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IFRS 15: Impact on Earnings Management in the Consumer goods and Energy sector

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Introduction

The European Union made the choice to promote and make mandatory the use of International Accounting Standards (IAS/IFRS) in order to have standardized accounting principles.

In particular, Revenue has always been an important figure in the income statements not just for its monetary meaning but also for its importance in the decision-making process of the investors. For that matters one of the last big changes made by the IAS/IFRS board concerning Revenue is the new "IFRS 15 – Revenue from contract with customer".

The aim of this dissertation is to present the former and the current rules for Revenue Recognition and more importantly to check through an empirical analysis if the new IFRS 15 may be able to bring benefit on what regards Earnings Management Practices.

Chapter I

Revenue Recognition prior to IFRS 15

1.1 Background

Revenue have always been a key figure in the income statement not simply for their monetary significance but also for their relevance in the decision-making process of the investors. The previous and future performance of a firm is measured by the trends and the growth of the Revenue: as an effect, the Revenue recognition is one of the biggest matters for standard setters and accountants (Zhang, 2005).

Before the introduction of the IFRS 15 the standards that managed the Revenue Recognition were IAS 18 – Revenue and IAS 11 – Construction Contracts. These two standards are amidst the oldest in the whole set of IFRS as they were reviewed for the last time in 1993.

The IASB and FASB agreed to launch a joint project on the review and convergence of US GAAP and IFRS Revenue Recognition in 2002 (Norwalk Agreement). The objective of the boards was to compose a standard adopting a contract-based, Revenue Recognition model which recognizes Revenue if the performance obligations of the contracts are accomplished (Rutledge, Karim & Kim, 2016).

From the IASB's point of view the primary aim of the project was the removal of inconsistencies in the existing IFRS Revenue Recognition and among the Revenue Recognition criteria and the definition of assets and liabilities in the IASB (Wuestermann & Kierzek, 2005). A further objective was also the urge to replenish the gap that have come up in Revenue Recognition as a consequence of the new business models (Wuestermann & Kierzek, 2005).

The aims of the joint project according to FASB (Gallistel et al., 2012) were:

1. Remove inconsistencies and weaknesses in existing Revenue requirements;
2. Provide a more robust framework for addressing Revenue issues;
3. Improve comparability of Revenue Recognition practices across entities, industries, jurisdiction and capital markets;
4. Provide more useful information to users of financial statements through improved disclosure requirements;
5. Simplify the preparation of financial statements by reducing the number of requirements to which an entity must refer.

The two Boards have mainly analyzed whether the calculation of contractual assets and liabilities at fair value may be applicable for undertaking the issues with the ongoing Revenue recognition.

In February 2006 the Memorandum of Understanding (MoU[1]) was published by the FASB and the IASB. In the latter the Boards acknowledged the goal of establishing high quality and common standards to be used in the world's markets. The Norwalk Agreement and the MoU were the basis for the engagement to create a shared set of high-quality standards (Dalkilic, 2005).

In June 2010, an exposure draft was published followed by a revised one in November 2011. In May 2014, the IASB and FASB presented the new shared standard for the recognition of Revenue: the FASB delivered the ASU 2014-09, Revenue from contracts with customers (Topic 606) while the IASB released the IFRS 15, Revenue from contracts with Customers.

[1] Updated in 2008, the MoU was set up on three fundamental principles: Convergence of accounting standards can be best achieved through the development of high quality, common standard over time; Trying to eliminate differences between the two standards that are in need of significant improvement is not the best use of the FASB's and the IASB's resources – instead, a new common standard should be developed that improves the financial information reported to investors; and Serving the needs of investors means that the Boards should seek convergence by replacing standards in need of improvement with jointly developed new standard.

At the beginning the date of the standard to be effective for the reporting periods was after December 15, 2016 for listed US Companies and on January 1, 2017 for those that adopt IFRS. Anyway, the FASB on July 9, 2015 decided to postpone the effective date on December 15, 2017 whilst the IASB on January 1, 2018 (Peters, 2016), following some concerns that had been raised such as the poor time to put into action the standard and the uncertainties caused by multitude of proposed modification to the standard and its guidance (Rutledge, Karim & Kim, 2016).
In fact, on April 2016 the IASB has issued a series of amendment to the new principle that clarified some requirements and provided further support for the companies which was implementing the new standard.

The changes in IFRS 15 that provided clarification to the guidance are the following:

- Identification of the performance obligation: the latter are identifiable on the base of the good or service that are distinct from each other;
- Principal vs Agent consideration: IFRS 15 asks the entity to determine whether it is a principal or an agent according to the goods and service underlying before the operation;
- Licensing agreement: Revenue from a license agreement are recognized along both the duration and in a specific moment. The model of the Revenue Recognition is based on the fact that the entity is required to undertake activities that may significantly influence the functionality of intellectual property. The changes entail additional guidance and examples to determine when the activities influence significantly intellectual property, together with a clarification regarding the deals that involve sales – royalties or usage-based royalties;
- Transitional relief: completed contract, there is no obligation to apply IFRS 15 retroactively to the contracts completed.

It is worth to underline that along IAS 11 and IAS 18 standards there are four related interpretations:

a. IFRIC 13 – Customer Loyalty Programme

b. IFRIC 15 Agreements for the Construction of Real Estate
c. IFRIC 18 – Transfer of Assets from Customers
d. SIC – 31 Revenue – Barter Transaction Involving Advertising Services.

The IFRIC is the body which has the task to check and analyze IFRS and the IASB framework for releasing clarification with respect to accounting problems that could be subjected to conflicting or improper accounting practice as a result of lacking authoritative guidance.

IFRIC 13 was issued thanks to the recognition of a problem identified between IAS 18 par. 13 and par. 19. The latter proposes two distinct ways of accounting for "customer loyalty programme", e.g. bonus points or miles (Johansson & Ringius, 2008): IAS 18, par. 18 affirms that every transaction is employed singularly but sometimes it is required to use the recognition criteria to the different identifiable element of a single transaction for displaying the essence of the transaction. As a consequence, if $2 of bonus on a good sold are obtained on a good sold for $100; 98$ are treated as Revenue. Differently, if costs are not attributable in a clear method, compensations for the sale of goods are considered as debt.

IFRIC 15 was precisely constituted for the Real Estate sector. The issue was that the companies accounted in various way the Revenue from the project coming from real estate: either under IAS 18, consequent to the completion and transfer of the object, or under IAS 11 using the Percentage of Completion method (Dylag & Kucharczyk, 2011). This is connected to the subjective evaluation of the buyer, so if he is able to define major structural element of the design of the real estate before construction begins and/or is able to specify major structural changes once construction is in progress (Dylag & Kurcharczyk, 2011).

IFRIC 18 is used when an item of property is obtained from a customer that will be utilized by the entity to link to a network or to provide it to the continuous access to a good or service[2] (Ernst & Young 2017b). When the transfers are out of the extent

[2] E.g. provision of electricity, gas or water.

of IFRIC 18 the definition of asset is matched with the one given by the Framework, the asset is measured at fair value or at cost of initial recognition.

Lastly, SIC 31 treats the situation in which a seller can compute in a true way the Revenue at fair value of an advertising service received or provided in a barter transaction (Ernst & Young, 2017b).

1.2 Definition of Revenue

The IASB's framework provides one definition of Revenue: «income encompasses both Revenue and gains. Revenue arises in the course of the ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interests, dividends, royalties, and rent. » Furthermore, the framework specifies that «gains represent other items that meet the definition of income may, or may not, arise in the course of the ordinary activities of the entity.[3]»

A similar one is addressed by IAS 18. According to this principle «Revenue is the gross inflow of economic benefits during the periods arising from the course of the ordinary activities of an entity when those inflows result in in increases on equity, other than increases relating to contributions from equity participants. »

This definition according to Nobes (2012) makes one thing clear: Revenue is a gross concept. Namely, it does not entail the reduction of an expense or the carrying value of a disposed asset. By contraposition, the Standards related to the gains demand net measurements: a gain is computed as the difference between two values (Nobes, 2012).

It appears that there are four mistakes in the definition of Revenue in the IAS 18. The first is that Revenue should be determined as an increment in equity instead of an inflow of benefits[4] (Nobes, 2012).

[3] Gains entails e.g. disposal of non-current assets. IAS 16 clarifies gains should not be recorded as Revenues.
[4] Same error pointed out by Barker on the definition of Income (2010)

The second is the constraint given by the definition to the situations «when those inflows result in increase in equity». Imagine that an entity buys inventory for $10 and then sells it for $8, two possible cases arise:

a. The transactions do not concern an increase in equity though a decrease, hence the $8 is not Revenue;
b. The $8 is an increase in equity, in this circumstance all the sales of inventory concern an increase in equity and therefore there is Revenue.

Under case (a[5]) a sale of that kind would not be Revenue while under case (b), the "when" is «redundant and misleading because the implied restriction does not exist». (Nobes, 2012).

If we consider the case (b) above mentioned correct another error rise. Let's presume that an entity buys inventory for $10 and sells it for $12, a Revenue of $12 would then be recognized as a result of the increment in account receivable that make equity to rise by $12. As the customer pays there is an increase in equity of $12 thanks to the gross inflow of cash. The latter satisfy the definition of Revenue: it is a gross inflow from ordinary activity. Likewise, if an entity factors its receivables to a bank, the consequent inflow of cash matches the definition of Revenue because it is an ordinary activity. This issue can be amended by outlying Revenue in terms of the purpose of a transaction (Nobes, 2012).

The fourth problem concerns the concept of "ordinary activities" which is misplaced due to the fact that the notion is not important or delineated by IFRS anymore and has consistently be unhelpful as IAS 1 affirms that some gains are ordinary too (Nobes, 2012).

[5] That is not consistent with accounting practice.

1.3 IAS 18

The aim of IAS 18 is to describe the accounting procedure of Revenue coming from precise kind of transactions and events, which are:

- Sale of goods;
- Rendering of Services;
- Interest[6], royalties[7] and dividends[8].

The key definitions of this standard are:

- Revenue: which has been discussed previously and;
- Fair Value which is «the amount for which an asset could be exchanged, or a liability settled between knowledgeable, willing parties in an arm's length transaction. (IAS 18 par. 7) »

For what concerns the measurement of Revenue: «Revenue shall be measured the fair value of the consideration received or receivable (IAS 18 par. 9) ».
The measure of Revenue that comes from a transaction is frequently established by a deal between the entity and the buyer. The consideration is usually in the form of cash or cash equivalents.

The fair value of the consideration might be lower than the nominal amount of cash and cash equivalents received if the inflow of cash and cash equivalents is deferred (Muthupandian, 2009). For example, this may happen when the seller is providing interest-free credit to the buyer or when he is charging a below-market rate of interest.

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[6] Charges for the use of cash and cash equivalents or amounts due to the entity
[7] Charges for the use of long-term assets of the entity (patents, trademarks, copyrights)
[8] Distributions of profits to holders of equity investments in proportion to their holdings of a particular class of capital

Interest must be imputed based on market rates (IAS 18 par. 11). If the deal institutes a financing transaction, the fair value is established by discounting the forthcoming earnings adopting an imputed rate of interest[9].

In the following cases IAS 18 is not applied:

a. Lease agreements;
b. Dividends arising from investments that are accounted for under the equity method;
c. Insurance contract within the scope of IFRS 4;
d. Changes in the fair value of financial assets and financial liabilities or their disposal;
e. Changes in the value of other current assets;
f. Initial recognition and from changes in the fair value of biological assets related to agricultural activity;
g. Initial recognition of agricultural produce;
h. The extraction of mineral loss.

1.3.1 Identification of the transaction

In IAS 18 the recognition criteria are commonly employed to every different transaction. Sometimes it is required to use the recognition criteria to the different attributable element of a unique transaction for being able to display the substance of the transaction. For instance, if the price of the service for a product is entailed in the selling price, the latter is deferred and identified as Revenue in the course in which the service is carried out. Differently, the recognition criteria are implemented to two or more transaction if they are connected to the ensemble of transaction. For example, an entity might trade goods and simultaneously take part

[9] An imputed rate of interest is an estimated interest rate used instead of the established interest rate associated with a debt.

into a different agreement to recoup the goods, therefore denying the substantive outcome of the transaction. If this happens, the two transaction are handled jointly (IAS 18, par. 13).

1.3.2 Sales of goods

The requirements that have to be fulfilled in order to recognize Revenue from sale of goods are the following (Oyedokun, 2016):

- The exposures and the benefit of the property of the goods have been transferred from the entity to the buyer;
- the entity does not maintain either extended managerial involvement to the scope mostly connected with ownership or direct control over the good sold;
- the total of Revenue can be calculated accurately; there is a good possibility that the economic benefit linked to the negotiation will stream to the entity;
- the costs faced or to be faced in relation to the transaction can be estimated easily.

The Revenue is not recorded when the entity holds considerable risks of ownership. The condition for which the entity may be in a position of risks of ownership are (IAS 18, par. 16):

- when the entity retains an obligation for unsatisfactory performance not covered by normal warranty provisions;
- when the receipt of the Revenue from a particular sale is contingent in the derivation of Revenue by the buyer form its sale of the goods;
- when the goods are shipped subject to installation is a significant part of the contract and the entity is uncertain about the probability of return.

1.3.3 Rendering of Services

If the result of a transaction can be predicted in a trustworthy way, Revenue is acknowledged to the degree of completion of the transaction at the reporting date (Oyedokun, 2016).

If the result of a transaction can be forecasted reliably then the Revenue can be recognized based onto the point of achievement of the transaction at the end of the reporting period; otherwise the Revenue can be recognized exclusively to the extent of the expenses recognized that are recoverable (Oyedokun, 2016).

The result of a transaction can be predicted in a respectable way when:

- The Revenue can be computed faithfully;
- It is feasible that the economic gain connected to the transaction;
- The status of achievement of the transaction at the end of the reporting period can be calculated accurately;
- The expense of the transaction can be assessed precisely.

If the principles mentioned above are not satisfied than the Revenue coming from the rendering of services shall be identified only in the limit of the expenses identified that are recoverable.

It is possible to appoint reliable evaluation for an entity when it has settled with the other parties the successive requirements (Muthapandian, 2009):

- Each party's enforceable rights regarding the service to be provided and received by the parties;
- The consideration to be exchanged;
- The manners and the terms of the settlement.

The entity also needs to possess an internal financial budgeting and reporting system and to review as time goes by the estimates of Revenue. This does not mean that the result of the transaction may not be forecasted in a right way (Muthupandian, 2009).

1.3.4 Interest, Royalties and Dividends

Revenue deriving from the employment by others of entity assets generating interest, royalties and dividends could be acknowledged when (Oyedokun, 2016):

- It is likely that the economic gain linked with the transaction will go to the entity,
- The Revenue can be computed truthfully.

Revenue are identified as follow: for the interest, the effective interest method as laid out in IAS 39 shall be used; the royalties shall be identified on an accrual basis in conformity with the essence of the related agreement and the dividends shall be perceived albeit the shareholder's right to collect the payment is decided (Oyedokun, 2016).

1.3.5 Disclosure Requirements

The disclosure is defined by IAS 18 par. 35 which points out that an entity shall disclose the accounting policies used for the recognition of Revenue, the ways selected to establish the stage of completion of transactions associated with the rendering of services and the amount of every notable category of Revenue recognized along the period, counting Revenue that rises from the sale of goods, the rendering of services, interest, royalties and dividends (Oyedokun, 2016). Lastly, the amount of Revenue coming from transfer of goods or services in each significant category of Revenue (Oyedokun, 2016).

1.4 IAS 11

IAS 11 was put into action in 1995 following the revision in 1993 and defines the contractor's accounting method of Revenue and costs connected along construction contracts. Commonly a construction contract[10] is executed in two or more accounting period. Hence, the first accounting problem is the assignment of contract Revenue and costs related to the periods in which the construction work is carried out. According to IAS 11:

- When the outcome of a construction contract can be estimated reliably, contract Revenue and contract costs associated with the construction contract are recognized as Revenue and expenses based on the stage of completion of the contract activity at the end of the reporting period (Percentage of Completion method);
- When the outcome of a construction contract cannot be estimated reliably Revenue may be recognized only to the extent of contract costs incurred which have the possibility to be recovered. While the contract costs may be recognized as an expense in the period in which they are incurred. When it is probable that the total contract costs will exceed the total contract Revenue, the expected loss is recognized as an expense immediately (Zero-profit Method).

Construction contract encompasses, for the object of this Standard, contracts that are linked to the construction of the asset and contracts related to the

[10] A construction contract is defined by IAS 11, par. 3 as «a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use»

elimination or renewal of assets. Construction contracts are drafted in different methods categorized as fixed price contracts[11] and cost plus[12] contracts.

1.4.1 Combining and segmenting Contracts

If the construction contract involves different assets, the construction of these should be interpreted as a single construction contract when (Muthupandian, 2008):

- distinct programs have been proposed to each asset;
- each asset has been object of an individual agreement and the contractor and customer have been capable to obtain or deny that component of the contract connected to each asset;
- the Revenue and costs of every assets could be established.

A *nexus* of contract should be approached as a single construction if (Muthupandian, 2008):

- the contracts are mediated as a unique contract;
- the contracts are so interconnected that they are, *de facto*, component of a single activity;
- the contracts are executed all at once or in a repeated sequence.

The construction of a supplementary asset should be considered as a separate construction contract when (Muthupandian, 2008):

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[11] A fixed price contract is a construction contract in which the contractor agrees to a fixed contract price, or. Affixed rate per unit of output, which in some cases is subject to escalation clauses

[12] A cost-plus contract is a construction contract in which the construction is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed fee.

- the asset is considerably different in technology and operation from the asset covered by the initial contract
- the amount of the asset is settled without connection to the original contract amount.

1.4.2 Contract Revenue and Costs

Contract Revenue is determined at the fair value of the consideration received or receivable (Muthpandian, 2008). The calculation of contract Revenue relies upon different uncertainties that are contingent to the outcome of future events, hence estimation may need to be checked as events happen and uncertainties are solved (Muthpandian, 2008). Thus, the amount of contract Revenue could increment or decrement from one period to another. For instance, a contractor and a customer might settle variations[13] or claims[14] that boost or decline contract Revenue in a time subsequent to what was initially agreed in the contract (Muthupandian, 2008).

Contract costs are constituted by costs that are connected precisely to the specific contract; costs that are identifiable to the contractor's general constructing activity to the extent that they can be allocated to the contract and costs that are uniquely imputable to the customer beneath the conditions of the contract (Muthupandian, 2008).

Costs that are not connected to contract exercise or cannot be assigned to a contract are removed from the costs of a construction contract (Muthpandian, 2008). Among these costs are contained: general administration costs for which repayment is not defined in the contract, selling costs, R&D costs for which

[13] A variation is an instruction by the customer for a change in the scope of the work to be performed under the contract.
[14] A claim is an amount that the contractor seeks to collect from the customer to another party as a reimbursement for costs not included in the contract price.

repayment is not defined in the contract, depreciation of unproductive plant and equipment that is not utilized on a particular contract (Muthupandian, 2008).

1.4.3 Recognition of Contract Revenue and Contract cost

When the result of a construction contract can be predicted reliably, contract Revenue and costs connected to the construction contract can be recorded as Revenue and expenses according to the percentage of completion of the contract at the recording day.

For what concerns the stage completion method, the percentage of a contract can be established by different means. Based on the structure of the contract these means may encompass: the portion of the cost faced for the work already performed to date bear to the forecasted total costs; surveys and the conclusion of a tangible amount of the contract work.

The stage completion method is also used in the case of a contract formerly judged as unable of correct estimation that turns into one able of reliable estimation.

1.4.4 Accounting treatment and Recognition of expected loss

When a contract entails two or more assets, the construction of these should be accounted individually if:

- Different proposals were suggested for each asset;
- Parts of the contract connected to each asset were settled individually; and
- Revenue and costs of every asset can be evaluated (Muthupandian, 2008).

Alternatively, the contract should be considered in its wholeness (Muthupandian, 2008).

In the case in which either an additional asset is rather distinct with respect to the original asset or the amount of the additional asset is worked out individually, if there is an option to call for any additional assets than the construction of the latter should be recorded as a separate contract (Muthupandian, 2008).

When there is a chance that the contract costs may overcome the contract Revenue the expected loss shall be recorded as an expense right away. The loss is established with respect to:

- The status of completion of the contract activity;
- If the work on the contract has begun or no;
- The profit predicted to rise on different contracts that are not considered as a single construction contract.

1.5 Revenue recognition under US GAAP

The FASB's concept statement No. 6 (CON 6) defines the concept of Revenue: inflows or other enhancement of asset of an entity or settlements of its liabilities from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations (Bohusova & Nerudova, 2009). CON 5 (Recognition and Measurement in Financial Statements of Business enterprises) defines the criteria for Revenue Recognition:

a. Revenue must be realized;
b. Revenue must be realizable;
c. Revenue must be earned.

Revenue are realized when goods or services, merchandise, or other assets are traded for cash or cash equivalents. Revenue are realizable when the associated assets earned or held are eagerly exchangeable to an established amount of cash and cash equivalents. Revenue are treated as earned when the entity has considerably

achieved what it takes to be recognized to the benefits represented by the Revenue (Bohusova & Nerudova, 2009).

The use of the earning process appears not to be compatible for the utilization in different industries: the presence of separate requirements for economically analogous transaction lower the comparability of Revenue along entities and industries, in fact there are precise regulation connected to the recognition of real estate sales, software Revenue or services brought by cable television.

SFAS 48 (Revenue Recognition when Right of Return exists) determinates in what manner an entity should register Revenue when the buyer possesses the right to send back the product. Revenue in this case shall be acknowledged exclusively at time of sale if the requirements defined by SFAS 48 are satisfied (Bohusova & Nerudova, 2009).

SFAS 5 – Accounting for contingencies asks allowance for returns making in the Revenue recording moment despite the particular parties that will claims under warranties may not be identifiable, therefore it enables trade loading and could bring to greater Revenue reporting (Bohusova & Nerudova, 2009).

This notion is included in the SEC SAB (Staff Accounting Bulletins) 101 – Revenue recognition in financial statement and SAB 104 – Revenue recognition.

These two standards define four criteria regarding the recognition of Revenue:

- Existence of evidence of an arrangement;
- The price must be fixed or determinable;
- Collectability must be reasonably assured;
- Delivery must be occurred.

The dubious timing of the criteria above mentioned increase further complication to the already complicated problem of Revenue recognition.
The Statement of Financial Accounting Concepts (SFAC) 5 par. 83 and 84 outline directions on the recognition of Revenue on the sales of goods and services which are commonly strictly connected.

Par 83 (b) in fact affirm «an entity's Revenue-earning activities involve delivering or producing goods, rendering services, or other activities that constitute its ongoing major or central operations, and Revenue is considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the Revenue. »
Par. 84 (a) sets the conditions for the criteria for the recognition of Revenue, in fact according to the latter they are satisfied when they «are usually met by the time product or merchandise is delivered or services are rendered to customers, and Revenue from manufacturing and selling activities and gains and losses from sales of other assets are commonly recognized at time of sale. » (SEC, 1999)
There is exceptional situation in which the sale and/or the cash acquisition happens arise prior to the production and shipment SFAC 5 affirms that Revenue is going to be recorded as production and shipment occur, like in the case of magazine subscriptions. In a similar circumstance the Revenue has generally been carried out as an upfront subscription payment by the customer matching the first criteria for Revenue recognition. Anyway, Revenue is not recognized prior to the shipment of the magazines: hence, the second criteria for Revenue recognition needs a deferral of Revenue recognition (FASB, 2008).

When there is a right to return for the buyer the recognition of Revenue is more complicated: as written before, this particular situation is regulated by SFAS 48 (Revenue Recognition When Right of Return Exist) which set forth that Revenue can be realized at the time of sale when the following criteria are satisfied:

1. The seller's price to the buyer is substantially fixed or determinable at the date of sale;
2. The buyer has paid the seller, or the buyer is obligated to pay the seller and the obligation is not contingent on resale of the product;
3. The buyer's obligation to the seller would not be changed in the event of theft or physical destruction or damage of the product;
4. The buyer acquiring the product for resale has economic substance apart from that provided by the seller;

5. The seller does not have significant obligations for future performance to directly bring about resale of the product by the buyer;
6. The amount of future returns can be reasonably estimated. (FASB, 2008).

The aforementioned criteria commit to the major part of retail sales and deals between manufacturer – wholesaler – retailer. In the case in which one of the criteria is not matched Revenue may be realized when the return right has ceased or if those circumstances afterwards are satisfied, the one that arise earliest.

Concerning the interest Revenue, standards are given by SFAC 5 (Par. 84 (d)) which states: «If services are rendered or rights to use assets extend continuously over time (for example, interest or rent), reliable measures based on contractual prices established in advance are commonly available, and Revenue may be recognized as time passes»[15](FASB, 2008).

Because of the essence of a royalty deal, Revenue recognition would be dealt according to the principles given by SFAC 5 in connection with the interest or rent. Revenue for royalties are usually recorded on the base of the contract agreement.

Dividend income is recognized likely in the same way of other Revenue. Anyway, the timing is essential to the directions given on the recognition of dividend: recognition for the beneficiary of dividend income is to be deferred up to the "ex-dividend[16]" date (Gallistel et al., 2012).

SAB 104 regulates the direction on how public traded company should recognize income. It aims its attention on exercising the provisions of the FASB's Emerging Issues Task Force – Revenue Arrangements with Multiple Derivable to traded companies principally in the areas of bill-and-hold arrangements, immaterial obligations, and non – refundable up – front fees, connected to the shipment of goods sold and the arising Revenue.

[15] Precisely, authoritative guidance is provided for financial institution in SFAS 91 – Accounting for Non-refundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Lease, which requires interest Revenue recognition treatment for commitment and loan origination fees.

[16] The first day following the declaration of a dividend on which the buyer of a stock is not entitled to receive the next payment: substantially delineates when the earning process begins and ends for holder of a dividend paying security and, therefore, also the date upon which the holder can recognize such Revenue.

There is a Bill-and-hold arrangement when a company bills its customer but has not shipped the products. For instance, a contractor manufacturer that assembles the product for a customer controls the latter logistics', should not record the Revenue as far as a fixed shipment schedule coherent with the customer's business objective is provided (Bohusova & Nerudova, 2009).

According to SAB 104 an entity could recognize Revenue for Bill-and-Hold Arrangements if there are written agreements that encompass business purposes and grant the parties to judge all the important facts and conditions for introducing these kinds of arrangements. The latter must be compliant to the other related accounting requirements.

For what concerns the immaterial remaining obligations to complete delivery and sale SAB 104, entities should recognize sales if their remaining obligations are inconsequential or perfunctory to the earning process. EITF 00-21 is observed by SAB 104 on the deliverables linked to the deals. If the plant is immaterial and unnecessary to the equipment's utilization, the entity can recognize the Revenue in the ongoing term and at the same time accrue the associated cost of installation. Alternatively, the entity recognizes the whole transaction following the conclusion of the installation when the latter is a significant cost or is fundamental for the performance of the equipment. Furthermore SAB 104 gives some illustrations on:

- When to involve or defer nonrefundable up-front fees;
- Resulting impact on income;
- Suggesting Revenue deferral for up-front fees in exception for fees that delineate the completion of a different earning process.

1.5.1 Construction Contract under US GAAP

Given that the major portion of construction contracts are longstanding, the matching principle would be breached if the Revenue were recorded at the time of the contract execution or the sale of the service. SOP 81-1 (Accounting for Performance of Construction-Type and Certain Production Type Cost Contracts)

regulates the two ways of Revenue recognition approved: The Percentage of Completion Method and the Completed Contract Method.

Under the former, the construction contractor realizes the Revenue during the duration of the of the construction contract dependent on the stage of completion. SOP 81-1 demands that the percentage of completion method should be adopted *in lieu* of the Completed Contract Method if all the norms of SOP 81 -1 are satisfied.

The latter is applied in occasional situation: under the percentage of completion method, contract Revenue is paired alongside the costs faced in meeting the stage of completion. The Revenue and the gains are realized throughout the execution of the contract and the former is matched to incurred costs. With this method all Revenue, costs and income are realized exclusively at conclusion of the construction work. Reporting income before the very conclusion is not allowed. The percentage completion method could be used only if the result of the construction contract may be forecasted in a truthful way. When a loss is forecasted a provision should be created for the loss of the contract.

1.6 Weakness of Revenue Recognition Standards prior to IFRS 15

In the previous standard as noted by IASB there were some divergence and fragilities. Those divergences that have emerged due to the restricted guidance on plenty of topics like accounting for arrangements with multiple elements (Tong 2014; Prochazka, 2009).

In deals for the construction of real estate the IFRIC 15's instructions on the shifting of control and the significant risks and rewards of ownership as time passes were not precise and have created different point of view. Furthermore, the previous Standards gave minimal instruction regarding the possible introduction of new type of transactions, for instance the licensing arrangements and warranties that comprehend a service component (Tong, 2014). Hence, the problems concerning Revenue recognition were continuing to be born as more class of transaction turned up.

The IASB observed that the disclosure demand in the previous Standard was insufficient for the investors to interpret in a right way the entity's Revenue, and the analysis and estimation done by the entity in recognizing Revenue (Tong, 2014).

As pointed out previously, IAS 18 asks that Revenue are to be recognized in the case of a critical event in an earning process. This prerequisite disproves the definition of Revenue that depends from the changes in assets and liabilities.

For what concerns US GAAP there are some inconsistencies as well. The requests established by SFAC 5 may overrule the definitions disposed by SFAC 6: in fact, conforming to SFAC 5, Revenue have to be realized or realizable and earned, so in the case of a multiple-element contract it's complicated to pinpoint the moment in which determine the Revenue as earned. One answer to this problem could be deferring Revenue as a balance sheet item (Prochazka, 2009).

Anyway, deferred Revenue could not satisfy the definition of liability. The motive behind is that there is a disparity between the application criteria for the Revenue recognition and liability recognition dispositions: the recognition of deferred items is an effect of the dominance of Revenue recognition principles over the definition of liability (Prochazka, 2009).

The determination of Revenue is based on the capital maintenance approach and Revenue comes thanks to the change in net assets; whilst for what concern the asset and liabilities method, the assets and liabilities are individuated consequently to a sale transaction and the concentration on the changes is towards the entity's financial position and the assets and liabilities made by transactions are computed through the fair value. The applications criteria depend on the earning process approach which determines the single component of the earning process and determines the related Revenue at the fair value through the allocation method. Those guidance enclosed application criteria that were inconsistent with the definition of Revenue therefore in a way varied and overrode the definition itself: the aforementioned arguments implied incomparability of financial statements and diminished quality of decision-oriented information (Tong, 2014; Prochazka, 2009).

Furthermore, the IASB has identified that IAS 11 and IAS 18 are substantially diverse: this may drive to an alteration of the financial statements based on the standard that is employed. Moreover, it affirms that the previous provision did not encompass accurate guidance for "variable consideration and rules for the time value of money". Hence, some enterprises don't deal with the present value of money. Disclosure is not acceptable and absence of coherence with the disclosure of different terms in the financial statements: for instance, a lot of enterprises display Revenue alone so that beneficiaries of the financial statement might not be capable to connect Revenue to the financial position of the enterprise.

Mccarthy (2012) displays a study in which twain in a rule-based and principle-based Revenue recognition situation a little number of the people that have taken part to the study computed in the right way the total of Revenue to be considered. Bierstaker (2016) conducted an akin study which objective was to examine the skill of 176 financial managers to correctly use the Revenue recognition under IFRS. An important need for more IFRS support was established as only the 40% of the managers answered in the right way (Bierstaker et. al 2016).

Findings on the interpretation of Revenue recognition is limited: Ismail (2014) concentrates on IFRIC 15 in Malaysia's financial reporting convergence in the property development sector. Just 2 of 133 companies selected the IFRIC method, therefore some consideration was set on Revenue recognition in IFRIC 15.

A study by Haller et. al (2009) find IAS 11 as one of standards accountable for an important increase in stockholders' equity in the time of the required application of IFRS in Germany primary because of the PoC method.

Chapter II

IFRS 15

2.1 Scope of IFRS 15

The range of IFRS does not comprehend all the types of contracts, in fact this principle does not apply to lease contracts under the scope of IFRS 16, insurance contracts within the scope of IFRS 4, financial instruments and other contractual rights or obligations within the scope of IFRS 9 (financial instruments), IFRS 10 (Consolidated financial statements), IFRS 11 (Joint arrangements), IAS 27 (separate financial statements) and IAS 28 (Investment in association and Joint Ventures), and to non-monetary exchanges between entities in the same line of business facilitate sales to customers or potential customers[17]. A distinction from the previous IAS 18 may be underlined: dividends and interest are ignored from the extent of IFRS 15 while formerly they were subject of IAS 18 (Deloitte 2015[18]). There could be the case, in a single contract, that some components might not be part of the extent of IFRS 15 or might be subject to application of another standard. In order to isolate those elements, the other standard would be applied before IFRS 15, if the aforementioned standard is not able to clarify how to separate the elements, then IFRS will be applied to create the separation (IFRS 15 par. 8). In addition, if there are contracts with affinities in terms and conditions a portfolio approach could be used to the limit that the latter would not substantially be different from a separate treatment of all contracts (Peters 2016).

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[17] E.g. IFRS would not apply to a contract between two oil companies that agree on exchange of oil to fulfill demand from their customers in different locations specified location on a time basis.

[18] *Implementing IFRS 15 Revenue from with customers – a practical guide to implementation issues for the aerospace and defence industry*

2.2. Important Changes

According to Tong (2014) an entity would have to determine the different performance obligations for contract with multiple elements and account for every part of it. This encompasses the disengagement of multiple goods and services in a transaction, the separation of a warranty if it includes a service element and a licensing element in a sale of good or service transaction. The transaction price must be assigned to the single performance obligations in a contract on the base of the related stand-alone selling prices (Tong 2014).

In the case of long-term contracts an entity has to determine if the latter answer to a performance obligation over time or at a point in time. The determination is set up on the moment in which the obligation assigns the control of an asset to the customer, with the control to be determined from the perspective of the customer. When the performance of the obligation is provided over time, the entity acknowledges Revenue over time by quantifying the advance towards the full achievement of the performance itself (Tong 2014).

The expenses linked to a contract with a customer would contain incremental costs to obtain and costs to accomplish a contract must be recognized as an asset[19]. IFRS demands that the recognized asset must be exposed to amortization and impairment test (Tong 2014).

On disclosures it is asked by IFRS 15 both qualitative and quantitative information regarding contracts with customers, those encompasses judgments and estimates made, disaggregated information about recognized Revenue and performance obligations pending at the end of the reporting period.

The following table (Dalkicic, 2015) recaps the different characteristics between the former and the current standards:

[19] The equivalent of a contract work in progress.

Former Standards	IFRS 15
Various standards and interpretations.	A unique, concise standard.
Different models for diverse types of Revenue.	A unique model for Revenue for all sectors.
IAS 18 – Revenue, built on the concept of risks and rewards.	A control-based model, aligned with the other IFRS Standards.
Consideration calculated through fair value.	Consideration calculated as the amount that the company supposes to be entitled.
Discrepancy regarding the time of the recognition of Revenue by a company: at a point in time or over time.	Revenue are going to be recognized over time exclusively if certain criteria in IFRS 15 – Contract with Customers are reached. Alternatively, Revenue are going to be recognized at the point in time in which the customers gains control of the goods or service.
Absence of an accurate guidance regarding the measure of Revenue that has to be recognized in the case variable amounts.	Variable consideration is entailed when there is an accurate expectation pointing that the entity's will is to offer a price compromise to the buyer.

2.3 The Five Step Model

The objectives of the so called "Five step model" according to IFRS 15 are the following:

a) Provide a more robust framework for addressing Revenue recognition issues;
b) Improve comparability of Revenue recognition practices across entities, industries, jurisdictions and capital markets

c) Simplify the preparation of financial statements by reducing the amount of guidance to which entities must refer;
d) Required enhanced disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of Revenue that is recognized.

2.3.1. Step one: Identification of the contracts with the customers

As the consequent criteria are met the first step of the model is accomplished:

- Consent of the contract parties on the terms of the contract, in writing or orally or according to the generally accepted practices within the business sector.
- The potentials for determining the rights of the contract parties as regards the goods transferred from one party to another in the contract.
- The contract has commercial substance which implies that the modification of risks, time or quantity of future money movement is foreseen as the outcome of the contracts itself;
- It is possible that the company will collect compensation for the goods and/or services, handed to the buyer, for which he has the right. The probability of getting the whole compensation is determined on the ground of the customer's ability and his plan to pay that amount of compensation.

Nevertheless, if the aforementioned criteria are not satisfied and the company gains the compensation from the client, then the compensation is acknowledged as Revenue solely in the circumstance in which any either of the subsequent occurrences take place:

1. The entity does not have infraction of obligations on the shipment of goods and service, and the total, or essentially the total amount guaranteed by the client was achieved and is not accountable to repayment;

2. The contract was concluded, and the amount of payment collected from the client is not answerable to repayment.

If one confronts IFRS 15 and IAS 18 with respect to the recognition with the buyer, one can come to the end that, at this level there are no significant divergence between the aforesaid standards.

Anyway, this description suggests that contracts have to be valid by law if we want to recognize the rights and obligation set up by the very contract (IFRS 15, par. BC 31). This has considerable influence because of the various definition of the term "contract" in IFRS; e.g. the one within IAS 32 – financial instrument: in fact, a contract is not automatically be enforceable by the law (Peters 2016).

The criteria sort out by IFRS 15 par. 17 are peculiar to the one in IAS 11, which demands a combination of contract (Tong, 2014). On the contrary IAS 18 did not include any instruction on when contracts had to be combined (Tong, 2014). Hence, the contracts that match those criteria will be connected even though they are not subjected to IAS 18 (Peters, 2016). The principle permits an entity to account for portfolios when it could be fairly foreseen that the outcome is not substantially different related to having accounted every single contract (Tong, 2014).

Contract modifications are regulated by IFRS 15, par. 18: "those involve modifications in the scope, price or both of a contract and are approved by the parties" (Tong, 2014). With relation to that, IAS 18 did not entail any direction.

Usually contracts may be intertwined with each other. In fact, thereafter renegotiation between buyers and sellers, some changes may occur in the scope or price of the contracts themselves. Thanks to the new condition asked by IFRS 15, companies might have to readjust their ongoing practices on the matter of contract combination or modifications.

For what concerns the combinations of contracts, as aforementioned, while IAS 18 did not apply anything with relation to the matter being discussed, IFRS 15

submitted criteria that has to be applied in terms of combination of contract ad stated out in IFRS 15, Par. 17:

a) The contracts are mediated as a group of contracts for a distinct commercial aim;
b) The total of the consideration that has to be paid in a single contract relies upon the price or performance of the other contract; or
c) The goods or services promised in the contracts are a single performance obligation according with paragraphs 22-30.

Regarding contract modifications, IFRS 15 explain how companies should account for them. This matter is regulated by IFRS 15 par. 18 that states that a contract modification is a variation in the scope and/or price that is agreed by the counterparts of the contract and it can be also defined in some industries and jurisdictions as a change order, a variation or an amendment. A contract modification is born after the counterparts agree to a variation in the contract that may constitute new or changes current enforceable rights and obligations of the parties of the contract. The change in the contract could be allowed by writing, oral agreement or implicit by ordinary business practices. According to par. 20 a company may consider a contract modification as a distinct contract if the following conditions are satisfied: the scope of the contract is incremented thanks to the augmentation of promised goods or service which shall be distinct[20] and the value of the contract is raised by an amount of consideration that mirrors the company's stand-alone selling prices of the further promised goods or service and any appropriate modification to said price to echo the circumstances of the particular contract. Lastly, when a contract modification is not treated as explained in par. 20, the promised goods and services that are not already transferred at the time of the contract modification have to be accounted in one of the following methods:

a) If the remaining goods or services are separated from the goods or services transferred prior to the time of the change in the contract a company shall

[20] In accordance with paragraphs 26 -30.

record the contract modification in such a way that there were a termination of an existing contract and the production of a new contract[21].

b) A company may record the modification of the contract as if it were a part of the existing contract if the remaining goods or services are not distinct, hence part of a distinct performance obligation which is in some measure satisfied at the date of the contract modification. The consequences on the transaction price and on the entity's measure of progress with relation to the total satisfaction of the performance obligation, is seen as an adjustment to Revenue at the date of contract modification.

c) If the remaining goods and services are a combination of item a) and b) then the result of the modification of the contract shall be accounted in a way that is consistent with the aims of this principles.

2.3.2 Step two: Identification of the performance obligation in the contract

A contract can include distribution of goods and services and the point of achieving control over them by the buyer may be different. With relation to the latter IFRS 15 recognizes the need to determine each obligation, that is underlined in the contract and is subject to achievement, if the guaranteed goods or services are distinct and the sale of the specific object is the unit of Revenue accounting (Okhramovic & Tokareva, 2018).

IFRS 15 par. 22 demands the consideration of different performance obligations, specific goods or services related to the principles of IFRS 15, par 27[22]. Furthermore, IFRS 15, par. 27b affirms that this type of analysis has to be handled in the background of the contract. For what concerns distinct performance obligations, the

[21] «The amount of consideration to be allocated to the remaining performance obligations is the sum of the consideration promise d by the customer that was included in the estimate of the transaction price and that had not been recognized as Revenue and the consideration promised as part of the contract modification»

[22] I.e. if goods are profitable to the customers on their own and are readily available resource.

ones that are accomplished as time goes by as one single performance obligations, they are considerably akin and have an alike system of transfer as regulated by IFRS 15, par. 22 (Peter, 2016). The aggregation of non-distinct goods or services is directed until the moment in which a single performance obligation is detectable (Peters, 2016). Differently IAS 18, par. 13 just demanded transactions to be concluded in definite situations. Hence, this characteristic of IFRS displays one of the most important innovation (Peters, 2016).

2.3.3 Step three: Determination of the transaction price

The price of the transaction is the compensation that is supposed to be earned from a sale of goods or services to the customer. In order to establish the transaction price, the entity should take into consideration impact of the following elements:

1. Variable compensation – the amount can differ on the base of discounts, cored points, price rebates, incentives, performance bonuses, and fines;
2. Presence of the essential financial component – the total of the compensation has to be revised for considering the time cost of compensation based on which discount rate is employed, whenever the range between the shipment of goods or services and payment goes beyond twelve months.

According to Okhramovic & Tokareva (2018) «IAS 18 took into account the effect of discounting during Revenue recognition, if the deferred payment provided for the presence of essential financial component. However, the discounting was not applied in the situation when the company obtain advanced payment. Therefore, according to IFRS 15, the Revenue is subject to correction in terms of the effect of discounting not only in case of the deferred payment, but also in case of obtaining advanced payment. In this case, the total amount of Revenue can be higher than the amount of remuneration as per the contract, as the income and expenditure statement will separately reflect the amount of Revenue, taking into account the financial component ad financial expenses regarding this financial component».

Furthermore, as pointed out by Peters (2016) the price settled in the contract may be affected by volatile consideration, important financing factors, non – cash consideration[23] or considerations payable to customers[24]. The estimation of the variable consideration according to IFRS par. 53 and 54 has to be established on the expected value or the more probable amount (Peters, 2016); while IFRS par. 56 points out that the "constraint" of the variable consideration indicates that a variable consideration is exclusively acknowledged in the transaction price when it is largely probable that there is no important annulment of Revenue as soon as the inconvenience is solved. For what concerns IAS 18 a variable consideration is usually postponed until the acquittance is taken by the customer. Given that an estimation is enough for IFRS 15, Revenue is likely to be recognized earlier (Peters, 2016). As stated by IFRS 15, par. 64 transaction prices shall be adapted with relation to a discount rate suitable for different financing transaction and either considered as interest expenses or interest Revenue presented separately from the original Revenue from the contract (IFRS 15, par 65). The latter has the objective to accurately display the Revenue. The definition of "significant" in relation with financing elements is given by IFRS 15 par. 62.

Anyway, if the extent of time between the transfer and the payment does not surpass a year, the adjustment for discounted value of money is not required. In contrast to the previous (IAS 18, par. 11), this standard lower the adjustments for the time value of money.

As stated by Petersen, Bansbach, Dombach and KLS Accounting (2015) the non-cash consideration is recognized at their fair value. If the fair value cannot be forecasted in a reliable way or is not accessible, the market price has to be considered. Mutation in values are to be taken into account with relation to the regulation of variable consideration. Consideration payable to customers lower the Revenue other than for a single performance obligation, that is contemplated as a normal purchase (Petersen et. al, 2015).

[23] IFRS 15, par. 66-69.
[24] IFRS 15, par. 70-72.

2.3.4. Step four: Allocation of the transaction price to the performance obligations

When the price of the transaction is identified it has to be put in the midst of the single performance obligation established during the second step (Peters, 2016).

In order to do that the companies will use the so-called relative stand-alone selling prices method[25]. The entities have to first decide the different stand-alone selling prices of the performance obligations. Then, the latter will be summed together, and every particular performance obligation will be put as a portion of the transaction price depending on the percentage of its relative stand-alone price in this sum (Peters, 2016).

According to IFRS 15 par. 84 the allocation of variable consideration is an exemption to the relative stand-alone selling price method because it could connect to a unique part of the contract. This means that the entities do not have to allocate a variable element to every single performance obligation in a contract each time if it uniquely relates to a part of the. In some cases, the variable consideration could have been even connected to a single performance obligation (Peters, 2016). Ernst & Young (2014) affirms that these new requirements are not so diverse with respect to the fair value approach. Deloitte (2014) states that companies that settle a huge number of contracts will face difficult challenges on the calculation and allocation of Revenue because the latter mat vary from each distinct contract.

2.3.5. Step five: Revenue recognition when the entity satisfies a performance obligation.

The ultimate step of the model concerns the recognition of Revenue. According to IFRS 15 the entities are able to recognize Revenue when the entity itself fulfill a performance obligation though the transfer of a promised good or service to the

[25] IFRS 15 par. 75.

customer. Goods and service are treated as transferred as the customers gain the control of the assets (IFRS 15, par 31.). According to IFRS 15, par 33 the “control” is the capability to the direct use and the gathering of the considerably all the benefits from an asset.

Under IAS 18, Revenue is recognized if the buyer has obtained all the risks and rewards (IAS 18, par. 14). According to Allocco et al. (2014) given that IFRS 15 and IAS 18 are based on diverse approach the timing of Revenue recognition will be different. For instance, a buyer may gain the control of an asset whilst the seller is having the risks related to transfer of that asset. In this circumstance Revenue are going to be recognized before the transfer according to IFRS 15 and after the transfer according to IAS 18. For the IASB the choice to aim the attention on control is related to the fact that it would simplify the establishment of the distinct performance obligation and would direct to more rational regarding the transmission of goods and services.

One particular problem regards the determination if the performance obligation is fulfilled over time or at a point in time. To check whether the Revenue has to be recognized over time it is required to determine if one of the criteria in IFRS par. 35 is met:

- The customer simultaneously receives and consumes the benefits provided by the entity’s performance as the entity perform;
- The entity’s performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- The entity’s performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

If one the criteria aforementioned are not met than the performance obligation is satisfied at a point in time. In order to establish the point in time at which the control is gained by the customer the entity should check the criteria for the control in IFRS

15 par 31—34. Moreover, the entity should deem the indicators concerning the transfer of control stated in IFRS 15 par. 38

In order to establish the point in which the client gains control over the asset one has to examine the conditions to the control:

- Control over an asset convey the fact that the buyer acquires the ability to manage this asset;
- The receipt of the benefits that one can take advantage with it;
- The control entails the power to exclude other entities to manage the usage of assets and gain benefit from it.

2.4 Disclosure

The new IFRS 15 asks both qualitative and quantitative information to be divulged about contracts with customers containing evaluation and estimates employed, Revenue divided in categories and performance obligation still active at the end of the period (Tong, 2014). Other disclosures are mandatory for:

a) Contract balances;
b) Performance obligations;
c) Transaction prices allocated to the remaining performance obligation;
d) Significant judgment in the application of the standard;
e) Determining the timing of satisfaction of performance obligations;
f) Determining the transaction price and the amounts allocated to performance obligations (Tong, 2014).

According to Tong (2014), IFRS 15 affects the former method in seven areas:

1) Long-term contract with customers: The Percentage of Completion method comparable to IAS 11 is exclusively applicable if the customer has control

over the asset during its evolution, the asset has no different use for the entity and the entity has a juridical right to payment for the performance completed to date[26];

2) Recognition of different performance obligations: for definite goods and services, the contract has to split in different performance obligations. This might direct to diverse units under the standard with relation the units determined by the former standard[27];
3) Licensing and Rights to use: IFRS 15 demands an entity to asses if the license in a contract is specific. In this circumstance, it is treated as a single performance obligation. Differently it is accounted as portion of the performance obligation to supply goods and services. An entity has to evaluate if the criteria for the fulfillment of the performance obligations over time are in place or not[28].
4) Product warranties: as regulated by the former practices, warranties are seen as a provision in the time of a cost accrual. According to the new standards a warranty may be a distinct separate performance obligation if it is a service factor that is priced or settled solely[29];
5) Use of estimates: the use of estimates is asked at a larger grade thanks to the determination and allocation of the transaction price on the ground of stand-alone selling prices. The former method demanded to defer Revenue recognition in the case in which observable prices were not accessible for upgrades or additions. IFRS asks the entity to forecast stand-alone prices for the goods or services in the contract[30].
6) Accounting for costs: the accounting obligation for costs are entailed in IFRS 15: for example, incremental costs to gain a contract and costs for expect contract could be anticipated in the contract expense[31].
7) Disclosures: disclosure beneath IFRS 15 demands a far bigger level of detail than the preceding requirements, in particular with attention to more

[26] IFRS 15, par. 35 - 37
[27] IFRS 15, par. 26 - 30
[28] IFRS 15, par. B52 – B56
[29] IFRS 15, par. B28 – B33
[30] IFRS 15, par. 76 – 80.
[31] IFRS 15, par. 91 – 98.

disaggregated information on recognized Revenue and the performance obligations that are left at the end of the period[32].

According again to Tong (2014) IFRS 15 is able to adjust the flaws and the imperfection of the former recognition standard and the consequences that are based on the transaction type and the entity.

2.5 Retrospective Method vs Cumulative Effective Method

In the case in which the retrospective method is adopted, three practical expedients can be used in order to simplify the transaction and thus incentivizing the utilization of this method:

1) Closed contracts: the contracts that begin and end in the same fiscal year are not required to be re-exposed. Even if it is a simplification, for the companies that publish trimestral or semesterly financial statements, the internal information might not be comparable;
2) For the closed contracts that expect variable consideration the price of the transaction can be used on the date in which the contract has ended instead of forecasting the variable consideration that already existed in the previous fiscal year that are reported for comparative ends.
3) For every fiscal year reported before the date of the first application of the contract it is not necessary giving the information regarding the amount of the price of the transaction allocated on the remaining performance obligation and explanation concerning the time in which one can expect those performances to be registered as a Revenue.

As illustrated in the following examples, if from one side the rules of transition allow to lighten the impacts caused by the switch to the new standard on the other the

[32] IFRS 15, par. 110 – 129.

choice of the more appropriated approach will be difficult due to the different effects that may be produced by the choice itself on the income statement and the financial statements of the first balance sheet pursuant the new principle on Revenue recognition. For this reason, one can sustain that the IFRS adopters should analyze the different scenario deriving from the options available, with the aim to identify the one that is more suitable for their own needs.

There are indeed different costs and benefits for each of the two methods:

- For what concerns the Retrospective Method it asks a lot of information to the entity, but it gives a clear representation of the financial data as the Revenue of the previous fiscal year are restated under IFRS 15. Such information is more relevant when the variation and/or the trend of Revenue is analyzed. Moreover, the three practical expedients aforementioned are fruitful exclusively when this method is adopted;
- Regarding the cumulative effect method, even if this method could have a major appeal to the IFRS adopters given that is a method of simple application and the comparable data are unchanged one has to consider that by adopting the Cumulative Effective Method the comparability with the Revenue of the previous fiscal year following the application of different standard in the two periods. This might be problematic for the users that want to analyze the balance sheet in order to find variation and/or trend in the Revenue. Anyway, this method is probably the one which take less time to apply and demands less information as it is applied only to contracts in progress at the date of first application of the new standard.

As a consequence, the IAS adopter had to carefully value the needs of the users of their balance sheet, the economic and financial impacts of the two methods and the costs to gain the required information when they had to choose the approach to follow.

Now four common examples are reported which could lead to changes more or less significative with respect to the international standard applied before the new

principles. In all of the following examples is assumed that the selling company will of course adopt IFRS 15 and it will be showed the impact of the new standard compared to the one of the previous years.

Example 1: changing of timing in the recognition of Revenue in front of the use of a license

A record company sells a license of a specific Beethoven's registration to a customer (an advertising company) from March 1st, 2015 to February 28th, 2017. The client has the right to use the registration in every kind of advertising campaign (television, radio and on-line media included) in a specific country. The contract is not effaceable, and the client must pay $1000 per month. The seller company assure to its client to offer the access to the registration at the beginning of the license. In this example the retrospective model is applied and it leads to the recognition of more Revenue with respect to the cumulative effective method, according to the latter the difference of $2000 will not be recorded as a Revenue in the income statement but will be recorded as a balance adjustment in the reserve of the equity at the beginning of the period.

Under IAS 18 the Revenue would be recorded as constant quota along the duration of the contract while under IFRS 15 the right of use of intellectual property is static and the performance obligation is satisfied at certain point in time. The vendor records the sell in the moment in which the client is able to use the good in license and obtain substantially all the benefits deriving from the use of the intellectual property.

In the case of application of the retrospective method the data are exposed according to the rules of IFRS 15 while under the cumulative effect method the Revenue of 2016 is not re-exposed because the new standard is applied at the data of first use (1st January 2017). At this last date an adjustment is recorded with a counterpart on the reserves to keep into account the difference that would have been in the Revenue if that would have been recorded if the new standard had always been applied.

Example 2: accounting treatment of variable consideration

Let's suppose that on 1st November 2015 a company closes a contract of 18 months for the supply of a service of call center to a client which job is the commercialization of electronic products. The contract expects that the company receives a fixed amount of $180.000 and a variable one of $100.000 if it will be able to reach certain levels of service relatively to the waiting time of the clients.
The additional amount will be rewarded as follows:

- $100.000 if the level will be reached by 30th April 2016
- $50.000 if the level will be reached by 31st December 2016

Under IAS 18 the seller would have recorded in constant quota along the contract period. The achievement of the level of exercise would have been valued at the end of every fiscal year to determine the eventual variable amount. At the beginning of the contract the additional remuneration would have been recorded only when the level of service is reached.

Under IFRS 15, an analysis of the contractual terms points that the selling will be recognized in constant quota along the duration of the contract. In the determination of the price of the transaction, the seller will consider the approach that will better forecast the last amount that will be received and thus determine the most likely method more appropriated.

The estimation of the variable consideration is updated at the end of every fiscal year to reflect the position at that date and every change with respect to the previous year. The initial variable consideration is evaluated at $50.000 at the beginning of the contract. This value is included in the price of the transaction given that is very probable that will not be subject to a significative increase in the future. The seller values the estimation of the variable consideration at the end of every exercise and determines that there is not variation with respect to the initial forecast of the value. Since the contract has begun in the 2015 an adjustment in the initial reserves in 2016 for an entity that adopt the Retrospective Method. The adjustment is equal to

the difference between the Revenue recorded under IAS 18 and those that would have been recorded under IFRS 15. As a consequence, there would have been Revenue for $5.556 that will not be recorded in the income statement using the Retrospective Method against the $11.111 recorded as reserves under the Cumulative effective Method.

Example 3: treatment of multiple derivable arrangements

If a company closes a contract that will foresee the furniture of a software on license that expect the installation of the latter e and technical support for a period of two years from 1st June 2015 for $480.000.

For what concerns the accounting records, under IAS 18 the seller would have. Treated the contract as a unique supply. The Revenue would have been recorded as constant quota along the duration of the contract for a consideration of $20.000 per month. Under IFRS one can affirm that the client might benefit from every of the goods or services both alone or along other goods or services that are ready for the use. Moreover, every deliver of goods and service is separately identifiable by others. Given that the installation does not modify significantly the software, the installation and the software are two distinct outputs and non a combination of themselves.

The fair value of the goods and service is the following:

- Software License: $260.000
- Installation: $100.000
- Technical support: $120.000

The Revenue coming from the license and the installation is recorded at the date of delivery (1st June 2015)

The technical support is supplied along the duration of the contract and it is expected the following hours of labor:

2015: 100 hours
2016: 300 hours
2017: 200 hours
The total amount of the hours expected is equal to 600 hours.

Under the retrospective method the Revenue from the sale of the license and the installation of the software are recorded in 2015, that is the moment in which they are supplied. As a consequence, the amount of these services is recorded as an adjustment of the initial reserves.

Under the cumulative effective method, the sales of 2016 reported according to IAS 18 are not re exposed because the new standard is applied only at the first day of application. On such date (1st January 2017) an adjustment on the initial reverses equal to the difference between the sales that would have been recorded in the antecedent period according to the new standard. Lastly, there will be Revenue for $240.000 that will not be recorded using the retrospective method against the $60.000 recorded as initial reserves with the Cumulative Effective Method.

Example 4: treatment of contractual modification

A company has closed a contract for the supply of n. 200 products for a consideration of $16.000 that will be supplied to the client along a period of 10 months beginning on 1st April 2016 (20 products per month) and the control on the products themselves will pass with the delivery to the client. On 1st December 2016, after 160 products have being delivered the contract is modified with the demand of further 80 products in addition to the 40 that have not been shipped.
In the moment in which the contract is modified, the price for every product drop to $75. According to IFRS 15, the additional products to deliver are distinct. The price of the additional product is $65.

Under the previous accounting record (IAS 18) the seller recorded Revenue for $80 per month for the first 200 products equally during the 10 months the additional products are recorded such as they were products sold on the base of the original contract. The Revenue is recorded for an amount equal to $65 for the 80 additional products that comes from the contractual modification.

With the new accounting regulation, the price of selling of the additional products is not the stand-alone price at the date of the contractual modification. As a consequence, from an accounting point of view, the original contract is considered closed in the moment of the contractual modification. The quantity of product left that were included in the original contract, together with the additional quantities deriving from the contractual modification are arranged together and recorded as if they were sold on the base of a new contract. The price of sale of every product is the weighted averaged mean equal to $70.

Under the Retrospective Method the Revenue from the sale of 160 products are recorded for $80 per product. When the contract is modified the remaining 40 pieces and the additional 80 are recorded for a price of $70 per product.
According to the Cumulative Effective Method the 2016 sales reported under IAS 18 are not re-exposed because the new standard is applied only from the date of first application (1 January 2017). At the date of first application it is recorded an adjustment on the initial reserves equal to the differential between the sales that would have been recorded in the period before under the new standard.

In this example with the retrospective method the Revenue recorded are lower by $100 with respect to the cumulative effective method. The difference is recorded on the reserve of 2017 year. The total Revenue under the cumulative effective method are higher than the consideration from the contract because some sales are recorded twice.

2.6. Importance of IFRS 15

As pointed out before Revenue recognition is of huge significance. As displayed by Henry and Holzmann (2009) 38% of the restatements were connect to issue with Revenue recognition. Another study by Henry and Holzmann (2009) showed that more than the 50% of Revenue – related reinstatements arose from timing problems or from taking into account fabricated Revenue; which is in alignment with the findings of the Committee of Sponsoring Organizations of the Treadway Commission: in fact, more than half of the financial reporting frauds committed by US listed companies from 1987 to 1997 regarded overstating Revenue (Phillips Jr, Luehlfing & Daily, 2001). Also, according to Dalkilic (2015) if there are issues in an entity's financial statement, Revenue recognition is the first thing that worry investors. This topic is covered in other studies (Eccles, Holt & Fell-Smith, 2005; Edel Lemus, 2014; Holzmann & Ramnath, 2013; Sondhi & Taub, 2008).

This is connected to IFRS 15 by Peters (2016): it is illustrated that the standard influences the top line, as prevision has to be right, it is important to disclose proper information to the stakeholders. Furthermore, companies should not postpone their beginning impact assessment only because they do not foresee big differences. With relation to earlier requirements, IFRS 15 subsists in a greater extent of arduous rules and asks for time to understand at best the requirements and the practical application on single contract (Peters, 2016).

2.7 Effects of IFRS 15

As stated by Oyedokun (2016) the definition itself of Revenue is much simple in the text of IFRS 15 rather than the old IAS 18. The new guidance in fact hand over bigger detail in many aspects.

Tysiac (2017) underlines that Revenue impacts essential financial ratios and bottom-line earnings and entities might handle discussion on the possible effects

with their investors. PwC (2016) affirms what just written: 72% of respondents answered that.

According to Tysiac (2014), three industries will face a big influence: telecommunications, software, and real estate companies. For example, communication companies acknowledge more Revenue if the headset is supplied and less Revenue if the services are billed and licensed judgment practiced with relation to incremental acquisition costs and upfront direct costs to fulfill contracts.

For what concerns the software sector there could be some differences due to the fact that licenses that give the right to the usage of intellectual property are treated upfront at a precise point in time (Tysiac, 2014).

Regarding real estate companies according to Tysiac (2014) there is no sign of whether or not a sale is made when there is the transfer of control to the buyer.

2.8 Adoption and Implementation of IFRS 15

Even if GAAPweb (2015) showed that a strict number of respondents were ready for IFRS 15 implementation, it displayed information of IFRS 15 implementation problems which illustrates that 30% of participants predict the biggest problem in the allocation of Revenue and accounting forecasts whilst 17% guess that the implementation of different systems and processes would be uncertain.

Moreover, PwC (2016) examines the matter on the organizational level, finding that 68% of companies confirmed that reconsideration to systems and connected control would be either difficult or somewhat difficult. 23% of the respondents forecast a high impact, 31% a moderate impact on IT systems. 60% of the respondents think that the cost will go up from 0.5 million to 1 million of USD.

According to Tysiac (2017) a governance structure with a steering committee and executive sponsorship along the most important departments of finance, investor relation, tax and IT is fundamental.

Anyway, particular system and knowledge are not fundamental within the company using IFRS 15 but also for the auditors concerned by the new guidance (Haggenmuller, 2018).

IFRS 15 appears to have a huge impact on business, instruction of employees and accurate planning to secure that every data asked is captured. Business have the urge to understand that the all business is influenced and not only the accounting section (Weaver & Woods). Nonetheless, the knowledge provided by the former studies (GAAPweb, 2015; PwC, 2016; Tysiac, 2017).

Chapter III

Literature review on Earnings Management

3.1 Literature review on Earnings management

The use of an accrual-based accounting is labelled as necessary by the European Commission: in fact, in a real management process prospect a cash-based system structure would be more exposed given that monetary flows system is simpler to manage (European Commission, 2013, Section 3).

According to Goldman & Brashares (1991) on this regard, the clearness of financial statement is highlighted by a full-accrual accounting structure and permits a correct picture of the performance of the firm.

For what concerns literature on earnings management, there has been a continuing argument since 1980, when some academics began to develop model to underline to presence of this phenomenon.

Healy (1985) found a strong link between accruals and managers' income reporting incentives under their bonus contract. Managers are more inclined to pick income decreasing accruals if their bonus system upper or lower bounds are binding, and income increasing accruals if these bounds are not binding. The outcome of the tests supports the theory: keeping cash flows constant, accruals are lower for firms with binding bonus plan upper bounds than for firms with no upper bound (Healy, 1985). Regarding the voluntary modification in accounting procedures as a benchmark for discretionary accounting choices, the outcome of the analysis proposes a high influence of voluntary changes in accounting procedures along years after the adoption or modification of a bonus plan (Healy, 1985).

Watts and Zimmerman (1986) analyzed earning-based compensation deals. It is assessed that accounting has an important function in the contractual connection and possibly temper agency costs.

McNichols and Wilson (1988) studied the discretionary and non-discretionary factors of debt provision, analyzing the link between the non-ordinary expense and earnings given the incentives of managers who get earning-depending bonuses to take care of earnings thanks to bad-debt expense.

Jones (1991) empirical tests on whether companies that would receive benefits thanks to import relief tried to decrease earning throughout earnings management along the period in which investigations were made by the International Trade Commission (ITC). The study suggested that managers made income-decreasing accruals. The data shows that the discretionary accruals were more income decreasing in the year of the ITC investigation than expected (Jones, 1991).

Holthausen et al. (1995), utilizing data of executive-peculiar bonus plan have studied the extent to which upper managers maneuver earnings in order to boost the present value of the bonus plan. The findings support the hypothesis that managers shape earnings downwards in the case in which their bonuses are at their top.

Burgstahler and Dichev (1997) reported proof that companies manipulate reported earnings to bypass earning decreases and losses. Precisely, in cross-sectional distribution of earnings changes and earnings, it has been discovered uncommonly low density of slight decreases in earnings and losses, and unusually high frequencies of slight increases in earnings and small positive incomes. It is discovered indication that the two elements of earnings, cash flow from operations and changes in working capital are adopted in order to reach boosts in earnings (Burgstahler & Dichev, 1997).

Teoh et al. (1998) revealed that throughout the mutation of discretionary accounting accruals, seasoned equity issuers are able to increment reported earnings. It has been assessed that issuers that alter discretionary current accruals to record higher net income before the offering have reduced after-issue long-run anomalous stock returns and net income. The link between discretionary accruals

and the forthcoming returns is more robust for seasoned equity issuers than for non-issuers (Teoh et al., 1998).

Kasznik (1999) investigated the function of earning management in containing costs connected to management earnings prediction errors. The empirical outcomes are consistent with the forecasts that managers, worried about legal allegations by shareholders and loss of honor, utilize discretionary accruals to lower their estimation errors. The study shows that managers that enhance the earnings number manage recorded earnings upward, and the range of discretionary is linked to different securities litigation cost elements and the number of management's accounting flexibility.

Klein's research (2002) checks whether audit committee and board components are associated to earnings management by the firm. A negative relation is across audit committee independence and anomalous accruals. The contractions in board or audit committee independence are followed by big increases in abnormal accruals. The findings show that boards made to be more independent of CEO are more adequate in checking the corporate financial accounting process.

Xie et al. (2003) investigated the role of board of directors, the audit committee and the executive committee in avoiding earnings management practice. The study showed that the structure of a board and of an audit committee is connected to the possibility that a company will undertake earnings management. Board and audit committee component that have a corporate or financial qualification are connected with small discretionary current accrual with respect to others. It has also been found that board and audit committee gathering frequency is also linked with the lower levels of discretionary current accruals.

Leuz et al. (2003) offered an interpretation for differences in earning management between 31 countries: insiders in an effort to cover their private control benefits, utilize earnings management to hide firm performance from outsiders. Hence, earnings management is believed to lower in the case of investor protection since strong protection restrict insiders' possibility to gain private

control benefits, which diminish their incentives to hide firm performance. Their results are consistent to the forecast and propose an endogenous association between corporate governance and the quality of reported earnings.

Larcker and Richardson (2004) studied the link between the fees paid to auditors for audit and non-audit services and the decision of accrual method. The outcome of their analysis suggests that the ratio of non-audit fees to total fees had a positive relation compared to the absolute value of accruals while they find proofs of the negative relation across the level of fees granted to auditors and accruals[33].

Burhstahler et al. (2006) tested in which way capital market lobbies and institutional structures form companies' incentives to record earnings that mirror their economic correctly. They aim at level of earnings management as on dimension of accounting quality which is especially sensitive to companies' reporting incentives.

Chen et al.'s (2010) studies displays how private equity issuing firms emphasize their earnings in the quarter before the private equity placement disclosure and that sophisticated investor do not demand for a reasonable discount when acquiring shares of private issuing firms. Moreover, they found confirmations that the reversal of effects of pre-issue earnings management is an important factor of long-term performance of private issues. Findings demonstrate that the companies that utilize a more "vigorous" use of earnings management have a post-issue stock performance are outperformed by the firms that utilize a more "cautious" earnings management.

De Angelo's (1986) study on the accounting decisions carried out by managers of 64 New York and American Stock Exchange companies that suggested a management buyout of public stockholders between 1973 – 1982. This kind of acquisitions could arise conflicts of interests due to the fact that managers which possess the depositary responsibility to mediate at fair value the publicly held shares are the buyers of the shares and therefore are stimulated to lower the

[33] Higher fees are connected with smaller accruals.

compensation paid. This and the chance that insider managers may cover up friendly insights on the company's future outlook from other people, has made the SEC to investigate if public stockholders earn the right compensation for their shares.

The findings of De Angelo (2016) however show no indication that those managers regularly choose accounting accruals to lower the public corporation's reported income in the time prior to the buyout (De Angelo, 1986). The more probable justification for the result of the De Angelo study (1986) could be identified on the fact that due to the important managerial conflicts of interests in these operations, public stockholders will tend to analyze the companies' financial statement for proof of income-reducing accounting methods. The motive for managers to do not downplay earnings is not that earnings are irrelevant; but for the fact that earnings are sufficiently important to draw attention by the actors that would be touched by a profitable strategy of income manipulation (De Angelo, 1986).

According again to De Angelo (2016), the results obtained by the study are in line with the Liberty and Zimmerman (1985): union leader may undergo wealth losses if they are not able to detect earnings understatements, hence they possess a heavy incentive to look for inspect financial statements for proof of income reducing accounting techniques. Dechow et al. (1995) displayed that power of the models used is low for earnings management of economically plausible magnitudes.

3.2 Earnings management definition

A unanimous definition on what is earning management has not been given by the literature (Dechow et a., 1996, Messod, 2001).

A definition of earnings management for standard setters is provided by Haley & Walen (1998): «Earnings management occurs when managers use judgment in financial reporting and in structing transaction to alter financial reports to either mislead some stakeholders about the underlying economic performance of the

company, or to influence contractual outcomes that depend on reported accounting numbers». There are many approaches that managers can use in order to use judgment to influence their financial reports: for instance, judgment is needed to forecast a *plethora* of forthcoming economic events that are mirrored in financial statements, such as expected lives and salvage values of long-term asset, obligation for pension benefits and other post-employment benefits, deferred taxes and losses form bad debts and asset impairments (Haley & Wale, 1998). Again, Haley & Waley (1998) comment on their definition of Earning Management: «our definition frames the objective of earnings management as being to mislead stakeholders about the underlying economic performance of the firm. This can arise if managers do not believe that stakeholders undo earning management. It can also occur if managers have access to the information that is not available to outside stakeholders so that earning management is unlikely to be transparent to outsiders».

Judgement in financial reporting entails both benefits and costs (Haley & Waley, 1998). The costs are identified in the likely misallocation of sources that come from earnings management, while the benefits can be established as potential advancement in management's communication of classified information to outside stakeholders. Hence, it is important for standard setters to figure out when standards that allow managers to use judgment in reporting boost the quality of accounting information to users and when they lower it (Haley & Waley, 1999).

Schipper (1989) describe earnings management as a «purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain». He also studied the asymmetry between a company's management and the company's shareholder.

According to Tutino et al. (2019), two essential earning management could be determined:

- Accruals management, linked to the chance given by the accounting standards intending at "obscuring" or "masking" real economic performance (Dechow & Skinner, 2000);

- Real activities manipulation, which happen when managers initiate actions that modify the timing or structuring of an operation, investment and/or financing transaction in an attempt to shape the outcome of the accounting system (Gunny, 2010).

As pointed out by Joosten (2012) research and development expenses and selling, general and administrative expenses are used as devices for a modification form operating and investing activities by adjusting those expenses. According to the IFRS principles the expenses for research are instantly expended. Hence, deferring or moving projects to different periods may increase earnings. Also, as stated by IAS 38, par. 57 professional judgment could be capitalized if particular criteria are met and also can be recorded as development costs.

According to Roychowdhury (2006) overproduction, provision of price reduction to boost the amount of sales and amplify inventory in order to lower the cost of goods sold, industry memberships, stock of inventories and receivables, and incentives to have zero earnings are other method to manipulate earnings. Her cross-sectional analysis finds that these actions are less frequent in the existence of sophisticated investors. Another technique to increase earnings is to sell fixed assets when they are sold with a capital gain. Dye (2002) farther notices as activities that modify the earnings such restructuring of operating and investing activities[34]. Other means are repurchasing stocks to make an increase of earnings per share or financial instruments[35].

For what concerns accruals, they can be employed to manipulate the income beneath the requirement of discretion in accounting standards (Joosten, 2012)[36].

Regarding accrual-based management, Giedts (2017) identifies three accrual accounts connected to Revenue connected to Revenue, those are: accounts receivables, current deferred Revenue and long-term deferred Revenue. An analysis of 89.200 US companies showed that extending model for the detection of accrual-

[34] Acquisition of businesses or usage of leasing.
[35] Hedging activities or debt-to-equity swaps.
[36] Bad debt, asset impairments and salvage of long-term assets.

based earnings management by those three accruals linked to Revenue increases the detection probability (Giedts, 2017).

Another study on 29.520 firm-year observations of US companies examined if a firm's growth is linked with the probability of matching or overcome analysts' Revenue prediction. The analysis separates Revenue management into Revenue manipulation and Revenue expectation management displaying that both of them are efficient mechanism to obtain zero or positive surprises. Revenue manipulation is more linked to growth firms while Revenue expectation management is not used as much.

In general, manipulation is operated through the alteration of expenses to increase income (Pustylnick et al. 2017) while Revenue is manipulated through the acknowledgment of fabricated sales (Lau & Ooi, 2016). This is in accordance with Son and Lin (2017): upward Revenue manipulation might not be feasible in the long period and could deceive users' decision making.

The usage of accrual-based accounting is contemplated essential due to the capacity to produce an exhaustive picture.

3.3 Earning management and IFRS

With relation to the IAS/IFRS and earning management, some scholars become aware of that the quality that would put IAS/IFRS in a higher position with respect to local GAAP is the reduction in costs for investors to determine the value of the information disclosed in IFRS compliant financial statements (Tutino et al., 2019). Better comparability would render more likely the identification of earning management activity thus diminishing the chance of opportunistic conduct by managers (Tutino et al., 2019).

According to Michelli and Cimoni (2012) IAS/IFRS standards are able to correct local gaps associated with peculiar events that have to be recorded in the financial statements. Leuz and Verrechia (1999), Ashbaugh & Pincus (2001), Leuz (2003) affirm that the bigger the disclosure asked by adopting IFRS principles for the financial statement the higher the reduction of opportunistic behavior.

Studying the value of "budget numbers" before and after the embracement of IFRS on a sample of 327 firms that choose for a voluntary implementation from 1994 to 2003, Barth et al. (2008) found a smaller earning management practice together with a bigger value relevance and a timelier recognition of losses after the institution of international accounting standard, transforming into better quality financial statements with respect to the ones produced according to the local GAAP.

A study made by Daske et al. (2008) on the economic aftermath of using IFRS on a sample of 3.800 first adopters discovered a positive correlation among the introduction of IFRS, market liquidity and market valuation, while Armstrong et al. (2010) examined the possible outcome on stock market price finding a positive correlation between a positive (negative) market reaction with the increase (decrease) of IFRS adoption. These two studies display that for early adopters there was a benefit in using international accounting standards.
Analogous outcome has been found by Iatridis (2010) analyzing listed companies in the UK: the use of IFRS can lower the chances of earning management practices as it drives to a timelier and value relevant recognition of losses.

Jeanjean and Stolowy (2008) discovered that the prevalence of earnings management does not diminish after the introduction of IFRS standard and it even increase in France. The results of their research affirm that sharing rules is not a satisfactory prerequisite to conceive a universal business language, and that management incentive and national institution elements have a critical role in composing financial reporting characteristics.
A similar result has been found by Callao and Jarne (2010), which research's objectives was to check whether the adoption of IFRS in the European Union has incremented or decremented the scope for discretionary accruals in the periods

before and just after the regulatory change. They established then which companies' characteristics and country factors may explain justify the accounting discretion detected before and after IFRS. The outcome obtained demonstrates that earning management has enhanced since the introduction of IFRS in Europe, as discretionary accruals have risen in the period subsequent to the implementation.

In Indonesia Basundara and Chahiri (2014) found no important differences after the IFRS adoption per the Beneish M-Score. A similar analysis was operated in Europe with a sample of 771 firms' data along the period going from 2000 to 2013 with the objective to find if, thanks to IFRS adaptation earnings management where reduced and if it has a reaction on it (Mikova, 2015).

The outcome for Germany and UK is similar to the one found in Indonesia (Basundara & Chahiri (2014). Anyway, it has been showed that IFRS slightly assists to accounting a reporting quality and a lowering of earning manipulation in France (Milkova, 2015). In Malaysia, Lim (2016) analyzed the influence of various levels of accounting standard precision on managers' Revenue managements plan. It has been found that diverse levels of standard precision alone did not generate discrepancy in managers' financial reporting decision, while incentives are more decisive.

An analysis made by Myers et al. (2016) on 1.600 firms that began to use the new standards discovered no proofs that managers use discretion to manage earnings or Revenue to match or overcome specific earnings or Revenue benchmarks. The findings suggest that managers usually use the increased discretion gained thanks to the new standards in conformity with the declared objective of the standard that is a development of quality and value relevance of reported earnings (Myers et al., 2016). Hence, discretion is not linked just to manipulation of earning, instead also to a better reflection of business transaction (Haggenmuller, 2018).

Capkun et. al (2016) using a sample of 3.850 firms from 29 different countries found that the earning management (smoothing) occurred after 2005 (the year in

which IFRS adoption became mandatory) for early adopters shifting from old to new IFRS, late adopters from local GAAP to new IFRS and mandatory adopters shifting from local GAAP to new IFRS. This suggest that the transition in IFRS permits bigger freedom on the usage of professional judgement and also accounting discretion. Finally, early voluntary adopters had the reason to draw attention for foreign capital and did not want to be in danger for manipulating earnings (Capkun et al. 2016). Therefore Myers et al. (2016) argumentation is endorsed by Capkun et al. (2016), with relation to discretion: the latter may be utilized to mirror business transaction in a superior way; and incentives are a significant component for earning management (Lim, 2016).

An akin result has been found by Ugrin et al. (2017): a consistent link among IFRS adoption and earning management between countries is not present, actually IFRS established an environment that permit financial manipulation. Also, according to Ewert and Wagenhofer (2005) there was an increment in income-increasing earnings management after IFRS adoption.

In general, IFRS may grant more liberty for discretion than other GAAPs, but for the most time it does not drive to manipulative actions (Basundara & Chahiri, 2014; Mikova, 2015) or developing accounting quality (Myers et al., 2016).

3.4 Methodological Perspective

For what concerns the methodological perspective regarding the analysis of earning management there are different method. McNichols (2000) in his work confers the trade-offs related with the generally used research designs utilized in the literature, which are established on:

- Aggregate accruals;
- Specific accruals;
- Distribution of earnings after management.

The fundamental point of the research is that «much of the controversy over the interpretation of the literature's findings is due to the extensive use of aggregate accruals model to characterize discretionary behavior» (McNichols, 2000). Empirical results propose that aggregate accruals models that do not take into account long-term earnings growth are possibly misstated and could occur in inaccurate inferences about earnings management.

The main papers that used aggregate accruals are Healy (1985) and DeAngelo (1986). Jones (1991) proposed a regression method to manage for nondiscretionary accruals elements altering accruals.

Regarding the models based on specific accruals, check (McNichols and Wilson 1988), Petroni (1992) and Beaver and Engel (1996).

For what concerns the distribution of earnings after management see Burgstahler and Dichev (1997) and DeGeorge et al. (1999), which study the behavior of earnings on a precise benchmark[37].

Anyway, one of the most basic models is the one introduced by Healy (1985), that determines earnings management by comparing the mean of total accrual scaled by lagged total assets[38]. The way in which he partitions the variable make the sample to be divided in three groups, earnings forecasted to be manipulated upwards in one of the groups and downward in the remaining two groups (Dechow et al., 1995). Thereafter, inferences are computed by the pairwise comparison of the mean of total accruals for every of the groups in which earning is expected to be managed downwards (Dechow et al., 1995)[39]. The non-discretionary accruals are equal to the mean total accrual from the estimation period. Hence, the model for nondiscretionary accrual is the following:

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[37] For instance, zero or a prior quarter's earnings, to check if the degree of amounts above and below the benchmark are dispersed smoothly, or mirror discontinuities because of exercise of discretion.

[38] Healy's study (1985) is different from the others because he forecasts that systematic earnings management do happen in every period.

[39] This method is equal to evaluate the set of observations for which earnings are predicted to be managed upwards as the estimation period and the set of observation for which earnings are forecasted to be managed downwards as the event period.

$$NDA(t) = \frac{\sum_t TA(t)}{T}$$

Where:

- NDA = estimated non-discretionary accruals
- TA = total accruals scaled by total assets;
- t = 1,2…T year subscript for years included in the estimation period;
- T = a year subscript indicating a year in the event period.

The other basic is model is the one of DeAngelo (1986) which measures earnings management by calculating first differences in total accruals and presuming that the first differences have an expected value of zero under the null hypothesis of no earnings management (Dechow et al., 1995). The last period's total accruals scaled by lagged total assets are used in the model as measure of non-discretionary accruals. The model is the following

$$NDA(t) = TA(t-1)$$

According to Dechow et al. (1995), this model could be seen as a peculiar case of the Healy model (1985) due to the fact that the estimation period for non-discretionary accruals is confined to the previous year's observation. A shared element in these two models is that the total accruals from the estimation period are utilized to proxy for expected non-discretionary accruals. In the case of non-discretionary accruals constant over the periods and the mean of the discretionary accruals equal to zero in the estimation period, both models will detect non-discretionary accruals without error. Anyway, when non-discretionary accruals vary from period to period then the models will tend to calculate non-discretionary accruals with error (Dechow et al., 1995).

The hypothesis that non-discretionary accruals are constant is improbable to be empirically descriptive. According to Kaplan (1985), the essence of the accrual accounting process imposes that the level of non-discretionary accruals should vary

with respect to changes in economic circumstances. In the event of error to the model the economic circumstances on non-discretionary accruals will generate inflated standard errors because of the exclusion of uncorrelated variables (Dechow et al., 1995).

The distinction between the two model is that in DeAngelo the total accruals is dependent on the previous year's total accruals instead of the average of the years in the estimation period (Callao et al., 2014).

The biggest progress in assessing earnings management was made by Jones (1991). the assumption behind this model is that non-discretionary accruals are constant. The non-discretionary accruals are estimated throughout a regression that comprehends variation in Revenue and PPE as independent variables. However, the Jones model contains some limitation (Jones, 1991; Dechow et al., 1995; Kothari et al., 2005). In particular, Dechow et al. (1995) introduces a modification in the original Jones model to delete the conjectured tendency of the latter to calculate discretionary accruals with error in the case in which discretion is exercised over Revenue. In the modified model, non-discretionary accruals are estimated during the event period:

$$NDA(t) = \alpha \frac{1}{A(t-1)} + \beta\big(\Delta REV(t) - \Delta REC\ (t)\big) + \gamma(PPE(t))$$

The estimates of the coefficient and non-discretionary accruals is equal to the original Jones Model. The change in the model is that the Revenue are corrected with change in net receivables in the event period. This version of the Jones model entails that the variation in credit sales in the event period is due to earnings management. This comes from the idea it is simpler to manipulate earnings by using discretion over the recognition of Revenue on cash sales. If this happens, then the measurement of earnings management may not be biased to zero in the case where earnings management occurs though the management of Revenue (Dechow et al., 1995).

Another model used often is the Industry Model (Dechow & Sloan, 1991) which is based on the assumption that non-discretionary accruals are constant as time goes by. Anyway, rather than trying to straightforwardly model the determinants of non-discretionary accruals, the Industry Model hypnotizes that the change in the determinants of non-discretionary accruals are prevalent crosswise firms in the same industry. The non-discretionary accruals are calculated in the following way:

$$NDA\ (t) = \alpha + \ \beta\ median(t)TA(t)$$

Where:

- median(t)TA(t) = the median value of total accruals scaled by lagged total assets for all non-sample firms.

α and β are estimated using OLS on the observations in the estimation period.

The capability of the Industry Model to lighten the measurement error in discretionary accruals depends critically on two factors (Dechow et al., 1995):

1. The Industry Model cancels the variation in non-discretionary accruals that is usual along companies in the same industry. If variations in non-discretionary accruals mostly mirror responses in variation in firm-specific events, the Industry Model will not obtain all non-discretionary accruals from the discretionary accrual proxy (Dechow et al., 1995)
2. The Industry Model cancels the variation in discretionary that is linked to the companies in the same industry (Dechow et al., 1995)

A different accrual-based model is evaluated for measuring earnings management and moreover, the result of cross-sectional data is assessed. According to Callao et al. (2014) the Dechow et al. (1995) model has been criticized due to the lapse of significant explanatory variables and the exposure of the negative correlation between accruals and cash flows, implying that this connection should be entailed in the abnormal accrual models.

An accrual balance and instrumental approach would bypass some of the issues, such simultaneity, errors in variables or omitted variables problem (Kang and Sivaramakrishan, 1995). Concerning the dispute between time-series Jones Model and Cross-sectional Jones Model, Jeter and Shivakumar (1999) are able to display that the more effective is the former. Thanks to the "Cash Flow from Operating Activities " (CFO) variable they address the presence of a non-linear relationship between accruals and CFO in cross-sectional data.

On the contrary, Bartow et. al (2001) show that cross-sectional Jones Model and Modified Jones model operate in a better way than their time-series equivalents in detecting earnings management.

Zhang (2002) indicates that the problem in measuring the strength of metrics for detecting earnings management is based on the circumstances that earnings management is not precisely discernible. The outcome of his study determines ambiguities on the abilities of accrual-based models to find "minor offences" that should be the norm, alternatively than the exception of different kinds of earnings management.

The specification and power of analysis established on performance-marched discretionary accruals and correlations between the analysis utilizing the common discretionary accrual measures is studied by Kothari et al. (2005). They think that the research made by those who don't use performance-adjusted discretionary accruals have more possibility to draw inferences that are inaccurate at best and wrong at worst. The outcome of their study implies performance-matched discretionary accruals boost the likeliness of inferences. The hypothesis does not entail the fact that earnings management will change with relation to the performance and the control firms are not supposed to employed in earnings management (Kothari et al., 2005).

Ye (2007) in his study introduce to the Jones model and the performance-adjusted Jones model three measures:

- Abnormal beginning non-cash working capital;
- Working capital intensity;
- Historical depreciation rates.

It is demonstrated that unexpected accruals relied on his model show less bias and higher strength in detecting earnings management correlated to the ones based on the previous models. Thence, Ye (2007) concentrates on the way in which some elemental characteristics of companies influence accruals.

Chapter IV

Empirical tests on earnings management in the energy and consumer goods sector

4.1 Research design

The impact of IFRS 15 on different industries according to the big four (Kpmg, 2016; E&Y, 2016; PWC, 2014) is summarized in the following table:

Sector	KPMG	EY	Deloitte	PWC
Insurance	Medium	Medium/low	N/A	N/A
Building & construction	Medium	Medium/high	Medium	Medium
Retail & consumer goods	Medium	Medium	Medium	Medium
Licensors	Medium/high	N/A	Medium	Medium
Real Estate	Medium	N/A	Medium	High
Technology	Medium	N/A	Medium/low	High
Telecommunication	High	High	High	Low
Energy	Medium	Medium	Low	Low
Transport	Medium	N/A	N/A	Low

As it can be seen from the table, there is consistency between the different opinions given by the Big Fours except in the cases of Energy and Technology Sectors. The sector that is most impacted is the telecommunication one, which has been analyzed along with the Utilities' sector by Tutino et al. (2019).

The goal of the study is to introduce an analysis which want to underline the amount of discretionary accruals that exist in two industries with a separate extent of sensitivity to the application of IFRS 15; and to understand whether the use of IAS/IFRS boosts accounting quality information and lower earning management policies. Obliviously, on this matter it has to been taken into account the agency theory (Jensen & Meckling, 1976) with relation to the shareholder's need of delegation to the managers (Zanobio, 2012).

The analysis is based on the Jones Model which is one of the most used model for identifying the presence of earnings management: it is able to measure the amount of total accruals, differentiating between discretionary and non-discretionary, using the latter as proxy for calculating the presence and the degree of earnings management policies. The model does not recognize as a factor which can be dependent to discretionary accrual, instead it is considered as a control variable that shows the reason of the variation of discretionary accrual connected to the changes of the conditions in which the firms work.

The aim is to analyze the area in which IFRS is applied, knowing that Revenue, even if not seen as susceptible to manipulation have a key role in earnings management practices. As for Tutino et al. (2018) the analysis of this work, along with the one made by the Big Four correlates the Energy and Consumer Goods industries, pinpointed as medium sensitive (and low) to the introduction of IFRS 15.

4.2 Sample

The sample of the analysis includes companies which belongs to the Energy and Consumer goods sectors that are present in the Italian Stock Exchange Market (FTSE MIB). Given that:

1. The year of observation of the study goes from 2011 to 2019; and

2. In order to have data consistency from the information obtained by the financial statements are captured from only one source that is Bloomberg:

The total of firm used for the estimation of earnings management are 23, 7 from the energy sector[40] and 16 from the consumer goods sector[41].

4.3 Model and variables

The analysis has been conducted using the Jones Model (1991) which is based on the assumption that non-discretionary accruals are constant.

The discretionary portion of total accruals is utilized to catch earnings management. Total accruals are computed as follows:

$$TA_t = [\Delta CA_t - \Delta CASH_t] - [\Delta CL_t - \Delta STD_t - \Delta ITP_t] - D\&A_t \quad (1)$$

Where:

- TA_t = Total Accruals at time t;
- ΔCA_t = Changes in Current Assets between year t and t-1;
- $\Delta CASH_t$ = Changes in Cash between year t and t – 1;
- ΔCL_t = Changes in Current Liabilities between year t and t-1;
- ΔSTD_t = Changes in Short Term Debt between year t and t-1;
- ΔITP_t = Changes in Income Tax Payables between year t and t-1;
- $D\&A_t$ = Depreciation and Amortization Expense in year t.

In accordance with DeAngelo (1986), as the changes of non-discretionary accruals is irrelevant, the differences in total accruals is solely due to the changes in discretionary accruals levels. Hence, the model is established on the assumption that at time t earnings management are not present. The differences in the accruals

[40] Energy, oil, gas

[41] Food and beverage, Automotive, Clothes.

between time t and t-1 is linked to the presence of non-discretionary accruals, displaying a potential existence of earning manipulation (Tutino et al., 2018).

The model used to check the connection between the economic conditions of the firms and the accruals is the following:

$$\frac{TA_{it}}{A_{it-1}} = \alpha\left(\frac{1}{A_{it-1}}\right) + \beta_1\left(\frac{\Delta REV_{it}}{A_{it-1}}\right) + \beta_2\left(\frac{PPE_{it}}{A_{i,t}}\right) + \varepsilon_{i,t} \quad (2)$$

Where:

- TA_{it} = Total accruals in year t for firm i;
- ΔREV_{it} = Revenue in year t less Revenue in year $t-1$ for firm i;
- PPE_{it} = Gross Property, Plant, and Equipment in year t for firm i;
- A_{it-1} = Total Assets in year $t-1$ for firm i;
- ε_{it} = error term in year t for firm i.

In equation (2) the Gross, Property and Plant equipment and the changes in Revenue have the following meaning:

- The function of PPE is to control the non-accrual portion coming from the recognition of discretionary write down (Tutino et al., 2018). Moreover, Depreciation and Amortization is present in the computation of the total accruals;
- The function of Revenue is to provide an indicator of the economic condition of the companies (Tutino et al., 2018). Like PPE, the manipulation of Revenue is connected to the change in non-cash working capital.

All the variables in the equation are scaled by the lagged total assets in order to lower heteroscedasticity,

An OLS regression on equation (2) is used to find the estimates a1, b1 and b2 that are needed to find the portion of non-discretionary accruals:

$$\mathrm{NDA_t} = a1\left(\frac{1}{\mathrm{A_{it-1}}}\right) + b1\left(\frac{\Delta\mathrm{REV_{it}}}{\mathrm{A_{it-1}}}\right) + b2\left(\frac{\mathrm{PPE_{it}}}{\mathrm{A_{it-1}}}\right) \quad (3)$$

Given that $\mathrm{TA_t} = \mathrm{DA_t} + \mathrm{NDA_t}$

$$DA_t = TA_t - \left[a1\left(\frac{1}{A_{it-1}}\right) + b1\left(\frac{\Delta REV_{it}}{A_{it-1}}\right) + b2\left(\frac{PPE_{it}}{A_{it-1}}\right)\right] \quad (4)$$

4.4 Results

In order to find the discretionary accruals an OLS regression is needed: after having calculated the total accrual scaled by lagged assets for every firm using equation (1) to measure the total accrual, an OLS regression to estimate the coefficients of equation (3) was made. After having estimate those coefficients it was possible to calculate the portion of non-discretionary accruals (3) which have led to the estimation of discretionary accruals that are the measure to detect earnings management.

The expected sign for the change in Revenue coefficient is not straightforward thanks to the fact that a variation in Revenue can generate income-increasing variation in working capital records and income-decreasing in others (Jones, 1991). In both sectors the coefficient is positive.

For what concerns the expected sign for the property, plant and equipment, it should be negative because property, plant and equipment are connected to an income-decreasing accrual (Jones, 1991). This expectation is matched in the result given by the regression: for both sectors the sign is negative.

Energy sector output of regression:

	Coefficient	Standard error	T stat	P Value
Intercept	0,1326602	0,02007743	0,660743158	0,511348831
a1	-26,28315	15,62883514	-1,681708804	0,097911735
b1	0,02474884	0,034656782	0,714112475	0,477973376
b2	-0,0615567	0,019087976	-3,224895476	0,002056014

R Multiple	0,39672695
R Squared	0,15739227
Adjusted R Squared	0,11454781
Standard error	0,05859609
Observations	63
Degree of freedom	62
F	3,673573425
P value F	0,017035578

Consumer Goods output of regression

	Coefficient	Standard error	T stat	P Value
Intercept	-0,022022156	0,010552551	-2,086903553	0,038710029
a1	0,322514454	0,394454487	-0,817621462	0,414962686
b1	0,109907976	0,040693225	2,70089125	0,007769397
b2	--0,03451903	0,012906521	-2,674541777	0,008374154

R Multiple	0,322213609
R Squared	0,10382161
Adjusted R Squared	0,084617787
Standard error	0,061089886

Observations	144
Degree of freedom	143
F	5,406299133
P value F	0,00150459

For testing the differences in the two industries, as done by Tutino et al. (2018) an unequal variances test was made on the squared amount of the discretionary accruals previously obtained (it has been used that square of the discretionary accruals for deleting the negative sign that could occur after the computation).

As for Tutino et al. (2018) the differences between the mean of the two industry is significant because of a p-value lower than 0.05.

Welch's t test

	Energy	Consumer Good
Mean	0,003919451	0,050981284
Variance	0,0000550	0,00369162
Observations	63	144
Assumed difference between the means	0	
Degree of freedom	153	
Stat T	-9,140424818	

Given the results it can be affirmed that the consumer goods sector is more subject to earnings management practices. As for the analysis of the Big Four, regarding the impact of IFRS 15 on different sectors, the results of the analysis mirrors what has been predicted in the consumer goods sector, in fact the portion of discretionary accrual, that is higher than the one in the energy sector, reflects the "medium" label that has been given to the sector.

For what concerns the Energy Sector, the results suggest that Deloitte and PWC have predicted in the right way: the impact of IFRS 15 in the sector should be low and it will not affect the earnings managements practices that are not frequent according to the analysis.

According to the outcome of the analysis it is safe to say that the introduction of IFRS 15 is able to give benefit to those industries in which earnings management practices are more persistent.

4.5 Limitation of the research

This type of study present limitations. One could be identified in the small number of sectors analyzed. Even if the total amount of observations made in the analysis are not low, only two sectors have been examined. The study, of course, may be developed to a bigger number of sectors to give a more detailed outline on whether the earnings management practices are present (Tutino et al., 2018)

The second limitation is connected to the consideration of the Revenue as non-discretionary element which could be deleted to some extent by using the Modified Jones Model (Dechow et al.) that is able to cancel the tendency of the Jones Model to calculate discretionary accruals with error because discretion is practiced over Revenue (Dechow et al., 1995). The adjustment would consist in adding the change of receivables in the event period, but it was not possible due to the absence of the item in many companies in the database used. Another method to delete the limitation according to Stubben (2010) is to use a model where Revenue is taken into account but not all accruals are taken into consideration.

Conclusion

Given the importance of the Revenue item the IASB and the FASB decided to launch a joint project which main objectives were (Gallistel et al., 2012):

1. Remove inconsistencies and weaknesses in existing Revenue requirements;
2. Provide a more robust framework for addressing Revenue issues;
3. Improve comparability of Revenue recognition practices across entities, industries, jurisdiction and capital markets;
4. Provide more useful information to users of financial statements through improved disclosure requirements;
5. Simplify the preparation of financial statements by reducing the number of requirements to which an entity must refer.

The result which is the new IFRS 15 does not take into account all the types of contracts: it does not apply to lease contracts under IFRS 16, insurance contracts within the scope of IFRS 4, IFRS 9 (financial instruments), IFRS 10 (Consolidated financial statements), IFRS 11 (Joint arrangements), IAS 27 (separate financial statements) and IAS 28 (Investment in association and Joint Ventures), and to non-monetary exchanges between entities in the same line of business facilitate sales to customers or potential customers.

The new standard consists in a five-step model which aims to:

a) Provide a more robust framework for addressing Revenue recognition issues;
b) Improve comparability of Revenue recognition practices across entities, industries, jurisdictions and capital markets
c) Simplify the preparation of financial statements by reducing the amount of guidance to which entities must refer;

d) Required enhanced disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of Revenue that is recognized.

These five steps are, in order: Identify the contract with a customer; Identify the performance obligations in the contract; Determine the transaction price; Allocate the prices to the performance obligations; Recognize Revenue.

Given this background the problem was to find evidence that support the fact that IFRS 15 improves to some extent the quality of financial disclosure and reporting. In order to do so a research that analyzes the presence and the extent of earning managements in two sectors (consumer goods and energy) has been made.

The empirical analysis allowed, with the limitations of the latter, to affirm if the sectors in question are subject to the practice of earnings management. The outcome of the empirical analysis permits to state that in the consumer goods sector earnings management practices were more present than in the energy sector in the period taken into consideration.

These results have to be examined along with the analysis made by the Big Four regarding the impact on financial statement caused by IFRS 15. One can affirm that thanks to the introduction the new standard, this particular sector – consumer goods - could profit: the degree of earnings management present in the latter, in fact, may be lowered thanks to the benefit brought by the introduction of IFRS 15 which according to the Big Four, for the aforementioned sector would be labeled as medium.
Hence, a better quality of information in the financial statement may lead to a reduction in the earnings management practices on that very sector.

For what concerns the energy sector, since the presence of earnings management practices is already low it can be assessed that the introduction of IFRS 15 will not have a high impact in the reduction.

It is worth note that KPMG and EY had forecast a medium impact on the financial statement, meaning that the sample taken into consideration in the analysis may not mirror - in their forecast - the trend in the energy sector. Let's remember that the sample taken into consideration is only from companies listed in the Italy market.

The results can be correlated with the ones of Barth et al. (2008), the findings of their research exhibit that the companies which adopted IFRS voluntarily had a lower presence of earnings management practices; Daske et al. (2008) which showed that the use of IFRS principle, market liquidity and market valuation have a positive correlation among them, meaning that they found a positive market reaction with the increment of IFRS adoption; Iatridis (2010) analyzing a sample of listed companies in the UK found that the use of IFRS principles have a positive effect: in fact, a reduction of earnings management practices is possible thanks to the timelier and value relevant recognition of losses.

Other studies support the fact that IASB standards have the ability to lower the degree of earnings management in the company. For instance, according to Tendeloo & Vanstraelen (2005) companies that are audited by the Big Four which apply IFRS standards have a lower level of earnings management. Cai et al. (2008) study confirms that voluntary and mandatory adoption of IFRS can decrease earnings management practice even if a strong enforcement is a key factor for the reduction of the latter.

The model used for this empirical analysis (Jones, 1991), does not take Revenue into account in order to find the total accruals and the discretionary accruals. On the contrary, Revenue are used as a proxy to identify the economic conditions of the companies.
Even if in the empirical analysis the Revenue are not seen as an item of manipulation they can be considered as an element that can influence the grade of the discretionary accruals.

To conclude, the observation made in this analysis go along with the results obtained by other works on earnings management and effect of IASB standards. The

study allowed to have a panoramic on the practice of earnings management in the consumer goods and energy sector in companies listed in the Italian Market. The outcome of the analysis has to be read collectively with the prediction made by the Big Four: the larger the impact of the new standard in the sector the larger the presence of earning management practices and therefore the larger the benefit that the sector could obtain in terms of prevention of earnings management practices and overall quality of financial information and disclosure.

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