help of policymakers, regulators, auditors, bankers and brokers; Ken and his top management team undertook rampant accounting- and activity-based earnings manipulations, in the name of EM. It seems, accounting facts and figures made them aware about what was more and what was less with respect to their targets, but not what was enough. Even though Ken and his associates did not reach what was enough, they committed enough of accounting irregularities. However, a lot of manipulations made the business unsustainable. Only after a couple of months of becoming one of the top ten publicly-held companies, Ken filed for bankruptcy of X. (It was later discovered that many of X's recorded assets and profits were wholly fraudulent and nonexistent.) This was catastrophic for thousands of its employees (who lost most of their pension funds and savings that were tied to the company) and millions of shareholders (whose investments became literally of zero value because X's share price crashed down sharply within days). This, in turn, rocked the entire nation. In the midst of this, Ken and his close associates at X divested their shares and created millions for themselves. Later on, they were indicted for its failure. Many of Ken's employees, particularly his management team members whom he trusted the most, gave witness against him. The people whom he knew in his business, social, and political spheres, and had handsomely donated to their causes in the past, turned their back at him. Trying to prove his innocence, Ken, in an interview, had said, "[...] Am I a fool? I don't think I'm a fool. But I think I sure was fooled [by the people whom I trusted]."

After five years of intense legal battle, he was convicted of accounting felonies and frauds. Shortly after his conviction, he died of a sudden heart attack.

Now, please answer and/or comment on the following questions, taking cues from this illustration.

A desire is a hope, wish, longing or craving, as for something that brings satisfaction or enjoyment.

11. Would you say that a reason behind Ken's focus on earnings and creative accounting was his desire to get financially rich and socially famous?

No
May be yes
Yes

A belief is the psychological state in which an individual holds an idea, concept, proposition or premise to be true.

12. Would you say that a reason behind Ken's focus on earnings and creative accounting was his belief that healthy earnings numbers of his company could enable him to fulfil his desires (of getting financially rich and socially famous)?

No
May be yes
Yes

Valuing involves evaluating various pros and cons that are involved in a decision.

13. Would you say that a reason behind Ken's over-indulgence in earnings management (EM) was a result of his valuing that EM was the best possible vehicle that could enable him to fulfil his desires (of getting financially rich and socially famous)?

No
May be yes
Yes

Webpage6

Please read the illustration below, which is a continuation of the previous illustration.

Ken's country was highly developed, and a free market economy; where business community had a lot of influence in every sphere of life. Be it market friendly domestic policies or business friendly foreign policies, the market forces called the shot across the country's governance corridors. They also had a predominant representation in various regulatory bodies that oversaw business activities.

As a strong advocate of free-market principles, Ken once had said, "We see ourselves as first helping to open up markets to competition. And through competition, reducing costs, and of course significantly reducing prices paid by consumers. Also we see ourselves as being innovators in these new markets once they're deregulated, where we can come in and begin providing a lot of other products and services. [...]" However, as we have seen, Ken's emphasis on innovation was not limited to products and services alone. Much of the innovations took place in "creative accounting" practices, especially in meeting earnings targets through fraudulent means. There were other factors involved, in addition to his (manipulative) intentions.

By making huge sums of political donations, Ken had built good rapport with country's politicians and legislators who selected members of the regulatory bodies; thus, he through his political connections influenced them. Furthermore, his country was a major donor of humanitarian aid to many developing countries; he, on the virtue of his political clout, routed major chunks of those humanitarian funds mainly to those countries that permitted him to create overseas special purpose entities (SPEs), many of which were fraudulent.

In Ken's country, audit firms were deemed to be independent organisations. However, X's audit firm, along with auditing, were also rendering consulting services, for which it was being paid hefty sums of money. Thus, it in stead of auditing, it was merely complying with everything that X's management desired. Apart from the fact that Ken and his top management team were educated and experienced in economics and management sciences, many of X's accounting and finance department employees were ex-employees of various regulatory bodies. Thus, he and his staffs were aware of different loopholes in the accounting statutes and guidelines and used them to their advantage. And lastly, the members of X's Board of Directors and Board of Advisors were elites of the society, that included top-level politicians and legislators, and finance and accounting experts.

In a nutshell, Ken created the enabling conditions to carry out earnings manipulation, in the name of earnings management. Enabling conditions explain issues and questions related to how an action is possible; they include: skill, effort, persistence, opportunity, removed obstacles, etc.

Now, please answer and/or comment on the following questions, taking cues from this illustration, as well as the previous one.

Earnings management (EM) involves strategies to adjust company earnings so that reported earnings match a pre-determined target, through prudent means.

14. How would you like to rate the importance of enabling conditions as facilitators of EM on a scale of 1- 3, where 1 represents low and 3 high?

- 1
- 2
- 3

Earnings manipulations are activities where speculative decisions grossly override prudent means.

15. Taking cues from the illustration in this (web) page, how would you like to rate the importance of enabling conditions as facilitators of earnings manipulations on a scale of 1- 5, where 1 represents low and 5 high?

- 1
- 2
- 3

Webpage7

Please read the illustration below, which is a continuation of the previous illustrations.

Ken was born and brought up in a country where social and economic success were seen as the most important objective of life. People who were rich, having social fame, were considered successful; failure was looked down upon and failed individuals were considered as lazy and worthless. Incidentally, Ken's family was poor, his mother was a farmer and father a store owner. When Ken was still a child, his father's small store went out of business; his family eventually moved on to a farm where they lived in a house without indoor plumbing. His childhood was marked by adult responsibilities; for example, he helped his parents in livelihood activities like ploughing fields, delivering newspapers and mowing lawns. Although he was a good student and received scholarships, yet they were not sufficient to his meet high educational expenses; for which he took bank loans, worked part-time and eventually completed his studies. Thus, the beginning of his life was influenced by higher expectations from the society (to be rich and famous) and lower abilities to meet them (because of his poverty ridden family background), which is an instance of Relative Deprivation (RD). In this important period of his life, he had a strong desire to be rich and famous in order to overcome RD.

His lavish lifestyle, as the head X, revealed much of his obsession with success and prosperity. He had more than twenty costly houses (decorated with antiques), limousines, private jets, luxury yachts, and so on. In his trials, he reportedly defended his personal spending; including a \$200,000 yacht for his wife's birthday party, which he spent despite having hundreds of millions in personal debt. This spending is interesting considering the fact that it was done just some months before X went bankrupt. However, he justified them on the ground that to be rich and famous was one of the defining features of his country. "[... I] had realized the [... dream of becoming rich and famous] and [... was] living a very expensive lifestyle [...]. It's the type of lifestyle that's difficult to turn on and off like a [tap or valve ...]," he had said during one of his legal hearings.

As we already have noted, Relative Deprivation (RD) is a phenomenon that involves situations in which a person or group does not have something which they think they are entitled to, while another person or group possesses it. RD is often confused with absolute deprivation (AD); AD implies lack of basic necessities with respect to a fixed standard such as the amount of food necessary for survival.

Now, please answer and/or comment on the following questions, taking cues from this illustration, as well as the previous ones.

16. Would you say that Ken's childhood and adolescence deprivations, arising out of being raised in a poor household, had an impact on his said manipulative behaviour?

Yes
May be yes
No

17. Would you say that other factors, like social pressure to be rich and famous, could have aggravated Ken's sense of deprivation during his childhood and adolescence?

Yes
May be yes
No

18. Even after becoming highly successful, both with money and fame, Ken did not stop aspiring for more. In the process, he committed numerous frauds, particularly earnings manipulations. Moreover, we have also seen that while managing earnings fraudulently, Ken still lived in his country where economic and social success were highly demanded. Would you say that Ken's continued aspirations to earn more was an outcome of living in a society where social and economic success are highly demanded (like that of his)?

Yes
May be yes
No

Earnings management (EM), by definition, should be based on faithful representation; whereas, earnings manipulation mainly concerns wishful thinking that is driven by speculative and fraudulent intentions (of people like Ken). In the case of Ken, we have discussed how his efforts to manage earnings subsequently became instances of earnings manipulations.

19. On a scale of 1- 3, where 1 represents low and 3 high, how would you like to rate Relative Deprivation as a cause of EM straying into earnings manipulations?

1
2
3

Webpage8

The storyline that you have followed until now is a true incident that happened in 2001-02 in the U.S.A. – the Enron Scandal – involving Late Dr. Kenneth Lay (the founder of Enron). It has been stated elsewhere that “[... o]ne cannot [...] study [fraudulent earnings management activities ...] without looking into the profile of the [person indulging in such activities]” Keeping this in mind, I re-narrated the story that is behind the story of the Enron Scandal.

Now that you have almost finished this survey, please give your valuable comments on the following issues which are related to creative accounting in general and earnings management in particular.

Goals drive people to act. People tend to be accurate and logical following accuracy goals, and use those beliefs and strategies that are considered most appropriate to accomplish them; whereas they tend to arrive at a particular conclusion in the case of directional goals, and use those beliefs and strategies that are considered most likely to yield the desired result/s. On the one hand, earnings management (EM) involves strategies to adjust company earnings so that reported earnings match a pre-determined target, and in this sense it helps to achieve directional goals; on the other hand, it is also undertaken to realistically present the financial position of a company and in this sense it is accuracy goal oriented too.

20. Would you say that EM can become earnings manipulation when directional goals overshadow accuracy goals?

No
May be
Yes

Ken, in the course of his occupation, committed those earnings manipulations while being a respectable person with high social status. In this context, it has been argued that people like Ken “[...] want nothing more than we all want – money, power, and consideration – in a word, success; but they are in a hurry and they are not particular as to the means.”

21. Would you say that earnings manipulations are instances where the offenders are in a hurry to achieve their goals, using those strategies and means that are not appropriate?

No
May be
Yes

It has been said that “[...] sometimes individuals’ motivation for [... earnings manipulations] may have originally been relative deprivation, greed, threat to continued goal attainment and so forth. However, as they found themselves successful at this [...] they began to gain some secondary delight in the knowledge that they are fooling the world, that they are showing their superiority to others. [...]” As we have discussed, Ken, even after becoming highly rich and famous, continued to set higher earnings targets and committed more manipulations to achieve them, thereby deceiving the market.

22. Would you say that continuously succeeding in manipulating earnings can make people like Ken to undertake bigger and bolder forms of manipulations wherein they take the pleasure and satisfaction of their skills and capabilities at achieving their desired targets?

No
May be
Yes

As we have discussed, accounting knowledge and expertise are some of the enabling conditions that, in the first place, makes earnings management possible.

23. Would you say that, while managing earnings, people like Ken could overestimate their accounting skills and abilities?

Yes
May be
No

Ostrich effect is biased decision-making where people may delay acquiring information or ignore them, even when doing so degrades the quality of decision making; if these information are in opposition to their plans and ideas. As we have seen, Ken ignored warnings (from some of his management team members) about the overuse of earnings management (EM) practices in his organisation.

24. Would you say that in the process of managing earnings, people like Ken could insulate them like an ostrich, avoiding information that are in opposition to their targets?

Yes
May be
No

Estratto per riassunto della tesi di dottorato

L'estratto (max. 1000 battute) deve essere redatto sia in lingua italiana che in lingua inglese e nella lingua straniera eventualmente indicata dal Collegio dei docenti.

L'estratto va firmato e rilegato come ultimo foglio della tesi.

Studente: Siddharth Mohapatra matricola: 955403

Dottorato: DEA

Ciclo: 23

Titolo della tesi : Earnings Management, Human Rationality, and Relative Deprivation -- Some Critical Assessments

Abstract (English):

Although lawful, the widespread use of earnings management in financial reporting, as noted by Arthur Levitt (the former Chairman of the US SEC), gives reasons to believe that companies may be indulging in illegally manipulating earnings in stead of managing them prudently. What motivate it are not straightforward because the nature of human motivation is complex. Although, earnings management is deemed an intentional action, wherein company decision-makers use managerial discretions and judgements to achieve desired earnings numbers; yet nothing has been said beyond this. In this empirical study, based on a real case, using vignettes in a Web-survey as the method of investigation (i.e., a mix of qualitative and quantitative approaches); we have attempted to study relative deprivation – i.e., people's reaction to objective situations depends on their subjective comparisons – as one of the causes behind decision-makers' reasoning process to manipulate earnings. Our findings are mixed in the sense that while answering if relative deprivation causes earnings management to stray into earnings manipulations, the respondents have rendered varied levels of support to it under two different situations. Notwithstanding, we have some interesting findings as regards relative deprivation effecting manipulative earnings management practices that can potentially set the roadmap for future research on causal correlates behind managing earnings, including manipulating them.

Abstract (Italiano):

Sebbene permesso, il diffuso ricorso all'"earnings management" nell'informazione di bilancio, come sostenuto da Arthur Levitt (former chairman US-SEC), porta a ritenere che le società possano indulgere in manipolazioni illegali dei profitti invece che gestirli con prudenza. Non è chiaro cosa causi questo comportamento perché la

natura della motivazione umana è complessa. Earnings Management è considerata un'azione intenzionale in cui i decision-makers delle società usano giudizi e valutazioni manageriali per conseguire i valori di profitto desiderati, oltre questo niente è ancora stato detto. In questo studio empirico, basato su un caso reale, il metodo investigativo utilizza un approccio quali-quantitativo e si basa una web-survey che impiega "vignettes"; si è voluto indagare la 'relative deprivation' (la reazione delle persone a situazioni oggettive dipende dalle loro comparazioni soggettive) come una delle cause che nei processi decisionali conducono alla manipolazione dei profitti. Le nostre conclusioni sono incerte nel senso che gli intervistati nel rispondere se la 'relative deprivation' porta l'Earning Management verso la manipolazione dei profitti, hanno dato vari livelli di supporto ad essa in due diverse situazioni. Ciò nonostante ci sono conclusioni interessanti per quanto attiene all'influenza della 'relative deprivation' sulla prassi della manipolazione dei profitti che possono tracciare la strada per una future ricerca sulle correlazioni causali del management dei profitti, inclusa la loro manipolazione.

Firma dello studente
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