

Master's Degree in Management

Final Thesis

Behavioural Accounting: are accounting terms lost in translation?

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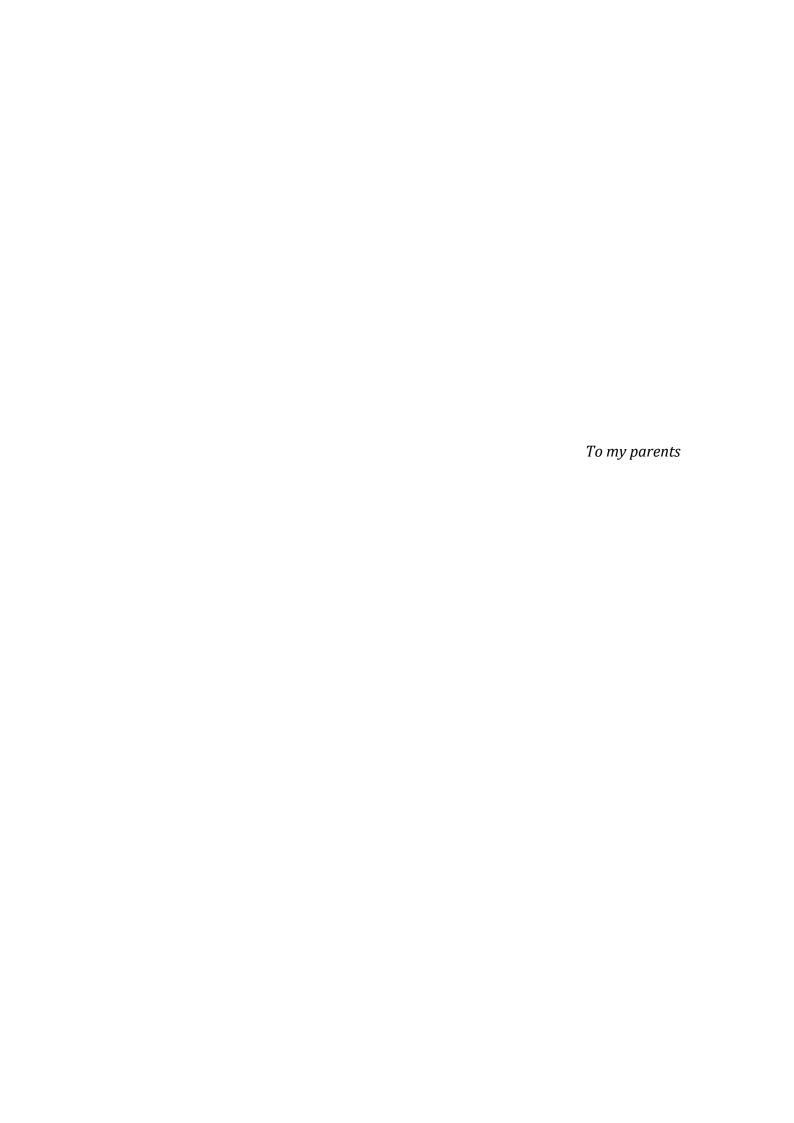


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List of Abbreviations

- **CEO** Chief Executive Officer
- **CFO** Chief Financial Officer
- **DG** Directorate General
- **DM** Deutsche Mark
- **EC** European Commission
- **EU** European Union
- FASB Financial Accounting Standard Board
- FIFO First In First Out
- **GAAP** Generally Accepted Accounting Principles
- IAS International Accounting Standards
- IASB International Accounting Standards Board
- IASC Inter-Agency Standing Committee
- **IFAC** International Federation of Accountants
- IFRS International Financial Reporting Standards
- LIFO Last In First Out
- **NYSE** New York Stock Exchange
- **SEC** Securities and Exchange Commission
- **SFAC** Statement of Financial Accounting Concepts
- **SFAS** Statement of Financial Accounting Standards
- **SME** Small and medium-sized enterprises
- **UK** United Kingdom
- **US** United States

Introduction

As stated by Devine: "On balance it seems fair to state that accountants seem to have waded through their relationships to the intricate psychological network of human activity with a heavy-handed crudity that is beyond belief. Some degree of crudity may be excused in a new discipline, but failure to recognise that much of what passes as accounting theory is hopelessly entwined with unsupported behaviour assumptions is unforgiveable." ¹

In the past, there was the presumption that individuals always act in a rational way, in each choice and activity they perform, but nowadays this belief's credibility has diminished, starting to be substituted by studies focusing on how the actions and decisions can be influenced, particularly in the field of accounting.

As a matter of facts, the type of choices taken by individuals can differ according to their personal preferences, to their cultural origins, society and environment, hence it is relevant to focus also on these factors to have a broader perspective.

This thesis will analyse this topic applied to accounting, starting from the formulation of accounting theory, considered as a solution to some unsolved problems in accounting practice and profession. Various theories for its elaboration will be presented in chapter 1.

Chapter 2 will focus on the behavioural accounting approach, which is identified as "the application of behavioural science to accounting, with its basic objective being the explanation and prediction of human behaviour in all possible accounting contexts" , with the aim of answering to questions such as:

- "Which are the factors which may affect the formulation of theory and standards in accounting?"
- "Do accountants and researchers need to take into account their own cultural beliefs, personal opinions, judgements and behaviours when preparing the theory or accounting standards?"

¹ Devine, C. T., "Research Methodology and Accounting Theory Formation", The Accounting Review, 1960, p.387–399

 $^{^{\}rm 2}$ Belkaoui, A., "Behavioral Accounting: The Research and Practical Issues", Westport; 1989, p.438

There are many studies in this field, but here there will be an emphasis on the adequacy of disclosure, on the preparation and communication of accounting information, mainly determined by accounting standards such as IFRS.

Here, the role of translation is extremely important: are accounting terms lost in translation because of behavioural aspects, such as culture and language, affecting their interpretation and application?

As a matter of facts, IFRS are issued in English, but they are frequently described in any other different language according to the country.

Being English the language used by the IASB, the success of the global adoption of IFRS is relying a lot on the adequacy of translation and not just on the one of standards.

In Chapter 3 an investigation about this will be explored, with the goal of improving the reliability and comparability across the world in financial reporting, which is based on a lot of factors including addressing the limitations of translation of IFRS, elevating the quality of evaluations and decisions made by experts, and identifying whether IFRS are understood in an equal and consistent manner across countries. An in-depth analysis will be presented about the link between accounting, language, culture and thought, with some examples of major errors and misunderstandings in the use of language as a means of communication in accounting, such as the True and Fair View, and Impairment.

An analysis of the distances in terms used for financial reports will be investigated, in particular about 6 terms, about how they differ in the European Fourth Directive on Company Law, and in the International Standards framework, leading to the emergence of various types of English terms that may arise in the presentation of financial statements.

The same investigation will be shifted on other languages, in this case Italian, with an analysis of the reports of 80 Italian companies listed in the Italian stock exchange. Finally, we will draw the conclusions by evaluating the results obtained through the analysis, highlighting some possible limitations or curiosities emerging.

CHAPTER I- Accounting theory

In 1966 the American Accounting Association defined accounting as:

"...the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of that information" but in 1977 they added that the purpose of the process was "to provide information which is potentially useful for making economic decisions and which, if provided, will enhance social welfare" 4.

In any case, it is not rare that accounting is perceived as a monotonous, cold, and systematic area of study with very defined topics and answers, that are either true or false. But nothing can be more wrong.

To cite an instance, we can imagine two similar companies that are distinguishing their cost of goods sold and inventory using two accounting methods, Firm *A* uses LIFO (last-in, first-out) and Firm *B* selects FIFO (first-in, first-out), leading to very different but at the same time right answers.

Anyhow, somebody can consider this decision about inventory methods as an exclusively "accounting construct" in which the main focus is the interest of accountants, with no connection to the world outside.

Obviously, this is wrong because the choice about the two accounting methods has relevant consequences even on society, impacting income taxes for individuals: with LIFO there will be a faster write off of current inventory costs against revenues, resulting in lower income taxes.

It is possible to observe the link between the accounting way of doing things and social reality, with accounting numbers having social effects, so why is it not possible to always measure "economic reality" in a proper way?

Economic reality can be perceived in different ways according to the subject, we may think of the distinction between *replacement cost/entry value* and *exit value*, two distinct approaches in order to value assets, the former considering the total amount paid in the market, and the latter expressed by the amount the firm can obtain by

³ American Accounting Association (AAA), "A Statement of Basic Accounting Theory",

^{1966,} source: https://courses.lumenlearning.com/sac-finaccounting/chapter/accounting-defined/, https://www.iedunote.com/accounting-definition

⁴ American Accounting Association (AAA), "Statement of Accounting Theory and Theory Acceptance.", 1977

selling the asset. We may also add *historical costs*, for which measurement can be more reliable than for the other two and it can be understood better.

As we can observe there are relevant problems and questions that are arising regarding measurement in accounting. It is not straightforward to understand how assets and liabilities should be measured: should we use their historic cost, their selling price, or the present value of future cash flows?

In addition, what are the consequences of implementing different measurement systems on the economy or market or on each individual stakeholder?

It is clear that there are many issues in accounting that remain unsolved, underlying the need to concentrate on understanding these problems in accounting practice and profession.

The discipline studying these topics and trying to answer these questions is known as accounting theory.

During years and throughout the accounting literature there have been many interpretations of this vague and a little mysterious term, as it happens, a central problem in accounting research is that, at the moment, there is not a fundamental theory on which accounting research can be based, as identified by many accounting researchers. For example, Watts and Zimmer-mann stated that "there is no generally accepted accounting theory to justify accounting standards" and discovered that this will never be achieved⁵.

1.1 What is a theory?

A theory can be illustrated as a system that allows the management and control of events, the understanding and exploration of phenomena, forecasting possible outcomes and consequences⁶.

However, the term theory has several interpretations and meanings, precisely, when thinking about a theory there are two main impressions that arise. First, the concept of theory regarded as something very far from reality, the belief that a particular idea exists only in theory and it is never applied in real life.

⁵ Watts, L.W. & Zimmerman, J.L., "The demand for and supply of accounting theories: the market for excuses", The Accounting Review, 1979, pp. 273-305.

⁶ Kelinger, "Foundations of Behavioural Research", Holt, Rinhart & Winston., 1964

The second impression is about the relationship of cause-effect that occur behind the scenes of events or real activities. This second method, involves some scientific observations in order to demonstrate the occurrence of a particular episode, with the purpose of deriving a systematic theory supported by hypothesis.

In this manner, theory may be described as a "cohesive set of hypothetical, conceptual and pragmatic principles forming a general frame of reference for a field of inquiry" ⁸.

So, it is possible to think about it as a deductive system of statement in which starting from an agreed assumption the generality will decrease more and more, or it can be conceived as a method to interpret real world observations.

Theory diverges from a hypothesis or law since it can be considered not only as an explanation, but it declares that whenever we are in presence of certain predefined circumstances, an almost identical result will occur.

We can think about people driving after having drunk alcohol, the probability that they will cause an accident is higher than the one for people that are driving responsibly without having drunk. In other words, the theory is stating that a drunk person will have a higher probability of causing accidents, and it applies to any people driving a car.

A theory does not necessarily need to always be right, but it does need to be right a certain number of times in order to be considered reliable.

As a matter of facts, theories require the development of assumptions, expectations, and declarations about particular events, followed by authentication and proofs that might confirm or reject the prior assumptions. If the verification is not happening, a new testing and investigation will be needed⁹.

Summing up, theory can be delineated basically as the logical reasoning behind the definition of a belief. A theory can be considered as a good theory and it can be accepted or not based on:

- "how well it explains and predicts reality,
- how well it is designed both theoretically and empirically,

⁷ Hendriksen, ES., Accounting Theory (revised Edition). Homewood: IL:Irwin. 1970

⁸ Webster's Third New International Dictionary, Unabridged (Springfield, Mass.: G. & C. Merriam Co., Publishers, 1961), p. 2371

⁹ Machlup F., "The Problem of Verification in Economics". The Southern Economic Journal, 1955

- how consistent it is both internally (when the theory ensures the same result in the same circumstances) and externally (when the theory is in line with theories in other disciplines),
- how comprehensive it is of all the alternatives and variations related to a specific event,
- how adequate are the consequences of the theory to group of scientists, professionals and society as a whole."

1.2 The nature of accounting theory

FASB states that a general accounting theory would contribute and generate appropriate standards and specify the limits, nature and use of financial accounting and statements.

A generally accepted accounting theory is discussed can:

- Lead to the establishment of accounting standards,
- Provide a frame of reference for solving accounting issues,
- Specify the limits for personal opinions in the elaboration of financial statements,
- Enhance comparability.

However, there are different schools of thought regarding what accounting theory is.

The first one concentrates on the development of accounting principles and according to Eldon S. Hendriksen in "Accounting Theory", the most important definition of theory as it applies to accounting represents "... the coherent set of hypothetical, conceptual and pragmatic principles forming the general frame of reference for a field of inquiry. Thus, accounting theory may be defined as logical reasoning in the form of a set of broad principles that:

1- Provide a general frame of reference by which accounting practices can be evaluated and

2- Guide the development of new practices and procedures." ¹⁰ ¹¹ ¹²

The author added that accounting theory may be used also to illustrate already existing techniques and methods to gain a better knowledge of them.

The Dictionary for Accountants defines theory as "... a set of propositions, including axioms and theorems, which, together with definitions and formal or informal rules of inference, is oriented toward the explanation of a body of facts or treatment of a class of concrete or abstract operations" but it is necessary to relate this interpretation in detail to accounting. First, theory is based on logic and not all accounting procedures are likely to be developed and prepared in a logical way, but the definition can still be considered accurate if the attention is mainly focused on results instead that on procedures and approaches applied.

Another school of thought defines it as an activity to explain and predict:

"... the primary objective of accounting theory is to provide a basis for the prediction and explanation of accounting behaviour and events" and "The objective of accounting theory is to explain and predict accounting practice" 15.

While the first school's central point is on principles of accounting, the second one aims to value the practice.

These schools are based on normative and descriptive approaches, two main techniques for the development of theory in general.

The first one analyses and investigates existing theory to describe what the theory *should be,* supported by considerations on what is good or bad; while the second one examines and evaluates phenomena to describe *what they are*¹⁶ 17 .

¹⁰ Hendriksen, E. S. Accounting Theory. 3rd. edition. Richard D. Irwin, Inc., 1977, available at: https://sb.cofc.edu/academics/academicdepartments/accounting/syllabi/fall-2015/fall2015acct500-01Hendriksen1965PrefaceandChapter1.pdf

¹¹ http://womlib.ru/book/Accounting Theory And Conceptual Frameworks.pdf

¹² https://www.accountingnotes.net/accounting-theory/accounting-theory-role-levels-and-methodology/5286

¹³ Eric L. Kohler, "A Dictionary for Accountants", Englewood Cliffs, N.J.: • Prentice-Hall, Inc., 1957, p. 484

¹⁴ A. Belkaoui, "Accounting Theory", Dryden Press, 2004

¹⁵ Ross L. Watts, Jerold L. Zimmerman, "Positive accounting theory", Englewood Cliffs, Prentice-Hall Inc., 1986

¹⁶ E.S Hendriksen, "Accounting theory", Urbana, Ill: Irwin., 1982;

¹⁷ Riaki-Belkaoui, "Accounting Theory", Dryden Press, 2004

In particular, Belkaoui believes that accountants perceive accounting as a state of art, which can not be systematized or organized¹⁸.

In other words, accounting theory can be considered as a legislative body made by a set of fundamental principles, assumptions and definitions that are the basis of accounting rule making. It may also be applied to interpret existing practices to obtain a better understanding of them, but its most important goal should be to provide a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices.

As said before, accounting theory is not easy to define and it is a kind of dilemma to never be considered as a finished product even more when new problems are emerging, with discussions that are going on from years about what the basic principles and assumptions should be.

In this case, the term refers to financial accounting, meaning that it applies to accounting information adopted by investors, creditors, and other outside parties for appropriate decision making and evaluations of performances.

Inside the domain of accounting theory, we can find also what is known as "conceptual framework", considered to be the basis for a proper development of accounting rules.

If we compare accounting theory with the accounting framework, the IASC Framework for the Preparation and Presentation of Financial Statements, we can observe that the latter intends to:

- "support the board of IASC in the preparation of standards and reassessment of existing ones,
- present a basis for reducing the number of different accounting methods that are allowed,
- help developers deal with issues that still need to be considered as a substance of a standard." ¹⁹

After stating this it is possible to observe that it looks like an accounting theory, but if this is true then no alternative methods and approaches would exist in order to provide data to users in a clear and proper way.

http://womlib.ru/book/Accounting Theory And Conceptual Frameworks.pdf

¹⁸ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981

¹⁹ Accounting theory and conceptual frameworks, available at:

So, is an accounting theory possible?

As stated by Hendriksen and McDonald the creation of an accounting theory should be possible²⁰ ²¹. In particular, McDonald in "Comparative Accounting Theory" illustrated three main factors that are at the basis of any theory, that can also be identified in accounting theory:

- "Representation of phenomena by symbols; he says accounting employs symbolic representation, which are unique to it for example "debit" and "credit", and proper accounting terminology (e.g depreciation, current cost, amortisation, accruals etc.)
- Manipulation or combination according to rules, accounting employs translation rules; and the symbolic representation of economic events and transactions. There are a bunch of guidelines for manipulation or combining credits and debits.
- Translation back to real world phenomena; the accounting output in the form of balance sheet, profit and loss account and other financial statements are translation back to real world. (Presentation of debits and credits by means of reports)"²².

1.3 Different approaches for the development of accounting theory

It is possible to observe that accounting is a modern and kind of new notion with respect to theories that are arising from more scientific domains, like mathematics or physics.

But regardless of this, there were many approaches that were adopted in order to explain and predict certain practices and to develop an appropriate accounting theory.

Investigations in this domain have led to the emergence of particular classifications, and in this case, in order to simplify, the distinction will be between traditional,

²⁰ Hendriksen, E. S. Accounting Theory. 3rd. edition. Richard D. Irwin, Inc., 1977, available at: https://sb.cofc.edu/academics/academicdepartments/accounting/syllabi/fall-2015/fall2015acct500-01Hendriksen1965PrefaceandChapter1.pdf

²¹ McDonald, D. L., "Comparative Accounting Theory", Reading: Addison-Wesley, 1972

²² McDonald, D. L., "Comparative Accounting Theory", Reading: Addison-Wesley, 1972

regulatory and new approaches, following the categorization provided by Belkaoui²³.

1.3.1 Traditional approaches

Traditional approaches can be considered as mostly descriptive and they can be divided in two main branches, non-theoretical (practical) and theoretical ones²⁴ ²⁵ ²⁶.

- Non theoretical
- Theoretical
 - Deductive
 - Inductive
 - Ethical
 - Sociological
 - Economic
 - Eclectic

The formers, non-theoretical ones, consist in preparing and developing principles and standards in order to help users in the process of decision making.

This approach has widely been used in the past in order to formulate and create an accounting theory, but it has failed in reaching good results for the formulation of an accounting theory, it was not able to solve some main issues and dilemmas in accounting techniques and principles, particularly because of an absence on theoretical foundation.

On the other hand, theoretical approaches are a lot, in particular, in the text "Accounting theory" by Belkaoui, he identifies them as the one listed before.

²³ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981

²⁴ https://www.assignmentpoint.com/business/accounting/traditional-approaches-to-accounting-formulation-theory.html

²⁵ Accounting theory and conceptual frameworks, available at:

http://womlib.ru/book/Accounting_Theory_And_Conceptual_Frameworks.pdf

²⁶ A. Oseni, M. Ireghah, "Accounting Theory Formulation as a Tool for Enhancing International Harmonization of Accounting Standards", Journal of Innovative Research in Management and Humanities, 2011

1.3.1.1 Deductive approach

This method of developing a theory is a process that starts with "basic accounting propositions or premises and proceeds to derive by logical means the accounting principles that serve as guides and bases for the development of accounting techniques"²⁷, that will provide the basis for pragmatic and realistic applications, from general to specific.

The theory is tested by determining whether its results are acceptable in practice.

There is a specific structure to follow with this approach, and the main steps characterizing it are:

- "Specifying the objectives of financial statements,
- Selecting the 'postulates' of accounting
- Deriving the 'principles' of accounting
- Developing the 'techniques' of accounting" 28 29

As it is possible to observe from the figure below, one of the main steps consists in the formulation and preparation of the objectives of financial reporting, obviously different objectives might demand completely different processes and will result in different techniques and principles.

The activities and procedures are related to the principles, postulates and objectives in a logical way, so if they are true the activities and procedures must be true too.

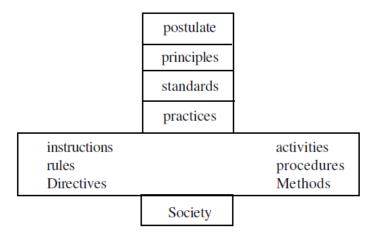


Figure 1: Deductive approach to the formulation of Accounting Theory

²⁷ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981, p.9

²⁸ Porwal, L. S., "Accounting Theory: An Introduction"; New Delhi Tata M. Graw-Hall Publishing Company Limited., 2001

²⁹ https://www.accountingnotes.net/accounting-theory/accounting-theory-role-levels-and-methodology/5286

Then, there might be some constraints to be taken into account while developing principles directly from objectives, because of the uncertainty in the environment about the future and changes that might occur, such as fluctuations in the value of money.

However, it is important to underline that one of the main weaknesses of this method if that if any of the main assumptions and initial propositions are false, the conclusions will be consequently false.

In addition, it may be considered even a little too far from reality in order to obtain realistic principles and, subsequently, a basis for functional and applicable rules.

Regardless of these negative effects, the main goal of the theory is to create a structure for the development of new ideas and procedures and to help the decision making among different alternatives. If this is true, it is not necessary that the theory is based entirely on practical methods, many of the accepted and used principles are considered to be general guides to action instead of very precise rules.

1.3.1.2 Inductive approach

In this case, the technique consists in making observations of existing phenomena and measurements and then trying to obtain some generalized conclusions from them, moving from the specific to the generalisation.

The results that are drawn, however, need some further confirmation or rejection after some other investigations and examinations.

For instance, by means of this approach, Newton was able to discover laws of motion and derive conclusions through observations of specific phenomena of motion.

In accounting, specifically, it implies observations of financial information about businesses and companies: if there is the emergence of some common characteristics, principles and conclusions can be defined³⁰.

Obviously, this process necessitates empirical testing and enough examinations that confirm the results and generalized conclusions.

If repeated relationships are identified among the transactions, generalisation and principles can be formulated (See Figure 2 below).

 $^{^{\}rm 30}$ Glautier, M. W and Underdown B., "Accounting Theory and Practice", Great Britain: Pitman Publishing Ltd., 1970

The inductive approach to a theory involves four stages:

- "reducing all observation,
- analysis and classification of these observations to detect recurring relationship ("like" and "similarities"),
- inductive derivation of generalization and principles of accounting from observations that depict recurring relationships,
- testing the generalizations."31 32

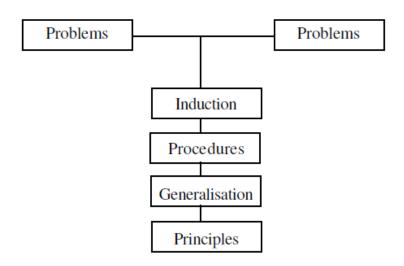


Figure 2: Inductive Approach to the formulation of Accounting theory

One of the main advantages with this technique is that there is not a precise and clearly defined process or model to follow, many observations can be made but results and derived principles should be confirmed by the logic behind deductive process.

As a matter of facts, frequently the deductive and inductive approaches are combined and used together by researchers. As Riahi-Belkaoui declares in "Accounting theory": "General propositions are formulated through an inductive process, but the principles and techniques are derived by a deductive approach." On the other hand, a disadvantage that is relevant to express is that with inductive approaches the researcher that is examining certain phenomena has high

³¹ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981

³² Porwal, L. S., "Accounting Theory: An Introduction"; New Delhi Tata M. Graw-Hall Publishing Company Limited., 2001

³³ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981

probability of being affected by some personal ideas and perceptions of what is more important to analyse and investigate.

1.3.1.3 Ethical approach

This technique focuses on ideas and notions of fairness, justice and truth.

Dr Scott in "The basis for accounting principles" believes that there are some main concepts to follow: "(1) accounting procedures must provide equitable treatment to all interested parties; (2) financial reports should present a true and accurate statement without misrepresentation; (3) accounting data should be fair, unbiased, and impartial without serving special interests"³⁴.

He also included the fact that accounting principles should be revised often as long as there are changing circumstances that are affecting them.

Fairness, justice and neutrality relate to the fact that reports and financial statements should not be object of biases or personal judgements.

They must be prepared in a way that satisfies every party that is involved, they must be compensated in equal manners, not preferring just one of them because of predispositions due to the management or owners of companies.

For example, the committee on auditing procedures identifies the notion of 'fairness of presentation' as:

- 1. conformity with GAAP
- 2. disclosure
- 3. consistency
- 4. comparability

Truth may be more difficult to explain and analyse when it is referred to accounting, for instance, for many authors the term can be used as a synonym of "in accordance with the facts". But "facts" can be interpreted in various ways, they can be described as information that are verifiable and objective, like historical costs, or they can refer to the valuation of assets and expenses in current terms.

Truth and fairness are considered as good basis for the presentation of financial statements by many accountants, but sometimes they may be considered as too

³⁴ DR Scott, "The Basis for Accounting Principles," Accounting Review, Vol. XVI (December, 1941), pp. 341--49.

subjective, and because of this there is a propension to depend more on traditional procedures to bring an element of objectivity for the measurement of truth.

As a matter of facts, the main disadvantage of this approach is that it is not able to create a secure and reliable basis for the preparation of accounting principles or for the analysis of currently accepted ones.

(This approach consists of the concepts of 'true and fair'. These concepts have, of course, been taken on board by the EU in the Fourth Directive.)

1.3.1.4 Sociological approach

This can be considered as an ethical approach that focuses on social welfare.

Here the goal is not related to the decisions of the current users of accounting data, but it is a more a general sociological effect.

The attention is focused on presenting results and consequences of business operations on the social environment in general and on connected groups of society, regardless of whether they are accounting users of information.

While accountants should not make decisions about welfare, sometimes it is required that reports should contain data that are needed in order to make welfare decisions. The main disadvantage here is that appropriate principles cannot be established except if accountants have adequate knowledge to decide which conclusion about the welfare is important and what data will help making these decisions.

In other words, a specific accounting principle and method is assessed based on its consequences and influences on all groups in society. Main contributions of this approach are provided by Gambling³⁵, Ladd³⁶ and Mobley³⁷.

1.3.1.5 Economic approach

This method is focusing on the economic welfare in its broader terms.

The selection and approval of distinct accounting techniques and principles depends on their effect on the national economic good.

³⁵ T. Gambling, "Societal Accounting", London: George Allen and Unwin., 1974

³⁶ Ladd, D. R., "Contemporary Corporate Accounting and Public", Honewood: Richard D. Irwin., 1963

 $^{^{\}rm 37}$ Mobley, S. C, "The challenges of socioeconomic Accounting" Accounting Review, Sarosota: AAA, 1970

The chosen techniques and procedures should represent the economic world, considering their consequences on it.

This economic approach is known to be adopted by Sweden, for the development of its national GAAP, or by the IASB in preparing its standards.

A practical example of this economic method can be represented by the valuation of inventory method that moves from FIFO to LIFO in presence of inflation periods.

In addition, enterprises dissuade to make investments during these periods and on the contrary encourage huge capital expenses and higher dividends in periods of economic growth and success.

Usually, principles have been established without considering this approach but pressures coming from interested parties are so strong that are encouraging its adoption.

Many contributions to this approach have been developed by Enthoven³⁸, Mueller ³⁹and Zeff⁴⁰.

1.3.1.6 Eclectic approach

It is recognised that the current development and preparation of accounting theory and standards is supported by an eclectic approach.

It is considered as a mixture and composition of all the previously mentioned approaches, and not just one.

It has been created and produced not intentionally but more by coincidence, because of various researchers, individuals and institutional bodies' exchanges of ideas and knowledge that have met and merged in the preparation of accounting theory.

Moreover, this eclectic approach is not static and stable but has also contributed to further developments in accounting theory.

³⁹ Mueller, G. G., "Accounting within a Macroeconomic Framework", International Accounting, New York: Macmillan., 1967

³⁸ Enthoven, A. J. H., "Accountancy and Economic Development Policy", New York: American Elseir, 1973

⁴⁰ Zetf, A. S., "The Rise of Economic Consequences", Journal of Accountancy New York. AICPA, 1978

1.3.2 Regulatory approaches

Accounting regulation has been defined, according to Taylor and Turley, as "the imposition of constraints upon the preparation, content and form of external reports by bodies other than the preparers of the reports, or the organizations and the individual for which the reports are prepared" ⁴¹.

A lot of people consider this approach as a technique in which the preparation of standards is established in order to find answers to some specific doubts and issues that are related to the distribution of reliable and helpful data for users.

As a matter of facts according to this procedure, standards and principles are not constructed based on significant and general theories like the ones previously described, but they are continuously modified, added or removed.

They can be considered as a basic support for accountants in order to do their job, acquired as strict rules to follow.

However, there are different perspectives of whether or not to regulate.

According to the regulated approach, regulation is necessary because markets for information are not efficient and without regulation a sub-optimal amount of information will be produced. In addition, investors need protection from fraudulent organisations that may produce misleading information; it is also a method through which comparability is improved thanks to the adoption of uniform procedures by various bodies.

On the other hand, according to the free-market perspective, regulation is not necessary because:

- "- Accounting information is like any other good and people (financial information users) will be prepared to pay for it to the extent that it has use. This will lead to an optimal supply of information by entities.
- Capital markets require information and any organisation that fails to provide information will be punished by the market (an absence of information will be deemed to imply bad news)
- Because users of financial information typically do not bear its cost of production, regulation will lead to over-supply of information (at cost to the producing firms) as users will tend to overstate the need for information

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⁴¹ P. Taylor, S.Turley, "The Regulation of Accounting Practice", 1986, p.61

– Regulation typically restricts the accounting methods that may be used (prohibition of methods that best reflect performance and position of firms so impacting on the efficiency with which firms can inform the markets about their operations." 42

"FREE-MARKET" PRO-REGULATION PERSPECTIVE PERSPECTIVE Accounting information is like any other good, and forces of supply and demand should be left to operate in an unhindered Information is a public good and due to free riders will be underproduced in unregulated markets. Government manner to provide optimal amounts of information. intervention is therefore necessary. Markets are efficient and provide disclipling mechanisms for Markets are not efficient or equitable and therefore regulation is supplied in response to the need for a correction of managers who do not produce that information that is required by the market. inefficient or inequitable market practices. Government regulators are not objective, but like everybody Government regulators act in the public interest else, are driven by their own self-interest. Regulation will ultimately serve the interests of politically Regulation will serve the general interests of society. effective groups. government failures that There are government failures that provide inefficient outcomes. Government intervention will lead to regulation Government is a costless and dependable vehicle for altering overaload as well as many costs associated with compliance. market behaviour. The political process of regulation will ultimately be captured Regulation will not be captured as this would be against the by the industry that is being regulated. public interest.

Table 1: Summary of free market and pro-regulation arguments

In addition, there are different views of why regulations are established: first, there is the public interest theory, in which regulators work for the interest of the constituency; second, according to capture theory, the regulated party tends to capture the regulator in order to be favoured from regulation; third, economic interest groups theory, in which all action by all individuals can be tracked back to self-interest.

1.3.3 New Approaches

The essence at the basis of these new approaches consists in mixing both abstract and practical analysis to obtain an accounting structure, as stated by Belkaoui: "they represent new streams of accounting research that use both empirical reasoning to formulate and verify a conceptual accounting framework"⁴³.

 $^{^{42}}$ Godfrey J., Hodgson A., Tarca A., Hamilton J. and Holmes S, "Accounting theory" (7th edition.), Wiley, 2010

⁴³ A. Belkauoi, "Accounting Theory", New York: Harcourt Brace Javonvich., 1981, p.34

It is possible to observe various approaches among them:

- Events
- Positive
- Predictive
- Human information processing
- Behavioural.

1.3.3.1 Events approach

According to George H. Sorter who elaborated this approach in "An Event Approach to Basic Accounting Theory" it consists in "providing information about relevant economic events that might be useful in a variety of decision models"⁴⁴.

The accountant will present data and facts on the economic event letting the user match the events with some decision models.

It is clear how it is a responsibility of the user to combine and value particular events, elaborating them in a way that is more in line with their own opinions, forecasts, utility functions and decisions, and not the ones of the accountants.

For example, according to this technique, income statement would not underline the financial performance in a period, but it would define the events during the period without any aim to obtain a conclusion and a bottom line.

There are some basic limitations of this approach that are worth to be stated:

- First, measuring all the characteristics of an event might be very complicated and effort taking.
- No criteria for the selection of the events to be reported is defined in a clear way.
- The users when trying to elaborate and estimate all the data collected about specific events might be overwhelmed by information, not being able to process them.

1.3.3.2 Positive approach

This theory is trying to give an explanation of what is currently happening in accounting practices.

 $^{^{\}rm 44}$ Sorter, G. H., "An Event Approach to Basic Accounting Theory", Accounting Review, Sarosota: AAA., 1941

Henderson, Peirson and Harris provide a useful description of positive theories. They state:

"A positive theory begins with some assumption(s) and, through logical deduction, enables some prediction(s) to be made about the way things will be. If the prediction is sufficiently accurate when tested against observations of reality, then the story is regarded as having provided an explanation of why things are as they are. For example, in climatology, a positive theory of rainfall may yield a prediction that, if certain conditions are met, then heavy rainfall will be observed. In economics, a positive theory of prices may yield a prediction that, if certain conditions are met, then rapidly rising prices will be observed. Similarly, a positive theory of accounting may yield a prediction that, if certain conditions are met, then particular accounting practices will be observed". 45

Related to accounting, this approach can be best explained by Jensen, who defines: "development of a positive theory of accounting which will explain why accounting is what it is, why accountants do what they do, and what effects these phenomena have on people and resource utilisation."⁴⁶

In other words, positive accounting is analysing real events and is trying to provide an explanation to them, also predicting how individuals and companies are relating and working with them in economic terms, in the future too.

Its main contribution to accounting is the ability to demonstrate and forecast the selection of principles and standards by means of a benefit-cost analysis.

This definition is supported by the assumption that all individuals involved with the development of accounting practices (i.e regulators, managers...) are rational and are trying to optimize their utility through their actions and decisions.

An empirical example can be represented by an accountant who derives conclusions about the performance of a company based on the numbers and on financial statements, or related to the selection of standards with a benefit-cost analysis.

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⁴⁵ Henderson, S, Peirson, G and Harris K., "Financial Accounting Theory", Pearson Education Australia, Frenchs Forest, NSW, 2004

⁴⁶ Jensen M.C, "Reflections on the State of Accounting Research and the Regulation of Accounting", Stanford Lectures in Accounting, 1976

It is relevant to notice that the positive approach is opposed to the normative approach.

The former, as explained before, tries to express accounting as it is; the latter tries to specify accounting procedures and policies as they should be done.

The aim of this last one is to describe what individuals involved in economic decision should do, sometimes requiring personal judgement, which of course has its limitations and side effects.

For example, regarding financial accounting the decisions are related to what should be considered as an asset, or as a liability and how to evaluate them.

1.3.3.3 Predictive approach

The predictive approach can be treated as a branch of the positive approach, but focusing on the interpretation, description and prediction of accounting methods and techniques, instead of just specifying such practice as it would normally be done with traditional approaches.

It is mainly based on observation of real and existing events, and through this examination there is the intention to foresee some possible situations that might occur in the future, for example, how likely are managers of a firm to adopt a specific standard or accounting technique in a given situation.

As a matter of facts, this method emerged mainly to clarify some complex issues when evaluating various techniques for accounting measurement or when selecting the right principle to be used.

In particular, the predictive ability of accounting data is analysed by the SFAC No. 2 of the FASB as an explicit criterion of the quality of accounting information.

But even before, in 1968, Beaver, Kennelly and Voss had illustrated the issue of the various measurement techniques in accounting, stating that: "the measure with the greatest predictive power with respect to a given event is considered to be the "best method for that particular purpose"⁴⁷.

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 $^{^{47}}$ Wlliam H. Beaver, John W. Kennelly, William M. Voss "The Predictive Ability as a Criterion for the Evaluation of Accounting Data", The Accounting Review Vol. 43, No. 4 (Oct., 1968), pp. 675-683

However, this approach is used mainly in the field of management accounting, and its most relevant examples are the efficient market hypothesis, beta models, and chaos theory.

1.3.3.4 Human information processing

The aspiration and request to improve the range of data that is reported to users of financial information and their ability to use these materials lead to the development of human information processing approach.

This method explores the basic psychological mechanisms that are supporting the process of decision-making for individuals and their practical utilisation in the field of accounting, involving a personal interpretation of the data that are provided.

In other words, its main purpose in accounting is to identify, describe and clearly understand the process of taking decisions and evaluating alternatives, focusing on its improvement.

There are various models that are developed in order to get general information processing issues moving from accounting issues.

The most intuitive of these models recognizes three components: input, process, and output. The input element is the data provided which is processed and evaluated by a decision maker or a judge, who then produces the output, which will result as a decision or a judgement.

1.3.3.5 Behavioural

This approach aims to focus on the role of human behaviour when taking accounting decisions and evaluating problems, since most of the previously mentioned techniques are ignoring its relevance and effect in accounting.

As stated by Devine:

"On balance it seems fair to conclude that accountants seem to have waded through their relationships to the intricate psychological network of human activity with a heavy-handed crudity that is beyond belief. Some degree of crudity may be excused in a new discipline, but failure to recognise that much of what passes as accounting theory is hopelessly entwined with unsupported behaviour assumptions is unforgiveable" ⁴⁸.

Since financial reporting is about informing users with appropriate data in order to allow them to make correct and aware decisions, missing to consider how these data affect their behaviour is inexcusable.

As a matter of facts, the selection of an accounting technique must be judged in accordance with the objectives and behaviour of the users of financial information. For the development of accounting theory, this technique argues that there are three major principles to follow: the significance of accounting data reported to users, the influences and consequences of those data on the behaviours of people, and the effects of preparers of accounting information' personal characteristics on financial accounting data.

It is possible to understand that the main focus here is to provide a behavioural perspective to accounting, with the main goal of "understanding, explaining and predicting human behaviour in all possible accounting contexts"⁴⁹.

This approach, will be the focus of the next chapter.

 $^{\rm 49}$ American Accounting Association (AAA), "Report of the Committee on Foundations of Accounting Measurement", Accounting Review, 1971

⁴⁸ Devine, C. T., "Research Methodology and Accounting Theory Formation", The Accounting Review, 1960, p.387–399

CHAPTER II- Behavioural Accounting

In this chapter, a focus on the role of behaviour applied on the field of accounting will be investigated.

Starting first from an examination of behaviours, analysis of the effects and consequences of such behaviours have been explored, leading to the emergence of the concepts of behavioural accounting and finance.

As discussed in the previous chapter, there are various approaches for the formulation of accounting theory, and one of them is behavioural accounting, taking part of the so called "new approaches".

In the past, there was the presumption that individuals always act in a rational way, in each choice and activity they perform, but nowadays this belief's credibility has diminished, starting to be substituted by studies focusing on how the actions and decisions can be influenced, by adopting the behavioural accounting approach.

This analysis takes into account people that are working with accounting information, preparers but also those who are benefiting from this data.

The type of choices taken by individuals can differ according to their personal preferences, to their cultural origins, society and environment, hence it is relevant to focus also on these factors to have a broader perspective.

All of this led us to some very significant questions:

- "Should a theory take into account behavioural aspects in order to be useful and coherent?"
- "Which are the factors which may affect the formulation of theory and standards in accounting?"
- "Do accountants and researchers need to take into account their own cultural beliefs, personal opinions, judgements and behaviours when preparing the theory or accounting standards?"

2.1 Development of behavioural accounting

Behavioural accounting can be considered as a recent notion that has emerged mainly in the past years, based on the analysis of how accountants and users of accounting data behave according to them.

Analyses in this field have been developed in three main periods, the first one includes the period between 1965-1975, the second one between 1975-1985, and the last one from 1986 on.

In the first period, between mid-1960 and mid-1970, the term "behavioural accounting" was presented for the first time, arising as a completely new topic in the accounting area, being submitted by the "Journal of accounting research" in 1967⁵⁰. Here the investigation was mainly driven by practice, the whole attention was on the effect that accounting information had on people, and in financial accounting the principal focus was on the kind of data to provide to external individuals and third parties when taking decisions and how to judge and distribute those data, leading to a variety of new investigations being published.

Particularly, in auditing, the central point was on how to develop audits in an appropriate and efficient way, and how to disclose them to external parties.

In the second period, between mid-1970 and mid-1980, the investigation was focusing on designing patterns to make appropriate decisions at an individual level, estimating how choices and opinions of individuals took a step back from normative models.

From mid-1980 on, the study concentrates on moving from identifying the drawbacks of individual's opinion and views when applied to accounting and auditing to comprehending, and if possible, eliminating, those drawbacks.

A significant move in this phase was the change of perspective of the decision maker, shifting from a passive role to the relevant role of spotting notable issues in the field of accounting.

From this period on, the research was covering all branches and aspects of accounting, with a lot of new studies and interest arising in relation to the behavioural factors.

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⁵⁰ Sterling, R., "A Statement of Basic Accounting Theory: A Review Article", Journal of Accounting Research, 1967, 5(1), 95-112.

However, in general the main goal in accounting research is to understand and investigate how people are dealing with information in an effective and appropriate way, in this case focusing on the actions and decisions performed by individuals in whatever accounting move⁵¹.

Behavioural accounting has been elaborated with the intention of correcting some defects that emerge in traditional accounting, for example, the fact that it might not be able to analyse the ideas, opinions, and choices of any individuals using reports and financial statements, underemphasising them⁵². As a matter of facts, traditional accounting is more connected to economics in general, while behavioural accounting is closely associated with psychological and sociological aspects, Belkaoui identifies it as "the application of behavioural science to accounting, with its basic objective being the explanation and prediction of human behaviour in all possible accounting contexts"⁵³.

2.2 Definition of behavioural accounting

Behavioural accounting is considered to be a section of accounting that is connected to behaviour in addition to the basic accounting knowledge.

Accounting was identified as a "phenomenon that operated in contexts that forms, functioning, and consequences were interdependent with; but now, it is recognized as a practice whose outcomes are mediated by the human and social contexts in which it operates". ⁵⁴

It is concerned with the perspectives, feelings, moods and behaviours of people when they are facing an accounting phenomenon and information which determine the behaviour and attitudes that they will adopt once making the decisions.

The definition of behavioural accounting, according to the report of the Committee on the Relationship of behavioural Science and Accounting, is "an offspring from the union of accounting and behavioural science; it represents the application of the method and outlook of behavioural science to accounting problems" and its main

⁵¹ Usul H., "Behavioural Accounting", Ankara: Asil Yayın Dağıtım Ankara; 2007. p. 98

⁵² Ateş, B. A., Çivi, G., & Öz, M., "Emotional Intelligence in Accounting Professionals in the Context of Behavioral Accounting", Social Economic Research, 2016, p. 24–53.

⁵³ Belkaoui, A., "Behavioral Accounting: The Research and Practical Issues", Westport; 1989, p.438

⁵⁴ Hopwood AG., "Behavioural accounting in retrospect and prospect", Behavioural Research in Accounting. 1989; 1:1-22

objective is "to understand, explain, and predict human behaviour in accounting situations or contexts". ⁵⁵

Therefore, great attention is given to accountants and their actions, and whenever they are making hypothesis about human behaviour, they are required to revaluate their hypothesis always in relation to behavioural sciences.

It can be represented as a branch of accounting that is trying to give an explanation to those aspects of individual behaviour, both rational and emotional, that have a strong ability in influencing the procedure of making decisions in any accounting situation and framework.

In other words, the main focus is on analysing and examining the actions and decisions taken by people at a group, organizational, individual and market level with the aim of understanding better the activities performed by accountants, auditors and other stakeholders and to see how users are affected by some factors like reports and financial statements.

Some features on which behavioural accounting concentrates are the relevance of judgement's quality, information-processing activities, and on issues that are arising from the point of view of users but also on providers of accounting data and their skills⁵⁶. For example, in the past there was the clear idea that every individual taking a decision in the accounting field was behaving in a rational way, with the aim of always maximising his benefits or profits when facing some particular issues, but nowadays it is developing more and more the belief that even in accounting individuals can make errors, influenced by psychological and personal characteristics⁵⁷.

When dealing with behavioural accounting is important to underline some elements of behaviour that are widely employed in books and related studies, that are crucial

⁵⁵ Report of the Committee on the Relationship of Behavioral Science and Accounting, The Accounting Review, 1974, p.127-128

⁵⁶ Kurawa JM, "Issues in behavioral aspects of accounting", Dandago KI, editor. Advanced Accounting Theory and Practice. 1st ed. London: Adonis & Abbey Publishers Ltd; 2009, pp. 221-233

⁵⁷ Macharzina K., "On the integration of behavioural science into accounting theory", Management International Review (MIR). 1973;13(2/3):3-14

to better comprehend the actions and decisions taken by people dealing with accounting data⁵⁸.

They are:

- *Analytical Ability*: it is mainly the capability to collect and evaluate information. It is representative of individuals with technical knowledge like engineers, or technologists and accountants. Obviously, great relevance is given to the correctness and appropriateness of information and details that they are providing.
- *Amiable disposition*: it consists in the natural inclination of people to create and preserve relationships, that are highly needed to achieve agreement in accounting. In this way different parties are cooperating and exchanging information to obtain mutual advantages.
- Driverability: this trait is typical of people with great ability in managing, guiding, monitoring, observing the tasks that are given to them, getting the job done in an efficient way. These people are highly motivated and always work hard in order to achieve their objectives and superior levels of their careers.
- *Expressionism*: it consists in individuals sharing their personal, inner and emotional skills and events instead of their view and opinion about the outside world. These people usually have a broader perspective, trying to extend to as many things as possible, considered to be as the "politicians" of the accounting world.
- *Management fraud:* it consists of an issue that arises in behavioural accounting whenever there are some ambiguous and tricky financial statements prepared intentionally by the management that are damaging investors and stakeholders. In general, it misleads users of accounting data with some false and unreal reports and statements, intentionally created by producers of accounting data.

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⁵⁸ Kurawa JM, "Issues in behavioral aspects of accounting", Dandago KI, editor. Advanced Accounting Theory and Practice. 1st ed. London: Adonis & Abbey Publishers Ltd; 2009, p.223

2.3 The Factors Influencing the Behavioural Dimension of Accounting

Whenever people face an accounting problem, the process of decision making is involved in order to reach a solution and a conclusion for it.

There are some relevant research and analysis that are identifying particular elements and aspects with a strong ability to influence that decision making process. These elements can be arranged in four main groups: belief, culture, political structure and ethical understanding.

- *Belief*: it represents a relevant part in the process of decision making of an individual, and its effect has direct consequences on accounting decisions too.

As a matter of facts, beliefs are developed as an aspect of everyone's personality starting from a very young age until maturity, during its whole life, learning from any experience that is presented, and saving what is learnt for future activities, in this case, especially for accounting problems.⁵⁹

- Culture: it is transmission of beliefs and behaviours from one period to another and from one generation to another, since it can be identified as the aggregation of specific rituals and traditions. Culture can be of different types:
 - Social culture: Since it can interact with accounting procedures, this will create cultural values in accounting too. These values can be expressed as: status quo against professionalism, flexibility against monotony, optimism against conservatism, transparency against privacy.
 - Organizational culture: it is the sum of opinions, values, experiences that pertain to individuals in society. Decisions can vary according to the organisations that are taking those decisions, leading to different accounting systems for each type of organization⁶⁰. (i.e some organizations represent accounting as a merely task of recording transactions, while others as something broader).
 - Spiritual culture: society might be characterized by diverse religious and spiritual values. Obviously, this will have an influence also on the

60 Usul, H., "Behavioral Accounting", Ankara: Asil Publication Distribution, 2007

⁵⁹ Gönen, S., & Rasgen, M., "Literature Review for Research Including Behavioral Accounting", Human and Social Sciences Studies, 2017, pp. 189–198.

formulation of accounting mechanisms. One clear example is the one of Islam, where there are specific rules and principles for trade and economic affairs according to the population's spirituality.

- Political structure: the administrative and political system of a state could influence the accounting procedures and mechanisms of that state or nation. When developing the accounting mechanisms, it is necessary to take into account also the administrative, governmental and political structure, in order to have a line of coherence between these two. For example, relevant aspects to be studied are the objectives of the parliament, political parties, but also society at large.
- *Ethical understanding:* even when making business and accounting decisions, involving the economic knowledge, ethics plays a relevant role, requiring moral judgements and opinions. In this way there is a kind of incorporation between accounting and ethical learning.

Obviously, this could result also in emerging dilemmas, when interests are in contrast with tasks and responsibility.

2.4 Influence of accounting information on behaviour

We have seen that there are many factors influencing behaviour in accounting, but if we change perspective, it is possible to observe also how accounting information is actually changing the behaviour of individuals using it.

As a matter of facts, "Accounting systems are often the most important formal sources of information in industrial organizations. They are designed to provide all levels of management with timely and reasonably accurate information to help them make decisions which are in agreement with their organization's goals" ⁶¹.

There are some companies that are requiring some principles and rules from accounting in order to operate and define particular practices like taxes and transactions, while others are requiring the production of data that are most in line with the necessities of users⁶².

As claimed by Macharzina "the process of influencing behaviour through accounting

⁶¹ Hopwood AG, "An empirical study of the role of accounting data in performance evaluation. Empirical research in accounting: Selected studies.", Journal of Accounting research, 1972; p.156

⁶² Sevilengül O., "General Accounting", Ankara: Gazi Bookstore; 2014, p. 813

information is conceived of as an interaction process, in the course of which an individual (accountant) attempts influence the behaviour of one or more other individuals (focal persons) with the aid of appropriate reported information in order, as far as possible, to realize the reporter's or management's behavioural expectation."⁶³

Many of the behavioural problems arise because of misunderstandings during communication, and not when progressing with data. One of the main areas of study of behavioural accounting is the focus on the receivers of accounting information and how modifications and alternative information affect their actions, with communication being the support for their performance⁶⁴.

As said before, accounting data have an effect mainly on the process of making decision for individuals⁶⁵, and it is possible to identify three main groups of people that develop their choices using and processing accounting data:

- First, there is the group representing the highest level of management, in charge of the development and creation of financial statements and reports but also of any modification in the accounting procedures.
- The second group is the one who is not responsible of reports, but on the contrary, is responsible of the subsequent and consequent activities, that by implication might have an impact on the accounting mechanisms (without directly changing the object of accounting information).
- The third group represents all external individuals and parties, that might have an effect on the context and performance of the firm, but who do not have an immediate contact and management of the projects and tasks of the firm.

Accounting information, having an effect on these three main groups of decision makers, can be distinguished in two main sections: financial and non-financial accounting information.

⁶³ Macharzina K., "On the integration of behavioural science into accounting theory", Management International Review (MIR), 1973; p.5

⁶⁴ Hofstedt TR, Kinard JC., "A strategy for behavioural accounting research", The Accounting Review, 1970,45(1):38-54

⁶⁵ Kısakürek MM, Pekcan A., "The view of accounting information from different perspective.", Cumhuriyet University Journal of Economic and Administrative Sciences. 2005; 6 (2): 107-125

Financial information is mainly quantitative but has many interpretations according to the user of this information, his backgrounds and the nature of the decision to be made⁶⁶. It represents the basis on which corporations rely on, useful for taking decisions and perform operations that will lead to the company's success, since it describes the monetary transactions happening inside. Financial information can be under the form of payment histories and financial statements and is included mainly in budgets, pro forma reports and worksheets, playing a relevant role in activities such as assessing the performance of the company.

On the other hand, non-financial information is a mix of both qualitative and quantitative information, for example data about environmental, social, and governmental dimensions (i.e. human rights in the workplace, greenhouse gas emissions, average number of employees by geographical area, gender diversity data...). It can be very useful when there is the need to identify new opportunities to expand and find new businesses.

These various types of information can be used in decision making in different ways, according to the individuals' education and experience and the type of choice and problem to be solved.

However, information might have two relevant functions for these individuals: it can facilitate or influence the decisions to be made. ⁶⁷

Decision-facilitating information helps users to reduce uncertainty and so improving their ability in making more effective and advantageous decisions in line with the intended purposes. Obviously, because of these improvements it provides it can be considered as a direct tool to be used, that will enhance the skills for making decisions.

Decision-influencing information has the ability to influence behaviour and decisions in the context of businesses, and obviously, in order to work, it needs different groups of people to be involved.

⁶⁶ Mohd Yusof NA, Hui WS, Rahman IKA, Alam NOS, "Style of information usage and use of accounting information: A Malaysian study", Asian Review of Accounting. 2012;20(1):20-

⁶⁷ Wall F, Greiling D., "Accounting information for managerial decision-making in shareholder management versus stakeholder management", Review of Managerial Science, 2011

It shows its consequences usually through a direct observation of behaviours, measurement of performance, with recompenses or punishments of actions.

In deep detail, information can be used in two main ways: in a diagnostic and interactive way⁶⁸.

With a *diagnostic usage*, the central point is on the use of information for "diagnosis", for example, "the observation of deviations of organizational processes from a preset norm which reflects a management style that relies on standard setting, measuring, comparing, and taking corrective actions, and which emphasizes monitoring, top-down control, and the pursuit of efficiency." ⁶⁹

On the other hand, with *interactive usage* of accounting information, the attention is all focused on trying to create an "interaction" between each member of a company, representing a type of management where the top-level supervisors are creating engagement and relations with their subordinates when making decisions and performing activities. It is necessary that the whole team has the appropriate knowledge and experience in order to use information in this interactive way.

Usually, managers with a strong education in management have the tendency to adopt a diagnostic usage of accounting information more than an interactive one, with a preference for financial data to evaluate performance and to make decisions. On the contrary, non-financial information are adopted for the process of decision making mainly by those managers with a preference for an interactive usage of information.

Obviously, these different treatments of information create some effects on the performance of managers. Higher level managers, and usually senior ones, who have a tendency of adopting a diagnostic usage are very focused in putting all efforts in order to achieve the desired results, without concentrating so much on the work of managers at lower levels. With this approach, discussions about information being used are carried out at the end of operating phases, in the form of formal assessments and revisions.

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⁶⁸ Mohd Yusof NA, Hui WS, Rahman IKA, Alam NOS, "Style of information usage and use of accounting information: A Malaysian study", Asian Review of Accounting. 2012;20(1):20-33.

⁶⁹ Naranjo-Gil D, Hartmann F., "How CEOs use management information systems for strategy implementation in hospitals", Health Policy, 2007

With the interactive approach, in contrast, there is a constant communication between people inside the company about the information being used, everything occurring in a very informal and uninterrupted way.

Another characteristic that is determining which kind of usage to adopt is related to the kind of choice, decision and problems that have to be solved by managers; a diagnostic usage is more appropriate for more basic, fundamental and routinary issues like assessing the work and behaviour of a specific division of the company, or the assignment of rewards to a specific unit for their work.

An interactive usage, instead, is fitting more with unexpected, confused and unorganized issues and decisions to be taken.

Obviously, personal traits and features of an individual using accounting information and their ability to have an effect on decisions should be taken into account by preparers and developers of this information.

As a matter of facts, information can be interpreted in various ways according to the personal characteristics of the decision makers but also on the general predisposition to process data without particular biases of preconceptions, hence, a high degree of neutrality and tolerance versus what is still unknown and uncertain is required⁷⁰.

Hence, very relevant is also the focus on the behaviour of the developers and producers of accounting information that can be subject to four essential qualitative characteristics of useful financial information⁷¹:

- Relevance: Relevant information has a strong power in affecting the decision-making process and is important for usefulness of information. Closely related is the concept of materiality, to be material means to be important both from a qualitative and quantitative point of view.
- Faithful representation: Information must give a fair representation and reliable through numbers. It should rely on concepts of completeness,

2005; 6 (2): 107-125

71 Kurawa JM. "Issues in behavioral aspects of accounting", In: Dandago KI, editor.

Advanced Accounting Theory and Practice. 1st ed. London: Adonis & Abbey Publishers

Ltd; 2009.pp. 221-233.

⁷⁰ Kısakürek MM, Pekcan A., "The view of accounting information from different perspective.", Cumhuriyet University Journal of Economic and Administrative Sciences. 2005; 6 (2): 107-125

neutrality (information giving a representation that is close to reality), and free from errors.

- Comparability: Information should allow the comparisons of economic phenomena in time and space, allowing users to identify similarities or differences.
- *Understandability:* Information and financial report must be understandable and written in a clear way. Users with appropriate accounting knowledge, like investors, should be able to comprehend the real meaning of the data that are presented.

2.5 Theories used in behavioural accounting

There are various theories that are adopted in the field of behavioural accounting and some of them closely related to behaviours in general.

2.5.1 Expectation theory

It was developed by Victor Vroom⁷² in 1964 and then analysed in deeper details by Porter and Lawler⁷³ in 1968.

This theory is based on the main assumption that expectations as an outcome of behaviours of individuals are the main driving force of motivation.⁷⁴

The term "expectation" represents an association of an activity's outcome to a reward or compensation.

Obviously, high expectations of rewards, as an increase in the salary, would create a high level of motivation for the individual to perform a specific activity in an appropriate and efficient way, resulting in a stronger level of concentration.

There are individuals in accounting who are satisfying the duty to relocate data and report in a nominative way. They also may adopt a positive accounting method for reports, with forecasts and modifications of procedures in line with IFRS, at the end of periods. Here behavioural accounting is involved when deciding if modifications

⁷³ Porter, L. W., & Lawler, E. E., "Managerial attitudes and performance", R. D. Irwin, 1968

⁷² Vroom, V. H, "Work and motivation", New York: Wiley, 1964

⁷⁴ Marşap, B., & Gökten, P. O, "Behavioral Accounting: A Theoretical Approach", Business Studies, 2016, p.350

should be made in accordance with the interpretations and evaluations of one individual or another, that are directly related to their experiences.

According to Vroom, this theory divides the effort, performance and outcomes (linked to a person's motivation), assuming that behaviours are a consequence of an aware selection of various choices with the aim of optimizing pleasure and reducing as much as possible pain.

In order to evaluate this, he adopts three main variables: Expectancy, instrumentality and valence.

Expectancy is based on the notion that intensifying the level of effort put in a specific activity will intensify the performance too, leading to better results. For example, people put a lot of effort in conserving resources, or sorting the garbage in the right bins because they think that the more they do it, the more people in general will do the same thing.

This can be achieved thanks to the correct number of resources readily accessible, to the appropriate skills required to perform the activity and thanks to the support provided by supervisors and correct information.

Instrumentality is the thought that if the performance is carried out in a good way, then the desired results will be achieved.

This is impacted by an aware knowledge of the link between activities and their results, by the confidence in the people who will be responsible for taking decisions, and by the transparency of the procedures involved.

Valence is the recognized value that individuals assign on results and outcome, for example, people buy second-hand clothes, or try to put garbage in the right bins because they really care about environmental problems and concepts of sustainability.

2.5.2 Equality theory

Another theory that is used by behavioural accounting is equality theory, that has close links with motivation and productivity in performing tasks at work.

Analysis involved with this theory are related to the expertise and abilities of people in the workplace, how much they know and how much time they spend to perform activities.

Utility levels of employees are important too, according to equality theory, when an employee cannot find the utility he wants, then his motivation will get lower. The state of the state

2.5.3 Goal Setting Theory

Goals are closely connected with individual's behaviour. It is important to not have any contrast and disagreement between the goal and interests of different people involved with the functioning of an organisation, like employees and managers.

According to Locke, who studied this theory in 1968 with the article "Toward a Theory of Task Motivation and Incentives," he showed that clear and very well-defined objectives and appropriate feedback motivate employees, adding that there is a close link between the level of difficulty in achieving a goal and the level of motivation, leading to improvements in performance⁷⁷.

In his research he stated that "the more difficult and specific a goal is, the harder people tend to work to achieve it." ⁷⁸

As an example, the effort showed by an employee with an easy goal and the effort showed by an employee with a more demanding and challenging goal will result in different levels of motivation.

2.5.4. Contingency Approach

According to David T. Otley, in "The contingency theory of management accounting: achievement and prognosis": "There is no universally appropriate accounting system which applies equally to all organizations in all circumstances. Rather, it is

⁷⁵ Gönen, S., & Rasgen, M., "Literature Review for Research Including Behavioral Accounting", Human and Social Sciences Studies, 2017, p. 193

⁷⁶ Kutluk, F. A., "Evaluation of Ethics in Behavioral Accounting Framework", Social Science Institute, Akdeniz University, 2010

⁷⁷ https://www.mindtools.com/pages/article/newHTE_87.htm

⁷⁸ Locke, E. A., "Toward a theory of task motivation and incentives. Organizational Behavior & Human Performance", 1968, pp.157–189

suggested that particular features of an appropriate accounting system will depend upon the specific circumstances in which an organization finds itself. Thus, a contingency theory must identify specific aspects of an accounting system which are associated with certain defined circumstances and demonstrate an appropriate matching."⁷⁹

As a matter of facts, individuals can adopt various actions and take different decisions depending on the kind of context in which they are.

This is showing the urgence to abandon the selection of very rigid and specific rules and procedures being substituted by more adaptable, responsive and flexible ones. Nowadays people are living in continuously changing environment, societies and economies, requiring a quick adjustment in order to be always updated and informed of what is going on.

The contingency approach, in this constantly modified atmosphere, is stating that strong predefined rules are losing their validity and efficiency. When this is applied to accounting, it is underlying that particular approaches and procedures cannot be used in every type of context or condition, there should be the development of different programmes to be implemented in every possible situation.

2.5.5 Agency Theory

Agency theory has been developed since the 1970s, and later has gained attention thanks to the analysis and developments defined by Jensen and Meckling in 1976⁸⁰. This theory is widely applied in financial and behavioural sciences nowadays, and in behavioural accounting too, since the essence of this approach is based on analysing the bonds between the so-called principals and their agents; in these two categories might be included employees, managers, investors, lenders and stakeholders.

It is possible to observe in everyday business life that usually there is a conflict of interest and different assumptions of all the positions and individuals that are taking

⁸⁰ Jensen, Michael C. & Meckling, William H. "Theory of the firm: Managerial behavior, agency costs and ownership structure," Journal of Financial Economics, Elsevier, 1976, vol. 3(4), pp. 305-360

⁷⁹ Otley, David T., "The contingency theory of management accounting: Achievement and prognosis," Accounting, Organizations and Society, Elsevier, 1980, vol. 5(4), 1980, pp. 413-428

part an organization. Interest of people with different tasks, like the interests of an employee and the interests of a CEO, might diverge, having different objectives, responsibilities and positions in the hierarchy of the company.

For example, according to this theory, the board of an organization has the responsibility to act in line with the interests and objectives of the shareholders, and not their own.

At the same time, managers and employees must act consistently with the interests of the board, creating a principal-agent relationship again.

Generally, conflicts arise when the interests are diverging, like a manager who is receiving an extra pay because of the success related to a specific project so that he is in some way encouraged to change and falsify the results in order to obtain an extra pay.

Another possible situation could be the one where a transaction is based on two factors: behaviour and results.

Normally, the value of a transaction made based on behaviours is higher than the value of a transaction made based on results and outcome.

If the principal makes the agreement based on behaviours, obviously this will cause an increase in the motivation of the agent, because when behaviours are involved in concluding the transaction the attention is all focused on the attempts and efforts of the agent. 81

To sum up, the agent has the right to behave and take decisions that are always in line with the principal's interests and goals, no matter what these goals and interests are. When agency theory is linked to the business word, the term "best interest" means maximizing benefits and profits, but sometimes even acting in a corporate social way.

Agency theory is linked and in some way is incorporated in the complex framework of accounting theory.

As stated in the first chapter, accounting theory is not to be considered as a stable notion but is always being modified and adjusted according to new developments in business and regulatory principles.

 $^{^{\}rm 81}$ Kutluk, F. A., "Evaluation of Ethics in Behavioral Accounting Framework", Social Science Institute, Akdeniz University, 2010, p.15

Together with the perspective of the business, it is a way to balance the different interests involved.

In the example of the extra pay for managers, we have observed that they will be encouraged to change and falsify the results to obtain a higher pay. But according to accounting theory, the company will pick the accounting technique that will retain profits under the control of regulators and politicians.

2.6 Financial accounting

Accounting has a relevant part in economic and capital markets, its main instruments like the financial statements and reports of companies recapitulate the financial and economic results of their operations, being widely used by external but also internal parties to get information and insights in an easy and accessible way. Every organization has its own accounting mechanisms to prepare financial statements, to determine and evaluate the operations, and to spread and disclose the information to possible users and shareholders.

The IASB, the international accounting standard board, is the responsible body for the preparation of international accounting standards with the objective of diminishing differences among countries.

As a matter of facts, harmonization is the process of increasing the compatibility of accounting practices by setting bounds to their degree of variation. It can be:

- *De jure* harmonization, with similar laws and standards, for example the European accounting directives
- De facto harmonization, with similar practices. For example, French German and Swiss companies were encouraged to develop financial reports that were US oriented.

But before going into detail for the analysis of the role of behaviour in financial accounting, it is necessary to introduce and examine the role of international financial reporting standards and their link with accounting theory, in addition to their conceptual framework.

2.6.1 Accounting theory and policy making

As it is possible to observe from Figure 3, accounting theory is related to the standard setting process in a very broad framework.

Economic conditions have an effect on accounting theory and political factors at the same time, with political factors affecting accounting theory too.

For instance, with the introduction of the Statement of Financial Accounting Standards (SFAS) No.96 about income tax allocation, a lot of consequences on the political and economic sphere were produced, highly criticizing it.

Organisations like the Financial Accounting Standard Board (FASB) and the Securities and Exchange Commission (SEC), responsible for the development of accounting standards and principles, have a strong policy task.

Indeed, this task is known as "standard setting" or "rule making", leading to the production of accounting rules.

As said before, there are three main ingredients for the process of policy making:

- Economic factors: situations of severe inflations happened in the past leading bodies, such as the FASB, to oblige the disclosure of information regarding modifications in prices, resulting in the development of a policy.
- Political factors: they include the impact on policy making of parties that have to follow the emerged regulations. Here it is possible to identify auditors, who are in charge of checking whether the standards have been applied, preparers of financial statements, and investors.
- Accounting theory: it is the result of much research put in place by professionals and professors, leading to the emergence of various approaches as mentioned in the previous chapter.

Following Figure 3, then the produced standards and rules will be applied at the organizational level, and consequently, the results of the policy will be put in place at the accounting level.

Users of the accounting data and reports can be identified in many groups, such as shareholders, creditors but also any individual who is interested.

Relevant to underline is the fact that these users are not using accounting information just to make decisions, but these data are influencing them even indirectly at a practical level.

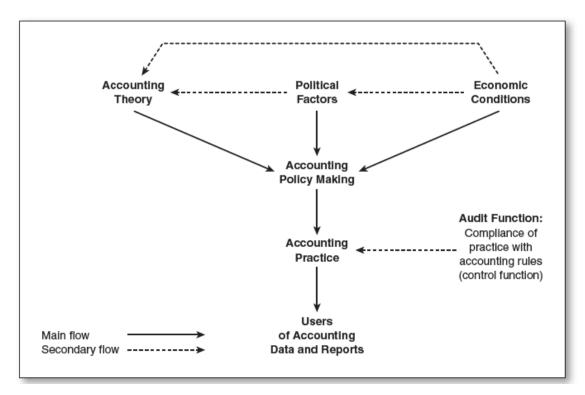


Figure 3: The Financial Accounting Environment

2.6.2 Why do we need international accounting standards?

International financial reporting standards (IFRS), are the result of a "commitment to developing, in the public interest, a single set of high quality, global accounting standards that require transparent and comparable information in general purpose financial statements." ⁸²

IFRS are the accounting standards which have to or can be used by organizations to prepare their, individual or consolidated, financial statements, as a consequence of a harmonisation and convergence plan across countries.

In other easier words, IFRS are high quality accounting rules adopted by an increasing number of countries, but each country has already its own accounting principles, such as local GAAP, with enduring and sound accounting tradition, leading to a necessary question to emerge: "Why do we need another set of standards?"

First of all, globalisation is considered to be the main driver for accounting convergence, being responsible for the increasing integration between capital markets and markets for goods and services, with companies that now can trade

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⁸² International Accounting Standards Board, 2011, 5

with other companies in different countries all over the world, while before they were dependent and operating mostly on their domestic market.

Obviously, an increased level of competitiveness in the economic and business world was a direct effect, making the efficiency of financial communication a relevant and necessary aspect for the correct functioning of financial markets, in order to better protect participants and allow a high level of transparency.

This same objective can be achieved through accounting standards too, identified as a set of concepts and techniques that are used with the aim of identifying, measuring and communicating financial information of a specific economic entity to different users.

Another reason related to the development of global accounting standards is the desire to improve the functioning of capital markets: the expansion of these standards encourage the removal of barriers and obstacles to cross-border acquisitions and divestures and should improve the inflow of capital from international investors to a country because of an ameliorated image and reliability. In addition, another important point, is the fact that convergence will also improve the comparability of financial information across countries with a higher quality too. It will also reduce and simplify the job of financial analysts, eliminating the need to adjust financial statements prepared under different standards for comparability reasons.

The overall quality of reporting system is improved thanks to the promise of more accurate, more comprehensive and timely accounting information.

Moreover, a single accepted set of accounting standards would result in cost and risk reductions: it is possible to observe not only a decrease in costs required for analysing and evaluating accounting information but also a decrease in the costs of preparation of reconciliation accounts.

It is clear that there are benefits emerging both from the perspective of the firm (putting together individual accounts to get group account through consolidation, internal control systems), but also from a regulatory point of view.

After having stated these various reasons that have led to the development of a global group of standards, great attention is focused on the environment in which companies have operated recently, an international context where creditors are

located all around the world and in which businesses are competing, cooperating and communicating on a global scale.

This had direct consequences and effects on the development and adoption of a shared and common language to exchange information; as a matter of facts, the use of English was not so obvious in the international financial accounting framework. For example, we assume there is a German firm that is operating in Italy. There might be various problems that can arise. First, the German company's financial statements should be developed following the Italian or German GAAP? Normally, when the firm is settled in Italy, it demands to employ the GAAP required by the Italian law, causing extra costs for the firm (i.e learning Italian GAAP, producing different versions of financial statements according to Italian GAAP and to German GAAP, adjusting to any possible modifications in the local laws, etc...).

But here we assume that the company is required to develop its financial statements only according to German GAAPS, resulting in no additional costs.

A possible scenario that may arise is the one where the German company is trying to obtain a loan from an Italian bank because of more advantageous loan arrangements if compared to the ones in Germany.

In this case, if the company is applying German GAAP, it would be difficult for the Italian bank to read and understand properly the German reports, leading to an aversion and unwillingness to lend money.

From this basic example, it is clear that a single set of high-quality rules would be a solution and would decrease information asymmetries, helping investors to make more aware and informed investment decisions.

These various factors have pushed many international bodies, like the international federation of accountants (IFAC) and the European union (EU), to provide users with appropriate and efficient information no matter the country of origin of firms. When this urgency became explicit, an adequate body was required to promote and coordinate "the largest accounting change ever undertaken" as reported by Christensen.

⁸³ Hans B. Christensen, Edward Lee and Martin Walker, "Cross-sectional variation in the economic consequences of international accounting harmonization: The case of mandatory IFRS adoption in the UK", The International Journal of Accounting, 2007, vol. 42, issue 4, pp.341-379

Nowadays, the IFRS and related operations are carried out by an international body settled in London: The International Accounting Standard Board (IASB).

2.6.3 IFRS foundation and IASB

The IFRS foundation, of which the IASB is the responsible standard-setting body, defines itself as "an independent, not-for-profit private sector organisation working in the public interest"⁸⁴.

Its structure is characterized by a Monitoring Board, consisting of public authorities such as financial regulators, who are overseeing the organization exerting a public accountability task.

Then, governance and oversight are a responsibility of the Trustees, trying to promote IFRS standards and securing the organisation's funding.

At the core there is the International Accounting Standards Board, responsible for independent standard-setting and related activities, composed by experts characterized by different professional backgrounds and geographical areas.

IFRS foundation structure can be summarized in the Figure 4 below.

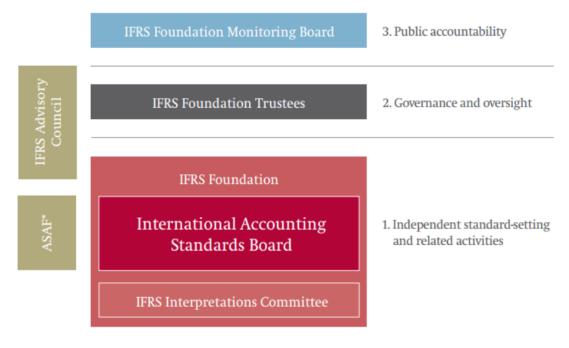


Figure 4: The Three-tier Structure of the IFRS Foundation⁸⁵

⁸⁴ www.ifrs.org

⁸⁵ Source: IFRS, 2013. www.ifrs.org

IFRS foundation's principal objectives are:

- 1. "To develop a single set of high quality, understandable, enforceable and globally accepted international financial reporting standards (IFRSs) through its standard-setting body, the IASB;
- 2. To promote the use and rigorous application of those standards;
- 3. To take account of the financial reporting needs of emerging economies and small and medium-sized entities (SMEs); and
- 4. To promote and facilitate adoption of International Financial Reporting standards (IFRSs), being the standards and interpretations issued by the IASB, through the convergence of national accounting standards and IFRSs."

Important is also their mission statement: "Our mission is to develop IFRS Standards that bring transparency, accountability and efficiency to financial markets around the world. Our work serves the public interest by fostering trust, growth and long-term financial stability in the global economy." ⁸⁷

However, is important also to have some information about the history of this organisation.

As a matter of facts, up to 2000 international standards were issued by the international accounting standards committee (IASC) whose members were professionals from developed countries, and the principles developed in that period are known as International Accounting Standards (IAS).

Between 2000 and 2001, the IASC was reorganized giving rise with what today is known as international accounting standards board (IASB) in 2001, which is considered to be a more independent body, with more detailed and strong competencies in accounting, leading to high quality standards.

But the process of developing and applying a single set of high-quality standards started back in the 70s. In 1973 the IASC was founded after the IFAC, with the objective of becoming a global standard setter, managing and organizing accountants all over the world with a set of harmonized standards (IAS) to be used in the financial statements and to promote their development and acceptance worldwide. But some limits were arising, because these standards were mainly US

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⁸⁶ https://www.ifrs.org/about-us/who-we-are/

⁸⁷ https://www.ifrs.org/about-us/

and UK oriented, lacking a global perspective and of a consideration of countries' differences.

These critics made the IASC to change its structure becoming the IASB with the objectives of convergence of strong and high-quality standards.

An important step was the support provided by the EU, which can be considered as the initiator of the IASB success, as a matter of facts, in 2002 the EU regulation (EC) No. 1606/2002, was asking the compulsory application of IAS/IFRS in Europe for the consolidated statements of listed companies from 2005, a crucial decision that increased the relevance of the IASB as a global standard setter.

However, the process of convergence is not completed yet, since at the moment there are still two sets of accounting standards: the US GAAPS and IFRS.

2.6.4 Stages of IASB due process

Developing standards through an open and inclusive process is an important part of the role of IASB as a global accounting standard setter, and it is important to be analysed in relation to behavioural accounting since it is involving the judgements, opinions and knowledge of individuals and organisations from around the world.

The process is based on three fundamental notions:

- The first one is *transparency:* each individual, no matter their professional background, their country of origin, their skills, should be capable of understanding the process of preparation of standards.
 - For this reason, all discussions of the Board and the interpretations committee are publicly available to anyone who is interested.
- Second, there is *full and fair consultation*: before standards are issued and approved there is a public consultation that is carried on, so that anybody can express their ideas and opinions about particular issues, with a lot of comment letters that will be received after the consultations.
- Third, *accountability*: The Board and the Interpretations Committee express the reasons and logic behind their decisions and choices, exploring every possible consequence of their proposals.

Through these notions the process takes places in four major steps: the agenda consultation, the research projects, the standard setting project and the maintenance phases.

The first stage consists in setting the agenda, in which the Board seeks to address a demand for better-quality information, consulting the public on its technical work plan every five years.

The second step is characterized by the research program, exploring accounting issues and identifying possible solutions, and deciding whether standard setting is required. Very often, ideas and proposals are set out in the discussion paper, seeking feedbacks on how to proceed.

This is followed by the selection of which project should be approved for the actual standard setting phase, accompanied by the sketch of what the new accounting standards might look like. As said before, this work is completely transparent, since people can observe the Board's meeting and read their papers.

When the exposure draft is published, feedbacks on proposals are encouraged from all around the world, as anyone can participate and contribute.

Normally, several hundreds of letters about proposals are received from organisations and individuals taking part in the public meetings.

Based on the feedbacks, other refinements are made before issuing the new standards. Every new standard has a start date which allows countries to have plenty of time to authorize its use and for companies to prepare for the new requirements.

Once issued there is support for the implementation of the standard, making sure it is working as intended, through the maintenance phase.

As it is possible to observe, the involvement of multiple subjects and the different steps in which every standard is issued allows the development process to be very democratic and dialectic, resulting in the participation of behaviours of different individuals in the accounting context.

Every five years, the Board conducts a comprehensive review and consultation to define international standard-setting priorities and develop its project work plan. The Board can also add topics to its work plan if necessary between agenda consultations. This can include topics Agenda consultation following Post-implementation Reviews of Standards: the IFRS Interpretations Committee may also request the Board review an issue. Most projects begin with research, exploring the issues, identifying possible solutions and deciding whether standardsetting is required. Often, ideas are set in a discussion paper and seek public comment. Research program If there is sufficient evidence that an accounting problem exists, the problem is sufficiently important to warrant changing a Standard or issuing a new one and a practical solution can be found, beginning with standard-setting. If the Board decides to amend a Standard or issue a new one, there is the review of the research, including comments on the discussion paper, proposing amendments or Standards to resolve issues identified through research and consultation. Standard-setting Proposals for a new Standard or an amendment to a Standard are published in an exposure draft for public consultation. program To gather additional evidence, members of the Board and IFRS Foundation technical staff consult with a range of stakeholders from all over the world. The Board analyses feedback and refines proposals before the new Standard, or an amendment to a Standard, is issued. The work doesn't stop once a Standard is issued. This process includes application of the Standards, mantaining them and consulting on the implementation of a new or **Mantainance** amended Standard to identify any implementation or application problems that may need to be addressed. If issues arise, the IFRS Interpretations Committee may decide to create an IFRIC Interpretation of the Standard or recommend a narrow-scope amendment. Such amendments follow the Board's normal due process.

Table 2: Summary of the steps in standard setting process

2.7 Role of accounting in behavioural finance

After having acquired a look on the standards and the whole background and institutions around them, it is now possible to observe potential interventions of behaviour in this context.

As stated before, the IASB is able to develop IFRS as globally accepted accounting standards with 144 jurisdictions now requiring the use of IFRS Standards for all or most publicly listed companies, whilst a further 12 jurisdictions permit its use. ⁸⁸ According to an indirect presumption, the IASB is establishing IFRS that are objective, neutral and value-free, expecting that reports and accounting information are equivalent among different countries if preparers and accountants adopt IFRS. Nevertheless, there are explicit demonstrations coming from accounting literature ⁸⁹ ⁹⁰ that it is not always true.

⁸⁸ https://www.ifrs.org/use-around-the-world/why-global-accounting-standards/

⁸⁹ Hellmann, A., Perera, H. and Patel, "Contextual issues of the convergence of International Financial Reporting Standards: The case of Germany, Advances in Accounting, incorporating Advances in International Accounting, 2010, pp. 108-116.

⁹⁰ Doupnik, T. S. and Richter, M., "Interpretation of uncertainty expressions: a cross national Study", Accounting, Organizations and Society, 2003, pp. 15-35.

As a matter of facts, a usual mistake made by shareholders is that that they tend to overestimate the actual neutrality and impartiality of financial statements.

For this reason, it is important to be aware of the possible interventions of behaviour in the field of accounting from the preparation of information to their final application. However, the focus is not only on the behavioural characteristics of investors and stakeholders, but also on the ones of accountants, preparing statements and making decisions involving their own education, perceptions, and interpretations. Particularly, these decisions and development of information are highly dependent on accounting standards such as IFRS.

These principles are the result of standard setter's work and of the explanation and applications by accountants; at the same time financial statements are analysed by auditors and implemented and controlled by other bodies.

Involving all these various actors, it is necessary to emphasise the emergence of strong behavioural problems in three major aspects: in standard setting, in the development of financial statements and in auditing, demonstrating that accounting disclosure and preparation is strongly based on behavioural aspects that are employed from the initial phases of information's development to the final implementation. As a matter of facts, studies in the field of behavioural accounting have focused on the adequacy of disclosure, on the usefulness of financial statements and on the decisions' consequences of different accounting techniques.

2.7.1 The function of standard setters

The effect of accounting principles on financial statements is evident when considering the consequences of adopting previously coexisting standards, such as modifications of results in reports of corporations.

An example, is the case of Daimler-Benz AG, a parent company of Mercedes-Benz AG, the first Germany company listed on the New York Stock Exchange (NYSE), on October 5, 1993, seen as "the greatest thing I've done in my career," as said by Gerhard Liener, Daimler's CFO.⁹¹

At the beginning this action was highly criticised by other relevant German businesses, seen as something that was totally opposite to the other companies'

⁹¹ Benz Starts Its Ride on the Big Board, Chicago Tribune (Oct. 6, 1993), BUSINESS at 3.

decisions and positions that were against the presumption of adopting particular standards just for foreign issuers.

As a matter of facts, Daimler-Benz had to prepare and disclose its financial reports and statements following the US-GAAP.

Later, following the US-GAAP the company recorded a loss 1.8 billion of German Deutsche Mark (DM), or \$1.06 billion, compared to \$1.35 billion in 1992. But in the same year, using German regulation and standards, Daimler-Benz revealed a profit of 615 million marks, or \$358.1 million, down 57 percent from 1992.⁹²

This discrepancy in net income when identified with US-GAAP or with German principles is explained by the fact that, according to German standards, organizations can draw from "hidden reserves" to buy profits.⁹³

Importantly, companies are allowed to draw on these reserves without any specific limitation by debiting the off-balance sheet reserves and using the credit to increase the income. As a result, companies following German accounting regulations can build reserves out of earnings in advantageous years and draw on them in years of actual losses, thus decreasing the company's historic earnings volatility.

The two accounting regulations have distinguished goals: on one hand, US-GAAP, are trying to support the decision of stakeholders by providing appropriate and realistic data of what is going on from the financial point of view; on the other hand, in this case with German accounting principles, there is more protection provided to creditors, promoting caution.

All of this obviously created confusion and unreliability perceived by shareholders and possible investors, encouraging the development of globally accepted accounting principles, trying to reduce differences and misunderstandings as much as possible, particularly required by international bodies, regulators and companies. As stated before, this activity is implemented mainly thanks to the work of the IASB, with the goal of substituting the local accounting principles with IFRS, that are

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⁹² Daimler-Benz Group posts \$1 billion loss for 1993, Diana T. Kurylko, available at: https://www.autonews.com/article/19940418/ANA/404180729/daimler-benz-group-posts-1-billion-loss-for-1993

 $^{^{93}}$ Doupnik, T.S. and Perera, H., "International Accounting", 4th edition, McGraw-Hill: New York, 2015, p.56

prepared and created through a precise "due process", previously described, trying to eliminate any subjective and inconsistent feature involved⁹⁴.

Indeed, it is always important to have in mind that it consists of an operation that is not objective, but on the other hand involves many individuals composing the IASB, that may have some prejudices or discriminations regarding particular standards, influencing the neutrality of results.

There are clearly defined confirmations coming from literature, describing that economic benefits related to accounting principles are affecting the decisions taken by shareholders in the "due process", together with other professional figures and businesses that are more and more influencing the decisions about what and how to develop principles.⁹⁵ ⁹⁶

For these various reasons, the role of the standard setter is extremely complex, especially for the task of remaining impartial and neutral, trying not to be affected by powerful bodies and organizations for the application of standards that are more advantageous to them, as illustrated by the IASB's amendment to IAS39 (Financial Instruments: Recognition and Measurement) after the EU put pressure on the IASB to eliminate some controversial sections.

Another issue that is worth to underline, and which will be the focus of next chapter, is the problem of translating IFRS. Even if they are developed in English, they are frequently described in any other different language according to the country.

For instance, the IFRS are translated from English into other 22 different languages according to the EU endorsement process.

Later, possible mistakes and misunderstandings in the translation will be discussed, illustrating their consequences and effects in accounting practice. $^{97~98}$

⁹⁴ Erb, C. and Pelger, C., "Twisting words"? A study of the construction and reconstruction of reliability in financial reporting standard-setting, Accounting, Organizations and Society, 2015, pp. 13-40.

⁹⁵ Kwok, W.C.C. and Sharp, D, "Power and international accounting standard setting: Evidence from segment reporting and intangible assets projects", Accounting, Auditing and Accountability Journal, 2005, pp.74-99.

⁹⁶ Larson, R. K., "Constituent Participation and the IASB's International Financial Reporting Interpretations Committee", Accounting in Europe, 2007, pp. 207-254

 $^{^{97}}$ Niehus, R. J, "The IFRS in German, Errors and Inadequacies of Translation", The Operation, 2005, pp.2477-2483

⁹⁸ Dahlgren, J. and Nilsson, S.A, "Can translations achieve comparability? The case of translating IFRSs into Swedish, Accounting in Europe, 2012, pp. 39-59.

2.7.2 The function of financial statement preparers

IAS/IFRS are principle-based standards since their primary objective is to provide sensible principles to which all applying entities must conform, which aim to be as universal as possible and independent of the actual contractual form chosen by applying entities for their business operations or transactions, so they can be seen as a guide to action, supporting true and fair presentation.

On the other hand, there are rule-based standards, like US-GAAP, which try to provide rules for all possible situations that companies might face.

Both of these standards have advantages and disadvantages, but normally rule-based standards are easier to apply, being more detailed and requiring fewer personal judgements. But, if the same individual confronts a situation which is not perfectly illustrated by the rules, he might not have the appropriate indications and tools in order to decide how to act in the accounting field.

This would not be the case of principle-based standards, that are more general and can adapt to different situations. As a matter of facts, the use of principle-based standards by the IASB is related to the large number of potential applying entities, creating a highly heterogeneous group, for which a very strong level of flexibility of standards is preferred.

From this is possible to understand that IFRS are not providing a detailed guidance and precise answers to questions but on the other hand they are demanding the exercise of professional judgements.

Actually, the IASB identifies the expression 'substance over form' to emphasize the significance of professional judgments for the analysis and employment of IFRS.

This term necessitates accountants to concentrate more on the substance of an economic operation than on its legal form.

For instance, professional judgments are needed if analysis and interpretations of probability expressions are required, if materiality thresholds have to be measured, and if particular accounting techniques have to be decided. Probability expressions are a significant factor of principle-based standards and are largely used for the recognition, measurement and disclosure of items.

Even in this case there are demonstrations that probability expressions are interpreted in inconsistent ways by accountants in various countries.

For example, there are studies developed by Doupnik and Richter on different interpretations across countries about shared terminology, discovering that accountants in Germany are likely to interpret probability expressions in a more conservative way if compared to accountants in the US. ⁹⁹

Hellmann stated that there is a tendency for German people to be risk averse and this might be translated in the adoption of more conservative professional judgements. 100

Moreover, there is evidence showing that professionals who were educated following the German Commercial Code have the tendency to apply their knowledge about local German accounting principles to better understand and analyse the principle based IFRS.

All of these various contributions are illustrating how the education and cultural features that are composing accountants' personalities are affecting their judgements and analysis, leading to some possible inconsistencies and discrepancies in the adoption of the standards among different countries.

In point of fact, the cultural elements have been widely explored and have been identified my many researchers as a relevant characteristic that is significantly having an impact on the decisions, choices and opinions developed by responsible accountants, affecting the overall accounting context of a country for a long period of time. ¹⁰¹

To be added, there are other relevant individuals' features with substantial consequences on decision making and on judgements, involving personal skills, confidence, gender, motivation and cognitive style. 102

There are other episodes that are worth to be stated, for example modifications in the form of annual reports with large increases in their sizes, emphasising the intensified relevance of narrative data.

⁹⁹ Doupnik, T. S. and Richter, "The impact of culture on the interpretation of "in text" verbal probability expressions", Journal of International Accounting Research, 2004, pp. 1-20.

¹⁰⁰ Hellmann, A., Perera, H. and Patel, "Contextual issues of the convergence of International Financial Reporting Standards: The case of Germany, Advances in Accounting", incorporating Advances in International Accounting, 2010, pp. 108-116. ¹⁰¹ Gray, S.J., "Towards a theory of cultural influence on the development of accounting systems internationally, Abacus, 1988, 1-15.

 $^{^{\}rm 102}$ Bonner, S. E., Judgment and decision making in accounting, Pearson Prentice Hall: New Jersey, 2008

Moreover, more graphical representations, pictures and charts are used to report financial information, together with titles and captions 103 which might encourage the adoption of a particular option over another, redirecting the attention. 104

Regarding regulations, a lower attention has been directed for the preparation of narrative information, focusing more on quantitative and technical data. As a matter of facts, all characteristics of accounting narrative information for the preparation of financial reports are considered more a responsibility of the management body. Because of this missing piece in regulations, management might behave in an opportunistic way, with some tactical and calculated disclosures and presentations of financial statements.

As a consequence, management might overstate and amplify positive and advantageous performances and data in financial statements and at the same time hide the adverse and threatening ones, a strategy that is followed in order to put management in a better and more promising position. ¹⁰⁵

Clatworthy and Jones demonstrated this belief by showing that a relevant part of director's statements of English listed companies is devoted to disclosing optimistic and favourable information. ¹⁰⁶

All of these contributions are gaining more and more relevance with the growth and development of online platforms and websites for the disclosure of financial information.

With these tools there is a great possibility to have an impact on the process of decision making, through the use of graphic designs, interactive and coloured instruments by interacting with the emotional sphere of individuals, more than in the regular annual reports of companies.

¹⁰³ Beattie, V. and Jones, M.J., "Corporate reporting using graphs: A review and synthesis", Journal of Accounting Literature, 2008, pp. 71-110.

¹⁰⁴ Bruce, N.D.B. and Tsotsos, J.K., "Saliency, attention, and visual search: An information theoretic approach", Journal of Vision, 2009, pp.1-24.

¹⁰⁵ Merkl-Davis, D.M. and Brennan, "A conceptual framework of impression management: New insights from psychology, sociology and critical perspectives", Accounting and Business Research, 2011, pp. 415-437.

¹⁰⁶ Clatworthy, M. and Jones, "Financial reporting of good news and bad news: Evidence from accounting narratives", Accounting and Business Research, 2003, pp. 177-185.

2.7.3 The function of auditors and enforcement bodies

Even the role of auditors can be considered as highly influenced by behavioural factors, their tasks can be identified as a pure judgement mechanism in which auditors are employing their knowledge and opinions for the development of a kind of guarantee related to the financial statements of a company.

As a matter of facts, the condition and value of the results of auditors have a high probability of being influenced by personal factors.

Gul analysed that their quality might differ according to specific auditors' characteristics. ¹⁰⁷

As discussed before, the aspects having an effect on the final judgements and actions taken by auditors consists of the cultural and educational background, and of the level of effort and loyalty to the organizations, and of some personal comprehension weaknesses. ¹⁰⁸

Other factors that might have an impact on auditors' work are possible biases coming from performance of tasks under strong pressure leading to some wrong conclusions.

At the same time, the communication and interplay between auditors and other individuals like clients and co-operators have important effects on the opinions and decisions taken regarding the preparation of financial statements.

Concluding, a high level of control and monitoring on auditors and organisations is required, otherwise a lack of these characteristics may cause inconsistencies and incongruity in procedures, as stated by Nobes. ¹⁰⁹

2.7.4 Do Producers of Accounting Information Mislead Its Users?

After having analysed the role of different producers of accounting information and the relevance of the behavioural intervention, a question may arise: "Do they intentionally deceive the users of these data?"

¹⁰⁷ Gul, F.A., Wu, D. and Yang, Z., "Do individual auditors affect audit quality? Evidence from archival data, Accounting Review, 2013, pp. 1993-2023.

¹⁰⁸ Nelson, M. And Tan, "Judgment and decision making research in auditing: A task, person, and interpersonal interaction perspective", Auditing: A Journal of Practice & Theory, 2005, pp. 41-71.

 $^{^{109}}$ Nobes, C., "The continued survival of international differences under IFRS", Accounting and Business Research, 2013, pp. 83-111.

Sometimes, this is happening, as described by Hand, Hughes and Sefick, who found out that very often companies record some false transactions just to "window dress" their earnings. 110

Another example can be represented by the fact that organisations, in order to enhance the perceptions of investors, might adopt accounting techniques that tend to increase income, or disclose high accruals. ¹¹¹

Because of these various situations the users must be aware of the behavioural factors and beliefs of producers that are involved, in order to appropriately and prudently utilise the accounting data that are provided.

It is known that the major goal of companies is to optimize their market value, drawing the attention to the relevance of disclosing information to the outside of the firm.

As said before, accounting information are created following four main features: relevance, faithful representation, comparability and understandability. When these features are not met, usually the information is not disclosed.

After having stated this, it is clear that users need to be characterized by a high level of analytical ability, in order to acquire and evaluate relevant accounting data. In addition, amiable disposition is also needed, they should be able to create pleasant discussions and communications with producers, so that they are encouraged to provide data that are reliable.

Driverability trait is important too, pushing producers to develop statements that are almost perfect, in order to take appropriate decisions.

In addition, maybe the most important characteristic required for users in order to better interpret and understand information provided, is the ability to read between the lines, creating some kind of empathy with producers, recognizing and identifying some emotional aspects involved in the formulation of data.

In conclusion, after having studied behavioural characteristics and their effect in accounting there are some relevant results that can be identified.

¹¹¹ Chan, K., Jegadeesh, N.and Lakonishok, J., "Earnings quality and stock returns: The evidence from accruals", University of Illinois. USA, 2000

¹¹⁰ Hand, J., Hughes, P. and Sefcik, S., "Insubstance defeasances - Security price reaction and motivations", Journal of Accounting and Economics 13, 1990

The analysis of behavioural accounting has been developed in different phases and is currently being developed with the aim of identifying issues in the disclosure mechanism of financial information.

In addition, it is not rare that standard-setters, financial statement preparers and auditors are being influenced by personal characteristics, professional and cultural background when creating and disclosing information, that sometimes may mislead their users, who have to maintain control and be aware of which data to select.

CHAPTER III - Translation

Intervention of behaviour is happening also in the field of language and translation, particularly the problem of translating IFRS and reports should be taken into account for deeper analysis.

Language influences the beliefs, opinions and behaviour of people, which may lead to severe misunderstandings when it is used as a way to communicate, particularly in accounting.

This issue might be aggravated by the translation of accounting topics from one language, the "source language" and its related characteristics to another, the "target" language.

Translation is not only an empirical and technical issue, but sometimes it is considered more as a way to authorize the performance and behaviour of people or firms than as a guide to make decisions.¹¹²

Accounting is highly reliant on specific vocabulary and notions to appropriately disclose and perform its operations¹¹³. In the last years it has developed into an international activity, pushing more and more for harmonization and convergence, resulting in the need for translation of accounting information.

The advantages of developing a single set of high-quality standards, such as IFRS, are well recognized globally because of their ability to increase integration between capital markets for goods and services, a greater level of competitiveness and comparability, improving the communication between companies around the world and removing any possible barrier to cross-border operations.

Nevertheless, the adoption of international accounting standards might not be enough to guarantee a comparable and equal value in accounting disclosure and communication.

This happens because of influences coming from cultural, political and personal spheres in which firms are performing that may have relevant consequences on the mode through which principles and standards are understood and implemented in each country.

¹¹² Power, M. K, 'Auditing and the Production of Legitimacy', Accounting, Organizations and Society, 2003, Vol. 28, No. 4, pp. 379–94.

¹¹³ Mills, P. A., 'Words and the Study of Accounting History', Accounting, Auditing & Accountability Journal, 1989, Vol. 2, No. 1, pp. 21–35.

One of these influences is translation, which will be explored in detail in this chapter. With the goal of improving reliability and comparability across the world in financial reporting, which is based on a lot of factors including addressing the limitations of translation of IFRS, elevating the quality of evaluations and decisions made by experts, and identifying whether IFRS are understood in an equal and consistent manner across countries.

As a matter of facts, IFRS are issued in English, but they are frequently described in any other different language according to the country.

Being English the language used by the IASB, the success of the global adoption of IFRS is relying a lot on the adequacy of translation and not just on the one of standards. Indeed, even if standards are prepared in a very appropriate way, they cannot be implemented harmoniously globally if the translations are not reflecting in a fair way what was meant and represented with the English versions.

Obviously, this problem has consequences for a lot of individuals involved in the process, such as users of translated financial statements, preparers of this accounting information which are asked to adapt to certain rules, professors and students of accounting and all those parties involved in the system of harmonisation. Hence, the focus is on behavioural characteristics and cultural differences which can lead accountants around the world to apply and interpret accounting standards in various ways: cultural values influence accounting values which then again affect the interpretation and application of standards. Important is to understand that culture is not just represented by values, but it includes symbols too, like languages and the IFRS, whose application depends on the linguistic features of statements and paragraphs. For this reason, they might appear unclear and ambiguous, affecting accountants in different countries and their knowledge in accounting, that they may apply in inequivalent ways.

However, even if the translation is practicable, full comparability and equivalence is not possible to be reached since dissimilarities in understanding the authentic version and the translated one will always occur, as stated by Ho "equivalent interpretation and application of (foreign) concepts will always remain problematic'¹¹⁴.

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 $^{^{114}}$ Ho, G., 'Translating Advertisements across Heterogeneous Cultures', The Translator: Studies in Intercultural Communication, 2004, Vol. 10, No. 2, pp. 221–43.

3.1 Prior research and theoretical framework

The IFRS Foundation recognizes the relevance of good translations in improving international comparability¹¹⁵, since there are professionals coming from around the world with distinguished educational and cultural experiences but everyone adopting the same accounting standards.

Nevertheless, it is clear that a consistent, comparable and equal implementation and explanation of international topics will always remain questionable, in relation to the troubles of language translation¹¹⁶.

Some studies have been developed, a part of them showing that the interpretation of accounting topics may diverge even when applied to groups of people talking the same language, but differing in their positions, like students, developers of accounting data, professors and so on¹¹⁷.

As a matter of facts, this process is involving a range of stakeholders, with standard setters, auditors, analysts and any other users of accounting terminology providing their approval for an effective disclosure.

For instance, according to Chesley even within the same group "common words such as "probable" or "likely" will cause wide variations in interpretation and should not be used for specific communication of uncertainty in general situations sensitive to inaccurate interpretations"¹¹⁸. Hence, very significant is also the understanding and valuation of these probability and uncertainty expressions, which may lead to very different results, also because they can cause a variety of inconsistent applications in the implementation of International Accounting Standards¹¹⁹.

Research, 1986, Vol. 2, No. 2, p.197

¹¹⁵ IFRS Foundation (2016), IFRS Translation Policy, IFRS Foundation, London, 2016, available at:

www.ifrs.org/Use-around-the-world/IFRS-translations/Pages/IFRS-translations.aspx

¹¹⁶ Evans, L., Baskerville R., "The darkening glass: Issues for translation of IFRS", The Institute of Chartered Accountants of Scotland, 2011

¹¹⁷ Haried, A. A., 'The semantic dimension of financial statements', Journal of Accounting Research, 1972, 10 (2), pp. 376-91.

Adelberg, A.H. and Farelly, G.E., 'Measuring the meaning of financial statement terminology: a psycholinguistics approach', Accounting & Finance, 1989, 29 (1), pp. 33-61.

118 Chesley, G., 'Interpretation of Uncertainty Expressions', Contemporary Accounting

¹¹⁹ Doupnik, T. S. and M. Richter, "The Impact of Culture on the Interpretation of "in Context" Verbal Probability Expressions', Journal of International Accounting Research, 2004, Vol. 3, No. 1, pp. 1–20.

Even Bagranoff analysed the effect of national characteristics on the evaluation of accounting concepts for people talking the same language, stating that "cultural differences may affect the meaning of, and hence the application of, accounting principles"¹²⁰.

This is even more complex when applied to a situation where individuals are talking different languages, involving multilingual translations of topics and regulations.

This happens with terms and notions related to material and physical ideas, but it is even more challenging for intangible and abstract ones, like "the true and fair view" "true and fair presentation", which for instance was not converted in literal terms from the original English version¹²¹ and neither was applied in comparable ways.

In particular, abstract topics are very typical in accounting language, being characterized by a variety of very precise words and notions, very useful when needing to disclose information in a proper manner.

In addition, there is no trans linguistic register for accounting, mainly because there is not semantic correspondence of topics in various countries, together with practical peculiarities in the application of languages¹²².

As a matter of facts, one of the main reasons of misunderstandings that may arise is related to how hard it is to translate a foreign idea where there is a lack of an accurate equivalent in accounting vocabulary of the target language.

As stated by Crystal: "... people certainly find it easier to make a conceptual distinction if it neatly corresponds to words available in their language"¹²³.

This of course will lead to some confusion of meanings and messages related to particular terms, encouraging people to adopt similar but not equivalent terminology.

¹²⁰ Bagranoff, N. A., K. A. Houghton, and J. Hronsky, 'The Structure of Meaning in Accounting: A Cross-cultural Experiment', Behavioral Research in Accounting, 1994, Vol. 6, p.35

¹²¹ Nobes, C., 'The True and Fair View Requirement: Impact on and of the Fourth Directive', Accounting and Business Research, 1993, Vol. 24, No. 93, pp. 35–48.

¹²² Archer, S. and S. McLeay, 'Issues in Transnational Financial Reporting: A Linguistic Analysis', Journal of Multilingual & Multicultural Development, 1991, Vol. 12, No. 5, pp. 347–61.

 $^{^{\}rm 123}$ Crystal, D., The Cambridge Encyclopaedia of Language, Cambridge University Press, Cambridge, 1987, p.15

In other words, the cultural background is playing a relevant role, since language is strongly related to the culture, influencing the awareness, understanding and reasoning of people.

It is not common to find words that are representing the same meaning of another word in another language: the signifier (the sound pattern or word) and the signified (the related meaning) are not identical and comparable in the variety of cultures and languages that are present globally¹²⁴.

Part of the meaning is always lost or even added during the process of translation ¹²⁵. After stating that, it is possible to understand that evidence coming from prior studies on translation of accounting terminology is showing that:

- Interpretation and reading may diverge even for actors using the same language, leading to complexity in the field of translation,
- There are international dissimilarities regarding accounting topics and terms, resulting in the lack of a multilingual register for accounting information.
- When there are notions related to the culture, like the true and fair view, translation becomes even more complex, resulting in some misunderstandings.
- Translation is quite challenging even with statements that are very similar, such as probability expressions.

3.1.1 Accounting and linguistics

Accounting is being more and more linked to the linguistic field of study, being considered as a way of transferring and exchanging information and data in order to make appropriate decision.

First studies tried to compare the diverse perceptions of messages and understanding of accounting topics by distinguished categories of people, such as users or preparers of financial statements and accounting data¹²⁶.

¹²⁴ Saussure, F. (1915/1966), Course in General Linguistics, The Philosophical Library, New York, NY.

Pan, P., Patel, C., "The influence of native vs foreign language on Chinese subjects" aggressive financial reporting judgments. 2018, pp. 863–878

¹²⁶ Oliver, B.L., "The semantic differential: a device for measuring the interprofessional communication of selected accounting concepts", Journal of Accounting Research, 1974, Vol. 12 No. 2, pp. 299-316

Belkaoui and Jain identify accounting as the "language of business" ¹²⁷ ¹²⁸, adopting theories coming from linguistic studies for the understanding of accounting.

In particular, Belkaoui believes that accounting terminology includes some "lexical" and "grammatical" factors that can persuade and influence the thoughts, impressions and behaviours of individuals using it.

Anyhow, Parker claims that this belief conceived as a metaphor is not capturing the true meaning of language's nature: "The metaphor is illuminating but also dangerous. Languages are not sets of rules imposed by regulation and which change only as the regulators so direct. Furthermore, of all languages, English . . . is one of the least standardised and whose speakers have shown themselves unwilling to standardisation nationally, let alone internationally." 129

Belkaoui even analyses the cultural, linguistic, organisational and contractual influences in accounting when trying to develop a model for an international theory of accounting.

He found out that individuals make decisions and create judgements and opinions based on their perceptions, and such perceptions are affected by cultural, linguistic, organisational and contractual characteristics, which are all correlated¹³⁰.

This becomes clear in a study made by Belkaoui and Picur to understand if national influences have a role in the definition of the accounting methods and perceptions of a specific country¹³¹.

They tried to separate the effect of national culture from other possible influences, like the organisational and linguistic one, by selecting individuals speaking English working for the same international accounting company, in three different offices around the world, like Chicago, London and Toronto.

¹²⁷ Belkaoui, A., "Accounting and language", Journal of Accounting Literature, 1989, Vol. 8, pp. 281-92.

¹²⁸ Jain, T.N., "Alternative methods of accounting and decision making: a psycho-linguistic analysis", Accounting Review, 1973, Vol. 48, pp. 95-104

¹²⁹ Parker, R.H., "English and other languages of account", English Today, 2000, Vol. 16 No. 2, p.53

¹³⁰ Belkaoui, A., "Judgement in International Accounting", Quorum Books, New York, NY/Westport/London, 1990

Riahi-Belkaoui, A. and Picur, R.R., "Cultural determinism and the perception of accounting concepts", International Journal of Accounting, 1991 Vol. 26 No. 2, pp. 118-30.

They discovered that these individuals had divergent conceptions and impression about accounting topics, which confirmed their theory that perceptions are so much dependent on the cultural factor.

Obviously, these problems become even more relevant when accounting techniques and concepts are being used by individuals and companies located in different countries, with different languages, requiring their translation.

3.1.2 Language, culture and thought

As stated by Saussure, there is no equivalence for words used in different languages¹³². This is true both for the signifiers, the "signifying element", and the signified, the message that the word wants to convey¹³³.

If, as stated before, there is no exact and equivalent translation, how can it be functionalised?

At first, there was the adoption of literal translation, trying to represent in a fair way each single word of the source language.

This method is mostly approved by unprofessional translators or those who know little of the various mechanisms and effects involved in translation.

But translation from this perspective lacks the social and cultural sphere related to the statements to be translated, which will result in a less adequate and successful translated text¹³⁴.

Because of this limitation the adoption of a functionalist approach has been encouraged. With functionalist approach an appropriate translation is considered as one that "can be used by the intended reader for a pre-determined purpose" 135.

Here equivalence depends on interpretations of the user of the original text and the one of the target and resulted text.

¹³³ Joseph, J.E., "Why isn't translation impossible", in Hunston, S. (Ed.), Language at Work, British Association for Applied Linguistics/Multilingual Matters Ltd, 1998, pp. 86-97.

¹³⁴ Adab, B., 'Towards a More Systematic Approach to the Translation of Advertising Texts', in A. Beeby, D. Ensinger, and M. Presos (eds.), Investigating Translation, John Benjamins,

Amsterdam, 2000, pp. 223–34.

 $^{^{\}rm 132}$ Saussure, F., "Course in General Linguistics", The Philosophical Library, New York, NY, 1915/1966

¹³⁵ Adab, B., 'Towards a More Systematic Approach to the Translation of Advertising Texts', in A. Beeby, D. Ensinger, and M. Presos (eds.), Investigating Translation, John Benjamins, Amsterdam, 2000, p.136

With this approach, there was a clear change of perspective, moving from a mostly linguistic translation to one that is more focusing on cultural and social aspects.

The emergence of this complexity is connected to the relation of language, culture and thought, being analysed even in anthropology, philosophy, linguistics and translation studies.

The belief that language expresses, reveals and impacts thought, since individuals coming from different language speaking countries might think in distinguished ways, is demonstrated with the Sapir-Whorf hypothesis, which can be summed up with this extract:

"Human beings do not live in the objective world alone nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. . .. The "real world" is to a large extent unconsciously built up on the language habits of the group. No two languages are ever sufficiently similar to be considered as representatives of the same social reality. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached." 136 There is a grammatical version of this hypothesis, in which cultural characteristics are closely linked to the grammar of a language, and a lexical version, showing the link between language and culture only related to the lexicon 137.

In addition, there is also a strong version, identifying a linguistic determinism, in which thoughts are *determined* by language, and a weak one, identifying a linguistic relativism, where thoughts are just *influenced* by language, being the most accepted between the two views.

As a matter of facts, language might not be a fundamental determinant of thinking and beliefs, but it certainly performs an influence on the awareness, perceptions and understandings of people¹³⁸.

The connection between language and culture is recognized by translation theory as a factor that is turning the translation process into a very complex task: "Since

¹³⁶ Sapir, E., "The status of linguistics as a science", Selected Writings of Edward Sapir in Language, Culture and Personality (1949), p. 162

¹³⁷ Werner, O., "Sapir-Whorf Hypothesis", The Encyclopedia of Language and Linguistics, Vol. 7, Pergamon Press, Oxford, 1994

¹³⁸ Crystal, D., The Cambridge Encyclopaedia of Language, Cambridge University Press, Cambridge, 1987, p.15

every language is ultimately *sui generis* – its categories being defined in terms of relations holding within the language itself – it is clear that formal correspondence is nearly always approximate." ¹³⁹

By stating that, it is evident that perfect translation with equivalent terminology is almost impossible, there are no mathematical techniques involved in the process, but it is more an exchange of ideas between people with different thinking. There are certain notions that are characteristic of a given culture, so they are difficult to be found in other country with other cultures.

We can imagine the word "snow" or "ice" which might be impossible to translate into languages of tropical locations.

This problem can in part be solved by providing explanations and descriptions of concepts, trying to provide the message also in another language different from the original one, using a lot of examples, terms and statements.

However, translators "live with the constant guilt of knowing that they can never render the text faithfully in another language without doing violence either to the text or to the second language" ¹⁴⁰, and this might happen even with easy and intuitive notions.

Translation process would be much easier if there was the existence of transnational or trans linguistic registers for accounting terminology.

Its presence would make equivalent translation a little less complicated, by creating a kind of similarity between accounting concepts¹⁴¹.

In addition, other influences on translation that are worth to be noted are the legal traditions of a country, as a matter of facts, each law is representing a structure with its own methods, terminology and concepts, which of course will have an impact on translation. This is also because the legal language is very technical if compared to the normal language, with this being true also for the accounting context.

Summing up,

- language and culture are highly connected,

¹³⁹ Catford, J.C., "A Linguistic Theory of Translation. An Essay in Applied Linguistics", Oxford University Press, London., 1965, p.27

Joseph, J.E., "Why isn't translation impossible", in Hunston, S. (Ed.), Language at Work, British Association for Applied Linguistics/Multilingual Matters Ltd, 1998, p.14
 Archer, S. and McLeay, S., "Issues in transnational financial reporting: a linguistic analysis", Journal of Multi-Lingual and Multicultural Development, 1991, Vol. 12 No. 5, pp. 347-61.

- language has a strong power of affecting people's understanding, thinking and awareness (linguistic relativity)
- an exact and equivalent translation is almost impossible,
- problems increase with diverse legal or accounting traditions clash.

3.2 Translation in the EU and by the IASB

Starting from January 2005 listed EU companies are demanded to develop their financial statements following the International Accounting Standards (IAS) and IFRS.

But, the European Union is an economic and political union of 27 countries and 23 languages, resulting in a very huge translation process, which can be considered as a complex task since many cultures, political and corporate views are involved, leading to diverse understandings and interpretations of IFRS.

In accounting settings, the enforcement of directives and regulations of EU's business law is influenced by translation, together with Regulation (EC) No 1606/2002 on the application of IFRS.

The original language of international accounting standards is English, but according to IFRS foundation "translation is a necessary and vital part of achieving the . . . mission to develop a single set of high-quality global accounting standards for use around the world'142.

The procedure consists mainly of the management, control and revision of translations developed by professionals¹⁴³. There is just one version for every language since various translations "would endanger comparability, transparency, and the long-term sustainability of high-quality IFRS translations" 144.

As stated by the IASB "the approved text of any discussion documents, exposure draft, or IFRS is that approved by the IASB in the English language, and the IASB may approve translations in other languages, provided that the translation is prepared in accordance with a process that provides assurance of the quality of the translation, and the IASB may license other translations"145.

¹⁴³ IASB, Five Questions on IFRS Adoption, IASB Insight, 2008, pp. 8–9

¹⁴² IASC Foundation (2014)

¹⁴⁴ IASC Foundation (2014)

¹⁴⁵ IASB, Preface to IFRSs, International Financial Reporting Standards (IFRSs) 2008 (London: International Accounting Standards Committee Foundation (IASCF)), p.67

A glossary for different languages is also provided, now including 1500 IFRS key expressions, that are applied in the approved final translations.

Up to 1997, the process of translation was performed by IASC's member bodies, which sometimes culminated in the creation of inconsistent translations, of dissimilar quality related to one specific language¹⁴⁶. These issues that were arising encouraged the IASC to gain control of the entire procedure in 1997.

In 2005, to promote the adoption of IFRS in the EU there was the necessity to develop a timely and punctual translation of them into the various languages required by each EU country, being considered as a fundamental requirement in order to be spread globally.

The process was performed by the European Commission's Directorate General (DG) during 2003 and 2009 together with the IASC Foundation, but members of the DG's translation services and of national governments were also providing some inputs. However, starting from June 2009 the translations are the result of the Commission only.

In spite of that, the Foundation keeps on with the control of its own translations' procedures into EU languages, especially when these languages are largely adopted also in other continents.

Thus, diverse and incompatible translations of IFRS still continue to exist between those produced by the Foundation and those produced by the Commission.

For instance, while translations of the Foundation into Spanish and French are trying to find terms that are satisfactory also to users in Latin America or in Canada, the EU's translations performed by the Commission are related just to the European language versions.

3.3 Implications for translation in accounting

Because of the reasons and limitations related to translation that were stated before, it is considered a complex task even when applied to accounting context.

The meanings of accounting terminology are sometimes lost in translation¹⁴⁷, which can damage the implementation of IFRS around the world because of translation

¹⁴⁶ IASC Foundation, 2001, p. 15

¹⁴⁷ Pan, P., Patel, C., "The influence of native vs foreign language on Chinese subjects" aggressive financial reporting judgments. J. Bus., 2018, 863–878.

issues and explanation, especially because they are developed in English and then translated into 48 languages¹⁴⁸, which of course may lead to some misrepresentation of the original meaning as proposed by the IASB, causing some inconsistencies.

Because of the global economic world in which we are living, all of this has influences even on professionals working in the field of behavioural finance who try to investigate the reasons behind some incompatible choices supported by translated models of financial statements made by researchers who talk different languages.

There is evidence coming from literature that individuals will result in making completely different decisions in their native language and any other foreign one.

The "foreign-language effect" states that adopting any language that is not the native one improves "psychological distances" and leads subjects in making more logical, rational and systematics choices, instead of more spontaneous, natural and unconscious ones that are typical when using the original language¹⁴⁹. Applied to the context of accounting, an example of this is evident in relation to the notion of "fair value" and its German version "Beizulegender Zeitwert" for which there are different interpretations made by experts around the world¹⁵⁰.

However, sometimes translation problems might not be instantly identified in accounting, since some inappropriate implementations and misunderstandings of IFRS might be caused even by preparers of financial statements that intentionally change and manipulate data.

As stated before, the issues in translation are arising because of differences in the cultural and social sphere characterizing various countries adopting the IFRS, but also because of a lack of transnational registers for accounting.

Particularly, in accounting, inappropriate translations are partly caused by a lack of training and in-depth skills of translators about international comparative

¹⁴⁸ IFRS Foundation, 2017. IFRS Translations, https://www.ifrs.org/issued-standards/ifrs-translations/#other-available-translations

¹⁴⁹ Costa, A., Foucart, A., Hayakawa, S., Aparici, M., Apesteguia, J., Heafner, J., Keysar, B., "Your morals depend on language", 2014, p.1

¹⁵⁰ Hellmann, A., Patel, C., Tsunogaya, N., Foreign-language effect and professionals' judgments on fair value measurement: Evidence from Germany and the United Kingdom. J. Behav., 2021

accounting, indeed, "in financial reporting texts . . . much is implied and the mere knowledge of terms is not sufficient to achieve high quality" ¹⁵¹.

In order to achieve these translated high-quality standards, the IFRS is making available a terminology list, with all those words that are common for the translation of IFRS, together with their meanings. However, because of the above stated limitations related to culture and absence of equivalence, even in presence of this list there are diverse perceptions and interpretations of the various notions.

In addition, such list holds some discrepancies, providing multiple translations for the same notion, with no demonstration for their dissimilarities.

For instance, it provides two translations for "fair presentation" in French and Italian but the German term "Bilanz" is used both to represent "balance sheet" and "statement of financial position", which might lead to a loss of certainty and distinction between terms.

Another problem is that there might be two official forms of IFRS for some European languages, which of course will reduce comparability and equivalence. As a matter of facts, one of this form is controlled by the IFRS foundation's translation services and the other is developed by the EU.

Nevertheless, only recently the demand for translations has become relevant in the process of setting standards. As stated by Coman "the Japanese translations that have been produced to date really highlight that IFRSs have been designed by English speakers for English speakers, with long, wordy sentences containing language which is wide open to interpretation"¹⁵².

This has led the IASB to modify some terms in the English version, for example, changing "should" into "shall", decreasing doubts and uncertainties for other languages.

But the emergence of such errors might lead to a loss of reliability, however, they can be adjusted, even if such adjustment may be understood as a modification in the meaning and message.

For instance, the shift from "should" to "shall" demanded a justification: "By replacing "should" with "shall", the Board does not intend to change the

Linguistics, 2004, vol. 32, p.140

152 Coman, R., 'Japan Moves Towards IFRS', Chartered Accountants Journal, 2010, Vol. 89, No. 8, p.45

¹⁵¹ Mourier, L., 'Communicating Financial Reporting Across Continents', Hermes, Journal of Linguistics, 2004, Vol. 32, p.146

requirements in the Standards, but to clarify that it interprets "should" as meaning "shall"".¹⁵³ When changing terms, a consistency in the words is needed in order to prevent the fact that people might perceive a change of meaning that is not there, even if this might result in lowering the value of the translation.

An additional limitation occurs when there are certain words that are used both in everyday circumstances and in a very technical context, like the accounting one.

For instance, the German word "Vorsicht" can be translated into English as "attention", "carefulness", "caution", "prudence", or "conservatism", but only the last two can be used in an accounting situation.

Certain terms might be straightforward when used in the traditional context, but when applied to the context of accounting, for example, they might lead to some relevant misunderstandings, needing some clear differentiations to be made.

These misunderstanding can lead even to some legal repercussions, for example, a Swedish firm was accused of having disclosed inappropriate information based on the Swedish translation of certain standards, even if it seemed to follow the same meaning of the original version.

In addition, it is important to consider the costs and time involved in the process of translation, containing the interval between the disclosure of standards, their evaluation and review in the original version and the translated one, which might turn into an additional limitation and obstacle¹⁵⁴.

There are solutions that are developed in order to cover the costs, which are solved in part by governments and by professional groups, but this may be done differently according to the country.

3.4 Translation issues and misunderstandings

A lot of studies have been developed analysing the limitations of translation in accounting context, which is clear can result in different practices, because of errors, misunderstandings, and misperceptions about the message of financial information.

¹⁵⁴ Street, D. L. and R. K. Larson, 'Large Accounting Firms' Survey Reveals Emergence of "Two Standard" System in the European Union', Advances in International Accounting, 2004, Vol. 17, pp. 1–29

¹⁵³ IASC Foundation, Exposure Draft of Proposed Improvements to International Accounting Standards, 2002

3.4.1 Technical notions and probability expressions

Before considering any trouble in translation it is necessary to analyse some literature about the theory of words.

The understanding of specific terms is highly reliant on how much a specific concept is shared across different countries. The meaning of such concepts can be defined as "denotative" or "connotative" meanings, which should not be considered as two separate and independent branches, but they are working together in order to provide an appropriate message. The first, is the proper literal meaning of a particular term, also known as the "dictionary meaning" for example, the meaning of "asset" is "a resource controlled by an entity".

On the other hand, connotative meaning is the "association, subjective, and affective meaning. It refers to the effect of a word on people in different cultures" which again can be linked to the notion of "fair value" that can be interpreted in various ways according to the users reading it.

Evans emphasises the fact that when translating, there is the probability that the original version of the text might modify or even lose the "denotative meaning", for example, the terms "true and fair view", "prudence" when translated from English to German might be very tricky, since the words that are selected to translate are already connected to a specific meaning in the target language ¹⁵⁷.

All of this can be related to the definitions of Saussure, who identified the necessity to create a distinction between the word and what message the word is trying to provide.

He distinguishes the "signifier" (the "signifying element", for example dog which is the same word for perro in Spanish, or chien in French) compared to what is "signified" (the "signified element"), that is the object, the image that the word is conveying¹⁵⁸.

 $^{^{\}rm 155}$ Omar, Y.Z., "The challenges of denotative and connotative meaning for second language learners", 2012, pp.300

¹⁵⁶ Omar, Y.Z., "The challenges of denotative and connotative meaning for second language learners", 2012, pp.300

¹⁵⁷ Evans, L., "Language, translation and the problem of international accounting communication" Account. Auditing Account. J.2004, pp.210–248

¹⁵⁸ Saussure, F., "Troisième Cours de Linguistique Générale (1910–1911), (Saussure's Third Course

In addition, there are certain notions that simply cannot be translated into a foreign language. For the term "asset", for example, the literal German translation is ""Vermögensgegenstand", which is not providing the message of "future economic benefits" as required by the IASB but rather it is emphasising the ability to cover liabilities, with a much broader meaning that is not appropriately matching with the original English version.

Other differences between English and German emerge with probability expressions like "probable, reasonable and control" that are interpreted in dissimilar ways, mostly because of factors related to the culture or inappropriate equivalent terms¹⁵⁹.

As said before, there are different registers, particular terms used by various groups in society, for example there is a specific technical register of words used by doctors, professors, and accountants of course, which are not necessarily the same words used by ordinary people every day, that will adopt an everyday register. For instance, if the word "depreciation" is looked out in the dictionary it is defined as "loss of value", but it is not the true message that accountants want to provide, indeed, with "depreciation" true meaning in accounting is "to allocate cost of an asset over its life charging it against income year by year", which has nothing to do with the definition "loss of value".

Another characteristic worth to be stated is the one of "hypernyms", that are words with a wide coverage of things, whose adoption might be dangerous. For instance, the word "colour" covers a lot of different individual colours, but using this term when defining the situation of a traffic light might be very risky, with the necessity to be very precise in the identification of the colour.

In accounting particularly, there is another problem to be considered, which is the fact that accountants prepare annual reports and balance sheet that are read and used by non-accountants, creating an extra problem of communication.

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of Lectures on General Linguistics)"(translated by and edited by E. Komatsu and R. Harris), Pergamon, London, 1910

¹⁵⁹ Doupnik, T. S. and Richter, "The impact of culture on the interpretation of "in text" verbal probability expressions", Journal of International Accounting Research, 2004, pp. 1-20.

3.4.2 Example: True and fair view

The "True and Fair view" has become a typical example of translation problems in accounting, being a term that is closely related to the English culture: "The problem is not primarily a question of finding words but rather a meaning that in each language would convey the original idea. Since the concept did not exist in the accounting cultures of the other countries, it obviously could not be translated. Here, different countries chose different strategies when the directive was to be incorporated into the law." ¹⁶⁰

The idea that the ultimate objective of financial statements is to give a true and fair view comes first in the United Kingdom with 1947 Companies act, and then expanded to other Commonwealth countries, and to European Member states thanks to the EU fourth directive on company law. At the beginning British law had said that the financial statements should give a "true and correct view", but accountants told the government that the term "correct" was not a very sensible word in accounting. For example, it would be possible to us FIFO or weighted average for inventory valuation: they are both allowed and reasonable which is "correct", but it also would be possible to use either the cost of a building in the balance sheet or the fair value of the building, both allowed and reasonable, and therefore "correct"; for such reasons "correct" is not a sensible word leading to its change into "fair", adopted by all English speaking countries.

Regarding France, Germany and Italy, before European harmonization, the German/Italian audit report said that financial statement had just to comply with law, and no other requirement or suggestion for true and fair was needed.

If looking at the French word for it is "regularité et sincérité" conveying a message of following the rules without cheating.

But then in Europe, harmonization led to the true and fair view being spread around all the European Union.

In table 3, there are the translations in date order of implementation of the Fourth Directive, according to the studies made by Nobes¹⁶¹.

¹⁶⁰ Dahlgren J., Nilsson S.A, "Can Translations Achieve Comparability? The Case of Translating IFRSs into Swedish", Accounting in Europe, 2012, 9:1, 39-59,

Nobes, C., "The True and Fair View Requirement: Impact on and of the Fourth Directive", Accounting and business research, 1993, Vol.24, No.93, pp.35-48

In English we know there is the adoption of "a true and fair view", with two different adjectives where "true" means in "accordance with the facts" and "fair" means "not misleading".

The Dutch when they first got a Company's act used "een getrouw beeld" which is the same of "true and fair view", that can be considered as the country that translated it in the best way.

In Denmark, there is the adoption of "Et retvisende billede" meaning "a right looking picture", which is a pretty good translation even if not a literal one.

In French, "une image fidèle" representing a faithful presentation, in which the word "fidèle" is including both "fair" and "true", hence adopting just one adjective instead of two like in English; in addition, while the original English version of TFV was considered as a solution to be implemented when the already existing rules and law did not provide enough direction, in French it was regarded as "The True and Fair View is the principle that should be used when a rule does not exist or when an existing rule is inadequate for describing the reality" which is proposing a quite different message.

In Germany, there is a long expression "unter Beachtung der Grundsätze ordnungsmässiger Buchführung ein den tatsächlichen Verhältnissen entsprechendes Bild", a picture in accordance with the actual circumstances, which is an interpretation of only the adjective "true".

In Spain, "la imagen fiel" with the use of the article "la" meaning "the" opposed to the general "a" in English.

When the Italian government decided to translate this, they decided to get back to the original English version adopting two adjectives, with "rappresentare in modo veritiero e corretto", even if "veritiero" is not the normal Italian word for "true" and "corretto" doesn't really mean "fair", with the same happening in Portugal.

In Finland, the focus is focusing on "correctness" again, which might be misleading. In Poland, Kosmala MacLullich discovered that there are a lot of signifiers used to represent TFV in Polish, in which a lot of them concentrate on "correctness". She

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 $^{^{162}}$ Morisaux, R., "Normes d'Exercice Professionnel et proposition d'un outil d'aide a` la planification", (CNCC), 2007, p. 13

explained that this large variety might be linked to the fact that there is an absence of agreement about TFV in Polish which then results in incompatibility¹⁶³.

UK (1947) Ireland (1963)	A true and fair view
Netherlands (1970)	Een getrouw beeld
Belgium (1985) Denmark (1981)	Et retvisende billede
France (1983)	Ecretioniae dilicae
Luxembourg (1984)	Une image fidèle
Belgium (1985) Germany (1985)	Ein den tatsächlichen
	Verhältnissen entsprechendes Bild
Greece (1986)	Ten pragmatiki ikona
Spain (1989)	La imagen fiel
Portugal (1989)	Uma imagem verdadeira e apropriada
Italy (1991)	Rappresentare in modo veritiero
	e corretto
Finland (1992)	Oikeat ja riittävät tiedot
Sweden (1995)	En rättvisande bild
Norway (1998)	Et pålideligt bilde

Table 3: TFV signifiers in different EU countries

We can summarise all these translations with some observations:

The original version has "a" true and fair view with the use of the indefinite article, but "the" true and fair view in Greek or Spanish preferring the definite article. This perhaps is because the governments in Spain or Greece decided that "a" true and fair view sounded a little too vague, particularly because the numbers will be used for tax calculations, requiring something more accurate and definite. However, in this way the translation deviates from the original concept and resulting in a different meaning.

¹⁶³ Kosmala MacLullich, K., "Truth and fairness in accounting: a case of polish transition economy", CERT Discussion Papers, Heriot-Watt University, Edinburgh, 2001

- There are two adjectives in the original version, but only one adjective in most of the translations.
- The German long sentence is more a version of "true" rather than "fair".

In conclusion, the results suggest that translations of "true and fair view" into the official language versions of the EU member states are not literal translations of the original English and are not applied equivalently maybe because its meaning is not clear even in the original version, but it is evident that also the applications of such expression may vary.

Indeed, Parker stated: "Whilst it is at first sight surprising that the Continental European countries have accepted such a concept it is clear that what they have really imported is a form of words which they are translating and applying so as not to disturb unduly what already exists. Perhaps this is the fate of all indefinable concepts" 164.

Many countries applied their own cultural and professional background on what they regarded as something far and strange to them¹⁶⁵, resulting in accounting concepts that can't be standardised when they are perceived in different ways by distinguished countries and cultures.

3.4.3 Example: Depreciation, Amortisation and Impairment

As said before, abstract concepts are characterized by particular words and terminology that can be identified as "special registers" ¹⁶⁶, "languages for specific purposes" ¹⁶⁷ or even "jargon" ¹⁶⁸.

These various registers can have various purposes and uses, such as promoting the connection of information for people inside a group, permitting the exchange of appropriate and adequate statements, but they can also reject those members who

¹⁶⁵ Parker, R. H., "Importing and exporting accounting: the British experience", International Pressures for Accounting Change, Prentice-Hall/ICAEW, 1989, pp. 7-29.

¹⁶⁴ Parker, R. H., "Importing and exporting accounting: the British experience", International Pressures for Accounting Change, Prentice-Hall/ICAEW, 1989, pp. 23

¹⁶⁶ Salmond, V, 'The development of special registers in English: A historical review', 1998, Vol. 2, de Gruyter, Berlin and New York, pp. 2502-11.

¹⁶⁷ Engberg, J., 'Languages for specific purposes', Elsevier, The Encyclopedia of Language and Linguistics, 2006

¹⁶⁸ Allan, K., 'Jargon', Elsevier, The Encyclopaedia of Language and Linguistics, 2006

are not involved. At the same time, jargon can be essential in order to identify some peculiarities that are not present in the traditional language.

According to Mills: "As with other professional fields of knowledge, accounting in both its theory and practice is, and has been throughout most of its recorded history, peculiarly dependent on a specialised vocabulary or terminology, both to transact its business as expeditiously as possible and to differentiate it from other disciplines" 169.

The translation of such specialised terminology can be perceived as a highly complex task, as identified by Alexander and Nobes, who tried to analyse the similar but not equivalent significance of the terms in English "Depreciation", "Amortisation and "Impairment"¹⁷⁰.

Following the Table 4 regarding the translation of two accounting standards, IAS 16 on property, plant and equipment (tangible assets) and IAS 38 on intangible assets, it is possible to observe that in English there are two different words for the same thing: "depreciation" related more to the wearing out because of the use of a machine for example, by contrast "amortisation" is related more to an intangible asset like a license that lasts ten years, connected to the passing of time.

However, "depreciation" is not a very good word to use, it would be better to adopt the term "wearing out" because "depreciation" implies to non-accountants a kind of fall in value, which is not what is being measured with the world "depreciation".

In Italian, there is the use of the word "ammortamento", related to the fact that the asset is "dying", a word being used both in IAS16 and IAS38. The same happens in French and in German, but the latter, with the word "planmässige Abschreibung" is providing more the meaning of "scheduled off writing", telling what the accountants are doing because the assets is dying, gradually and in an organised way, and writing off a bit of the assets each year.

The Spanish translation for IAS 16 has both the words "amortización" and "depreciación", with the last one being used mostly when talking about an asset wearing out because of usage.

In Portuguese, the two words like in English are used.

¹⁷⁰ Alexander, D. and Nobes, C., "Financial Accounting: An International Introduction", Pearson/Financial Times, 2007, p.186

¹⁶⁹ Mills, P. A., 'Words and the Study of Accounting History', Accounting, Auditing & Accountability Journal, 1989, Vol. 2, No. 1, p.21

So, it is possible to observe that a lot of them are not direct literal translations, as a matter of facts, the German word meaning "scheduled off writing" is not at all the translation of "depreciation", which may lead to some troubles in their interpretation and application.

Language	IAS 16	IAS 38
English	Depreciation	Amortisation
Italian	Ammortamento	Ammortamento
French	Amortissement	Amortissement
German	Planmässige Abschreibung	Planmässige Abschreibung
Spanish	Amortización (sometimes depreciación)	Amortización
Portuguese	Depreciação	Amortização

Table 4: Translations of IAS16 and IAS38

The next thing that might happen to an asset is the damage, the so called "impairment" 171.

The signifier is "impairment", but its meaning is something very complicated to define. The word can be traced back to the Latin word "impeiorare", meaning to make things worse. There is also a completely different Latin word "imparitas", meaning inequality, which has nothing to do with "impairment", but it looks somewhat a similar word.

However, the Cambridge English Dictionary, defines it as "to spoil something or make it weaker so that it is less effective"¹⁷², which may have a valuation that is not linked just to the accounting world.

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¹⁷¹ Christopher Nobes, Christian Stadler, "Impaired translations: IFRS from English and annual reports into English", Accounting, Auditing & Accountability Journal, 2018, Vol. 31 Issue: 7, pp.1981-2005

¹⁷² Cambridge English Dictionary, definition of "impairment"

On the other hand, following the accounting register, the set of technical terms used by accountants, impairment is not defined in IAS36, but "impairment loss" is, being considered as a particular type of asset write-down caused by physical or economic damage.

In accounting, the word appears in America first by the FASB in 1980, and it gets in international standards in 1982 with SFAS61 (Accounting for Title Plant) and IAS16 (Property, plant and equipment).

As discussed before, the word "depreciation" is important here, to be understood as a systematic allocation of cost over useful life, with the same gold amount every year, quite a different thing from impairment, an unsystematic response to an unintended event, which is often nothing a year and then suddenly a horrible surprise happens, a large impairment of an asset which is damaged.

If we look at the attempts to translate the word "impairment", we can distinguish four major aspects of it:

- 1. Deterioration/damage (physical or economic) of an asset: nothing yet to do with accounting, for instance, a factory that is burnt down or a vehicle that is stolen.
- 2. Actual fall in value: because the factory had a fire it lost some or all of its value, which is still not accounting but an economic event.
- 3. Adjusting the asset (for some falls in value), the credit: here we move to the accounting field, accountants might reduce the value of the asset on the balance sheet, but they might not too. If the assets held a cost minus depreciation, it might be such a low number that actually the asset is still worth more than that, even if it has been damaged. So, for some damage accountants end up not having to adjust the balance sheet.
- 4. The debit (impairment loss): affecting the income statement.

Now we look at translations of the term "impairment" related to IAS36, in table 5. The Swedish official version of IAS36 says "nedskrivning" with "skrivning" meaning "writing", leading to the literal translation as "write-down".

The German law talks about "ausserplanmässige Abschreibung", and here it is curious to observe that while the German word for depreciation is "scheduled off writing", its related word for impairment is "unscheduled off writing" or "surprising, outside of the plan writing off the assets".

German translation of IAS36 "Wertminderung", has a meaning of "fall in value", however, it would have been better to use a word expressing damage, and because of this lack of precision in some German reports, there is the term "Wertminderung" accompanied by impairment in brackets.

The same happens also for the Danish, Norwegian, French, Italian, Spanish, Polish, Russian and Finnish translations, providing the meaning of "fall in value".

But it is significant to focus on the French translation, as a matter of fact, the French official word for impairment is "dépréciation", which may lead to some serious problems in the translation, being very similar to the word "depreciation" but with a totally different meaning.

Language	Signifier	Literal Translation
Swedish	Nedskrivning	Write-down
German (Law)	Ausserplanmässige	Unscheduled
	Abschreibung	write-off
German (IAS 36)	Wertminderung	Fall in value
Danish	Vaerdiforringelse	Fall in value
Norwegian	Verdifall	Fall in value
French (EU, CAN)	Dépréciation	Fall in value
Italian	Riduzione di valore	Fall in value
Spanish (EU, ARG)	Deterioro del valor	Fall in value
Polish	Utrata wartości	Fall in value
Russian	обесценение	Fall in value
Finnish	Arvon alentuminen	Fall in value

Table 5: Signifiers and literal translations of "impairment"

The terms providing the message of "fall in value" or "write down" are too much vague, too big to be useful (hypernym) since there are a lot of reasons why an asset might have a fall in value which is not damage; for instance, if you bought some

shares, they go up and down every day in the stock market, and it doesn't mean they are damaged.

Following with Table 6, it is clear that almost all the terms used for "impairment" in translations of IAS 36 do not provide the message of "damage to assets".

It is possible to observe that the Dutch translation "bijzondere waardevermindering" is a neo invented special accounting word, which can be translated as a "special fall in value", making the term a little less vague.

The amusing translation is the European Portuguese one, "imparidade" which adopted the wrong latin root, "imparitas" instead of "impeiorare", providing a literal translation of "inequality", which is completely wrong and far from the true meaning of impairment.

In Brazil, they realised that this translation was not accurate and there were some mistakes, so they adopted "redução ao valor recuperável" meaning "reduction in recoverable amount", related to the aspect number (3) cited before, adjusting the assets, which related to the accounting activity, rather than aspect number (1) which represents a physical or economic damage, that is adopted in original English version. It still doesn't relate to the appropriate meaning of damage, but it is more informative than simply a fall in value.

The Chinese and Japanese have the same first character, 减, in Japanese providing the meaning "decreasing-losing", and the Chinese has something pretty similar, translating the word "impairment loss" using a character meaning "damage", which instead is not appearing on the Japanese version.

The only version in which there is the adoption of the term "damage" is the Korean one, providing a more proximate message.

Language	Signifier	Literal translation
Arabic	الأصول قيمة إنخفاض	Fall in value
Dutch	Bijzondere waardevermindering	Special fall in value
Portuguese (EU)	Imparidade	Inequality
Portuguese (Brazil)	Redução ao valor recuperável	Reduction in recoverable amount

Chinese	减值	Fall in value
Japanese	減損	Decreasing-losing
Korean	손상	Damage

Table 6: Signifiers and literal translations of impairment, part 2

Hence, it is possible to summarise these twenty translations by stating that:

- Most of them are too big and too vague (hypernyms), they communicate something bigger than impairment. This might be problematic when investors (who are not accounting professionals) read the annual reports in different languages, and when translators try to translate such terms back to English.
- Some are special coinages, inventions just for accounting, such as the Dutch and the Japanese. Even the Portuguese one, which was created almost by error, now has a special meaning in the accounting registers. Especially, even the Portuguese word "imparidade" is taken by accountants to mean "impairment", even if it didn't mean anything to the accountants originally.
- One is equivalent, as a matter of fact, the Korean translation is conveying the appropriate meaning of damage.

However, Nobes and Stadler, in their analysis are not proposing the translators of international standards to follow always the literal meaning of English.

If they did it, they would not be able to translate "depreciation" appropriately for example, because the literal English dictionary meaning "depreciation" is not what is really meant in accounting, which is a continuous charge of depreciation even when the asset increases in value.

The key point for translators should be to try to guarantee the same message to readers in the target and source language. Regarding "impairment", the adoption of more literal translations might have facilitated that.

Impairment/damage	Korean
Decreasing-losing	Japanese
Fall in value	Arabic, Chinese, Danish, Finnish, French (EU and
	Canadian), German, Italian, Norwegian, Polish,
	Russian, Spanish (Eu and Argentinian)
Special fall in value	Dutch
Reduction in recoverable value	Portuguese (Brazilian)
Writing-down	Swedish
Unscheduled off-writing	German law
Inequality	Portuguese (EU)

Table 7: Summary of literal meanings of terms for "impairment" in translations of the title of IAS36

3.5 Distances in terms used for financial reports

It is now interesting to have a look at the terms used in financial reports, and the differences in the adoption of specific terminology 173 .

Related to this, first we evaluate the English language version of the European Fourth Directive on Company Law, of the following specific six terms, then we look for the equivalents of these terms in International Standards, to identify differences that might lead to complex translations and misunderstandings.

These six terms are:

- (a) Fixed assets
- (b) Goodwill
- (c) Stocks
- (d) Debtors
- (e) Own shares
- (f) Turnover

As we are going to see, there are two types of English for certain terms, in one group there are English words related to the European Fourth Directive¹⁷⁴ (only one of the

Analysis from the lectures of Nobes C., from the course "Contemporary issues in accounting and auditing", 2021

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31978L0660&from=en

previous lists is used even in International Standards) and one group of words related to the IFRS.

In the article 9 of the Fourth Directive, the term "fixed assets" is applied to represent the old English term "non-current assets".

Then it is possible to find "stocks", which is the old English version for "inventory", including raw materials, consumables, work in progress, finished goods and goods for resale and payments on account.

Regarding "debtors", it is the old version for receivables, which is not to be confused with the Italian word "debitori" which is actually the opposite.

"Own shares" are part of the investments, while moving to article 23 of the directive, we can observe "net turnover", which is the old-fashioned English word for "sales". If we move to the IFRS, how do these terms look like?

By analysing the Commission Regulation (EC) No 1126/2008 of 3 November 2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council¹⁷⁵ we can observe that the international standards use the term "non-current assets" for "fixed assets".

Looking at IFRS 3, "goodwill" is used even in International Standards, being the only one of the previous terms to be characterized just by one English version.

"Stocks" are identified as "inventory" and "debtors" as "receivables".

Looking at IAS32, there are no "own shares" but at paragraph 33, they are presented as "treasury shares", which is the corresponding international standard term.

Regarding "turnover", analysing the IAS 1, the proper international standards term for the first line of the income statement is "Revenue".

Moving to the practice, if we now analyse two English speaking companies, Glaxo and Caterpillar, what have they made of the previous six terms? Have they used the old British terms, the international standards ones or do they even need something else?

The English company Glaxo is using international standards, by analysing its 2019 annual report, from the consolidated balance sheet (even though in IAS1 it is called the statement of financial position) there is the usage of the International standards'

¹⁷⁵ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008R1126&from=EN

terms "non-current assets", "inventory", "receivables", "goodwill" (not surprisingly since it is not changing), there are no "treasury shares"; while moving to the consolidated income statement there is the word "turnover" instead of "revenue", leading to a mixture of terminology in this company, some of which are IFRS terms and some are old legal British terms.

The US company Caterpillar, which is adopting US GAAP, in its 2019 annual report shows the usage of the terms "Sales & revenues" in the income statement, while in the consolidated statement of financial position there are no "non currents assets", which is a bit odd since current assets have their own title, but it is possible to identify "receivables", "goodwill", "inventory", and "treasury stocks" (IFRS calls them "treasury shares").

To sum up, there are different types of English terms that may arise in the presentation of financial statements, so it is necessary to be careful about which document is being used, in order to avoid misunderstandings and errors.

European Fourth Directive	International Standards
Fixed assets	Non-current assets
Goodwill	Goodwill
Stocks	Inventory
Debtors	Receivables
Own shares	Treasury shares
Turnover	Revenue

Table 8: Comparison of English versions for specific 6 terms

3.5.1 Distances in Italian accounting terms

It is interesting to have a look at an example of another language, in this case Italian, analysing the Italian version of Campari annual report and its English translated version, followed by an investigation of some anomalies that might arise when taking a sample of some Italian listed companies, and then comparing their original version of reports and their English translation.

Before doing that, it is better to investigate the Italian directive and the Italian IFRS.

Starting from the Italian translation of the Fourth Directive on company law¹⁷⁶, looking at the section regarding the balance sheet, the Italian term for "fixed assets (old English)/non-current assets (IFRS)", is "immobilizzazioni" which is near to the term "fixed". "Goodwill" is "avviamento" and "crediti" is the Italian word for "debtors (old English)/receivables (IFRS), which may lead to some confusion.

The legal word for "inventories" is "scorte", while "own shares (old English)/treasury shares (IFRS)" has a pretty literal translation into "azioni proprie".

For the first line of the income statement, the legal Italian expression in the Directive for "turnover (old English)/revenues (IFRS)" is "importo netto".

If we now look at the Italian version of these six terms in the Italian version of international standards¹⁷⁷, we can find "attività non correnti" related to "fixed/noncurrent assets", "rimanenze" for "inventory", "crediti" for "debtors/receivables", and "ricavi" for "turnover/revenues", "azioni proprie" for "own shares/treasury shares", and "avviamento" for "goodwill".

Hence as it is possible to notice, there is difference between the Italian Law and the Italian translation of international standards for these 6 terms, and even if there is more consistency than in the English framework, it may again lead to some confusion.

English version	Italian Law	Italian version of IFRS
Fixed assets/Non-current	Immobilizzazioni	Attività non correnti
assets		
Goodwill	Avviamento	Avviamento
Debtors/receivables	Crediti	Crediti
Stocks/Inventories	Scorte	Rimanenze
Own shares/treasury	Azioni proprie	Azioni proprie
shares		
Turnover/revenue	Importo netto	Ricavi

Table 9: Comparison of terms used in English and different versions in Italian

177 https://eur-lex.europa.eu/legal-

content/IT/TXT/PDF/?uri=CELEX:31978L0660&from=en

¹⁷⁶ https://eur-lex.europa.eu/legalcontent/IT/TXT/PDF/?uri=CELEX:31978L0660&from=en

3.5.1.1 The translation of the Annual report of Campari from Italian To English

If we now take as an example the Italian company Campari, what does Campari call these 6 terms in its 2019 Italian report and its English translation of that?

First of all, there is a section called "impairment" in the Italian annual report of Campari at page 91^{178} , in which the company realises that there is a major problem in translation, as a matter of fact instead of using the proper Italian word "riduzione di valore" they decided to create a section in the report with the English version "impairment", since no one can misunderstand it, even if it is not an Italian word, so they created a solution to the problem just adopting the English word.

Regarding the selected 6 terms:

(a) *Fixed assets*: In the report's notes they are presented as "Immobilizzazioni materiali nette", which is the term used in law, whereas the term in international standards is "attività non correnti", so they have chosen to adopt the legal term here.

However, there is a mixture of terms, since if we look at the consolidated balance sheet at page 57, there is "Attività non correnti", followed by "immobilizzazioni materiali nette" too.

If moving to the English annual report of Campari¹⁷⁹, regarding the consolidated statement of financial position, at page 55, we can observe "non-current assets", with "net tangible fixed assets" being there too.

- (b) *Goodwill:* As stated before, this term is the same both in English and Italian regardless of if it is referring to the 4th directive or to the international standards. As a matter of facts, in the Italian report we can observe "avviamento" and in the English version "goodwill".
- (c) *Stocks:* In the consolidated balance sheet of the Italian version there is the usage of the international standard's word "rimanenze", the same happening

¹⁷⁸ Campari Italian Report, 2019

¹⁷⁹ Campari English Report, 2019

in the English version with "inventories", even if in the notes sometimes there is the usage of the old English term "stocks" too.

- (d) *Debtors*: In the Italian report we can observe "crediti finanziari correnti", which is the always the same no matter if referring to the international standards or not, while in the English version we have the international standards word "receivables".
- (e) *Own shares*: in the Italian report there is the usage of "azioni proprie", while in the English version there is the adoption of both the old term "own shares" and the International standards' one "treasury shares", which may lead to some confusion.
- (f) *Turnover:* Looking at the consolidated income statement of the Italian report, we have the term "Vendite nette" with the international standards' word being "ricavi" and the legal one being "importo netto" leading to three different ways of saying the same thing in Italian. For the English version, there is the usage of the term "net sales" when the proper term according to international standards is "revenue", but it is not creating any issue since anybody can understand its real meaning, even if it is not actually the international standards term. Relevant also is not to confuse it with "Staff turnover rate" presented in the report.

After having analysed the previous six terms, it is worth to underline also the effects and importance of the word "ammortamento", which is the Italian expression for both depreciation and amortisation.

In the Italian report, at page 66 it is used in relation to "attività immateriali", meaning "intangible assets", hence interpreting amortisation.

But the word is used for tangible fixed assets too, as can be noted at page 68 with "immobilizzazioni materiali", interpreting depreciation.

In the English version of the report, the issue about amortisation is examined on the note about "intangible assets" where it is possible to find this statement: "intangible assets are recorded at cost net of accumulated amortisation and any impairment

losses" (p.64) which is a good translation, while for example, in French it would be much more complicated using "amortissement" and "dépréciation", leading to some confusion.

Moving to "tangible fixed assets" (p.66), here we notice "tangible fixed assets are recorded at cost net of accumulated depreciation and any impairment losses", which is conveying the right message.

They did a good job of translation since in intangible assets they used the word "amortisation" as a translation of "ammortamento", and when they get to tangible assets they adopted the word "depreciation" when in Italian the word is always "ammortamento".

So, the translators have seen the same word "ammortamento" but cleverly translated it as "amortisation" for intangible assets, and as "depreciation" in relation to "tangible assets".

3.5.1.2 Analysis of Italian listed companies' reports

In order to get some more relevant data about the distances in terms used for different versions of companies' annual reports, the same analysis done with Campari was performed on a sample of 80 Italian companies listed in the Italian stock exchange. (See Appendix for the data collected)

As said before, there are different version to represent the same concept both in Italian and in English, depending on the adoption of the legal or IFRS term, and it is interesting to have a look of how companies are selecting a particular word instead of another.

Before starting, the 80 companies were selected based on the availability of the Italian original report and its English translated form. It was curious to notice that a large number of firms were excluded from the analysis simply because there was not the equivalent translated version available on the dedicated website, which of course might not be perceived in a positive way by potential foreign investors who are interested in the Italian company.

Now, we start investigating on the data that emerged about the various terms.

(a) Fixed assets/Non current assets and Immobilizzazioni/attività non correnti

From the analysis of the 80 companies, it has emerged that in Italian the most preferred terminology was IFRS version "attività non correnti", as a matter of facts, it was present in each of the 80 reports analysed.

Moving to "Immobilizzazioni", it was not used in 44 reports, but implemented as a subsection together with "attività non correnti" in 36 of them.

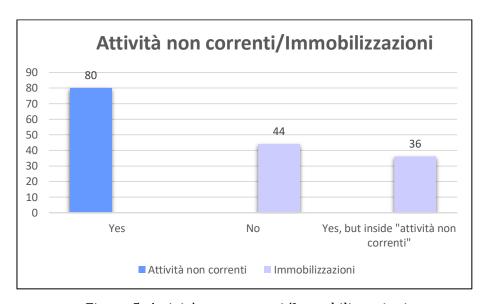


Figure 5: Attività non correnti/Immobilizzazioni

When such terms were translated in English, looking at the translated version of the report, it is possible to notice that the IFRS term "non-current assets" was adopted every time, and it is curious to see that the legal term "fixed assets" was employed a lower number of times (10 times) with respect to its Italian equivalent ("immobilizzazioni", 44 times).

Hence, it is clear that there are some inconsistencies in the adoption of accounting terminology regarding the assets from Italian to English.

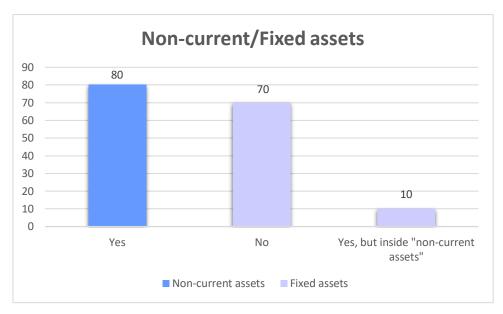


Figure 6: Non-current/Fixed assets

(b) Goodwill/avviamento

Here the evaluation of the 80 companies accounting terminology is much simpler, since both in Italian and in English there is just one word that is conveying the message.

However, there were 3 anomalies out of the 80 reports analysed:

- In the Italian report of the Italian company Acotel, the term "avviamento" has
 never appeared, and it was simply reported as "attività non correnti". This of
 course might cause some confusion since its translated version in English
 was "goodwill", creating some serious inconsistencies.
- In the Italian reports of Eni and Corsero, the companies decided not to adopt the Italian word "avviamento" at all, but the English term "goodwill". The employment of the same word in the two languages can be considered as a clever move, since it is eliminating any possible misunderstanding.

(c) Debtors/receivables and crediti

Again, the analysis here is not complicated since in the 80 Italian reports the term "crediti" is always applied, the same happening with the IFRS term "receivables".

The word "debtors" never appeared in the consolidated financial position, with some exception regarding the notes of 4 reports.

(d) Stocks/Inventories and scorte/rimanenze

From the examination of the 80 Italian reports, it has emerged that each of the 80 companies have adopted the IFRS terminology "Rimanenze", with the legal term "Scorte" appearing just in the notes of 27 reports.

Moving to the English translated reports, the IFRS word "Inventory" is applied in the same way as in Italian, 80 times; on the other hand, "stocks" appears in the notes a little bit more than its Italian equivalent, 34 times.

Worth to be noticed is that in the English reports, "stocks" can also be used in relation to the Stock market, which can of course lead to some confusion, but in this case they were appropriately translated in Italian "azioni/titoli".

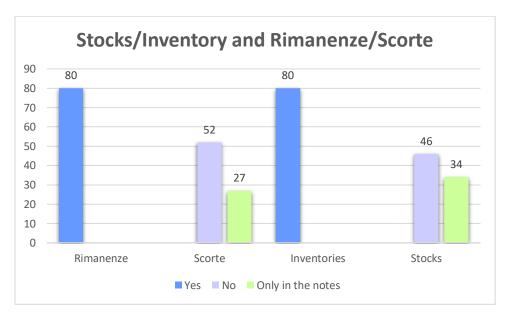


Figure 7: Stocks/Inventory and Rimanenze/Scorte

(e) Own shares/Treasury shares and azioni proprie

Since in Italian there is just one version, "azioni proprie", it is easy to understand that it used in all the reports analysed.

In the English reports, the conclusions emerging are more challenging, the IFRS terminology "Treasury shares" appears almost in each report, 74 times, while "Own shares" only 20 times.

It was curious to notice that 16 times there was the adoption of both "treasury" and "own shares" at the same time.

An anomaly has also emerged, as a matter of facts, just in 1 report (EL.EN), the terminology "treasury stock" was replacing the two versions, which usually is the terminology adopted by US companies. However, the meaning is always the same.

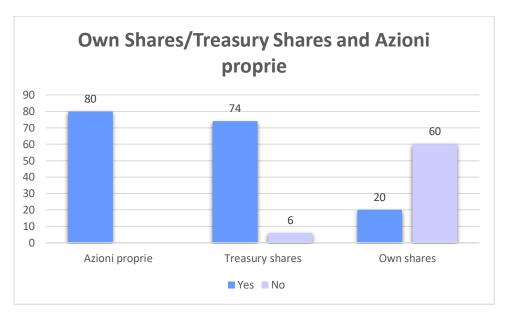


Figure 8: Own Shares/Treasury Shares and Azioni proprie

(f) Turnover/revenue and Importo netto/ricavi

In the Italian reports analysed, the IFRS term "Ricavi" appeared 76 times, only in 4 reports (Basic net, Davide Campari, Interpump group, Safilo) it was substituted by "Vendite", which is an additional terminology used. It is interesting to notice that "importo netto" is never considered.

In English, the IFRS "Revenues" is the most preferred version in comparison to "turnover", which is adopted just 34 times, but only in the notes.

Again, as in Italian, when the term "revenues" is not appearing, it is because it is being substituted by "Sales". However, in two cases, the English term "Sales" was adopted but in Italian there was the regular "Ricavi". So, there are these differences emerging regarding which term to adopt when translating reports from the original language.

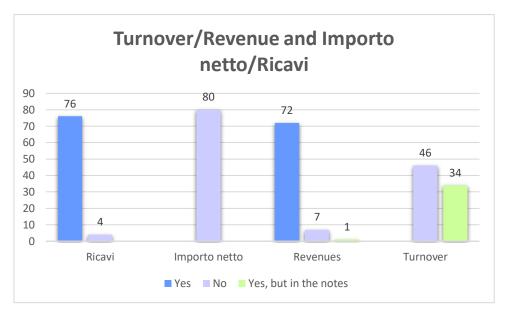


Figure 9: Turnover/Revenue and Importo netto/ricavi

(g) Ammortamento and amortisation/depreciation

The term "ammortamento", which is the Italian expression for both depreciation and amortisation, is worth to be analysed in detail since its effects and consequences are very relevant.

In the Italian reports explored, it is used in relation to "attività immateriali", "immobilizzazioni immateriali", hence interpreting amortisation.

But the word is used for tangible fixed assets too, indeed in the reports it is applied together with "immobilizzazioni materiali" or "attività materiali", interpreting depreciation.

When coming to their English translation, it was satisfying to see that they were translated in appropriate ways in each of the report investigated, depreciation used together with plant, property and equipment and amortisation always appearing together with intangible assets.

However, there were two reports that presented some peculiarities:

In Ascopiave's Italian report, in the consolidated income statement section, there is the term "ammortamenti e svalutazioni" which is then translated into "amortisation and depreciation". Written like this, it seems like "svalutazioni" is the Italian equivalent for "depreciation", while in English its closest translation is "write-downs".

In Eni's report, the Italian "ammortamento" is translated into "depreciation, depletion and amortization", including the word "depletion" which is not precisely conveying the same message and can cause some negative effects when interpreting it.

(h) Impairment and Riduzione di valore

In 78 of the reports explored, "riduzione or perdita di valore" are always implemented. Only in 2 cases there are some incogruencies:

- In Alkemy's report, impairment is translated also into "svalutazioni".
- In Leonardo's Italian report, surprisingly, the Italian word "riduzione di valore" was substituted by its English equivalent, maybe to avoid some errors in the interpretation. However, it is quite curious that just one company out of 80 decided to rely only the English version, since it might lead to some positive outcomes and avoid misunderstandings.

Regarding all the other reports, the Italian term was always accompanied by its English translation, sometimes in brackets to provide a better comprehension.

3.5.1.3 Results

From the elaborated data, it is evident that there are no big differences between the Italian original versions of the reports and their translations into English.

In some cases, there are some variations in the adoption of terms, whether IFRS or legal terms, but they are not causing any relevant negative effects.

But still, particular attention should be given to certain terms when coming to their translation, a visible example is the one of "ammortamento", which in English is expressed in two ways. Even the term "sales/vendite" is used in addition to the original versions to provide a better comprehension, since the meaning is not changing. From the analysis it is also possible to observe, that in some cases, the translators have perceived the potential difficulties in providing the message in the translated reports, so they have decided to apply the same term in each document: for example, the English term "impairment" in particular cases is used both in the Italian and English reports, since no one can misunderstand it, even if it is not an Italian word, creating a solution to the problem, the same happening for goodwill.

In conclusion, it is always better to have in mind that there is potential for misunderstandings and misperceptions, because the original message elaborated in the source language might not be comprehended in an equal way in the target language, because of diversity in the cultural, judgemental and personal characteristics of individuals involved in the process of translation and of the potential readers of that information.

As investigated before, there is a link between culture and language, the latter having an effect also on the way of thinking of people, leading to the fact that most of the times a perfect and literal translation is impossible to reach. Obviously, this is applied also on the accounting field, in which people speaking different languages might perceive differently even accounting concepts, which can lead such concepts to be lost in translation.

However, from the analysis it is clear that translation is not impossible: it might be considered as a complex process because of many factors and limitations involved but with the appropriate attention it can be implemented.

Conclusions

This project had the objective to shed light on the topic of Behavioural Accounting as a basic approach for the formulation of Accounting Theory, and in particular, to provide a good knowledge and understanding of how the process of translation of accounting concepts works, and how it can be influenced by human and behavioural aspects, such as cultural, educational and personal characteristics, trying to explore whether an equivalence between accounting terminology in different languages can be achieved, or if particular words are lost in the mechanism of translation.

As a matter of facts, certain accounting topics and terms require a complex process of translation, sometimes because those terms simply do not exist in the target language or because they are perceived differently and are associated to other concepts (TFV, Impairment).

For such reasons, translation can be viewed as an impediment for a consistent application and interpretation of IFRS, even more if there are different versions to express the same accounting concept.

As investigated, two English versions for particular accounting terms have been identified, one related to the European Fourth Directive on Company law, the so-called legal terminology, and another one connected to International Standards, and it was interesting to observe how they changed.

The same exploration was shifted to the Italian language, and it was clear that relevant attention should be given to certain terms and their legal and IFRS version, even if in this case there is more consistency between the two versions if compared to English.

In addition, an analysis was put in place, exploring the reports of 80 Italian companies listed in the Italian stock exchange, to investigate whether some peculiarities or even some errors emerged in the translation from the source language (in this case Italian) and the target one (English).

The data collected showed that no big differences emerged, sometimes some variations were evident but never causing some dangerous effects.

What is clear, is that special attention should be given to certain terms, such as "ammortamento", the Italian expression for both depreciation and amortisation, but it was satisfying to see that they were translated in appropriate ways in each of the

report investigated, depreciation used together with plant, property and equipment and amortisation always appearing together with intangible assets; with exception only of the reports of Ascopiave and Eni.

Another interesting fact that can represent a solution is that in some cases, the translators have perceived the potential difficulties in providing the message when coming to the translation of reports, so they have decided to apply the same term in each document (impairment, goodwill), or to adopt both terms, in English and Italian, with one of them in brackets to avoid errors.

Hence, it is always better to have in mind that there is potential for misunderstandings and misperceptions: the original message elaborated in the source language might not be comprehended in an equal way in the target language, because of diversity in the cultural, judgemental, and personal characteristics of individuals involved in the process of translation and of the potential readers of that information.

When all of this is analysed in relation to accounting, it is evident that people speaking different languages might perceive differently even accounting concepts, which can lead such concepts to be lost in translation.

However, from the analysis it is noticeable that translation is not impossible: it might be considered as a complex process because of many factors and limitations involved (culture, language, way of thinking of people) and for such reasons a literal translation is quite difficult to be reached, but with the correct and proper care it can be performed but accepting that it might contain some peculiarities and therefore might not be totally perfect.

Appendix

The 80 Italian Companies and their data analysed in the reports:

- Point (a) of the analysis:

V	Fixed assets	Non-current assets	Immohilizzazioni	Attività non correnti
A2A	No	Yes	Yes, but inside	Yes
	Yes, but inside	Yes	Yes, but inside	Yes
ACOTEL	No.	Yes	No	Yes
	Yes, but inside	Yes	Yes, but inside	Yes
AEFFE	Yes, but inside	Yes	Yes, but inside	Yes
AEROPORTO G. MARCONI	No	Yes	No	Yes
ALKEMY	No	Yes	Yes, but inside	Yes
AMPLIFON	No	Yes	No	Yes
ARNOLDO MONDADORI	No	Yes	No	Yes
ASCOPIAVE	No	Yes	Yes, but inside	Yes
ASSOCIAZIONE SPORTIVA ROMA		Yes	Yes, but inside	Yes
Astaldi	No	Yes	No	Yes
ASTM	No	Yes	Yes, but inside	Yes
ATLANTIA	No	Yes	No	Yes
AUTOGRILL	No	Yes	Yes, but inside	Yes
AVIO	No	Yes	Yes, but inside	Yes
	Yes, but inside	Yes	No	Yes
BASIC NET	No	Yes	No	Yes
BIANCAMANO	No	Yes	Yes, but inside	Yes
BIESSE	No	Yes	No	Yes
BREMBO	No	Yes	No	Yes
BRUNELLO CUCINELLI	No	Yes	No	Yes
BUZZI UNICEM	No	Yes	No	Yes
CAIRO COMMUNICATION	No	Yes	No	Yes
CALTAGIRONE EDITORE	No	Yes	No	Yes
CAREL	No	Yes	No	Yes
	Yes, but inside	Yes	Yes, but inside	Yes
CEMBRE	No	Yes	Yes, but inside	Yes
CEMENTIR HOLDING	No	Yes	No	Yes
CERVED	No	Yes	No	Yes
	Yes, but inside	Yes	Yes, but inside	Yes
DANIELI	No	Yes	Yes, but inside	Yes
DATALOGIC	No	Yes	Yes, but inside	Yes
DAVIDE CAMPARI	Yes, but inside	Yes	Yes, but inside	Yes
DELONGHI	No	Yes	Yes, but inside	Yes
DIASORIN	No	Yes	No	Yes
EDISON	No	Yes	Yes, but inside	Yes
EL.EN	No	Yes	Yes, but inside	Yes
ELICA	No	Yes	Yes, but inside	Yes
EMAK	No	Yes	Yes, but inside	Yes
ENEL	No	Yes	No	Yes
ENI	No	Yes	No	Yes
ESPRINET	No	Yes	Yes, but inside	Yes
GAROFALO HEALTH CARE	No	Yes	No	Yes
GEOX	No	Yes	Yes, but inside	Yes
GVS	No	Yes	No	Yes
FINCANTIERI	No	Yes	No	Yes
IGD SIIQ	No	Yes	No	Yes
IMA	No	Yes	Yes, but inside	Yes
INTERPUMP GROUP	No	Yes		
			Yes, but inside	Yes
INWIT	No No	Yes	No	Yes
IREN	No	Yes	No	Yes

ISAGRO	No	Yes	No	Yes
ITALGAS	No	Yes	No	Yes
ITWAY	No	Yes	No	Yes
LA DORIA	No	Yes	Yes, but inside	Yes
LEONARDO	No	Yes	No	Yes
MAIRE TECNIMONT	No	Yes	No	Yes
MEDIASET	No	Yes	Yes, but inside	Yes
MONCLER	No	Yes	Yes, but inside	Yes
NEWLAT	No	Yes	No	Yes
ovs	No	Yes	Yes, but inside	Yes
ORSERO	No	Yes	Yes, but inside	Yes
PIRELLI	No	Yes	Yes, but inside	Yes
PIAGGIO	No	Yes	No	Yes
RAI WAY	No	Yes	No	Yes
SAFILO	No	Yes	Yes, but inside	Yes
SALVATORE FERRAGAMO	No	Yes	No	Yes
SAIPEM	No	Yes	No	Yes
SARAS	No	Yes	No	Yes
SOGEFI	Yes, but inside	Yes	Yes, but inside	Yes
SNAM	No	Yes	No	Yes
TECHEDGE	No	Yes	No	Yes
TECHNOGYM	No	Yes	No	Yes
TIM	No	Yes	No	Yes
TISCALI	No	Yes	No	Yes
TOD'S	Yes, but inside	Yes	No	Yes
UNIEURO	No	Yes	No	Yes
VALSOIA	No	Yes	Yes, but inside	Yes
ZIGNAGO VETRO	No	Yes	Yes, but inside	Yes

Table 10: Data collected from the 80 reports for point (a)

- Point (b) of the analysis:

▼	Goodwill	Avviamento
A2A	Yes	Yes
ACEA	Yes	Yes
ACOTEL	Yes	No, but "attività non correnti"
AEDES	Yes	Yes
AEFFE	Yes	Yes
AEROPORTO G. MARCONI	Yes	Yes
ALKEMY	Yes	Yes
AMPLIFON	Yes	Yes
ARNOLDO MONDADORI	Yes	Yes
ASCOPIAVE	Yes	Yes
ASSOCIAZIONE SPORTIVA ROMA	Yes	Yes
Astaldi	Yes	Yes
ASTM	Yes	Yes
ATLANTIA	Yes	Yes
AUTOGRILL	Yes	Yes
AVIO	Yes	Yes

B&C SPEAKERS	Yes	Yes
BASIC NET	Yes	Yes
BIANCAMANO	Yes	Yes
BIESSE	Yes	Yes
BREMBO	Yes	Yes
BRUNELLO CUCINELLI	Yes	Yes
BUZZI UNICEM	Yes	Yes
CAIRO COMMUNICATION	Yes	Yes
CALTAGIRONE EDITORE	Yes	Yes
CAREL	Yes	Yes
CARRARO	Yes	Yes
CEMBRE	Yes	Yes
CEMENTIR HOLDING	Yes	Yes
CERVED	Yes	Yes
CLASS EDITORI	Yes	Yes
DANIELI	Yes	Yes
DATALOGIC	Yes	Yes
DAVIDE CAMPARI	Yes	Yes
DELONGHI	Yes	Yes
DIASORIN	Yes	Yes
EDISON	Yes	Yes
EL.EN	Yes	Yes
ELICA	Yes	Yes
EMAK	Yes	Yes
ENEL	Yes	Yes
ENI	Yes	No
ESPRINET	Yes	Yes
GAROFALO HEALTH CARE	Yes	Yes
GEOX	Yes	Yes
GVS	Yes	Yes
FINCANTIERI	Yes	Yes
IGD SIIQ	Yes	Yes
IMA	Yes	Yes
INTERPUMP GROUP	Yes	Yes
INWIT	Yes	Yes
IREN	Yes	Yes
ISAGRO	Yes	Yes
ITALGAS	Yes	Yes
ITWAY	Yes	Yes
LA DORIA	Yes	Yes
LEONARDO	Yes	Yes
MAIRE TECNIMONT	Yes	Yes
MEDIASET	Yes	Yes
MONCLER	Yes	Yes
NEWLAT	Yes	Yes

ovs	Yes	Yes
ORSERO	Yes	No
PIRELLI	Yes	Yes
PIAGGIO	Yes	Yes
RAI WAY	Yes	Yes
SAFILO	Yes	Yes
SALVATORE FERRAGAMO	Yes	Yes
SAIPEM	Yes	Yes
SARAS	Yes	Yes
SOGEFI	Yes	Yes
SNAM	Yes	Yes
TECHEDGE	Yes	Yes
TECHNOGYM	Yes	Yes
TIM	Yes	Yes
TISCALI	Yes	Yes
TOD'S	Yes	Yes
UNIEURO	Yes	Yes
VALSOIA	Yes	Yes
ZIGNAGO VETRO	Yes	Yes

Table 11: Data collected from the 80 reports for point (b)

- Point (c) of the analysis:

▼	Debtors	Receivables	Crediti
A2A	No	Yes	Yes
ACEA	In the notes with another meaning	Yes	Yes
ACOTEL	In the notes with another meaning	Yes	Yes
AEDES	No	Yes	Yes
AEFFE	In the notes with another meaning	Yes	Yes
AEROPORTO G. MARCONI	No	Yes	Yes
ALKEMY	No	Yes	Yes
AMPLIFON	No	Yes	Yes
ARNOLDO MONDADORI	No	Yes	Yes
ASCOPIAVE	No	Yes	Yes
ASSOCIAZIONE SPORTIVA ROMA	No	Yes	Yes
Astaldi	No	Yes	Yes
ASTM	No	Yes	Yes
ATLANTIA	No	Yes	Yes
AUTOGRILL	No	Yes	Yes
AVIO	No	Yes	Yes
B&C SPEAKERS	No	Yes	Yes
BASIC NET	No	Yes	Yes
BIANCAMANO	No	Yes	Yes
BIESSE	No	Yes	Yes
BREMBO	No	Yes	Yes
BRUNELLO CUCINELLI	No	Yes	Yes
BUZZI UNICEM	No	Yes	Yes
CAIRO COMMUNICATION	In the notes with another meaning	Yes	Yes
CALTAGIRONE EDITORE	No	Yes	Yes
CAREL	No	Yes	Yes

CARRARO	No	Yes	Yes
CEMBRE	No	Yes	Yes
CEMENTIR HOLDING	No	Yes	Yes
CERVED	No	Yes	Yes
CLASS EDITORI	No	Yes	Yes
DANIELI	No	Yes	Yes
DATALOGIC	No	Yes	Yes
DAVIDE CAMPARI DELONGHI	No	Yes	Yes
	No	Yes	Yes
DIASORIN	No	Yes	Yes
EDISON	No	Yes	Yes
EL.EN	No	Yes	Yes
ELICA	No	Yes	Yes
EMAK	No	Yes	Yes
ENEL	No	Yes	Yes
ENI	No	Yes	Yes
ESPRINET	No	Yes	Yes
GAROFALO HEALTH CARE	No	Yes	Yes
GEOX	No	Yes	Yes
GVS	No	Yes	Yes
FINCANTIERI	No	Yes	Yes
IGD SIIQ	No	Yes	Yes
IMA	No	Yes	Yes
INTERPUMP GROUP	No	Yes	Yes
INWIT	No	Yes	Yes
IREN	No	Yes	Yes
ISAGRO	No	Yes	Yes
ITALGAS	No	Yes	Yes
ITWAY	No	Yes	Yes
LA DORIA	No	Yes	Yes
LEONARDO	No	Yes	Yes
MAIRE TECNIMONT	No	Yes	Yes
MEDIASET	No	Yes	Yes
MONCLER	No	Yes	Yes
NEWLAT	No	Yes	Yes
ovs	No	Yes	Yes
ORSERO	No	Yes	Yes
PIRELLI	No	Yes	Yes
PIAGGIO	No	Yes	Yes
RAI WAY	No	Yes	Yes
SAFILO	No	Yes	Yes
SALVATORE FERRAGAMO	No	Yes	Yes
SAIPEM	No	Yes	Yes
SARAS	No	Yes	Yes
SOGEFI	No	Yes	Yes
SNAM	No	Yes	Yes
TECHEDGE	No	Yes	Yes
TECHNOGYM	No	Yes	Yes
TIM	No	Yes	Yes
TISCALI	No	Yes	Yes
TOD'S	No	Yes	Yes
UNIEURO	No	Yes	Yes
VALSOIA			
	No.	Yes	Yes Yes
ZIGNAGO VETRO	No	Yes	-

Table 12: Data collected from the 80 reports for point (c)

- Point (d) of the analysis:

•	Stocks	Inventories •	Scorte	Rimanenze
A2A	Only in the notes	Yes	No	Yes
ACEA	Only in the notes	Yes	No	Yes
ACOTEL	No	Yes	No	Yes
AEDES	No	Yes	No	Yes
AEFFE	Only in the notes	Yes	Only in the notes	Yes
AEROPORTO G. MARCONI	No	Yes	No	Yes
ALKEMY	No	Yes	No	Yes
AMPLIFON	In the notes in relation to stock mkt		No	Yes
ARNOLDO MONDADORI	In the notes in relation to stock mkt		No	Yes
ASCOPIAVE	In the notes in relation to stock mkt	Yes	No	Yes
ASSOCIAZIONE SPORTIVA ROMA	In the notes in relation to stock mkt	Yes	No	Yes
Astaldi	No	Yes	No	Yes
ASTM	No	Yes	No	Yes
ATLANTIA	Yes as a subcategory	Yes	No	Yes
AUTOGRILL	No	Yes	No	Yes
AVIO	No	Yes	No	Yes
B&C SPEAKERS	Only in the notes	Yes	Only in the notes	Yes
BASIC NET	No	Yes	Only in the notes	Yes
BIANCAMANO	No	Yes	No	Yes
BIESSE	No	Yes	Only in the notes	Yes
BREMBO	No	Yes		
			Only in the notes	Yes
BRUNELLO CUCINELLI	No	Yes	No	Yes
BUZZI UNICEM	No	Yes	No	Yes
CAIRO COMMUNICATION	No	Yes	No	Yes
CALTAGIRONE EDITORE	No	Yes	No	Yes
CAREL	No	Yes	No	Yes
CARRARO	Only in the notes	Yes	Only in the notes	Yes
CEMBRE	Yes but in relation to capital	Yes	No	Yes
CEMENTIR HOLDING	Only in the notes	Yes	Only in the notes	Yes
CERVED	In the notes in relation to stock mkt	Yes	No	Yes
CLASS EDITORI	In the notes in relation to stock mkt	Yes	No	Yes
DANIELI	No	Yes	No	Yes
DATALOGIC	Only in the notes	Yes	Only in the notes	Yes
DAVIDE CAMPARI	Only in the notes	Yes	No	Yes
DELONGHI	In the notes in relation to stock mkt		Only in the notes	Yes
DIASORIN	In the notes in relation to stock mkt			
			No	Yes
EDISON	No	Yes	No	Yes
EL.EN	Only in the notes	Yes	Only in the notes	Yes
ELICA	Only in the notes	Yes	Only in the notes	Yes
EMAK	Only in the notes	Yes	Only in the notes	Yes
ENEL	No	Yes	No	Yes
ENI	Only in the notes	Yes	Only in the notes	Yes
ESPRINET	Only in the notes	Yes	Only in the notes	Yes
GAROFALO HEALTH CARE	No	Yes	No	Yes
GEOX	In the notes in relation to stock mkt	Yes	Only in the notes	Yes
GVS	In the notes in relation to stock mkt		No	Yes
FINCANTIERI	Only in the notes	Yes	Only in the notes	Yes
IGD SIIQ	No	Yes	No	Yes
IMA	Only in the notes	Yes	Only in the notes	Yes
INTERPUMP GROUP	Only in the notes	Yes	Only in the notes	Yes
INWIT	No	Yes	No	Yes
IREN	No	Yes	No	Yes
ISAGRO	No	Yes	No	Yes
ITALGAS	No	Yes	Only in the notes	Yes
ITWAY	No	Yes	No	Yes
LA DORIA	Only in the notes	Yes	No	Yes
LEONARDO	No	Yes	No	Yes
MAIRE TECNIMONT	No	Yes	No	Yes
MEDIASET	No	Yes	No	Yes
MONCLER	No	Yes	No	Yes
NEWLAT	No	Yes	No	Yes
OVS	Only in the notes	Yes	No	Yes
ORSERO	No	Yes	No	Yes
PIRELLI	No	Yes	No	Yes
PIAGGIO	No	Yes	No	Yes
RAI WAY	Only in the notes	Yes	No	Yes

SAFILO	No	Yes	Only in the notes	Yes
SALVATORE FERRAGAMO	No	Yes	No	Yes
SAIPEM	No	Yes	No	Yes
SARAS	Only in the notes	Yes	Only in the notes	Yes
SOGEFI	Only in the notes	Yes	Only in the notes	Yes
SNAM	No	Yes	Only in the notes	Yes
TECHEDGE	No	Yes	No	Yes
TECHNOGYM	No	Yes	Only in the notes	Yes
TIM	No	Yes	No	Yes
TISCALI	No	Yes	No	Yes
TOD'S	No	Yes	No	Yes
UNIEURO	No	Yes	Only in the notes	Yes
VALSOIA	Only in the notes	Yes	Only in the notes	Yes
ZIGNAGO VETRO	No	Yes	Only in the notes	Yes

Table 13: Data collected from the 80 reports for point (d)

- Point (e) of the analysis:

▼	Own shares	Treasury shares	Azioni proprie
A2A	No	Yes	Yes
ACEA	No	Yes	Yes
ACOTEL	No	Yes	Yes
AEDES	No	Yes	Yes
AEFFE	No	Yes	Yes
AEROPORTO G. MARCONI	No	Yes	Yes
ALKEMY	No	Yes	Yes
AMPLIFON	No	Yes	Yes
ARNOLDO MONDADORI	No	Yes	Yes
ASCOPIAVE	Yes	No	Yes
ASSOCIAZIONE SPORTIVA ROMA	No	Yes	Yes
Astaldi	No	Yes	Yes
ASTM	No	Yes	Yes
ATLANTIA	No	Yes	Yes
AUTOGRILL	No	Yes	Yes
AVIO	No	Yes	Yes
B&C SPEAKERS	No	Yes	Yes
BASIC NET	No	Yes	Yes
BIANCAMANO	No	Yes	Yes
BIESSE	No	Yes	Yes
BREMBO	Yes	Yes	Yes
BRUNELLO CUCINELLI	No	No	No
BUZZI UNICEM	No	Yes	Yes
CAIRO COMMUNICATION	No	Yes	Yes
CALTAGIRONE EDITORE	No	Yes	Yes
CAREL	No	Yes	Yes
CARRARO	No	Yes	Yes
CEMBRE	Yes	Yes	Yes
CEMENTIR HOLDING	No	Yes	Yes
CERVED	No	Yes	Yes
CLASS EDITORI	No	Yes	Yes
DANIELI	No	Yes	Yes
DATALOGIC	No	Yes	Yes

DAVIDE CAMPARI	Yes	Yes	Yes
DELONGHI	No	Yes	Yes
DIASORIN	No	Yes	Yes
EDISON	No	Yes	Yes
EL.EN	No	No	Yes
ELICA	No	Yes	Yes
EMAK	Yes	Yes	Yes
ENEL	Yes	Yes	Yes
ENI	Yes	Yes	Yes
ESPRINET	Yes	No	Yes
GAROFALO HEALTH CARE	No	Yes	Yes
GEOX	No	Yes	Yes
GVS	No	Yes	Yes
FINCANTIERI	Yes	No	Yes
IGD SIIQ	No	Yes	Yes
IMA	Yes	Yes	Yes
INTERPUMP GROUP	No	Yes	Yes
INWIT	No	Yes	Yes
IREN ISAGRO	No No	Yes Yes	Yes Yes
ITALGAS	No	Yes	Yes
ITWAY	Yes	Yes	Yes
LA DORIA	No	Yes	Yes
LEONARDO	No	Yes	Yes
MAIRE TECNIMONT	No	Yes	Yes
MEDIASET	Yes	Yes	Yes
MONCLER	No	Yes	Yes
NEWLAT	No	Yes	Yes
ovs	No	Yes	Yes
ORSERO	Yes	Yes	Yes
PIRELLI	Yes	Yes	Yes
PIAGGIO	No	Yes	Yes
RAI WAY	Yes	Yes	Yes
SAFILO	Yes	Yes	Yes
SALVATORE FERRAGAMO	No	Yes	Yes
SAIPEM	No	Yes	Yes
SARAS	Yes	Yes	Yes
SOGEFI	No	Yes	Yes
SNAM	No	Yes	Yes
TECHEDGE	No	Yes	Yes
TECHNOGYM	No	Yes	Yes
TIM	No	Yes	Yes
TISCALI	Yes	Yes	Yes
TOD'S	Yes	Yes	Yes
UNIEURO VALSOIA	No Yes	Yes No	Yes Yes
ZIGNAGO VETRO	No	Yes	Yes

Table 14: Data collected from the 80 reports for point (e)

- Point (f) of the analysis

▼	Turnover	Revenue	Importo netto	Ricavi -
A2A	No	Yes	No	Yes
ACEA	No	Yes	No	Yes
ACOTEL	No	Yes	No	Yes
AEDES	No	Yes	No	Yes
AEFFE	No	Yes	No	Yes
AEROPORTO G. MARCONI	Yes in the notes	Yes	No	Yes
ALKEMY	Yes in the notes	Yes	No	Yes
AMPLIFON	No	Yes	No	Yes
ARNOLDO MONDADORI	No	Yes	No	Yes
ASCOPIAVE	No	Yes	No	Yes
ASSOCIAZIONE SPORTIVA ROMA	No	Yes	No	Yes
Astaldi	No	Yes	No	Yes
ASTM	No	Yes	No	Yes
ATLANTIA	No	Yes	No	Yes
AUTOGRILL	No	Yes	No	Yes
AVIO	No	Yes	No	Yes
B&C SPEAKERS	Yes in the notes		No	Yes
BASIC NET	No	No (SALES)	No	No (VENDITE)
BIANCAMANO	No	Yes	No	Yes
BIESSE	Yes in the notes		No	Yes
BREMBO	Yes in the notes		No	Yes
BRUNELLO CUCINELLI	Yes in the notes		No	Yes
BUZZI UNICEM	No No	No (SALES)	No	Yes
CAIRO COMMUNICATION	No	Yes	No	Yes
CALTAGIRONE EDITORE	Yes in the notes		No	Yes
CAREL	No	Yes	No	Yes
CARRARO	Yes in the notes		No	Yes
CEMBRE	Yes in the notes		No	Yes
CEMENTIR HOLDING	Yes in the notes		No	Yes
CERVED	Yes in the notes		No	Yes
CLASS EDITORI	Yes in the notes		No	Yes
DANIELI	Yes in the notes		No	Yes
DATALOGIC	Yes in the notes		No	Yes
DAVIDE CAMPARI	No Vos in the notes	No (SALES)	No	No (VENDITE)
DELONGHI	Yes in the notes		No	Yes
DIASORIN	Yes in the notes		No	Yes
EDISON	No	Yes	No	Yes
EL.EN	No	Yes	No	Yes
ELICA	No Vos in the notes	Yes	No	Yes
EMAK	Yes in the notes		No	Yes
ENEL	-	Yes	No	Yes
ENI	Yes in the notes		No	Yes
ESPRINET CARE	No	No (SALES)	No	Yes
GAROFALO HEALTH CARE	No	Yes	No	Yes
GEOX	No	No (SALES)	No	Yes
GVS	Yes in the notes		No	Yes
FINCANTIERI	No	Yes	No	Yes
IGD SIIQ	Yes in the notes		No	Yes
IMA	No	Yes	No	Yes
INTERPUMP GROUP	No	Yes but not in the IS	No	No (VENDITE)
INWIT	No	Yes	No	Yes
IREN	No	Yes	No	Yes

ISAGRO	Yes in the notes	Yes	No	Yes
ITALGAS	Yes in the notes	Yes	No	Yes
ITWAY	Yes in the notes	Yes	No	Yes
LA DORIA	Yes in the notes	Yes	No	Yes
LEONARDO	No	Yes	No	Yes
MAIRE TECNIMONT	No	Yes	No	Yes
MEDIASET	Yes in the notes	Yes	No	Yes
MONCLER	No	Yes	No	Yes
NEWLAT	No	Yes	No	Yes
ovs	Yes in the notes	Yes	No	Yes
ORSERO	No	No (SALES)	No	Yes
PIRELLI	Yes in the notes	Yes	No	Yes
PIAGGIO	Yes in the notes	Yes	No	Yes
RAI WAY	Yes in the notes	Yes	No	Yes
· · ·	No	No (SALES)	No	No (VENDITE)
SAFILO	INO	NO (SALES)	INO	INO (VEINDITE)
SALVATORE FERRAGAMO	No	Yes	No	Yes
SALVATORE FERRAGAMO	No	Yes	No	Yes
SALVATORE FERRAGAMO SAIPEM	No No	Yes Yes	No No	Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS	No No No	Yes Yes Yes	No No No	Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI	No No No No	Yes Yes Yes Yes	No No No No	Yes Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM	No No No No	Yes Yes Yes Yes Yes Yes Yes	No No No No	Yes Yes Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE	No No No No No Yes in the notes	Yes Yes Yes Yes Yes Yes Yes	No No No No No	Yes Yes Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE TECHNOGYM	No No No No No Yes in the notes Yes in the notes	Yes Yes Yes Yes Yes Yes Yes Yes	No No No No No No	Yes Yes Yes Yes Yes Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE TECHNOGYM TIM	No No No No No Yes in the notes Yes in the notes	Yes	No No No No No No No	Yes Yes Yes Yes Yes Yes Yes Yes Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE TECHNOGYM TIM TISCALI	No No No No No Yes in the notes Yes in the notes No No	Yes	NO	Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE TECHNOGYM TIM TISCALI TOD'S	No No No No No No Yes in the notes Yes in the notes No No Yes in the notes	Yes	No N	Yes
SALVATORE FERRAGAMO SAIPEM SARAS SOGEFI SNAM TECHEDGE TECHNOGYM TIM TISCALI TOD'S UNIEURO	No No No No No Yes in the notes Yes in the notes No No Yes in the notes Yes in the notes Yes in the notes	Yes	No N	Yes

Table 15: Data collected from the 80 reports for point (f)

- Point (g) of the analysis

v	Ammortamento	Depreciation	Amortisation <a>
A2A	Att.materiali/immateriali	Tangible assets	Int assets
ACEA	Att.materiali/immateriali	Tangible assets	Int assets
ACOTEL	Att.materiali/immateriali	PPE	Int assets
AEDES	Att.materiali/immateriali	Tangible assets	Int assets
AEFFE	Immobiliz.mat/Imm	Tangible assets	Int assets
AEROPORTO G. MARCONI	Att.materiali/immateriali	Tangible assets	Int assets
ALKEMY	Immobiliz.mat/Imm	PPE	Int assets
AMPLIFON	Immobiliz.mat/Imm	Tangible assets	Int assets
ARNOLDO MONDADORI	Immobiliz.mat/Imm	PPE	Int assets
ASCOPIAVE	ammortam. e svalutazioni		
ASSOCIAZIONE SPORTIVA ROMA	Immobiliz.mat/Imm	Tangible assets	Int assets
Astaldi	Att.materiali/immateriali	Tangible assets	Int assets
ASTM	Att.materiali/immateriali	Tangible assets	Int assets
ATLANTIA	Att.materiali/immateriali	PPE	Int assets
AUTOGRILL	Att.materiali/immateriali	PPE	Int assets
AVIO	Att.materiali/immateriali	Tangible assets	Int assets
B&C SPEAKERS	Att.materiali/immateriali	PPE	Int assets
BASIC NET	Att.materiali/immateriali	PPE	Int assets
BIANCAMANO	Immobiliz.mat/Imm	PPE	Int assets

BIESSE	att.materiali/immateriali	DDF	Int assets
BREMBO	Immobiliz.mat/Imm	PPE	Int assets
BRUNELLO CUCINELLI	Immobiliz.mat/Imm	PPE	Int assets
BUZZI UNICEM	Immobiliz.mat/Imm	PPE	Int assets
CAIRO COMMUNICATION	att.materiali/immateriali		Int assets
CALTAGIRONE EDITORE	Att.materiali/immateriali		Int assets
CAREL	Att.materiali/immateriali		Int assets
CARRARO	Immobiliz.mat/Imm		Int assets
CEMBRE	Immobiliz.mat/Imm	PPE	Int assets
CEMENTIR HOLDING	Att.materiali/immateriali		Int assets
CERVED	· ·		
	Att.materiali/immateriali Immobiliz.mat/Imm	PPE	Int assets
CLASS EDITORI DANIELI		PPE	Int assets
DATALOGIC	Immobiliz.mat/Imm Immobiliz.mat/Imm		Int assets
	·	- U	Int assets
DAVIDE CAMPARI DELONGHI	Att.materiali/immateriali		Int assets
	Beni materiali/imm	–	Int assets
DIASORIN	Att.materiali/immateriali		Int assets
EDISON	Immobiliz.mat/Imm		Int assets
EL.EN	Immobiliz.mat/Imm	Tangible assets	Int assets
ELICA	Immobiliz.mat/Imm		Int assets
EMAK	Immobiliz.mat/Imm	PPE	Int assets
ENEL	Att.materiali/immateriali		Int assets
ENI	Att.materiali/immateriali		Int assets
ESPRINET	Immobiliz.mat/Imm		Int assets
GAROFALO HEALTH CARE	Immobiliz.mat/Imm	PPE	Int assets
GEOX	Immobiliz.mat/Imm	PPE	Int assets
GVS	Att.materiali/immateriali		Int assets
FINCANTIERI	Att.materiali/immateriali		Int assets
IGD SIIQ	Att.materiali/immateriali		Int assets
IMA	Immobiliz.mat/Imm	PPE	Int assets
INTERPUMP GROUP	Immobiliz.mat/Imm	PPE	Int assets
INWIT	Immobiliz.mat/Imm		Int assets
IREN	Immobiliz.mat/Imm	PPE	Int assets
ISAGRO	Att.materiali/immateriali	_	Int assets
ITALGAS	Att.materiali/immateriali		Int assets
ITWAY	Att.materiali/immateriali		Int assets
LA DORIA	Immobiliz.mat/Imm	PPE	Int assets
LEONARDO	Att.materiali/immateriali		Int assets
MAIRE TECNIMONT	Att.materiali/immateriali		Int assets
MEDIASET	Att.materiali/immateriali		Int assets
MONCLER	Att.materiali/immateriali		Int assets
NEWLAT	Immobiliz.mat/Imm	PPE	Int assets
OVS	Beni materiali/imm	PPE	Int assets
ORSERO	Immobiliz.mat/Imm	Tangible assets	Int assets
PIRELLI	Immobiliz.mat/Imm	PPE	Int assets
PIAGGIO	Att.materiali/immateriali		Int assets
RAI WAY	Att.materiali/immateriali		Int assets
SAFILO	Immobiliz.mat/Imm	PPE	Int assets
SALVATORE FERRAGAMO SAIPEM	Att.materiali/immateriali Att.materiali/immateriali		Int assets Int assets

SARAS	Att.materiali/immateriali	Tangible assets	Int assets
SOGEFI	Beni materiali/imm	Tangible assets	Int assets
SNAM	att.materiali/immateriali	PPE	Int assets
TECHEDGE	Immobiliz.mat/Imm	PPE	Int assets
TECHNOGYM	Att.materiali/immateriali	Tangible assets	Int assets
TIM	att.materiali/immateriali	Tangible assets	Int assets
TISCALI	Att.materiali/immateriali	PPE	Int assets
TOD'S	Att.materiali/immateriali	Tangible assets	Int assets
UNIEURO	Immobiliz.mat/Imm	PPE	Int assets
VALSOIA	Immobiliz.mat/Imm	PPE	Int assets
ZIGNAGO VETRO	Immobiliz.mat/Imm	PPE	Int assets

Table 16: Data collected from the 80 reports for point (g)

- Point (h) of the analysis

▼	Impairment -	Perdita/riduzione di valore
A2A	yes also in italian	yes
ACEA	Yes also in italian	yes
ACOTEL	yes also in italian	yes
AEDES	yes also in italian	yes
AEFFE	yes also in italian	yes
AEROPORTO G. MARCONI	yes also in italian	yes
ALKEMY	Yes also in italian	Yes
AMPLIFON	yes also in italian	yes
ARNOLDO MONDADORI	yes also in italian	yes
ASCOPIAVE	yes also in italian	yes
ASSOCIAZIONE SPORTIVA ROMA	yes also in italian	yes
Astaldi	yes also in italian	yes
ASTM	yes also in italian	yes
ATLANTIA	yes also in italian	yes
AUTOGRILL	yes also in italian	yes
AVIO	yes also in italian	yes
B&C SPEAKERS	yes also in italian	yes
BASIC NET	yes also in italian	yes
BIANCAMANO	yes also in italian	yes
BIESSE	yes also in italian	yes
BREMBO	yes also in italian	yes
BRUNELLO CUCINELLI	yes also in italian	yes
BUZZI UNICEM	yes also in italian	yes
CAIRO COMMUNICATION	yes also in italian	yes
CALTAGIRONE EDITORE	yes also in italian	yes
CAREL	yes also in italian	yes
CARRARO	yes also in italian	yes
CEMBRE	yes also in italian	yes
CEMENTIR HOLDING	yes also in italian	yes
CERVED	yes also in italian	yes
CLASS EDITORI	yes also in italian	yes
DANIELI	yes also in italian	yes
DATALOGIC	yes also in italian	yes
DAVIDE CAMPARI	ves also in italian	yes

DELONGHI	yes also in italian	yes
DIASORIN	yes also in italian	yes
EDISON	yes also in italian	yes
EL.EN	yes also in italian	yes
ELICA	yes also in italian	yes
EMAK	yes also in italian	yes
ENEL	yes also in italian	yes
ENI	yes also in italian	yes
ESPRINET	yes also in italian	yes
GAROFALO HEALTH CARE	yes also in italian	yes
GEOX	yes also in italian	yes
GVS	yes also in italian	yes
FINCANTIERI	yes also in italian	yes
IGD SIIQ	yes also in italian	yes
IMA	yes also in italian	yes
INTERPUMP GROUP	yes also in italian	yes
INWIT	yes also in italian	yes
IREN	yes also in italian	yes
ISAGRO	yes also in italian	yes
ITALGAS	yes also in italian	yes
ITWAY	yes also in italian	yes
LA DORIA	yes also in italian	yes
LEONARDO	yes also in italian	No
MAIRE TECNIMONT	yes also in italian	yes
MEDIASET	yes also in italian	yes
MONCLER	yes also in italian	yes
NEWLAT	yes also in italian	yes
ovs	yes also in italian	yes
ORSERO	yes also in italian	yes
PIRELLI	yes also in italian	yes
PIAGGIO	yes also in italian	yes
RAI WAY	yes also in italian	yes
SAFILO	yes also in italian	yes
SALVATORE FERRAGAMO	yes also in italian	yes
SAIPEM	yes also in italian	yes
SARAS	yes also in italian	yes
SOGEFI	yes also in italian	yes
SNAM	yes also in italian	yes
TECHEDGE	yes also in italian	yes
TECHNOGYM	yes also in italian	yes
TIM	yes also in italian	yes
TISCALI	yes also in italian	yes
TOD'S	yes also in italian	yes
UNIEURO	yes also in italian	yes
VALSOIA	yes also in italian	yes
ZIGNAGO VETRO	yes also in italian	yes
	,	1 2 2

Table 17: Data collected from the 80 reports for point (h)

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