Corporate Governance in Knowledge-Based Society

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Preface

Since the beginning of the millennium, the scientific community seems to make significant reference to corporate governance, a concept that became even more attractive within the current global economic context emerging from the recent financial crisis. Being seen as an interface between companies and financial markets, corporate governance significantly impacts both the society in general and companies in particular, with potential beneficial consequences at both macroeconomic and microeconomic level. Corporate governance is expected to generate remedies for current economic problems by providing mechanisms that fight against injustice, fraud, lying and misleading, while stimulating long-term performance and value creation.

This book proposes an interdisciplinary approach to governance as imposed by nowadays knowledge based society through chapters covering general conceptual approaches and particularities of several European countries. Theoretical analysis and empirical methodology are combined in providing the necessary support in relation to each chapter’s objective. Corporate governance entered the spotlight due to recent corporate crisis, but trade literature documents the use of correspondent concepts in writings dating a few centuries ago. The first chapter of the book therefore develops a synthesis of corporate governance historical evolutions and conceptual grounding. Organizational performance can be improved by developing an efficient framework for the company’s management and control through corporate governance. Meanwhile, corporate governance efficiency depends upon the management being able and willing to lead a company towards achieving shareholders’ and stakeholders’ objectives. Performance management systems are crucial for a company’s evolution. This further imposes the need for their adequate assessment that supports efficient implementation, as discussed in one of the chapters. The decision-making process being knowledge based bears special significance for managers in nowadays globalized economy. One of the chapters in the book focuses on the decision-making process within transnational companies as major players in the world economy, starting with a theoretical framework on decision and concluding with some thoughts on the subjective reasoning derived from considering knowledge as a human attribute. Insolvency is something managers hope they won’t have to face, but the recent financial crisis turn the nightmare into reality for a significant number of companies. The chapter focusing on insolvency offers insights on the insolvency act from an economy characterized through an almost half of century disrupted continuity in transitioning from a centrally-planned to a market economy, that of the Czech Republic.

The financial reporting process being meant to provide useful information, and accounting information aiming for faithful representation, fits in very well with the concept of corporate governance and its principles. A significant number of the chapters in the book can be positioned in the area of financial reporting, offering different approaches and links to governance. Risk management and reporting business risks is an area that obviously fell short if we are to analyze practices leading the economy into the recent financial crisis. One of the chapters discusses risks in the context of corporate governance mechanisms, the theoretical approach of business and financial risks being followed by an empirical analysis of practices characterizing listed companies on another emerging European economy, namely the Romanian one. The following chapter briefly points out some particularities of risk management in the banking industry of the same country. When discussing governance of the financial reporting process in a globalized world, accounting standard setting in the international arena plays a major role. The chapter dedicated to this issue offers a synthesis of accounting harmonization research and provides an update on the International Accounting Standards Board (IASB) – Financial Accounting Standards (FASB) convergence project. The consequent chapters provide discussions of key aspects in the financial reporting process such as measurement, consolidated financial statements and the accounting profession. Measurement in financial reporting continues to remain a highly debated topic, which is understandable if we are only to consider its implications on financial performance representation. A detailed theoretical approach is therefore provided in one of the book’s chapters. Considering the globalizing markets...
and evolutions of international trade, business groups are becoming more important and relevant, and so is our understanding of their financial statements. One of the chapters develops an empirical analysis of market value relevance of consolidated and parent company accounting information for companies being listed on the largest stock markets in Europe (London, Paris, and Frankfurt). Environmental reporting requires ethical behavior which can be stimulated through corporate governance mechanisms. A chapter in the book develops an empirical analysis in this regard by considering European Union countries. The accounting professional is an extremely important factor in the financial reporting process, with accounting education significantly impacting accountants’ development. Two chapters in the book approach accounting education, the first offering a general conceptual approach leading from accounting education to the accounting profession (including particularities of accounting certification in Nordic countries) and accountability, while the second discusses nowadays modern curricula in relation to current expectations coming from the business environment. The last chapter of the book continues analyzing the profession by developing a detailed study of professional judgment and the decision-making process when considering the particularities of external audit.

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1 Introduction and Concept Analysis
During the last decades, corporate governance has been widely debated in economic scientific papers, being a topic of great interest and amplitude in the current economic context. We can say that the evolution of corporate governance is an important area of research because the survival of firms depends on their ability to adapt governance structure to changes in external environments (Kole & Lehn, 1999 [14]; Morck & Steier, 2005 [16]; Jandik & Rennie, 2005, p. 1 [13]). The “governance” term is derived from the ancient Greek word “kybernaein”, then from Latin word “governance”, that refer to the leading of ships and boats on the sea. In the ‘80 of the 20th century was talk about “new public management” and “corporate governance” which signaled a new view of the company’s management.

As originally defined in The Cadbury Code (1992, p. 15) [4] and lately taken up by the OECD (1999) [19], "Corporate Governance specifies the distribution of rights and responsibilities among different categories of persons involved in a company such as: the Board of Directors, managers, shareholders and other categories, and establishes rules and procedures for taking decisions regarding the activity of a company". The concept of corporate governance appeared and developed in the last century, starting with the occurrence of conflicts of interest between shareholders (owners) and managers. It was influenced consecutively by economic environments based on family property, banks’ capital, institutional investors or limited liability company, in fact environments dynamized by the resonant scandals that have occurred over time. Surprisingly, the same moments of crisis had a beneficial effect on identifying ways of improving the concept of corporate governance, in order to meet the new stage in the evolution of the economy.

The lack of confidence among investors in the management of corporations would have diminished corporate life and affected both private and public sector, and especially the way in which they were led. If such a measure would not have been taken, the investors’ commitment would have diminished and corporate life would have been affected due to this lack of confidence. Corporate governance affects the way in which organizations function and their results, not directly, but through the actions and decisions taken by leaders. As Pérez (2003, p. 12) [21] paraphrases Edgard Morin, one can say that the government is somehow “the management of management.” This self-reference can explain a significant portion of enthusiasm, mixed with a little mystery, caused by this concept in the field of organizational science.
In 1776, Adam Smith had initiated the discussions about corporate governance in his work “The Wealth of Nations”, and this is probably the first observation that anticipated the possibility of corporate governance problems arising out of the normal corporate contracts which involve the providers of capital (owners) and the overseers of the enterprises (managers) (Damagum, 2009, p.34) [5]. The first studies on corporate governance appeared in the 1930’s, based on the research undertaken by Berle and Means (1932) [1] in their famous agency theory1, as the authors Brezeanu & Stanulescu presented in the article “Corporate Governance Models” (2008, p.15) [3]. Berle and Means confirmed the prophecy of Smith and analyzed the value creating separation between shareholders and management. This scientific concern occurred during the decline of traditional family businesses, whose owners and managers were the same persons. These companies were subsequently replaced by companies with dispersed capital ownership, in which there was a clear separation between ownership and control.

Tricker, the “father” of corporate governance as he was called by Cadbury, published the first book, and one of the most representative, entitled "Corporate Governance", based on his studies conducted at Nuffield College. Tricker (1984) [25] considers the following to be essential components of corporate governance: corporate strategy, executive management, accountability and oversight. Corporate governance represents the ways in which suppliers of financial resources of a company shall ensure that they will receive the benefits they have expected when making this investment (Shleifer & Vishny, 1997, p. 737) [24].

2 Historical Evolutions

The concept of corporate governance arose in the ancient times when there were questions about governance, especially in the trade of goods area. Economic history, as mentioned by Feleagă & Vasile (2006, p. 24-26) [8] and Pérez (2003, p. 3-4) [21] leads us to the examples of corporate governance founding currents. These include distance trade from ancient times and the market of corporate governance; landowners and agricultural governance; the Industrial Revolution and exponential growth of enterprise governance.

Distance trade, whether is terrestrial (caravans) or on the sea (ships), made dissociations between rights holders and operators because usually the operational director of the expedition was neither the owner of the transported trade nor of the vector used for transportation. This leads us to address the issues of accountability and governance. Over the centuries, one has tried to clarify these rights and questions, but despite the efforts made, corporate governance issues remained complex. These questions will find answers only through stock markets, credit and capital companies development, namely through the "instruments of higher stages of change" as they were called by Pérez in his article "La gouvernance de l'entreprise" (2003, p. 3), quoting Braudel (1985, p 38) [2].

Appearance and marking of the dissociation between capital providers and fieldwork officers make this time from the corporate governance a major problem. Landed property and management in agricultural entities represent the second current of the governance practices as Pérez says in his paper. Relations between landowners on one hand, and farmers, housewives, administrators and other local officials, on the other hand, have been the subject to numerous laws and regulations that constitutes the rural codes; adventures of their implementation and the inevitable conflicts have given the way to an abundant legislation that makes agricultural corporate governance the most nourished source of the traditional practices of corporate governance (Pérez, 2003, p. 4) [21].

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1 The Agency theory, by which the company is seen as a „knot of contracts” (Feleagă L. & Feleagă N., 2005, page 51), allows the conflicts of interests between the sharaholders and the managers of a company to be solved (Feleagă L. & Feleagă N., 2005, p. 170) [7].
Industrial revolutions find their period of development at the end of the 18th century and during the 19th century. They have been a decisive factor for the development of western capitalism and gave progressively, the characteristics that largely characterize it today. We can say that this period of history, the great 19th century and the two decades that frame it was characterized not only by the exceptional growth of western economies, but also by a range of crisis of different kinds and intensities, including a deepening of corporate governance models. In this current, Smith and Say bring new meaning to the corporate governance by conceptualizing a representation of the company very different from the current theories, without seeing it like an organization but rather concretely considering the entrepreneur as being an active agent for which the activity is what creates the entity. This agent, the entrepreneur, sells a product on his market and, for producing this goods, buys inputs from the others markets. The entrepreneur is on the same time the director of the company and the company itself. The concept of “stakeholders”, with the actual meaning, was not yet conceptualized at that time, as the authors Feleagă & Vasile state in their paper “The governance between classicism and modernism” (2006, p.25-26) [8].

The concepts like „corporate management” or „corporate governance” appeared in the United States during the Watergate scandal in the ’70 years, when it was discovered the involvement of US companies in politics, through grants given to various political parties. The end of 20th century finds corporate governance in a more formalized approach. This approach was due to conflicts of interest and failures arising in the private sector in a short time, in large companies in USA, UK and Canada. This has led the investors to lose their confidence in the ability of managers to lead large corporations or public institutions. These conflicts have been a good opportunity for companies to develop and implement corporate governance codes.

The first code of corporate governance in Europe is published at London Stock Exchange, UK in 1992. Sir Adrian Cadbury has developed an extensive report named Cadbury (Cadbury, 1992) [4], following its research concerning the causes that contributed to the failure of some large corporations from the private sector. Institutionalized stakeholders from USA have a worthy in developing corporate governance codes because they were able to impose high standards of corporate governance.

The Cadbury Report became significant in influencing thinking around the world. Other countries followed with their own reports on corporate governance. These included the Vienot Report (1995) from France, the King Report (1995) from South Africa, the Toronto Stock Exchange recommendations on Canada Board practices (1995), the Netherlands Report (1997), and a report on corporate governance from the Hong Kong Society of Accountants (1996) (Tricker, 2012, p. 13) [26]. The World Bank has issued, itself, a point of view about corporate governance, considering that its purpose is to bring closer the interests of individuals, corporations and society (Ionescu, 2010, p. 4) [12]. Also, Organization for Economic Co-operation and Development (OECD) considers that corporate governance has the role to specify the distribution of rights and of responsibilities between different categories of people involved in the company like: board of directors, executives, shareholders and others, establishing rules and procedures for making decisions on the activity of a certain company (OECD, 2004) [20].

As Tricker said in his book (2012, p. 14) [26], in 1998 the OECD proposed the development of global guideline on corporate governance and encouraged states to introduce such corporate governance guidelines. As the 21th century dawned, corporate governance seemed to be developing around the world. Codes of principles of best practices for corporate companies were in place in most countries with stock markets. But the new century had scarcely begun when disaster struck, Enron, one of the largest companies in US, such as Waste Management, Wolddcom, Tyco, as well as the Arthur Andersen collapsed. Corporate governance problems appeared in companies in other parts of the world. In the UK, Marconi, British Rail, Independent Insurance and Tomkins faced governance problems, as did HIH Insurance in Australia, Parmalat in Italy and Vodaphone Mannesmann in Germany (Tricker, 2012, p. 15) [26].
In 2001, in US a Blue Ribbon Commission set up by the National Association of Corporate Directors (NACD), published a report Director Professionalism and a year later, the American Law Institute published a set of general principles on corporate governance. In November 2003, the SEC approved new listing requirements reflecting many of the NACD’s recommendations. In 2002 appeared the US Sarbanes-Oxley Act placing new stringent demands for the governance of all companies listed in the US (Tricker, 2012, p. 16) [26]. World trade boom or financial crisis that appeared in 2007 created a lot of financial problems all over the world, especially in the countries facing with a vast trade unbalance. The first run on a UK bank for over a century happened at the Northern Rock bank, which was taken over by the British government. In the US, Bear Stearns, a financial institution, was bailed out by the US government. Then, the two huge American mortgage organizations, Fannie Mae and Freddie Mac, which account for a large part of all mortgages to homeowners in the US, were given government a lot of money as guarantees (Tricker, 2012, p. 19) [26]. Nowadays, all over the world, corporate governance has become an important subject for researchers that needs to be frequently updated.

3 Particularities of Corporate Governance Developments in the UK and the US

Further we present the evolutions of the corporate governance codes in two common law countries like UK and US. We make this choice because both offer strong investors protection. The Cadbury Code, the first corporate governance code in Europe, was issued in 1992 and represents the basis for the Code of Corporate Governance, especially in United Kingdom.

Corporate governance has started to drawn world attention along with the collapse of the big companies such as Bank of Credit and Commerce International (in 1991) in United Kingdom or Enron and WorldCom (in 2001, respectively 2002) in United States. In what concerns this matter, researchers began to explore the corporate governance field from multiple perspectives and authorities started to implement rules and regulations to overcome this issue. Countries all around the world started setting the best practice as a guideline: Cadbury Report was produced in United Kingdom, Sarbanes Oxley in United States, The Dey Report in Canada, the Vienot Report in France, the Olivencia Report in Spain, the King’s Report in South Africa, Principles and Guidelines on Corporate Governance in New Zealand and the Cromme Code in Germany. The goal of most of these standards was to improve firm’s corporate governance environment (Norlia et.al, 2011, p. 205) [17].

In the European Union, corporate governance concept began to take shape after 1977, when most countries have adopted codes of corporate governance. The impulse for adopting these codes has been represented by the financial scandals related to the failure of some British companies listed on the stock market. The capital market model of corporate governance has experienced a tremendous success, first in the United States, then the rest of the world, being more emphasized in the last decade of the last century. The United States, with most pronounced capital market culture, represents the cradle and most important market of shareholders-oriented corporate governance, the system name being linked to the capital market model (Feleagă & Vasile, p. 26) [8].

In the figure below we presented the most important corporate governance regulations, and we grouped them by country of origin. UK updated its corporate governance codes, one and the most important reason for changing them was the economic crisis that hit the world in 2007. Therefore last time UK updated his codes was in 2010 and is currently applying Corporate Governance Code 2010, the former Combined Code.
Figure 1. Corporate Governance Codes evolution in UK and USA

UK
- 1987: The Cadbury Report
- 1998: The Tumball Report
- 1999: The Higgs-Smith Report
- 2002: The Combined Code
- 2003: The Combined Code revised
- 2008: The Combined Code on Corporate Governance
- 2010: The UK Corporate Governance Code
- 2012: The UK Corporate Governance Code revised

USA
- 1987: Treadway
- 1992: The Blue Ribbon Report
- 1995: Sarbanes-Oxley Act
- 2002: SEC

Source: Adapted and updated from Fülöp [10]
In the next section we will present the approaches of the most important corporate governance codes mentioned in the previous figure.

The UK’s corporate governance codes

The beginning of corporate governance in UK was due to the Bank of Credit and Commerce International (BCCI) Scandal. The UK has the largest number of corporate governance codes, summing almost a third of all codes issued by European Union countries, as can be seen in the figure above.

Cadbury Report (1992, UK) was developed in 1992, after the crisis of the 80s, by Adrian Cadbury due to concerns on researching the common causes of corporate failures in the private sector. The report revealed that corporate bankruptcies were due to major problems of organization and functioning of the internal control system, i.e. issues that are within the competence of senior management. General management not only that failed to prevent disasters products, but in some cases, even contributed to these failures [4].

The mission of the committee led by Air Adrian Cadbury has resulted in making recommendations subsequently grouped in a Code of Best Practices which aim was to improve the organization of power between the major "stakeholders" (shareholders, directors, managers). Corporate governance works on a set of principles, considered as pillars of good governance by the Cadbury Report, namely: integrity, transparency, accountability.

Figure 2. The Cadbury Report’s Principles


Integrity is a key concept and combines an appropriate and ethical behavior, respectively the concern for the interests of others and social responsibility. This concept is implicit in the activities conducted in the public

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* A previous version of this study has been presented at the International Conference AMIS Bucharest 2012, where it has been included in the Conference proceedings with the title „Trends in investors’ perception of the quality of consolidated and parent company financial statements on the largest three European capital markets”.

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sector and the private sector is governed by a principle that is considering just making profits. Transparency is necessary because irregularities or poor performance happens mostly behind closed doors. When the facts are in the limelight, opened to the public, subject to the justified findings of experts, they are more likely to improve. Public exposure for examination of their own actions and decisions, contribute to the improvement of behaviors and performance. Usually, transparency is a fundamental principle for organizations that want to learn. Without opening there are no progress and performance, we are unable to become more efficient. Of course, for a while we can hide unprofessional behavior and poor performance, but this is not possible on long term.

Accountability is the most important principle of governance, but at the same time, it is the least understood and less observed in organizations. Indeed, in most organizations accountability is not sufficiently defined, nor is it clear both the organization's personnel and management. The role of internal audit organizations regarding accountability at all levels of the organization is high and it is investigated through written procedures and a formalized system. To the three principles mentioned above we add another one – the competence – which has a high importance. The competence is that people need to perform their tasks in a professional manner. Competence refers to the technical skills and behaviors necessary to ensure discharge of responsibility. Good intent is a nice concept, but without having the necessary competence it becomes irrelevant. Level of competence must be established before occupying the position and should be reviewed regularly by management factors.

Cadbury Report was at the basis of the elaboration of the London Stock Exchange Corporate Governance Code, containing principles and basic rules for managing a company in order to obtain its efficiency improvement and the abolition of any discrimination between shareholders (Morariu, 2008) [15]. In this situation it was convincing the fact that the Cadbury Report was supported by the other reports findings which confirmed the initial findings and the fact that top management has not learned from mistakes and did not act properly.


In 1998 the Hampel Report was prepared, also in Great Britain, and made a review of the 5 years of implementation of the recommendations made in the Cadbury Report, bringing into focus a number of new problems such as the following:

- The issue of shareholders’ interests seen through the principle “The prosperity of company shall be preferred to its liability”;
- In terms of the shareholders’ interests, brings an interesting aspect, namely, the protection of the interests of present and future shareholders, in order to avoid short-term interests ("le short termisme"), thus preventing potential option for the sale of the shares. Thereby, the shares are kept speculations are prevented, situation which corresponds to the French notion of "social interest";
- Dispute the corporate governance practices which, for some British companies, means to be open to recommendations, which, although they know, in reality not want to apply them;
- Although it appreciates the conclusions of Cadbury Report, disagrees with those councils which only comply with the rules, criticizing their passive attitude;
• Considering the fact that less than 40% of shareholders vote at the General Meeting of Shareholders, the report rejects the idea that within AGA is voted the managers mode of remuneration, this task must pass to the independent directors responsibility;

• The author of the report does not agree with the separation of the position of President from the one of Executive Director, but admits the idea that the mandate of the holder of such a responsibility should not exceed 3 years.

Hampel report makes the following proposals:

• shareholders must be informed in a simple and clear manner about all managers ‘earnings;
• if a director resigns, he must states its reasons in the annual report;
• the financial conditions for the revocation of a social representative must be brought to the attention of the shareholders;
• every director will receive a full job description file, which will contain the rights and duties incumbent, which will comply with.

The Combined Code was created in 1998 due to reports presented above. Hampel Committee evaluated the progress of implementation of the Cadbury’s recommendations, and decided to urge the adoption of a code that would summarize the provisions of the previously codes in a less bureaucratic way.

Hampel report was followed in 1999 by the Turnbull Report which provides guidelines on internal control set-up.


The revised Code of Corporate Governance (2012) applies to accounting periods beginning on or after 1 October 2012 and applies to all companies with a Premium listing of equity shares regardless of whether they are incorporated in the UK or elsewhere. The UK Stewardship Code (2012), which provides guidance on good practice for investors, should be seen as a companion piece to this Code. Changes to the UK Corporate Governance Code include:

• FTSE 350 companies are to put the external audit contract out to tender at least every ten years with the aim of ensuring a high quality and effective audit, whether from the incumbent auditor or from a different firm. The FRC will be holding discussions with companies, auditors and investors to consider whether guidance on tendering would be useful;
• Audit Committees are to provide to shareholders information on how they have has carried out their responsibilities, including the way in which they have assessed the effectiveness of the external audit process;
• Boards are to confirm that the annual report and accounts taken as a whole are fair, balanced and understandable, to ensure that the narrative sections of the report are consistent with the financial statements and accurately reflect the company’s performance;
• Companies are to explain, and report on progress with, their policies on boardroom diversity. This change was first announced in October 2011, but its implementation was deferred to avoid piecemeal changes to the Code.
Companies are to provide fuller explanations to shareholders as to why they choose not to follow a provision of the Code (www.ecgi.org).

The US’s corporate governance codes

In USA, the seeds of corporate governance were sown by the Watergate scandals. The Foreign and Corrupt Practices Act was born in 1977 and contained specific provisions regarding the establishment, maintenance and review of systems of internal control. In 1979 Securities and Exchange Commission proposed a mandatory reporting on internal financial controls.

Treadway Commission certifies between October 1985 and September 1987, the role of the management, the board director and the external audit. The Treadway Report recommends the stock exchange listed entities that audit or audit committee should be independent from the entity being audited, and contains the requirement to draw up an audit report (Charter) which should be independent from the reports made by entity's management.

In the fall of 1998 was formed the Blue Ribbon Committee, which published a regulation about the establishment of audit committees in the entities. In February 1999, was published a new Blue Ribbon Report containing ten recommendations on audit committees obligations. This report emphasizes the importance of the credibility of financial statements and also the importance of controlling entity (Fülöp, 2011, p.20) [10].

The recommendations published in this report are taken and approved by NYSE (New York Stock Exchange), ANEX (American Stock Exchange), NASDAQ (National Association of Securities Dealers Automated Quotations) and the AICPA (American Institute of Certified Public Accountants).

New York Stock Exchange as is called the "Big Board", is a stock exchange located in New York City. Founded in 1795, but active in the current formula since 1817, the NYSE is the world's first stock exchange judged in terms of market capitalization in U.S. dollars. Considering the 2,764 companies covered, NYSE is considering at the second place in the world stock markets (www.nyse.com).

NASDAQ is a stock exchange began trading on February 8, 1971 and it was the world's first electronic stock market. Over the years, NASDAQ became more of a stock market by adding trade and volume reporting and automated trading systems. NASDAQ was also the first stock market in the United States to start trading online (www.nasdaq.com).

AICPA is the national organization of certified public accountants in the United States, with has over 370,000 members in 128 countries. It sets ethical standards for the audit profession and auditing standards for private sector entities, non-profit and public sector in the US.

Blue Ribbon report contains recommendations regarding the audit committee. It is necessary that the committee members should be minimum 3, independents from the entity and not to be part of the entity's management. Committee members are required to have extensive knowledge in accounting and financial areas. The Audit Committee is required to be recognized in terms of organization and have his own regulations that must be published at least every three years.

Following the financial scandals of corporations such as Enron, Tyco International, WordCom, and so on, the concerns of the American politicians have resulted in the adoption of the Sarbanes-Oxley Federal Act on July 30, 2002, also known as the "Public Company Accounting Reform and Investor Protection Act ". These scandals have arisen as a result of financial problems that led to the stock market collapse of these companies’ securities.

The law is named after its initiators, U.S. Senator Paul Sarbanes (D-MD) and U.S. Representative Michael G. Oxley (R-OH), and received an impressive political support.
The introduction of Sarbanes-Oxley Act, which is applied by all entities in the United States and in many non-US entities, had a major influence on corporate governance codes.

The purpose of this law was to establish enhanced standards for all U.S. public companies (including non-US companies, but which are quoted in U.S. capital markets), their management and the accounting public firms.

The law covers issues such as auditor’s independence, corporate governance, internal control and improved presentation of the financial statements.

The main objective of this law was to restore the investors’ confidence in the U.S. capital markets by:

- Improving the reliability of information provided by companies to investors, according to a specific timetable;
- Clear regulation of labor and responsibilities of auditors, legal advisers and rating agencies;
- Increase the stringency of corporate governance rules;
- Tightening the amendments and measures applied for contravention (Richard, B. & Miellet, D., 2003, p. 28) [23].

The ambition of this law was to cover, in terms of regulation, all actions taken by companies in the US territory, whether there are indigenous or not, which may create conflicts of jurisdiction in matters of private law with other states. American experience has facilitated the connection between disclosure of information related to governance, risk management and internal control, but could not prevent the financial crisis which appeared in 2007, manifested by a lack of liquidity in the chain bankruptcies and the destruction of investor confidence (Onofei, 2009, p. 63-66) [18].

The Regulatory and Supervisory Authority of US equity markets, SEC (Securities and Exchange Commission) which appeared in 2003 is increasingly concerned about corporate governance code requirements. SEC asks internal control to present to the audit committee its findings on the degree of responsibility of internal control, the manner of organizing the accounting and financial reporting process, entity’s property valuation at the end of the financial year, different opinions between entity’s management and accounting department, important issues for which management has contracts with specialized consulting firms, issues of control and audit activity, fraud or other forms of errors and deviation from the national rules (Fülöp, 2011, p. 22-23) [10].

The pivot for corporate governance in the USA is the Securities and Exchange Commission (SEC). This body regulates securities markets in order to ensure protection for investors and orderly trading. To do so it also regulates stock exchanges, broker-dealers, investment advisers, mutual funds and public utility holding companies. The SEC derives its authority directly from Congress and is active in litigation in support of the laws and rules which Congress has passed. It is, however, interesting that it is Eliot Spitzer, Attorney General for New York State and other state attorneys who have been pursuing Citibank and other companies (most recently Marsh & McLennan) for misfeasance. US regulation is largely law based whereas British regulation is driven by principles. The immediate reaction in the USA to the Enron scandal (and others) was the Sarbanes-Oxley Act which put regulation into a higher legal gear; the UK has reacted to problems of trust through the development of advisory codes (Davies, 2006, p. 19) [6].

4 Insights from An Emergent Economy: The Case of Romania

Corporate governance arises in Romania, in terms of conceptual and regulations at the beginning of 2000. The delay is explained by the arduous steps taken on the line of political, legal, economic and social reforms. In what concerns Romania, this country issued a corporate governance code in the year 2000, placing itself among the first countries in Eastern Europe that have issued a corporate governance code (Hermes et al., 2007) [11].
The Romanian Law no. 441/2006, which supplements the Companies Law no. 31/1990 in terms of the rules regarding good corporate governance, includes regulations that apply to listed entities. By Law 441/2006 are being introduced a number of new features designed to mobilize the entities to a better government. The Bucharest Stock Exchange (BSE) marked the first transactions starting with the year 1995. Securities and Exchange Commission fulfills its mission of supervising the circulation of securities in a questionable way.

On the other hand, the difficulties faced by the banking sector in the past decade has led to his minor involvement in the financing system and to the lack of trust that their partners have manifested, to which adds the minority shareholders’ lack of thrust, in the case of Romanian financial institutions with foreign capital. Consequently, it is difficult to accept that the attribute of functional market economy may be associated with Romania, without admitting the dose of tolerance of European and international partners.

That is the context in which, in 2001, BSE created for admission to BSE, the Plus Category ("the plus of transparency") and adopted the first code of corporate governance. Listed companies could advance in the Plus category only after fully taken in their articles of incorporation the provisions of the Corporate Governance Code. This process hadn’t the expected success, only one company requesting promotion to category Plus. In the following years BSE created the Corporate Governance Institute, which is committed to educate listed issuers in what regards the promotion of the appropriate standards of corporate governance, and has been an active participant in finding the best corporate governance practices, contributing to the adoption of Corporate Governance White Book in South Eastern Europe countries. However, implementation of corporate governance in Romania is not devoid of some fundamental inconsistencies as followings (Feleagă, 2008, p 44) [9]:

- the lack of a detailed analysis of the relationship between owners and managers;
- the weak involvement of the other parties participating in the decision-making process;
- the absence of a conceptual framework for an efficient market and its societal implications;
- questionable involvement of auditors in promoting business governance;
- the failure of reforms aimed to implement an accounting system in line with the international developments;
- the weakness of control mechanisms for a honest, relevant, reliable, understandable, comparable and meaningful financial information.

In 2008, BSE has adopted a new Corporate Governance Code, which is based on the OECD corporate governance principles. The code came into effect from fiscal year 2009 and is applied voluntarily by companies traded on the regulated market operated by BSE. Companies that decide his total or partial adoption must submit annually to BSE a Declaration of compliance or non-compliance with the Code of Corporate Governance provisions (the Declaration "Comply or Explain"), stating which recommendations were actually implemented, and also the manner of implementation.

The Corporate Governance Code issued by BSE is divided into 11 chapters:

- Corporate Governance Structures
- The rights of the financial instruments holders
- The role and obligations of the Board
- The structure of the Board
- The appointment of Board members
- The remuneration of Board members
• The transparency, financial reporting, internal control and risk management
• The conflict of interests and transactions with related parties
• The corporate information system
• The social responsibility of the issuer
• The management system

The BSE Corporate Governance Code is similar to those adopted by other EU member states and states new compliance recommendations important for executives and boards of directors in charge of Romanian companies. BSE considers the Code as having supplementary character to other Romanian laws applicable to companies traded on the regulated market (for example the Companies Law, the Accounting Law, the Capital Market Law, etc.).

In April 2012, the government approves the new Corporate Governance Code for state owned (public) companies, code that also includes the appointment of some board members and independent managers. At this point, the real challenge for these companies is to implement this code. We believe it is crucial, especially for companies that are about to be listed, because without a proper corporate governance and without the people behind it will be very difficult for the government to obtain better prices for shares, said Greg Konieczny, fund manager of the Property Fund.

5 Concluding Remarks
In conclusion, considering the issues above, the corporate governance has always been an important field of study. International researchers concern in this area represents our main reason to develop an analysis meant to offer a review of interest in the specialty literature regarding this concept and its evolution over time. From those presented previously we can see that corporate governance is that branch of economics that studies how companies can become more efficient by using institutional structures such as the articles of incorporation, organizational charts and the legal framework (Ionescu, 2010, p.2) [12].

We can state that corporate governance, through its rules, systems and processes designed for establishing relations between shareholders, management, employees and other stakeholders, associated with effective corporate management strategies, lead to an increased economic performance of company, in ethical and safety conditions (Radu, 2012, p. 128) [22]. If management was the focal point for the 20th century, corporate governance is set to be the primary focus for the 21st century. Almost all advanced and advancing economies have introduced corporate governance codes or set new laws for companies, as in the case of US following the Enron debacle. The global financial crisis starting in 2007 added further strands to corporate governance policy and practice (Tricker, 2012, p. 3) [26].

References


1 Problem Statement

Many references can be found in literature indicating that there have been difficulties in implementation of PMS (will be defined in section 2.2) not allowing to gain the full benefit from the system (Business Intelligence [3]; Kaplan and Norton [16]). There are certainly many success stories, but there is now growing literature addressing the difficulties of implementation and it is claimed by some that 70 per cent of performance measurement initiatives fail (McCunn [23]). The same rate (70%) marks failures of Balanced Scorecard (BSC) implementation (Neely and Bourne [26]). Waal [45] says that 56% of performance management projects fail. Research studies have shown that PMS implementation in industry still lags far behind expectations (Olsen et al. [28]).

Insufficient implementation and/or lack of inefficient PMS may lead to the poor organisational performance and on the contrary.

At the same time there are surveys conforming, that using PMS enhance organisational performances and these organisations have better performances than organisations with poor or without PMS. Four of them are presented below, characterising benefits from designing and using efficient PMS.

Lawson et al. [18] study shows that the use of PMS as a management control tool reduced the overhead costs by 25% and increased sales and profits (Martinez and Kennerley [22]). Aberdeen Group found that organisations with advanced PMS achieved significantly higher financial results than organisations with medium level PMS and organisations having difficulties with PMS.

One of the first research studies over a longer period of time (1996-1999) revealed that organisations with balanced PMS are more successful than organisations without balanced PMS (Schiemann and Lingle [37]).

Ittner, et al. [13] and Lingle et al. [19] found evidence that organisations making more extensive use of financial and non-financial measures and linking strategic measures to operational measures have higher stock market returns.

The objective of the paper is to construct approach, which enables to assess the implemented PMSs and case of appearing shortcomings to indicate and therefore to raise efficiency of PMS. To achieve this objective the author of this paper analysed viewpoints of different authors found in the literature about reasons causing implementation difficulties of PMS. During the research author gathered the viewpoints of different authors, systematised and grouped them on the basis of similar characteristics. In this way he reached the main and most frequent reason. Proposed approach in this paper would focus on assessing and if necessary on eliminating just on the same and most frequent shortcoming.

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2 Constructing the Approach

2.1 Findings from Literature
As follows, some justifications of failures will be brought out, which will be later analysed and grouped in order to discover one, the most significant cause.

PMS has a central role in the strategy execution process and thereof PMS contributes a lot to support this process successfully.

Fortune magazine study from 1999 found that 70% of CEO failures came not as a result of poor strategy, but the inability to execute (Niven, [27], p. 10). In the opinion of the author of the paper this indicator clearly underlines the significance of the executing strategy in addition to the strategy itself.

The answer to the question why the execution of strategy is so complicated, lies by Kaplan and Norton in the form of four barriers that must be surmounted before strategy can be effectively executed. They state also that only 10% of organisations execute their strategy, which is a very low number and indicates to big problems existing in this field in the author’s opinion. The barriers are (Niven, [27], p. 11):

- Vision barrier: only 5% of the workforce understands strategy;
- People barrier: only 25% of managers have incentives linked to strategy;
- Management barriers: 85% of executive teams spend less than one hour per month discussing strategy;
- Resource barrier: 60% of organizations do not link budgets to strategy.

All causes of failure presented by Schneiderman [39], may be classified as design failure and have been used in many papers as the main factors of failure causes:

- the independent (i.e. nonfinancial) variables on the scorecard are incorrectly identified as the primary drivers of future stakeholder satisfaction;
- metrics are poorly defined;
- improvement goals are negotiated rather than based on the stakeholder requirements, fundamental process limits, and improvement process capabilities;
- there is no deployment system that breaks high level goals down to the sub-process level where actual improvement activities reside;
- a state of the art improvement system is not used;
- there is not and cannot be a quantitative linkage between non-financial and expected financial results.

The author cannot agree with the last statement because the outputs of current activities, many of which are not measurable in monetary, shape the organisation’s financial results in the future. PMS attempts to create linkages between these two different dimensions of time, which is the gist of PMS.

Additionally Schneiderman [38] has characterised the situation as follows: “The much sought-after linkage between performance measurement and strategy is poor in practice, partly as a result of the forced classifications into the categories of financial, customer, internal processes, and learning and growth [. . .]. Current practice is ad hoc and the resulting linkages are not compelling”.

Bourne et al. [2] are categorising reasons for success and failure from literature and proposed them using three categories of Pettigrew et al. [33], which are:
• Contextual issues:
  o the need for a highly developed information system;
  o time and leadership and resistance to change;
  o lack of leadership and resistance to change.

• Processual issues:
  o vision and strategy were not actionable as there were difficulties in evaluating the relative importance of measures, and the problems of identifying true “drivers”;
  o strategy was not linked to resource allocation;
  o goals were negotiated rather than based on stakeholder requirements;
  o state of the art improvement methods were not used;
  o striving for perfection undermined success.

• Content issues:
  o strategy was not linked to department, team and individual goals;
  o large number of measures diluted the overall impact;
  o metrics were too poorly defined;
  o the need to quantify results in areas that are more qualitative in nature.

Bourne et al. [2] says there are four main blocking factors to implementation of the measures:

• the effort required;
• the ease of data accessibility through the IT systems;
• the consequences of measurement;
• being overtaken by new parent company initiatives.

Clinton et al. [5] believe that difficulties are related with selecting process of measures and with their appropriate use.

Frigo and Krumwiede ([11], p. 44) concluded that scorecard users rated about a third of customer and internal process area metrics as between “less than adequate” and “poor.” In addition, “only 16.8% rated customer metrics as ‘very good to excellent,’ and only 12.3% said their internal process metrics were “very good to excellent”.

BSC expert Niven [27] believes that half of BSC users are not achieving the results they hoped for and a significant number of users rate their performance measurement systems as “adequate”.

They seem to have a difficult time choosing the proper metrics and then using them appropriately (Clinton et al. [5]).

CIMA technical report points out the following weaknesses discovered in their research:

• 78% of companies that have implemented strategic performance measurement systems do not assess rigorously the links between strategies and performance measures.
• 71% have not developed a formal causal model or value-driver map.
• 79% have not attempted to validate the linkages between their non-financial measures and future financial results.
• 45% found the need to quantify results to be a major implementation problem.

The above described causes of shortcomings of PMS implementation have been summarised by the author as follows. The Fortune survey indicates if an organisation even has a good (realistic) strategy, then the obstacle to the success of the organisation is poor execution. To facilitate strategy execution a number of tools have been created, e.g. BSC, which, however, also need to be implemented and difficulties have been perceived there too. It should be added that BSC implementation need not yet signify strategy execution. This means that with an excellently designed BSC an organisation has got an instrument with the help of which to execute the strategy. The next aspect where to focus attention to is acting on the basis of BSC during the strategy period, since even when acting according to BSC there are several possibilities of failure. In most general terms, the research indicates that PMS as a strategy execution tool has (general) weaknesses.

Observations by Kaplan and Norton also verify difficulties in strategy execution. Their notes are related on the one hand with conducing background of strategy execution – attention of senior manager to project and on the other hand with effect on the creation of PMS structure caused by the same poor attention:

• Operational activities of managers are not aligned with strategy causing effect that strategy has not reached to the employee level. Herein the author can conclude that managers’ and their employees’ everyday activities are not related with strategy and actual everyday activities are not addressed to the achievement of strategic objectives;
• Strategy is complicated and not clear to employees causing the effect that strategy is not present at employees’ everyday level and therefore the probability of achieving strategic objectives is low from the start;
• Strategy execution is not paid enough attention to and resources (budget contributes to other activities not derived from strategic priorities).

All these shortcomings are transmitted in the PMS design on to the PMS structure. Remarks from Schneiderman indicate causality and they are about the execution process itself, in which PMS has essential contribution to success through support:

• The factors and activities that lead to stakeholders’ satisfaction are not defined. Hence it is not known what exactly leads to their satisfaction and therefore it is difficult to define the paths leading there and the activities of tracking the pathway and adjusting activities will not produce any results. This involves low probability of achieving the actual objectives;
• Objectives of units are not aligned with organisation’s or actual executors. As a result everyday work of the units and their employees is not aimed at the achievement of strategic objectives. Methods for executing are missing;
• The measures may therefore prove inaccurate and these cannot be used to track the pathway to strategy execution;
• Information from performance assessment that should necessitate adjusting activities, do not bring this effect. Even improvement activities are undertaken these are not based on the facts collected by the system. This entails that adjusting activities lack a real opportunity to influence the organisation’s objectives;
Execution is essentially complicated and achievement of results is rendered purely a matter of chance by that tasks are not cascaded, which separates employees’ everyday activity from strategy execution and in turn will cause the situation that strategic objectives are not achieved;

There are no linkages between everyday activities and effects of the same activities on the achievement of financial results.

Causes of failure are also insufficient attention to execution as a phase in the general usage of PMS. According to Bourne, a problem is the nonconformity of strategy to requirements for delegation, as a consequence, most probably the strategy will not be executed.

- Allocation of resources (time, money, lack of leadership in execution and lack of information system) for strategy execution is not systematic and sufficient.
- The vision and the strategy itself have weaknesses which do not allow guide the strategy to the units and employee level. As result their everyday work is not targeted at the achievement of the organisation’s strategic objectives.
- Poorly designed measures and their multitude.
- No measurement in important areas for strategy execution.
- Clinton et al. detect causes in the poor selection of measures, which involves PMS structure measures which actually do not express strategic objectives.
- Frigo et al. say the cause is poor measures leading to the situation where activities may be well executed, but if they are wrong, the probability of achieving the objectives is low.
- A weak linkage between strategy and the measures mentioned in CIMA report implies that there is no linkage between strategy and performance measures that measure its execution and achievement. This does not allow executors to set objectives which would be derived directly from the strategy and there is no confidence that the executed activities will lead to the achievement of strategic objectives.
- Lack of causal model is associated with the preparation of the strategy itself and deployment for the executors. No alignment between strategic objectives and executed activities occurs.
- A weak linkage between nonfinancial indicators and financial results implies a weak alignment between everyday activities and their impact on the organisation’s financial results.
- Problems with the quantification of results imply that the level to be achieved has not been defined. This involves weak alignment and it is not known what exactly is regarded as the achievement of strategic objectives. This does not allow communicate the same to executors and there is no confidence that executed activities will lead to the achievement of strategic objectives.

Grouping shortcomings

Grouping the above-mentioned shortcomings, more general and specific groups of reasons can be identified. General difficulties are largely associated with strategy execution (Fortune, Kaplan and Norton, Schneiderman, CIMA) and it has been mentioned once that vision and strategy themselves are inadequate (Bourne, CIMA).

The following more specific difficulties are encountered in strategy execution as a process:

- Communication difficulties: strategy has neither been deployed nor aligned with managers, units and employees (Schneiderman, Clinton, CIMA); strategy is not clearly understood (Kaplan and Norton).
• Measures are poor (Schneiderman, Bourne, Frigo, CIMA) and there are too many of them (Bourne), which all is a consequence of poor selection process of measures (Clinton). This implies a lack of an efficient method.

• Insufficient resources for strategy execution, resources are allocated without consulting strategic priorities but on some other basis (Kaplan and Norton, Bourne).

• Feedback related: adjusting activities are not based on actual results or these are not performed at all (Schneiderman, Kaplan and Norton); additional pay is determined not based on strategy execution (Kaplan and Norton).

• Problems are encountered in PMS implementation (Niven), insufficient initiative (Kaplan and Norton, Bourne), insufficient allocation of time and money for execution (Bourne). This indicates the lack of system operating “fuel”.

• Problems caused by PMS: lack of an advanced information system (Bourne).

More specific weaknesses can in turn be divided into two (Figure 1):

• Difficulties with communication: both deployment of objectives and feedback. Also measures can be regarded as means of communication tools (difficulties 1, 2, 4).

• Difficulties arising from insufficient leadership and resources in PMS implementation (difficulties 3, 5, 6).

**Figure 1. Summary of shortcomings**

Difficulties with communication affect creation of PMS structure and its functioning more directly. Insufficient leadership and resources influence the quality of the structure and functioning somewhat more indirectly.

Difficulties with communication have been pointed out by many authors. Verweire and Berghe ([42], p. 7) claim that communication has a significant role in the performance management process.

Merchant [24] argues that communication failure is an important cause of poor organizational performance.
Weak communication is mentioned also by Malmi [21] in his research: “Most interviewees stated that they have derived their measures from strategy, based on cause-and-effect reasoning. When asked to give an example of such cause-and-effect chains, the claimed link between strategy and measures appeared weak in most companies. Comments suggest that the initial idea of linking measures is not well understood”.

Breakdowns in communication and difficulty in translating the strategy into action are common reasons for failure. It is often difficult for employees to know what to do to improve performance (Debusk and Crabtree [8]).

Chtioui [4] in his research reached a conclusion that communication contributes to the realisation of control objectives. Depending on the model adopted, it acts as:

- a control tool;
- a motivational factor;
- an instrument of influence;
- a coordination mechanism.

Employees of a well-known auditing firm, Arthur Andersen, unveiled that the control framework is often unsynchronised with the organisation’s objectives. A challenge there is to identify and communicate the strategy and then design and implement a PMS which is clearly linked to strategic objectives. The trick is to identify the critical sources and find related measures that will lead to performance (Stivers and Joyce [41]).

Comprehension of causal connections (author: which is the result of working communication) are important for the achievement of results (Luft [20]). He finds that the reason why poor causality (author: result of communication) exists is due to that defining of the profit creating process and their indicators that would cover these processes in the best way, is extremely uncertain and not well understandable for anybody in the organisation.

This has been studied also by Webb [46] who in his experiment verified that managers focus more on fulfilling the objectives where causal connections are visible, perceptible and strong.

Alver and Kadak [1] pointed out an analogous problem: relationships with firm’s objectives (financial, personnel, product and their development areas) and data used for measuring the results were studied. Although the research demonstrated significant alignments, non-alignments still appeared between objectives and the indicators monitoring their achievement, both in strong and soft areas. These shortcomings can also be addressed as lack or weakness of communication where the objective is not observed in the execution phase.

Taking into account the high failure rate, on the one hand, and shortcomings of PMS implementation, on the other hand, there is an obvious need for a tool with the help of which to diagnose PMS. This tool will base on approach which will focus on communication in PMS design and usage.

2.2. What are PMSs?

Before constructing the approach the author of this paper presents how performance management and PMS are defined, what and how it consist of, related with strategy, some requirements to PMS and about the efficiency of PMS by different authors to frame the approach. Finally author itself defines the PMS and its parts.

Verweire and Berghe defined performance management as a process that helps an organisation formulate, implement and change its strategy in order to fulfil stakeholders’ satisfaction (Verweire and Berghe [42], p. 7).
If performance management a process, then which activities consist of process?

The following list contains activities that must be done to improve performance. The two institutions LGMB and the Audit Commission in the UK suggest that, in order to improve both organisational and individual performance, the following management functions are important:

- defining and setting organisational and individual aims and objectives;
- corporate planning;
- linking organisational strategy and service objectives to jobs and clients;
- identifying staff training and development needs;
- assessing the results through personal appraisal using relevant performance indicators;
- performance agreements or contracts;
- using the knowledge gained through training to modify performance attitudes;
- external and internal communication systems;
- organisation development and performance review.

What PMS consist of?

That has been described by many authors and institutions. An overview of PMS parts is provided in the definition (about Controlling) by Waal [43], according to what its structure is defined as a combination of the following parts:

- the organisation’s structure (i.e. delegation of authorities and responsibility);
- performance measurement and assessment standards;
- infrastructure for the planning and control cycle;
- infrastructure for the organisation’s management information.

According to Price [34], parts of performance management are:

- integration into business strategy;
- development of individual and team performances;
- focus on training and development;
- formal assessment components;
- line managers’ accountability;
- integration into HRM and rewarding practices.

PMS relation with strategy. Definitions by Cokins, Edis, IMA and NAHT relate performance management to strategy execution.

Performance management is the framework for managing the execution of an organization’s strategy. It is how plans are translated into results (Cokins [7], p. 2).
The term performance management refers to any integrated, systematic approach to improving organisational performance to achieve corporate strategic aims and promote its mission and values (Edis [9]).

Performance management is comprehensive management process framing the continuous improvement journey, by ensuring that everyone understands where the organisation is and where it needs to go to meet stakeholders’ needs.

NAHT describes performance management as “a process that links people and jobs to the strategy and objectives of the organisation”.

**Horizontal and vertical integration in construction of PMS.**

A key characteristic of Performance Measurement Framework (PMF) is their ability to integrate horizontally across functions and vertically through the hierarchy of the organisation (Ray and Neely [35]).

Performance management is an integrated set of planning and review procedures, which cascades down through the organisation to provide a link between each individual and the overall strategy of the organisation (Rogers [36]).

PMSs are defined as… the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities (Simons [40]).

The following two lists contain requirements for PMS. From a review of mainly US literature, Millett and Harvey suggest that an ideal PM model has features that support:

- communicating of objectives to all employees;
- relating individual and departmental performance targets to a broader set of objectives;
- reviewing formally progress towards these target objectives;
- identifying training, development, and merit pay assessments;
- evaluating and improving the effectiveness of the process.

In the opinion of Kennerley and Neely [17] PMF must:

- provide a “balanced“ picture of the business;
- provide a succinct overview of the organization’s performance;
- be multidimensional;
- be comprehensive;
- be integrated both across the organization’s functions and through its hierarchy;
- explain how results are a function of determinates.

Like in every system, one of the main assessment criterion of PMS is efficiency. The system is efficient when it can react and adapt to changes in the environment surrounding the organisation and within the organisation, and according to this provide information (Haldma [12]).

Olsen et al. [28] have assessed PMS efficiency with the help of three criteria:

- causability,
- continuous improvement,
- process control.
The efficiency of PMS is defined on the way, if management teams are using the majority of measures in the management of their business. Evidence to confirm that is the fact, if board meetings are reviewing company reporting documentation and observing the measures being displayed around the business (Bourne et al. [2]).

Kadak has determined ensuring the efficiency of the system through the fulfilment of the following criteria (Kadak [15]):

- constructed hierarchically;
- measures given to subunits and the achievement of their goals drives the fulfilment of an organisation’s objectives;
- are supported by other units and fields (for example, results are related with bonuses and motivation);
- measures follow trends and changes in the environment.

The author of this paper defines PMS as follows: PMS is an holistic approach to the organisation, which derives for executive units and employees their short-term tasks based on the strategic objectives of the organisation (or on other which is regarded as performance), regularly monitoring their conformity to expectations and where necessary, launching adjusting activities when the (interim) results are not as expected. All this is in order to help the organisation ensure the achievement of its strategic objectives (or other which is regarded as performance) with its arrangement.

PMS is a system which with its (hierarchical) structure/setup and functioning supports the organisation to achieve its strategic objectives. It may be put as follows:

\[ \text{PMS} = \text{structure} + \text{functioning} \]

In comparison with others, author of this paper underlines in his definition of PMS rather the importance of alignment in the structure and functioning and as a whole.

In brief, according to definitions, consisting parts and requirements to PMS and to efficiency of PMS, the constructed approach to ensure communication in all parts and components of PMS must ensure:

- cause-and-effect relationships in the system (being integrated, hierarchical, holistic),
- activities starting with planning and ending with adjusting activities and
- adaption of the system.

2.3. PMS and the chain concept. Birth of chain

The analysis of PMS shortcomings indentified that PMS implementation and utilisation failure is connected mostly with communication, which does not allow communicate information in several directions in PMS.

A solution to the problem where PMS in many organisations actually cannot support the achievement of its strategic objectives, would be strict abidance by the chain concept in PMS design and functioning.

A purpose of PMS implementation is to move from the present qualitative condition of the organisation into a different qualitative condition in the future (Figure 2).

**Figure 2.** Change of qualitative conditions (compiled by the author)
The pathway there can be addressed as a set of different but interlinked stages/parts. One set is formed of activities and another set of system components: interim objectives, measures, interim results etc. All along the way from the current condition to the future condition the organisation is accompanied by PMS, based on the chain structure.

The following qualities are typical of a chain:

- a complete chain consists of links/components,
- a chain can fulfil its function only when it is unbroken.

Then all it links can fulfil their role and therefore also the chain as a whole. In that case every link is filled with information which is transmitted from the beginning to the end of the chain. If the chain is broken, the link next to the break cannot fulfil its role anymore and communication/information will cease. After the broken link is repaired the transmission is restored. PMS with all its parts and components can be viewed in a similar way.

**General description of the chain and two directions of two chains**

First, movement (of information) in PMS chain occurs (1) in the chain of objectives (Figure 3). There the necessary sub-activities derived from the organisation’s strategic objectives are communicated to the respective units. In that way all required activities get an executor and the objective is split/deployed. Later, in the strategy execution and PMS functional phase, (information) communication movement will occur (2) in the result chain, which is movement in the opposite direction and where executing units with the results of their sub-activities exert the expected influence on the achievement of the organisation’s strategic objectives, i.e. individual results are transformed into overall results of the organisation.

**Figure 3. Communication of information in two chains (compiled by the author)**

Since the interval between setting strategic objectives and the final result being revealed is long (measured in years), then it is important to know before the date the final results become evident whether the strategic objective is likely to be achieved or not. For that the “long journey” needs to be deployed into shorter periods and then conclusions have to be made assessing the actual interim results against short-term objectives. The chain of both objectives and results will be deployed shorter by this amount (a month, quarter, half year, year).

Due to unsatisfactory interim results or other circumstances (e.g. changes in external environment) an adjustment would be made to the system. This would somewhat (but not significantly) change the next period’s
objectives of some executing units and the cycle will repeat: information is collected to know interim results; these are assessed and a judgement is made, which will lead to the adjustment of the next period’s objectives.

It will be guaranteed by moving along this chain that exactly these activities which lead toward the achievement of the overall objective were derived from the overall objectives of organisation to strategy executors. The achievement of these is monitored on the basis of the criteria (measures) derived from the objectives. It rules out any other, out of context results, keeping only those that are necessary with the overall objective in view. If this consistency is guaranteed and the chain is functioning, or all parts/links in the chain are functioning as necessary, there is a solid foundation also for the achievement of the organisation’s objectives.

In such a description we can speak of two chains (Figure 3):

- first – setting objectives based on the organisation’s objective;
- second – collection of results, analysis, drawing conclusions, communication and implementing adjusting activities.

The first chain happens earlier in time and is more static and shorter (objectives setting). The second chain acts later in time, is more dynamic and longer lasting (collection of results and responding). These chains come into contact with each other in two points. First, where in the functional phase of PMS it is initially observed what has been set in the chain of objectives, and then where the functional phase sets the short-term period objectives for the chain of objectives.

Consolidating the PMS and the chain. In a PMS can distinguish three main parts, which can be examined on the basis of the above-described two chains (objective setting chain and result collection chain) (Figure 4).

**Figure 4.** Relations between chains and PMS parts (compiled by the author)

<table>
<thead>
<tr>
<th>Objective setting chain (1)</th>
<th>PMS structure</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PMS implementation</td>
</tr>
<tr>
<td>Results collection chain (2)</td>
<td>PMS functioning</td>
</tr>
</tbody>
</table>

Source: author’s analysis

Therefore the author considered it necessary to describe separately:

- the structure of PMS through its components (the objective setting chain),
- functioning of PMS through its components (the result collecting chain), and
- implementation of PMS that connects previous two parts.

2.4. Chain creation between PMS parts

2.4.1. The first part of PMS

In the following the author discusses about the generation of PMS structure pursuant to the chain concept. While the directions of objective deployment and aggregation of results were discussed above, then now the
temporal direction must be added. The direction of actions deployment and of aggregation of results can be addressed together (as one). PMS will derive from looking at one chain from two different directions (Figure 5).

**Figure 5.** Final result formation from results of temporal activities (compiled by the author)

The first direction of the chain (temporal part) derives from the organisation’s ambition to reach somewhere (some condition) in the future; the second direction of the chain (activity part) is already the activity for the achievement of the intended results. Both are directed at the same target, to reach a previously specified condition via actions and by a certain date.

Both directions (parts) of the chain are interrelated through temporally performed activities and the final result is the achievement of the intended at the desired time – in the future. Time and activities are closely connected: activities are fixed temporally and in a time period several predetermined activities are made in parallel.

The other direction of the chain (activity part) involves many executors or contributors in the organisation who help to realise the expected. Their actions must be coordinated rather than counteracting or duplicating. Actions/steps by executing units lead to the achievement of the organisation’s overall objective. This direction of the chain has an internal focus in the organisation, aimed at setting units’ objectives concerning time and activity.

The two-directional chain concept is the basis for designing a PMS structure. Hence, the intended final result (objective) to be achieved in the future is a sum of results of actions of different temporal duration.

**Going in-depth axis**

Previously two directions of a chain were mentioned: objective setting direction, and result generation direction. These were supplemented by the time and activity axis. In the following let examine the going in-depth direction, which channels appropriate activities which need to be executed to reach executors with the
help of PMS structural components in an undistorted way, by going from the most general (organisational) level to a more individual (executor) level.

According the Best Practice, an organisation’s strategy is derived from the organisation’s mission, which answers the question what organisation wants to offer to society and to its initiator by its existence. If an organisation has, based on the mission, formulated its strategy, the formulation is mostly in a form and level that requires concretisation, so that firstly, activities could be derived from that strategy, which the organisation then has to start executing. Secondly, during the strategy concretisation specific interim and final results need to be determined, which the organisation has to achieve, in order to be able to say in the meantime that strategy execution has reached a certain stage or that it has been fully executed.

After deriving strategic objectives, also critical success factors (CSF) should be fixed in action plans. These are most urgent, critical (qualitatively expressed) areas where the biggest obstacles in strategy execution occur which the organisation should surmount to achieve a particular strategic objective. These are areas (factors) that help focus every objective, which exist at the current moment of strategy execution (in case they do not exist, this strategic objective need not be set, because the situation where they want to reach has already arrived) and therefore they do not allow achieving the strategic objective at the moment and must be surmounted as a result of purposeful action. Surmounting them must lead to achievement of the objective. If it does not, the success factors and measures were derived incorrectly. For the sake of clarity and good management there might be a maximum of two success factors per one objective (Waal [43]).

To ensure the surmounting of the CSFs and first of all of all achievement of objectives measurement (to know where specifically they want to reach and to know whether and when they have arrived) (quantitative) key performance indicators (KPI) or measures need to be imported to the system. Simons ([40], p. 234) has said the following about measures: measures communicate to people what is important. Hence, through measures organisational strategy reaches to employees. To understand whether the measure is appropriate, suitable to support the objective, the measure must meet three requirements:

- aligned with strategy,
- be effectively measurable (measures should be objective, complete and responsive),
- linked to value (input – process – output).

When these three conditions are met by all measures, one can be confident that the organisational strategy and measurement system are interrelated.

It is advisable to have not more than three measures per CSF, which would make 3–6 measures per objective. KPIs with target values must exist, since they show what the actual aspirations are and whether these are achieved later.

Adding the unit axis

Further movement in the chain must go along the above-mentioned structural components in the organisation (from the organisational level) to the executing unit level. Since these are organisations characterised by division of labour, then units of the organisation will be contributing for the achievement of strategic objectives. Hence also the requirement in the criteria of strategic objective setting that it must be possible to link the objective to area/function, which then will be responsible for achieving the corresponding objective.

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2 An organisation which is well aware of its success factors may skip the step of determining the CSFs and reach the KPIs directly from strategic objectives.
Here the units get (from the organisation’s strategic objectives) objectives for themselves. It is the same with units – their organisation strategy based objectives have some factors (CSF) that need to be surmounted. The surmounting of these factors is monitored by KPIs with target values. Additionally another success factor may be designated for a success factor, the accomplishment of which will lead to the surmounting of the first success factor. With the two different success factors the former should be called result CSF and the latter leading to the former, or effort CSF. The surmounting of the latter is again monitored by the effort KPI with target value.

Objectives, CSFs and KPIs of the organisational level and unit level must be interlinked (Figure 6).

**Figure 6.** Relationships between structural components of PMS on the different levels (compiled by the author)

Since the units surmounting the organisational CSFs or organisational CSFs should be definitely revealed in the list of objectives of some units, since the head office does not fulfil them (objective setting direction – top down). Otherwise the chain will be broken. Hence the target values of KPI at the organisational level are formed as a result of actions of one or several executing units (result direction – bottom up).

**Permanent PMS structural components hierarchically in private sector**

Based on the communication problem pointed out in the problem statement section, PMS structural components should be addressed consecutively – in a chain. Going from the general, abstract and long-term dimension toward a more detailed, specific and shorter dimension, each structural component of PMS can and has to derive its criteria which it must meet in order to allow to get from it continuously on to the next link in the chain, which in turn must meet the respective criteria. Hence it commences from the strategic objective and ends with defining the inputs needed for the achievement of this objective.

The author grouped the above structural components of PMS into two: recommended and obligatory (Table 1).
Recommended components support the channelling of the appropriate and aligned obligatory components into a chain, but these are not constituting the chain. Obligatory components must exist for constituting the chain.

The components which help derive or support deriving are recommended, so that the right KPI target values could form. They do not let deviate from deriving the right KPIs for strategic objectives. A deviation would cause the situation where units achieve KPIs with target values, but their achievement will not involve achievement of the KPI target values of the organisation’s strategic objectives.

Obligatory components (13) fix precisely where the organisation needs to get and enable it to track its pathway in the short term.

**Table 1.** Obligatory and recommended components of structure of PMS in the private sector (compiled by the author)

<table>
<thead>
<tr>
<th>OBLIGATORY AT ORGANISATIONAL LEVEL</th>
<th>OBLIGATORY AT UNIT LEVEL</th>
<th>RECOMMENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Strategic objective</td>
<td>(4) Strategic objective</td>
<td>Result CSF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Effort CSF</td>
</tr>
<tr>
<td>(2) Key performance indicators (KPI) +</td>
<td>(5) Key performance indicators (KPI) +</td>
<td></td>
</tr>
<tr>
<td>(3) Target value (TV)</td>
<td>(6) TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7) Key process</td>
<td>Effort CSF</td>
</tr>
<tr>
<td></td>
<td>(8) Output key indicator (KPI) +</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9) TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10) Activity key indicator (KPI) +</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(11) TV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(12) Input key indicator (KPI) +</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(13) TV</td>
<td></td>
</tr>
</tbody>
</table>

Source: author’s analysis

Such a step-by-step (in chain) movement is necessary so as the day-to-day activities of organisational units were derived from the organisation’s strategy and would lead to its achievement or alignment must be ensured already in the structure design phase. Monitoring of the execution of the strategy with the support of the PMS structure is already a task of reporting structure and management.

The key process is a derivative from the effort KPI and the latter in turn a derivative from the effort CSF. Hence the chain breakage can be addressed as a situation where an organisation has defined the success factors but has not derived from them activities/processes that after implementation would surpass the success factor. The key process success factor is also a qualitative indicator, which characterises a certain area which at the moment hinders implementation of the key process and which needs to be surmounted. Surmounting is characterised with the help of effort key performance indicators (measures) (or activity already), which are divided into those characterising inputs, process and outputs. Inputs must be sufficient for activities, which
have outputs ensuring that success factor of effort is surmounted, and which guarantees that sufficient effort KPI target value is achieved. Inputs necessitate relevant resources to achieve the objective, or a connection is generated between PMS and budgetary funds for strategy execution.

**Summary of PMS structure**

When units are given the strategy based targets with KPIs and target values and also activities with KPIs and time limits have been fixed (or available) for executing units, the structure for performance management exists (Figure 7). On the basis of that structure in functioning phase information can be gathered and communicated to managers, and on the basis of it adjusting activities are carried out, where necessary. If this chain is observed both regarding the structure creation and PMS functioning, it may be said that PMS works efficiently and the organisation is very likely to achieve its strategic objectives.

**Figure 7.** Relationships between structural components of private sector PMS (compiled by the author)

All this long, a three-directional chain is necessary so as processes and activities could be derived from the organisation’s objective with the deadline many years away, which the units need to perform in the short term as well as in the following years. Since functional division of labour is dominating in an organisation, units have to make efforts to the best of ability, which they do, or they are which through short-term activities generate long-term success/result. Hence, so as the right things are done well today it is necessary to derive an unbroken chain from strategy/future into the present day. In this way we can prevent “wrong activities” from being “mistaken for the right ones” in structural units’ development activities.

**2.4.2. The second PMS part**

Implementation would be communicating and establishing of new temporal objectives for units or executors. It is a transition stage where the above created PMS structure is implemented for utilisation. This gives the executors new knowledge, or in the following periods just these things will be done slightly differently. Implementation can be summed up as an activity where new rules/principles are explained and established for the units.
Implementation is a one-time preparatory action for putting the precedent part of PMS – structure – into functioning, which ends when units have comprehended their tasks, as a result of training units have new competences to fulfil new tasks and are ready to start acting “in a new manner” from a certain round date. Implementation contains introduction of changes to documentation (units’ statutes, work tasks, roles, duties, accountabilities, motivation).

This presumes assessment of conformity of the existing competences to new requirements after tasks for the new period are accessible and in the event of discrepancy, organising training. Implementation must also contain assignments to keep PMS functioning.

The importance of implementation cannot be underestimated. The structure of a PMS may be perfectly designed but when structural components are poorly implemented, the result is that the strategy execution does not begin as it should. Though the functioning of PMS will reveal non-achievement of interim results, time is lost until tasks of a new strategy are communicated to executors.

2.4.3. The third PMS part

There are studies which have examined the current use of performance management. It has been pointed out that 56% of performance management projects fail, especially in the functioning phase (Waal [45]; Waal and Counet [44]). This implies that the functioning phase is not less important than the structural design phase.

The author of this paper defines PMS functioning as the current operation of the system that begins from a round date (beginning of month, quarter or year) when a new strategy execution begins, new assignments enter into force.

Regular activities which constitute the functioning of PMS are:

- data collection,
- analysis,
- drawing up and presenting reports,
- communication,
- interpreting,
- managers and top level must peruse reports, react to them,
- feedbacking with “carrot and stick“ judgement is important3,
- planning of adjusting activities (with new KPI target values),
- executing of adjusting activities (the new activities probably involve that post-strategy actions will be somewhat influenced by them and they need to be adjusted slightly in the new light).

PMS functioning classically starts when implementation ends and operation by “new rules“ begins. In reports milestones set in the PMS structure, their achievement and communication of results are monitored.

Functioning, on the one hand, ends the chain (comprising of PMS structure, implementation and functioning), but on the other hand, provides also an input to PMS structure after interim results are known. This result will supplement units’ CSFs, KPIs of CSF and target values for the next period. Actually this is what closes the

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3 Otley [29] mentions it in the Performance Management Framework as a separate process.
chain. When this total chain exists and functions incessantly it is very likely that the organisation will achieve its strategic objectives.

2.5. Results

Supplementing diagnostic tool of PMS consist utilising chain approach on the assessing PMS. Assessment focuses on identifying the chain occurrence of PMS of assessed organisation between the parts of PMS and between the components of parts. Assessor should be expert being familiar with PMS subject.

Summing up the above, the author can point out relationships between its three parts and between the components of the parts. The approach shows, first, these three parts occurring in a chain (Figure 8), and secondly, components of these parts appearing in a chain (Figure 9).

**Figure 8.** PMS parts occurring in the chain (compiled by the author)

![Figure 8](source: author’s analysis)

Figure 8 depicts the PMS parts appearing in a chain: structure – implementation – functioning – structure. During the implementation the components in the PMS structure are set/established for executing units. Also the functioning phase concentrates on them, collecting, communicating the results and deriving adjusting activities.

**Figure 9.** Relationships between parts and components of PMS in the chain (compiled by the author)

![Figure 9](source: author’s analysis)
In addition to PMS parts, components of PMS parts (components of structural and functional chain) also occur in a chain on Figure 9. In addition to the fact of a PMS part or component being present, the continuance model set requirements for their content. If they meet the requirements, we can speak of a continuous chain and efficient PMS.

3 Conclusions
The objective of the paper was to construct approach, which is central part of diagnostic tool and enables to assess the implemented PMSs and therefore to raise efficiency of PMS. The created theoretical approach focused on removing the formerly mentioned main and most frequent shortcoming of the implementation of PMS – communication. Communication is enhanced when PMS observes the chain concept.

In the approach the author divided PMS into three parts:

- PMS structure design,
- implementation of PMS,
- functioning of PMS.

The existence of these parts and interrelations between them can be seen as a chain. The obligatory structural components (occurring in a chain) of the PMS of private sector organisations at the organisational level are:

- strategic objectives,
- KPIs of output + TV.

The obligatory components at the unit level are:

- strategic objectives (for the executive party),
- output KPIs + TV,
- activity KPIs + TV,
- input KPIs + TV.

In the PMS implementation phase, new temporal objectives formulated in the PMS structure are communicated and established for executive units. It is a transitional stage where the above created PMS structure is put into operation. This provides new knowledge to executors as a result of which these things will be done in a slightly different manner than before in the next periods. Implementation can be summarised as a process where new rules/principles are clarified and established for units.

The PMS functioning phase comprises gathering and communicating of information on the indicators formulated in the PMS structure, and where necessary, conducting adjusting activities. A chain is formed of the following activities:

- monitoring interim results, which presumes identification, collection, analysis and communication of information originally;
- reacting;
- planning and performing adjusting activities and adaptations;
- system maintenance.
The practical contribution of this paper is, that the approach allows to diagnose the efficiency of implemented PMS and where mal-functioning is detected, to draw attention to the weaknesses in the respective parts of the system, which, after the shortcomings are removed, would restore the efficiency. In addition to that, the same approach can be used on PMS creation from start.

Through this approach, PMS of organisation has been tested previously, which allowed to estimate the efficiency of PMS of organisation (Kadak [14]). In addition it enabled to assess the influence of existent level of PMS to the achievement rate of strategic objectives of organisation.

References


Plato says in his “Dialogues” that “a good decision is based on knowledge and not on numbers”. He is referring to the individual decision making, in the day-to-day life. His definition emphasises the basic human characteristic of seeking knowledge, without explaining the process of acquiring knowledge.

In today’s world, we consider the knowledge-based economy to be the system derived from the interconnection of the modern-age processes of technological progress, integration and globalization. When writing “The Age of Discontinuity”, Peter F. Drucker popularized the phrase (Drucker, 1992) [12], considering knowledge the best tool that the management system of a company can make use of. He predicted at the time (1992) what was the coming era of information technology and the changes in business behavior that followed.

The link between Plato’s and today’s worlds is the ongoing need for people to make decisions. Even if less philosophical today, managers need to decide on ways to develop their businesses and meet their goals. To do this, they use knowledge – their own and the “system’s knowledge”. Considering the current globalization trends, the following chapter refers to the decision-making process within transnational companies as major players in the world economy.

A theoretical framework on decision is first provided in order to better understand the forces influencing the decision making process. Moving forward, we analyze the major factors influencing the way decisions are being made at the company level. Mathematical modeling is used to show the way companies treat the information flow and categorize decisions. The decision equation reveals its dependence on the human factor more than any other factor.

Decision optimization methods are described both theoretically and empirically, using the example of an investment project in a foreign country. After discussing the criteria list and decision trees methods, the multidimensional problems are being considered. ELECTRE and PROMETHEE methods are generically described, showing again the dependence on the human factor even when complex modelling exists and is implemented within the company’s structure.

The last part of the chapter discusses the subjective reasoning when decisions are being made, once again considering knowledge as a human attribute more than anything else. While the psychological factors when taking decisions are not being mentioned, it is emphasized the importance of knowing the decidents’ qualities as they are ultimately the ones making and implementing the decisions. A special case in human resources management is the problem of authority delegation – considering the importance of human quality in decision-making, delegation is of paramount importance when it comes to strategic decisions. A way to optimize the process and ensure efficiency is have a system where teams are involved in making decisions – this aims at both a better analysis and implementation, increasing the overall efficiency for the company.

While there are efforts in having information technology process and analyze more data so that decisions may be taken objectively, there is a high degree of subjectivity involved in the process. All the current models are confirming its existence while the knowledge-based management is becoming more and more prominent in practice, taking into account the world’s globalization trends.
1 Decision – Definition, Classification and Processes

Decision represents a dynamic rational process of selecting a line of action out of a number of whichever possibilities, aiming at achieving a certain objective or purpose. The complex conditions in which the transnational company activates, as well as the other corporations, objectively highlight three very important features of the decision-making process.

The rationality of the process, owed to the diversity of the economical and social phenomena, to the continual growth of the holdings’ complexity, claim for their scientifical approach, for the use of mathematics, of operational research, of cibernetical and socio-economical simulation.

Another important characteristic of the process is the large volume of information, with the purpose of grasping the economical, social, political, scientifical, technological realities. This implies utilizing informatics in the data processing. The third feature points out to the existence of an objective, of a precisely determined and measurable purpose, which can allow the evaluation of everyone’s contribution to their accomplishment (Pride et al., 2010) [26].

Taking into account the scientifical character which every decision should encompass, the following ways of approach can be indicated (Albright et al., 2011) [1]:

- the mathematical and statistical theory of the decision, which is focused on the quantitative analysis, the study of the possible choices entailed by different factors of influence;
- the theory of economical analysis or of the utility in which quantitative analysis interferes with the qualitative part,
- the theory of systems (in the case of multidimensional decisions) in which investigations of corelation and concordance are made between the subsystems of one unity and the multiple optimal criteria are interpreted;
- the psychological theory of the decisions in which man and especially the collectivity / community, through group decisions, can affirm more directly from the point of view taking part in conceiving, optimising and finalising the decisions.

The decision is therefore the high responsibility act of leadership because it allows the passing from creative thinking, which is most of the times collective, having established the objectives, to the action which generates effective results. Within the company – viewed as a system – the decision is integrated within the leadership system (Nicolescu, 2003) [22].

The process can be described as a basic fourfold system, as shown in the following:
Figure 1. The decision – making process

The decision-making process at the level of the company is of special complexity and responsibility, closely connected the management process. The efficiency obtained by utilising the human, material and financial resources of the company depends on the quality of the decision, on its correctness and foundation. Therefore, the decision must be preceded by a series of problem clarification measures. One first measure is that of precisely enunciating the required objectives, which should offer the possibility to establish the human and material resources that need to be activated in order to fulfill them (Beach, 1997) [3]. The result measurement system must allow the interference, according to the attained level in accomplishing the objectives, correcting the initial objectives, or, on the contrary, operating on the accumulation of some resources for their prior fulfillment.

The decision-making process in the activity of transnational companies has a series of particularities connected to the area of action: there are decisions related to promotional activities and market research, to commercial publicity, decisions connected to the forms and techniques of advertising, decisions referring to export and the import contracting phase, the price policy, the buying – the actual purchasing and the investments that are to be done for the strategic global development of that certain company (Bibu and Brandas, 2000) [5].

Decisions within the transnational company, whichever sector it may belong to, point at both marketing the merchandise on the global market and producing it. The specific conditions of the external markets imply selling strategies aimed at enhancing the product competitiveness. Each competitiveness factor becomes the object of a decision, defining the strategy of the company (Roney, 2004) [29]. For example, making an export decision means analysing the price, the various technical and commercial features of the products, the diversity of the states’ commercial policies.

International economical relations are influenced by a variety of factors which derive from both the complexity of the global background, and the diversity recorded at a local level. The economic recession, the fluctuations of the prices of raw materials or of oil in the global economy are all elements which influence the activity of the transnational companies. All these modify the weight of the risks and uncertainties confronted by the companies’ management, entailing a chain of difficulties in making decisions. In the conditions of today’s external markets, the decision of direct investment into a third-part country has become a system decision, in which all the agreements must be taken into account, as well as the prior decisions about that certain market (Nicolescu, 2003) [22].
The decisive factors in developing and making a decision are the constituent elements, the stages and the principles. The constituent elements are (Friedman, 1999) [13] the decider, the objective (the theme) of the decision, the available information, the choices of the decision reported to the possible or imposed criteria, the multitude of the states characterising the conditions in which the decisions are being made (certainty, risk or uncertainty), the consequences of the decisions made, locally and socially, and the reachable objective. According to the dominant features, these can be grouped as:

- basic constituent elements: defining the objective, choosing the solution and making the decision;
- complementary constituent elements: preparing the objective, searching for information, processing the information;
- auxiliary elements: supporting the search and the processing of the information.

Therefore, we notice the different way that each constituent element participates in the complex process.

The stages of decision making are (Goodwinn and Wright, 1998) [15]:

- collecting the data;
- selecting and ordering (preliminary stages in which the problem and the objective are clarified) the data, separating the constituent elements and approaching them distinctively, analysing the circumstances of the problem and the way it affects the company and its environment, the emergency order (if there are more than one problem), the ways of interceding, the context of the problem, the norms and regulations in use, the restrictive elements of conditioning a certain solution and the way in which they can be satisfied;
- the information analysis and building-up the possible decision choices, through selecting the information, its careful examination, the study of the conditions, the grouping and ordering of the elements, the synthetization of the analysis through conclusions, the transformation of that particular situation into a general situation or the other way around, studying some facts in direct or indirect connection with that certain situation, establishing the decision choices;
- making a decision on the basis of optimizing (establishing the best criterion and encompassing it in a mathematical function), modelling (building-up the mathematical model of the economical phenomenon with the use of the influencing factors and estimating the probability for the factors upon which no action can be performed), settling the real factors and their interaction;
- applying the decision, keeping track and control of its implementation

The principles or the rules of decision making are as follows (Jagdev et al., 2004) [17]:

- the overview of the problem which needs to be solved;
- the use of the scientifical methods and techniques;
- the spirit of analysis and synthesis;
- the quick, efficient and correct information on the problem that needs to be solved and of the existent circumstances;
- the logical, objective and quick reasoning;
- the clear judging and the courage;
- alliance with those who can help make a correct and efficient decision, engaging the staff;
- the efficiency and the precision.
Due to the fact that managers are confronted with an almost continuous flux of problems which require to be solved through well thought decisions, each problem may be associated with uncertainties, risks and an expected influence on the general status of the company. According to the amplitude of the implications, decisions can be split in two categories: tactical and strategic. The tactical decisions are those connected to the current, daily operations of the company. Upon their making, the managers take into account only the implications, the results of a short and very short time span. These are those referring to collecting the information about the market, keeping up the delivery schedule, the schedule of contacting the clients, granting allowances and bonuses, etc. The strategic decisions are those with long term implications, those through which basic aspects of business strategies are clarified, such as: selecting the target market, configuring the products line, establishing the distribution network (Beach, 1997) [3].

Although the strategic decisions are not numerous, they are, in fact, the most important because they outline the way in which the company’s relations with the business world will take place. The tactical decisions are made only afterwards, through the orientation lens created by the strategic decisions (Jagdev et al., 2004) [17]. The decision of direct foreign investment for instance, even if strategic, it also contains a number of tactical decisions considering the investment project.

2 Risk and Uncertainty – The Factors Defining the Decision-Making Process
Choosing the methods and techniques used in the decision making process is made according to the type of decision that needs to be made, which is why we will have to classify decisions considering their content and character and the number of those taking part in their building up. According to their content and character, there are current decisions, routine decisions, prospective (strategic) decisions, administrative decisions, operational decisions or vegetative decisions, automatic, routine, interpretative, programmed, political, technical, commercial decisions. According to the number of participants in the elaboration and adopting the decisions, we distinguish between individual and collective decisions. Compared to the individual decision, the most important advantages of the decisions made collectively are: using the knowledge and experience of more than one specialist, that contributes to the shaping of a certain problem from all the points of view and gives the decision a complete character; obtaining better information regarding the problems which need to be solved; coordinating the efforts of those who are part of the decision making process, the confrontation between the different opinions and obtaining a result with a general validity, which is to be applied by all the participants; achieving a climate of interaction / collaboration, a good motivation for the decision, towards the whole group and towards every participant sharing his/her opinion, which causes the active participation to accomplishing the decisions being made; the birth of new ideas through the confrontation between different conceptions; the forming and installment of a new conception in the company’s management.

The decision making process, theoretically analyzed, as well as the practical experience of many companies has proven that the best decisions are those made through the participation of more employees within the company. Their participation establishes the basis of the team spirit, collective conscience and staff responsibility (Nicolescu, 2003) [22].

However, difficulties can still be met, especially when the organizational problems are not properly dealt with. Most of the times, they reside in the large amount of time spent on organizing the collective reunions for decision making, in which the process is being built to the detriment of individual liability and efficiency in terms of problem solving and is based on formal participation of the collective leadership (Ranyard et al., 1997) [27]. This kind of deficiencies can be eliminated through improving the reunion organizing (work plan in advance, thorough selecting of the cases that require collective decisions and establishing a small number of problem per reunion, thorough and timely preparation of all materials etc.) through permanently informing the collective decision-makers about the basic problems of the company, as well as concrete responsibilities by giving leading tasks and the members of the collective groups who no longer have a leading position.
According to the hierarchy of the company’s objectives and to the manner of information interpretation, decisions can be programmed, semi-programmed and un-programmed. The programmed or tactical decisions are those prepared through regulated or logical means. Those are made for concrete immediate actions, which have a certain character of regularity. The data establishing the choice of such a decision and its outcome are both known (Hitt et al., 2008) [16]. Regarding the content of a tactical decision, we can outline a few categories of choices: known outcomes, in which the choice is of the type “yes” or “no”; choosing the solution is done from a reduced number of possibilities, each being established before; a certain solution must be chosen so that it refers to a mentioned pattern, the action not being pre-established; the logical reasoning used for a certain choice leads to the existence of one or more optimal solutions.

The semi-programmed decisions, encountered often, are those made taking into account some programmed elements, but whose combination cannot be properly determined. For this type of decisions, choosing the optimal solutions is related to the existence of elements of urgent character randomly influencing the final solution. In this situation, the decision depends not only upon the extension of information available, but also on new investigations and taking into consideration the fact that the decision related to the problem to be solved can be overthrown by the problem seizing to exist by the time a solution is found, due to external factors (Jagdev et al., 2004) [17]. The connection between the decision types can be outlined as shown in the following correlation chart.

*Figure 2. Types of decisions and correlations*

![Decision Types Diagram](image)

Source: diagram made by the author based on the theory presented in [17]

The un-programmed or strategic decisions are those referring especially to the new problems appearing, for whose solving original solutions are necessary, at least partially. In their elaboration, analyzing and research is needed, considering the need to interpret the available information and take into account all the correlation influences. The decisions where solutions don’t have values strictly interpreted from a quantitative and measurable point of view belong to this category.

The un-programmed character of these decisions does not refer to the actions that must be fulfilled currently, such as: elaborating the annual plan, approving the techno-economical studies for certain investment objectives.
etc., but to the correlation of material and human resources used in the economical processes, which must be done in the optimal conditions of a certain moment.

Consequently, we are dealing with the significant issue of current-perspective relation in decision making, debating upon the idea according to which the sum of current actions would outline the perspective. Therefore, the result is the necessity of precisely defining the perspective and building the main concrete elements, derived from the main axis of the development strategy, with the identification of the possible alternatives in every moment of detailing and with the evaluation of the material, human and financial resources per employee, considering the consequences of the actions taken (Brandas, 2003) [6].

According to the nature of the “objective conditions” in which decisions are made in the company, there are decisions made in conditions of certainty, risk and uncertainty, characterized by the fact that, upon their making, knowing the outcome and the possibilities of production are presented as follows:

Table 1. Decision classification according the contextual conditions

<table>
<thead>
<tr>
<th>Decisions in conditions of:</th>
<th>The outcome</th>
<th>The probabilities of outcome production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty</td>
<td>is known</td>
<td>are known</td>
</tr>
<tr>
<td>Risk</td>
<td>is known</td>
<td>are NOT known</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>is NOT known</td>
<td>are NOT known</td>
</tr>
</tbody>
</table>

Source: author’s analysis

Considering the three contextual conditions existent when decisions are being made, the need to investigate and analyze the information is different, as shown in the following diagram. In the same time, the evaluation of any fact

Figure 3. Characteristics for each contextual condition

Source: author’s analysis based on the consulted theory

The methods and techniques of decision making process are adopted according to the character and the factors that influence their elaboration and application, as follows: human factors, the dynamics of the status variables and of the restrictions imposed, factors of uncertainty and risk (Brans et al., 1984) [7].
The equation of the decision (D) is as follows:

\[ D = f(F_c, F_n, M, R, V) \]

\( F_c \) from the previous equation represents the known factors of influence, \( F_n \) – unknown factors of influence, but those whose probability and purpose of occurrence are known. They materialise the information we hold about the interpreted phenomena, the difficulty and complexity of the phenomena, introducing the time axis in their content. \( M \) stands for motivation, being defined by a intermingling of staff motivation and its taking part in the process of collective management, with individual motivation, which points to the accomplishment and making the most of each worker’s personality, and \( R \) features responsibility, created through blending individual responsibility for making and fulfilling decisions that regard everyone’s work and the responsibility mostly represented by the consequences of these decision on a general, strategic plan.

Variable \( V \) refers to the value of the human element, which reflects the qualities, the experience, the decision-maker’s ability to adapt to the new. In the case of collective decision making, this factor gains new dimensions. From its analysis the result is the relation that expresses the value of the human element under the form:

\[ V = f(V(C, Q)) \]

in which \( C \) is the competence expressed by the professional knowledge and experience of the person who is part of the decision making process and \( Q \) is the ability to adapt to the permanent transformations, to the new, which also includes the process of preparation development under all its aspects.

Factor \( V \) can be given another dimension with the condition of acquiring a training and improvement which would offer the leader the knowledge to:

- have an overview of the raised issues;
- being able to solve the raised problems, bringing about characteristic elements and measuring their importance according to the usage of scientific methods;
- make reasoned, quick and bold decision, through a permanent effort of observing the phenomena and its connection;
- work with others from the premise that leading mean knowing how to work with people, no matter if they are superior, equal or inferior; understanding them in order to adjust your own behaviour.

The social consequences and the importance of these large decision categories gives them a strategic character. The equation of the decision previously presented shows that the human element – the decision-making factor, affected by environment is the second major element implied in the process of decision-making. The equation of the decision therefore becomes (Brans et al., 1984) [7]:

\[ D = f(F_c, F_n, M, R, f(V(C, Q))) \]

Taking into account especially the interfering factors of risk and uncertainty, adopting some methods and specific techniques is necessary. This is because the any strategic decision is often more difficult to adopt than decisions belonging to other fields, due to a high degrees of complexity, caused by:

- the large number of implied variables;
- the external and hardly controllable nature of many of these variables;
- the instability of the international market;
- the fluctuation of the variable’s evolution;
- the difficulty in quantifying and measuring them.
The decisions connected to the expansion on the international market becomes even more complicated in the absence of valuable information. Many times this would be made under risk conditions. Information regarding decision-making is generally limited because of the difficulty in measuring the relations, the changes between these relations in time, the cost of measuring the relations and the difficulties in establishing fairly good forecast for some variables belonging to other functional areas that influence decision-making (Friedman, 1998) [14]. The level of the risk is sometimes enhanced because the market conditions change permanently.

The world economy is characterised by a high degree of economical, commercial, monetary, financial, political instability. Taking part in the international economical exchanges in the most varied forms, the companies are forced to face both the risks associated to the cooperation agreements with various business partners, as well as those resulted from the general business environment. Considering the decision to invest in foreign markets as a strategic decision, one can clearly perceive the risks associated to the investment project per se as different than those associated to the world economical context and the effects they have on the current or potential activities of the company or the project. The company – even if it is not its first major scale investment and already has activities abroad or even international branches – can be confronted with obstacles coming from its internal organization (Baccarini and Archer, 2001) [2].

From the point of view of production, the risks that must be taken into account when we aim at strategic development at an international level are the following (Friedman, 1999) [13]:

- the risk of innovation – in order to upgrade production, the company can develop systems meant to streamline production, but which are not necessarily favourable in the moment of internationalizing the business. For example, in case the investment has already been made for a line of modern production only a few years before the decision of investing in a third-part country, may lose the added value it used to bring once the foreign investment had been made. In the new location, the company can obtain a value superior to that obtained through the production innovation, just because it uses cheap labor force. The same thing occurs in the case of innovation through the product. That is why the price of new products usually includes a margin for the risk of innovation;
- the risk of product operation – it takes place if the working force is not specialised for the production that is about to be developed as a result of direct investment. This risk is reduced by the obligations assumed by the producer during the warranty period;
- the risk of exploitation is connected to the high expenses used for organizing stations of technical assistance and ensuring the delivery of spare parts. This risk is emphasized in the case of the products’ and installations’ hidden flaws which can be owed to the inappropriate raw materials, but also to the deficiencies which relate to the construction;
- the risk of product colaboration refers to the failure of keeping the obligations assumed by agreement with the third party – suppliers, transporters, other service companies;
- the transport associated risk, which appears during various deliveries

In the case of international business, the risks generated by the world market are inherent. Taking up an active attitude towards the external economical risks cannot only avoid the risks’ negative effects, but also constitute a boosting factor for the international commerce efficiency, and, consequently, favour the direct foreign investment.

The risk factors amplify in the condition of an unstable international economy, mainly by the speed of information circulation, the partners’ diversity and the insufficient knowledge about their probability, but also through the sophisticated techniques used in business nowadays. This risk generating factors do not represent a reason to hold back from efficient investment, but, on the contrary, they imply their thorough knowing and making optimal decisions (Dimbean-Creta, 2000) [11].
The literature presents the indicator of the risk (R) in the economical business as a relation of the type:

\[ R = \frac{P \cdot i}{A} \]

in which:

- \( P \) represents the estimated loss and answers to the equation of conditionality \( 1 \leq P \leq A \);
- \( i \) is the probability of risk occurrence, answering to the condition \( 0 \leq i \leq 1 \);
- \( A \) renders the total commitment value, such as the volume of interests or the objectives exposed to the risk.

Another way of evaluating risk is comparing it with the expected benefit:

\[ (B_a): B > R. \]

This draws the attention upon the fact that, on the one hand, fear of risk must not be exaggerated because it can negatively influence initiative and, on the other hand, efficiency requires judgement at the level of every action, not only globally, and the expected benefit must be estimated in the case of every single operation (Coleman, 2006) [9].

In the international trading, the risk-generating factors act as the consequence of a shorter or longer time span in which the transaction takes place, as well as the spatial distance between partners. While the distance between the moment of contraction \( T_0 \), the moment of delivery \( T_1 \) and the moment of collection counter \( T_2 \) enlarges, the risk probabilities and the necessity of making an optimal decision also grow. This must be taken into account also in the case of direct foreign investment, especially in the implementation phase, when the vast majority of transactions are primordially commercial.

According to their manifestation, external risks can classify into commercial and non-commercial risks. Another category refers to political risks, coming from political events, risks in the case of emergency, such as wars, earthquakes, hurricanes, vulcanic eruptions, floods.

Commercial risks, easier to quantify, can be divided as follows:

- risks related to commercial partners, which regard a large variety of unfavourable events: the negotiation not followed by signing a contract; the buyer does not want or cannot collect part of the already contracted merchandise; breaking the terms of the already signed contract etc;
- risks related to the object of the commercial transaction, which refer to the quantity and the quality of the merchandise, the services, their techno-functional parametres, good behaviour during the operation or the products used during the technical warranty etc;
- risks related to the price, generated by the inflation and the diminishing of the the power of purchasing the sum which is about to be cashed, a raise in the the prices for the raw materials, a modification in the price of the parts and subunits offered by subcontractors. This risk category exists because of the time inconsistency between the moment of signing the contract and the one of cashing in or payment;
- risks related to the exchange rate owed to the fluctuation of the contract currency;
- risks related to credit sales, generated by a number of factors, such as: insolvability, external transfers, exchange fluctuations, inflation, and, moreover, capital depreciation, the fluctuation of the interest, etc.

In the case of risky situations, the first task of the decision-makers is to develop techniques which give them the opportunity to estimate and to minimise the risks occurred (Colibasanu, 2010) [10]. Being aware of the possible unfavourable results in the unfolding of a certain phenomenon allows taking measures that would counteract the negative effects. Since one feature of risks resides in the fact that the parameters of the frequency distribution can be statistically expressed, the expected gain or loss can be taken into account when establishing the cost.
structure. When the company can establish the loss probability, self-insurance plans can be conceived, by adding a risk bonus to the price of the company’s merchandise (Popa, 2008) [24].

The modern theory of decision making, besides the probability elements, also operates with the decision-maker’s attitude towards risk, because one and the same result does not seem as attractive for everyone, taking into account the psychological aspects, the different behaviour, the thinking and professional differences between decision-makers (Nicolescu, 2003) [22]. Therefore, if every decision-maker prefers, in the case of more than one option of action, the one which is more profitable, when a choice must be made between the ones that offer a higher gain and the ones with a low probability, the decision will not be necessarily similar for every person.

This way, in risky situations, choosing the preferred choice of action is made with the help of a criterion which asks for a certain attitude towards risk. So:

\[ U = (u_{ij}) \]

the utility matrix, where \( u_{ij} \) represent the value of the action choice’s utility \( i \) for the natural state of \( j \), we will distinguish between:

- the cautious rule, which adopts the alternative with the following utility:
  \[ \max_i \min_j (u_{ij}) \]

- the optimistic rule which expresses an attitude contrary to the cautious rule, choosing the option that provides the utility
  \[ \max_i \max_j (u_{ij}) \]

- the pessimistic-optimistic rule, also called Hurwicz’s rule, which establishes a compromise between the first two rules. Marking with \( \lambda \in (0,1) \) the decision-makers’ pessimism, the option which results in
  \[ \max_i \left[ \lambda \min_j (u_{ij}) + (1 - \lambda) \max_j (u_{ij}) \right] \]

- the rule of minimal regret, or Savage’s rule, which adopts the action choice that results in
  \[ \max_i \max_j \left( a_{ij} \right) \text{ where } a_{ij} = \max_i (u_{ij}) - u_{ij} \]

To illustrate practically the above mentioned rules, let’s consider the decision-making process on the issue related to selecting the location of a new production facility. Let’s assume that the decision-maker has to choose between four possible choices and would prefer the one ensuring the best efficiency. “The environment” is defining the market circumstances and it is assumed that there are three possible states: “favourable conditions”, “moderate conditions” and “unfavourable conditions” (MacCrimon) [19].

Let’s assume that we can build a utility matrix presented in the following chart. The elements of the matrix are the result of putting together the utilities priorly estimated by every criterion separated on the scale (0-1) and measured by certain coefficient of importance.
**Table 2.** The utility matrix – example

<table>
<thead>
<tr>
<th>Choices</th>
<th>(N_1)</th>
<th>(N_2)</th>
<th>(N_3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V_1)</td>
<td>1.3</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>(V_2)</td>
<td>1.6</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>(V_3)</td>
<td>1.2</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>(V_4)</td>
<td>1.5</td>
<td>1.3</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: author’s analysis

Applying the rules of decision-making, we will have the following results:

- the “cautious” rule: the optimal choice - \(V_3\)
- the “optimistic” rule: the optimal choice - \(V_2\)

We assume that the decision-maker has no reason to be optimistic and neither extremely pessimistic and he chooses a coefficient \(\lambda = 0.7\) which reflects a “moderate” pessimism.

The favoured choice will be the one to which we can add the utility:

\[
\max (0.7 \times 0.8 + 0.3 \times 1.3; 0.7 \times 0.7 + 0.3 \times 1.6; 0.7 \times 1 + 0.3 \times 1.2; 0.7 \times 0.9 + 0.3 \times 1.5) = \\
\max (0.95; 0.97; 1.06; 1.08) = 1.08 \text{ i.e. } V_4.
\]

We reach the same result also for the values 0.6; 0.5 and 0.4 of coefficient \(\lambda\).

By the Bernoulli – Laplace rule, the optimal variant will be given by:

\[
\max \left[ \frac{1}{3} (1.3+1.2+0.8); \frac{1}{3} (1.6+1.1+0.7); \frac{1}{3} (1.2+1.0+1.0); \frac{1}{3} (1.5+1.3+0.9) \right] = \\
\max (1.1; 1.3; 1.07; 1.23) = 1.23 \text{ that is variant } V_4.
\]

The rule of “minimal regret”

\[
[a_{ij}] = \begin{bmatrix}
0.3 & 0.1 & 0.2 \\
0 & 0.2 & 0.3 \\
0.4 & 0.3 & 0 \\
0.1 & 0 & 0.1
\end{bmatrix}
\]

The optimal variant will be \(V_4\).

We notice that when the decision-maker’s attitude towards risk is extreme – totally optimistic or totally pessimistic, he adopts variant \(V_2\), respectively \(V_3\); in middle-way situations, \(V_4\) will be selected.
3 Decision Optimisation – Methods and Techniques

3.1 Criteria list method

There are several steps in the decision making process. First, there is the study on current situation – a company usually has that at least once a year, in the attempt to identify potential problems and recognize best practices in the past in order to learn from own experience and use that for better development. The problems underlined in the study need to be solved – and therefore decision-making process starts. Data is collected from all departments involved and an analysis is being conducted both on internal and external environment so that the decision makers may have the basis for discussing potential solutions to the problem(s) underlined.

The next step refers to the development of decision alternatives in response to the identified problem. The list of alternatives must be refined using specific analytic tools, so that the alternatives would receive subsequent degrees of importance, being quantified after taking into consideration their unique perspective on final output. On the selected alternatives the criteria established in advance in terms of opportunities and priorities must be applied. For a refined ordering of the alternatives, importance weights will be given to the specific criteria.

The third step is to evaluate alternatives by defining the consequence matrix, applying the principle of independence and assess the need for new information. The last step in the decision process is equivalent to adopting appropriate decisions, by applying the algorithm and solving the problem that triggered the process. Implementation of the proposed solutions will determine, on one hand, the closing of the decision-making process for the specific problem and, on the other hand, it will involve the monitoring of environmental conditions to identify potential problems caused by the decision itself or collateral factors.

Figure 4. Decision making process – steps

Source: author’s analysis
To practically illustrate the connections exemplified above, we assumed an investment project relating to the implementation of a production facility in a third country that will support the company's export sales. To simplify the model, it is considered that the transnational company would produce machinery or other products of medium complexity and a large number of manufacturing products such as tractors, automobiles and we assume that the company will not sell the products on the internal market of the host country. The list of criteria for the investment decision is given in the table below.

**Table 3.** Example – optimizing the criteria list for the investment decision

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Type</th>
<th>Value</th>
<th>Assessment score of the criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C_{1} ) = unit price for the construction area</td>
<td>min</td>
<td>( a_{1} )</td>
<td>( \alpha_{1} )</td>
</tr>
<tr>
<td>( C_{2} ) = price for transport and related activities</td>
<td>min</td>
<td>( a_{2} )</td>
<td>( \alpha_{2} )</td>
</tr>
<tr>
<td>( C_{3} ) = cost for human resources related to the management team of the investment project.</td>
<td>min</td>
<td>( a_{3} )</td>
<td>( \alpha_{3} )</td>
</tr>
<tr>
<td>( C_{4} ) = charges and transfer pricing</td>
<td>min</td>
<td>( a_{4} )</td>
<td>( \alpha_{4} )</td>
</tr>
<tr>
<td>( C_{5} ) = cost for human resources related to the production team</td>
<td>min</td>
<td>( a_{5} )</td>
<td>( \alpha_{5} )</td>
</tr>
<tr>
<td>( C_{6} ) = cost of raw materials or raw materials leverage in the country where the investment is made</td>
<td>min</td>
<td>( a_{6} )</td>
<td>( \alpha_{6} )</td>
</tr>
<tr>
<td>( C_{7} ) = existence of the traditional suppliers on the market</td>
<td>max</td>
<td>( a_{7} )</td>
<td>( \alpha_{7} )</td>
</tr>
<tr>
<td>( C_{8} ) = existence of competition in the market</td>
<td>min</td>
<td>( a_{8} )</td>
<td>( \alpha_{8} )</td>
</tr>
<tr>
<td>( C_{9} ) = the weight of imported raw materials in the production process</td>
<td>min</td>
<td>( a_{9} )</td>
<td>( \alpha_{9} )</td>
</tr>
<tr>
<td>( C_{10} ) = import duty</td>
<td>min</td>
<td>( a_{10} )</td>
<td>( \alpha_{10} )</td>
</tr>
<tr>
<td>( C_{11} ) = transport network comparable to the one existing in the country of origin</td>
<td>max</td>
<td>( a_{11} )</td>
<td>( \alpha_{11} )</td>
</tr>
<tr>
<td>( C_{12} ) = telecommunication network</td>
<td>max</td>
<td>( a_{12} )</td>
<td>( \alpha_{12} )</td>
</tr>
<tr>
<td>( C_{13} ) = Possibility to benefit of personal training programs in the host country</td>
<td>max</td>
<td>( a_{13} )</td>
<td>( \alpha_{13} )</td>
</tr>
<tr>
<td>( C_{14} ) = opportunity to seek loans from financial-market of the host country</td>
<td>max</td>
<td>( a_{14} )</td>
<td>( \alpha_{14} )</td>
</tr>
<tr>
<td>( C_{15} ) = currency exchange rate of the host country in relation to USD / EUR</td>
<td>min</td>
<td>( a_{15} )</td>
<td>( \alpha_{15} )</td>
</tr>
<tr>
<td>( C_{16} ) = Political stability</td>
<td>max</td>
<td>( a_{16} )</td>
<td>( \alpha_{16} )</td>
</tr>
<tr>
<td>( C_{17} ) = Number of days needed to establish a business (low bureaucracy, fiscal benefits, etc.)</td>
<td>min</td>
<td>( a_{17} )</td>
<td>( \alpha_{17} )</td>
</tr>
<tr>
<td>( C_{18} ) = export duty</td>
<td>min</td>
<td>( a_{18} )</td>
<td>( \alpha_{18} )</td>
</tr>
<tr>
<td>( C_{19} ) = stability of host country currency</td>
<td>max</td>
<td>( a_{19} )</td>
<td>( \alpha_{19} )</td>
</tr>
<tr>
<td>( C_{20} ) = possibility of capital repatriation</td>
<td>max</td>
<td>( a_{20} )</td>
<td>( \alpha_{20} )</td>
</tr>
<tr>
<td>( C_{21} ) = control level of the government from the host country</td>
<td>min</td>
<td>( a_{21} )</td>
<td>( \alpha_{21} )</td>
</tr>
<tr>
<td>( C_{22} ) = existence of discrimination elements in the society of the host country</td>
<td>min</td>
<td>( a_{22} )</td>
<td>( \alpha_{22} )</td>
</tr>
<tr>
<td>( C_{23} ) = existence of elements of threat to the host society (terrorism, cyber attacks)</td>
<td>min</td>
<td>( a_{23} )</td>
<td>( \alpha_{23} )</td>
</tr>
<tr>
<td>( C_{24} ) = easy payment techniques used in the host country</td>
<td>max</td>
<td>( a_{24} )</td>
<td>( \alpha_{24} )</td>
</tr>
</tbody>
</table>

Source: author’s analysis

When comparing the variables for two chosen countries – Turkmenistan and Kazakhstan – for carrying out the above mentioned investment, the following criteria are being analyzed:
• the unit price for the land where the production unity is about to be built, close to the city of Atbasar (the region of Astana) in Kazakhstan is 500,000 USD, and for purchasing a disposed warehouse that can be adapted for the production ready to be developed by the company in Turkmenistan, Darvaza (the region of Dasoguz) the costs are of 167,000 USD;
• in order to transport the line of production acquired by the company in Atbasar, a cost of 10,700 USD has been taken into account, after comparing three possibilities, and for the transport to Darvaza 32,000 USD would have to be paid;
• the management team is recruited from among the company members and the cost difference between Atbasar and Darvaza is of 50,000 USD, the Atbasar location being more expensive in this case;
• the human resources for the production team are cheaper in Turkmenistan than in Kazakhstan;
• the same quality of the raw materials are available in both locations, but the company’s traditional suppliers are not present on the two markets;
• the rival has not invested and is still not selling either in Kazakhstan and in Turkmenistan;
• the state must be a business associate, with the percentage of 30-45% in Kazakhstan and 45-65% in Turkmenistan, these percentages being negotiable, but they cannot be reduced below the minimum;
• the company’s possibility to take facilitated credits through the implication of the host state is higher in the case of Kazakhstan and very low if an investment in Turkmenistan is opted for;
• judging by the internal analysis of the company, it is believed that, from a political point of view, Turkmenistan is more stable;
• the phone network is developed in both countries, but the Internet access is limited in Darvaza, Turkmenistan, supplementary investment being necessary in case this option is chosen.

Using the optimization model described above, decision makers will determine values related to the type of criteria - 0 or 1 - and will consider the importance of criteria based on project priorities. Results are calculated according to the table below, presented as an example.

### Table 4. Optimizing criteria list – comparison on the investment example Kazakhstan/Turkmenistan

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Type</th>
<th>Kazakhstan</th>
<th>Value</th>
<th>Assessment score of the criteria</th>
<th>Turkmenistan</th>
<th>Value</th>
<th>Assessment score of the criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C_1 = \text{unit price for the construction area} )</td>
<td>min</td>
<td>( a_{1} = 0 )</td>
<td>10%</td>
<td>( b_{1} = 1 )</td>
<td>( \beta_{1} = \alpha_{1} = 10% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_2 = \text{price for transport and related activities} )</td>
<td>min</td>
<td>( a_{2} = 1 )</td>
<td>6%</td>
<td>( b_{2} = 0 )</td>
<td>( \beta_{2} = \alpha_{2} = 6% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_3 = \text{cost for human resources related to the management team of the investment project.} )</td>
<td>min</td>
<td>( a_{3} = 0 )</td>
<td>6%</td>
<td>( b_{3} = 1 )</td>
<td>( \beta_{3} = \alpha_{3} = 6% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_5 = \text{cost for human resources related to the production team} )</td>
<td>min</td>
<td>1</td>
<td>10%</td>
<td>( b_{5} = 1 )</td>
<td>( \beta_{5} = \alpha_{5} = 10% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_6 = \text{cost of raw materials or raw materials leverage in the country where the investment is made} )</td>
<td>min</td>
<td>1</td>
<td>15%</td>
<td>( b_{6} = 1 )</td>
<td>( \beta_{6} = \alpha_{6} = 15% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_7 = \text{existence of the traditional suppliers on the market} )</td>
<td>max</td>
<td>0</td>
<td>15%</td>
<td>( b_{7} = 1 )</td>
<td>( \beta_{7} = \alpha_{7} = 15% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_8 = \text{existence of competition in the market} )</td>
<td>min</td>
<td>1</td>
<td>10%</td>
<td>( b_{8} = 1 )</td>
<td>( \beta_{8} = \alpha_{8} = 10% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{12} = \text{telecommunication network} )</td>
<td>max</td>
<td>1</td>
<td>6%</td>
<td>( b_{12} = 0 )</td>
<td>( \beta_{12} = \alpha_{12} = 6% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{14} = \text{opportunity to seek loans from financial-market of the host country} )</td>
<td>max</td>
<td>1</td>
<td>6%</td>
<td>( b_{14} = 0 )</td>
<td>( \beta_{14} = \alpha_{14} = 6% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{16} = \text{political stability} )</td>
<td>max</td>
<td>0</td>
<td>6%</td>
<td>( b_{16} = 1 )</td>
<td>( \beta_{16} = \alpha_{16} = 6% )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{21} = \text{control level of the government from the host country} )</td>
<td>min</td>
<td>1</td>
<td>10%</td>
<td>( b_{21} = 0 )</td>
<td>( \beta_{21} = \alpha_{21} = 10% )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: author’s analysis
Calculating the utility of each choice, according to the above criteria, it results:

\[ U_{Kazakhstan} = 0.06 + 0.1 + 0.15 + 0.1 + 0.06 + 0.06 + 0.06 + 0.1 = 0.69 \]

and

\[ U_{Turkmenistan} = 0.1 + 0.06 + 0.1 + 0.15 + 0.1 + 0.06 = 0.57 \]

From the results, it appears that Turkmenistan is less attractive than Kazakhstan for the company.

Usage of mathematical methods of decision making reveals new ways to increase the competitiveness of the investment. The application of linear programming methods, programming under uncertainty, using decision trees, critical path method, expands the range of tools to optimize the decision (Larichev and Moshkovich, 1996) [18].

3.2. The decision tree

The decision tree (DT) (Bennett and Blue, 1996) [4] is a graphic method employed for optimizing decisions within companies, being one of the tools used in the problem-solving situations. The main components of a decision tree are: the purpose/theme for the decision and the reference criteria, the decision points and events nodes, the alternative points of decision and event nodes, the existence of several alternatives and the probabilistic calculation of the consequences (cost / profitability, benefits, course of recovery).

Decision tree is formed by a sequence of decisions dependent on each other. The other graphical method used for the decision-making evaluation is the critical path analysis. Its representative graph has a start node and an end node, compared to the decision tree that has only one starting node and more terminal nodes (Cha and Tappert, 2009) [8].

Solving the decision tree method takes into consideration that it has two main moments and the solving is made from the terminal moment to the initial one. The main stages of development and use of the decision tree are as follows (Bennett and Blue, 1996) [4]:

- determining all possible events and actions and the sequence of decisions to be taken;
- graphic representation of alternative sequences of actions (strategies) and events;
- determining the conditional results on each final moment;
- allocating a probability to every possible event;
- evaluation of decision alternatives;
- calculating the optimal decision.

The decision tree allows determining not only the first decision in the sequence, but also subsequent decisions, which allows approaching on complex problems for a longer period of time. In practice, the decision tree is implemented in companies in different programming platforms and is used in solving marketing, distribution, sales and even human resources problems.

The existence of modern computing and programming methods made possible for mathematical modeling to be used in the strategic investment area, this method being a tradition in portfolio investments domain.
The decision tree for establishing the investment location - example

X Company has to choose between Kazakhstan and Turkmenistan to invest in a new production line for the Central Asia market. Things to be considered:

The expenses for building a new unit, with integrated project, rise to 500.000 Euros in Kazakhstan and 467.000 in Turkmenistan. To guarantee the operability of the unit, the company takes into account a transportation and establishment expense of 10.700 Euros for Kazakhstan and 32.000 Euros for Turkmenistan, for the production line brought from the homeland. The expenses for the management team are 50.000 Euros larger for Kazakhstan than for Turkmenistan;

The expenses for buying a similar unit from Kazakhstan are estimated to 250.000 Euros, while a similar unit can be bought in Turkmenistan for 360.000 Euros. It is taken into account that buying an existent facility, you don’t need to bring the production technological line with you. The expenses for the management team remain the same;

Considering the impact of the new production capacity for the clients, there will be taken into account for each situation three possibilities, which depend on the business community at a certain time – the possibility that the clients have a positive reaction to the fact that the company has invested in a new production line, the possibility that the clients have a moderate reaction and the possibility that they have a negative response, and that being the case, the sales in the central-Asian area would decline.

For choosing the location of the new investment, there will be formed a decision tree like this one:

Where: $I_1, I_2, I'_1, I'_2$ are risk nodes and $D_{Kaz}, D_{Turk}$ are decision nodes, which can be calculated using the results from the risk nodes. Risk nodes are calculated as the product of the accomplishment probability $P_1, P_2, ..., P_n$ of the n action possibilities taken into account. The condition for the probability constant is $0 \leq p_i \leq 1, i = 1, n$. For a risk node, the sum of the probabilities must be 1. $D$ represents the decision that has to be made, and in this case, represents the answer to the question “where do I invest?” Hereinafter, the decision tree is minutely structured, so it can be used to calculate $D_{Kaz}$ and $D_{Turk}$, and to establish a location for the investment.
Figure 5. Decision tree for choosing the location for a direct foreign investment project: in Kazakhstan or Turkmenistan?

In this example, the target function are $f_{\text{max}}$ = the function for maximizing the profit of the company, depending on the reaction of the clients to the realized investment, and $f_{\text{min}}$ = the function for minimizing the investment expenses. For example, if the clients have a good response to the investment in a new production line in Kazakhstan, the company will have annual revenue of 1.000.000 Euros, while a similar investment in Turkmenistan would bring annual revenue of 700.000 Euros. The analysts will consider though the optimal situation, analyzing both the probability of the situation in which the clients have a positive response, and the expenses of the investment.
The solution of the decision tree presented above is the following:

For $D_{Kaz}$:

$I_1 = 1.000.000 \times 0.4 + 800.000 \times 0.4 + 600.000 \times 0.2 = 840.000 \text{ EUR}$

$I_2 = 700.000 \times 0.3 + 750.000 \times 0.4 + 600.000 \times 0.3 = 690.000 \text{ EUR}$

For $D_{Turk}$:

$I_1' = 700.000 \times 0.3 + 750.000 \times 0.4 + 600.000 \times 0.3 = 690.000 \text{ EUR}$

$I_2' = 500.000 \times 0.5 + 450.000 \times 0.3 + 200.000 \times 0.2 = 425.000 \text{ EUR}$

Note: to simplify this case, we worked with a given annual profit, although in practice, it is preferred the usage of the economic indicators which determine the long-term revenue of the company.

Applying the maximizing function on revenue, we take $I_1$ for $D_{Kaz}$ and $I_1'$ for $D_{Turk}$. In terms of maximizing the revenue, the company will choose to invest by building an own facility, instead of buying an existent one.

To find out which location is the most appropriate for the integrated investment, we have to calculate the decision nodes:

$D_{Kaz}$ for $I_1 = 840.000 – 570.700 = 269.300 \text{ Euros}$

$D_{Kaz}$ for $I_2 = 690.000 – 300.000 = 390.000 \text{ Euros}$

$D_{Turk}$ for $I_1 = 690.000 – 499.000 = 191.000 \text{ Euros}$

$D_{Turk}$ for $I_2 = 425.000 – 360.000 = 65.000 \text{ Euros}$

$=> D_1 = D_{Kaz}$ for $I_1$

By applying the minimization function on the investment expenses, it results that building a new unit in Kazakhstan is the best solution.

The case we presented is simplistic, but is an example of using mathematical simulation through the decision tree for choosing the location concerning a large project. In practice, using advanced programming platforms, decisional criteria, possible alternatives and also the probabilities of each alternative are detailed and properly used within the calculus formula, so that the decision is made with minimum theoretical errors. Nevertheless, because the occurrence probability of unpredictable events cannot be forecasted, this method is not perfect and doesn’t entirely guarantee the evolution of future parameters.
4. Specific Methods for Solving Multidimensional Problems

In development projects management, usually confronts itself with multiple problems, usually interconnected and affecting one another. Decision trees and critical path are useful when the decision being taken refers to a limited set of questions and factors but become insufficient when complex problems need to be solved and a decision is needed fast. The main methods for solving multidimensional problems are ELECTRE and PROMETHEE (Urli and Nadeau, 1999) [32]. These methods are nowadays used in transnational companies through integrated information networks and software that are built to be very sensitive to both the importance criteria chosen but also to new data that may modify the criteria selected.

4.1. ELECTRE methods

ELECTRE-type methods were first defined in the 60’s by Bernard Roy and his colleagues from the consultancy company SEMA, in France. The methods are developed as decision applications corresponding to three main problems: choosing, systemizing and selecting. ELECTRE is an acronym from the French “Elimination et choix traduisant la réalité” – eliminating and choosing to express reality (Mousseau et al., 2001) [21].

A simple model of these methodologies, which are nowadays extended versions ELECTRE II, ELECTRE III, ELECTRE IV, ELECTRE IS and ELECTRE TRI, is presented below. Because of technological progress, they are integrated into the software platforms used by companies.

Consider the following notations:

\[ O = \{o_1, o_2, \ldots, o_n\} \] – the multitude of alternatives

\[ C = \{c_1, c_2, \ldots, c_n\} \] - the multitude of decision criteria

\[ K = \{k_1, k_2, \ldots, k_n\} \] – weight vectors (importance coefficients);

Let’s take \[ C_{ij} \] as consequence matrix for each criteria or as the note of alternative for \( j \) criterion.

The utility matrix is built as shown in the table below, considering the ranking of the alternatives.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>( c_1 )</th>
<th>( c_2 )</th>
<th>( c_j )</th>
<th>( c_m )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>( k_1 )</td>
<td>( k_2 )</td>
<td>( k_j )</td>
<td>( k_m )</td>
</tr>
<tr>
<td>( o_1 )</td>
<td>( u_{11} )</td>
<td>( u_{12} )</td>
<td>( u_{1j} )</td>
<td>( u_{1m} )</td>
</tr>
<tr>
<td>( \ldots )</td>
<td>( \ldots )</td>
<td>( \ldots )</td>
<td>( \ldots )</td>
<td>( \ldots )</td>
</tr>
<tr>
<td>( o_n )</td>
<td>( u_{n1} )</td>
<td>( u_{n2} )</td>
<td>( u_{nj} )</td>
<td>( u_{nm} )</td>
</tr>
</tbody>
</table>

Source: author’s analysis

The utility equation – ELECTRE method can be written like this:

\[ u_{ij} = \frac{c_{ij} - V_{j_{\min}}}{V_{j_{\max}} - V_{j_{\min}}}, \text{ where } V_{j_{\max}} = \max_i u_{ij}, \ V_{j_{\min}} = \min_i u_{ij} \]
Choosing the best alternative is made according to the Neuman – Morgenstern pattern, which implies the performance of the next algorithm:

It is associated the global utility:

\[ u_i = \sum_{j=1}^{n} k_j \cdot u_{ij}, \quad u^* = \max_i u_i \]

In case of equal utilities, row moments and column moments are calculated:

\[ M_i^j = \frac{\sum_{j=1}^{n} u_{ij}}{\sum_{j=1}^{n} u_{ij}} \quad \text{and} \quad M_j^i = \frac{\sum_{i=1}^{n} u_{ij}}{\sum_{i=1}^{n} u_{ij}} \]

According to them the rows and the columns are reordered until no other reorders are necessary.

Further, ELECTRE method submits to calculus the congruence indicators (Roy, 1978) [30]:

\[ C(O_g, O_h) = \frac{1}{k_1 + k_2 + \ldots + k_n} \]

with which is calculated only for j index if \( a_{gj} \leq a_{hj} \) and the congruence indicators:

\[ d(O_g, O_h) = 0 \quad \text{if} \quad a_{gj} \geq a_{hj}, \forall j \]

\[ d(O_g, O_h) = \frac{1}{d} \max_j |a_{gj} - a_{hj}| \quad \text{if} \quad a_{gj} < a_{hj} \]

with d=the difference between the maximum and the minimum weighting note in the normalized matrix.

If C has “high” value, close to 1, then \( O_g \) exceeds \( O_h \) as significant criteria. If it has a low value, close to 0, \( O_g \) is overrunned by \( O_h \) as significant criteria. If \( p \leq 1, \quad q \geq 0, \quad O_g \geq O_h \iff C(O_g, O_h) \geq p, \quad d(O_g, O_h) \leq q \), ranking the alternatives.

This method can be used both for decision problems prior to establishing foreign investment in a particular location but also after this decision was taken, when the investment project is being implemented. A concrete example is choosing the optimal import offers. The criteria in this case will be simplified to: unit price, specific weight, maintenance costs, pollution, monetary complexity, payment condition, the existence of international agreements between the host and the origin, existing interpersonal relationships, guaranteed lifetime and typology guarantees, transport conditions - time, cost, insurance, delivery.

For choosing the optimal international development alternative of the company we can take, for example, the following (V): \( V_1 \) - full production by direct investment, \( V_2 \) - subcontracting of production. The criteria taken into account in this case would be economic independence, quality, unit cost, production, work productivity, specific consumption of production factors, investment, cooperation percentage depending on the selected subcontracting.
4.2 PROMETHEE methods

PROMETHEE methods of multidimensional decision problem solving assume that the alternatives expected by the decision-maker do not remain constant over time. They retain with their risk characteristics also the uncertainty, ambiguity and are not completely independent of the analysis itself. This methodology was first introduced in 1986 by Jean-Pierre Branch, Pierre Vinkle and Bertrand Mareschal and its name stands for Preference Ranking Organization Method for Enrichment and Evaluation - method of ordering preferences for thorough evaluation (Macharis et al., 1998) [20].

Alternatives must not be normalized nor introduced in the capitalization scale. It is assumed that only a better value for an alternative means a better performance for that alternative. To evaluate the proposed alternatives, we take the evaluation criteria $C_i$ with $w_i$ weights, so that $\sum_{i=1}^{m} w_i = 1$, the latter being subjectively given by the decision-makers who use the method (Nowak, 2005) [23].

Each criterion is associated with a preference function $P_i(A_j, A_k)$ that represents the preference amount of $A_j$ alternative over $A_k$ considering the criterion $C_i$. If we consider $P_i(A_j, A_k)$ in its normalized form we have the following situations:

- $P_i(A_j, A_k) = 0$ – case of null preference or ignoring;
- $P_i(A_j, A_k) \approx 0$ – case of weak preference;
- $P_i(A_j, A_k) \approx 1$ – case of strong preference;
- $P_i(A_j, A_k) = 1$ – case of strict preference.

In practice, $P_i(A_j, A_k)$ is a function defined by the subtraction $d = a_{ij} - a_{ik}$.

The equation of preference function – PROMETHEE method can be written this way:

$$ P_i(A_j, A_k) = P_i(a_{ij} - a_{ik}) $$

with $P_i$ being an increasing function defined by $P_i(d) = 0$ for $d \leq 0$ and $0 < P_i(d) \leq 1$ for $d > 0$.

The preference functions are simple because there aren’t more than two parameters per case, each one having an explicit significance from economical point of view.

Thereby we can define a multi-criteria preference indicator $\pi(A_j, A_k)$ of $A_j$ for $A_k$:

$$ \pi(A_j, A_k) = \sum_{i=1}^{m} w_i P_i(A_j, A_k) $$

This index has values between 0 and 1, and represents the global preference intensity between the alternative couples $A_j, A_k$.

For ranking the alternatives we define the fluxes:
\[
\phi^+(A_j) = \frac{1}{n-1} \sum_{k=1}^{n} \pi(A_j, A_k)
\] - positive ordering flux and

\[
\phi^-(A_j) = \frac{1}{n-1} \sum_{k=1}^{n} \pi(A_k, A_j)
\] - negative ordering flux.

The positive ordering flux \( \phi^+(A_j) \) represents the exceeding of \( A_j \) alternative over the others. The highest the numerical value of \( \phi^+(A_j) \) is, the better is the alternative. \( \phi^+(A_j) \) it's also called the exponent of \( A_j \).

The negative ordering flux \( \phi^-(A_j) \) is the opposite of \( \phi^+(A_j) \), representing the weakness of \( A_j \). The lower the value of \( \phi^+(A_j) \), the better are the performances for \( A_j \).

PROMETHEE applications refer to ordering alternatives according to criteria established by the decision maker and decision optimization. PROMETHEE I is used when seeking a partial ordering of alternatives (Train, 2002).

\( A_j \) is preferred to \( A_k \) when \( \phi^+(A_j) \geq \phi^+(A_k) \) and \( \phi^-(A_j) \leq \phi^-(A_k) \) and at least one of the inequalities can be strict. \( A_j \) and \( A_k \) are ignored when \( \phi^+(A_j) = \phi^+(A_k) \) and \( \phi^-(A_j) = \phi^-(A_k) \). In any other case, the alternatives are incomparable.

PROMETHEE II is used to complete partial ordering, if the decision maker wants to avoid incomparability, the net ordering flux is: \( \phi(A_j) = \phi^+(A_j) - \phi^-(A_j) \). \( A_j \) is preferred to \( A_k \) when \( \phi(A_j) > \phi(A_k) \) and \( A_j \), and \( A_k \) are ignored when \( \phi(A_j) = \phi(A_k) \). All alternatives are then comparable and therefore, the alternatives with the highest \( \phi(A_j) \) are considered being the best. The disadvantage of this methodology is that information is lost by the difference between positive and negative flow associated to an alternative.

From the decision methodology with mathematical patterns family, PROMETHEE V is the most advanced version, aimed at optimizing the selection appropriate to the established or existing restraints. The objective in this case becomes the maximizing of the total net value of the ordering flux.

5 Human Quality – The Major Influencing Factor On Any Decision

Research made by psychologists on how individual take decisions suggests that in fact humans only have a finite well of self-control. We’re likely to make decisions that are heavily influenced by external factors such as physical surroundings or the meal we’ve just eaten (Ridgers, 2011) [28].

While this may sound trivial for a study on how transnational companies take decisions, it is in fact an important factor to be taken into consideration. The mathematical modeling that stands at the basis of decision-making within the modern companies is derived from the general formula discussed previously:

\[
D = f(F_c, F_n, M, R, f_1(C, Q))
\]

As already stated, \( F_c \) represents the known factors of influence, \( F_n \) – unknown factors of influence, \( M \) stands for motivation, \( R \) features responsibility, and \( V = f_1(C, Q) \) is the function standing for “human element” and dependent on \( C \) – competence, professional knowelde and experience and \( Q \) is the ability to adapt to the environment permanent transformations.
Therefore, among the factors that can be quantified using modern technology in collecting information, we only find two: \( F_c \) – the known factors of influence and, to a certain extent, \( F_n \) – the unknown factors of influence. Technological progress makes it possible for the \( F_n \) to be anticipated, but the human factor gets involved here as well through another equation – that representing the risk to be taken:

\[
R = \frac{P \cdot i}{A}.
\]

The estimated loss is represented by \( P \) and the probability of risk occurrence is exemplified by \( i \), while the only objective value in the equation is \( A \) - the total commitment value. Both \( P \) and \( i \) are subjective values, depending on the risk adversity the decident has. The only condition that limits risk adversity is related to the comparison between risk and expected benefit - \( B_s \): \( B_s > R \).

From the company’s perspective, taking into account all of the above, team decisions are considered better as they also get to be implemented easier and limit subjectivity, given way for information to be interpreted in various ways and risks to be considered from both high and small adversity levels.

A specific problem within the process is that related to authority. Teams are led by managers and therefore, authority delegation becomes an important topic both in terms of human resources but also in strategic terms.

Among the two categories of authority - the expertise (granted by the inborn and gained qualities, the intelligence, the moral features, the level of culture, the scientific, political and professional level, to which we can add the moral, psychological and human qualities of a person) and the formal authority, attained through education, a person can delegate to a co-worker only the formal authority, the competence one being inherently connected to the holder’s personality. Therefore, commissions obtained through the appointing in a management position are delegated, and competence can not be delegated. The competent authority has an objective character and can exist in the absence of formal authority, which has more of a subjective character even if it should be entrusted only to the competent ones. When there is formal authority in the absence of competent authority, the former is actually changed into the lack of authority (Bibu and Brandas, 2000) [5].

Delegating formalized authority equals with a transfer of attributions in the area in which the one who is delegated, in the context of a certain degree of freedom, can exercise this authority and, connected to it, also the possibility of choosing the way of fulfilling the pre-established objectives.

Delegating authority mainly aims at (Pricop et al., 2004) [25]:

- boosting the overall efficiency of the department/company;
- the need of the delegator to solve other major problems;
- enhancing the responsibility, the interest and stimulating the creativity of the co-workers.

Delegating authority is done directly between the one who assigns it and the one who receives it. It is usually based on a written document and it is primarily a matter of trust. On this occasion, the needs to be assessed are the following:

- the objectives to reach and the problems to solve;
- the spirit in which the authority must be exercised;
- the documentation and the tasks;
- the information system with regard to exercising the delegated attributions;
- the decisions of adjustment;
- the information of all involved about the delegation process.
Delegating is made to those that can solve the problems and know how to use the tools and methods to do so. Due to the nature of their position, the ones receiving authority are usually managers themselves, knowing how to coordinate processes and effectively work with the human resource.

The decision making process is therefore highly subjective even if the mathematics and cybernetics have helped a lot during the last decades and have improved the efficiency for firms. Having to take into account multiple influencing factors, the global company has developed in time its own knowledge, but as the basis of any strategic system is the human resource, knowledge still defines itself today as an attribute of the person and less as a characteristic of the enterprise. Information technology and the growing interconnection at the global level has increased interaction between companies, national economies and have contributed to the development of a new class of management. The knowledge-based economy is probably the environment where Plato’s words are best understood: decisions should be based on knowledge and knowledge remains a quality that still needs to be transferred from the decision personal level to the company.

References:


1 A Brief Overview of the History of Insolvency Systems in the Czech Republic

Since as early as the eighteenth, and especially the second half of the nineteenth century, the Czech economic environment ranked among the more important industrial areas in Europe. Within the territory of the Austro-Hungarian Empire, the Czech lands were certainly the most developed region in this regard. The first legal code concerned with bankruptcy was the Bankruptcy Regulations from 1781 (the “Josephine”); this was replaced by a new bankruptcy act in 1868, which remained valid until 1914. The legislative amendment at the time outlasted not only the war, but also the genesis of the Czechoslovakian Republic and was changed by the Bankruptcy, Compensation and Opponent Code in 1931. As we can see, the pressure rapidly grew for accelerating the creation of new legislations; the regulation enacted during the reign of Emperor Joseph II remained in effect for almost ninety years; its successor lasted 46 years, and was replaced after seventeen years, after which the whole process was interrupted by the Second World War. In 1951, the act from 1931 was abolished by the acceptance of the Civil Court Regulation and was not replaced in any way - the socialist economic system did not need any mechanisms in its planning system for settling business bankruptcies: Outside of a few minor exceptions, neither production nor providing of services were conditioned by market pressure, but were intended to behave within the diction of the plan as far as possible. The concept of bankruptcy had lost its meaning.

Following the revolution in 1989 and the rapid transformation of Czech economy from a centrally-planned to a market economy, it was necessary to return to bankruptcy law and renew its operation within the context of nascent market relations. Act No. 328/1991 Coll. on Bankruptcy and Compensation was enacted. In order to understand certain habits and fears prevailing in the Czech economic environment and in the second decade of the 21st Century, it is necessary to understand the atmosphere in which this act was enacted. At the given time there were still only a minimum of privatised businesses. The formerly “national businesses” were gradually transformed into “joint-stock companies” or “limited liability companies”; privatisation progressed at a dynamic pace, but in many cases it was uncontrolled (using loopholes in the legislation at the time), and sometimes even contrary to valid laws. Nevertheless, economic subjects in the country were unusually strongly interconnected and heavily dependent on one another owing to the traditional delivery of components. There were many “monopoly” manufacturers, whereas foreign competition was disqualified in many fields thanks to the crown exchange rate. On the other hand, domestic producers specialising in export lost their usual markets within a short time (the USSR and other Socialist Bloc states), they had to reorient themselves towards new markets unusually quickly. Besides this, there was also a particular state of judicature – the vast majority of judges had cooperated with the previous regime, but it was especially the judges who neither knew nor comprehended market relationships and the market system, its relations and logic. This fact was well known among the professional public and fears grew as to how judicature would be able to cope with the application of something as unknown to it as bankruptcy law. In reality, this whole system had ceased to function practically since the Communist revolution in 1948, as numerous business had been nationalised practically overnight, whereas large businesses were under state ownership from as early as 1945 and 1947. More than forty years had thus elapsed before the reinstatement of bankruptcy law, and if we were to include the period of the Second World War, we could speak of an entire half-century of disrupted continuity. The act from 1991 was abolished by the coming into effect of a new regulation, 182/2006 Coll. On Bankruptcy and Approaches to
its Solution (called the Insolvency Act in practice) – although this act was enacted in 2006, fears of its impact were so strong that its coming into effect was postponed until 1 January 2008. The Act on Bankruptcy and Compensation had thus served for almost eighteen years – and it was criticised as being poor and hardly usable for the same amount of time.

2 The Prejudice of the Czech Republic in Relation to Insolvency Law

In order to understand some of the difficulties with the insolvency system it is necessary to take into account various Czech prejudices concerning this issue. One of these is the conviction that the bankruptcy of a business necessarily means its end in a rather fatal sense of the word. The Czech public fails to comprehend the bankruptcy of one economic subject as an opening for a better and more functional, economically more logical and, most importantly, more profitable use of capacities (buildings, machines and so on) and thus not even as a possibility to make better use of a workforce.

This was caused primarily by circumstances during the first half of the nineties. During that time, practically an entire branch of industry disappeared from the Czech economy, whereas it had previously been very strong and employed many people. This applies especially to the textile industry, material manufacture and related activities; the glass-making industry was also weakened, as was the mining industry, mechanical engineering and several other types of manufacture. In many of the country’s regions, many original buildings and grounds remained in a disused state for almost a quarter of a century in some cases after the bankruptcy of the above-mentioned fields as there was now no more use for them. While it truly applies in standard economies that the assets of a company going bankrupt are returned to the economy and are involved once again in the division of work and in the cooperation of economic subjects, the transforming economic systems of Central and Eastern Europe saw a different development: Because these systems urgently needed to undergo their own deep restructuring – especially in the nineties – the result was that many assets were subsequently rendered useless in new economic relations. As a result, the public has become frustrated and distrustful as to whether a market economy is truly effective (Husák, 1997) [3].

The wave of privatisation in the country, which resulted in a fundamental redistribution on property in society, also gave rise to the public’s deep distrust in the functioning of standard economic relations. In this context, a large majority of the public is convinced that the privatisation was unjust, marred by corruption and the interests of individuals who became extremely wealthy during the process (Večerník, 1998) [12], despite the fact that the largest volume of property was practically given to the broader public in the form of privatisation coupons.

The creation of bankruptcy law in such a distrustful environment is understandably a highly complex problem, if we accept the thesis that a lawgiver must to at least some extent respect public opinion. This was why the act from 1991 was conceived with great caution, as a result of which debtors very quickly learned how to use loopholes in the law and why this law was never completely functional throughout the eighteen years of its being in effect (Maršíková, 2009) [5] despite more than 25 attempts to amend it to a greater or lesser extent. For similar reasons, the coming into effect of the Insolvency Act was postponed to the beginning of 2008.

3 The Insolvency Act: Its Fundamentals and Goals

Among others, during the period when the Act on Bankruptcy and Compensation was in effect (the abbreviation ABC is used in the Czech environment) the Czech expert public and political scene suffered owing to the fact that only a minimum of bankruptcies were settled by means of financial rehabilitation, that is, with the intention of preserving the activities of the business and naturally also work positions. The proposers of the Insolvency Act (hereafter abbreviated to “InsA”) thus clearly declared that their intention was to increase
the significance of financial rehabilitation as opposed to liquidation procedures – which in the new act entails strengthening the use of reorganisation as opposed to bankruptcy.

A further intention of the lawgivers was to strengthen the rights of creditors and transfer increased authority to them and thus greater control in the insolvency proceedings per se. This manifested itself primarily in the implementation of legal institutions such as the preliminary administrator (§27 InsA), the possibility of issuing preliminary precautions by which the court can order the debtor to refrain from certain actions which could threaten the joint interest of the creditors (§113 InsA), or the naming of a temporary creditors’ commission (§61 InsA). There is also a possibility to relieve an already appointed insolvency administrator at the first creditors’ meeting held after a review meeting (§29 InsA).

The third crucial aim of the 2006 legislative amendment was to accelerate the insolvency proceedings as a whole and to increase their transparency. Several deadlines and reparation media were amended, reduced and the entire procedure was simplified to a significant degree. All information and rulings on the proceedings are to be made public in the so-called Insolvency Register, which is administered electronically and enables free access from a distance. This significantly simplified public control of proceedings and reduced the cost of accessing information for creditors and the public.

The fourth aim was to create more space for increasing creditors’ yields from insolvency proceedings.

The fifth aim was to reduce the space for influencing insolvencies from the sides of certain creditors (or groups of creditors) or from the side of debtors, and also to prevent the debtor’s assets from falling into new owners’ hands without appropriate consideration. There can be no doubt that the environment created by the Act on Bankruptcy and Compensation from 1991 to 2007 enabled bankruptcies to be conducted in such a manner that non-secured creditors were not guaranteed sufficient fulfilment; outflows of property and other unethical practices often occurred.

The basic departure point for the creation of the law was the opinion that fulfilment of the aims described above would lead to an improvement of capital allocation within the economic system as a whole, that its progress would be accelerated and the societal impact of the exit of economic subjects from economic life would thus be reduced [1, 2].

4 The Real Impact of the Insolvency Act
Some of these aims were not achieved whatsoever, others only partially. As regards the strengthening of the financial rehabilitation principle, during more than four years of the Insolvency Act’s being in effect, it is not possible to trace a fundamental change of order in the use of reorganisation as opposed to compensation in previous years.
Table 1. The developments of various forms of the financial rehabilitation principle in proportion to the liquidation principle

<table>
<thead>
<tr>
<th>Year</th>
<th>Permitted compensation /reorganisation*</th>
<th>% of the entire number of rehabilitations</th>
<th>Declared bankruptcies**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>9</td>
<td>0.52</td>
<td>1 719</td>
</tr>
<tr>
<td>2004</td>
<td>6</td>
<td>0.42</td>
<td>1 435</td>
</tr>
<tr>
<td>2005</td>
<td>6</td>
<td>0.49</td>
<td>1 230</td>
</tr>
<tr>
<td>2006</td>
<td>7</td>
<td>0.56</td>
<td>1 238</td>
</tr>
<tr>
<td>2007</td>
<td>11</td>
<td>0.99</td>
<td>1 104</td>
</tr>
<tr>
<td>2008</td>
<td>6</td>
<td>0.91</td>
<td>651</td>
</tr>
<tr>
<td>2009</td>
<td>14</td>
<td>0.84</td>
<td>1 660</td>
</tr>
<tr>
<td>2010</td>
<td>19</td>
<td>0.97</td>
<td>1 948</td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
<td>0.76</td>
<td>2 229</td>
</tr>
</tbody>
</table>

*Until 2007, including compensation according to the Act on Bankruptcy and Compensation, in subsequent years, reorganisation according to the Insolvency Act.

**Business subjects only


As can be seen from the data in Table 1, the change in legislation and the enactment of the Insolvency Act has not resulted in a significant increase in the use of the financial rehabilitation principle (or reorganisation) in the given context. If we compare the amount of approved reorganisations from 2008 to 2011 with the data from the previous period, we cannot document any relevant growth of interest (among participants in insolvency proceedings) in financial rehabilitation procedures. The amount of cases solved by the rehabilitation approach remains well below one percent of all cases of business subject insolvencies. Moreover, we can by no means assume that this trend is set to change in any way – at least the data accumulated here does not suggest this in any way. Moreover, the situation in reality is worse than what is described in Table No. 1. In some cases, the court approves reorganisation as a method of settling a debtor’s bankruptcy and in others a court may even approve of a reorganisation plan, which means that it also approves plans on how achieve reorganisation, but then reorganisation meanders into bankruptcy after all and bankruptcy is thus settled using liquidation methods. In this context, we refer to 2010 and 2011, when such cases occurred, as is shown by the following Table No. 2.

Table 2. The amount of reorganisations transformed into bankruptcies during the course of procedures

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>7*</td>
</tr>
</tbody>
</table>

Of these, four bankruptcies were declared after the approval of reorganisation as a means of settling business decline and three after the approval of a reorganisation plan


It is worth noting that if we were to subtract these seven (reorganisations which became bankruptcies) from the entire count of 17 approved reorganisations, we would arrive at a figure of only ten reorganisations, which also means that the amount of cases using the financial rehabilitation principle would be reduced to less than half a
percent of all insolvencies. This means that the ratio between the financial rehabilitation principle and the liquidation principle would suddenly reach the same or a lower level than was the case in 2003 to 2006. As we can see, the legislative attempt to broaden the possibilities for using the so-called financial rehabilitation principle was not successful. An important consequence can, however, be drawn from this, i.e. the low use of financial rehabilitation principles when settling the bankruptcy of debtors can be attributed to factors other than the poor quality of legislation. The unwillingness of creditors to risk reorganisation shows that there are realities in the economy which disqualify financial rehabilitation procedures as they are of little use or perhaps even unusable.

While the first four years of the Insolvency Act's being in effect has proven that the new legislation is of little use in preserving work positions, creditor’s rights have been considerably strengthened, as the lawgivers had intended. As is usually the case when important competencies are shifted during certain processes, here it could also be observed that this shift is neither so simple nor without consequences as it may seem. The case of the debtor Odevní Podnik, a.s. (hereafter to be referred to as “OP Prostějov” or simply “OP”) showed that it is possible in some cases for smaller debtors to use certain coincidences and, in cooperation with the court and under an apparent legal pretext, to deprive a major creditor of voting rights (for example, when deciding who will be the insolvency administrator or when deciding about procedures during the monetisation of the debtor’s assets). It can generally be said, however, that the creditors’ authority and possibilities were truly strengthened and that this process brought about considerable shifts in the insolvency system as a whole. If we can believe available statistics, proceedings have also accelerated, which can no doubt be attributed to the new Insolvency Act and to the fact that they are now simpler processes, and also to the fact that creditors have been given greater authority, which lowers their desire to delay the process in certain cases. Most importantly, however, it limits the debtors’ possibilities to delay the proceedings, appropriate property during the proceedings, and so on.

In this connection, it is worth noting an often overlooked side of matters – creating a group of financial rehabilitation principle concepts – reorganisation (formerly compensation) and the liquidation principle – declaration of bankruptcy is imprecise and confusing in some cases. It is relatively easy to imagine a situation in which a declaration of bankruptcy becomes an example of the financial rehabilitation approach – for instance, if the debtor’s business as a whole is sold to a new investor. Similarly, in Czech practice, we are familiar with cases where several sensible business subjects were created from the debtor’s assets during bankruptcy; these were then sold as a whole, primarily in the sense of entrepreneurial units capable of independent existence and participation in the market. Thus, blending liquidation and declaration of bankruptcy is not without its pitfalls. In recent times, we can mention the business Sazka, a.s., which underwent declaration of bankruptcy, during which the company’s main assets were not separated from each other and monetised. Sazka’s activities were not at all interrupted. In the past, similar proceedings occurred in certain mechanical engineering companies, which proves that declaration of bankruptcy can be a rehabilitative solution not only in circumstances as special as the insolvency of the Sazka betting office. By the same token, the usual rule of proportion, according to which reorganisation is always the expression of the decisive part of the creditors’ wills to keep a creditor in operation, does not always apply. A reorganisation plan could be a project to sell off the business’s assets, whereas the debtors can afford the luxury of directing to an appropriate moment the actual date of selling the debtor’s assets. In the case of reorganisation which transforms into declaration of bankruptcy, however, this is not usually the final phase of the possibilities mentioned. At issue here are rather such cases where reorganisation has proven to be an economically unsustainable project, the original plan having been founded on mistaken assumptions.
Table 3. Duration of insolvency proceedings in years (from beginning to end of proceedings)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
<td>9.2</td>
<td>6.5</td>
<td>6.5</td>
<td>6.5</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Germany</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>OECD country average</td>
<td>2.1</td>
<td>2.1</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>


In any event, the new law enabled reducing the duration of proceedings to a third of the state in 2002 – 2006, which is certainly a very successful development and shows a substantial improvement. On the other hand, however, in comparison to other developed states, the average 3.2 year duration of insolvency proceedings is still three times the length of time necessary to complete such a process in the Netherlands. In Table 4, we can see a comparison of further data which is vital for understanding the relations of insolvency processes in the Czech Republic – here we are referring to costs of proceedings and returns on investments (thus also loans) from the investor’s point of view.

Table 4. Costs of insolvency proceedings and yields from insolvency proceedings (2011)

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>OECD</th>
<th>Finland</th>
<th>Germany</th>
<th>Italy</th>
<th>Poland</th>
<th>Slovakia</th>
<th>Sweden</th>
<th>UK</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of proceeding (year)</td>
<td>3.2</td>
<td>1.7</td>
<td>0.9</td>
<td>1.2</td>
<td>1.8</td>
<td>3.0</td>
<td>4.0</td>
<td>2.0</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Costs of proceedings (% of outstanding debt)</td>
<td>17.0</td>
<td>9.0</td>
<td>4.0</td>
<td>8.0</td>
<td>22.0</td>
<td>15.0</td>
<td>18.0</td>
<td>9.0</td>
<td>8.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Return for creditors (% of outstanding debt)</td>
<td>56.0</td>
<td>68.2</td>
<td>89.1</td>
<td>53.8</td>
<td>61.1</td>
<td>31.5</td>
<td>54.3</td>
<td>75.8</td>
<td>88.9</td>
<td>81.5</td>
</tr>
</tbody>
</table>


In comparison to other developed states, the data for the Czech Republic is markedly worse – costs for proceedings are high, whereas returns on investments are lower. The amount of costs is especially alarming (given that twice the OECD average is the rate considered to be acceptable over the long term) as it certainly entails a decrease in the Czech Republic’s competitive ability. Nevertheless, from the perspective of historical development, we must allow that the situation in 2010 and 2011 (i.e. after the new Insolvency Act came into effect) was substantially better than that of the preceding period.

As far as the fifth aim of insolvency law is concerned, i.e. limiting the possibilities of manipulation during insolvency proceedings, it could be objected here that practice over the last few years has seen cases where manipulation of proceedings could at least be considered. We will devote separate chapters to this issue, concerning the cases of OP Prostějov and the Sazka lottery company. On the other hand, we can objectively conclude that the Insolvency Act contains numerous provisions which clearly increase creditors’ safety – at least in comparison with the previous Act on Insolvency and Compensation. We will devote attention to these principles implemented into the Insolvency Act in the following section concerning the main individual
principles of the Insolvency Act and thus the development of the insolvency proceedings in the Czech economic environment.

5 The Principles of the Functioning of the Czech Insolvency Act
As is the case in similar legislative amendments in developed countries, the Czech Insolvency Act too is a legislation which prevents the possibility of creditors individually enforcing receivables in the event of a debtor’s bankruptcy, replacing such individual rights with regulations for collective enforcement. In the Czech Environment, it thus applies that property seizure or other acts of individual enforcement are automatically halted as soon as an insolvency proposal is filed or more precisely, after a decree is issued reporting the beginning of insolvency proceedings) in the Insolvency Register (§109, Para. 4 InsA). The insolvency proceedings must be commenced only on the basis of a proposal – in the case of a debtor, submitting a proposal for himself is in fact sometimes obligatory; if the company’s proprietor or management does not fulfil this obligation, they risk both financial and disciplinary recourse (e.g. injunction on activity). In certain cases, executives could in fact be investigated on suspicion of committing a criminal offence. At present (April 2012), it applies that debtors whose insolvency is either evident (inability to pay) or hidden (over-indebtedness) are obliged to file a proposal.

A proposal can be filed either by creditors or debtors; where a proposal on the grounds of impending bankruptcy is concerned, only the debtor is obliged. In the area of legal entities, the favoured methods for settling bankruptcy are declarations of bankruptcy and reorganisation. The first case primarily involves the liquidation method, whereas the second case involves the financial rehabilitation method; this means that, in the first case, it is not assumed that the insolvency proceedings will result in the preservation of a debtor’s business in a form even remotely similar to its state before bankruptcy. On the contrary, where reorganisation applies, it

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5 We are referring here to the situation as it was fixed in April 2012. The moment an insolvency proposal is filed, or more precisely, when the insolvency proposal is made public in the insolvency register (the commencing of insolvency proceedings: §109, para. 4 InsA) the executor or other authorised party is obliged to cease performance of the ruling. This is why it is necessary, from the perspective of the entrepreneurial environment, to draw attention to the occasional, but nevertheless real practice when (in cases of financial difficulty) a debtor, against whom one of the creditors is directing a property seizure, proposes that the court declare him bankrupt (§98 and § 104 Inca). In so doing, the debtor buys time, if nothing else. The property seizure has to cease, the debtor gains space either for negotiation or for removing assets from the business. A consequence of §109, para. 1, c) is at issue here: “performance of the ruling, or property seizure, which would affect property owned by the debtor, as well as other property which belongs to the property base, can be ordered but not carried out.” The aim of the provision, which goes fundamentally further than previous amendments, was to strengthen the rights of creditors. Practice has nevertheless shown that this provision can, on the contrary, be misused from the debtor’s side, despite the fact that § 109, para. 1 InsA limits the handling of a debtor’s property base if insolvency proceedings are commenced insofar as the debtor is meant to refrain from such handling if “a substantial change in the composition, use, designation of this property or significant decrease thereof is involved”. Para. 3 then states: “Legal operations which a debtor has performed in contradiction to limited provisions, as a consequence of effects connected with the commencing of an insolvency proceedings, are ineffective against creditors”. Legal practice nevertheless shows that cases exist in which debtors file proposals for commencing insolvency proceedings on themselves with the intent of circumventing creditors’ individual attempts to enforce their claims; they then use the time gained to manipulate property.

6 The Insolvency Act itself does not contain direct references to the Criminal Code. There was such a provision in the Act on Bankruptcy and Compensation for a certain time, but it was not accepted into the new amendment. However, a joint application of the provisions of the Insolvency Act and the Criminal Code enable prosecution of both property or criminal error committed during insolvency proceedings [6, 13].

7 The law has clearing of debts (personal bankruptcy) at its disposal for physical, non-entrepreneurial entities; there are also special methods of settling bankruptcy designated for certain special types of business subjects (primarily financial institutions, i.e. banks, savings banks, savings cooperatives and insurance companies).
is assumed that the main aim of insolvency proceedings is to preserve the debtor’s business as a whole, as an economic unit with its employment positions and other attributes.

However, in view of certain circumstances there are cases where a declaration of bankruptcy leads to the preservation of manufacture in the debtor’s company, and also to preservation of employment (the debtor’s assets are sold as a business to an interested party. Similarly, the opposite also applies – reorganisation carries a certain advantage in terms of time for the creditor. This is because from the legal point of view, declaration of bankruptcy is intended to facilitate the monetisation of the debtor’s assets, which is not necessarily an ideal solution for creditors. Especially in times of reduced asset value, some creditors may find it more advantageous to bide their time and offer the assets on the market at a later stage. This variant, however, is not made possible by declaration of bankruptcy, or the implementation of such a procedure is not without problems in a bankruptcy. Nevertheless, reorganisation plans are relatively loosely defined in the Insolvency Act (§338 – 363 InsA) and it is easy to conceive of a version where its fundament is the financial preservation of assets and their sale within a certain timeframe which also need not necessarily be literally defined. The Insolvency Act distinguishes two forms of bankruptcy – insolvency and over-indebtedness. Insolvency (inability to pay) is defined as a state in which the debtor is unable to fulfil his monetary liabilities for a period longer than thirty days after their due date. The fulfilling of non-monetary liabilities cannot be enforced by means of bankruptcy law, but only individually. Over-indebtedness is directly defined as a state when “the sum of his (the debtor’s) liabilities exceeds the value of his property” (§3, Para. 3 InsA). In both cases (insolvency and over-indebtedness) it is possible to observe a requirement which is normal in the legal statutes of developed countries, i.e. the requirement of a multitude of creditors (more than one creditor). Proceedural subjects are the

The transformation from reorganisation to a delayed bankruptcy is certainly not regular; besides this, reorganisation is at such a minimum in the Czech environment that, even if this change of mechanism were in question in all cases, it would still be a marginal event of relatively little macroeconomic significance. On the other hand, statistics have documented certain cases where we can assume that this kind of development occurred.

Here, the Insolvency Act corresponds with European law – primarily with Directive 2000/35 European Parliament and Council from 29 June 2000 on the fight against late payments in commercial contact. It considers the limit of thirty days after the due date to be the boundary, after which it is possible to take legal action to enforce receivables; Czech commercial law also codifies entitlement to penalty interests (interests for delay) for a period longer than thirty days, and the deadline of thirty days appears in certain other norms adjusting debtor bankruptcy.

Of course, this definition is somewhat unclear; in practice, it requires considerable inventiveness on the part of the court in order to be substantiated (e.g. through expert appraisals). Whereas the amount of liabilities is generally quite clear, the amount of property is necessarily unclear. However, in the actual Czech economic environment, the state of over-indebtedness itself carries a rather secondary significance and is important from the perspective of responsibility on the part of managers and other responsible parties for timely filing of a proposal to commence insolvency proceedings. In real life, over-indebtedness is relatively closely connected with insolvency and an inability to pay, even though it is naturally possible to conceive of numerous economic subjects in particular situations, in which bankruptcy may remain hidden for a relatively long time before it manifests itself in the inability to pay on time and to the full amount of the liability.

It is interesting to note that, in Czech economic practice, it quite often occurs that the requirements of more than one creditor are not understood by the participants of economic relationships. Numerous economic subjects, even after more than twenty years of a functioning market economy, have fairly little or no experience with enforcing receivables by means of legal procedures. After 1990, it was for a long time the case that enforcing receivables from commercial contact by means of lawsuits meant outlaying further expenses for activities which had practically no chance of success. In 2003, a new legal state, that of the “court executor” was implemented, and regulations which enabled effective enforcement of receivables were accepted; nevertheless, in view of other economic relations, a situation still did not arise in which receivables from commercial contact would be enforced in this manner. Moreover, the same businesses have not used (and still do not use) the Insolvency Act even in recent years owing to the fact that, as non-secured
insolvency court, the debtor, creditors claiming receivables on the debtor’s part, the insolvency administrator (perhaps other administrators if the insolvency administrator summons one to aid him), the state council (in cases where it enters insolvency proceedings or participates in an incidental lawsuit for some reason) and finally, the debtor’s liquidator could also be a procedural subject. The debtor and creditors with reported and recognised receivables are the participants in proceedings. The insolvency administrator is not a participant in the proceedings, but has an independent position to both the bankrupt debtor and the creditors – he cannot be considered to be the representative of the creditors – the creditors’ representative in this sense of the word is the creditors’ meeting or creditors’ commission to the extent that these are empowered by law and also to the extent that they are empowered by the creditors during the meeting.

The Insolvency Act distinguishes between a preliminary administrator and an insolvency administrator. The preliminary administrator is appointed by the court for the period between the filing of the proposal and the bankruptcy ruling, in cases where he deems this appropriate. While the judge should be designated for a case on the basis of an allocation of work according to previously set regulations – the principle of time is usually recognised - the preliminary administrator is appointed by the court (the president of the insolvency court) from a list of insolvency administrators. An insolvency administrator is appointed by the court when it rules on bankruptcy at the latest. If a bankruptcy ruling does not settle the matter, it is assumed that the preliminary administrator will perform this duty.

Creditors have the right to relieve this administrator and then to appoint their own administrator, also selected from the list of insolvency administrators. In the Czech economic environment it is said that this possibility exists practically at any time, but this is not the case. The Act specifically states (§29 InsA): “At the earliest creditors’ meeting which takes place after the review hearing, the creditors may resolve to relieve the insolvency court-appointed administrator from his duties and appoint a new insolvency administrator. This resolution is accepted if it is approved by vote by at least half of all creditors registered on the day preceding the holding of the creditors’ meeting, counted according to the amount of their receivables.” This creditor decision is confirmed by the court, but it is practically only a formal confirmation. However, if the creditors do not agree to relieve the original administrator within this time frame, their ability to do so afterwards becomes considerably more complicated (§31 InsA). This provision is in fact conceived for cases where the administrator falls ill or is unable to further perform his duties; in reality, however, it is possible to utilise it even if lawsuits between the creditors or creditors’ commission and the administrator occur.

The court may appoint a representative for the insolvency administrator in a case where the administrator is unable to perform his duties for a fixed period. This representative can be relieved by the creditors in a similar manner to the insolvency administrator. Furthermore, the law recognises the institute of a separate insolvency administrator whom the court appoints in cases where the insolvency administrator is disqualified from certain legal acts owing to his relationship to certain creditors. If the administrator is disqualified from certain duties because they conflict with the joint interests of the creditors in insolvency proceedings in which the insolvency administrator has also been appointed, the court will always appoint a separate administrator for these purposes (§34 InsA). Finally, the Insolvency Act also recognises the institute of a special insolvency administrator for cases where an especially complex problem in proceedings requires expert specialisation.

creditors they have practically no chance having their claims satisfied. In terms of the proportion between costs and yields, enforcing receivables brings no adequate yield. For this reason, numerous market participants fail to understand that, in a case of a single creditor, the Insolvency Act as a medium for collective enforcement is legally irrelevant.

12 In Czech judicial practice, however, there have been many cases in the past where serious doubt has been cast both on the choice of judge and subsequently also on the selection of the insolvency administrator (formerly the bankruptcy substantiation administrator). In recent years, the most striking case of this type was the bankruptcy of the largest Czech garment manufacturer, OP Prostějov. We will devote systematic attention to this case later in this chapter.
Registration in the list of insolvency administrators requires taking appropriate examinations, proof of prescribed education, integrity and fulfilment of other conditions.

Creditors file their claims; the administrator and the remaining creditors can, however, deny these and their validity is then adjudicated by a lawsuit. In recent Czech practice, almost all lawsuits concerned with a given insolvency hearing are settled at the same court, which is motivated by the desire to accelerate the progress of the proceedings. Creditors are divided into groups according to the extent of their claims on the yields taken from liquidating the debtor’s assets (§57 InsA). According to § 49 InsA, it applies that, unless otherwise stated by the law, the creditors’ meeting is decided by a simple majority of present votes regardless of creditor groups. In the majority of important cases, it is decreed that secured and non secured creditors are to vote separately. This applies also in such cases where shareholders and partners are considered a group of creditors. The creditors’ commission should not be comprised of a majority of secured creditors. Clause § 57 of InsA states that the number of members of the creditors’ committee proposed by secured creditors cannot be higher than the number proposed by non-secured creditors. The negotiations of the creditors’ committee can also be attended by the debtor’s employees (through a labour union); they have an advisory role in such cases.

6 Liquidation and Financial Rehabilitation Approaches
Declaration of bankruptcy constitutes the liquidation principle of settling bankruptcy within the scope of the Insolvency Act, whereas the financial rehabilitation mechanism is reorganisation. A declaration of bankruptcy aims to collect the assets of a debtor as quickly as possible, prepare their monetisation and transfer of cash to authorised accounts, i.e. mostly to secured creditors, as Czech practice results in non-secured creditors receiving only a fraction of their receivables which remain after the monetisation of the debtor’s assets. Reorganisation aims to secure the ongoing functioning of the debtor’s business, its financial rehabilitation, whereas settling bankruptcy through reorganization, followed by the precise progress of reorganisation approved by a reorganisation plan, must be approved by creditors in all significant groups.

The Act contains some provisions which are meant to facilitate a debtor’s access to reorganisation and other rehabilitation procedures. This stems from the lawmakers’ assumption that rehabilitation is generally and socially a more favourable way of settling a debtor's bankruptcy, primarily due to the fact that the assets do not depart from the economic environment or, more precisely, they do not stop being active therein. Moreover, there is a dominant conviction that work positions in the debtor’s business are preserved during reorganisation. These are, of course, convictions and not proven facts; nevertheless, the endeavour to enable the use of rehabilitation procedures was considerable while the Insolvency Act was being prepared. On the other hand, various circumstances have acted against this trend and continue to do so: these, in fact, significantly hinder the implementation of the financial rehabilitation principle.

The first of these circumstances is the fact that, in Czech conditions, business subjects in various ways mask both evident and hidden bankruptcies, and thus also insolvency and over-indebtedness. The Act and the effect of pressure (from the sides of the state and bodies active in criminal proceedings, but also from the side of creditors and other participants in economic life) on debtors to abide by it are insufficient to make the debtors’ management or their statutory bodies feel that they are at serious risk in the event that the bankruptcy is not admitted in time. This leads to a situation where debtors admit their bankruptcy at a very late stage, at a time when the situation is simply unsustainable and the debtor’s assets have either been depleted in the prolonging of his economic agony, or in worse cases, they have been removed from the debtor’s structure in a way that

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13 It is a fact that under certain circumstances (especially if a debtor of his own accord files a proposal for commencing insolvency proceedings together with an already pre-prepared reorganisation project), events could unfold in such a way that one creditor group’s agreement could suffice to enable submitting the plan to the court for approval [4].
ensures that they cannot be used to satisfy creditors when the insolvency proceeding takes place. Debtors thus enter insolvency proceedings mostly with property used as collateral for loans. Other assets are usually exceptional. Therefore, secured creditors enjoy a higher degree of satisfaction; non-secured creditors are satisfied only to a minimal extent. The return on their receivables is usually in the vicinity of three to five percent of the total amount, but in the majority of cases these creditors receive no satisfaction whatsoever. In Table 5, we can see the entire stated figures of insolvency proposals aimed at business subjects, which were rejected by the court on the grounds of insufficient property on the debtor’s part.

Table 5. Rejected insolvency proposals owing to insufficient property on the debtor’s part

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejected proposals</td>
<td>627</td>
<td>889</td>
<td>1159</td>
<td>1536</td>
<td>1986</td>
<td>668</td>
<td>1568</td>
<td>1571</td>
<td>1441</td>
</tr>
<tr>
<td>owing to insufficiency</td>
<td></td>
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<tr>
<td>of debtor property</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bankruptcies filed</td>
<td>1719</td>
<td>1435</td>
<td>1230</td>
<td>1238</td>
<td>1104</td>
<td>651</td>
<td>1660</td>
<td>1948</td>
<td>2229</td>
</tr>
<tr>
<td>Permitted reorganisations</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>14</td>
<td>19</td>
<td>17</td>
</tr>
</tbody>
</table>


As we can see, in certain years there were more rejected proposals than filed bankruptcies and reorganisations (before 2008, bankruptcies and compensations) – in recent years, the ratio has not moved in favour of filed bankruptcies, but the number of debtors who admit bankruptcy at a time when it is pointless to settle the matter through insolvency proceedings is still enormous.

At the same time, Czech insolvency practice allows a certain tradition of bullying proposals, or submission of insolvency proposals intended to force the debtor into improved payment discipline. There are also cases where the creditor attempts to elicit insolvency proceedings through dubious claims. In several cases, many businesses then filed for bankruptcies even though their economic situation as a whole was not hopeless, but at a given moment it was serious enough that the debtor truly fitted the definition of bankruptcy. According to these conceptions, the Act on Bankruptcy and Compensation contained little room to solve such a situation without the debtor declaring bankruptcy.

The Insolvency Act tries to remedy this situation, but at the same time it also exerts considerable effort to strengthen creditors’ rights and prevent the debtor from being able to decrease his assets when in bankruptcy.

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14 A bullying proposal is not a term that is precisely defined or described in Czech law; in legal practice, this term is usually understood as a proposal which is aimed at a debtor whose situation is not a bankruptcy, or at least the party filing the proposal is not convinced of the debtor’s bankruptcy. Also, this proposal is not meant to actually commence insolvency proceedings, but rather to force the debtor to act in a specific way. Bullying proposals are usually found in such fields where large clients for services or goods exist and there are several smaller suppliers besides them who are dependent on these clients to a significant degree and have been dependant on them for a long time. In such an environment, it often occurs that dominant clients do not abide by payment conditions, or they repeatedly cast doubt on the quality of supplies and demand discounts. Clients in principle use their network of suppliers as a source of operative capital. In certain situations, suppliers opt for bullying proposals rather than continuing with negotiations. In the environment of the Czech Republic, this sort of conduct often occurs in the construction business and insolvency proposals have been filed against major Czech construction companies – for example, Geosan Group, OHL ŽS, Strabag, Hochtief and many others.

15 Dubious claims are the sort whose justifiability is debatable or have been cast into doubt and are the subject of a lawsuit; this is a receivable the compensation of which is uncertain.
One of the results of this endeavour to strengthen the rights of creditors is the state when the commencement of insolvency proceedings (by filing a proposal for its commencement and the actual public release of the appropriate regulation) entails a certain limitation on the handling of the debtor’s property: Handling the property base of the debtor is limited (§111 Para. 1 InsA) and it is not possible to establish security (§109 Para. 1 letter b)\(^{16}\). This change is very important from the creditor’s position.

Similarly, from the majority of creditors’ point of view, it is fundamental that the commencement of insolvency proceedings also means the interruption of performance of all steps as regards individual enforcement of receivables from the creditors’ sides. As we can see, the Czech legal code places considerable importance on the actual proposal, especially if we take into account the fact that insolvency proceedings begin at the moment an insolvency proposal is filed and reported by a public announcement on the Insolvency Register (§101 InsA) within two hours after filing\(^{17}\). In other words, the court does not scrutinise the proposal from angles other than merely formal ones - even so, the mere commencement of proceedings could have significant consequences for the debtor.

The Insolvency Act is characterised by an endeavour to implement procedures that would lead to the protection of the debtor against misuse of the insolvency law on the part of one or more of the creditors; on the other hand, it protects the creditors to a significant degree and places considerable emphasis on curtailing the outflow of property from a debtor’s business in bankruptcy to other subjects. At the same time, the Act leans towards a certain preference of financial rehabilitation procedures, which is why it also contains, among other things, the institute of moratorium\(^{18}\). In such a system, the debtor can solve his situation at a time when his bankruptcy has not yet been discovered, or, if he is in bankruptcy (not because of over-indebtedness), there is still an assumption that his economic activity will recover fairly rapidly. Simply put, the moratorium a mechanism which is meant to enable a company to ensure a certain degree of protection against creditor pressure – of course, in the event that the majority of creditors (counted according to the extent of their receivables) agree to the moratorium.

At the same time, the moratorium is also a tool for the protection of creditors. This apparent contradiction is not difficult to explain – an insolvency proposal for the debtor can be filed by two creditors with quite minor receivables. Even if the debtor is supported by major creditors, it is easily possible that a ruling on bankruptcy will be passed within a relatively brief time, which will have an effect on the debtor’s economic activity and will lower the hopes major creditors may have of having their claims satisfied. At the same time, a declaration of bankruptcy could easily occur. If, however, the creditors believe such a debtor’s assurances that he will be able to fulfil his commitments in the future, the moratorium is an appropriate and sensible solution.

Another possibility also exists here – the debtor decides that his situation fulfils the criteria for bankruptcy as defined by the Insolvency Act. If the management or another responsible party fulfils the diction of the law, he must compile an insolvency proposal for the business and file it at the appropriate court. This should happen even in the event that the debtor gains satisfaction within a relatively short time that would ensure the return of

\(^{16}\) In Czech commercial practice, there is a dominant view that, according to the law on public tenders, filing an insolvency proposal is a disqualifying criterion for such tenders - this is not true; only declared bankruptcy is a disqualifying criterion.

\(^{17}\) If the insolvency proposal is filed within a period of shorter than two hours before the end of office hours or on public holidays, the insolvency court releases the appropriate announcement at the latest two hours after the beginning of office hours on the nearest working day after the day of filing the insolvency proposal.

\(^{18}\) The moratorium is not an entirely new element in Czech bankruptcy law. The Act on Bankruptcy and Compensation contained the institute of the term of protection; however, for numerous varied reasons it was practically not used.
his financial stability. A painful, but legally clean solution is to file an insolvency proposal, but speak to creditors at the same time and gain their approval to announce a moratorium.

The proposal for announcing a moratorium is filed by the debtor within a deadline of seven days after filing an insolvency proposal (if this proposal was submitted by the debtor, or within fifteen days from the moment when the debtor receives an insolvency proposal filed by the creditor from the court (§115 InsA)). The debtor can also request that the court announce a moratorium even before filing an insolvency proposal (§125 InsA). The debtor may request that the court announce a moratorium for a period of three months at the most provided that it can be extended by a month at the most (§119 InsA). A moratorium means that it is not possible to issue a declaration of bankruptcy during its course (§120 InsA), creditors can no longer continue in their individual attempts at enforcing receivables from the debtor (§121 InsA); also, handling the property base is regulated by special acts (§122 InsA). The moratorium can be cancelled for various reasons (§124 InsA), among others on the basis of a proposal by the majority of creditors counted according to the extent of their receivables.

According to the wishes of the lawgiver, the moratorium should enable debtors in an appropriate financial situation to gain protection from measures taken by creditors and thus to settle their situation with lower expenses than would be the case with a declaration of bankruptcy and in a less complicated manner than reorganisation could manage. However, similarly to the failure in practice of the protective deadline contained in the Act on Bankruptcy and Compensation, an almost identical problem predominates in the case of the moratorium at present. In reality, this institute is used minimally, probably owing to the fact that most debtors do not respect the provisions of the Act, which prescribes that executives and statutory bodies are to file an insolvency proposal should they become aware of the debtor’s bankruptcy. In other words, it seems that between 2008 through 2012, there were no creditors in the Czech Republic that trusted their debtors. By the same token, we can deduce that the situation of debtors is so serious at the time of their bankruptcy that they cannot expect the creditors to agree to a moratorium.

| Table 6. Proposals for announcing a moratorium according to their character and result |
|---------------------------------|--------|--------|--------|--------|
| Proposals filed before the commencement of insolvency proceedings | 2008 | 2009 | 2010 | 2011 |
| Proposals filed together with an insolvency proposal | 5 | 31 | 15 | 9 |
| Total permitted moratoriums | 5 | 18 | 9 | 6 |


As can clearly be seen in Table 6, the amount of permitted moratoriums is marginal – if we compare these figures with the total amount of insolvency proposals, then the amount of permitted moratoriums is unbelievably small. For instance, in comparison to declared bankruptcies, permitted moratoriums amount to roughly 0.3% of total declared bankruptcies. It is therefore certainly not possible to assert that Czech insolvency practice is moving in the direction of significantly increased use of financial rehabilitation principles thanks to the institution of the moratorium. On the contrary, this fact makes it evident that the core problem here is the insufficient amount of debtors’ property in comparison with their liabilities as a whole. In a given case, this is also connected with the generally low level of mutual trust among economic subjects in the Czech economic environment. From the international point of view, it must then be concluded that this fact is caused to at least a fundamental degree by the fact that managements and other responsible entities do not respect valid laws.
As regards the amount of reorganisations in comparison to the total amount of rulings on approaches to solving a bankruptcy, it can only be said (with reference to Table 1) that reorganisation, too, as a financial rehabilitation procedure carries little significance from the perspective of the total number of insolvency proceedings and that this significance is not quantitatively higher than the significance of compensation in ABC.

7 Risks Connected with Insolvency Proceedings
The Insolvency Act valid in the Czech Republic is very comprehensive and relatively complex, and was influenced by unfortunate experiences with the previous Act on Bankruptcy and Compensation, which was often bypassed or expediently interpreted. For this reason, the Insolvency Act (with its 434 paragraphs) attempts towards greater consistency and more precise description of events, authority and other lawgiver’s decisions. Despite this herculean endeavour, we must contend that, even after the enactment of the Insolvency Act, certain cases of court rulings, the practice of insolvency administrators or the behaviour of certain creditors have already raised questions as to the impartiality and honesty of insolvency proceedings.

This serves to increase the creditor’s risks concerning his receivables during insolvency proceedings (Schönfeld 2011) [11]. Uncertainty during insolvency proceedings is highly unpleasant from a creditor’s point of view and necessarily leads to increased costs for foreign capital, that is, increased costs for the debtor as it is he who eventually remits these costs – this reverse impact is then reflected in the problem of assessing risks in the scope of investment projects (Sieber and Hnilica 2011) [10] and because it is frequently not recognised, the result is that projects do not fulfil the originally assumed parameters. Otherwise, it applies that the creditor implements his risks into the calculated prices he charges for foreign capital - inflexible and risky insolvency proceedings thus affect the entire capital market in their consequences (Richter 2008) [7].

Insolvency proceedings in the Czech Republic remain risky even after changes in legislation. These risks are numerous in terms of type and levels.

The risk of criminal conduct on the part of the debtor. In the Czech Republic, the risk of a creditor encountering criminal behaviour on the part of a debtor is relatively high19. This can be attributed to a low respect for laws and the generally low ethical level of entrepreneurs, but most importantly to an insufficient will and capability of bodies active in criminal proceedings or courts to enforce the law and punish contravention of norms. From the debtor’s point of view, insolvency proceedings is a “final judgement” of sorts, after which nothing remains; the debtor’s assets change owners in an organised fashion and the yields from their sale serve to satisfy outstanding debts to creditors. The debtor thus has “nothing to lose”; if he does nothing, he will lose all of his assets. From this point of view, it is logical that the debtor’s endeavour to place certain property out of the control of the insolvency administrator and creditors will intensify when the debtor understands the hopelessness of his situation and ceases to see the maintenance of the business’s activities as his main priority. Then, instead of taking the initiative and filing a proposal for insolvency, the debtor intensively seeks ways to remove all assets which do not serve as collateral for loans. As we have already noted above, many of these procedures can truly be criminal and thus qualified as felonies (Púry and Kuchta 2011) [6]; this, however, does not often occur in reality.

The risk of criminal conduct on the part of insolvency administrators and insolvency judges. In the past, it could be proved several times that an insolvency administrator and insolvency judge had acted in criminal association with certain creditors or with financial groups which had bought receivables under certain conditions and led these to declarations of bankruptcies in cooperation with the administrator and judge. The

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19 This, however, applies to many other post-communist bloc states, and in recent times, similar practice has appeared in other developed countries.
The case of the group around Judge Berka, which was uncovered in connection with the bankruptcy of Union Bank Praha is an example of such criminal plotting in the area of directing the bankruptcy of a business. The risk of unreasonable prolonging of a proceeding. As can clearly be seen in Table 3, proceedings in matters of insolvency are notably higher than in OECD countries and in selected developed states. In contrast to the OECD average, which is given as 1.7 years, the Czech economic environment has an average that is twice as long – 3.2 years, whereas this figure is valid after the Insolvency Act took effect. Obviously, the length of a proceeding decreases the creditors’ prospects for adequate satisfaction of their claims – even if only due to the probable increase of costs for the actual proceedings, whether direct (costs for administering the property base), or indirect (costs for legal representation, lost time of the creditors’ employees etc.). It can generally be said that the creditors’ transactional costs grow systematically (Schönfeld, 2011) [11]. Thus, in the majority of cases, prolonging of proceedings lowers the value of the money to be paid out in the future.

Legal risks. The incomplete system of precedents and the fact that courts of lower instances often do not respect the rulings of the Supreme or even the Constitutional Court is traditional problem in Czech judicature. For this reason, among others, it is hardly possible to predict the outcomes of lawsuits with any real precision in the Czech environment – this applies even more so in commercial cases. Practically any even slightly more complex case in insolvency proceedings is accompanied by incidental lawsuits which take long to settle and are extremely unpleasant for creditors and not even a thorough knowledge of the basis of the lawsuit enables a responsible estimate of its outcome. In other words, this means that even a creditor who is certain about his matter and could responsibly assume that his claim will be acknowledged (or on the contrary, that another claim could be rejected) cannot support his assumption on anything other than his own best estimate of the situation. Even though applicable rulings in his interests may exist, it by no means follows that the court will follow these.

20 The case of this group concerned bankruptcy procedures conducted according to the Act of Bankruptcy and Compensation against the following companies: Union Bank, ZKL Kláštrec nad Ohří, Stavební podnik Ralsko, Zbrojovka Brno, Retema, Krušnohorské strojírny and Banské stavby Most. A group around Judge Jiří Berka was discovered by the police in April 2003 while it was investigating the suspicious bankruptcy of Union Bank, which Berka had declared in March on the basis of forged documents. According to the police, the group had manipulated bankruptcies of businesses which had been on the edge of bankruptcy. It selected businesses in the Most, Chomutov and Česká Lípa regions, where Berka had been the appropriate local judge. With the help of other companies and parties, the group had arranged the purchase of creditors’ receivables in a business, which was subsequently declared bankrupt by Berka, who then appointed a selected administrator to handle the insolvency. By doing so, they gained access to property worth hundreds of millions of Crowns, which they then sold under value. The damage incurred was close to half a billion Crowns. Judge Berka of the Regional Court in Ústí nad Labem, among others, was accused of criminal association; at the time when the group was being uncovered, he had been working on the Bankruptcy Schedule for three years and had declared approximately one hundred bankruptcies. In April 2003, he was accused of misuse of civil servant authority due to the suspicious bankruptcy of Union Bank; from 2004 he was prosecuted for criminal association, together with Daniel Thonat, Petr Thyu, Martin Jurenka and Lubor Kindl. The businessman and university tutor Vladislav Větrovec, co-owner of the private University of Karl Engliš in Brno, also figured in the case. According to the police, he was the main organiser of the frauds. He apparently kept contacts with influential state representatives, judges and officials of the state administration. He has convicted in May, 2004. An accusation fell also on bankruptcy substantiation administrator Daniel Thonat. He figured as the bankruptcy administrator for six companies which Berka had declared bankrupt. He had, however, also played a role in other bankruptcies. In 2010, eight accused parties in the case were convicted and sentenced from between six-and-a-half to nine years of imprisonment and, in some cases, to confiscation of property and other penalties, such as an injunction on performance of activities.

21 In 2011, a total of 3455 lawsuits of this type were being conducted.

22 However, it is necessary to add that, as far as the possibility to estimate the outcome of lawsuits beforehand is concerned, the situation in the Czech Republic is slowly, but quite definitely improving.
Reputation risk. One of the less observed circumstances surrounding insolvency proceedings in the Czech economic environment is the fact that the public is markedly inclined towards solidarity with debtors. It is true that this phenomenon mostly appears during individual approaches in enforcing receivables; the issue in question is primarily the extreme unpopularity among the public of executors and their methods. However, even in the case of insolvency proceedings, cases have been noted where certain situations had an impact on the reputation of the creditors. For instance, during the insolvency proceedings with the OP Prostějov business, a situation arose where the court rejected a proposal for permitting reorganisation owing to the fact that the main creditor had refused to provide the debtor with a loan necessary to overcome his difficulties. The fact is, however, that this creditor (the Česká Spořitelna banking institute - a part of the Austrian Erste financial group) was deprived of its voting rights under the pretext that Čska Spořitelna (hereafter to be referred to as “ČS”) and OP Prostějov formed a concern. As a result, the bank institute would have provided a further loan to enable the debtor to remain in operation, but would not have been able to influence any decisions and steps during reorganisation. The reason Čska Spořitelna withdrew from OP Prostějov’s plans to restructure and revive its production was thus due to the risk that any resources provided to the debtor could be used regardless of the interests of Česká Spořitelna. The bank thus risked an increase in their losses from doing business with OP Prostějov. Media interpretation, however, was of a completely different opinion. According to them, the bank refused to finance the scheme as it decided to favour quicker cash gains by liquidating collateral. This interpretation harmed the reputation of the banking institute, especially in the region where OP Prostějov operated as a garment manufacturer – bankers were blamed for OP Prostějov having to make hundreds of people redundant in a region already suffering from high unemployment. Although reputation risks are not frequent in Czech insolvency practice, they can perceivably damage creditors when they do emerge.

Political risks. Certain political risks are present in insolvency proceedings in developed countries. Bankruptcy as a state of a business, where a mechanism is sought for the departure of the debtor from the economic environment, always evokes certain societal reactions. These can be lesser or greater, depending on the size of the debtor’s business, how many people are employed in or depend on the debtor’s business. The level of creditor doubt will depend on the goodwill of the business and the position of its products (there are companies to which the state will always devote more attention; these are usually strongly connected with national concerns or are companies which evoke sympathy among the population or a feeling of solidarity or connection). If such a company is threatened with bankruptcy, one cannot expect unprejudiced actions from any government in the world. On the contrary, in such cases one has to be prepared for the possibility of political intervention in insolvency proceedings.

8 The Case of OP Prostějov

We have mentioned the case of OP Prostějov several times, and this has certainly been one of the most interesting insolvency proceedings since the Insolvency Act’s taking effect, i.e. since the beginning of 2008. OP Prostějov (OP stands for Oděvni Podnik (translator’s note: Garment Business)) went into bankruptcy in January 2011. 555 creditors claimed receivables amounting to 2.15 bil. CZK, whereas according to expert appraisals, OP Prostějov’s assets were valued at approximately 1.1 bil. CZK.

OP Prostějov’s largest creditor was a consortium of banks (Česká Spořitelna as the leader of the consortium at approx. 50%, the Raiffeisen Bank approx. 27% and Citibank approx. 23%), which clearly dominated among

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23 At this juncture, let us allow that part of this hate and distrust towards the executor’s occupation in general arises from several specific cases in which the executors proceeded in an extremely hard manner and in which they used and continue to use the imperfection of laws; moreover, thanks to the possibility to charge very exorbitant sums for their activities, they increase absolutely negligible sums of several tens of Euros to relatively high sums amounting to thousands of Euros. This kind of practice is especially prevalent in property seizures conducted against physical entities.
secured creditors and was significant also among non-secured creditors. According to Czech legislation, the volume of the outstanding debt increased by unpaid interest and vindicatory interests which have grown prior to the ruling on bankruptcy (which exceed the value of collateral) is transferred from secured outstanding debts to the area of non-secured debts, as far as voting and possible fulfilment is concerned\(^{24}\). The total volume of the consortium’s outstanding debts amounted to approximately 1.35 bil. CZK. Around the time when the proposal for insolvency was filed, however, Raiffeisen Bank sold their receivables and, in effect, its “place in the consortium” to the Pyrghos Lefkos company\(^{25}\). This company thus acquired receivables amounting to a total of approximately 420 million CZK, of which about 300 million was represented by their share of the secured loan provided by the bank consortium.

Despite the fact that this bank consortium should have been the hegemonic leader in the insolvency proceedings, which would correspond with the diction of the law, the contrary was the case. The insolvency proceedings became extremely complicated and became an environment of quite fundamental legal battles between 2010 and 2012 concerning the very substance of the Insolvency Act, as well as the rights of banks and creditors to generally monitor the activities of the debtor. This was largely facilitated by the approach of Pyrghos Lefkos and other companies: Even though these companies consistently denied having acted in unison, their measures had since the beginning given the impression of having been coordinated.

The approach of some of the creditors (with Pyrghos Lefkos at the helm) was a crucial aspect in this case; they cast doubt on the rights of the consortium represented by Česká Spořitelna to vote on certain key steps connected with the insolvency of OP Prostějov on the basis of §53 InsA, which is very brief: “Where the selection of a creditors’ committee is not concerned, none of the creditors may vote in their own matters, on matters close to the creditor or entities forming a concern with the creditor”. The case was adjudicated by a distinguished insolvency judge and recognised expert in bankruptcy law, Jan Kozák, MA, at the Regional Court in Brno. He accepted Pyghos Lefkos’s arguments, which is not particularly surprising: Judge Kozák himself had previously drawn attention to the fact that, in his opinion, the relationship of banks with certain debtors—businesses is so narrowly defined in pertinent agreements that the relationship could no longer be defined as that of creditor-debtor but rather as a concern. According to Czech insolvency law, however, this means that if Česká Spořitelna was truly in a concern with OP Prostějov and would represent a controlling company, OP Prostějov would then be a controlled company and Česká Spořitelna would have no right to vote in the vast majority of cases. As we have already asserted, the court presiding the case of OP Prostějov, represented by

\(^{24}\)The Insolvency Act contains a provision that a ruling of bankruptcy curtails interest to be paid on a creditor’s receivables. Nevertheless, there is an exception to this rule. Interest is paid on secured receivables, but not from the principal as a whole, only on the part which is secured by collateral (§ 171 InsA). The logic of this provision is clear. Secured creditors sacrifice the most in the context of collective success. Bankruptcy law as a whole is an aggregate of regulations which replace individual approaches with collective approaches when enforcing receivables. A secured creditor would certainly lay claim to his rights quicker through property seizure, but in the context of the collective principle, his chances of satisfaction risk lengthier procedures as well as several other potential complications. For this reason, a creditor is entitled to compensation; this compensation is interest which grows, unlike non-secured receivables, for which there is no interest. More on this problem e.g. Richter (2008, pp. 243 to 251)

\(^{25}\)This company is not a major financial business in the Czech Republic; in view of the size of OP Prostějov, it is in fact a very small company. In the years preceding the OP Prostějov case, this company participated in several insolvency procedures, into which it entered as a creditor who had bought receivables from the original debtors. It then assumed control over these bankruptcies and aggressively laid claim to significant fulfilment to the repayment of these receivables, e.g. the cases of Pyrr, Pila Javořice, CE Wood and other companies. Pyrghos Lefkos was represented by Petros Michopoulos and Filip Rybín, the owners of the Previa PR company.
Jan Kozák, accepted this argument\textsuperscript{26}, Česká Spořitelna thus could not exert influence during the vote on the proposal to relieve the court-appointed insolvency administrator, and the proposal was subsequently rejected by the creditor. Similarly, Česká Spořitelna could not be a member of the creditors’ committee either, as according to §59 of the Insolvency Act the following applies: Parties whose impartiality could be cast into doubt in view of their relationship with the debtor may not be members of the creditors’ committee or its substitutes; this applies especially to parties close to the debtor, a debtor’s executive employees (according to § 33 Para. 3 and § 73 Para. 2. Labour Code), a debtor’s partners, with the exception of shareholders (if they are not active in the debtor’s bodies and do not own the debtor’s shares or other participant securities issued to them valued at higher than a tenth of the debtor’s base capital), and parties forming a concern with the debtor.”

Of course, an extremely interesting argument was used by Judge Jan Kozák to explain that Česká Spořitelna and OP Prostějov had formed a concern. According to Kozák, the pertinent agreement for the loan contained so many strategic and immediate powers for the bank, i.e. the consortium of banks, that it strongly decreased the debtor’s possibilities to act independently, and in the context of this loss of independence, the debtor was forced literally to proceed according to the wishes of the bank. A concern is defined as follows in § 66a Para. 7 of the Commercial Code: “If one or more parties are subjected to uniform direction (hereafter to be referred to as a “controlled party”) by another party (hereafter to be referred to as a “controlling party”), these parties form a concern (holding) with the controlling party and their businesses, including the business of the controlling party, are the concern’s businesses. Unless otherwise proven, it is assumed that the controlling party and the parties controlled by him form a concern”. How we define the term “controlling” is a fundamental problem in this lawsuit. It is usually assumed that to “control” a business, a large enough stake in the owned property of the business must be owned that would enable the installation of management and delegation of tasks to this management. The Commercial Code, however, does not assume that this sign is necessarily manifest. Property interconnection need not be given by a direct stake in a “controlled” company: This relationship might not be manifest from the angle of property; it can, however, also be expressed insofar as the “controlled” company (a “controlled party”) transfers certain crucial activities to the “controlling” business (the “controlling party”). Although the lawsuit was extremely complex and enabled the deciphering of certain hidden loopholes in the Insolvency Act, its core can in fact be defined very simply and quite clearly: What extent of dependence must be evident in the actual situation to argue that businesses are concern businesses\textsuperscript{27}?

Thanks to the case of OP Prostějov, several courts of varying instances focused on this problem, arriving at somewhat divergent conclusions. However, it is of fundamental importance that halfway through December 2010, the Constitutional Court finally adjudicated: According to its ruling, Česka Spořitelna and OP Prostějov did not form a concern. Among others, the Court declared that “conventional courts need to clarify the structures of their thought”. The Constitutional Court, however, were really directing this criticism towards Judge Kozák – according to the Constitutional Court, this Regional Court Judge should have argued and made public his decision not to allow Česka Spořitelna the right to vote. This did not happen. In December 2011, the uncertainty was thus ended in the Czech economic environment as to whether the opinion of Judge Kozák would be implemented in practice; if this were the case, it would entail the contesting of numerous bank contracts and customary stipulations in contracts with debtors, as Czech banks generally function according to similar principles\textsuperscript{28}. At the beginning of 2012, the following was unambiguously ruled: the original insolvency

\textsuperscript{26} This ruling evoked the furious disapproval of the majority of the legal community and it was immediately strongly criticised from the angle of economic logic. This, however, did nothing to change the fact that at the given moment, the court ruling had been carried out.

\textsuperscript{27} The Commercial Code is attempting to set certain limits and works on own sales, with the issue of own purchase of raw materials, semi-finished products and so on; the issue of free choice and accepting of commitments is also mentioned.

\textsuperscript{28} Incidentally, it is appropriate to mention that part of the expert public is dissatisfied with the manner in which the Constitutional Court’s statement confronted Judge Kozák’s argumentation, asserting that the Constitutional Court did
administrator appointed by Judge Kozák had long since been relieved, Judge Kozák himself faced disciplinary action from the Ministry of Justice due to the OP Prostějov case, Česká Spořitelná was a key member of the creditor committee. The whole case is synoptically recapitulated in the following table:

**Table 7. The insolvency case against OP Prostějov (2010 to 2012)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. January 2012</td>
<td>The garment business, which had employed approximately 1500 people at the time, of its own accord requested that the court commence insolvency proceedings.</td>
</tr>
<tr>
<td>2. March 2010</td>
<td>At the Regional Court in Brno, the majority of creditors approved the plan of Česká Spořitelná (the company’s main creditor) to reorganise the company. Even before the adjudication on the planned reorganisation, Judge Jan Kozák overruled the appointment of ČS to the creditor committee. Their solicitor therefore filed an objection on the grounds of bias on the Judge’s part. The Court, however, overruled the objection as being unsubstantiated and continued the hearing.</td>
</tr>
<tr>
<td>26. March 2010</td>
<td>The business waived the right to compile a reorganisation plan; it did not raise money for operation. None of the creditors filed a reorganisation plan either.</td>
</tr>
<tr>
<td>26. April 2010</td>
<td>ČS did not become a member of the creditor committee even after second attempt, ČS appealed against the judge’s ruling.</td>
</tr>
<tr>
<td>28. April 2010</td>
<td>The business announced that it would make approximately 600 employees redundant.</td>
</tr>
<tr>
<td>3. May 2010</td>
<td>The Brno Regional Court declared OP Prostějov bankrupt.</td>
</tr>
<tr>
<td>13. May 2010</td>
<td>According to the insolvency administrators’ proposals, branches were closed, other real estate was offered for auction and the parent company in Prostějov was sold in a selection procedure.</td>
</tr>
<tr>
<td>20. May 2012</td>
<td>ČS appealed to the Supreme Court in Olomouc regarding the matter of declaring OP Prostějov bankrupt; in July, this court rejected the appeal.</td>
</tr>
<tr>
<td>31. May 2010</td>
<td>According to a report which the Minister of Justice, Daniela Kovářová, submitted to the government, the insolvency proceedings did not contravene the law.</td>
</tr>
<tr>
<td>1. September 2010</td>
<td>The Supreme Court rejected ČS’s appeal against the Regional Court’s ruling which did not validate its membership in the creditor committee.</td>
</tr>
<tr>
<td>14. September 2010</td>
<td>ČS filed a constitutional complaint concerning the bankruptcy. It ruled that the Regional Court had contravened the law in the matter of the bankruptcy of Oděvní Podnik.</td>
</tr>
<tr>
<td>24. November 2010</td>
<td>The insolvency administrator announced a selection procedure for the sale of custom production, the so called “tailoring”, which was the last functioning part of the company.</td>
</tr>
<tr>
<td>13. December 2010</td>
<td>The Regional Court in Brno revoked the declaration of bankruptcy for Oděvní Podnik. The court sustained several aspects of Česká Spořitelná’s lawsuit. The company was returned to the reorganisation phase.</td>
</tr>
<tr>
<td>14. December 2010</td>
<td>The Constitutional Court confirmed that there had been errors in the bankruptcy proceedings with Oděvní Podnik.</td>
</tr>
<tr>
<td>23. December 2010</td>
<td>The court overruled the objection against Judge Kozák’s bias.</td>
</tr>
<tr>
<td>25. January 2011</td>
<td>By means of opponent actions, the insolvency administrator for OP, Jaroslav Svoboda, filed lawsuits against the business’s main shareholders, the representatives of the banks and Jiří Tuver, the former general director of OP. Judge Kozák reported that he had received approximately two dozen lawsuits at the time.</td>
</tr>
<tr>
<td>6. April 2011</td>
<td>The Olomouc Supreme Court confirmed the declaration of bankruptcy and rejected the appeal of the second largest creditor, Pyrgchos Lefkos.</td>
</tr>
<tr>
<td>11. May 2011</td>
<td>The court once again overruled the objection against Judge Kozák’s bias.</td>
</tr>
<tr>
<td>13. May 2011</td>
<td>Jaromír Polžízek, President of the Brno Regional Court ruled that Judge Kozák would no longer preside in the OP insolvency proceedings. He appointed Bohumila Cuprova as the new insolvency judge, who decided to declare OP bankrupt one week later.</td>
</tr>
<tr>
<td>21. June 2011</td>
<td>According to insolvency administrator Jaroslav Svoboda’s declaration, OP Prostějov had made a loss of over 69 million CZK in the period of January to the end of April 2011.</td>
</tr>
<tr>
<td>24. June 2011</td>
<td>The Regional Court in Brno relieved insolvency administrator Jaroslav Svoboda, who had apparently not performed his duties correctly. Miroslava Horská became the new administrator.</td>
</tr>
</tbody>
</table>

not know how to refute his argumentation precisely, which was why the Constitutional Court apparently focused primarily on the issue of explaining stance.
The court reprimanded insolvency administrator Svoboda for, among other things, not having correctly substantiated his proposal to end the operation of the business.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. September 2011</td>
<td>Jiří Pospíšil, the Minister of Justice, filed a disciplinary lawsuit against Jaromír Pořízek, President of the Regional Court in Brno, and against Judge Jan Kozák, who had held the function of Vice Chairman of the Court. Criminal charges were also filed against Judge Kozák – according to the Ministry, vast contraventions of work schedule had occurred in 2010 and the Ministry was of the impression that 295 matters had not been processed according to the work schedule. If the reaction of the court had been the same in pertinent lawsuits as it had been in the case of OP Prostějov (in which the entire proceedings were returned to the phase of reorganisation), there would be a danger that the entire proceedings until then would have been void.</td>
</tr>
<tr>
<td>31. October 2011</td>
<td>The creditor committee approved the sale of the last viable section of OP Prostějov – the so-called “tailoring” (tailor-made production). The sale of the business’s real estates and further assets had already taken place.</td>
</tr>
<tr>
<td>5. January 2012</td>
<td>The court rejected a proposal to impose a fine on the insolvency administrator.</td>
</tr>
</tbody>
</table>

If we were to somehow assess the insolvency proceedings of OP Prostějov, we would have to assert that a failure of the entire system had occurred. During the roughly 30 months of the proceedings (January 2010 until April 2012), the business’s entire losses (according to information from the insolvency administrators) amounted to over 600 million CZK, which naturally damaged the creditors’ interests to a significant degree. If we were to compare these figures to the business value, half of the value of the assets (appraised by experts at the beginning of the company’s bankruptcy) had been squandered. Naturally, a considerable part of this loss was probably created by accounting operations; this nevertheless does not change the fact that the value of the property in the insolvency proceedings had dropped by at least tens of millions of crowns as a result of obstructions and delays. Invasive intervention into the insolvency by Pyrghos Lefkos evoked a legal battle, during which a notable amount of various lawsuits were filed – from this point of view, and viewed from a macro-societal perspective, the OP Prostějov insolvency proceedings were truly an invaluable experience. The possibilities of using criminal law and the possibilities of thus influencing the insolvency proceedings in this manner became evident; Pyrghos Lefkos’s solicitors also analysed the possibilities of the Insolvency Act itself and used innovative tactics to implement their own interests. From the perspective of a potential foreign investor interested in insolvency law in the Czech Republic, the case of OP Prostějov teaches a relatively blunt lesson: In the Czech legal environment, appropriate and well-constructed arguments make it possible to misuse contradictions and differences between individual laws. It is necessary to keep in mind that the arguments used by Judge Jan Kozak regarding a concern were not cast into doubt by courts of higher instances than the Regional Court in Brno, but were finally overruled only by the Constitutional Court. For the entire time since the declaration of bankruptcy, the main creditor (i.e. the consortium of banks) had been placed in the stressful situation where his attempts at a legal solution to the situation was confronted by the disinterest of state bodies.

9 The Sazka Case
The case of the Sazka lottery company is very interesting from numerous aspects and would deserve a book in itself. From the perspective of insolvency law, however, it is interesting to observe how it is possible to ostensibly use a method of liquidation in such a way that, at the end of insolvency proceedings, a company appears using the same brand name, to a large extent the same employees, the same know-how, but with completely different proprietors.

The actual collapse of the Sazka company was caused by the fact that this company took the task of building a winter sports hall for the ice hockey world championships. As this building was being constructed, its budget grew to several times what had been originally planned and, after many peripateias, the consequences of Sazka’s indebtedness became so serious that the company was unable to pay out winnings on time, and its
financial situation became dramatically unsustainable. Halfway through February 2011, billionaire Radovan Vítek, who had bought bonds issued by Sazka from the Komérní Banka portfolio, filed an insolvency proposal through his companies; Sazka was in delay for these receivables by several hundreds of millions of crowns. At the end of March, the court declared the Sazka lottery company bankrupt. The management implemented reorganisation as a solution to the bankruptcy – most probably because such an approach would mean that the management could retain its influence in the company. The management also tried to find an investor who could bring the resources necessary to remit the most acute outstanding debts – they were not successful, however.

At the end of May, the court announced a tender for Sazka’s property. During this time, bets were still being made, lotteries organised by the company continued – albeit with considerable difficulties, because the vast majority of Sazka’s terminals had been disconnected from the internet for a greater or lesser period of time. A complete cessation of betting nevertheless did not occur. However, terminals stopped functioning, as did recharging of prepaid mobile phone operator cards – Sazka had stopped transferring money to these operators, resulting in debts amounting to 600 million CZK.

In November, the insolvency administrator sold the Sazka business (i.e. the lottery section of the Sazka company) to a duo of investors cooperating with one another who were also the biggest creditors. Sazka was thus acquired for 3.81 billion CZK by Petr Kellner’s PPF group and Karl Komárek’s KKCG. This price was reached in a public tender, amidst numerous protests against its rules; the Penta group even decided not to participate in the tender, but in a letter, they offered the insolvency administrator a much higher sum. Nevertheless, the tender continued to the end and the winners paid the purchase price\(^\text{29}\). Penta, Česká Sporitelna and Sazka’s other former shareholders, i.e. sport unions and organisations from the field of sport filed several lawsuits on the grounds that the tender had not proceeded in a standard way and that the best price had not been gained. Of course, PPF and KKCG continued with their standard financial offensive and also came to an agreement to purchase Česká Sporitelna’s portion of the loan (ČS then dropped its lawsuit against Sazka’s new proprietors); they also bought receivables from the mobile operators, which paved the way to renewing the terminals’ activities – not only as betting stations, but also as places where pre-paid cards could be recharged.

Within a period of time shorter than one year – from March through November – the problem of Sazka’s bankruptcy had been largely solved, albeit not in every detail. At present (April 2012), the sale of further property is still taking place, but the creditors have been paid since January 2012. On 12 January 2012, the insolvency court approved the insolvency administrator’s proposal for a partial schedule, according to which the creditors’ receivables have begun to be repaid.

It thus seems that the case of Sazka’s bankruptcy will finally be solved within 12 months, despite very strong turbulence. This, however, was possible thanks to the fact that both strong investors had expended significant resources to implement their will in the insolvency proceedings. The insolvency administrator evidently wanted to have this case solved as soon as possible, and modified his behaviour and decision style towards fulfilling that purpose.

As regards the strategic and tactical side of things, the outcome of the Sazka company case shows that a claim against a company in bankruptcy can be an interesting item of merchandise under certain circumstances (Schönfeld 2011) [11]. Even an apparently worthless debt can become interesting depending on the angle of approach during insolvency proceedings or it can be of significance during a vote at a creditors’ meeting.

\(^\text{29}\) Partly in themselves, PPF and KKCG were among Sazka’s largest creditors, as this group purchased a significant portion of Sazka’s bonds, as well as other receivables for Sazka. The stakes of Citibank, Volksbank, Gtech Corporation and others were thus purchased.
Acknowledgment

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References:


1 Risk Related Information: A Necessity Enhanced through Crisis Circumstances

The recent financial crisis documented the significant need for improving risk management, emphasizing the importance of risk exposure prevention, as well as strategic management, both impacting companies’ performance. Furthermore, after having current realities documenting the importance of strategic risk management and preventing risk exposure, we argue that both practitioners and researchers should reconsider risk management and work on proposing ways for its improvement.

Numerous studies in recent literature deal with identifying potential “culprits” for the recent financial crisis including regulatory failures in the financial system leading to systemic risk; traders’ and bakers’ excessive risk undertaking, as well as an inadequate remuneration system; auditors; rating agencies; fair value; the securitization process etc. While interdependencies between a series of the previously mentioned elements are obvious, therefore making a fair trial of the recent financial crisis even harder to develop, we will further focus our attention on financial reporting related elements. This is linked to our analysis approaching risk management from an accounting perspective, while focusing on reporting business risks.

Fair value generated intense debate during the last decade, the financial crisis enhancing questions related to its adequacy in the context of illiquid, irrational markets; its pro-cyclical effect; as well as a series of difficulties in its measurement in practice. We might say that the circumstances made the debates even more intense, but the fair value concept in financial reporting continues to have its supporters, as well as its opponents. Without minimizing the shortcomings that fair value measurement might have or its potentially limited relevance when considering certain user needs, we can not agree with it being responsible for the crisis, but rather with is it this time fitting the shoes of the messenger as André et al. [3] (2009) also make the point. We should also mention

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30 The content of this chapter is based on papers that were presented in the 8th European Conference on Management, Leadership and Governance - Cyprus 2012, Managing and modeling of financial risks – Ostrava 2012 and International Conference Economics and Management – Tallinn 2012, and included in the corresponding Conference Proceedings.
the efforts of accounting standard setters and regulators in trying to shed some light in this issue by intensively working on fair value measurement projects. Last year the IASB (International Accounting Standards Board) and the FASB (Financial Accounting Standards Board) finalized one of their joint projects by publishing two accounting standards (IFRS 13 Fair Value Measurement and the revised Topic 820 as successor of SFAS 157 Fair Value Measurements) with mainly consistent fair value measurement requirements (Alexander et al. 2012 [2]). The process of securitization was also proven to lack transparency that further impacted markets’ behaviour due to incomplete information.

As emphasized by Walker (2010) [46], recent events have revealed enormous gaps in our understanding of how financial markets and financial governance systems work. A perfectly justified question would therefore be related to where did risk management and corresponding control systems go wrong? We therefore position our analysis at the interference of corporate governance and financial reporting arguing for informational transparency and risk disclosure. The latter’s importance should be considered by mainly making reference to the cost of capital and risk management. Furthermore, we draw on results in previous studies documenting the limitations of risk disclosure, as well as the necessity for further developments (Jorion, 2002 [24]; Linsmeier et al., 2002 [30]; Campbell et al., 2011 [8]; Kravet and Muslu, 2011 [26]; Lajili and Zéghal, 2005 [27]; Kajüter, 2004 [25]; Dobler, 2005 [16]; Berger and Gleissner, 2006 [5]; Beretta and Bozzolan, 2004 [4]; Solomon et al., 2000 [43]; Linsley and Shrives, 2006 [29]; Marshall and Weetman, 2008 [34]) as an argument for the discussion being brought forward through our analysis. Pope (2010) [40] arguing that the time is right for theoretical and empirical academic research to revisit the ability of accounting information to reveal risk also emphasizes the opportunity of the proposed analysis.

Our study undertakes both qualitative and quantitative analysis. The qualitative analysis focuses on debating developments in the area of risk reporting as well as perspectives for its improvement in relation to the extant of recent expectations calling for changes. This is mainly done by means of literature review. The quantitative analysis investigates the case of an emerging economy by considering risk reporting practices of companies listed on the Romanian capital market. A disclosure index is computed and furthermore used within a regression analysis trying to identify determinants of risk reporting practices. The obtained results document a low level of risk related information being presented by companies listed on the Romanian capital market. Still, corporate governance elements can be used in explaining companies’ current risk reporting practices.

2 Main Directions in Research Literature

As Jianu et al. (2011) [23] emphasize, economic entities are those who, by the conducted activities, provide value for themselves and for the socio-economic environment in which they operate. It is our argument that risk management can prove itself extremely useful in this direction. Furthermore, with reference to the users of financial information, it is risk reporting practices that mirror companies’ risk management practices. This would be our main argument in developing an analysis of risk reporting practices as a reflection of companies’ risk management practices, as well as in trying to look into corporate governance elements and their ability to impact upon such practices.

When looking at research and trade literature in the area of risk management we notice preoccupations intensifying in time. Furthermore, approaches to risk management shifted from debating minimum requirements and standard indicators towards the development of a holistic approach which developed over the last three decades and intensifying over the last one. If we are to separate and synthesize the contribution of previous studies in risk management literature by considering theoretical and empirical studies, we might say that the first debate risk management’s ability to create value for the company, while the latter mainly document determinants of risk management and the use of derivatives. What we find as encouraging is noticing the coherence between the results of empirical studies and the theoretical grounding of using derivatives in order to hedge risk. A number of studies document that hedging risk and using derivatives can increase the
value of the company (Mayers and Smith, 1982 [37]; Bessembinder, 1991 [7]; Froot et al., 1993 [17]; Berkman and Bradbury, 1996 [6]; Nguyen and Faff, 2002 [39]). Furthermore, corporate governance’s role in shaping sound policies for derivatives usage is also analyzed (Chang, 1997 [9]; Tufano, 1998 [45]; Whidbee and Wohar, 1999 [47]; Rogers, 2002 [41]; Marsden and Prevost, 2005 [33]).

It is our arguments that sound corporate governance mechanisms require informational transparency. In this context accounting information and the financial reporting process play an important role. The finality of the financial reporting process consists in providing information that responds to user needs. Risk reporting practices are an important component of the reporting process through its perception as reflection of companies’ risk management policies ad practices. We therefore consider it important to analyze current practices and argue for the development of risk reporting practices that adequately present companies risk management practices in response to user needs. Identifying factors that impact risk reporting practices is also important by offering means to further work on such reporting practice’s improvement.

3 Research Methodology in Analyzing the Particularities of the Romanian Capital Market

As mentioned before, our analysis approaches risk management from an accounting perspective, focusing on reporting business risks. Therefore the first component of the employed research methodology involves grounding and computing a disclosure index that captures risk reporting practices of the analyzed companies (as a reflection of also its risk management practices). Secondly our methodology focuses on identifying determinants of these practices as being reflected through the proposed disclosure index. Potential determinants included in the analysis were selected based on similar studies in literature. We will further detail the employed research methodology with regard to both above mentioned dimensions, as well as to the sample companies. In a nutshell we need to explain the grounding of the sample of entities being considered for analysis, their main characteristic elements and governance related elements. Information was hand collected from companies’ financial statements as well as other reporting documents that were publicly available for the 2011 financial reporting period.

Selecting the companies that were included in our analysis sample was done in two stages. The first stage involved the consideration of all companies listed on the Bucharest Stock Exchange and developing a preliminary analysis. More precisely we analyzed financial statement being filed in for the 2011 financial reporting period. In case a certain company presented both individual and consolidated financial statements we initially considered both sets. Our choice was based on Müller’s (2011) [38] discussion over the value relevance of consolidated versus parent company financial statements. This led to analyzing a number of 103 sets of financial statements for the 2011 financial reporting period. Based on the developed analysis we further eliminated from the sample those companies that did not publicly present reporting documents and those that were suspended from listing. Furthermore in order to ensure comparability of the analyzed data and by considering the number of consolidated and individual financial statements respectively, we decide to focus our analysis on individual financial statements only. We finally ended up establishing a sample of 76 individual financial statements that were considered in developing the proposed analysis. When trying to capture both risk reporting practices and determinants of such practices we required collection of information from companies’ financial statements together with other documents (reporting documents) that were publicly available.

The next step in our analysis was related to identifying those elements that characterized and helped us develop the previously mentioned disclosure index (DI), as well as the aimed regression analysis. Drawing from research and trade literature on risk management, we computed the risk disclosure index by considering the following elements:
• Indicators regarding risk identification (RII) – considering the presentation of certain indicators meant to
dimension or announce the presence of certain risks characterizing the company’s activity;
• Indicators regarding the risk management system (RMI) – following information presenting risk
management strategies within the considered companies;
• Indicators regarding hedging instruments (RCI) – considering information presenting the use of hedging
instruments.

Based on the previously presented construction manner and appealing to the attribution approach of rankings,
the disclosure index which we are using within our study is formed as follows:

\[
DI_{rm} = \frac{\sum_{i=1}^{m} d_i}{\sum_{i=1}^{n} d_i}
\]

where:

\(DI_{rm}\) - risk reporting practices as a reflection of risk management practices;
\(d_i\) - element considered within the computation based on the above presented arguments, recording the
value 1 in case the corresponding information was found within companies’ reporting practices and 0 in case it
wasn’t;
\(m\) - number of elements actually considered;
\(n\) - maximum number of elements that could have been presented.

Moving forward, in order to develop the proposed regression analysis we appealed to including some elements
characterizing the considered companies’ dimension and activity. Selecting such elements mainly relied on
corporate governance literature and similar studies being developed in research literature. The considered
elements are mainly consistent with those used by Ienciu (2012) [21] who develops a similar study by focusing
on environmental reporting. We therefore use in the development of our study the following elements,
organized into different groups:

**A. General corporate governance information**

*GovAct* – separate description of main corporate governance practices;

*GovMembers* – presentation of a list with the members defining the company’s corporate governance system
and structures;

*AGMInfo* – information regarding General Assemblies taking place within the company;

**B. Corporate governance specific indicators**

*ManagementStyle* – information regarding the management system (unitary/dual);

*BoardNo* – number of members within the administrative board;

*BoardIndep* – number of independent and non-executive board members;

*GovComm* – the existence of audit committees, nominalization committee that are part of the company’s
corporate governance as well as their structure;
In order to analyze the relationship between companies’ risk reporting practices (as a reflection of risk management practices) and the elements considered as characterizing their corporate governance system we have appealed to constructing and using the following regression model:

\[ DI = \alpha + \beta_1 \text{GovAct} + \beta_2 \text{GovMembers} + \beta_3 \text{AGMInfo} + \beta_4 \text{ManagementStyle} + \beta_5 \text{BoardNo} + \beta_6 \text{BoardIndep} + \beta_7 \text{GovComm} + \varepsilon_i \]

All the variables being comprised in this model have been previously explained. The following section of the chapter develops the proposed analysis and presents the obtained results.

4 Developing the Analysis and Interpreting Results

Developing the analysis involved the implementation of the ordinal regression model in order to analyze the probability and magnitude of the connection between risk reporting practices (as a reflection of risk management practices) and corporate governance elements that were considered for the sample companies. In order to document that the proposed model is fitting we have applied two supplementary tests, namely the likelihood ratio test and chi-square goodness of fit. We report the Cox-Snell R2 prediction accuracy (R2) and Nagelkerke measure to indicate the power of the ordinal model.

### Table 1. Ordinal Regression Analysis

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient Estimate</th>
<th>Wald $\chi^2$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GovAct (+)</td>
<td>1.107</td>
<td>9.692</td>
<td>0.000</td>
</tr>
<tr>
<td>GovMembers (+)</td>
<td>0.510</td>
<td>4.510</td>
<td>0.019</td>
</tr>
<tr>
<td>AGMInfo (+)</td>
<td>0.211</td>
<td>2.338</td>
<td>0.023</td>
</tr>
<tr>
<td>ManagementStyle (+)</td>
<td>0.744</td>
<td>1.980</td>
<td>0.028</td>
</tr>
<tr>
<td>BoardNo (+)</td>
<td>0.589</td>
<td>2.320</td>
<td>0.071</td>
</tr>
<tr>
<td>BoardIndep (+)</td>
<td>0.896</td>
<td>1.889</td>
<td>0.024</td>
</tr>
<tr>
<td>GovComm (+)</td>
<td>0.523</td>
<td>2.597</td>
<td>0.068</td>
</tr>
</tbody>
</table>

Model $\chi^2 = 57.223$, $p < 0.000$.
Pearson Chi-Square = 107.11, p-value = 0.922
Deviance Chi-Square = 111.34, p-value = 0.871
Pseudo R-Square
Cox-Snell 0.395
Nagelkerke 0.337

All of the independent variables are defined above.

As seen from the above presented results, our sample companies document the existence of a relationship between the considered corporate governance elements and their risk reporting practices (as a reflection of risk management practices). When considering all the variables included in the analysis and the value for Model $\chi^2 = 57.223$, while $p$-value < 0.000, we may conclude that we have a well-fitting model. This is proved also by the registered results related to the goodness-of-fit tests and the values for Pseudo R-Square (Cox-Snell 0.395 and Nagelkerke 0.337).
5 Concluding Thoughts on Reporting Business Risks

Frank Knight made the distinction between risk (randomness with knowable probabilities) and uncertainty (randomness with unknowable probabilities) in his 1921 famous dissertation "Risk, Uncertainty and Profit”. Following his approach, some authors still make a distinction between risk and uncertainty by making reference to risks that can be measured and those that cannot, suggesting consistent with Knight that a measurable risk is a risk proper, while an unmeasurable one is an uncertainty (ICAEW, 2011) [22]. Simply considering this separation makes the task of developing sound risk reporting practices quite a difficult challenge for whatever corporate governance system we might think of.

It is obvious that risks are difficult to be quantified in an objective manner. This imposes consequences in terms of risk reporting that, despite covering both qualitative and quantitative data, remains subjective and limited as a scope. Whatever risk quantification we might think of, supposable based on objective computations, is in fact subjective:

Risk is inherently subjective… [R]isk does not exist ‘out there’, independent of our minds and cultures, waiting to be measured. Instead, human beings have invented the concept risk to help them understand and cope with the dangers and uncertainties of life. Although these dangers are real, there is no such thing as real risk or objective risk. Even the simplest, most straightforward risk assessments are based on theoretical models, whose structure is subjective and assumption-laden and whose inputs are dependent upon judgment. (Paul Slovic quoted in Victor Ricciardi, A Risk Perception Primer: A Narrative Research Review of the Risk Perception Literature in Behavioral Accounting and Behavioral Finance, quoted by ICAEW, 2011) [22].

This can further be linked to Walker (2010) [46] quoting Donald Rumsfeld:

As we know, there are known knowns. There are things we know we know. We also know there are known unknowns. That is to say we know there are some things we do not know. But there are also unknown unknowns, the ones we don’t know (Donald Rumsfeld - Feb. 12, 2002, US Department of Defense news briefing quoted by Walker, 2010).

and analyzing the applicability and evolution of these concepts within the context of the recent financial crisis as the number of known unknowns increasing dramatically, the number of known knowns decreasing (in the sense that things we thought were known are now known to be unknown) and naturally not knowing whether the number of unknown unknowns has also increased, but certainly knowing the world is more uncertain than we previously knew (Walker, 2010) [22].

The results of the analysis being developed on listed companies of an emerging economy document a low level of risk related information being presented by companies. We conclude after having analyzed a number of 76 sets of financial statements that companies rather aim for conformity with requirements than for reporting information that would be consistent with user needs. An example in this regard is even the manner in which companies discuss performance in publicly available reports. And this would be a manner that does not correlate with risk management policies and practices. Despite the low level of risk related information being presented, we were still able to document that governance elements can be used in explaining companies’ current risk reporting practices. We consider such results to be useful in the sense that it should further allow developments in order to improve companies’ risk reporting practices and also risk management. The limitations of our study include a low number of sample companies and the impact of the elements being considered when constructing the disclosure index.
6 Risk Management and Particularities in Hedging Currency Risk
The increased pace of the globalization process enhances the impact of exchange rate fluctuations upon various ratios reflecting the efficiency of entities conducting transactions in foreign currency. Exchange rate fluctuations taking place since contracting until payment might significantly impact the contracting parties generating an either positive or negative effect. In other words, one partner is always exposed to currency risk. Since currency risk is quantifiable, we consequently argue for the corresponding measures to avoid it, as well as for the advantages of their implementation. Our analysis approaches strategies in hedging currency risk from both a theoretical and practical perspective. From the theoretical point of view we mainly look at currency hedging techniques being established through trade literature and practice while developing an overview of research literature (mainly accounting) in the area. On the other hand, we also analyze the use of various techniques for hedging currency in practice.

The idea of companies disclosing information in relation to their risk management policies (our analysis focusing on the particular area of currency risk) as a management tool is also discussed. The objective of our analysis would finally be to document the necessity of developing an adequate system of surveillance and control measures imposed through the certainty of currency risk itself. The purpose and benefit in developing such a system as a component of sound corporate governance policies would be to limit companies’ exposure to currency risk. Our conclusions document the usefulness of such measures capturing the interest of researchers, practitioners and regulators in search for appropriate solutions to avoid or at least minimize currency risk.

The employed research methodology includes literature review related aspects. Literature review methodology is used in order to develop a critical and evaluative account of what has been published within accounting research literature on hedging currency risk. As Matiș and Bonaci (2011) [36] point, literature review methodology imposes a certain organizational pattern that combines both summary and synthesis by covering question formation, identification of the relevance, assessment of quality, evidence summarization and interpretation of findings. Papers being covered through our analysis approach hedging currency risk from both a theoretical and practical perspective. The first part of the analysis is dedicated to accounting research literature while the second focuses on practical aspects related to designing and implementing foreign currency hedging strategies.

7 Accounting Theory and the Global Capital Market or Simply Setting the Research Background
Main objective being linked to approaching hedging currency risk from an accounting perspective positions our literature review in the area of accounting research literature. Furthermore we must relate to capital market research and accounting for derivatives. The complete understanding of an accounting view on financial instruments (especially derivatives) can only be reached by following their historical development being interrelated with capital market evolutions. Moreover, developments in accounting theory should also be included when aiming for a comprehensive picture. Godfrey et al. (2006, p. 10) [19] discuss the main periods of theory development comprising practice development, pre-theory period (continued development of practice), formalisation of practice, general scientific period (explanations of practise and development of explanatory framework), normative period (statement of ideal practices and basis for achieving such practices), positive accounting theory (a framework to explain and predict behaviour) and mixed developments (positive and behavioural theories).

We consider worldwide known bankruptcies that pointed out a series of gaps in national accounting systems to represent a significant factor in the development of accounting theory, or at least in emphasizing the components of previous developments. The significant number of financial scandals made stakeholders express
their concern regarding the ability of financial information (supposable useful based on accounting standard setting bodies declared objective) to signal or prevent such financial catastrophes. What these financial scandals confirmed out of the positive accounting theory is that one of the parties acted in order to maximize its own wealth in the obvious detriment of the other party. We are therefore tempted to consider the necessity of developing a comprehensive theory with regard to the impact accounting practices could have on human behaviour instead of focusing on explaining past events and the corresponding behaviour.

Figure 1 captures the correlations between the development of accounting theory, the perspective of a global capital market through capital market research and worldwide known bankruptcies. As it can be seen from the graphical representation, the integration process of world capital markets, which recorded a 60% progress from markets segmentation to their integration (Lindert & Williamson, 2002) [28], almost totally overlaps the periods in the development of accounting theory, from the general scientific period to the positive accounting theory. Naturally, capital market researches increase significantly under the positive accounting theory when markets global integration process already recorded significant results. In terms of worldwide known bankruptcies we included in the figure the biggest twenty of them, but from a chronological point of view we must mention their appearance starting with year 1987. We therefore consider that Figure 1 speaks for itself in demonstrating the manner in which developments in accounting theory, capital markets integration process and capital market research interrelate.

8 Hedging Currency Risk: Accounting Research Literature under Review

In developing a review of accounting research literature we first developed a content analysis of published papers approaching the issue of hedging currency risk. This further led us to dividing the analyzed published papers within three main categories, as follows: capital market research studies, studies focusing on management’s behaviour and studies focusing on accounting regulations and accounting practices. We should also mention that considering the above mentioned categories does not claim to cover all existing literature exhaustively. Mentioning the fact that the established categories are not excluding each other is also necessary since we did find studies which can not only be included within one category. We will further synthesis studies being analyzed within each category by considering their objective, the employed research methodology and obtained results.

As Chowdhury & Sarno (2004) [13] emphasize, exchange rate volatility plays a major role in international portfolio diversification and in several aspects of economic policy, including, inter alia, the determination of the uncertainty surrounding prices of exports and imports, the value of international reserves and open positions in foreign currency, and the domestic currency value of debt payments and workers’ remittances which, in turn, may affect domestic wages, prices, output and employment. This is actually the reasoning for having a significant body of literature focusing on modelling time-varying exchange rate volatility.
In the area of capital market research studies, Makar & Huffman (2008) [31] examine the relationship between UK multinationals’ stock returns and changes in the principal exchange rate to which each firm is most exposed, finding more firms with significant foreign exchange exposure estimates using this firm-specific principal currency data, compared with those exposure estimates using the broad exchange rate index data prevalent in prior studies. Furthermore, the cross-sectional variations in such principal-currency exposure estimates are explained in relation to the financial currency-hedge techniques that each firm specifically identifies as being used to manage its currency risk. Through the use of ordinary least squares (OLS) regression Makar & Huffman (2008) [31] provide evidence that firms effectively use foreign currency derivatives and foreign-denominated debt to reduce the currency risk associated with the bilateral exchange rate to which they are most exposed. Clark & Mefteh (2011) [14] provide evidence on the asymmetric sensitivity of stock returns of French firms to exchange rate risk and the effect of foreign currency derivative use in alleviating this risk. Using a two stage empirical framework to examine the effect of foreign derivatives use on the exchange rate exposure, they show that foreign currency is frequently asymmetric and differs with respect to the US dollar (USD) and non-USD currencies. Cross sectional analysis provides evidence that foreign currency derivatives use has a significant effect on reducing foreign currency exposure to appreciations and depreciations of non-USD currencies and depreciations of the USD, but not to appreciations of the USD.

The second considered category of studies (those focusing on management’s behaviour) positions us in the area of risk management literature which has increased significantly during the last decade. Marsden & Prevost (2005) [33] synthesize the theoretical component of this literature as showing that risk management can add value to the company, while the empirical literature describes the cross-sectional determinants of derivative usage and risk management. Furthermore, Marsden & Prevost (2005) [33] discuss how in general the findings
of the empirical and survey literature are consistent with the theoretical justifications of using derivative contracts to hedge. Their synthesis documents that corporate hedging and derivative usage can increase company value because of lowered contracting costs (Mayers & Smith, 1982 [37]; and Smith & Stulz, 1985 [42]), imperfect access to external capital markets (Froot et al., 1993 [17]), financial distress costs (Mayers & Smith, 1982 [37]; Smith & Stulz, 1985 [42]; Berkman & Bradbury, 1996 [6]; and Nguyen & Faff, 2002 [39]), reductions in agency costs (Mayers, 1987 [37]; and Bessembinder, 1991 [7]), and reduction in expected taxes (Mayers & Smith, 1982 [37]; Smith & Stulz, 1985 [42]; and Berkman & Bradbury, 1996 [6]).

Makar et al. (1999) [32] investigate how large US multinational companies use foreign exchange derivatives to manage currency risk. Their study tests whether a company's use of foreign exchange derivatives is associated with its exposure to changing exchange rates, and whether such risk management practices are affected by the company's degree of geographic diversification indicative of natural hedging. The employed research methodology includes ordinary least squares (OLS) regression estimates. The obtained results document that large companies' foreign exchange derivatives use increases with the level of foreign currency exposure as well as with the degree of geographic concentration indicative of using less natural hedging (Makar et al., 1999) [32]. Dhanani & Groves (2001) [15] use qualitative research methodology in examining the responses of multinational companies, their organisational structures, systems and managers to strategic exchange rate risk. They therefore document that the management of exchange rate risk as a whole appears to have been an evolutionary process with companies progressing gradually from the management of translation risk in the 1970s to that of transaction risk in the 1980s, and more recently to strategic exchange rate risk management (Dhanani & Groves, 2001) [15].

Rather than assuming that the relationship between a manager’s stake and corporate hedging is unequivocally positive, Spanò (2007) [44] focuses on the weaker hypothesis that managerial risk aversion is an incentive to deviate from the optimal hedging position. The study employs the use of binary probit multivariate analysis on the determinants of the likelihood to hedge and ordinary least squares (OLS) analysis on the determinants of the hedging position. Empirical results therefore allow the conclusion that the conflicts of interest between shareholders and managers are at the centre of the decision about the firm’s risk profile but are not relevant as determinants of the decision to hedge which is rather associated with factors enhancing the firm’s expected value (and shareholders’ expected wealth), namely, the alleviation of underinvestment problems, costs decreasing with the size of the firm and the possibility of reducing expected tax liabilities (Spanò, 2007) [44]. Furthermore it is documented that that managerial motivations are a strong incentive to change the firm’s risk profile and deviate from the perfectly balanced hedging position. Spanò (2007) [44] documents that risk averse managers whose wealth is directly affected by the firm’s value use hedging instruments in a suboptimal way, thereby systematically creating gains or losses, while managers whose wealth is only marginally affected by the firm’s value act in a more risk neutral way and their firms are closer to the perfectly balanced hedging position.

The adoption of the “euro” as common currency offered the opportunity to also examine the determinants of risk management in an environment where exposure to foreign exchange risk was considerably reduced. With the use of multivariate regressions, Capstaff et al. (2007) [10] therefore examine the impact of the euro on derivative use for a sample of French firms. Their results document that the decline in the use of foreign exchange derivatives was greater for firms with substantial sales within the euro zone and less for firms in industries that still had significant imports from outside the euro zone. Furthermore, the reduction in hedging was not in direct proportion to the reduction in foreign exchange exposure, implying that euro risk was hedged more intensely than French franc risk in the sample of French firms over the chosen years (Capstaff et al., 2007) [10].

We further find that studies looking at management’s behaviour are closely linked to the financial reporting process, studies documenting correlations with accounting practices and even changes in accounting regulations. For example Hughen (2010) [20] examines behaviour following a change in accounting treatment.
for derivative hedges by examining companies having to choose between maintaining stability in economic earnings but increase the volatility of accounting earnings and maintaining stability in accounting earnings but increase the volatility in economic earnings. She therefore documents a change in management behaviour following a change in accounting method, finding that firms’ historic abilities to meet earnings targets are positively associated with the likelihood that firms will focus on accounting earnings rather than economic earnings. The study’s methodology employs the use of the probit model. Marshall & Weetman (2007) [34] address the issue of transparency in financial reporting by comparing disclosures of foreign exchange (FX) risk management in financial statements and managerial information on foreign exchange risk management policy, as evidenced in questionnaire responses. Their study involves the use of regression analysis. They conclude that modelling and explaining the aspect of incomplete accounting disclosure in an international setting must be sufficiently flexible to accommodate national differences in managerial behaviour. Furthermore, considering their comparative study of US and UK firms they find incomplete disclosure in both samples but with differing aspects. This deduction is drawn from the particularities of their study, Marshall & Weetman (2007) [34] documenting, in the US case, that the information gap is lower where the information has higher relevance or firms with higher financial risk (greater leverage) are signalling the extent of risk, but the gap is greater where firms are in competitive product markets. Meanwhile, for the UK sample, the information gap is significantly lower where firms have higher financial risk or higher liquidity, but the gap is greater where the shares are more closely held (Marshall & Weetman, 2007) [34].

Moving forward towards the category of studies focusing on accounting regulations and accounting practices we find Ahmed et al. (2006) [1] documenting that investor valuation of derivative financial instruments differs depending upon whether the fair value of these instruments is recognized or disclosed. Based on a sample of banks that simultaneously held recognized and disclosed derivatives prior to SFAS No. 133, Ahmed et al. (2006) find that the valuation coefficients on recognized derivatives are significant, whereas the valuation coefficients on disclosed derivatives are not significant. Moreover, when using a sample of banks that had only disclosed derivatives prior to SFAS No. 133, which were recognized after SFAS No.133, their results document that while the valuation coefficients on disclosed derivatives are not significant, the valuation coefficients on recognized derivatives are significant. Ahmed et al. (2006) [1] therefore contribute to arguing for the view that recognition and disclosure are not substitutes. In terms of accounting for derivatives we have to mention an older study which we consider relevant in terms of providing an example of the analysis necessary to prepare and evaluate accounting for a derivative transaction. Cerf & Elmy (1998) do this through the logic developed in the case questions providing the ability to understand: (1) the international interest rate environment which motivates currency transactions; (2) foreign exchange rate risk; (3) how the cash flows of the currency swap interact with the cash flows of the debt to hedge the foreign exchange risk, (4) how entering into the currency swap mitigates currency risk, but exposes the company to counterparty credit risk and legal risk; (5) the attributes of accounting and reporting for the debt and currency swap as separate instruments or as a combined synthetic instrument; and (6) accounting for the currency swap at fair value.

9 Designing and Implementing Hedge Strategies
Debates following the recent financial crisis relate to a significant extent to strategic management failings stimulating the dramatic downturn in corporate and economic performance. This enhances the need for better risk management aiming to prevent strategic management failings and risk exposure. Corporate use of derivatives to hedge foreign currency exposure has become standard practice for firms with foreign operations or commercial interests (Clark & Mefteh, 2011) [14]. Furthermore we must not forget that developing and implementing a foreign currency hedging strategy requires a commitment of financial, physical, and human resources that can represent significant costs for the firm, as also discussed by Clark & Mefteh (2011) [14]. Understanding the nature of foreign currency exposure and further trying to optimize a strategy meant to reduce
it can only be done by considering the complexity of economic reality. We therefore need to consider exchange rates within their economic context that includes a series of economic factors (such as those mentioned by Clark & Mefteh (2011) [14]: relative prices, income, expenditure, interest rates, supply, and demand). Going back to considering the costs involved by developing and implementing a foreign currency hedging strategy, shareholders need to know whether hedging reduces exposure and adds value to the firm.

Fung & Leung (1991) [18] derive an optimal rule for hedging currency risk in a general utility framework by examining ex ante hedging performance of the forward markets through the use of optimal hedge ratio derived from the utility model and an optimal rule derived from another model (excess return per unit risk) suggested in the hedging literature. Interestingly, their results document that a naive (one-to-one) hedge performs similarly to the optimal hedge ratios under either model therefore suggesting that financial managers of multinational firms should simply follow a one-to-one rule when hedging foreign exchange risk in the forward markets. Intriguing results are also obtained by Chowdhry (1995) [12] when analyzing hedging policies for a corporation that generates a foreign currency cash flow that is not known with certainty. Chowdhry (1995) [12] documents that the probability of bankruptcy for a firm that attempts to minimize this probability is lower when there is some uncertainty in the exchange rates than when there is no uncertainty in the exchange rates: the firm reduces the probability of bankruptcy by borrowing more than its financing needs through foreign currency borrowing alone and by investing the excess funds in domestic risk-free securities.

Choi (2010) [11] compares the effectiveness of constant hedge and speculative hedge by focusing on the recent experience of major and minor currencies in order to establish whether there are any significant differences between both hedges. The obtained results document speculative hedge to be slightly more effective than the constant hedge in reducing currency risk, therefore suggesting that speculative hedge about major currencies can be a relevant hedging tool.

10 Conclusions and Discussions

Our analysis offers an accounting perspective to hedging currency risk from both a theoretical and practical perspective. The developed analysis documents risk management’s preoccupations in handling risk exposure to include the use of derivatives to hedge foreign currency exposure. A first part in our analysis documents the interest for hedging currency risk by looking at accounting research literature and its orientations. The analyzed papers ended up being included and presented within three main categories, as follows: capital market research studies, studies focusing on management’s behaviour and studies focusing on accounting regulations and accounting practices. The objective and results of each study are closely correlated with the category to which the study belongs. Interpreting the employed research methodology of the analyzed studies we can conclude that most of them are empirical studies relating to the positive accounting theory. This further adds to setting the research background for our study being done by reference to developments in accounting theory and particularly positive accounting theory. The second part of the study focuses on analyzing developments in companies’ practices and documents their approach towards managing currency risk is becoming more sophisticated and focused. When designing and implementing an effective foreign currency hedging strategy we must also relate to Smith & Stulz’s (1985) [42] positive theory of corporate hedging stating that the therefore generated costs can be justified only if imperfect capital markets create conditions where corporate hedging reduces exposure and adds value to the firm.

Literature even covers the context of environments where exposure to foreign exchange risk had been considerably reduced due to economic events such as the adoption of the “euro” as common currency for several European countries. Studies (such as Capstaff et al., 2007 [10]) document the foreign exchange derivative usage (even though in decline) despite the decrease in foreign exchange risk exposure. Furthermore, Capstaff et al. (2007) [10] document the reduction in foreign exchange derivatives usage was less than proportional to the reduction in foreign exchange exposure while the number of sample firms using foreign
exchange derivatives was virtually unchanged, which could reflect more intense hedging of the residual foreign exchange risk following the adoption of the euro, uncertainty caused by macroeconomic events, or the volatility and performance of the euro. Another fact being documented by Capstaff et al. (2007) [10] which we consider relevant for foreign exchange derivative usage is that the reduction in the use of foreign exchange derivatives was greater for French firms with a higher proportion of business within the euro zone.

The idea of companies disclosing information in relation to their risk management policies (our analysis focusing on the particular area of currency risk) as a management tool should also be considered. When managers choose not to disclose all the relevant information in their possession in their financial statements, there is an information gap between the managers and users and consequently a lack of transparency (Marshall & Weetman, 2007) [34]. We consider the possibility of opportunistic use of such a gap should not be underestimated. We finally argue for the necessity of developing an adequate system of surveillance and control measures related to currency risk exposure as a component of sound corporate governance policies. More precisely, we argue that companies’ use of derivatives to hedge foreign currency exposure should be coordinated through sound corporate governance mechanisms. Our proposal relates to Marsden & Prevost’s (2005) [33] results illustrating that internal governance mechanisms can play a role in corporate derivatives policy, and that the legislative and regulatory environment may affect this role.

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References


1 Introduction

Corporate governance is a subject of constant timeliness and broad interest, mainly aimed at ensuring adequate protection for investors and financial institutions. This interest in corporate governance is due to its influence on the healthy growth of companies and society as a whole. The concept of corporate governance has many definitions, because of the complex elements it covers. Basically, corporate governance is the system which companies are directed and controlled by. Corporate governance structures specify the distribution of rights and responsibilities to the different direct and indirect participants in the work of the company or institution (executives, managers, employees, shareholders, customers, funders) as well as the rules and procedures underlying the decision-making process, the establishing of objectives and the methods of achieving and monitoring performance.

The monitoring and management function should be fulfilled within each credit institution. The supervisory authority (Romanian National Bank) will check if the credit institutions have established their decision-making process in terms of hierarchy and responsibilities, according to regulations.

In order to implement an effective corporate governance to manage banking risks, the governing structures of a credit institution have as main tasks the following:

- providing the implementation plan for the IRB approach (internal-rating based) on the most important exposure categories;
- developing the methodology for internal risk rating process;
- identifying and evaluating the events that generate risks;
- monitoring and managing potential sources of conflict of interest;
- establishing responsibilities for the risk control unit and professionally evaluating the staff.

Corporate governance system takes into consideration the following:

- the permanent monitoring of the credit institution activities, the institution's management and the risk control personnel should having to regularly meet to discuss their performance, the areas that need improvement and, not least, the state of the previously identified weaknesses;
- the existence of a risk control unit within each credit institution to carry significant risk control function;
providing an overall assessment on the adequacy of the internal control system and on the banking risk control function by the internal audit;

- the existence of an internal reporting system, which varies depending on the nature, size and degree of complexity of the credit institution and which is based on the analysis of the institution’s risk profile.

**Figure 1.** Corporate governance components

![Diagram of Corporate Governance Components](image)

Source: NBR

After the year 2000, corporate governance failures in the financial and banking system stood out, having a strong impact on the society’s level of confidence in the credit institutions. Three significant problems stand out according to this point of view:

- imbalances in reward structures;
- neglect of fundamental values by investors and executive management;
- manager’s lack of accountability for their actions.

**Reward structures.** The trend is to include reward structures as part of banking risk management, by providing incentives for the implementation of the deferred compensation plans. According to them, the employee is immediately rewarded with part of the bonus only, the difference being paid after a certain period of time (e.g. one year), when the performance of his work can be confirmed. Another option circulating proposes connecting bonuses and annual awards to certain profit indicators adjusted with the risk.

Core values have changed significantly in recent years, due to the increasingly sophisticated demands, the credit institutions diversifying their activities. Thus, a global risk was generated and because of the claims for even higher profits, the client portfolio has increased. However, human relationships began to lose their original values, because each client was perceived as a quick source of profit rather than a long-term partner. The 2008
financial crisis highlighted even more these problematic issues, often resulting in not understanding their customers, their needs and perspectives.

The responsibility of employees and managers is a new increasingly recognized trend and is based on educating people with regard to the financial and banking system, the products and services it offers, by government and credit institutions.

The basic concept of effective management is based on the idea that risk management is the responsibility of every employee of the credit institution, on every level and functional line. Banking risk management must become a fundamental part of the institution’s culture, in addition to respect for the value system and for information.

2 Basel I Accord Standards and Objectives

The 1988 Basel Agreement established the criteria to be considered for determining the optimal size of a bank's capital and the minimum level of capital that a bank needs to have. The formula set by the Basel Agreement in 1988, simply called Basel I provides precise criteria for capital adequacy. It is important for a bank to have a solid financial basis, to protect it from insolvency. If a bank has a loan portfolio with a high degree of risk, it needs to make sure that it has sufficient financial resources to protect itself in the event of bad loans. Also, a large capital basis protects depositors and maintains their confidence in the bank, being sure that they will not lose money if the bank losses from other activities.

Following the Basel I Agreement, banks in most countries comply with regulations on capital adequacy. This eliminates a certain type of competition, as respecting this requirement restricts banks' ability to attract new customers by simply increasing the volume of granted loans.

According to the Basel I Agreement regulations, banks must have their 1st rank capital proportionate to their assets weighted with the risk at a minimum of 4%, and their 2nd rank capital of minimum 8%. Currently, most banks in developed countries have a capital adequacy index of at least 10%, the most well capitalized reaching 12%. N.B.R. regulations in the field of capital adequacy foresee a minimum index (solvency ratio) of 8%, which is calculated by dividing the equity of banks to the assets (balance-sheet and off balance-sheet) weighted according to risks.

A banking institution’s own funds consist of the following categories of capital:

- equity, consists of the paid-in capital, bonus shares, provisions, retained earnings, tangible assets, development fund and other reserves;
- additional capital, which consists of the general reserve for credit risk, subordinated loans, other funds.

In accordance with Basel I, R.N.B. established the following risk percentages on asset categories in the balance sheet: 0% for cash and deposits with R.N.B.; securities issued by the Romanian central administration and other A countries, international financial institutions, central banks of A countries; loans and cash advances granted to the Romanian central administration and other A countries, international financial institutions, central eligible participants in the country from category A; other claims on the central Romanian government and other A countries, international financial institutions, central countries, international financial institutions, central banks of A countries; 20% for checks, coupons and other items in collection; securities issued by the Romanian banks, A countries banks, local administration in Romania and A countries; loans and cash advances granted to the Romanian banks, A countries banks, B countries banks with date of payment in one year or less, the local government in Romania and other A countries, governmental organizations in Romania and other A countries; cash and deposits in Romanian banks, A countries banks, B countries banks with date of payment in one year or less; other claims over the Romanian banks, A country banks, B country banks with payment day in one year or less, the local government in

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Romania and other A countries, government organizations in Romania and other A countries; 50% for loans and cash advances to customers, secured by mortgages on lands and buildings owned by the banking company, for its activity purposes; the total exchange rate position is short; 100% for other securities, other loans and cash advances, equity ownership in financial institutions and other non-banking entities, other tangible assets, other assets. The R.N.B. also specifies the conversion factors for off-balance sheet elements in credit equivalent as well as the risk percentages on the types of beneficiaries.

The bank insolvency issue has become the subject of debate in the international banking world. Thus, in 1988, the Basel Committee on banking supervision issued a set of rules on capital adequacy standards adjusted for risk. These rules took into consideration reducing the risk by setting a minimum rate of solvency for the international financial and banking institutions. The main objective of the Basel I was to improve bank capitalization and to standardize the action field of competing markets, against insolvency or unexpected losses.

Since 1998, directives of the European Union on financial assets require that activities of financial and banking institutions be divided into two categories: actual financial and banking activities and commercial activities. The first category aims for the main activities of the bank, while the second category refers to the times when banks trade assets on their own on any stock market. European Union directives lay down a method for calculating the risk exposure of the bank during transactions that are highlighted in its record keeping. This is done by updating the market value of their daily positions results, which means calculating the difference between the expected earnings for the original transaction and the cost of acquiring an equivalent transaction the same day.

After the Basel I system was applied, the need to improve its stipulations emerged, due to the complexity of risks in the financial markets. Given this conclusion, derived from the practical application of Basel I system, the central banks governors and heads of bank supervisory authorities in the European Union countries, approved on 26 June 2004, the final version of Basel II.

3 Corporate Governance: Essential Requirement of the Basel II Accord

The publishing of the new own funds adequacy system "International Convergence of Capital Measurement and Capital Standards" is the result of the Basel Committee’s activity, which began in 1998. The first Basel Accord was therefore amended in 1996 to allow banks to use internal models for market risks. The agreement became an international principle, for the setting of capital standards, being implemented in over one hundred countries. But its conceptually simple rules became increasingly obsolete for a very complex international banking system in terms of risk management and transactions.

The consultation process continued internationally, with the participation of supervisors, central banks, public authorities and banking and financial institutions. Following these consultations, the Basel Committee issued additional proposals for international consultation in January 2001 and April 2003 and developed three studies on the possible impact. Following the publishing of these studies, they modified the original proposals and approved the new agreement of own funds adequacy for financial and banking institutions in June 2004.

The final version of Basel II, global regulation that establishes a direct link between the equity of financial institutions and the risks they take, was issued at the end of June 2005. Changes from the previous version are notable and banks immediately began to prepare implementation strategies for the new form of the agreement. For banks in Central and Eastern Europe, the implementation of Basel II was a test of their ability to integrate into a wider financial market, European and then global.

The important economic and political changes experienced by the countries of Central and Eastern Europe (CEE) at the time constitute a unique background for the implementation of Basel II. The group of ten joining
the European Union in May 2004, and then Romania and Bulgaria in 2007, as well as the strong economic growth in recent years encouraged international banks to create networks in the area.

In addition, the local market has a great potential: it is still under-banked and the demand for financial products increased dramatically, especially in 2003 and 2004. Banks’ retail divisions had high growth rates, and forecasts indicate that this trend will continue in the future. Consumer credit increased by 300% in 2003 compared to 2002. Banking infrastructure is also growing by creating credit bureaus. Therefore, a large share of national bank assets is held by regional or international scale banks. The largest banks in CEE countries are already held by international banks and the process continues with privatization of banks in Albania, Bulgaria and Serbia.

Basel II is a true catalyst for the development of the regional banking market. The European Directive on Capital Adequacy (CAD III) requires that all active banks in the European area implement the agreement until 2007. But in many countries in the region, risk management is not at a very advanced level. Policies and risk management models must be much improved to reach the level of the large banks that use their own internal risk models. If trading volumes or risks presented by the regional branches of international banks are not very important, a more flexible implementation of the Basel II may be chosen with the consent of the national regulator. The main purpose of the Basel II implementation: CAD III will strengthen the Basel II adoption in those CEE countries which are also members of the European Union. CAD III, which will set provision standards for all financial intermediaries, will contribute to the harmonization of the European financial market.

Risk management infrastructure in CEE countries is growing from a very low level and foreign banks must make significant efforts to raise this level. For example, the comparatively low trading volumes and lack of historical data makes it difficult for a risk assessment model to be applied. Other problems to be overcome are slow data processing and bureaucracy. In addition, reduced volumes lead to extension of the hardware investment amortization, at least in the short run.

Some international banks have already implemented risk management practices within corporate governance, especially the ones consistent with the transparent collection and processing of data. Although these projects required significant investments and lasted between two and three years, the result was the implementation of flexible and reliable solutions and a first step towards meeting the requirements of the IRB (Internal Rating Based Approach) model. There are a number of factors that encourage national banks to adapt Basel II as soon as possible. First of all, a bank about to implement Basel II is more attractive to potential foreign investors and it can obtain a higher price for its shares. Also, it can easily integrate into a global network. Secondly, after applying Basel II national banking markets will become more competitive, although there is a risk of greater sensitivity to external shocks. On the other hand, one must also take into consideration the fact that the 2008 global economic collapse began to generate question marks when it comes to the effectiveness of the risk management in credit institutions under Basel II system.

4 Issues of the Basel II Requirements Implementation in Romania

The Basel II capital agreement, adopted by the Basel Committee in 2005, is not an imperative regulation for the national banking systems. However, the Basel Committee’s regulations are picked up in international or national standards that are mandatory to apply. It is also the case of the Basel II, picked up by the European Directive, commonly known as CAD III (Capital Adequacy Directive). CAD III has the Banking Consolidation Directive 2000/12/EEC and the Directive for Capital Adequacy of investment companies and credit institutions 93/6/EEC, reconfigured. In the European Union countries, CAD III was implemented starting with 2007 [3].

Once Romania joined the European Union, the preparation of the banking system in order to implement the specific Basel II standards, started. At first, the Romanian banking system, through the decision takers of the central bank and credit institutions, had to understand the stipulations of the new agreement. The next step was to relevantly assess the banking system’s development stage, and last but not least, to configure and implement
a coherent set of measures in order to adapt the domestic banking system, allowing the application of Basel II system.

The main feature of the new agreement is capital adequacy within credit institutions. In the field of capital adequacy, during the first half of 2006, credit institutions in Romania started applying the national legislation which assumed the stipulations of Basel I agreement, in place since 1988. Banking companies active in Romania, in their capacity of credit institutions, are required to maintain at all times the solvency ratio at a minimum of 12%.

The solvency ratio expresses own funds, as a proportion of total balance-sheet and off balance-sheet assets, net of provisions, adjusted to the risk. The minimum solvency ratio established in our country is higher than the 12% established by the Basel I, which shows an attitude of caution from the regulatory authority in the field.

According to the 2008 Annual Report of the National Bank of Romania, with respect to the solvency of the banking system, the solvency ratio has slowed down its descending trend, its level being at 12.30% at the end of 2008, because of capital increase in credit institutions and reduction of government credit. This remains above the minimum requirement, which is 12%.

In national law, the National Bank of Romania Norm no. 17/2003 regulates the management of key banking risks, in accordance with Basel II. This norm stipulates organization and internal control of credit institutions and managing of the significant risks, as well as the organization and internal audit of credit institutions. The regulatory act defines significant banking risks, presents the benchmarks of the internal control system and internal audit that banks must organize. Credit institutions must organize a system of internal control which should identify and assess significant risks.

Identification and evaluation of significant risks should be made at an overall level of a credit institution as well as at all its organizational levels, it must cover all activities and take into account the emergence of new activities. In terms of international provision, the second part of the Basel II Accord presents the calculation of the minimum capital required from the banks, depending on credit risk, market risk and operational risk. Moreover, the new agreement introduces the concept of operational risk, insignificant in the preceding foresights.

Actions taken by the National Bank of Romania show that the central bank understood the rules of the Basel II system as being complicated and has set up an action plan to meet the challenges of Basel II. The central bank made its concerns in the field public, and established a timetable for implementing the proposed actions.

Understanding the state of the Romanian banking system was the first thing that the central bank established in its priorities as the main pawn of the Basel II in Romania. Being a national banking supervisory authority and having within reach the informational levers with credit institutions, the central bank was able to establish information requirements for banks to report with respect to the current procedures available in the field of risk management. Also, the banks were required to come up with options as to the type of approach they would like to implement in the field of risk management according to the Accord [3].

According to the choices made by the banks in November 2005 in terms of choosing the methods for addressing credit risk, 30 banks opted for the standardized approach, 2 banks for the foundation internal rating-based approach, none for the advanced internal rating-based approach and two banks were not decided at the time. As for the bank’s options on operational risk specific approach, 17 banks opted for the basic indicator approach, 13 banks for the standardized approach, 2 banks for advanced measurement approach AMA and two banks did not decided at that time.

The National Bank of Romania established a Steering Committee in the field of Basel II, composed of The Ministry of Public Finance, The National Securities Commission and The Romanian Association of Banks, institutions which have an impact on the activity of banks [3]. This board is based on the information support
coming from the experts of the European Commission, who were consulted to facilitate preparations. The National Bank of Romania presents as following the regulations on the implementation of Basel II in Romania, organized into three pillars:

**Table 1. Structure of the Basel II Accord**

<table>
<thead>
<tr>
<th>1st Pillar – Minimum capital requirements</th>
<th>2nd Pillar – Capital adequacy supervision</th>
<th>3rd Pillar – Market discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible and advanced rules for determining minimum capital requirements for: • credit risk: - standardized approach; - Internal Rating Based Approach - IRB - foundation or advanced version • market risk • operational risk - basic indicator approach; - standardized approach - advanced measurement approach (internal models)</td>
<td>- Active role of the supervisory authority in evaluating banks’ internal procedures regarding capital adequacy to the risk profile; - Checking banks’ internal procedures by the supervisory authority; - Requiring that credit institutions maintain capital in excess of the minimum level indicated by Pillar I; - Implementation of early NBR intervention mechanisms.</td>
<td>More detailed reporting requirements towards the NBR and as a novelty, towards the public, regarding: • shareholding structure • risk exposure • capital adequacy to the risk profile</td>
</tr>
</tbody>
</table>

Source: NBR

In conclusion, the implementation of Basel II should lead to the development of the rating agencies, statistical databases and econometric methods for grounding internal models of the banks. As emphasized by Nucu (2011) [4], Basel III, representing a fundamental review of the regulatory and supervision framework of the banking industry in the future, its aim being to strengthen the stability of the financial system, nowadays represents a new challenge for the Romanian banking system. The implementation of the directive on the capital agreement Basel III will be phased in from January 2013 for the European banking system. The process is expected to be concluded by January 2019. The requirements will be introduced in the EU through the Capital Requirements Directive (CRD) 4, which applies to all EU member states. In this regard the Romanian Banking Association (ARB) has set up a commission on Basel III to implement it, make propositions and seek clarifications (Posirca, 2012) [5]. Our historical analysis contributes to developing an overview on Basel developments and encourages further investigations into the particularities of the Basel III which is soon to be put into practice.
References


Globalization and Governance in the International Accounting Arena

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1 Introductory Thoughts on Accounting in Relation To Globalization

Globalization is defined by previous studies through a large variety of approaches, from simple views that consider it to represent “the extension of social relations over the globe” (Mann, 2001, p. 51 [8]) and “economic processes of internationalization”, global referring to “the expansion of trade and commerce between countries” (Lehman, 2005, p. 976) [7]. The later approach is very similar to Hirst and Thompson’s (1996, p. 48 [4]) definition referring to “large and growing flows of trade and capital investment between countries”. More elaborate versions define globalization as “the widening, deepening and speeding of worldwide interconnectedness in all aspects of contemporary social life, from the cultural to the criminal, the financial to the spiritual” (Held et al., 1999, p. 363 [3]) and “an inherently temporal process whose history—arguably a very long one (Hopkins, 2002 [5])—either puts at risk, or requires specification of, any claim to novelty” (Poullaos, 2004, p. 716 [12]).

Gallhofer and Haslam (2006, p. 906) [2] document that globalization in effect equates to the governance of a problematic hegemony and shapes a context witness to related problematic processes and outcomes. All approaches and definitions arising during history in order to better characterize the process of globalization point its interdisciplinary coverage. Poullaos (2004) [12] acknowledge how Held et al. (1999) [3] documented the expansion beyond the national and regional levels of governance mechanisms, trade, markets, financial flows, production networks, migration, organized violence and environmental degradation, in conjunction with “a series of decisive shifts in the geographical scale, immediacy and speed of cultural interaction and communication” (Held et al., 1999, p. 363 [3]).

While globalization processes have not been found to act uniform or unidirectional, both when considering space and time dimensions, Held (1999) [3] still provide convincing evidence of a tendency towards a “thick globalization” taking place during the last half of century. The authors document this tendency as being

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31 The content of this chapter is based on papers that were presented at the 5th WSEAS International Conference Economy and Management Transformation - Timisoara 2010 (Mustata et al. 2011) and the 8th International Conference European Integration – New Challenges – Oradea 2012 (Bonaci et al. 2012) and included in the corresponding conference proceedings.
characterized by high extensity, intensity, velocity and impact. Poullaos (2004, p. 717) [12] presents extensity, intensity, velocity and impact as “dimensions along which to track how what happens here affects what happens there, and vice versa”. The dynamic of the interaction then becomes complicated because in some circumstances we might think about analyzing here and there in conjunction, as forming a global object of analysis. Furthermore we inevitably ask ourselves exactly what kind of object have we formed, the relation between the components of our new object most surely becoming problematic.

A fair list of globalization’s negatives can easily be found in critical accounting research and includes: economic re-structuring and volatility, fore some meaning increased poverty, social inequality, job and pension loss; facilitation of massive frauds; possibility of developing elaborate tax avoidance schemes generating a retreat from progressive taxation and welfare statism; global trade regimes working against the poor in poor countries, therefore enhancing the rich-poor divides; and posing threats to traditional cultures. Increased global ecological awareness is also considered by some to have increased insecurity, while increased economic activity and re-structuring can contribute pollution and exert some downward pressure on environmental as well as social standards (Gallhofer and Haslam, 2006) [2]. Smaller nation state can become constrained by global capital flows, economic and systemic interdependency and the power of big business.

Gallhofer and Haslam (2006) [2] on one hand summarize what are commonly understood as negative dimensions of globalization, which they see as a political, economic, technological and cultural process, characterized by the growth and spread of suprastatism, supranationalism or supraterritoriality (Gallhofer and Haslam, 2006, p. 905) [2]. On the other hand, they acknowledge that globalization is a dialectical context, a context of tension and contradiction, wherein lies much of its positive potentiality. Therefore, some critical researchers take globalization positively by accepting the fact that within its developments and context there is also potential for progressive and emancipatory change.

As Poullaos (2004) [12] was noting, the word “globalization” or its derivatives are for some time now being used when approaching broad topic areas including: the academy and pedagogy; post-modernism; capital markets; the critical accounting project itself; transfer-pricing; the future and nature of work; privatization and the public sector; the accounting profession; and accounting practice. Analyzing accounting in relation to globalization makes it possible for us to asses to what extent does globalization allow, facilitate, call and engender the need for an emancipatory and enabling accounting (Gallhofer and Haslam, 2006) [2].

2 Trends in Accounting Harmonization Research
The accelerating pace of globalization also led to the appearance of a significant number of free-market global accounting institutions, while analyzing the demand for international accounting regulation still brings difficulties. Hopwood (1994) [6] urges researchers to consider international accounting with all its implicit processes and impacts. The free market international accounting reform can be looked at as part of a problematic globalization process. Lehman (2005) [7] goes further and challenges international accounting research to focus on accounting impacts which are associated with governance and harmonization processes. The dominant model of harmonizing international accounting is considered to be based on decision-usefulness accounting assumptions. Therefore, entities should be able to continue their operations if they achieve efficient and effective outcomes (Peter and Waterman, 1984 [11]; Watts and Zimmerman, 1986 [13]; Lehman, 2005 [7]).

Critical accounting nevertheless brings its own vision on how it might help the understanding of accounting harmonization, its dynamics and processes. It is brought to our attention that international accounting can be characterized by a very skillful orchestration of the world-wide lobbying pressures of the audit industry that have the power to control agendas and create technologies of control (Hopwood, 1994, p. 245 [6]). Gallhofer and Haslam (2006) [2] also worry over the fact that in the context of the universalistic forces shaping corporate
accounting, even the alternative corporate social accounting being strongly promoted through the UN’s Global Reporting Initiative (GRI) and the Institute of Social and Ethical Accountability’s (ISEA’s) global initiatives can be influenced by the problematic mainstream.

Coming back to posing the accent on the positive, critical accounting researchers come to conclude that the accounting harmonization process has the ability to facilitate more progressive global democratic governance (Calhoun, 1996 [1]; Hopwood, 2003 [6]; Gallhofer and Haslam, 2006 [2]). Those questions being raised in order to clarify the global object of analysis, this being created through the accounting harmonization process as a result of the interactions taking place, ironically generate significant concerns on valued differences.

If we are to further focus on the literature dealing with accounting harmonization we must make reference to Nobes (2004) [10] who showed that starting with the mature period (1990-2004, according to Mustata, 2008 [9]) in the development of this category of studies, two major groups of researches can be observed. One would focus particularly on analyzing the international accounting harmonization process, while the other on measuring the harmonization degree. It is the first group that better suits the above discussed type of research, raising a series of questions that have revelatory power. Meanwhile, results being obtained through those studies that aim at measuring accounting harmonization must also be interpreted and analyzed within a more complex setting that considers all implicit processes and impacts.

3 Historical Evolutions and Landmarks in the International Accounting Arena

It is a well known fact that national differences impact upon national accounting systems, accounting research literature identifying a series of reasons for differences in the financial reporting process, including the character of the national legal system, the way in which industry is financed, the relationship of the tax and reporting systems, the influence and status of the accounting profession, the extent to which accounting theory is developed, language, etc. On the other hand, economic realities closely linked to the globalization process encourage us to aim the diminishing of such differences. In this regard literature offers the option of the standardization approach (referring to rules to account for similar items in all countries) and the harmonization approach (aiming to provide a common framework while allowing for some different national approaches). The therefore generated benefits would mainly relate to permitting greater comparability and reducing training costs for the accounting profession on the long run.

A significant role under the given circumstances belongs to accounting standard setting bodies based on their accountability for the accounting standards’ (financial reporting standards’) due process. When positioning our analysis in the international arena we implicitly relate to the International Accounting Standards Board (IASB), former International Accounting Standards Council (IASC). Furthermore, we must also relate to the Financial Accounting Standards Board (FASB) as being the regulatory body for the world’s largest economy, the United States (US) representing an attractive source of capital for foreign companies. This also takes us to the Securities and Exchange Commission closely monitoring the accounting standard setting process in the US. Looking back on the relation between the IASB and the FASB, we consider it safe to assess that there was always an apparent competition for international supremacy between the two accounting standard setters and the corresponding regulations which they issue (namely the International Financial Reporting Standards – IFRS (including the International Accounting Standards -IAS) and US Generally Accepted Accounting Principles – US GAAP). Despite such potential competition, the above mentioned process of globalization also impacted their relation due to the manifestation of a need for accounting harmonization. Perhaps a more suitable term when discussing the IASB and FASB would be accounting convergence. Following such a purpose, the IASB and FASB signed in 2002 what we all know as the Memorandum of Understanding (MoU - The Norwalk Agreement, September 2002), both Boards acknowledging their commitment to the development of high-quality, compatible accounting standards that could be used for both domestic and cross-border financial reporting.
While US GAAP were perceived as high quality accounting standards until the 21st century, it was the large US bankruptcies that became known worldwide (Enron, Parmalat, WorldCom) that also brought doubts with regard to the accounting regulations that would allow for such manifestation without signaling stakeholders. It was also at the beginning of the 21st century that the European Union (EU) started negotiations in order to adopt a set of accounting regulations. Considering the negative impact of the previously mentioned bankruptcies taking place under the watch of the FASB, but without forgetting the IASB’s flexibility in the negotiation process, it therefore becomes easy to follow the EU’s decision. It was Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards and Regulation (EC) No 1725/2003 of the European Parliament and of the Council of 29 September 2003 on adoption of certain international accounting standards in accordance to Regulation (EC) No 1606/2002 that became landmarks in the evolution of the accounting standard setting process in the international arena. In accordance to these regulations, consolidated financial statements of companies listed on EU capital markets had to be filed in based on IFRS starting with year 2005.

This can of course also be easily seen as one of IASB’s victories over the FASB. The following was to come in 2007 when the SEC and the FASB were recognizing IFRS for the purposes of foreign companies listed in the US (mentioning that this applied only to IFRS as issued by the IASB since the SEC was not at all pleased with the IAS 39 carve out that the IASB accepted under European lobby). Things were looking quite promising for the IASB, considering the fact that by the end of 2007 IFRS were used in more than 100 countries round the world. It was through a subsequent MoU (September 2008) that the FASB and the IASB agreed that a common set of high-quality, global standards remained their long-term strategic priority and established a plan to align the financial reporting of US issuers under US GAAP with that of companies using IFRS. Very soon (November 2008) the SEC issued a proposed roadmap that included seven milestones for continuing US progress toward acceptance of IFRS.

Evolutions in the international arena started storming and it was only turbulent times that were able to slow things down. The 2007-2009 financial crisis determined shareholders to also question the high quality of IFRS considering that this time it happened under the watch of both the IASB and the FASB. It was in 2011 that the SEC should have decided whether to incorporate IFRS into the US financial reporting system for US issuers, and in case of deciding so, when and how. In early January 2012 Schapiro was promising a decision in the next few months, adding that there are some challenges that have to be addressed before the SEC will be comfortable making the ultimate decision (see IFRS USA).

Positioning our study under the above discussed setting, the purpose of our chapter is to develop an analysis that would help assess further developments of the convergence project. This is done by looking at the current status of the projects being developed under the IASB –FASB collaboration as well as by developing a comparison between IFRS and US GAAP. The employed research methodology relies on analyzing data provided through the IASB and the FASB’s websites, as well as other official documents being issued by the two Boards. The developed analysis comprises two parts. The first focuses on the actual stage of the IASB-FASB collaboration in terms of undertaken projects. The assessment of the projects was done by reviewing exposure documents and monitoring the Boards’ deliberations. The second part of the analysis develops content analysis of IFRS and US GAAP in order to establish differences without considering their impact in practice, which would be more difficult to assess. Developing the comparison between IFRS and US GAAP is done based on accounting regulations content analysis.
4 The IASB-FASB Collaboration: Recent Stage of Projects
When looking at projects which the IASB and the FASB undertook in their collaboration when considering the accounting standard setting process we have to consider both the MoU and their other joint projects. The two accounting standard setting bodies issued the MoU in 2006 and further updated it in 2008 with the purpose of identifying the accounting standard setting projects that they considered to mostly require improvement in the near-term. The MoU included both short-term projects and longer-term projects. Establishing the two Boards’ priorities was mainly done by considering the purpose of increased convergence between IFRS and US GAAP as well as higher quality for the two sets of accounting standards. The manner in which the Boards considered it suitable to do so primarily related to the development of new standards. We will further synthesize the longer-term projects based on their status:

Table 1. MoU longer term projects

<table>
<thead>
<tr>
<th>Completed</th>
</tr>
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<tbody>
<tr>
<td>Business combinations</td>
</tr>
<tr>
<td>Fair value measurement</td>
</tr>
<tr>
<td>Post-employment benefits</td>
</tr>
<tr>
<td><strong>Project scope reassessed</strong></td>
</tr>
<tr>
<td>Derecognition</td>
</tr>
<tr>
<td><strong>Re-exposure of proposals</strong></td>
</tr>
<tr>
<td>Insurance</td>
</tr>
<tr>
<td>Leases</td>
</tr>
<tr>
<td>Revenue recognition</td>
</tr>
<tr>
<td><strong>Redeliberation of exposure draft</strong></td>
</tr>
<tr>
<td>Insurance</td>
</tr>
<tr>
<td>Leases</td>
</tr>
<tr>
<td><strong>Reassessed as a lower priority project</strong></td>
</tr>
<tr>
<td>Financial statement presentation</td>
</tr>
<tr>
<td>Financial instruments with characteristics of equity</td>
</tr>
<tr>
<td>Intangible assets</td>
</tr>
<tr>
<td><strong>Differentiated on project elements</strong></td>
</tr>
<tr>
<td>Financial instruments: classification and measurement, impairment, hedge accounting, and balance sheet offsetting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidations</td>
</tr>
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Source: authors’ projection based on information available on IASB’s and FASB’s website

If we are to select the projects that are considered to have greater priority, we have to make reference to financial instruments, revenue recognition and leasing, all requiring the Boards final decision regarding technical aspects. We will further synthesize the two Boards’ collaboration on these topics, all representing active on-going MoU projects.

With regard to the financial instruments project (which includes the elements mentioned within the above presented table), the two Boards aim the issuance of converged standards, but actual timing and phasing in their development was differentiated. The IASB chose to consider each of the above mentioned elements of the project as a separate phase which is approached under the development of IFRS 9 Financial Instruments. Meanwhile, the FASB initially approached the project by considering the following two phases: classification and measurement, impairment, and hedging; and balance sheet offsetting. Offsetting represents a significant
aspect due to the fact that the different requirements result in a significant difference between amounts presented in statements of financial position prepared in accordance with IFRS and amounts presented in statements of financial position prepared in accordance with US GAAP, particularly for entities that have large amounts of derivative activities. Despite the fact that the Boards jointly issued the exposure draft on offsetting in January 2011 (proposing changes to address the differences between IFRS and US GAAP), it seems like the received feedback encouraged them to continue further with different offsetting models. Still, considering the fact that users consistently asked that information be provided to help reconcile differences in the offsetting requirements between IFRS and US GAAP, the Boards decided to work on converging disclosure requirements to assist users in this regard.

As seen from the above presented table, in June 2011 the revenue recognition project was considered to require re-exposure (despite their due process requirements stating that re-exposure was not required) of the proposals due to the special nature of revenue. The two Boards had previously published a joint discussion paper (in December 2008) and a joint exposure draft (in June 2010) related to revenue from contracts with customers. The leasing related project was also included in the re-exposure of proposal category. After jointly publishing a discussion paper (in March 2009) and a joint exposure draft (in August 2010) related to leases, it was in July 2011 that the two Boards decided to re-expose the revised proposals due to the fact that up to date decisions were significantly different when compared to the exposure draft, and therefore required re-exposure. A more detailed content analysis of IFRS and US GAAP will further be developed within the following section with the purpose of providing the synthesis of such a comparison.

### 5 Where Are We Today? Synthesis of IFRS and US GAAP Comparison

We will further synthesize the results of the developed comparison between IFRS and US GAAP by considering specific areas and factors that are relevant for the convergence process nowadays still under debate.

**Intangibles (IAS 38 and ASC (Accounting Standards Codification) Topic 350):** require initial capitalization of acquired intangibles and preclude the recognition of most internally-generated intangibles. While IFRS allow entities to elect between the cost model and the revaluation model, US GAAP requires the cost model for all intangible assets within the scope of ASC Topic 350, the revaluation model therefore not being permitted. Still, practical implementation of the revaluation model is perceived to be limited even under IFRS due to the existence of several restrictions (fair value needs to be determined by reference to an active market, and the revaluation must be kept sufficiently up-to-date so that the carrying amount of the asset does not differ materially from its fair value).

**Research and development (IAS 38 and ASC Topic 730):** IFRS require capitalization of development costs under given criteria, with costs incurred before the criteria being met having to be expensed as incurred; meanwhile US GAAP require research and development costs to be expensed as incurred, with the exemption of computer software development that requires capitalization under criteria that is similar to those in IFRS.

**Property, Plant, and Equipment (IAS 16 and ASC Topic 360):** require initial capitalization at an amount based on cost and subsequent depreciation of the capitalized asset, with impairment tests being required in case there is an indicator of impairment. While we notice general consistency between the principles of IFRS and US GAAP, there are some differences with regard to definitions and mostly in detailed guidance. SEC exemplifies what it considers some of the potentially more significant differences including: asset depreciation, remeasurement of residual value, option for revaluation, impairment and impairment reversals. Investment Property represents another area that might generate differences due to the fact that IAS 40 Investment Property allows the use of the fair value model and the cost model (based on the entity’s election) while US GAAP only allows for the cost model (unless the entity meets the criteria of an investment company measuring its assets at fair value).
Inventory (IAS 2 and ASC Topic 330): require initial recording at cost and subsequent testing for impairment by reference to a market-based value. Among the significant differences we would mention: IFRS require inventory to be carried at the lower of cost or net realizable value while US GAAP requiring the lower of cost or market; IFRS require reversal of inventory impairments in the period in which an impairment condition reverses while US GAAP precludes a reversal of previous inventory write-downs; US GAAP permit the use of LIFO (last-in, first-out) method which is not permitted under IFRS.

Cash and Cash Equivalents (IAS 7 and ASC Topic 305): similar principles (such as cash equivalent instruments requirements: short-duration, highly liquid, and readily convertible to cash), IFRS articulating certain requirements in a less prescriptive manner than US GAAP.

Liabilities (IAS 39 and ASC Topic 405): mainly consistent accounting guidance for the extinguishment of liabilities. US GAAP offer application guidance for circumstances which are less (or not at all) covered under IFRS (such as transactions, transfers of noncash financial assets in settlement of a creditor’s receivable).

Contingencies (IAS 37 and ASC Topic 450): require that loss contingencies are recorded when a future economic outflow is probable, with the term probable itself being defined differently (IFRS: more likely than not to occur, US GAAP: the future event or events are likely to occur), but allowing similar interpretations (more than 50%).

Share-based Payment (IFRS 2 and ASC Topic 718): include similar share-based payment models requiring fair value measurement. Significant differences can be noted in relation to the classification of share-based payment awards.

Foreign Currency Related Aspects and Inflation (IAS 21 and ASC Topic 830): require translation of financial statements of foreign operations into the reporting currency, with recognition of the effects of changes in exchange rates in other comprehensive income and remeasurement of foreign currency transactions into the entity’s functional currency with impact upon income; operating in hyperinflationary economies imposes special accounting. SEC (2011) emphasizes some significant differences including exchange rates for translation, cumulative translation adjustment and impairment, translation of entities with multi-level organizational structures, monetary items forming part of net investment in foreign operation, application of highly inflationary accounting, and cessation of highly inflationary accounting.

Risks and Uncertainties (IAS 1 and ASC Topic 275): include similar principles, but US GAAP present more particular disclosure requirements that are not required under IFRS. Main differences that might generate differential disclosure are linked to vulnerabilities due to certain concentrations and estimates and uncertainties.

6 Concluding Remarks, Limitations and Research Perspectives
The above presented synthesis represents a selection of topics that were approached and could further be developed by enlarging the list of analyzed topics. We consider this to represent both a limitation of our analysis and an opportunity for its future development. Another limitation of aiming to develop a similar comprehensive comparison between IFRS and US GAAP comes from the fact that differences affect stakeholders in different manners and to different extent, therefore making their assessment difficult. Concluding upon the Boards’ ongoing projects, we might identify areas in which convergence seems to be quite close (such as revenue recognition and leasing), but also areas in which convergence becomes even more challenging (such as financial instruments or the particular case of offsetting). Furthermore, it is also difficult to position the Boards’ decisions related to the priority of the approached projects in relation to the so-called roadmap for convergence previously being undertaken and which again is currently under significant uncertainty. More precisely we must not forget that the US representatives keep delaying the decision related to the incorporation of IFRS into the financial reporting system for US issuers.
Similar to other studies being developed within accounting research and trade literature we may conclude that, generally, US GAAP present more detailed, specific requirements than IFRS. Nevertheless, there are cases in which IFRS offer higher-level or general guidance, as there are also cases in which they do not contain any corresponding guidance when compared to US GAAP. We therefore relate to SEC emphasizing the fact that any developed comparison between IFRS and US GAAP should consider the existent fundamental differences linked to:

- IFRS containing broad principles to account for transactions across industries, with limited specific guidance and stated exceptions to the general guidance; and
- fundamental differences existing between the FASB and IASB conceptual frameworks. The IASB and FASB are currently jointly facing the challenge of developing a comprehensive project (added on their agendas in 2004) having the purpose to replace existing documents with an improved, common conceptual framework that builds on their existing frameworks.

The developed historical retrospective documents how things started to move quickly in relation to the IASB – FASB collaboration after the 2002 Norwalk Agreement, providing a roadmap for convergence that was recently stormed by turbulent times such as the financial crisis. Discussing the IASB - FASB collaboration on recent projects as well as developing a comparison content analysis of IFRS and US GAAP might prove helpful in assessing the developments as well as perspectives of the convergence process.

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Measurement for Financial Reporting Purposes: A Highly Debated Accounting Challenge

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1 Introduction
One of the most important functions that corporate governance can play is in ensuring the quality of the financial reporting process (Cohen, Krishnamoorthy & Wright, 2004 [13]). Working paper prepared by Beest, Broom and Boelens (2009) [2] stated that the primary objective of financial reporting is to provide high-quality financial reporting information concerning economic entities, primarily financial in nature, useful for economic decision making (FASB, 1999) (Norwani et al., 2011:207) [33].

Financial reporting is an interactive supply chain process involving all corporate governance participants. This process consists of: (1) the preparation and certification of financial statements by corporate management under the oversight function of the board of directors, particularly the audit committee; (2) the verification and assurance of the fairness of financial statements by external auditors; (3) an evaluation of the quality of financial information by financial analysts; (4) the assessment of compliance of financial statements with applicable laws and regulations by standard-setters and regulators; and (5) the monitoring and use of financial information by investors and other stakeholders. The effectiveness and quality of the financial reporting process depends not only on compliance with applicable rules and regulations, but also a firm commitment to the fundamental reporting concepts of integrity, reliability, quality, transparency, and accountability by all corporate governance participants involved in the reporting supply chain (Rezaee, 2004:146) [38]. Therefore, we can say that corporate governance improves the underlying accounting information system which in turn, improves the measurement and recognition process.

Having to face debates that are increasing more and more concerning the validation of the appropriate measurement base, we consider necessary to know the theories where this alternatives regarding the suitable attributes of measurements finds their justification.

Going on the idea that any change of paradigms finds its expression in a theoretical construction (Barth, 2007:13) [1], we try to identify our research field tangent theories and highlight issues key, useful in understanding the motivations that underlie disputes regarding the viable solution in selecting appropriate measurement base. Therefore, in the following, we highlight the own perspective point of genesis of the measurement in accounting and the positioning of valuation between accounting theories.

Why normative theories? Because they were developed during the period when the first debates on the evaluation in accounting emerged and because then, theoreticians’ concerns regarded the assessment methods and modalities of disclosing the accounting information. It is said that measurement theories are of a legislative character. The justification is given by the fact that normative accounting theories seek to prescribe a basis for measurement in accounting, specific accounting procedures, as well as the content of the financial reports (Ijiri, 1975 [22]; Watts & Zimmerman, 1986 [48]).
Ijiri (1975) [22] sees normative theories as a special case of deductive theories (theories deductive start with assuming of a lens and deduce accounting procedures from them). Therefore, there are two important components of a theory: assuming of the objective and deduction. Be that they propose objectives which are not inherent in current accounting practice (for example, Chambers (1966) [10]), derive from inductive hypotheses to improve accounting practice (for example, Ijiri (1975) [22]) or considers that the objective bases of accounting (for example, Littleton (1953) [28], the normative theoreticians focus on the determination of judgments regarding the measurement in accounting. For example, the normative regulatory accounting school adopted the neoclassical economic theory and their observations of economic behavior propose that accounting, usually concerned with historical cost records, to rethink its approach in order to reflect current values. This school, in general, "arrived at the conclusion that the profit measured using a unique basis of assessment would ideally meet all of users’ needs" (AAA, 1977:6) – they have been described as "as lawyers of true profit theory ". Most theoreticians in this category have been considered reformers, since they have suggested new bases of assessment, supporting most of the times, the cost or current values.

The promoters of these theories that have paid special attention to recognition and measurement issues in accounting we will name - MacNeal (1939) [29], Littleton (1953) [28], Chambers (1966) [10], Ijiri (1975) [22], Edwards & Bell (1975 ) [15], Sterling (1970) [44] – as referred to by G. Dean at the EAA Symposium in Tampere on 13 May 2009, as precursors of the assessment in accounting, representing the early writings in this field. Therefore, in this chapter the emphasis will be put on the proposals of these theoreticians regarding the recognition and measurement in accounting", as well as on theoretical arguments and on the structures behind these proposals. Also, we will compare the analyzed papers.

The analysis of the normative theories, which are considered by us previous to the literature devoted evaluation in accounting, leads us to separating the papers in two. We will have on the one hand the historical cost papers and on the other the ones that deal with fair value. It is remarkable that often the idea according to which the debates regarding historical values and those of the fair value together with the compromise between the reliability and the relevance of the accounting information have been propelled as new topics for accounting researchers. We can presently say that we are being afflicted for almost six decades with this lack of agreement in the debates. We can say that the literature of normative theories foresaw the development of major research streams in accounting.

Evaluation involves choosing of a basis or of an evaluation convention. Selecting the appropriate measurement basis is a matter of choice due to the characteristics of the accounting information. As regards to the options of the normative theoreticians, this conceptual difference is primarily due to the different notions of the function of accounting. And in order to solve the assessment issues, firstly there must be a consensus on the accounting function (Whittington, 2008 [49]; Bradbury, 2008 [5]).

The emergence of the fair value concept in accounting theory can be traced if we go back in the 1930s, for example, in the work of MacNeal (1939) [29], in which he favored measuring all the accounting elements at fair value (Procházka, 2011:76) [34].

MacNeal’s (1939) [29] work is revolutionary. His paper contains an attack against current accounting practices. He is of the opinion that the main feature of the accountant is to report the economic truth. But financial statements, he claims, do not present the actual truth. They are deceiving for investors and creditors. In particular, he states that historical cost principle and the idea of conservatism prevent financial statements from presenting the true financial position and the operational results of the company.

However, MacNeal evaluates three justifications for the benefit of the cost principles. First, the cost is the value of a fixed asset, supporting the principle of business continuity. Second, it is not practical and is expensive to reevaluate assets each year. Third, even if the trade-in allowances on fixed assets have been carried out each year, they don’t provide important information for users.
MacNeal argues that the objective of accounting is to provide information about the entity, useful information for shareholders and creditors in order to make investments and to take crediting decisions. He asserts that managers, creditors and shareholders want to know what net present value of the entity. Financial statements may provide this information only in the event that they report current economic values. He defines the economic values by one comprehensive display prices as established by free play of request and demand on a market which is free and competitive, as well as sufficiently broad and active. If the open market, competitive, sufficiently broad and active does not exist (for example, in the case of work-in-progress, finished products, etc), current economic values should be estimated by present costs of replacement.

Historical cost should not be used only the case for assets without market (for example, intangible assets, mineral deposits).

For MacNeal, it is ironic that the resulting number of total assets in the balance sheet has no significant purpose, as it would be a curious mixture of the pricing of the market, replacement cost of and historical costs (Kabir, 2005:5) [24].

MacNeal refers to the concept of economic profit, which he defines as the surplus from the value of the capital at the end of the period, after the capital has been maintained or the costs have been recovered. Whereas MacNeal preferred to use market values for measuring elements included in the balance sheet and requires all changes (even unrealized gains), in the value of the assets and debt in the profit or loss, the method used for obtaining income regards the concept of physical capital retaining. However, he doesn’t make clear if the applied market value is the entry or exit price. He defines the measuring base as economic value: economic value of any asset is the power of exchange that, measured in money, represents the market price (MacNeal, 1939:87) [29].

Sterling (1970) [44] endorsed market values (for example output price), being the most logical way to measure net assets at any point in time. To support this argument, Sterling lists following advantages: (1) is relevant for all users of financial statements because it specifies resources currently available for entity and measures entity’s capacity to meet current obligations; and (2) it is verifiable, i.e. all neutral observers would agree on the value; (3) is a measure of a dimensions empirically significant; (4) it is additive; (5) is temporarily consistent, i.e., measurement is made at a point in time, unlike a prediction; (6) It is an assessment; (7) is much more informative than any other value (Sterling, 1970:360, AAA, 2012 [44])

Sterling (1970) [44] believed that there is a way to determine the profit top all other, defined as wealth as the difference between the two points in time plus the consumption. The arguments favoring accounting profit are sent via historical cost, the key concept that is at the basis of this approach. He claims that “The arguments regarding the correct method for the calculation of the margin had persisted for over a century. When an argument is present for so long, we may suspect that there is no possibility of solving.” [44].

The central theme in Chambers (1966) [10] system of ideas is adaptation. The underlying assumption is that an entity wants to adapt to prevailing market conditions through involvement in exchanges. However, before systematically dealing with aspects of the evaluation, Chambers (1966) [10] considered that it is necessary to find out what is the function of accounting. This led him to be inferred that main function of accounting is to provide financial information which may act as a guide for the future: Accounting Information must be relevant to adaptive behavior under conditions of uncertainty and variability of the medium [10].

Assets and liabilities must be reported at their current cash equivalents value. Specifically, the assets should be reported to their resell value (for example, the value measured) and their liabilities should be reported to their current value. However, Chambers (1966) [10] insists to record bonds payable at their nominal value and other marketable securities held as investment at market prices. Thus, debts and assets have an asymmetrical treatment (Kabir, 2005:16) [24].
On the other hand, Chambers comments of Littleton’s defense of the historical cost and is willing to work with a weaker version of objectivity and verifiability, in order to get more accurate financial statements: Objectivity it is, without doubt, a useful concept; better to be used whenever possible. But its use and importance should not be overstressed. It seems that it is sufficient to stipulate that initial entries in the accounting records shall be based on verifiable and clear documentation.

The idea of adapting has an impact definition of assets. As a firm wishes to adapt to its environment, the market in particular, by reselling its assets, the assets are defined as separable means. Therefore, the assets must be sold on a separate market from that upon which it operates the entity which holds them. Entity’s assets that are specific and which therefore have no market value are not treated as assets. This is due to the fact that these actives restrict entity’s ability to adapt to the market environment (Kabir, 2005:16) [24]. It is remarkable that Chambers assumes that the entity will continue its activity, but it assumes that the entity will be adapted to the particular environment of the market by reselling the assets. This means that there is no such thing as an irrevocable asset.

In accordance with the hypothesis of market adaptation, Chambers puts emphasis on balance sheet to the detriment of the profit or loss and considers the balance sheet as a statement of financial position. In his vision, the profit is calculated after adjusting initial financial position for the changes in the general level of prices. Adjusting for changes in the general level of prices is called adjustment for maintaining the capital.

Reading the work of Chambers, we inevitably ask ourselves if, relative to recent discussions supported by IASB/FASB, it’s a déjà-vu. The findings and conclusions in his writings are made with regard to their meaning in terms of measurement dilemmas presently faced by regulating bodies. Therefore, taking into account the method of determining fair value in the event that there is a directly price, Chambers notes (Dean, 2010:92) [14]: the first question is whether we will define the accounts of any addictive linked to the future. In my opinion, no, except for the purposes of in which the entity is assumed to have a future. In regard to this position, Uncertainty is ruled out in accounting, though it remains for decision-making. The problem in accounting is complicated rather by ignorance (the asymmetry of information etc.) than by uncertainty.

Subsequently, (1970, 1974) he stated that if there is no observable price or a reasonable approximation (corresponding levels 2 and 3 of the IASB/FASB hierarchy) then the balance sheet should report the value of 0, but still to disclose the existence of the assets or the liability (Dean, 2010:93) [14]. For political accounting reasons he proposed the use of an accounting system dual (Chambers, 1976:45) [12].

The work of this author provides a large part of the basis for the development of fair value accounting and it stressed the fact that: There are many prices which can be assigned to a monetary object ... But at any moment present all the prices listed are just a matter of the past. Only current prices may influence the choice of an action (Chambers, 1966:91) [10].

Edwards & Bell (1961) [15] presents the first systematic synthesis on the current cost in their classic work, The Theory and measurement of Business income. They found that the measurement has three main functions: (i) the prevention of fraud and theft; (ii) to evaluating the performance of the entity and (iii) To provide a solid and fair base for the purposes of taxation (Edwards & Bell, 1961:4) [15]. Supporters of current cost, they highlighted that historical value should forecast, in order to determine the useful life of an asset. For example, the new identical assets are not all retracted in due time

Edwards and Bell (1961:75) [15] distinguished between an input value (cost of a replacement for the purchase of the asset presently held) and a value of output (maximum price at which an asset held at present could be sold at the market less cost sales transactions, for example, the value measured net of the underlying asset): these markets of assets [] can be divided into two types, markets in which the company would be able to buy assets in the form specified and at the time specified and in the markets where the firm would be able to sell assets in the form to be specified and the specified time. Prices obtained in markets in the first group will be
called input prices, the prices obtained on the markets from the second group we will appoint prices output [15].

The authors advocate for an even usage of a database unique for the purpose of measuring in the accounts. These claims, together with the approach for maintenance of the capital, they have considerable consequences accounting figures and utility accounting information concerning financial position and performance. In accordance with these requirements, we are able to calculate the accounting profit with features similar to the economic benefit. In accounting, maintaining the capital is a starting point for determining profit.

Edwards & Bell support distribution of the profits on 2 stages depending on the activities carried out: (1) Those which produce profit by converting or combining factors of production in products of which the amount of sale exceeds the value of the factors, (2) Those which bring gains by increasing the value of the assets (or subtracting liabilities) as long as those active (liabilities) are in the possession of the company. Within the first guidance, the profit is developed using factors, and in the second by holding factors or products [15]. Being based on the two activities, in addition to traditional accounting profit, they introduce the concept of the profit of the business and profit realized.

Littleton (1953) [28] analyzes the nature of accounting and attempts to inductively obtain the principles of accounting. In formulating its assumptions, he uses five basic hypotheses (Kabir, 2005:13) [24]:

- companies exist to make economic services (for example, the supply of goods and the creation of employment) for people;
- the company is an entity of economic cohesion;
- the business activities follow a cyclical model;
- the most important data to be supplied by all the parties involved in the control of operations are those deeds that depict the efforts of the company and its accomplishments within a period.
- the company must continue its activity.

Littleton starts from the idea that economic entity has the role to provide goods and services to the economy, which leads to the connection of expenses and revenue as the central purpose of accounting:

The central purpose of accounting is to make the periodical correlation of liabilities (efforts) and revenue (achievements) possible. This concept is the core of accounting and a reference point for future discussions regarding accounting [28].

Regarding the function of accounting, Littleton (1953) [28] sees the cost as the foundation for the registration of assets, debt, capital and reserves. He considers that his ideas shall reflect the view of the majority of financial accountants and advocates in the favor of historical cost accounting as being "perfect" for financial reporting due to its property of reproducibility and, therefore, the adjustment of historical cost assessments of the assets is best to be left for management accounting. Of course, in the case where inflation is high or moderate, this will lead to a blockage for the investors, with an inaccurate reported income based on historical cost.

Littleton (1953) [28] argues that the goal of accounting is to provide reliable and relevant information, putting the emphasis on reliability. This is clearly evident from the fact that a concept important to base its verifiability; objectivity and relevance are not core concepts in the framework of his theory.

The main statement for reporting in the vision of Littleton (1953) [28] is the profit or loss, while the balance sheet is demoted to the second position. The profit or loss depicts the efforts and achievements of the reporting entity during the period. The purpose of the balance sheet is to report unexpired costs, not the values of the assets. Regarding the assets as unexpired costs, Littleton refuses the incorporation of reevaluations in the accounts, alleging that these would induce irrelevant and confusing changes in the objective measurement of
efforts and accomplishments (Kabir, 2005:14) [24]. Therefore, together with the Ijiri and Sterling, Littleton (1953) [28] is among the most dedicated defenders of the accounting profit (Belkaoui, 1992:481) [3], i.e. approach matching revenue and expenditure.

According to Ijiri (1975) [22] responsibility is, and should be, the important objective of current accounting practice. Accounting purpose is to facilitate the proper functioning of the relationship of responsibility between the parties concerned. In accordance with the rules of conventional accounting, the resources are recorded at historical cost and once registered, the values assets is not reviewed in accordance with changes in the market prices for assets. A distinguishing mark of historical cost accounting is that it allows the recording of real transactions only (Kabir, 2005:18) [24].

We observe that Ijiri is a powerful champion of the principle of historical cost. He provides three important justifications in favor of that principle. First, proper functioning of the responsibility is based on corresponding entries of the activities, while actual cost principle imposes the recording of all real transactions. Second, this principle provides the most useful measure of performance. Other measuring bases, such as the net measured value and replacement costs may be useful only for some decision. Ijiri rejects these registration bases, arguing that they are founded on the actions (for example, sale and purchase of to the balance-sheet date), which normally, the entity does not intend to carry out. So, he invokes the business continuity hypothesis. Ijiri says that the value is a bi-dimensional concept. It is a value of sacrifices and a value of benefits. Ijiri chooses the value of sacrifices, the historical cost, on the grounds of hardness of the measure. However Ijiri does not believe that the cost history is flawless. Here are in Figure no. 1 a summary of arguments exposed in this part of our endeavor:

<table>
<thead>
<tr>
<th>The Theoretical Structure of the Purpose of Evaluation in Accounting</th>
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<tbody>
<tr>
<td><strong>MacNeal</strong></td>
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<tr>
<td>- the balance sheet should report real economical values of the assets and liabilities</td>
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<tr>
<td>- the income statement should report both realized and unrealized gains and losses</td>
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<tr>
<td>- the principle of realizations is abandoned</td>
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<tr>
<td><strong>Chambers</strong></td>
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<tr>
<td>- transactions should be recorded at their equivalent in cash</td>
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<tr>
<td>- the principle of realization is rejected</td>
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<tr>
<td><strong>Sterling</strong></td>
</tr>
<tr>
<td>- sustains fair value – the most logical way of measuring the net assets in any point in time (current exit price)</td>
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<tr>
<td>- profit is defined as the difference in wealth in two points in time plus consumption</td>
</tr>
<tr>
<td><strong>Edwards and Bell</strong></td>
</tr>
<tr>
<td>- makes the distinction between the entry and exit values</td>
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<tr>
<td>- maintaining of the physical capital as a profit computation method</td>
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<tr>
<td><strong>Littleton</strong></td>
</tr>
<tr>
<td>- transactions should be registered at historical cost</td>
</tr>
<tr>
<td>- the modifications in the price of the assets subsequent to the acquisition should be incorporated into costs</td>
</tr>
<tr>
<td>- the method of profit computation – accounting profit</td>
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<tr>
<td><strong>Ijiri</strong></td>
</tr>
<tr>
<td>- historical cost should be the basis of evaluation in accounting</td>
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<td>- the method of profit computation – accounting profit</td>
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The major contribution of normative accounting literature pertains to the pro and counter debate regarding the various ways to improve the accounting system. This provides a framework with the help of which the accounting regulatory authorities may decide on a single basis for measurement. We can speak of anticipation in the illustration of normative theories, thus contributing to the development of research streams such as the eternal debate between fair value and historical cost.

Without concluding, we can state that the accountants have always searched for criteria to help them choose best alternatives as a basis for evaluation. Moreover, we believe that the process of inversion of the values used as assessment bases emerged a long time ago and represents a trend sequentially formed in time (Bonaci, 2009: 320).

3 Measurement for Financial Reporting Purposes and Equity Theories

When we talk about evaluation in accounting, the first thing that came into our mind is how to measure profit. Regardless of how it is measured (revenues minus expenditure or in terms of wealth based), profit occupies a central position in accounting, being probably the most important goal and function of accounting. Therefore periodic measurements of a company's profit is a contentious issue among scholars, researchers, and accounting practitioners. As a result, many concepts and approaches have emerged in order to determine net income.

It is known that the relationship between income statement and balance sheet has been a matter of debate in accounting research. This controversy had an impact on how to measure profit. Thus, the preference for a certain way of calculating profit depends on the chosen approach (balance sheet/income statement).

There are a number of theoretical and practical issues regarding the reliability of evaluations and how to report assessments changes. Questions about how relevant gains and losses should be reported in the income statement bring a variety of views about what "profit" means and different perspectives on the nature and purpose of financial reporting. Even in the idealised world analysed by Hicks, where at any point in time all cash flows and associated discount rates relating to individual assets and liabilities are thought to be known with certainty (although, since it is a partial equilibrium model, these certainties may change periodically), a plethora of different measures of income (or of consumption possibilities) can be derived around the basic distinction between income as a measure of the difference between net assets at two points in time (which may, loosely, be characterised as the approach taken in the various conceptual frameworks) and income as an amount which is sustainable in future time periods (Gwillian, 2008:244) [18].

Therefore, we try to show how these disputes regarding the corect way of measuring profit intersect with equity theories. We set as a goal of this part, documenting plurality of views on the measurement of profit. Different conceptions inevitably give rise to different reporting solutions of the problems.

As with any policy issue, prescriptions cannot be made without an understanding of the objectives of the exercise. To whom are we reporting? Whose pluses and whose minuses? Different users may demand different accounting reports, and confusion reigns if issues are discussed at cross purposes. A shareholder might recognise a gain from a fall in the market value of debt as credit worthiness deteriorates, but not the creditor. Bank shareholders might wish to see bank deposits at fair value, but not the depositors. A bank regulator would also be concerned about reporting deposits at less than face value if such reporting affected depositors’ confidence in the banking system. While an investor might welcome the information about volatility that fair value accounting reveals, not so a central banker who might be concerned about feedback effects on systematic risk. A bank regulator might be concerned about marking up banks (Penman, 2007:34) [35].

Equity theories offer different opinions when answering the question on whose point of view should be considered in companies' accounting process (Kam, 1990:302) [25]. The point of view adopted in financial
reporting and accounting determines whose perspective dominates the accounting transaction analyses and the way these transactions are accounted for.

According to Hendriksen & Van Breda (1992:766) [20] equity theories interprets economic situation in different ways leading to different approaches on how to disclosure benefits of the parties and determining profit. Chatfield (1977) and Schroeder et al. (2001) identified as equity theories: property theory, entity theory, residual theory, fund theory and the commander theory. Without pretending to be exhaustive in presenting these theories we focus on dragging them to our research field, measurement in accounting.

3.1 Property theory

This theory assumes that the owner and the entity is essentially the same thing (Merino 1993 [30], Lakatos, 2010:9 [26]). Traditional view of this theory assumes that the owner is acting in the interest of the firm and the company acting in the best interest of the owner, the latter being merely a tool used by owners to increase their wealth (Meyer, 1973:116 [31]).

Property theory is considered to be a concept of agency. In a traditional agency view, financial statements are prepared by managers in order to provide information to owners on which managers are held accountable (Hendriksen & Van Breda, 1992:771 [20]).

According to property theory, financial statements are prepared from the standpoint of the holder and eventually are designed to measure and analyze their net wealth expressed by the following accounting equation (Riahni-Belkaoui, 2004:251 [37]):

\[ Assets − Liabilities = Shareholder's equity \]

Under the property theory spectrum, the owner is seen as the owner of the assets and liabilities of the company (Zeff, 1961:105 [50]; Rosenfield, 2005:3 [39]). For resolving the conceptual problems, we can look at debts as negative assets (Sprague, 1913 [41]; Newlove, 1951:21 [32]) so we can consider the theory active based, and centered on their correct evaluation and also focused on the balance sheet. Gilman (1939) [16] sees the entity as an artificial person holding assets while being accountable for the assets. Also contributors are considered masters and the entity is seen as a slave.

In addition, revenue is seen as an increase in property owner and the expenses as a decrease. Profit is that part of the owner growth that returns to shareholders (Hatfield, 1909 [19], Sanders, 1938 [40]). In other words, the primary focus is to report useful information for owners and therefore we can say that financial statements are prepared from their perspective (Meyer, 1973:117 [31]).

There are studies (Hatfield, 1909 [19]; Sprouse & Moonitz, 1962 [42]) in which it is shown that assets and liabilities should be valued at current cost rather than historical cost. In addition, if the income represents the increase in the net value of the holder’s asset, than all the matters likely to affect a change in wealth holder should be included in income (Kam, 1990:303-304 [25]).

Whatever the approach supported is, we consider it extremely important to define, recognize and measure assets and liabilities more accurately and reliably. So this theory argues for the valuation of assets at current values, being considered to be net wealth of the holder.

3.2 Entity theory

Entity theory has developed of the concept of limited liability of shareholders of a company (Van Mourik, 2010:11 [46]). Entity is seen as having a separate identity compared to owners, so has its own distinct responsibility (Hendricksen & Van Breda, 2002:761 [20]).
Compared with the vision of property theory, this theory assumes that both the assets and profits belong to the entity and not to the shareholders, and as a result transactions are analyzed with respect on their effect on the entity. In addition, revenues are business product and expenses are goods and services consumed to obtain income. Therefore, expenses are deducted from revenues, and the difference is the company's profit to be distributed to shareholders or reinvested in the company (Hendriksen and Van Breda, 1992:772 [20]).

A major implication of this theory is that revenues and expenses must be defined in terms of changes in company’s assets rather than changes in equity owner. Accounting equation in this case is:

\[ \text{Assets} = \text{Debt} + \text{Equity} \]

Capital providers designate creditors interest, and assets, liabilities, income and expenses are determined in terms of management rather than that of shareholders (Porwal, 2001:106 [36]). Entity theory is said to be focused on income and as a consequence centered on profit or loss (Belkaoui, 2004:107 [3]).

According to Hendriksen (1992) [20], the entity theory is not concerned with assessing the current values, because the emphasis is on cost accounting for shareholders and other owners of capital. However, current debates on current value assessment, highlighted the importance of determining the income of an enterprise. The theory assumes that the holder of heritage is just one financial stakeholders (Zeff, 1961:2) [50].

### 3.3 Fund theory

The theory was developed by Vatter (1947) [47] in response to the ongoing debate on the nature of the relationship between the shareholder and the company. Vatter (1947) [47] argues that financial statements should be considered only as statistical indications without any implicit or inherent attachment to any potentially interested parties (Meyer, 1973:121) [31].

According to this theory, the focus of accounting is neither wealth holder or stand-alone entity, in exchange an oriented business accounting unit is the basis of this theory. Accounting unit is seen as being composed of economic resources (funding,) obligations and restrictions related to the use of these resources. For each fund identified there is a hierarchy of restriction upon collection of assets, so accounting equation becomes: (Meyer, 1973:122) [31]:

\[ \text{Assets} = \text{Restrictions on assets} \]

Final general restriction indicates that the assets collected are intended purposes and operations of the fund in which they occur and it is called "residual equity” (Meyer, 1973:122) [31]. Theory avoids the problems of defining and reporting net income and is more concerned with custody and fund administration, specifically for reporting changes in the collection of assets and related restrictions.

### 3.4 Residual equity theory

Residual equity theory proposed by Staubus (1959) focuses on that part of the owners of capital that are "residual" by nature. The theory argues that common shareholders are the true owners of the business.

This theory is often referred to as the investors theory because supporting the idea that the functions of accounting and financial statements should be reported in terms of investor (Kam, 1990:13 [25], Van Mourik, 2010:198 [46]). According to Staubus (1959), financial reporting purpose is to provide accounting information that will be helpful in making or not making investment decision.

Under the residual equity theory, accounting equation takes the form:

\[ \text{Assets} – \text{Specific equity} = \text{Residual equity} \]
The term specific equity includes creditors’ requirements, long-term loans and preferred shareholders. Residual capital can be defined as the equitable interest in the assets of the company which will absorb the effects on those assets to any economic event that no interested party wishes to absorb (Staubus, 1959:8).

From the point of view of the objective of this chapter, namely the transposition theories on the evaluation field, Staubus (1959) maintains accurate and precise evaluation of assets and liabilities and recording changes in their level, necessity arising from the need for accurate measurement of residual capital. We understand from this, that this theory is also active based.

### 3.5 Commander theory

As the name implies, the commander theory focuses on people who "command over resources" - Commander (Goldberg, 1965:167) [17]. Such commanders do not need to keep the resources they command. Therefore it is considered that shareholders are commanders of shares of capital owed, while managers are commanders over the company's assets. The theory also makes a distinction between resources that managers control those other external parties to control.

Financial statements are reported from one commander level to a higher commander level, reflecting the effect of the concept of "chain of command" (Meyer, 1973:123) [31]. Although each side of the balance sheet is oriented towards the position of the various commanders, it is drawn to other commander resources as unions, customers, competitors. Income statement illustrates the effect of a particular tax period, while profit is a measure of the increase in economic resources that management control.

More detailed study of these theories led us to think of the current trend concerns the measurement in accounting, namely the debate between the balance sheet and the income statement approach based.

In an accounting model based on current values, the balance sheet is the main transmitter of reliable information to stakeholders, and this perspective is identified with economic profit. Instead, the implementation of a model of historical value, income statement is an important tool for providing information to investors. Profit is not economic profit, but rather the value added by purchasing goods from suppliers, which are transformed in accordance with the company's business model.
### 3.6 Measurement in accounting and equity theories

<table>
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<tr>
<th>Theory</th>
<th>Orientation</th>
<th>Accounting equation</th>
<th>Profit calculation</th>
</tr>
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<tr>
<td>Property theory</td>
<td>Shareholders</td>
<td>Assets - Liabilities = Equity</td>
<td>Income - expenses other than dividends</td>
</tr>
<tr>
<td>Entity theory</td>
<td>Entity</td>
<td>Assets = Debt + Equity</td>
<td>Income - expenses other than dividends and interest tax</td>
</tr>
<tr>
<td>Fund theory</td>
<td>Fund</td>
<td>Assets = Restrictions on assets</td>
<td>Entries special unrestricted assets - unrestricted particularly active outputs</td>
</tr>
<tr>
<td>Residual equity theory</td>
<td>Common shareholders</td>
<td>Assets - specific equity = residual capital</td>
<td>Income - expenses other than dividends to residual shareholders</td>
</tr>
<tr>
<td>Commander theory</td>
<td>Managers or investors</td>
<td>Resources over which the manager has control = Resources on which investors control</td>
<td>Income - expenses other than dividends</td>
</tr>
</tbody>
</table>

Source: Meyer (1973) [31]

As we could see in this chapter, normative theories have as goal the development or construction of accounting principles, focusing on the recognition and measurement issues. Therefore we analyzed in detail the proposals resulting from normative type of research as well as theoretical constructions and arguments behind them. Equally, this chapter has shown how the profit measurement disputes intersect with equity theories and documenting plurality of views on measuring profit.

### References:


The Quality of Consolidated versus Parent Company Financial Statements*

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1 Introduction
One basic OECD Principle of Corporate Governance refers to the high quality disclosure and transparency of financial information (OECD 2004: 22) [34]. A main characteristic of financial information quality is relevance, which quantifies its capacity to influence the decision-making process of users in general and investors on the capital market in particular. (Francis et al. 2004: 968) [14]. Moreover, in its Conceptual framework IASB named relevance and faithful representation as the two fundamental qualitative characteristics of financial information (QC5). Therefore, in order to make assessments on the quality of information of financial statements, it is absolutely necessary to quantify this relevance (capacity to influence) of financial information.

An adequate environment for performing such a measurement is the capital market, where investors’ decisions (as users of financial information) are reflected directly in the share price of the reporting entity. In this context, market value relevance is measured by the ability of financial information to capture or summarize information that influences share prices (Francis & Schipper, 1999) [13]. According to the same authors market value relevance means the existence of a statistical correlation/association between financial information and prices or returns, and also the fact that this information explains market prices to an extensive measure, starting from the presumption of the efficient market in which prices reflect the available information (Francis & Schipper, 1999: 326 [13]). This approach presumes that the function of financial information is to reflect economic income represented by stock return and economic value, respectively, represented by market prices (Hellström, 2006: 326 [21]).

Financial information is supplied mainly through financial statements of entities (listed on the capital market). In the majority of cases (at least on the large European stock markets) listed companies own one or more subsidiaries, and therefore are obligated (through national accounting legislation as well as stock exchange regulations) to prepare consolidated financial statements for the group they own. At the same time, as legal persons, companies are legally obligated to present individual financial statements. Consequently, parent companies are obligated to a dual reporting materialized in two sets of financial statements – one at individual level, the other at group level. Therefore, the following question arises naturally – which of the two sets is of higher quality, respectively which of the two sets is more relevant for investors. Of course, the possibility of both sets at the same time being more relevant for investors is not ruled out.

Moreover, beginning with January, 1st 2005, companies listed on the European stock markets had to adopt IFRS for the preparation of their group accounts. The already famous Regulation no 1606/2002 (on the application of International Accounting Standards) has affected the vast majority of companies listed in the EU (over 9000 companies), being considered by many as „the most broad and complex accounting conversion in history”, and considered by IASB Chairman, Sir David Tweedie, as the greatest change which affected businesses in Europe since adopting Euro currency (Bruckney & Witmer, 2005: 6). In consequence, European parent companies need not just prepare two sets of financial statements, but have to apply different accounting regulations: IFRS for the group accounts and European directives for individual accounts. Therefore, the
second question arises – what is the impact of the mandatory adoption of IFRS in the E.U. on the absolute and relative quality (measured through value relevance) of consolidated financial reporting?

Taking all these aspects into consideration, in our scientific endeavor we set to carry out an empirical association study on the problem of market value relevance of consolidated financial statements and of individual financial statements of the parent company, searching for an answer to the above questions. Market value relevance can be evaluated through event studies in which the market reaction to financial information announcements is analyzed, or through association studies used to measure the explicit connection between indicators of company market value (e.g. stock price) and financial information. This second perspective of evaluation is applied in most market value relevance studies (Hellström, 2006: 328 [21]) and has also been approached in our research.

In this sense, we pursued an analysis of (absolute and relative) market value relevance of consolidated and parent company accounting information of listed entities between 2003-2008 on the largest stock markets in Europe (London, Paris, and Frankfurt). We chose a time frame of several years in order to be able to follow the evolution in time of the relevance (absolute and relative) of consolidated financial statements. It must be mentioned, however, that strictly from the point of view of the calendar year relevance is measured for the period 2004-2009, because statistical associations are based on stock prices from April the following year. Moreover, we also investigated the impact the mandatory adoption of IFRS starting with 2005 had on the absolute and incremental value relevance (and thus on the quality) of financial information supplied by the consolidated financial reporting.

The reminder of the paper is organized as follows. The next section (first numbered section) relates our study to previous technical and academic literature. Section 2 explains the research methodology (including sample selection and data sources as well as the development of hypotheses and empirical models). Section 3 reports the descriptive statistics while in section 4 we expose the empirical results obtained. The final section provides a discussion of results and conclusions.

2 Literature Review

Concerning the empirical research that has tackled this matter, there are only a few studies which could be identified in the international literature. In general, they bring evidence in favor of the superior relevance of consolidated financial statements (ex. Harris et al., 1994 [20], Niskanen et al., 1998 [33], Abad et al., 2000 [1]) respectively evidence regarding a lack of relevance increment of individual financial statements of the parent company (Niskanen et al., 1998 [33], Goncharov et al., 2009 [18]).

In their study, Harris et al. (1994) [20] compare the value relevance of accounting measures for U.S. and German firms matched on industry and firm size. One of their conclusions based on their empirical findings states that the explanatory power of accounting data is increasing in the level of consolidation and that unconsolidated data perform poorly relative to the consolidated data. Niskanen et. al (1998) [33] examine the information content of consolidated versus parent-only earnings, using accounting and market data from Finnish firms. Their results show that consolidated earnings are a significant incremental explanatory variable for stock returns, while parent-only earnings are not, thus indicating that consolidation improves the information content of earnings, and that the requirement to disclose parent-only earnings should be based on arguments other than their value-relevance to shareholders.

Abad et al. (2000) [1] investigate the value relevance of consolidated versus parent company accounting information on a sample of Spanish firms listed on the Madrid Stock Exchange. The authors use the Edwards-Bell-Ohlson valuation framework to generate the results. The empirical findings show that, from this valuation perspective, consolidated information dominated parent company (non-consolidated) information. Finally, Goncharov et. al. (2009) [18] examine the possibly different economic functions of company (single) and group
(consolidated) accounts using a large number of accounting and market-based metrics from a sample of German companies. Their analysis indicates higher value relevance, predictive ability, and timeliness of group accounts as compared to company accounts. Furthermore, they could not identify an incremental usefulness of single accounts.

Also regarding the value relevance of consolidated information are empirical studies which investigate the value relevance of consolidated financial statements in the context of the IFRS transition. A series of empirical studies have proven the rise of market value relevance following IFRS adoption (Bartov et al., 2005 [6]; Jermakowicz et al., 2007 [27]; Barth et al., 2007 [5]; Lim and Paananen, 2007 [29]). However, there are also studies showing that IFRS has not lead to a rise in the market value relevance of consolidated financial statements (Callao et al., 2007 [7]; Hung and Subramanyam, 2007 [23]; Gjerde et al., 2008 [17]; Paananen, 2008 [36]). According to a recent study (Armstrong et al., 2010 [4]), the mandatory application of IFRS when presenting consolidated financial statements starting with 2005 determines an improvement of the quality of accounting information as seen by the investors.

3 Research Methodology

3.1 Sample selection and data sources

In this empirical research we followed the analysis of market value relevance of consolidated accounting information on companies on the large European stock markets in 2003-2008. The European stock market (monitored by Federation of European Securities Exchanges – FESE) comprises capital markets from EU countries as well as Iceland, Norway and Switzerland. The large European capital markets (which exceed the threshold of 5% of the total European capital market) include: BME Spanish Exchanges, Borsa Italiana, Deutsche Börse, London Stock Exchange, NASDAQ OMX Nordic, NYSE Euronext and SIX Swiss Exchange. The criteria chosen to estimate the size of a stock market (and implicitly of selecting it) is market capitalization and the volume of share trading (within and outside of the electronic system) for each year of the analyzed period. In order to form a representative sample of the large European stock markets we decided to include in our sample the top European stock markets that together exceed 50% of the total size of the largest European stock markets and respectively 50% of the total size of the European capital market for each of the six years. Of course, we dare think that such a sample can be considered representative at the level of the European capital market as a whole, since the large European markets – for which the sample is representative – represent over 90% of the total European capital market.

Thus, the largest stock markets are Deutsche Börse, London Stock Exchange and NYSE Euronext, which together exceed the conditions aforementioned in each year of study. On average, for the analyzed period, the three stock exchanges represent 67.5% of the transaction volume, respectively 60.3% of the market capitalization of the European capital market. In fact, these are the only stock markets that individually exceed 10% of the total market capitalization, respectively of the total volume of share trading on European stock markets for the six years of the analyzed period, which constitutes an additional argument for considering the sample as representative for large European stock markets.

From the four stock exchanges that make up NYSE Euronext we chose Paris Stock Exchange (the largest of the four, accounting for 70% of the companies included in the Euronext100 index) and for the German stock market we chose, of course, Frankfurt Stock Exchange (again the largest of the seven component stock exchanges). To continue, the main criteria for selection that we established for each stock exchange is the belonging to the main index which includes the first 100 of the largest and most traded companies on that particular stock exchange. So, for the London stock exchange we chose FTSE 100, for the Parisian stock exchange EURONEXT 100, and for the Frankfurt stock exchange HDAX 110. The HDAX 110 index
represents the extended version of DAX 30 and includes companies from the DAX, MDAX and TecDAX. We chose this index since it is the closest as structure and number of included companies to FTSE 100 and EURONEXT 100.

We excluded financial and insurance companies from the sample because their structure and accounting practices differ significantly from those of non-financial companies (Hellström, 2006: 335 [21]). As well, to eliminate composition differences of the sample from one year to the other (which would affect comparability of results in time), we excluded companies that have not been listed on the stock exchanges for the whole analyzed period. At the same time, to increase the homogeneity of the sample and to use the same time span (31.03 – 30.04) to determine average share price, companies who close financial years (for financial statement purposes) at a date different from 31.12 were excluded. Therefore, after going through these steps, the final sample is made up of 98 companies, respectively 588 firm-year observations as can be seen in table 1. The sample constitutes, therefore, a two-dimensional balanced panel data noted \( X_{it} \), which is practically a data set containing observations on the individual characteristics (e.g. equity, income) of the same (\( i = 1, \ldots, 98 \)) for a number of year (\( t = 1, \ldots, 6 \)).

Based on this complete sample, throughout the paper we constructed different sub-samples for each year, stock exchange or other sub-samples which have been described in the study at the moment when they were used. It must be mentioned that we did not study comparatively the market value relevance of consolidated (and individual) financial statements for the three stock markets. Creating sub-samples is only meant to get confirmation (to strengthen) of the empirical results obtained from the complete sample.

Consolidated and individual financial information (group equity, parent company equity, group earnings, parent company earnings, number of shares) was collected manually from the annual reports for the 588 year-observations of the complete sample, after being previously downloaded from the official web-sites of the respective companies. For many German companies using parent company annual reports was necessary because annual group reports did not include parent company financial statements, but only consolidated financial statements.
Table 1. Final sample composition

<table>
<thead>
<tr>
<th>Frankfurt Stock Exchange</th>
<th>London Stock Exchange</th>
<th>Paris Stock Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BASF</td>
<td>1 AMEC</td>
<td>1 Accor</td>
</tr>
<tr>
<td>2 Bayer</td>
<td>2 Anglo American</td>
<td>2 Air Liquide</td>
</tr>
<tr>
<td>3 BB Biotech</td>
<td>3 Antofagasta</td>
<td>3 Bouygues</td>
</tr>
<tr>
<td>4 Beiersdorf</td>
<td>4 Astrazeneca</td>
<td>4 Cap Gemini</td>
</tr>
<tr>
<td>5 BMW</td>
<td>5 Autonomy</td>
<td>5 Carrefour</td>
</tr>
<tr>
<td>6 Celesio</td>
<td>6 Bae Systems</td>
<td>6 Christian Dior</td>
</tr>
<tr>
<td>7 Continental</td>
<td>7 Balfour Beatty</td>
<td>7 Ciments Francais</td>
</tr>
<tr>
<td>8 Daimler</td>
<td>8 BG Group</td>
<td>8 Danone</td>
</tr>
<tr>
<td>9 Deutsche Börse</td>
<td>9 BP</td>
<td>9 EADS</td>
</tr>
<tr>
<td>10 Deutsche Lufthansa</td>
<td>10 British American Tobacco</td>
<td>10 Eramet</td>
</tr>
<tr>
<td>11 Deutsche Telekom</td>
<td>11 Cairn Energy</td>
<td>11 Essilor International</td>
</tr>
<tr>
<td>12 Eon</td>
<td>12 Capita Group</td>
<td>12 Iliad</td>
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<tr>
<td>13 Elring Klinger</td>
<td>13 Centrica</td>
<td>13 Imerys</td>
</tr>
<tr>
<td>14 Fuchs Petrolub</td>
<td>14 Cobham</td>
<td>14 Klepierre</td>
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<tr>
<td>15 Gildemeister</td>
<td>15 Foreign&amp;Col Investment</td>
<td>15 L’oreal</td>
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<td>16 Heidelbergegement</td>
<td>16 Glaxosmithkline</td>
<td>16 Lagardere</td>
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<tr>
<td>17 Henkel</td>
<td>17 Hammersen</td>
<td>17 Michelin</td>
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<tr>
<td>18 Hochtief</td>
<td>18 Intertek Group</td>
<td>18 Peugeot</td>
</tr>
<tr>
<td>19 Hugo Boss</td>
<td>19 International Power</td>
<td>19 PPR</td>
</tr>
<tr>
<td>20 Krones</td>
<td>20 Liberty International</td>
<td>20 Publicis Groupe</td>
</tr>
<tr>
<td>21 Leoni</td>
<td>21 Pearson</td>
<td>21 Renault</td>
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<tr>
<td>22 Metro</td>
<td>22 Randgold Resources</td>
<td>22 Saint Gobain</td>
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<td>23 MLP</td>
<td>23 Reed Elsevier</td>
<td>23 Sanofi-Aventis</td>
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<tr>
<td>24 Morphosys</td>
<td>24 Rexam</td>
<td>24 Schneider Electric</td>
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<tr>
<td>25 Nordex</td>
<td>25 Rio Tinto</td>
<td>25 Technip</td>
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<tr>
<td>26 Pfeiffer Vacuum Techno</td>
<td>26 Rolls-Royce Group</td>
<td>26 TF1</td>
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<tr>
<td>27 Pfeiderer</td>
<td>27 Segro</td>
<td>27 Total</td>
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<tr>
<td>28 Rheinmetall</td>
<td>28 Serco Group</td>
<td>28 Vallourec</td>
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<tr>
<td>29 Rhön-Klinikum</td>
<td>29 Smith &amp; Nephew</td>
<td>29 Veolia Environ</td>
</tr>
<tr>
<td>30 RWE</td>
<td>30 Tullow Oil</td>
<td>30 Vinci (Ex.Sge)</td>
</tr>
<tr>
<td>31 Salzgitter</td>
<td>31 Unilever</td>
<td>31 Vivendi</td>
</tr>
<tr>
<td>32 SAP</td>
<td>32 Xstrata</td>
<td></td>
</tr>
<tr>
<td>33 United Internet</td>
<td></td>
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<tr>
<td>34 Volkswagen</td>
<td></td>
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<tr>
<td>35 Vossloh</td>
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</tbody>
</table>

Total companies included in the final sample: 98
Total number of observations (company-year) included in the final sample: 588 (98 companies x 6 years)

Share prices for the sampled observations were also collected manually from the finance.yahoo.com database. This database can be accessed without charge and is recommended by Andrei & Bourbonnais (2008: 30) [3]. For the development of the study, we computed average closing share prices for 31.03 – 30.04 of each year, making sure that companies have already published the annual reports for the preceding year. We consider that using average closing prices for a certain period of time (as opposed to using the closing price of a certain day – for example 31.03) has the advantage of neutralizing possible daily fluctuations of the prices, caused by factors that are not linked to the financial information published in the annual reports.

A very important aspect for every empirical study based on testing linear regressions is the problem of identifying and eliminating outliers (Martin & Roberts, 2006: 703) [30]. In this respect, we established two filters: the first filter (applied by Hellström, 2006 [21]) eliminated observations that, in the first stage, exceed five standard deviations from the average value of equity (consolidated and individual, respectively)/share price.
and net income (consolidated and individual, respectively)/share price and then (after eliminating these ones) the ones that exceed three standard deviations from the average. The second filter (applied by Collins et al. 1997 [8]; Gu, 2007 [19]) eliminates outliers for which residuals have absolute values exceeding 4 standard deviations from zero for consolidated financial statements regressions, respectively for parent company individual financial statements. This methodology was applied for the complete sample (n=588), as well as for each sub-sample used throughout the study. The final dimension of each sample is indicated in the first column of each table, which represents the empirical results for the various regression models employed.

3.2 Hypotheses development

For the purpose of this study, we formulated the following six hypotheses related to the „confrontation” on the absolute and relative quality (relevance) of consolidated financial statements and parent company financial statements.

**Hypothesis 1: Information supplied by consolidated financial statements are of higher quality (i.e. are more value relevant) than information supplied by individual financial statements of the parent company.**

This hypothesis represents the starting point and basis for elaborating and testing the next hypotheses. Naturally, for its development we took into consideration empirical results of previous research, which support the thesis of consolidated financial statement superiority (Harris et al., 1994 [20]; Niskanen et al., 1998 [33]; Abad et al., 2000 [1]; Goncharov et al., 2009 [18]). As mentioned before throughout this scientific endeavor, the capacity of individual financial statements of the parent company to reflect its real economic power is reduced. The information supplied by these statements often appear insufficient, especially for those users of accounting information whose fulfillment of individual goals depends on the activity of more or all of the companies within the group (Theisen, 2000: 494 [40]). Therefore, consolidated financial statements, which reflect the economic power of the whole business combination (presenting information on all the resources and activities within the scope of the reporting entity), should supply more relevant information to the stock market investors.

**Hypothesis 2: The quality (value relevance) of information supplied by consolidated financial statements has been increasing (in the analyzed period of time).**

At the basis of the development of this hypothesis lies, on one hand, the results of previous studies (Collins et al., 1997 [8]; Gjerde et al., 2007 [16]), which show that the relevance of financial statements has increased over time. On the other hand, we also start from the presumption that the qualitative level of the regulations for presenting consolidated financial statements has increased over time, especially considering the adoption of IFRS in 2005 and their constant improvement in time as a result of IASB concern (together with FASB) to elaborate global standards of high quality.

**Hypothesis 3: The quality (value relevance) surplus supplied by consolidated financial statements as opposed to individual financial statements of the parent company has an increasing trend (in the analyzed period of time).**

This hypothesis represents, to a certain extent, a blending of the first two aforementioned hypotheses. For its development, we also took into consideration the fact that the European and national accounting regulations on presenting parent company financial statements generally evolve at a slower pace (compared to international standards), and have not been substantially modified in the analyzed period of time.
Hypothesis 4: Information supplied together by consolidated financial statements and parent company statements are of higher quality (i.e. are more value relevant) as opposite to information supplied only by consolidated financial statements.

While consolidated financial statements are meant to offer a true and fair view on the financial position and performance of the economic entity (the group), individual financial statements have not only the role to inform on the financial position and performance of the legal entity (the parent company), but also represent to starting point in determining taxes and computing distributable income (Goncharov et al., 2009: 335 [18]). Therefore, it is plausible for information supplied by parent company financial statements to bring a surplus of relevance (market value relevance), beyond consolidated information, which leads to the fact that a dual reporting is superior (from the point of view of relevance) to consolidated reporting.

Hypothesis 5: Consolidated financial statements presented according to International Financial Reporting Standards (IFRS) are of higher quality (i.e. are more value relevant) than consolidated financial statements presented according to national regulations (which are based on European accounting directives).

International Financial Reporting Standards are generally perceived as being of high quality and assuring a high degree of transparency and comparability of financial statements presented according to these standards. These considerations have determined the European Union to impose, starting with 2005 for all listed companies to present consolidated financial statements according to IFRS (adopted by the EU). According to a recent study (Armstrong et al., 2010 [4]), mandatory application of IFRS from 2005 when presenting consolidated financial statements leads to an increase of the quality of accounting information perceived by investors. As well, some previous empirical research have proved the increase of market value relevance of consolidated financial statements once IFRS were adopted (Bartov et al., 2005 [6]; Jermakowicz et al., 2007 [27]; Lin and Paananen, 2007 [29]).

Hypothesis 6: The quality (value relevance) surplus supplied by consolidated financial statements (when compared to parent company financial statements) is higher in the context of applying International Financial Reporting Standards (IFRS) when preparing group financial statements.

Starting from the perspective of confirming the previous hypothesis, and considering that, from the point of view of their quality, international standards are perceived by investors as superior to European and national accounting regulations, that govern parent company financial statements as well as consolidated financial statements up until 2004 (see Armstrong et al., 2010 [4]), in our vision, the increase in the relevance increment between consolidated financial statements and parent company statements is probable, once IFRS was adopted for consolidated reporting. (This hypothesis can be looked upon as a particularization of hypothesis 3.)

3.3 Development of empirical models and description of the variables involved

In order to empirically test the research hypotheses on the market value relevance of information supplied by consolidated and parent company financial statements, we developed a series of econometric valuation models which measure the degree of association between share price and accounting information supplied by financial statements (equity and net income). The starting point in developing these models was the following linear regression (whose parameters are to be estimated using ordinary least square OLS):
Initial model: \[ P_{it} = \alpha_0 + \alpha_1 \times C_{pit} + \alpha_2 \times Rez_{it} + \varepsilon_{it} \] (1)

where:

- \( P_{it} \) = share price of company i in year t
- \( C_{pit} \) = equity/share of company i in year t
- \( Rez_{it} \) = net income/share of company i in year t
- \( \varepsilon_{it} \) = residual value (error term) for company i in year t

This regression model in which the dependent variable is the share price level (price level regression), has the advantage that it is affected in a small amount by an eventual inefficiency of the market, since price level regressions reflect information accumulated since the establishment of the companies (concentrated for example in net assets) (Aboody et al., 2002: 978 [2]). At the same time, another advantage of this model is that it can be decomposed, so that the two explanatory variables (equity and net income) are broken down to their components. The basis for this is the Ohlson (1995) [35] valuation model, which expresses share price as a function of current accounting value of equity plus discounted value of future (abnormal) results. The model was initially proposed by Preinreich in 1938 [38], later used by Edwards and Bell (1961) [10], Edey (1962) [9] and Peasnell (1982) [37], but it was restored and popularised in accounting literature through papers written by Ohlson and respectively Feltham and Ohlson in 1995 [12].

To compare relevance in absolute values of information supplied by consolidated financial statements, respectively by parent company financial statements, the following empirical models were elaborated:

Model 1: \[ P_{it} = \alpha_0 + \alpha_1 \times pBV_{it} + \alpha_2 \times pE_{it} + \varepsilon_{it} \] (2)

Model 2: \[ P_{it} = \alpha_0 + \alpha_1 \times cBV_{it} + \alpha_2 \times cE_{it} + \varepsilon_{it} \] (3)

where

- \( pBV_{it} \) = book value of parent company equity/share of company i in year t
- \( pE_{it} \) = parent company net income/share of company i in year t
- \( cBV_{it} \) = book value of group equity/share of company i in year t
- \( cE_{it} \) = group earnings/share of company i in year t

In order to make inferences regarding incremental utility of information supplied by consolidated financial statements (considering that both sets of financial statements are published by the sampled companies) we developed a model to include both categories of information:

Model 3: \[ P_{it} = \alpha_0 + \alpha_1 \times pBV_{it} + \alpha_2 \times cBV_{it} + \alpha_3 \times \Delta cBV_{it} + \alpha_4 \times pE_{it} + \alpha_5 \times \Delta cE_{it} + \varepsilon_{it} \] (4)

where

- \( \Delta cBV_{it} \) = difference between group equity and parent company equity/share of company i in year t
- \( \Delta cE_{it} \) = difference between group earnings and parent company earnings/share of company i in year t

These three empirical models will be used to test the first three hypotheses. Therefore, in order to confirm hypothesis 1 regarding consolidated information relevance superiority, explanation power of model 2 quantified by adjusted \( R^2 \) must be greater than the explanation power of model 1. Since \( R^2 \) coefficient of determination increases with the introduction of new exogenous variables (and thus not being adequate to make
comparisons between models with a different number of explanatory variables), we use coefficient of determination corrected with the number of degrees of freedom (or adjusted $R^2$).

In order to test if an eventual relevance difference (that is relevance increment $\Delta \text{Adj. } R^2$) is statistically significant, we use models 1 and 3, checking the level of $R^2$ change of model 1, after introducing supplementary variables from model 3 (corresponding to consolidated information). As well, to confirm/refute hypothesis 3, we verify if the difference between explanatory power of model 3 and explanatory power of model 1 follow an increasing trend in the analyzed period of time. About hypothesis 2, we will of course follow the evolution in time of explanatory power of model 2.

A fourth empirical model was developed to verify hypothesis 4, regarding the market value relevance superiority of information supplied (together) by consolidated and parent company financial statements as opposed to consolidated information. This is based on model 2 (based on consolidated information) and also includes information supplied by parent company financial statements:

$$P_{it} = \alpha_0 + \alpha_1 \times cBV_{it} + \alpha_2 \times \Delta pBV_{it} + \alpha_3 \times cE_{it} + \alpha_4 \times \Delta pE_{it} + \varepsilon_{it}$$

(5)

where

$\Delta pBV_{it} = $ difference between parent company equity and group equity/share of company i in year $t$

$\Delta pE_{it} = $ difference between parent company earnings and group earnings/share of company i in year $t$

To confirm hypothesis 4, the explanatory power of model 4 must be superior to the explanatory power of model 2, and the change in explanatory power, as a result of introducing the two variables which represent information regarding the parent company, must be statistically significant.

To test the last two hypotheses related to the impact of applying International Financial Reporting Standards (IFRS) on the absolute and relative relevance of consolidated financial statements, we applied the first three models described above but only on samples composed of those specific companies that adopted IFRS starting with 2005. In order to confirm hypothesis 5 (regarding the superior relevance of consolidated financial statements presented according to IFRS), the explanatory power of model 2 for 2005-2006 period (and separately for 2005 and 2006) must be superior to the explanatory power of the same model 2003-2004 period (and separately for 2003 and 2004). In the end, to confirm/refute the last hypothesis (superiority of relevance variance between consolidated and individual financial statements in the context of IFRS adoption for consolidated reporting), we will check if the difference between the explanatory power of model 3 and the explanatory power of model 1 is greater in 2005-2006 (IFRS application) as opposed to 2003-2004 period (application of national regulations).

### 3.4 Descriptive statistics

From the descriptive statistics analysis presented in table 2 (absolute values) and table 6 (values per share) there are more relevant conclusions that can be extracted regarding the variables considered in this study. To begin with, an increasing trend of the average share price and total market capitalization can be noticed (for the companies of the sample) until 2006, followed by a slight decrease in 2007 and a more steep one in 2008, due to the economic-financial global crisis, of course. A similar evolution can be noticed for consolidated equity, consolidated income and parent company income (expressed in values per share). However, a clear trend cannot be identified for parent company equity. Worthwhile to remark is the increase (up until the beginning of the crisis) in the difference between group equity and parent company equity, respectively between group earnings and parent company earnings, indicating an increase in time of the contribution of subsidiaries to consolidated equity, respectively to consolidated earnings.
Table 2. Statistical synthesis of variables (absolute average values in mil. Euro)

<table>
<thead>
<tr>
<th>Period/Sample</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Shares</td>
</tr>
<tr>
<td>2003-2008 (n=588)</td>
<td>819.2</td>
</tr>
<tr>
<td>2003 (n=98)</td>
<td>799.1</td>
</tr>
<tr>
<td>2004 (n=98)</td>
<td>803.6</td>
</tr>
<tr>
<td>2005 (n=98)</td>
<td>781.7</td>
</tr>
<tr>
<td>2006 (n=98)</td>
<td>824.8</td>
</tr>
<tr>
<td>2007 (n=98)</td>
<td>827.9</td>
</tr>
<tr>
<td>2008 (n=98)</td>
<td>878.1</td>
</tr>
<tr>
<td>Frankfurt St. Ex.</td>
<td>341.1</td>
</tr>
<tr>
<td>London St. Ex.</td>
<td>1814.2</td>
</tr>
<tr>
<td>Paris St. Ex. (n=31)</td>
<td>331.9</td>
</tr>
</tbody>
</table>

If we concentrate the analysis on the three stock exchanges (that form the sample), what stands out is the fact that the average of all variables is very low compared to the companies listed at the London Stock Exchange compared to those listed on Frankfurt or Paris Stock Exchange, which is due especially to the high average number of shares issued by English companies (1.814 million shares/company) compared to German companies (341 million shares/company) and French (332 million shares/company). This state of facts is based on the long tradition in financing of the big companies on the Great Britain stock market (country with an Anglo-Saxon economy). By analyzing absolute values results that companies listed on Paris Stock Exchange (and included in the sample) have, on average, the highest market capitalization and the highest consolidated equity. The market capitalization average values for the three sub-samples are situated in the same size range (tenths of billion Euros) deviating from the average of the complete sample (13.9 billion Euro) with 14% at the most, indicating a relatively homogenous complete sample (from the point of view of company size).

Regarding the existent associations between the variables employed in the econometric models (see Pearson correlation matrix in table 3), it can be seen that there are strong significant correlations between the dependent variable (share price) and the explanatory variables (equity, respectively earnings per share, at consolidated and individual level), which signals the relevance of these accounting values to explain the market value of companies. Correlations between share price and consolidated accounting values are higher, suggesting the possibility (or even the probability) of superiority (from the market value relevance point of view) of consolidated financial statements as opposed to parent company financial statements. Of course, this supposition is to be confirmed or refuted by statistical inferences (econometric models).
Table 3. Correlation matrix of variables

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>cBV</th>
<th>cE</th>
<th>pBV</th>
<th>pE</th>
<th>ΔcBV</th>
<th>ΔcE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cBV</td>
<td>0.776</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cE</td>
<td>0.781</td>
<td>0.788</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pBV</td>
<td>0.679</td>
<td>0.784</td>
<td>0.598</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pE</td>
<td>0.620</td>
<td>0.407</td>
<td>0.404</td>
<td>0.510</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔcBV</td>
<td>0.552</td>
<td>0.729</td>
<td>0.601</td>
<td>0.146</td>
<td>0.099</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>ΔcE</td>
<td>0.534</td>
<td>0.481</td>
<td>0.709</td>
<td>0.251</td>
<td>-0.329</td>
<td>0.489</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*All correlations are significant at 0.01.

It must be mentioned, as well, the existence of significant correlations between some explanatory variables used in the same econometric models. We are referring especially to group equity and group earnings (per share). These correlations, which indicate the existence of multicollinearity between variables are, however, common to such studies, since they are present in numerous empirical research (see Naceur & Goaied, 2004 [32]; Aboody et al., 2002 [2]; Hevas et al., 2000 [22]; Abad et al., 2000 [1]; Rees, 1997 [39]; Collins et al., 1997 [8]).
To examine if multicollinearity generates instability of empirical results, we computed, for each coefficient of the explanatory variables from the econometric models, the variance inflation factor (VIF), which quantifies to what extent the variance for a coefficient is increased due to collinearity (Andrei & Bourbonnais, 2008: 274 [3]). When variables are not correlated, the variance inflation factor is 1. VIF values of more than 5 (see Jermakowicz et al., 2007 [27]) or even 10 (see Kutner et al., 2004 [28]) are regarded in the specialty literature as indication of (serious) autocorrelation problems between independent variables.

### 4 Empirical Results

#### 4.1 Quality of consolidated financial statements as opposed to parent company financial statements

As we mentioned when we described the empirical models developed, in order to test the hypothesis regarding the superior quality (value relevance) of consolidated financial statements (as opposed to parent company financial statements),
financial statements), in the first stage we compared the absolute value relevance of information supplied by the two types of financial statements, based on two regression models. The empirical results regarding the two models are presented in table 5 and illustrated graphically in figure 1. By comparing the explanatory power (Adj. R²) of the two models for the whole analyzed period (2004-2008) as well as for each year and each stock exchange included in the sample, the superiority of the value relevance of information provided by consolidated financial statements clearly stands out. Concerning the coefficients of the two regressions, they are significant (and positive) for each sub-sample and for the complete sample, usually at 0.001 level (at least at 0.05 level for model 2 related to consolidated reporting, respectively at 0.1 for model 2 related to individual reporting).

At the same time, the estimated coefficients have values of variance inflation factor (VIF) under 5, indicating the fact that there are no worrying aspect regarding the effects of multicollinearity between explanatory variables of the model. In the second stage we considered testing the relevance difference between group statements and parent company financial statements (that is incremental Δ Adj. R²) to see if it is statistically significant. Therefore, based on models 1 and 3 (see table 6 respectively figure 2) we checked the level of statistical significance of changing the explanatory power of model 1 after introducing supplementary variables corresponding to consolidated information from model 3, and concluded that the relevance surplus is statistically significant at 0.001 level. Consequently, the first hypothesis regarding the superiority in terms of quality (relevance) of consolidated financial statements (as opposed to information provided by parent company statements) is statistically confirmed.

At the same time, from the analysis of the empirical results obtained (see table 5 and figure 1) we clearly observe the increasing trend of relevance (market value relevance) of consolidated financial statements, starting with a value (of the explanatory power of model 2 Adj. R²) of 64.7% in 2003 and reaching 77.9% in 2008. The slight decrease of the power of explanation from 2007 against 2006 is singular, and can be credited, of course, to the financial-economic crisis and does not affect, in our opinion, the increasing trend of the analyzed period. Therefore, this statistical evidence permits to confirm the second hypothesis regarding the increase in time of the quality (relevance) of consolidated financial statements.
| Period/Sample | Characteristics | MODEL 1 | | MODEL 2 | |
|---------------|-----------------|---------|-----------------|---------|
|               | α₀          | pBV     | pE       | F      | Adj. R² | α₀          | eBV     | eE       | F      | Adj. R² |
| 2003-2008 n= 548 | Alfa        | 11.827   | 8.375**** | 1.064   | 5.138   | 285.405   | 53.20%     | 12.634   | 11.504**** | 0.578   | 3.802   | 507.106   | 66.30%   |
|               | t           | 8.375**** | 1.064   | 5.138   | 285.405   | 53.20%     | 12.634   | 11.504**** | 0.578   | 3.802   | 507.106   | 66.30%   |
|               | VIF         | -        | 1.502   | 1.502   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2003 n= 88    | Alfa        | 9.687    | 4.439**** | 0.851   | 2.986   | 49.948    | 56.30%     | 10.071   | 5.327****  | 0.492   | 3.465   | 69.862    | 64.70%   |
|               | t           | 4.439**** | 0.851   | 2.986   | 49.948    | 56.30%     | 10.071   | 5.327****  | 0.492   | 3.465   | 69.862    | 64.70%   |
|               | VIF         | -        | 1.586   | 1.586   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2004 n= 86    | Alfa        | 10.049   | 4.064**** | 0.784   | 5.545   | 53.302    | 57.30%     | 11.815   | 6.022****  | 0.443   | 3.237   | 79.142    | 65.90%   |
|               | t           | 4.064**** | 0.784   | 5.545   | 53.302    | 57.30%     | 11.815   | 6.022****  | 0.443   | 3.237   | 79.142    | 65.90%   |
|               | VIF         | -        | 2.093   | 2.093   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2005 n= 88    | Alfa        | 12.083   | 3.834**** | 1.272   | 6.631   | 76.733    | 65.40%     | 14.827   | 5.649****  | 0.958   | 1.98    | 95.703    | 69.00%   |
|               | t           | 3.834**** | 1.272   | 6.631   | 76.733    | 65.40%     | 14.827   | 5.649****  | 0.958   | 1.98    | 95.703    | 69.00%   |
|               | VIF         | -        | 1.717   | 1.717   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2006 n= 84    | Alfa        | 18.379   | 5.095**** | 0.987   | 9.245   | 71.492    | 64.40%     | 16.339   | 6.252****  | 0.856   | 4.487   | 156.771   | 79.40%   |
|               | t           | 6.561**** | 0.987   | 9.245   | 71.492    | 64.40%     | 16.339   | 6.252****  | 0.856   | 4.487   | 156.771   | 79.40%   |
|               | VIF         | -        | 3.142   | 3.142   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2007 n= 87    | Alfa        | 15.339   | 3.574**** | 0.935   | 7.306   | 41.05     | 49.40%     | 13.269   | 4.771****  | 0.346   | 6.237   | 121.515   | 74.20%   |
|               | t           | 3.841**** | 0.935   | 7.306   | 41.05     | 49.40%     | 13.269   | 4.771****  | 0.346   | 6.237   | 121.515   | 74.20%   |
|               | VIF         | -        | 1.322   | 1.322   | -        | -          | -        | -        | -        | -        | -        | -        |
| 2008 n= 89    | Alfa        | 5.249    | 1.757*   | 0.978   | 4.706   | 45.564    | 53.00%     | 10.508   | 6.258****  | 0.198   | 3.877   | 147.698   | 77.90%   |
|               | t           | 6.826**** | 0.978   | 4.706   | 45.564    | 53.00%     | 10.508   | 6.258****  | 0.198   | 3.877   | 147.698   | 77.90%   |
|               | VIF         | -        | 1.196   | 1.196   | -        | -          | -        | -        | -        | -        | -        | -        |
| Frankfurt n= 192 | Alfa    | 22.105   | 6.561**** | 0.772   | 3.784   | 26.758    | 22.50%     | 18.682   | 8.262****  | 0.34    | 4.282   | 93.017    | 50.30%   |
|               | t           | 6.561**** | 0.772   | 3.784   | 26.758    | 22.50%     | 18.682   | 8.262****  | 0.34    | 4.282   | 93.017    | 50.30%   |
|               | VIF         | -        | 1.13    | 1.13    | -        | -          | -        | -        | -        | -        | -        | -        |
| London n= 174 | Alfa       | 4.702    | 6.829**** | 0.871   | 4.98    | 44.862    | 36.10%     | 4.597    | 8.277****  | 0.355   | 4.891   | 87.796    | 52.20%   |
|               | t           | 4.106**** | 0.871   | 4.98    | 44.862    | 36.10%     | 4.597    | 8.277****  | 0.355   | 4.891   | 87.796    | 52.20%   |
|               | VIF         | -        | 1.221   | 1.221   | -        | -          | -        | -        | -        | -        | -        | -        |
| Paris n= 171  | Alfa        | 25.197   | 5.667**** | 0.747   | 4.889   | 39.611    | 32.30%     | 28.228   | 9.479****  | 0.434   | 2.609   | 111.331   | 57.10%   |
|               | t           | 9.479**** | 0.434   | 2.609   | 39.611    | 32.30%     | 28.228   | 9.479****  | 0.434   | 2.609   | 111.331   | 57.10%   |
|               | VIF         | -        | 1.238   | 1.238   | -        | -          | -        | -        | -        | -        | -        | -        |

**** significant at 0.001; *** significant at 0.01; ** significant at 0.05; * significant at 0.1
In order to test hypothesis 3 regarding the increase in time of the quality (relevance) variance between the two categories of financial statements, we verified if there is a trend over the analyzed period for the difference measure between the coefficient of determination of model 3 (corresponding to consolidated financial statements) and the coefficient of determination of model 1 (corresponding to individual financial statements). In this respect, to better delineate the trend, we split the analyzed period (2003-2008) in three sub-periods of two years, computing for each sub-period the average explanatory power for the corresponding years (see figure 2).

From the conducted analysis results an increase in time of the difference between the two coefficients of determination, from 8.8% (for 2003-2004) to 25.8% (for 2007-2008). Considering the statistical significance of the respective difference certified by statistic tests applied to verify hypothesis 1 (at 0.001 level), we can conclude that the third hypothesis, as well, regarding the increasing trend of the quality (relevance) surplus provided by consolidated information is statistically confirmed.
Table 6. Empirical results for regression model 3

<table>
<thead>
<tr>
<th>Period/ Sample</th>
<th>Characteristics</th>
<th>MODEL 3 ( \alpha_0 )</th>
<th>pBV</th>
<th>( \Delta cBV )</th>
<th>pE</th>
<th>( \Delta cE )</th>
<th>F</th>
<th>Adj R(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2008 n= 548</td>
<td>Alfa 10.343</td>
<td>0.725</td>
<td>0.386</td>
<td>5.167</td>
<td>3.139</td>
<td>272.155</td>
<td>68.40%</td>
<td></td>
</tr>
<tr>
<td>2003 n= 88</td>
<td>Alfa 9.072</td>
<td>0.629</td>
<td>0.374</td>
<td>3.714</td>
<td>2.197</td>
<td>37.159</td>
<td>65.60%</td>
<td></td>
</tr>
<tr>
<td>2004 n= 86</td>
<td>Alfa 9.34</td>
<td>0.572</td>
<td>0.449</td>
<td>3.77</td>
<td>1.994</td>
<td>38.119</td>
<td>65.60%</td>
<td></td>
</tr>
<tr>
<td>2005 n= 88</td>
<td>Alfa 12.484</td>
<td>1.095</td>
<td>0.615</td>
<td>4.344</td>
<td>1.415</td>
<td>51.127</td>
<td>71.50%</td>
<td></td>
</tr>
<tr>
<td>2006 n= 84</td>
<td>Alfa 15.198</td>
<td>0.882</td>
<td>0.374</td>
<td>5.634</td>
<td>4.506</td>
<td>79.46</td>
<td>80.10%</td>
<td></td>
</tr>
<tr>
<td>2007 n= 87</td>
<td>Alfa 12.184</td>
<td>0.383</td>
<td>0.431</td>
<td>7.369</td>
<td>4.82</td>
<td>60.571</td>
<td>74.40%</td>
<td></td>
</tr>
<tr>
<td>2008 n= 89</td>
<td>Alfa 8.54</td>
<td>0.371</td>
<td>0.041</td>
<td>4.052</td>
<td>4.078</td>
<td>78.3</td>
<td>79.60%</td>
<td></td>
</tr>
<tr>
<td>Frankfurt n= 192</td>
<td>Alfa 17.465</td>
<td>0.355</td>
<td>0.408</td>
<td>5.012</td>
<td>3.523</td>
<td>46.899</td>
<td>50.90%</td>
<td></td>
</tr>
<tr>
<td>London n= 174</td>
<td>Alfa 4.376</td>
<td>0.634</td>
<td>0.423</td>
<td>5.029</td>
<td>2.964</td>
<td>35.461</td>
<td>47.10%</td>
<td></td>
</tr>
<tr>
<td>Paris n= 171</td>
<td>Alfa 24.288</td>
<td>0.395</td>
<td>0.282</td>
<td>5.216</td>
<td>2.507</td>
<td>59.001</td>
<td>58.90%</td>
<td></td>
</tr>
</tbody>
</table>

*** significant at 0.001; ** sig. at 0.01; * sig. at 0.05; * sig. at 0.1

Figure 2. Evolution of value relevance increment of CFS relative to PFS

To continue, we tested regression model 4, developed to verify the hypothesis regarding the superiority for the capital market of information provided (together) by consolidated financial statements and parent company statements as opposed to consolidated information. The empirical results are synthesized in table 7.
### Table 7. Empirical results for regression model 4

<table>
<thead>
<tr>
<th>Period Sample</th>
<th>Characteristics MODEL 4</th>
<th>α</th>
<th>δBV</th>
<th>∆pBV</th>
<th>cBV</th>
<th>∆pE</th>
<th>cE</th>
<th>∆pE</th>
<th>F</th>
<th>Adj. R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-08 n= 548</td>
<td>Alfa</td>
<td>10.279</td>
<td>0.692</td>
<td>0.381</td>
<td>5.384</td>
<td>1.845</td>
<td>282.185</td>
<td>68.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>4.525</td>
<td>2.75</td>
<td>5.916</td>
<td>3.247</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2003 n= 88</td>
<td>Alfa</td>
<td>9.266</td>
<td>0.58</td>
<td>0.211</td>
<td>3.954</td>
<td>1.341</td>
<td>36.676</td>
<td>65.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>6.361</td>
<td>2.628</td>
<td>4.631</td>
<td>1.588</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 n= 86</td>
<td>Alfa</td>
<td>10.02</td>
<td>0.57</td>
<td>0.284</td>
<td>4.565</td>
<td>2.123</td>
<td>43.689</td>
<td>67.80%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>VIF</td>
<td>5.223</td>
<td>2.715</td>
<td>8.844</td>
<td>5.786</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005 n= 88</td>
<td>Alfa</td>
<td>12.334</td>
<td>1.042</td>
<td>0.444</td>
<td>4.946</td>
<td>3.688</td>
<td>54.156</td>
<td>71.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>2.165</td>
<td>1.959</td>
<td>2.28</td>
<td>1.816</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2006 n= 84</td>
<td>Alfa</td>
<td>14.847</td>
<td>1.039</td>
<td>0.422</td>
<td>4.298</td>
<td>-0.36</td>
<td>80.453</td>
<td>79.70%</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>5.456</td>
<td>4.698</td>
<td>1.737</td>
<td>-0.204</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007 n= 87</td>
<td>Alfa</td>
<td>11.779</td>
<td>0.4</td>
<td>-0.51</td>
<td>7.403</td>
<td>2.702</td>
<td>64.171</td>
<td>75.10%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>VIF</td>
<td>3.948</td>
<td>2.042</td>
<td>-0.196</td>
<td>6.349</td>
<td>2.124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008 n= 89</td>
<td>Alfa</td>
<td>8.933</td>
<td>0.346</td>
<td>0.289</td>
<td>4.036</td>
<td>-0.004</td>
<td>76.529</td>
<td>78.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>4.597</td>
<td>2.770</td>
<td>1.962</td>
<td>3.478</td>
<td>2.382</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Frankfurt n= 192</td>
<td>Alfa</td>
<td>17.099</td>
<td>0.356</td>
<td>0.76</td>
<td>5.347</td>
<td>1.287</td>
<td>48.063</td>
<td>50.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>6.411</td>
<td>2.207</td>
<td>0.382</td>
<td>6.844</td>
<td>1.931</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London n= 174</td>
<td>Alfa</td>
<td>4.384</td>
<td>0.47</td>
<td>0.16</td>
<td>5.275</td>
<td>0.992</td>
<td>44.292</td>
<td>52.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>7.464</td>
<td>2.175</td>
<td>0.667</td>
<td>6.964</td>
<td>1.091</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paris n= 171</td>
<td>Alfa</td>
<td>23.66</td>
<td>0.385</td>
<td>0.117</td>
<td>5.385</td>
<td>2.803</td>
<td>63.212</td>
<td>60.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIF</td>
<td>6.972</td>
<td>2.917</td>
<td>0.755</td>
<td>6.165</td>
<td>3.481</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** significant at 0.001; ** sig. at 0.01; * sig. at 0.05; ** sig. at 0.1

As mentioned before, this has the starting point in model 2 (based on consolidated information) and also includes information offered by parent company financial statements. The comparison between the explanatory power of the two models (see table 8) reveals a superiority (statistically significant) of model 4 (based on dual information) of 2.3% for the whole sample.

### Table 8. Empirical results regarding the difference of value relevance between models 2 and 4

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2003-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 2 SFC</td>
<td>64.70%</td>
<td>65.90%</td>
<td>69.00%</td>
<td>79.40%</td>
<td>74.20%</td>
<td>77.90%</td>
<td>66.30%</td>
</tr>
<tr>
<td>Model 4 Dual</td>
<td>65.50%</td>
<td>67.80%</td>
<td>71.40%</td>
<td>79.70%</td>
<td>75.10%</td>
<td>78.40%</td>
<td>68.60%</td>
</tr>
<tr>
<td>Δ Adj. R² (M4-M2)</td>
<td>0.80%</td>
<td>1.90%</td>
<td>2.40%</td>
<td>0.30%</td>
<td>0.90%</td>
<td>0.50%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.164</td>
<td>0.038</td>
<td>0.014</td>
<td>0.202</td>
<td>0.091</td>
<td>0.151</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Frankfurt</td>
<td>London</td>
<td>Paris</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R² Model 2 SFC</td>
<td>50.30%</td>
<td>50.50%</td>
<td>52.20%</td>
<td>57.10%</td>
<td>57.10%</td>
<td>60.00%</td>
<td>60.00%</td>
</tr>
<tr>
<td>Adj. R² Model 4 Dual</td>
<td>50.80%</td>
<td>52.20%</td>
<td>52.30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Δ Adj. R² (M4-M2)</td>
<td>0.50%</td>
<td>0.10%</td>
<td>2.90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.133</td>
<td>0.409</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

However, bringing the analysis at the level of each year, respectively of each stock exchange (from the sample), there is a fluctuation of the difference (between the explanatory power of the two models) in the interval 0.3% - 2.4%, respectively
0.1% - 2.9%. From the six years, only for 2004 (1.9%) and 2005 (2.4%) the difference is significant (at 0.05 level). As well, only for the French stock exchange (2.9%) there is a statistically significant value (at 0.001 level). These „mixed” results allow, in our opinion, only a partial confirmation of the fourth hypothesis regarding the superior quality (relevance) of dual reporting as opposed to consolidated financial reporting.

4.2 Impact of IFRS adoption on the quality of consolidated financial statements

In order to test the last two hypotheses regarding the impact of applying International Financial Reporting Standards (IFRS) on absolute and relative quality (relevance) of consolidated financial statements, we applied the first three regression models on a sample composed of only the companies that have adopted consolidated reporting according to IFRS in 2005. That sample was divided in four annual sub-samples (2003, 2004, 2005 and 2006), and respectively in two two-year sub-samples, the first for the period before adopting IFRS (2003-2004), when consolidated financial statements were presented in conformity with national regulations (Local GAAP) and the second of the period after adopting IFRS (2005-2006).

The empirical results obtained after testing regression model 2 on the samples described above (to check hypothesis 5) are presented in table 9 and graphically illustrated in figure 3. Comparing the explanatory power of the model for 2003-2004 (Local GAAP) with the explanatory power for 2005-2006 (IFRS) reveals it increased in time (Δ Adj. R²) with 16.2%. Detailing the analysis (at year level), reveals an increase from year to year of the explanatory power of the model, but at a different pace: therefore, if between 2003 and 2004 (Local GAAP) respectively between 2005 and 2006 (IFRS) the increase is of 4.8% and of 4.4%, between 2004 and 2005 (transition from Local GAAP to IFRS) the increase in explanatory power is of 14.8%, that is 3 times more than the previous and the subsequent increase. Because the explanatory power of the econometric model is used as a measure of value relevance of financial statements, it implicitly results the confirmation of the fifth hypothesis regarding the higher level of quality (relevance) of consolidated financial statements presented according to IFRS than presented according to national regulations.

Table 9. Empirical results for regression model 2 applied to the sub-sample of companies that adopted IFRS in 2005

<table>
<thead>
<tr>
<th>Period/ Sample</th>
<th>Characteristics</th>
<th>MODEL 2</th>
<th>α₀</th>
<th>cBV</th>
<th>cE</th>
<th>F</th>
<th>Adj. R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2004 / Local GAAP</td>
<td>Alfa t</td>
<td>10.595</td>
<td>0.561</td>
<td>1.911</td>
<td>88.634</td>
<td>61.70%</td>
<td></td>
</tr>
<tr>
<td>n= 122</td>
<td></td>
<td>5.926****</td>
<td>5.667****</td>
<td>3.163***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-2006 / IFRS</td>
<td>Alfa t</td>
<td>12.848</td>
<td>0.972</td>
<td>2.723</td>
<td>206.906</td>
<td>77.90%</td>
<td></td>
</tr>
<tr>
<td>n= 122</td>
<td></td>
<td>6.193****</td>
<td>7.074****</td>
<td>3.184***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003 / Local GAAP</td>
<td>Alfa t</td>
<td>9.636</td>
<td>0.677</td>
<td>1.161</td>
<td>36.6</td>
<td>58.30%</td>
<td></td>
</tr>
<tr>
<td>n= 61</td>
<td></td>
<td>3.690****</td>
<td>3.729****</td>
<td>0.868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 / Local GAAP</td>
<td>Alfa t</td>
<td>11.477</td>
<td>0.509</td>
<td>2.117</td>
<td>56.593</td>
<td>63.10%</td>
<td></td>
</tr>
<tr>
<td>n= 61</td>
<td></td>
<td>4.576****</td>
<td>4.027****</td>
<td>3.038***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005 / IFRS</td>
<td>Alfa t</td>
<td>11.134</td>
<td>0.93</td>
<td>2.102</td>
<td>104.827</td>
<td>77.90%</td>
<td></td>
</tr>
<tr>
<td>n= 61</td>
<td></td>
<td>4.312****</td>
<td>5.445****</td>
<td>2.026**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006 / IFRS</td>
<td>Alfa t</td>
<td>11.491</td>
<td>0.61</td>
<td>6.449</td>
<td>138.306</td>
<td>82.30%</td>
<td></td>
</tr>
<tr>
<td>n= 61</td>
<td></td>
<td>3.578****</td>
<td>3.609****</td>
<td>6.736****</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**** significant at 0.001; *** sig. at 0.01; ** sig. at 0.05
To verify the last hypothesis regarding the superiority of the difference in quality (relevance) between consolidated and individual financial statements in the context of IFRS adoption we again tested empirically models 1 and 3 for the specific samples described in the previous paragraph. The results obtained (see table 10 and figure 4) reveal an increase of the difference between the explanatory powers (Δ Adj. R²) corresponding to models 3 and respectively 1 (statistically significant at 0.0001), from 6.1% in 2003-2004 (Local GAAP) to 12.7% in 2005-2006 (IFRS). At the same time, from the analysis at year level results a surplus of explanatory power for model 3 (again statistically significant) higher for 2005 (16.1%) and 2006 (13.7%), when consolidated financial statements were presented according to IFRS, as opposed to 2003 (12.8%) and 2004 (4.6%), when group reporting was made according to national regulations (based on European accounting directives).
These empirical results clearly lead to statistically confirming the sixth hypothesis regarding the higher level of quality surplus (increment) supplied by group statements (as opposed to parent company financial statements) in the context of applying IFRS as opposed to applying national regulations for consolidated reporting.

5 Summary and Conclusions

In this study we investigated using econometric regression models the absolute and relative market value relevance of consolidated financial statements for companies listed during 2003-2008 on the largest stock markets in Europe (London, Paris, and Frankfurt stock exchanges), in order to make assessments regarding the quality of financial information. We also investigated the impact which the IFRS mandatory adoption as of 2005 had on the absolute and incremental quality (measured through value relevance) of financial information supplied by the consolidated financial reporting.

For this purpose we focused on the „confrontation” regarding the value relevance between consolidated financial statements and parent company financial statements. As expected (and in accord with previous empirical studies, for example Harris et al., 1994 [20]; Niskanen et al., 1998 [33]; Abad et al., 2000 [1]; Goncharov et al., 2009 [18]), the results have shown an increase in superiority (statistically significant) of the relevance of consolidated statements (in detriment of individual ones). While in the analyzed period, consolidated financial statements have seen a positive trend of relevance, individual statements have had an oscillating relevance (inside some limits). These results prove, of course, the importance (usefulness) of consolidated financial statements especially for investors on the capital market. Therewith, they question the necessity of publishing parent company financial statements (according to national regulations) as long as they present consolidated financial statements. As a matter of fact, in the USA the obligation to publish parent company financial statements was eliminated since 1982, following the issuing of Accounting Series Release no. 302. (Francis, 1986: 394 [15]). We consider that these conclusions are valid not only for large European capital markets, but also for emerging capital markets (such as the one in Hungary, Poland, Romania, Bulgaria).

Concerning the impact of IFRS application on the absolute and relative quality of consolidated financial statements the statistical results have confirmed the initial prediction regarding the increase of group statements quality (value relevance)
once IFRS were adopted. Thus, we join the conclusions delineated by more authors (e.g. Bartov et al., 2005 [6]; Jermakowicz et al., 2007 [27]; Barth et al., 2007 [5]; Lin and Paananen, 2007 [29]) as a result of some empirical research on this matter. Plus, we ascertained (according to predictions) an increase in the quality surplus (increment) supplied by consolidated financial statements compared to parent company financial statements once the adoption of IFRS became mandatory for preparing consolidated financial statements. As well, it must be emphasized the fact that, even in the situation of presenting consolidated financial statements according to national regulation (based on European accounting directives) they have a superior quality (relevance) compared to individual statements (presented according to national regulations). This idea comes to strengthen the conclusions exposed in the previous paragraph.

In the end, some aspects regarding the limitations of this study should be mentioned, as well as the perspectives of future empirical research. First, it is possible to raise the problem of sample representativeness (and implicitly of the results obtained) for the large European capital markets and respectively for the whole European capital market. In this respect, future research could extend the analysis (and the sample) to other capital markets in Europe, as well as to companies that are not included in the main index of the stock market they are listed on. Second, the obtained results are based only on testing linear price level regression models. Future research could employ nonlinear models, for example logarithmic models (see Hellström, 2006 [21]) respectively return regression models (see Bartov et al., 2005 [6]). And third, the present study investigates relevance and therefore usefulness for decision making of consolidated financial statements only from the point of view of the investors on capital market. So, a future research theme less approached until now (see Goncharov et al., 2009 [18]) would be to investigate the relevance of financial statements from the perspective of other categories of users (for example financial institutions in their role as creditors).

Acknowledgements

This study is part of the research project POSDRU/89/1.5/S/59184 ‘Performance and excellence in postdoctoral research within the field of economic sciences in Romania’, Babeş-Bolyai University, Cluj-Napoca being a partner within the project.
Table 10. Empirical results for models 1 and 3 applied to the sample of companies who adopted IFRS in 2005

<table>
<thead>
<tr>
<th>Period</th>
<th>Sample</th>
<th>Characteristics MODEL 1</th>
<th>Characteristics MODEL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$\alpha$</td>
<td>pBV</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Local GAAP</td>
<td>12.024</td>
<td>0.331</td>
</tr>
<tr>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>2005-2006</td>
<td>IFRS</td>
<td>11.471</td>
<td>1.392</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIF</td>
<td>2.398</td>
</tr>
<tr>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Local GAAP</td>
<td>11.788</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIF</td>
<td>1.486</td>
</tr>
<tr>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Local GAAP</td>
<td>11.429</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIF</td>
<td>3.022</td>
</tr>
<tr>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>IFRS</td>
<td>9.266</td>
<td>1.469</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIF</td>
<td>1.657</td>
</tr>
<tr>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>IFRS</td>
<td>14.616</td>
<td>0.985</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIF</td>
<td>3.428</td>
</tr>
</tbody>
</table>

**** significant at 0.001; *** significant at 0.01; ** significant at 0.05; * significant at 0.1
References


[34] OECD, Principles of Corporate Governance, 2004


Ethical Behavior Regarding Environmental Reporting – An European Union Perspective

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ROMANIA

1 Introduction
Companies' ethical behavior is also assimilated to terms like transparency of information. Stakeholder theory supports the idea that a company’s success depends on the management of the company’s relationships with the stakeholders, because of the continuous pressure exerted from stakeholders to the company (Mahoney and Roberts, 2004 [37]). As a result, ethical behavior or ethical aspects are the ones determining companies to respond to the users’ requests for information with regard to environmental performance. Therefore, the ethical behavior is a constraint for the company’s strategy. In the same spirit, the legitimacy theory advocates that a company is legal / legitimate when its system of values is in accordance with the social system it belongs to, and wherever there is non-conformity, the company’s legitimacy becomes threatened.

The ethical behavior of companies, determined by strategies for ensuring, maintaining and re-establishing such conformity, consist in informing and educating the public and environmental reporting is considered part of these strategies (Gray et al., 1995 [20]). The companies use sustainable reporting in order to express their ethical behavior before users.

A wide range of stakeholders such as shareholders, financial institutions, government, local communities are interested in sustainable performance and its disclosure. Financial institutions such as banks and insurance companies have become interested in appraising corporate environmental risk and performance when they invest money (Lee et al., 2002 [35]). In response, many corporations have begun to report their eco-friendly activities and environmental performance.

The objective of our study is to analyse the way that corporate governance characteristics determine the ethical behavior and to reflect factors that determine companies from European Union countries to report environmental information. So our study is structured in two parts. In the first section we analysed the correlation between the efficiency of the board of directors, essential characteristic of the corporate governance and the ethical behavior of companies, while in the final section we analyse factors that can determine companies from European Union Countries to disclose environmental information. The study has it’s originality by analyzing corporate behavior, corporate governance and environmental at the national level for the European Union countries.

2 Corporate Governance and Ethical Behavior
The ethical behaviour of companies follows their behaviour while interacting with the information users, the environment and the society they operate within. In his study on the ethical behaviour of Israeli companies and business, Schwartz (2012) [51] analyses the managers’ perception on the term “business ethics”. They associate the term with phrases such as: being capable of distinguishing between good and evil, acting in a correct and adequate manner, proper behaviour, avoiding deviances, acting professionally, acting in such a way as to not

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32 The research within this study have been published in: Ienciu Ionel-Alin, "Corporate Governance and Ethical Behaviour: A National Perspective", Romanian Economic Journal No. 44, pp. 35-53.
feel ashamed when reading about you in the media the following day, being responsible for the society, treating people properly, acting in the interest of others, following the rules of the game, honesty, transparency, dignity.

The ethical behavior is most likely best understood by means of non-ethical behavior, by knowing the non-ethical behaviors and activities such as, non-observance of laws, favoritism (favoring certain persons), discrimination, theft, bribery, lack of confidentiality, lack of transparency, inadequate treatment of clients, suppliers, employees, deceitful advertising, concealment of financial indicators, inadvertence towards environment, safety and protection. Ethical behaviour implies therefore the observance of laws, transparency, non-differential treatment, adequate determination and presentation of performances, attention given to social and environmental aspects, as well as their proper representation.

A company’s reputation is an important asset (Alzola, 2011) [4]. Companies which are acknowledged for their ethical behavior and perceived as socially responsible have in general a higher financial performance (Pava and Krausz, 1996) [43]. Ethical behavior is an important aspect for the success of a company, as it influences its relations with various stakeholders (employees, investors, clients, suppliers, etc), thus ensuring the success of a business. The ethical reputation of a company doesn't necessarily lead to new performances, but non-ethical reputation may seriously affect future performance or the development of new businesses.

We notice that the large majority of phrases and terms defining ethical behavior lead to the term of social responsibility. A company’s social responsibility is generally regarded as the manner companies use to integrate social, economic and environmental aspects into the values, culture, strategy, decisions and operations they promote, respectively the company’s contribution to a sustainable economical development (Cormier and Ledoux, 2011: 1280) [9]. Social responsibility targets the achievement of all users’ needs, based on elements that are ethical in nature and representing a manifestation of companies' ethical behavior.

3 Corporate Business Behavior and the Code of Business Ethics

A large number of companies tried to elaborate ethical codes, in order to guide their corporate strategies and ensure market visibility and image.

Codes of ethics codes are corporate statements incorporating principles, rules of conduct, and codes of practice or the company’s philosophy concerning responsibility to stakeholders, environment or the society external to the company (Langlois and Schlegelmilch, 1990) [33]. The code of ethics contains the company’s responsibilities, principles, values and norms, demonstrating the degree of ethical issues acknowledgement and indicating the approach taken for these aspects and is meant to capture the company’s key values and send these values to stakeholders (Donker et al., 2008) [12].

In 2001, Kaptein (2004) [30] has investigated the ethical codes of the 200 largest companies in the world, showing that 58% of the analysed companies have such a code, and that most codes contain aspects related to the company’s responsibilities in matters of product and services quality, adherence to local rules and regulations, environmental protection, team work, conflict of interest, corruption, fraud.

Although there are many reasons for a company to elaborate and use a code of ethics as complex as possible, there is a certain doubt whether the existence of such a code is sufficient for determining the ethical behaviour of companies. Nevertheless, from a theoretical point of view, these codes are indicators of the companies' ethical behavior, determining them to act in an ethical manner, but specialized literature and empirical examples have demonstrated the contrary in some cases.

Lere and Gaumnitz (2003) [36] conclude, on the basis of the results from various studies and empirical examples, that these ethic code do not have a major impact on the decision making process within a company. Weaver et al. (1999) asserted that the large majority of companies have adopted only a symbolic code of ethics,
without having it actually applied and without giving the possibility to change it or fail to observe it when it becomes contrary to the company's momentary interest.

In their study, Svensson et al. (2010) [56] built a model or system of what ethical behavior should represent. Thus, the system should have as foundation the following sub-components: code of ethics, ethical audits, ethical performance appraisal, and consequences of a breach of the code). Other defining elements of this model are the communication to stakeholders regarding their efforts toward the use of ethically sustainable practices, the management, monitoring and evaluation of ethically sustainable practices, respectively the managerial relevance.

4 Corporate Governance and the Ethical Behavior

Among the studied elements, we believe that management’s attitude plays a major role in the ethical behavior of companies, as the management represents the main actor with direct implications in the operations performed by the company. This vision derives from the agency theory, used in some studies in order to explain why managers decide, at times, to make series of decisions that fail to best represent the company’s interests (Tuttle et al., 1997 [57]; Rutledge and Karim, 1999 [49]; Booth and Schulz, 2004 [5]). According to this theory, the manager is rationally interested in maximising his/her personal profit, thus a conflict of interests occurs between the manager and the shareholders, respectively users. The corporate governance is supposed to interfere in this conflict of interests, as it represents the process of supervision and control for ensuring that company's management acts in accordance to the shareholders' interests (Solomon, 2007 [53]). According to the stakeholder theory, corporate governance is defined as such governance providing the company with a global direction, through supervision and control of the management actions and through satisfaction of the legitimate expectations as a result of responsibilities and regulations beyond corporate borders (Solomon, 2007 [53]).

The corporate governance, covering the problems raised by the ownership / management ratio, is vital for the functioning of a modern business. Social responsibility depends on the corporate governance, as an optional management strategy. The increase of importance given to social responsibility worldwide has influenced the relationships between the owner and manager, expressed by the agency theory and expanded the concept of corporate governance beyond these relationships. Presently, social responsibility has become a profitable management strategy, to the extent it generates on long term, the credibility and trust necessary for a company in its relationships with those it depends upon, shareholders, business partners, clients, containing defining elements for the ethical behavior of companies. The increasing importance of social responsibility makes us state that the corporate governance and social responsibility have become concepts which are difficult to differentiate in the world's economic landscape.

Svensson et al. (2010: 337) [56] states: “In the last twenty years, the terms such as corporate governance, corporate social responsibility, triple bottom line, and sustainability have all become part of the everyday vocabulary of organizations. These concepts need to be embedded in the philosophical treatise that is business ethics...Our great concern has been that corporate governance, for example, has become just another checklist to be completed and filed and forgotten until the next time the specific legislative requirement needs to be met.” Starting from this statement, the present study intends to address the extent corporate governance efficiency influences the companies' ethical behavior.
5 Research Problem Formulation
Enron’s board of directors voted three times the suspension of the act on conflict of interests included in the company’s code of ethics, in order to allow the financial manager Andrew Fastow to establish and manage companies that have made business and took advantage of Enron (Schwartz, 2005: 85) [52]. From this example, the present research follows up on the way corporate governance, more precisely the efficiency of the board of directors, determines companies to coherently apply codes of ethical conduct and to act ethically, in accordance with the requirements from the stakeholders. Thus, we have formulated the following hypothesis:

**H0: Corporate governance and especially the efficiency of the board of directors determines the companies’ ethical behavior, respectively the corporate social responsibility, including the environmental responsibility.**

According to the agency theory, the executives are interested in maximising their personal profit and thus their actions do not always lead to an ethical behavior of the companies on behalf of which they act upon. As a result, corporate governance, by means of the supervision and control process exerted by the board of directors, is meant to ensure that the company's management acts ethically, in accordance with the stakeholders' interests. The specialized literature supports this hypothesis especially by means of analysing the way in which corporate governance determines the companies' ethical behavior in matters such as transparency of information, respectively voluntary supply of information to stakeholders.

Rao et al. (2012) [45] analyze the annual reports of 100 Australian firms listed on the Australian Stock Exchange, concluding a significant positive relationship between the extent on environmental reporting, which is considered an ethical behavior and efficiency of the board. Also Sanchez et al. (2011) [50] analyzing the disclosure practices of Spanish companies show that companies where the Chairperson of the Board is the same person as the CEO and, moreover, in which there is a lower frequency of meetings, which is a measure of the board efficiency disclose a greater amount of strategic information for stakeholders on their web sites.

Buniamin et al. (2008) [8], based on the content analysis for 243 Malaysian companies stock listed shows that board size influences the level of environmental reporting, while Akhtaruddin et al. (2009) [3] suggests a positive association between the size of the board and the reporting of voluntary information. So the efficiency of the board assured by the size and the structure of the board influence disclosure of voluntary information, which can be consider an indicator of corporate behavior.

6 Research Methodology
The research conducted in this study is included in the field of constructive, fundamental researches, using empirical research technique. The study is based on the existence of two variables: the efficiency of corporate governance, expressed by the efficiency of the board of directors and the ethical behavior of companies, respectively.

The two variables are indicators from the World Competitiveness Report 2011-2012, report issued by the World Bank, including economic indicators from 142 countries. Global Competitiveness Report has evolved during the last three decades, becoming the most comprehensive and respected source of assessing the inter-country competitiveness, offering invaluable information regarding the factors determining the sustainable economic development and long term prosperity. Conducted in cooperation with academicians and national and international research institutes, the World Competitiveness Report provides users with a very comprehensive database of competitiveness indicators for a large number of industrialized countries and emerging economies. The supplied indicators represent the results of the annual survey conducted by the World Economic Forum,

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33 Enron Corporation was an American energy, commodities, and Services Company which became a popular symbol of wilful corporate fraud and corruption.
capturing the perception of a few thousand of managers, from countries all over the world, on various subjects related to national competitiveness (www.gcr.webforum.org). This source of data presents the following advantages:

- It is the most comprehensive and respected source of evaluating the national competitiveness;
- The data supplied in the report are ranked using the same methodology, thus helping the creation of comparisons and connections between variables.

We have considered for our analysis the dependant variable, ethical behavior of companies, expressed by the behavior of national companies in their relationships with officials, politicians, other companies, society, environment, assuming values between 1 (minimal level) \([1 = \text{among the worst in the world}]\) and 7 (maximum level) \([7 = \text{among the best in the world}]\) (World Bank, World Competitiveness Report: 406).

The independent variable, corporate governance efficiency is the indicator 1.19 from World Competitiveness Report 2011-2012 and it reflects how corporate governance is characterized in a country from the perspective of investors and board of directors. The variable takes values between 1 (minimal level) \([1 = \text{management has little accountability to investors and boards}]\) and 7 (maximum level) \([7 = \text{investors and boards exert strong supervision of management decisions}]\) (World Bank, World Competitiveness Report: 408). The values of the variables are presented in Appendix 1.

The statistical correlations between the two variables, the reflection of how the board of directors efficiency determines the ethical behavior of companies are performed by means of the statistical software SPSS, version 17.0.

### 7 Analyses and Results

From the descriptive analysis (Appendix 1) of the two variables we notice that ethical behavior of companies showed the smallest value \((n = 2.40)\) in the case of Greece companies, respectively the maximum value \((n = 6.70)\) in the case of Denmark. Romania is situated below the average of the ranking with a score of 3.40, situation which is emphasized by the devotion Romanian companies show for environmental protection aspects, respectively the transparency of information provided by them (Ienciu, 2011) [27].

As far as the board of directors’ efficiency is concerned, we notice that the least efficient are the board of directors of companies located in Greece, with an average of 3.70, while Swedish companies are considered to have the most efficient boards of directors, exercising an efficient supervision on the management and executives. Romania is below average for this chapter as well, with a score of 4.30. For 2009, only one of the Romanian companies submits the „Comply or Explain” statement (Fülöp, 2009) [17], and for 2010, although the number of companies publicly submitting this statement is increasing, companies do not observe the requirements suggested in the Code of Corporate Governance of the Bucharest Stock Exchange and especially with regard to the independence of members, the share of non-executive members, the existence and independence of audit committees.

As a result of these faults, the efficiency of the board of directors’ decreases and the supervision of the executives is superficial. Regarding the conformity level of the Romanian companies listed at Bucharest Stock Exchange in 2010, Feleaga et al. (2011) [14] analyse 15 of the companies listed at Bucharest Stock Exchange, first category, and conclude that most sample companies do not meet the recommendations of the Bucharest Stock Exchange code of corporate governance regarding the independence of directors and audit committee members. In addition, for most of the Romanian companies in our sample, the degree of transparency is much lower than that of other European companies (Feleaga et al, 2011: 15) [14].
Table 1. Descriptive analysis

<table>
<thead>
<tr>
<th>Analysed variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical behavior of companies</td>
<td>4.8037</td>
<td>1.20527</td>
<td>3.10</td>
<td>6.70</td>
<td>27</td>
</tr>
<tr>
<td>Efficiency of the board of directors</td>
<td>4.6778</td>
<td>.56930</td>
<td>3.70</td>
<td>5.90</td>
<td>27</td>
</tr>
</tbody>
</table>

With regards to the analysis of correlations between the Ethical behavior of companies and the Efficiency of the board of directors, we notice (table 2) that there is a correlation (Sig = .000), the intensity of which is quite high (Pearson Correlation = .814), making us reject the null hypothesis and consider the probability of a dependence liaison between the two variables.

Table 2. Correlations table (Pearson Correlation)

<table>
<thead>
<tr>
<th>Ethical behavior of companies</th>
<th>Sig</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency of the board of directors</td>
<td>.814</td>
<td>.000</td>
</tr>
</tbody>
</table>

The obtained results have determined us to monitor how the board of directors' efficiency determine companies to assume an ethical behavior in their relationships with stakeholders (officials, politicians, other companies, society, environment etc). We notice in table 3 that Durbin-Watson coefficient is relatively close to the value 2, and that R Square is .663 (Sig F Change .000), which reflects the fact that board of directors' efficiency explains the variation of ethical behavior in companies to a percentage of approximately 66.3%.

Table 3. Regression results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>t - value</th>
<th>p value</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-3.258</td>
<td>-2.812</td>
<td>0.009</td>
</tr>
<tr>
<td>Efficiency of the board of directors</td>
<td>1.723</td>
<td>7.007</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Notes:
Model summary: R = 0.814, R² = 0.663, adjusted R² = 0.649, F = 49.101, p value = 0.000, Durbin-Watson = 2.599

We support the hypothesis stating that the efficiency of the board of directors, ensured by a sufficient number of members, by the predominance of independent non-executive members would lead to an efficient supervision of the executives, impeding the management from acting towards the maximization of their own interests and acting non-ethically.

In the case of Romania, the Bucharest Stock Exchange 2008 Corporate Governance Code (Principle VI, Art. 4) recommends a balance between executive and non-executive members of the Board and a sufficient number of board members must be independent directors. Independent directors are presented by the Code (Principle VII Art. 4) as those that should not have or have recently had, directly or indirectly, any business relationship with the company or persons involved, of such importance as to influence the objectivity of their opinions.
Nevertheless, this balance is missing all together in the structure of the board of Romanian companies, thus determining the inefficiency of the board of directors, as well as a frequent less than ethical behavior of the companies.

Therefore, the present study supports the agency theory, according to which corporate governance is instrument acting towards the decreasing of the conflict between the agent and the stakeholders, determining the agent, respectively the company, to act ethically and maybe to report their environmental performance because companies use sustainable reporting in order to express their ethical behavior before users. So, in our next section we will analyse environmental reporting for companies within European Union counties, reflecting other factors that could determine companies to act ethically and report their environmental performance.

8 Environmental Reporting as a Component of Ethical Behavior

Over the past decade environmental issues have become important for many companies especially after the big accidents relating multinational companies. Additionally to the environmental accidents, the scarcity of the natural resources and the natural degradation incited economical, political and social debate around the present situation and the foresights to revert this scenario (Yamamoto et al., 2007 [58]). Revitalisation of interest in environmental issues in the 1990s has recognised that impacts such as vehicle emissions, pollution, destruction of the ozone layer, disposal of toxic and hazardous waste, acid rain, resource depletion and climate change (Gray et al., 1996 [21]; Gamble et al., 1996 [19]) require a response at both the local and the global level. Rapid industrial development, whilst credited with contributing to economic and technological progress, has been criticised for creating greater environmental impacts, and calls have been made for greater responsibility by businesses. Companies are being urged to become accountable for their environmental impacts (Hackston and Milne, 1996 [24]).

The 1996 KPMG international survey of environmental reporting shows that in 13 major countries surveyed environmental reporting has become part of the annual corporate reporting process. Nearly three out of four companies include environmental information in the annual report while one of four companies produces separate environmental reports. (KPMG, 1996 [32]).

There has been a lot of focus on environmental reporting, especially after the launching of the ACCA Environmental Reporting Guidelines in Malaysia in 2003 and the ACCA Environmental Reporting Award. Among time reporting on environmental issues and sustainable development has been recommended by the United Nations, by the European Commission and by the Federation des Experts Comptable Europeens and other institutions. So today there are more thirty reporting frameworks, including the Global Reporting Initiative, United Nation Environmental Programme, Public Environmental Reporting Initiative, and Federation des Experts Comptable Europeens and others.

However, in the absence of environmental accounting standards, the user/stakeholder is forced to rely on voluntary environmental reporting (Larrinaga-Gonzalez et al, 2002) [34] which vary across companies, countries and continents.

In this section we’ve tried to explain how environmental disclosure varies across countries within European Union. Using results from an international survey publish by World Bank we’ve analysed the differences between countries regarding environmental disclosure by connecting corporate environmental disclosures with variables such as strength of auditing and accounting standards, government mandated disclosure of environmental performance and pollutant release. Also we’ve tried to find variation of corporate environmental disclosure within countries by analysing factors such as level of development, number of eco-label awards obtained by companies within the country, number of companies within a county which had implemented ISO 14001 or EMAS. Taking into consideration the results of some studies which indicate that environmental reporting is not related to corporate environmental performance (Ingram and Frazier, 1980 [28]; Wiseman,
we’ve compared the level of environmental disclosure with the level of environmental performance within a country to see if the environmental disclosure is reflecting the truth and fair view regarding environmental issues.

9 Literature Review
A review of the relevant literature reveals that corporate environmental reporting has received attention by researchers and professionals for a number of years. Examples include Wiseman (1982) [61], Guthrie and Parker (1990) [23], Harte and Owen (1991) [25], Gamble et al. (1995) [18], Gray et al. (1995) [20], Gamble et al. (1996) [19], Fekrat et al. (1996) [13], Deegan and Rankin (1996) [11], Brown and Deegan (1998) [6], Neu et al. (1998) [39], Adams et al. (1998) [1], Perry and Teng (1999) [44], Richardson et al. (1999) [46], Larrinaga-Gonzalez et al. (2002) [34], Deegan et al. (2002) [10], O’Donovan (2002) [41], Holland and Foo (2003) [26], Gray and Milne (2004) [22], Murray et al. (2006) [38], Frost (2007) [16], Yamamoto et al. (2007) [58], Aerts et al. (2009) [2] and others. Empirical studies on environmental reporting and disclosures have focused on both industrialised countries and developing countries. Many studies analyse the disclosure of environmental information in the context of developed countries: Solomon and Lewis (2002) [54], O’Dwyer (2002) [42], but only a few papers discussed this issue in the developing world context: Ite (2004) [29]. Some of these have been longitudinal studies of reporting practices in a single country others have attempted to provide comparative analyses between countries. Our study continues this analyse by examining the differences in reporting environmental issues between countries trying to identify the variables that explain this differences.

Yamamoto et al. (2007 [58]) study the discretionary disclosure of the environmental information practiced using companies that work in Latin America and South Africa. This study showed Brazil as the host country of the largest number of companies with high disclosure items, followed by South Africa and Peru. In a segregated analysis Mexican firms outperformed their Brazilian peers in terms of disclosure, although there were only three group Mexican companies in the sample. The Bolivian firm presented the highest score among all companies in 2005. The authors suggest that a solution to increase the environmental disclosure in developing countries is to make it mandatory through specific regulation.

Yusoff and Lehman (2006) [59] studied the differences of the environmental disclosure of the top 50 companies in Australia and Malaysia regarding the factors influencing the environmental disclosure decision of the analysed companies. They conclude a better and higher environmental disclosure in the Australian companies because Australian regulation regarding environmental issues is better than the Malaysian’s one. They also point that in Malaysia only the positive points regarding environmental disclosure is reflected while in Australia either positive or negative results are disclosed.

Holland and Foo (2003) [26] examine current corporate environmental reporting practices within UK and US annual reports and suggest that elements of the legal and regulatory framework of each country which regulate environmental activity determine the types of disclosures made, and so influence environmental performance.

A study exploring some of the underlying conditions for differences in disclosure in Canadian and US companies (Buhr and Freedman, 2001) [7] found that the type of disclosure—mandatory and voluntary—followed from the context in which the companies operated. Hence in Canada voluntary disclosure was higher and reflected the collectivist nature of Canadian society reporting in the US appeared to follow the requirements of the legislature and higher levels of mandatory disclosure were seen in US company’s annual reports.

Stittle et al. (1997) [55] state as a conclusion of their study that in spite of the similarity between regulations (both UNE and BS 7750 conform to the EU regulations), in reality the extent and quality of this information varies considerably between companies and between countries. Differences can be seen between the UK and
Spain due to the degree of variety in the development of the way that environmental issues are perceived and also from within the economic and legal systems.

Nyguist (2003) [40] compared the legislation in Denmark, Norway and Sweden concerning what kind of information firms must disclose. He concluded that these countries have great similarities regarding accounting legislation and standards. However Denmark has chosen a different way to force entities to disclose environmental performance. In Denmark entities must deliver separate green accounts while Norwegian and Swedish entities and bound to report environmental issues in the administrative report. The objective of the Danish and Norwegian legislation is to stimulate entities environmental improvements.

Larrinaga-Gonzalez et al. (2002) [34] analyse the Spanish environmental disclosure standard. They concluded that the regulation of environmental reporting would prevent all the shortcomings of voluntary environmental disclosure. Regulation is not sufficient for the advancement of environmental accountability. We conjecture that an institutional reform would need at least a discursive dialogue in the development of regulation and an effective enforcement of legislation.

Jorgensen and Sodorstrom (2006) [31] investigate how environmental accounting vary under commercial and environmental laws across countries. They find evidence that ‘legal institutions affect managers’ reports of corporate environmental disclosure. Environmental disclosure and disclosure regulations are codetermined that is across countries, reported environmental disclosure vary with legal institution, environmental regulation and disclosure regulation.

All this studies had enforced us to see the differences regarding environmental disclosure from the eye of the accounting regulation system, the voluntary of mandatory disclosure of environmental performance and other factors which will be presented in the below.

10 Research Methodology
The section represents an empirical research that uses archival data as the primary source of data. The advantages of the archival data consist in the fact that archival data may already be available to examine your research hypothesis and the researcher do not have to design surveys and find respondents. These archival data helped us to present the level of variables used in a comparative way for a sample of 27 countries from European Union. The main argument for choosing this sample (the European Union countries) is that in the European Union all the countries have to promote the same environmental policy and have to implement common environmental instruments and so there are no different objectives between European Union countries on environmental protection.

We’ve analysed the correlations between the main variable (corporate environmental disclosure) and the codetermine variables (strength of auditing and accounting standards, government mandated disclosure of environmental performance and pollutant release, development, number of companies which had implemented ISO 14001/EMAS, eco-label awards obtained by companies within the country, environmental performance).

In Appendix 2 we present the variables used. The Global Competitiveness Report for 2005 - 2006 is the main data source used for determining the level of the variable analysed (prevalence of corporate environmental reporting, strength of auditing and accounting standards, government-mandated disclosure of environmental performance and pollutant release, Gross Domestic Product) within different countries from Europe. The Global Competitiveness Report series has involved over the last three decades into the world’s most comprehensive and respected assessment of country’s competitiveness, offering invaluable insights into the policies, institutions, and factors driving productivity and, thus, enabling sustained economic growth and long-term prosperity. Produced in collaboration with leading academics and a global network of research institutes, The Global Competitiveness Report provides users with a comprehensive dataset on a broad array of
competitiveness indicators for a large number of industrialized and developing economies. Besides hard data from leading international sources, these indicators include the results of the Executive Opinion Survey carried out by the World Economic Forum annually. The Survey captures the perceptions of several thousand business leaders across the countries covered on topics related to national competitiveness (www.gcr.webforum.org).

Along with this Global Competitiveness Report the data used have been taken from the World bank website (www.worldbank.org), from the European Commission Eurostat website (http://epp.eurostat.ec.europa.eu), from the United Nation Statistics Division website (http://unstats.un.org), from International Energy Agency website (www.iea.org) from Pilot 2006 Environmental Performance Index and from United Nations Conference on Trade and Development website (www.unctad.org). From these sources we could determine the environmental performance within a country, factors reflecting the economic health of a country (development) or other elements important regarding the differences of corporate environmental disclosure (eco-label awards obtain, number of companies which had implemented ISO 14001/EMAS). The variables were selected from the period 2005-2006.

In this paper we’ve tried to explain the variation of corporate environmental disclosure within European countries so we chose the corporate environmental disclosure as the determine variable of the study.

The prevalence of corporate environmental disclosure (CED)

Corporate environmental disclosure, according to stakeholder theory, represent the environmental information which is disclosed voluntarily by companies is a response to the existence of users who are legitimately interested in the behavior of the company and who compete with traditional users (Freeman, 1984 [15]; Roberts, 1992 [47]; Fekrat et al., 1996 [13]). The main variable ”Prevalence of corporate environmental reporting” represent the question 10.10 in the Global Competitiveness Report 2004-2005 survey and question 9.09 in the Global Competitiveness Report 2005-2006 survey. It was noted in the survey with a mark from 1 to 7. Number 1 attached to the variable represent the fact that the corporate environmental disclosure in that country is nonexistent. Number 7 represents the fact that the level of the corporate environmental disclosure in that country is widespread.

We consider that these differences could be explained by variables like: strength of auditing and accounting standards, governmental-mandated disclosure of environmental performance and pollutant release, level of development, eco-label awards obtained by companies within the country, the number of companies which had implemented ISO 14001/EMAS environmental performance.

The strength of auditing and accounting standards (AAS)

This first codetermine variable analysed ”Strength of auditing and accounting standards” is consider by many empirical studies to be the factor that determine the financial reporting, the accounting and auditing regulation within a country. The variable is question 9.24 in the Global Competitiveness Report 2005-2006 survey and it was noted with a mark from 1 = nonexistent (which represent the fact that the auditing and accounting standards doesn’t exist in that country) to 7 = widespread (which suggest that the auditing and accounting standards are at the highest level ).

The governmental-mandated disclosure of environmental performance and pollutant release (GME)

The second codetermine variable governmental-mandated disclosure of environmental performance and pollutant release is referring to the fact that the disclosure of environmental information within a country can be voluntary and mandated. In some countries there are some specific mandated elements regarding environmental
disclosure, in some counties there are totally voluntary. Also this factor was chosen as a codetermine variable as it was suggested by many empirical studies we’ve presented in the literature review. The variable is question 10.05 in the Global Competitiveness Report 2004-2005 survey and question 9.03 in the Global Competitiveness Report 2005-2006 survey and it was noted with a mark from 1 = nonexistent (which represent the fact that the disclosure of environmental performance and pollutant release is voluntary, there aren’t mandatory environmental information) to 7 = widespread (which suggest that the disclosure of environmental performance and pollutant release is mandatory and it reached the highest level).

**Level of development (DEV)**

These codetermine variable was taken from the Global Competitiveness Report 2004-2005. This variable reflects the economical health of a country. So we analysed if the economical health represents a factor that determines the level environmental responsiveness and environmental disclosure of information. For this we’ve divided European counties in developing, developed and underdeveloped considering the division made by World Bank (www.worldbank.org) representative for our study.

**Eco-label awards obtained by companies within the country (EcoA)**

This indicator is defined as the number of eco-label or "EU flower” awards in EU Member States. The Community eco-label is awarded to products and services with reduced environmental impacts and is administered by the European Eco-labeling Board (EUEB).

**Number of companies which had implemented ISO 14001 or EMAS (ISO-EMAS)**

Is an indicator that reflects the number of entities that have implemented environmental management systems such as ISO 14001, that the EMAS, systems designed to improve the management and monitoring of environmental performance in an entity. The worldwide ISO14001/EMAS statistical numbers were collected by Reinhard Peglau, c/o Federal Environmental Agency from Germany from the interested people throughout the world and subjected to a schematic process to show the graph by Corporate Risk Management.

**Environmental Performance Index (EPI)**

Represents an index composed of 17 indicators from six categories: environmental health, air quality, water resources, natural resources, biodiversity, sustainable energy, which represent the environmental performance within a country. The main factor that influences the environmental performance within a country is the economic activity of the entities that activate in that country, the main source of pollution and resource degradation. The indicator was selected from Pilot 2006 Environmental Performance Index and is marked between 0 and 100, which represent the highest scor of environmental performance within a country.

**11 Hypotheses**

Each hypothesis represents our personal view regarding the connection between the determine variable and each codetermine variable. Some of the correlation was suggested by empirical studies some of them were analysed and presented for the first time within this study.
**H1: The strength of auditing and accounting standards influences the level of prevalence of corporate environmental reporting.**

This correlation was suggested by many studies presented in the literature review section. The accounting and auditing regulation within a country gives the strength to disclose information within the companies which are representative for that country. Countries in which accounting and audit standards are well implemented the amount and quality of information reported by companies is high level and also the environmental information are better disclose in bough quantitative and qualitative terms.

The motivation underlying the formulation of the first hypothesis is that transparency on preventing errors and fraud in the private sector is essential for business and can be obtained by using accounting practices and auditing standards to ensure the access to information. Although European Directives and International Standards of Accounting present deficiencies in reporting environmental issues, they have recently passed through standards (IFRS 6), interpretations of standards (IFRIC 1, IFRIC 5, IFRIC 6) or various guidelines and recommendations (EC Recommendation 2001/453) which encourage corporate environmental reporting. Jorgensen and Sodorstrom (2006) [31] analyzing how environmental reporting varies between countries argue that environmental reports are determined by the degree of implementation and enforcement of accounting and auditing standards.

**H2: The governmental-mandated disclosure of environmental performance and pollutant release influences the level of prevalence of corporate environmental reporting.**

Countries with a high level of governmental-mandated disclosure of environmental performance and pollutant release have also high level of prevalence of corporate environmental reporting. Governmental-mandated rules regarding disclosure determine companies to disclose more. In countries were the disclosure rules are voluntary companies disclose less because there are factors like costs, non transparency of negative aspects and others which determine companies to disclose in the limit of the regulations. Mandatory environmental reports are considered by many researchers as a way to increase the accountability of an entity (Deegan and Rankin, 1996 [11]; Holland and Foo, 2003 [26]; Frost, 2007 [16]; Yamamoto et al., 2007 [58]).

**H3: The economical strength of a country influences the prevalence of corporate environmental reporting.**

We analysed if developed countries have a higher level of prevalence of corporate environmental reporting than developing countries. Developed countries have more financial resources those developing countries so the environmental protection has to benefit from this. Developed countries are countries where many environmental theories were born and countries where companies are consider by many practitioners and academicians more environmental friendly. Studies have shown that entities with high financial performance present high level of environmental disclosure (Richardson et al., 1999 [46]; Gray and Milne, 2004 [22]; Murray et al., 2006 [38])

**H4: Also we tried to see if countries which are consider more environmental friendly taking into account variables like the number of eco-label awards obtained by companies, the number of companies implementing ISO 14001 or EMAS.**

These variables reflect in some way the ethical behavior of the entities within a country which leads us to the legitimacy theory based on the idea that to be successful entities must act within the limits of what society identifies as ethical behaviour (Deegan et al., 2002 [10]; O’Donovan, 2002 [41]; Aerts et al., 2009 [2]). So we assume that a country in which the number of eco-label awards obtained by companies is higher is considered
to be more environmental friendly and so the level of prevalence of corporate environmental reporting should be high. Also we consider that companies with ISO 14001/EMAS standards are environmental friendly so they disclose more environmental information than other companies.

**H5. Corporate environmental performance is reflecting the truth and fair view regarding environmental issues.**

So we assume that environmental reporting is related to corporate environmental performance and countries in which the level of pollution is high have to disclose more information that countries in which the level of pollution is low because they have more environmental information to disclose. To analyse this hypothesis we correlate the corporate environmental reporting with environmental performance within a country. There have been numerous studies that have shown the existence and absence of connections between environmental reporting and environmental performance of the entities (Fekrat et al., 1996 [13]; Brown and Deegan, 1998 [6]; Neu et al., 1998 [39]).

### 12 Analyses and Results

Using the archival dates presented in Appendix 3 we analyse the hypothesis presented above. Table 4 present a descriptive analysis of the variables, while table 5 and table 6 present the correlations between variables used.

**Table 4. Descriptive Statistics of variables used**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CED</td>
<td>27</td>
<td>2.50</td>
<td>5.90</td>
<td>4.3852</td>
<td>.98086</td>
</tr>
<tr>
<td>GME</td>
<td>27</td>
<td>2.80</td>
<td>6.20</td>
<td>4.6556</td>
<td>.89199</td>
</tr>
<tr>
<td>SAA</td>
<td>27</td>
<td>3.70</td>
<td>6.60</td>
<td>5.2407</td>
<td>.77522</td>
</tr>
<tr>
<td>DEV</td>
<td>27</td>
<td>2.00</td>
<td>3.00</td>
<td>2.7037</td>
<td>.46532</td>
</tr>
<tr>
<td>EMS</td>
<td>27</td>
<td>6.00</td>
<td>12048.00</td>
<td>2118.2963</td>
<td>3278.76382</td>
</tr>
<tr>
<td>EcoA</td>
<td>27</td>
<td>.00</td>
<td>95.00</td>
<td>12.7778</td>
<td>21.63212</td>
</tr>
<tr>
<td>EPI</td>
<td>27</td>
<td>56.90</td>
<td>87.80</td>
<td>79.9704</td>
<td>5.90279</td>
</tr>
</tbody>
</table>

Valid N (listwise) 27
The obtained results have determined us to monitor how the independent variables such as the governmental-mandated disclosure, the strength of accounting and audit standards and environmental performance the determine companies to assume an ethical behavior regarding environmental reporting in their relationships with stakeholders (officials, politicians, other companies, society, environment etc). We notice in table 6 that Durbin-Watson coefficient is relatively close to the value 2, and that R Square is .911 (Sig F Change .000), which reflects the fact that the independent variables explains 91,1% from the variation of environmental reporting.

Table 5. Correlation table

<table>
<thead>
<tr>
<th></th>
<th>CED</th>
<th>GME</th>
<th>SAA</th>
<th>DEV</th>
<th>EMS</th>
<th>EcoA</th>
<th>EPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CED</td>
<td>1.000</td>
<td>.928</td>
<td>.795</td>
<td>.411</td>
<td>.230</td>
<td>.217</td>
<td>.445</td>
</tr>
<tr>
<td>GME</td>
<td>.928</td>
<td>1.000</td>
<td>.732</td>
<td>.393</td>
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For validating the first hypotheses we see that Pearson’s coefficient is 0.795 (Sig. < 0,05), suggesting that there is a direct and high intensity correlation between variables so hypothesis H1 can be accepted. Accounting and auditing standards do not give a particular importance of environmental issues, they are insufficient to reflect fairly the entity’s environmental impact but the consistent application of these help to increase reporting in general and so the environmental reporting in particular.
Analysing the second hypotheses we have present the correlation between the prevalence of corporate environmental reporting and the level of governmental-mandated disclosure of environmental performance and pollutant release. Pearson’s coefficient (which can range between -1 and 1) is very close to 1 suggesting a very strong correlation between prevalence of corporate environmental reporting and governmental-mandated disclosure of environmental performance and pollutant release. Countries that have a high level of governmental-mandated disclosure of environmental performance and pollutant release have also a high level of prevalence of corporate environmental reporting. We can validate the hypothesis and conclude that changes in national regulations regarding environmental reporting can be very useful in explaining the quality and quantity of environmental information reported. However environmental reports are ambiguous and remain in many cases at the discretion of management even in the most sensitive sectors that affect the environment.

For testing if the economical strength of a country influences the prevalence of corporate environmental reporting we’ve made in the connection between the economical strength of a country expressed by the variable level of development and corporate environmental disclosure. Pearson's coefficient is 0.411 suggesting that there is a direct low intensity correlation between variables. Since the value of the coefficient is significantly different from 0, the hypothesis is accepted reflecting that the degree of development of a country explains in a very limited extent reporting of environmental information. With some exceptions such as Malta which, although it is considered a developed country has the lowest level of environmental reporting, most developed countries have a high level of environmental reporting.

For validating the forth hypotheses we used four variables which reflect how environmental friendly a country can be (the number of eco-label awards obtained by companies, the number of companies implementing ISO 14001 or EMAS) and we analyse if the corporate environmental reporting is influenced by one of this. From the distribution map we cannot find any correlation between these two variables. The relation can be identifying in about 40% of the countries which we consider very low level so the hypothesis cannot be validated. Exceptions can be identifying in the case of Greece, Italy and others. This are countries were although the level of environmental disclosure is middle the number of companies which are consider to be environmental friendly is high.

Although implementing ISO 14001 or EMAS is a factor the increase environmental disclosure within a company we cannot find any linear function between them at a country level. We can see that Sig. is greater than 0.1 so there cannot be define a correlation between these variables concluding that the number of entities that have implemented management systems (ISO14001/EMAS) is not a determinant factor of corporate environmental reporting. There are exception like Italy and Spain there the number of companies implementing ISO 14001 standard is high but the prevalence of corporate environmental reporting is not very high. These could be explained by the high level of CO2 emissions which determine companies to implement environmental standards like ISO 14001 or EMAS to be more environmental friendly.

Although we can see that countries with the level of corporate environmental reporting higher than 4 levels are countries with many sustainability-satisfying companies we cannot define a linear correlation between these variables.

For testing the final hypothesis we analyse the correlation between environmental performance and corporate environmental performance. The middle intensity correlation between environmental performance and level of corporate environmental reporting (Pearson's coefficient is 0.445) determine us to say that entities with higher environmental performance disclose more information regarding environmental impact that those with low level of environmental performance. This can be explained by the benefits which are created by reporting good aspects regarding environmental impact for the stakeholders of information. If the reporting of environmental
information is not mandatory companies are tended to omit the negative news regarding environmental impact and to report only the high environmental performance.

13 Conclusions
Reporting of environmental information has matured over the past decades, but still remained a lack of adequate standardization and environmental disclosure remains voluntary in many countries. Our results suggest factors that explain corporate behavior regarding environmental disclosure: the efficiency of corporate board which is an attribute of good corporate governance strength of auditing and accounting standards, governmental-mandated disclosure of environmental performance and pollutant release, economical strength, environmental performance.

From the study we can conclude that countries with high level of governmental-mandated disclosure of environmental performance and pollutant release and where the corporate governance and strength of auditing and accounting standards is high level present a high level of prevalence of corporate environmental reporting. So the determining factors of environmental reporting in the entities in a country remains the legal factor while ethical conduct and responsible entities and legitimacy to the society in which they operate, represent also an important factor. We believe that the introduction of mandatory environmental reporting within specific sectors and industries in a country would increase considerably the relevance, reliability and comparability of environmental reporting within the entities. If the disclosure of environmental information remains voluntary entities is encourage to disclose only positive aspects regarding their environmental impact. As we could see entities from countries with high environmental performance disclose more that entities from countries with low environmental performance.

Regarding environmental disclosure and development we can say that countries with high economic development (developed countries) have a high level of environmental reporting explained from our opinion by the fact that the financial resources and the importance given to environment is higher than in developing countries in which the environmental disclosure is not a priority. These countries are more long term oriented than developing companies regarding natural resources, air pollution and climate change.

Environmental organisations within a country make pressure for environmental protection although most all this organisations don’t have the authority to change environmental regulations. There are countries where is one or two organisation with big influences so the number of the organisations is not a very relevant factor regarding environmental disclosure. The relation between the number of companies that have implemented ISO 14001/EMAS and the environmental disclosure is not very well pointed by the analyses. I can conclude that although the implement of ISO 14001/EMAS determine an increase of corporate environmental disclosure level within a company there cannot be determine a clear relation between the number of companies that have implemented ISO 14001/EMAS and the environmental disclosure at the country level. The number of Eco-label awards within a country is not very suggestive for the amount of information disclose or for the countries profile regarding environmental disclosure. The factor is more suggestive for the quality of environmental disclosures and is more significant at company’s level analyses.

Countries from Northern Europe and Western Europe with high level of environmental regulation, corporate governance mechanism and high level of auditing and accounting standards have also a high level of reporting environmental issues. From Europe Scandinavian countries present the highest reported environmental disclosure. This is the region with the highest level of environmental disclosure all over the world and it is represented by countries like Denmark, Finland and Sweden well known for the importance given to the environment. From Europe countries like Germany, United Kingdom and Scandinavian Countries (Denmark, Finland, Sweden) are developed country for which environmental protection is an important issue, countries with high GDP, long term oriented with high level audit and accounting standards, high level of governmental-
mandated disclosure of environmental performance and pollutant release which determine also a high level of corporate environmental reporting.

Some exceptions from the relations analyses have been observed especially from Italy, Spain and Greece. There were warnings sent to Italy and Greece for "failing to submit environmental studies on the current state of their water resources" (European Commission, 2007). Separately, the Commission said it was taking legal action against Italy over 11 cases of environmental law, most of them stemming from a failure to submit information on air pollution, management of waste, biotechnology and environmental impact assessments. "In spite of previous warnings, Italy is not complying fully with EU environmental laws or cooperating over our requests for information," Environment Commissioner Stavros Dimas said in a statement (European Commission, 2007).

As we can see from the analyses most of the Southern Europe Countries and Eastern Europe countries (Romania, Bulgaria) are developing countries with low GDP per capital and with a low level of corporate environmental reporting. In these countries companies have difficulties regarding environmental disclosure:

- the first obstacle was found in the lack of regulations regarding good corporate governance mechanisms which do not determine companies to act ethically and also the lack of environmental regulations;
- Time dimension is also an important variable. These countries are only at the beginning its real integration in matters which regard the European Unions’ structures and systems, this meaning that environmental legislation has changed and will continue to do so;
- a great number of companies only relate environmental investments to increased costs, without even seeing a glance of the possible returns and therefore are only interested to keep themselves at the thickest limit imposed through laws;
- a huge problem in approaching this topic is grounded within the environmental education which spreads both in the internal structures of one’s entity and through the relationships between different entities; what we want to say here is that there should be a change in the entities’ attitude towards environmental responsibility which ought to come out of common sense since all of us are interested in creating such an environmental management system which would lead to smaller quantities of wastes, decreased material consumption and fewer accidents. In a working paper in 2005 The World Bank consider that Bulgarian, Croatian and Romania companies were far behind developed countries in terms of environmental practices. The study presents importance for the understanding of environmental reporting and presenting differences regarding this issue between European countries and suggests that the legal factor, mandatory environmental disclosure and the ethical behavior is an efficient way that we can increase the quantity and the quality of environmental disclosure. Corporate governance is important instrument acting towards the decreasing of the conflict between the agent and the stakeholders, determining the agent, respectively the company, to act ethically and maybe to report their environmental performance.

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References


### Appendix 1. Values of the variables

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### Appendix 2. Description of variables analyzed

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<td>5764</td>
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Source: dates are selected from Global Competitiveness Report 2005-2006, Pilot 2006 Environmental Performance Index, Eurostat, Federal Environmental Agency
1 Introduction
Proper governance of the educational system is crucial for the development of students that are further to become part of a profession. Our study considers the particularities of accounting education leading to accounting professional that through their activity should document a comprehensive approach of accountability. The existence of the term “accounting education” is not new, and is more and more discussed in research literature. Accounting is mainly about describing the past to reflect faithfully what has already happened with the purpose of providing useful information, while accounting education is describing the past and the future in the same time because it starts from the past but it is in a continuing change. The literature indicates that the role of accounting has changed in recent years and it will continue to do this. Furthermore, the change in its utility must be correlated with methods, way of teaching and techniques being different from the ones which were used years ago.

The history of accounting education has its origin early in the 20th century when most accountants had limited formal education and learned their accounting skills on their own or through apprenticeships. However, a demand for professional education arose, and American business schools began the business of educating accounting professionals (Oliverio and Newman, 1996 [45], quoted by Bolt-lee and Foster, 2002: 34 [6]). From the very beginning, academicians led the way in initiating changes in accounting education. Because educators were often practicing professionals, a close alignment existed between programs in schools and the needs of the profession. During the past quarter of the 20th century, formal studies, frameworks, articles, and surveys have recommended an assortment of educational changes and proposed lists of skills, attributes, and areas of knowledge desired of entry-level accountants (Bradford and Peck, 1997 [8], quoted by de Bolt-lee and Foster, 2002: 35 [6]). These works are an important factor in accounting education in the USA and an important basis for current research. An early start for the change movement was the American Accounting Association's (AAA) Bedford Committee Report (1986), 'Future Accounting Education: Preparing for the Expanding Profession.' The report, prepared by accounting educators and researchers, addressed the need to reconstruct the accounting classroom experience before the year 2000 due to anticipated changes in the profession. The Bedford Committee Report introduced the idea that the premise for success consists of more than technical expertise. It also contains lifelong learning skills, critical thinking, interpersonal skills, and an understanding of accounting information systems. These prescriptions challenged educators to modify traditional classroom instruction to include many so-called 'soft' skills not specific to the preparer's viewpoint but so used nowadays.
From this point of view, what we want to highlight from the beginning is that there are two different approaches in internationalizing the concept of accounting education. As Burns (1979) [13] notes, one approach is to treat international business as a single discipline, requiring the establishment of separate multidisciplinary courses. A second outlook broadens existing academic areas so that discussions of domestic topics are expanded to include international aspects (Stolowy and Tenenhaus, 1998 [60]). The most debated issue in the early times is that more schools offered separate courses in international finance, international marketing and international management than they did in international accounting. An important point of view related to this debate is the one expressed by Burns (1979 quoted by Stolowy and Tenenhaus, 1998 [60]) as follows: “while the ideal may be to integrate international accounting concepts into existing accounting courses, numerous constraints prevent this approach. First, few faculty members are prepared to discuss international aspects of financial, managerial, auditing, information systems, or tax accounting. Second, current textbooks rarely include such information except for the occasional text with a separate chapter on international aspects of accounting. Third, supplementary readings are inadequate for many topical areas”. What we would like to add is that nowadays the evolutions have a different dynamic. As time passes, there are more and more accounting courses being introduced, and more and more courses of international finance, international marketing and international management are taught in relation to accounting, to build a bridge in order to see the bigger picture. So, according to the ideas mentioned above, the science of accounting education, because we can consider it a science as we further document in the following paragraphs, is a social science as long as this discussion revolves around human society as a whole, but without neglecting accounting as being the cornerstone of this science.

2 From Education To Accounting and Methods of Learning

Education is one of the strongest factors associated with trust, tolerance and quality of life. For at least past two decades, accounting educators had the important mission to face with increasing demands to keep pace with the imperatives from the profession and with changes in the practice environment (Lillie and Wygal, 2011 [39]). We are mentioning this thing because we all know that there are rapid changes in information technology applications, both in accounting practice and theory which hampered the fulfillment of accounting educator’s responsibilities and that many forces of change have affected our society, the workplace and academic institutions in recent years. To remain globally competitive, there is increasing pressure for universities to incorporate a greater use of technology and innovation into their curriculum. In response, many higher education institutions have adopted a blended learning approach, which combines traditional face-to-face with online teaching resources. Rapid developments in information and communication technologies have made a significant impact on the content and delivery of course curricula in higher education (Nicol, 2006 [44], quoted by Wong 2009 [68]). It has been suggested that the use of technology in educational process assist in the achievement of outcomes, but in the same time It can have a negative effect. It alters the relationship between teacher and student, giving the teacher less authority. In the same time, all accountants make extensive use of information technology in their working lives (Lane and Shellard, 2009 [36]). Taking into consideration this point of view we believe that the use of internet and technology in educational process have also a good side because the students are helped learning how to use internet and technology in the real life when they are facing accounting profession.

It has been suggested that problem based learning methods produce better results than lecturing in an accounting education context (Breton, 1999 [9] quoted by Lane and Shellard, 2009 [36]). But, what is more important that these facts, is that teaching and intermediate financial accounting in an environment of international financial reporting standards (IFRS) and generally accepted accounting principles (GAAP) is an issue which help a lot the career of an accountant after graduation. We argue that this approach encourages deep learning resulting in students’ better understanding of accounting standards and their application.

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According with Pries and Baker (2010) [49], the proposed approach has a number of benefits as well as some drawbacks. The benefits of the proposed approach include:

- It can help students avoid “standards overload” by providing a guide for understanding the keywords, measurement, presentation.
- It prepares students for a world of continually changing standards by demonstrating that there is more than one way to measure and report financial statement items and that accounting standards can vary over time and across different business environments.
- It supports students who will have professional careers in private enterprises or professional firms that serve private enterprises as well as students who will work with publicly accountable enterprises, rather than emphasizing one particular path.
- It encourages a deep learning approach to the material by emphasizing meaning rather than memorization. This approach helps students begin the process of dealing with alternatives, an important quality in professional accounting, by demonstrating that there is not one ‘‘right’’ set of accounting principles (Harding and Ren, 2007 [24] quoted by Pries and Baker, 2010 [49]).

The approach can help students to understand that according to accounting principles there will never be one single correct solution because these differ from case to case in order to reflect the requirements of different users and different business environments. There are also drawbacks to the proposed approach. These include:

- It is much easier to find examples of IFRS measurement, presentation, and disclosure because public company financial statements are widely distributed while financial statements of private enterprises are often not publicly available.
- It is not clear what relative emphasis professional accounting bodies will place on IFRS and GAAP in their examination of students. If these bodies emphasize IFRS over GAAP, then students will want to see a similar emphasis in their university/college accounting courses.

Returning on the new methods of learning, computers and computer-assisted instruction are being used with an increasing frequency in the area of health science, but students’ attitudes towards the use of e-learning technology and computer-assisted instruction have received limited attention to date (Brown et. al, 2012 [11]). In variation theory, learning refers to the capability of students for simultaneously discerning and experiencing a number of critical aspects of the learning object. Here, “critical” means the aspects that students need to discern in order to learn and understand the learning object. Students can simultaneously discern, and relate to only a limited number of aspects of the learning object. The way a student understands a learning object and the meaning described to this object depends upon which aspects of the learning object the student discerns simultaneously. As other students may have discerned simultaneously different aspects of the same object, it is evident that students understand a learning object in various ways. Student learning can be understood as the discernment of a “how-aspect” and a “what-aspect”, which are the two integrated aspects of the learning object. This means that the ability to discern the variation in “critical aspects” of the learning object is of decisive importance for the results of learning (Marton, 1981 [42] quoted by Johansson and Lumsden, 2012).
Nowadays, the use of technology, computer-based learning, web-based training is increasing among all disciplines and sciences, from art to social science, in all fields of study and all universities. The term Computer Assisted Learning (CAL) covers a range of computer-based packages, a has the aim to provide interactive instruction usually in a specific subject area. In general, the use of computers in education through CAL has been a great effort which was expended with little general impact. Many of those academics that took part in that earlier cruciade are now cynical about the effectiveness of computers in teaching. The motivations for the development of this style of teaching are varied and consist in more direct and individualized feedback, correct misconceptions more quickly, allow the educators to measure progress of the students limiting stress, allow for a focus or non-technical elements of pedagogy, motivate students, enhance student achievement, provide authentic material for study, give the change of using numerous sources of information and a global understanding. In addition, there are also some teacher’s barriers to the use of computer assisted learning which can be classified in the following common categories: financial barriers, availability of computer hardware and software, technical and theoretical knowledge and acceptance of the technology (Bolt-lee and Foster, 2002 [6]). In particular, Computer Based Learning is often seen as the most efficient and effective manner to conduct distance education, as a lesson plan can be created that allows people to study at their own pace, either via the Internet or software installed on individual computers on various sites.

Discussing computer assisted learning in contrast with internet based technology we can say that there are still good reasons to use computer assisted learning, rather than Internet based technologies. Computer assisted learning runs either straight from a CD or floppy disk drive, or over a local network so the constraint of the internet - slow download for multimedia materials may not apply. This, coupled with the fact that computer assisted learning technology has been around a bit longer, means that computer assisted learning packages have the potential to offer more advanced, interactive, multimedia learning experiences than it is currently reasonable to expect from the Web. According to Liegl and Janicki (2006) [38], quoted by Brown et. al (2012)
“Academicians are placing more and more course material online to supplement their traditional in class instructions”. There is a large amount of studies which discuss this issue, trying to develop this kind of learning and study student’s perception. For example Steel et al (2002:225) [59], quoted by Brown et al, (2012) [11] said that “Much of the research on CAI (computer assisted instructions) has focused on the comparison of outcomes when content is offered using standard education formats (for example, lecture or text) vs. providing the same content in a computerized learning environment”. What we find in international literature on this theme is that the use of technology and e-learning strategies are becoming more used in science education because the educators are trying to develop a course designed to change students to expand beyond the traditional skills and knowledge of past accounting courses (Bolt-lee and Foster, 2002) [6]. Moving forward, and trying to find what is bringing 21st century in comparison with 20th century we can see a massive expansion in technology and globalization with attendant industrialization but sadly these developments have brought an unprecedented degradation of the natural environment, social inequity and removal of civil rights and the native knowledge of indigenous people (Ngwakwe, 2010:28) [43].

Now, comes ethics and the relationship between ethics and education, even accounting. Recent developments in the business world have caused the academic community to address the coverage of ethics in the accounting curriculum. This study surveyed accounting faculty to (1) examine perceptions about ethics coverage in the undergraduate accounting courses; (2) identify teaching methods used to include ethics in the undergraduate accounting courses, the perceived effectiveness of those methods and the amount of time spent on ethics coverage; and (3) identify problems encountered in including ethics in accounting courses. The study found that although a large majority of professors surveyed (77%) said they include ethics, 69% felt that there was a need for more ethics coverage. Also, the study revealed that while the lecture method was the most commonly used method, the written case was deemed the most effective method. The average time spent covering ethics was a little over 3 hours per course. The most significant problem encountered by faculty who include ethics in their undergraduate accounting courses was having not enough time and lack of appropriate ethic materials (McNair and Milam, 1993). Now as the entire world has changed, in every faculty there is a course of ethics for any specialization, and there are a lot of materials because is considered one of the most important social course taking into consideration that can change the perception of a person. Since the inclusion of ethics in faculties courses and in the accounting curriculum has been deemed to be important a further assessment of current ethics coverage in the accounting courses seemed appropriate. Last but not least about ethics, it is interesting that ethics has a particular connection with the accountant or auditor or economist profession in general, because even International Accounting Standards Board mentioned through their standards content ethics and the influence of being or behaving in accordance with ethic principles.

Regarding the search for innovative pedagogical approaches, The Bedford Report (1986:187) recommends: “Faculties should design educational experiences for students that require them to be active, independent learners and problem solvers rather than passive recipients of information”. There was also a similar call for reform in undergraduate education at the June 1994 Wingspread Conference that was organized to discuss the quality of undergraduate education. The conference developed the following list of important characteristic of quality performance of college and university graduates (Debessay, 2004) [15]:

- High-level skills in communication, computation, technological literacy, and information retrieval to enable individuals to gain and apply new knowledge and skills as needed.
- The ability to arrive at informed judgments – that is, to effectively define problems, gather and evaluate information related to those problems, and develop solutions.
- Ability to address specific problems in complex, real-world settings, in which the development of workable solutions is required.
Accounting educators who are still relying on the traditional, lecture-based way of teaching are being “criticized for spending too much time on content mastery and too little time and effort for helping students to develop skills that will enrich their lives and make them successful” (Albrecht and Sack, 2000:55) [3]. The persistent call is for pedagogical approaches that will help professionals develop their problem solving skills, their analytical ability and their ability for collaborative work as well the ability to continue to learn on their own. In urging accounting educators to devise new pedagogical approaches, Albrecht and Sack argue: “Students forget what they memorize. Content knowledge becomes dated and is often not transferable across different types of jobs. On the other hand, critical skills rarely become obsolete and are usually transferable across assignments and careers.” (Albrecht and Sack, 2000:55) [3].

3 Motivation and Engagement in Computer-Based Learning

Moving forward, we shouldn’t have to forget about motivation and engagement in computer-based learning tasks. Studying the background this issue, in the 1980’s, professor Mark Lepper pointed to the likely motivational impact of certain uses of computers as classroom learning tools. His examination of the theoretical literature on intrinsic motivation suggested several ways that computer-based learning activities might lead to increased student engagement on academic tasks. First, to the extent that computer activities provide intellectual challenge, they motivate students to seek a solution to a problem. Second, computer activities that stimulate human curiosity or a desire to resolve an incongruity generate similar effort. And third, computer work that provides a sense of independent control and mastery over an environment also provokes sustained and intense effort (as cited in Brewester and Fager, 2000 [10]).

In general terms, student motivation “refers to a student's willingness, need, desire and compulsion to participate in, and be successful in the learning process” (Bomia et al., 1997:1 [7], quoted by Brewester and Fager, 2000 [10]). To be motivated means to be moved to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated. Student motivation is often divided into two categories. In Self-Determination Theory (Deci and Ryan, 2000 [16]) we distinguish between different types of motivation based on the different reasons or goals that give rise to an action. The most basic distinction is between intrinsic motivation, which means doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which means doing something because it leads to a separable outcome. Although intrinsic motivation is clearly an important type of motivation, most of the activities people do are not, strictly speaking, intrinsically motivated. This is especially the case after early childhood, as the freedom to be intrinsically motivated becomes increasingly curtailed by social demands and roles that require individuals to assume responsibility for non intrinsically interesting tasks. In schools, for example, it appears that intrinsic motivation becomes weaker with each advancing grade (Deci and Ryan, 2000) [16]. Next, we have to give an insight into some of the main factors influencing student motivation while carrying out computer-based learning. Prensky, (2005) [48] said that “it starts from the conviction that the students of the digital era who can, reasonably, be considered “digital native” appear not to be inclined to use any digital product “just because it’s digital”. Enhancing student active and genuine engagement (which actually can be regarded as mix up of motivation, interest and attention) in learning activities is widely recognized as an important goal to be reached (Robertson & Howells, 2008 [50], quoted by Otta and Tavella, 2010 [46]) also because it appears to have positive influence on the learning outcomes. In this direction, it is important that teachers and educators make use of those educational means that, in principle, can be more stimulating and motivating for the students, namely those that are able to keep students “…enthusiastic, focused, and engaged”, that are able to sustain and maintain their interest, “to make them enjoy what they are doing so that they try hard, and persist over time, thanks to an inner self determined drive, determined by their own volition rather than external forces” (Garris, 2002 [21]). In a survey carried out

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by Otta and Tavella, (2010) [46] they tried to find what factors influence student motivation and they discovered that the more important factors are:

- The quality/appeal of software interface (93%)
- The concern for teacher’s evaluation/judgment (64%)
- Transient, contextual conditions: a number of different elements related to the momentary personal situation and/or to the specific working/learning context (62%)
- The ability to perform the required activities (48%).

Those teachers, in fact, considered the quality/appeal of software interface as the most important aspects to be taken into account and to a lesser extent, also transient, contextual conditions; the project’s results, conversely, showed that the actual ability/capacity to perform the task was the main factor influencing student motivation and engagement in the learning activities. There are myriad reasons that students become less engaged in learning as they grow older, including influences from both within and outside the school. As Lumsden (1994) [41] notes, the earliest influences on children’s motivation to learn are parents. When students enter school, their level of interest and desire to engage in learning are also heavily influenced by teachers, administrators, the school environment, and their classmates (Lumsden, 1994) [41]. Although it may sometimes seem that teachers have no control over students' attitudes about learning, researchers confirm that they do. "To a very large degree, students expect to learn if their teachers expect them to learn” notes Stipek (as cited in Brewester and Fager, 2000: 3 [10]).

4 Blended Learning

As time passed there are more and more terms introduced which are in direct relation with the type of learning. This is because, it is considered that in order to remain globally competitive there is increasing pressure for universities to incorporate a greater use of technology and innovation into their curriculum. So, was introduced and many higher education institution have adopted, the so called blended learning approach. A review of current literature has provided a diversity of definitions and interpretations of the term „blended learning”. It is often described as „the mix of traditional methods of teaching, such as face-to-face teaching and online teaching”. Due to its simplicity, this is perhaps the most common meaning of blended learning used in a higher education context (Bluc et al, 2007 [5] quoted by Wong, 2009 [68]). However, a more comprehensive definition is offered, whereby: “blended learning is the thoughtful fusion of face-to face oral communication and online learning experiences. The basic principle is that face-to face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended”. (Garrison and Vaughan, 2008, p. 5 [22], quoted by Wong, 2009:54 [68]).

To begin, it is important to distinguish blended learning from other forms of learning that incorporate online opportunities. First, blended learning is distinguished from that of enhanced classroom or fully online learning experiences. However, it is not clear as to how much, or how little, online learning is inherent to blended learning. In fact, this is only a rough, indirect measure that may be misleading. The real test of blended learning is the effective integration of the two main components (face-to-face and Internet technology) such that we are not just adding on to the existing dominant approach or method (Jones and Chen, 2008) [33]. This holds true whether to be a face-to-face or a fully Internet-based learning experience. A blended learning design represents a significant departure from either of these approaches. It represents a fundamental reconceptualization and reorganization of the teaching and learning dynamic, starting with various specific contextual needs and contingencies (e.g., discipline, developmental level, and resources). In this respect, no two blended learning designs are identical. This introduces the great complexity of blended learning (Garrison and Kanuka, 2004)
“mixed mode” which uses the Web as the primary instruction mode, but incorporates a limited number of face-to-face classroom meetings during the semester (Ward and LaBranche, 2003 [66]). This approach offers the convenience of a primarily-online course, but still provides some face-to-face interaction with an instructor. Therefore, blended learning promotes a social learning environment and helps to partially offset a primary drawback to totally online instruction (Jones, Moeeni, and Ruby, 2005 [34] quoted by Jones and Chen, 2008 [33]). Relatively few studies have examined distance learning in technical courses such as accounting.

Furthermore, the results of studies in non-technical and non-quantitative disciplines may not necessarily apply to accounting (Arbaugh, 2005) [4]. Therefore, Jones and Chen (2008) [33] surveyed students in a blended-learning section and a traditional classroom section of the same graduate accounting course to compare these two delivery methods in several important areas. The results offer important evidence on the relative effectiveness of blended-learning and traditional classroom delivery in terms of student perceptions, and address some important course issues. Although the results continue to suggest tradeoffs, blended-learning students actually indicated higher levels of satisfaction than their traditional classroom counterparts along a number of dimensions. For instance, these students find group work more palatable than do traditional classroom students. Blended-learning students also tended to be more satisfied with student/instructor interactions outside of class. Additionally, we use the student feedback to obtain a preferred number of class meetings. In doing so, we provide evidence that students perceive benefit to having at least some classroom interaction, despite the personal costs. To help identify the degree of blending learning which may occur within online or face-to-face teaching, we will present a figure which provides a classification based on the level of online resources used. A three-year project across the University of Glamorgan led by Professor Norah Jones, the Head of Centre for Excellence for Learning and Teaching, has been carried out. With the consideration for all arguments against no standard models for blended learning, Jones suggests that the continuum of blended learning is a better guideline instead of a stage-like model for institutional wide adoption.

![Figure 2. Continuum of Blended Learning](image)

Jones identifies that PowerPoint presentations and basic web-facilitated learning resources are the indication for the category of “Basic ICT Usage” and “E-enhanced”. The next point is “E-focused” where discussion boards, online assessment tests and interactive materials take place. More online facilities are used extensively and creatively here. E-intensive is the last category in the continuum, where whole teaching and learning is delivered online with face-to-face inductions (Jones et al, 2008 [33]). Trapp, (2006) [62] spoked in her study...
that Blended Learning concerns not only different methods, but also different theories of learning and applies these theories by using traditional and new media. It affects different levels:

- the theoretical level (combining different theories of learning, like constructivism, cognitivism, behaviorism)
- the methodical level (combining self-directed with instructor-led learning, individual with cooperative learning, receptive with explorative learning, etc.)
- the level of the media (combining face-to-face with on-line elements; using different media, like books, video, etc.).

Blended learning does not make the learning process easier than traditional classroom training. E-learning costs still as much effort as any other kind of learning. Every kind of self-directed learning is difficult and uncertain, because the individual learner has no opportunity to find out about his own progress. With blended learning, the comparison of individual learning progress with that of other learners is being facilitated. Bluic, Goodyear and Ellis (2007) [5] cited in Stacey and Gerbic (2008) [57] study, argued that a research has been focused on different aspects of blended learning, especially the technology, and they argue for a more holistic approach which seeks to understand the complexity of blended settings and processes as a whole system. The authors agree with this view and, based on our discussion above, suggest additional avenues for future research in blending learning:

- more insights into the factors and approaches which can improve connections between the virtual and physical elements of blended courses within universities,
- the new technologies integrated with face-to-face environments, to investigate the characteristics of optimal blends for learning,
- pedagogical frameworks to support blended learning for teachers and students, and
- more investigation of successful models of professional development and support of teachers who take up this new mode of teaching.

5 Accounting Profession and Sustainable Development

The accounting profession is seen as set of organizations overseeing accountants collectively, the professional bodies of accountants that establish and regulate training entry standards and professional examinations, as well as ethical and technical rules and guidelines. These bodies are organized on national and international levels. From other point of view, a legal definition sounds as follow: “a person who has the requisite skill and experience in establishing and maintaining accurate financial records for an individual or a business. The duties of an accountant may include designing and controlling systems of records, auditing books, and preparing financial statements. An accountant may give tax advice and prepare tax returns”. The practice of accounting is a highly skilled and technical profession that affects public welfare. It is entirely appropriate for the state to regulate the profession by introducing a licensing system for accountants. Some states do not permit anyone to practice accounting except certified public accountants, but other states use the title to recognize the more distinguished skills while permitting others to practice as public accountants. All accountants are held to high standards of skill in issuing professional opinions. They can be sued for malpractice if performance of their duties falls below standards for the profession.

Another important definition of the professional accountant is the one proposed by IFAC (International Federation of Accountants). In one paper prepared for consultation in January 2011, they proposed a definition based on three descriptive levels, as follows: On the highest and most definitive level, it states what a
professional accountant is by emphasizing some form of official qualification (e.g., formal education, certification, and chartering). On the second level, it states what a professional accountant does by outlining the core responsibilities that imply the application of skills in the context of society’s expectations (e.g., demonstrates competence, complies with Code of Ethics for Professional Accountants (acts in the public interest). On the third level (which is optional and contingent upon the characteristics of each jurisdiction), it states that professional accountants can be differentiated from one another by certain factors, such as types of responsibilities (e.g., professional accountants in business, public sector accountants, and auditors) and the level of formal training or education generally subject to jurisdictional considerations. This definition is taken from their agenda paper together with its graphical representation.

Figure 3. The proposed definition of the Professional Accountant by the IFAC.

In 1987, the United Nations released the Brundtland Report, which included what is now one of the most widely recognized definitions: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". According to the same report, the above definition contains within it two key concepts:

- the concept of „needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (World Commission on Environment and Development, 2011 [69]).

The concept of sustainable development is the result of the growing awareness of the global world. It strongly links environmental and socio-economic issues. The first important use of the term was in 1980 in the World Conservation Strategy (IUCN et al., 1980 [31]). Economics came to be the dominating issue of human relations with economic growth, defined by increasing production, as the main priority (as cited in Hopwood et al, 2005 [29]). This was seen as the key to humanity’s well-being and, through growth, poverty would be overcome: as everyone floated higher those at the bottom would be raised out of poverty. As Johann Dréo represented, sustainable development is formed at the confluence of three elements: social, environment and economic.
The role of sustainable development related to accounting or accountant profession is one very complex. Sustainable development became a ubiquitous aphorism defined by the United Nations as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UN, 1987b, quoted by Ngwakwe, 2010 [43]). The adoption of this definition and various actions backing it, marked the formal beginning of a global environmental campaign encapsulating all faces of ethics to restrain immoderate human activity on the environment, society and culture. The role of business and accounting in sustainable development is implicit in the Fifth Action Programme of the European Commission on the environment, entitled Towards Sustainability (European Commission, 1992). Hence business and accounting are implicated in sustainable development because industrial pressure on the environment results from two major factors: the level of production and consumption, and environmental pressure per unit produced and consumed (Schaltegger et al., 1996 [54]; Schaltegger and Burrit, 2000 [53], quoted by Ngwakwe, 2010 [43]).

Accounting should be a tool for the desired measurement to enhance corporate environmental management, because accounting information guides management operational planning and decisions, and therefore influences corporate behavior (Hopwood, 1974) [29]. Some critics believe that accounting functions as an instrument of economic measurement and that this might have induced accounting insensitivity against the value of humans and the environment in the quest for economic wealth.

Speaking about appliance of sustainable development among the accountants, ACCA conducted a global survey on accountants and accounting bodies and found a growing interest among accountants and accounting bodies in sustainable development. Furthermore, ICAEW conducted a survey of practicing accountants and found over 56% positive response from accountants regarding sustainability improvements. This examination therefore attempts to extend these earlier findings, but adopts a different approach by investigating the sustainability activities reported on the websites of selected accounting bodies to assess the sustainability stance of the accounting profession. In the same time, Hazelton and Haigh (2005) [25] said in their study that education has long been considered central to achieving sustainable development and the higher education sector is important for sustainability. Segovia and Galang [56] (quoted by Hazelton and Haigh, 2005 [25]), believe “the university provides an environment that nurtures critical and independent critique of what government or business does. Academia has also the advantage of the social acceptability, technical credibility
and the moral ascendancy to broker”. What are the barriers to implementation of education for sustainability? The majority of studies mention among the most important barriers, the following:

- a lack of a culture of value or priority given to greening and sustainability;
- a lack of organizational and resource support for staff; and
- a lack of training for academic staff.

6 The Changing Role of Accountants

As we said before, the role of accountants is in a continuous change. This is due to globalization and changing society’s perceptions of the professions in general and accounting profession in particular. In addition, the literature outlines the contributions of current accounting education, and indicates that modifications and improvements that may be necessary to assist graduates in preparing to meet the changing character of accounting tasks, and to develop graduate attributes that are important for success in practice (French and Coppage 2000 [20]; Schott and Karr 2005 [55]; Steadman and Green 1995 [58], quoted by Jones and Abraham, 2007 [32]). However, this literature is principally written from an American practitioner-based perspective. Accounting has evolved, as have medicine, law, and other professions, in response to the social and economic needs of society. For the most part, early accounting dealt only with meeting the financial information needs of a relatively few owners of business enterprises. As business and society became more complex over the years, the accounting function expanded in order to meet the needs of a variety of interested parties. The accounting system used to provide information to the management of an entity is referred to as managerial accounting. The accounting system used to provide information to external users is referred to as financial accounting. The primary accounting records are for the preparation of the financial statements, which are directly or indirectly required by law. Much of the accounting information for managerial decision making comes from those records. Moreover, management is responsible for the content of financial accounting statements. Also, management is obviously concerned about the financial statements, since these statements are often used to evaluate management. In our society, the various functions of accounting are performed by accountants employed in (1) public accounting, (2) private accounting, (3) governmental accounting, or (4) accounting education. Members of these accounting fields have formed many accounting organizations in attempts to advance, in some way, the accounting profession. The number of CPAs (Certified Public Accountant) has increased significantly in recent decades. In 1944, fifty years after the enactment of the first CPA law, there were approximately 25,000 CPAs in the Unites States. During the next four decades the number increased tenfold, and currently the number exceeds 350,000. It should be noted that the practice of public accounting is not restricted to CPAs. Accountants who are not certified may also make their services available to the public. However, only a CPA may issue a certified audit opinion. Public accounting firms include partners, who must be CPAs, and staff accountants. The size of these firms varies from small one or two person firms to the very large international firms employing thousands of accountants. The largest public accounting firms, which are frequently referred to as the Big Four, are as follows: Deloitte and Touche, Ernst & Young, KPMG, PricewaterhouseCoopers.

Professional Accountants of Romania followed the social and political events. Always prepared, he has implicitly contributed to general economic progress. Torments in the accounting profession have been also determined by economy spasms but also by the interests segregation that took effect increasing irritation of the members, because of overdue payment requirements, exchange rates, etc. This in a context where "inflation" of accounting experts decreased the quality of work and thus the level of fees (Bunget et al, 2009) [12]. The literature pertaining to the responsibilities and expertise of practicing accountants can be divided into three main categories: first, the traditional and current role of accountants; secondly, the skills required by accountants in the current work environment, and thirdly, the conflicting perceptions and expectations of the
various stakeholders within the accounting community. These have subsequently led to calls for educational change in the accounting discipline (Jones and Abraham, 2007) [32]. The second area in the expansion of accounting literature relates to the skills that are considered desirable for accountants working in practice. These include the traditional as well as so called ‘soft skills’ that give accountants the ability to contribute positively to the tasks that they are required to perform. The evolution of the accounting role has meant that new graduates are thrust into advisory roles and thus need to develop new proficiencies and become broad-based business people (Corrigan, 1997 [14]; Holtzman, 2004 [27], quoted by Jones and Abraham [32]). Financial information is needed before any economic decision is made. Financial accounting information focuses on actual events.

For the purpose of decision making, the past is used as a guide to future estimates of the consequences of different alternatives. The accountant can help significantly in the areas of budgeting, investigating, interpreting and communicating results using both internal and external decision makers (Hoggett et al, 2011 [26]). Thus, accounting education has become increasingly more complex to manage as the business environment is constantly evolving. While the accounting role was restricted to the provision of financial information and analysis, accounting education focused on the development and application of accounting and audit knowledge.

In the current climate, the acquisition of technical accounting skills is still relevant, but there is an increasing need for accountants to have business management knowledge and skills, a well-developed knowledge of information technology, and greater interpersonal skills (French and Coppage, 2000 [20] quoted by Jones and Abraham, 2007 [32]). This call demonstrates that it is important to ensure that all interested parties are operating from the same beliefs. With calls for accountants to be able to take on more managerial roles and possess well developed behavioral skills, additional research is needed into the identification of appropriate skills, and how they can be measured, developed and further enhanced. Furthermore, addition attention should be given to the consideration of the value of emotional intelligence and its importance for accounting graduates, because “business educators, in particular, have the responsibility to provide their graduates with a strong foundation in both technical and emotional training so that they will be well rounded individuals, and hence worthy employees, effective managers and dynamic leaders” (Abraham, 2006 [1]). The role of accountant starts even from the faculty. The education we found there, the skills we attain, all helps us becoming a good accountant. In Bedford Report on Future Accounting Education was stated that when accounting faculties educate students for the analysis function of accounting, they may find it necessary to include in accounting courses various qualitative and quantitative techniques (statistics, mathematical model building, expert systems methods, etc.) to develop multiple types of relationships among recorded phenomena in the expanded accounting database. Associated with the development of this additional information will be the need for accounting students to learn to market the new information products. In addition, accounting faculties may decide that effective performance of the accounting analysis function will require future accounting students to take university courses dealing with systems analysis and information processing in order to be prepared for future accounting practice and to place the study of accounting in a meaningful perspective. So, as we saw, accounting education plays an important role in this profession. Even Hans Hoogervorst, Chairman IASB related this year that accounting is imprecise because the solution we find, the decision we take depends anytime on our professional judgment, on our knowledge and professional experience. He said that “accounting can be so controversial, and that is the inescapable judgment and subjectivity of accounting methods. Put simply, there is a lot to disagree about. When I became Chairman of the IASB in July last year, I knew enough about accounting to know that I was not entering a world that was governed by the iron rules of science. I knew that Accounting has the same problems as its sibling Economics: you need maths to exercise it, but you should not count on outcomes with mathematical precision. In short, I did not have naive expectations of accounting. Or so I thought”.

Regarding accounting education, what we found really interesting is the statement issued by the Accounting Education Change Commission (AECC), commission those mission is to improve the academic preparation of

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accountants, so that entrants to the profession will possess the skills, knowledge, values and attitudes required for success in accounting career paths. What we found in the Positive Statement Number One, from September 1990, is that accounting programs should prepare students to become professional accountants, not to be professional accountants at the time of entry to the profession. At the time of entry, graduates cannot be expected to have the range of knowledge and skills of experienced professional accountants. To attain and maintain the status of a professional accountant requires continual learning. Therefore, pre-entry education should lay the base on which life-long learning can be built. In other words, graduates should be taught how to learn. The base on which life-long learning is built has three components: skills, knowledge, and professional orientation. We found also discussion about skills, knowledge and professional orientation. Accounting graduates should identify with the profession and be concerned with developing the knowledge, skills, and values of its members. They should know and understand the ethics of the profession and be able to make value-based judgments. They should be prepared to address issues with integrity, objectivity, competence and concern for the public interest. Taking into discussion general accounting education, the statement sets out that Accounting courses should present accounting as an information development and communication process. The central theme should be how information is identified, measured, communicated, and used. The courses' essential components should be: 1) decision making and information in organizations, 2) design and use of information systems, 3) financial information and public reporting including attestation, and 4) knowledge of the accounting profession. Courses should focus on both basic concepts and the application of these concepts in real-world environments, including international and ethical issues. The difference between general accounting education and specialized accounting education, term which was introduced in the statement we spoke about before, is that specialized accounting education should follow only after attainment of general accounting, organizational, and business knowledge. Therefore, it should be offered primarily at the post-baccalaureate level and via continuing education. Specialized accounting programs may include advanced study in financial accounting, management accounting, taxation, information systems, auditing, government (or nonprofit) accounting, and international accounting. Continuing professional education may overlap considerably with specialized accounting education offered by universities. The principle of comparative advantage should govern which types of specializations are offered by universities and which by others.

If we want to speak about the role of accounting and his characteristics, about education, learning or teaching methods, even traditional or online learning, we will always arrive at blended learning or one kind of learning helped by the computer and internet. What we hadn’t discussed is the profile of an accountant, or the capabilities needed by an accounting graduate. The statement from 1990 of the Accounting Education Change Commission created a profile of an accounting graduate, profile which we want to present in the following paragraphs. So, an accounting graduate has to hold the following skills:

- **General Knowledge**
  - An understanding of the flow of ideas and events in history and the different cultures in today's world. Basic knowledge of psychology, economics, mathematics through calculus, and statistics.
  - A sense of the breadth of ideas, issues, and contrasting economic, political and social forces in the world.
  - An awareness of personal and social values and of the process of inquiry and judgment.
  - An appreciation of art, literature, and science.

- **Intellectual Skills**
  - Capacities for inquiry, abstract logical thinking, inductive and deductive reasoning, and critical analysis.
- Ability to identify and solve unstructured problems in unfamiliar settings and to apply problem-solving skills in a consultative process.
- Ability to identify ethical issues and apply a value-based reasoning system to ethical questions.
- Ability to understand the determining forces in a given situation and to predict their effects.
- Ability to manage sources of stress by selecting and assigning priorities within restricted resources and to organize work to meet tight deadlines.

**Interpersonal Skills**
- Ability to work with others, particularly in groups, to influence them, to lead them, to organize and delegate tasks, to motivate and develop people, and to withstand and resolve conflict.
- Ability to interact with culturally and intellectually diverse people.

**Communication Skills**
- Ability to present, discuss, and defend views effectively through formal and informal, written and spoken language.
- Ability to listen effectively.
- Ability to locate, obtain, organize, report, and use information from human, print, and electronic sources.

**Organizational and Business Knowledge**
- A knowledge of the activities of business, government, and nonprofit organizations, and of the environments in which they operate, including the major economic, legal, political, social, and cultural forces and their influences.
- A basic knowledge of finance, including financial statement analysis, financial instruments, and capital markets, both domestic and international.
- An understanding of interpersonal and group dynamics in business.
- An understanding of the methods for creating and managing change in organizations.
- An understanding of the basic internal workings of organizations and the application of this knowledge to specific examples.

**Accounting Knowledge**
- History of the accounting profession and accounting thought.
- Content, concepts, structure, and meaning of reporting for organizational operations, both for internal and external use, including the information needs of financial decision makers and the role of accounting information in satisfying those needs.
- Policy issues, environmental factors, and the regulation of accounting.
- Ethical and professional responsibilities of an accountant.
- The process of identifying, gathering, measuring, summarizing, and analyzing financial data in business organizations, including:

**The role of information systems**
- The concepts and principles of information system design and use
The methods and processes of information system design and use
The current and future roles of computer-based information technology
The concepts, methods, and processes of control that provide for the accuracy and integrity of financial data and safeguarding of business assets.
The nature of attest services and the conceptual and procedural bases for performing them.

- **Taxation and its impact on financial and managerial decisions.**
  - In-depth knowledge in one or more specialized areas, such as financial accounting, management accounting, taxation, information systems, auditing, nonprofit, government, and international accounting.

- **Accounting Skills**
  - Ability to apply accounting knowledge to solve real-world problems.

- **Personal Capacities and Attitudes**
  - Creative thinking
  - Integrity
  - Energy
  - Motivation
  - Persistence
  - Empathy
  - Leadership
  - Sensitivity to social responsibilities
  - A commitment of life-long learning

As we shown above, an accounting graduate has to meet a lot and diverse capabilities in order to be able to do this profession. The disadvantage of sourcing data from current students and graduates is that they do not have the benefit of professional practice to inform their views. Alternatively, employers often have many years of professional experience and, while they tend to have a clear understanding of the requirements of professional practice, a significant period of time has elapsed since their own tertiary study and their first years of professional practice (Wells et al, 2009 [67]). Concluding our ideas regarding accounting education, we can say that educational institutions prepare their students for real life by equipping them with up-to-date information and necessary skills. Survival of educational institutions in today’s rapidly changing and dynamic business environment depends on meeting the expectations of the business world. This is true for the accounting discipline as well as others. The traditional scorekeeping role of accountants is no longer sufficient in modern global business models (Lange et al., 2006 [37], quoted by Uyar, 2011 [65]). This reality forces educators to learn what the business world demands from graduates for successful performance in their future careers. Old curricula and teaching methods are insufficient to meet the demands of employers. Although most of the earlier studies have aimed to determine skills required for the accounting profession, some have aimed to determine the professional knowledge considered important for the accounting profession. Lange et al. (2006) [37], quoted by Uyar, (2011) [65] conducted a survey on graduates. They found that graduates perceive communication and analytical-based skills as the most important qualities required for a successful accounting career. Digabriele (2008) [17] found that the items rated as most important were critical thinking, deductive analysis, and written communication according to overall means of respondents which include forensic.
accounting practitioners, accounting faculty, and users of forensic accounting services. In recent decades, there has been much debate about the skills and knowledge that accounting graduates should have to enable them to pursue a career in the accounting profession. This matter is considerably important for all stakeholders, including students, academicians, and employers. Students want to equip themselves better for the work environment; academicians are expected to provide better equipped graduates to the market; and employers desire highly qualified and skilled job applicants. Moreover, changing business environments, and developments in accounting and financial reporting standards are other forces that affect and shape accounting curricula. For example, adoption of International Accounting Standards by many countries is a motivation for accounting curriculum changes. In addition, technological developments require incorporation of new technology into classic curricula. It is clear that changing conditions are affecting both the personal skills and knowledge levels required of accounting graduates, and all world of accounting, in general.

7 An Accountant’s Professional Qualification and Its Assignment
Several member states of the European Union have been following the International Education Standards (IES) and the International Education Guidelines (IEG) in their education and examination systems. The guidelines cover secondary and vocational education, vocational examinations, requirements for work experience and continuing qualification training. They were worked out by experts in order to promote the global harmonisation of requirements for professional qualifications. The harmonisation of the state qualification systems would reduce costs on the mutual recognition of agreements and would enhance provision of accounting services across borders.

The International Education Standards are of normative character, domestic standards are superior. However, the member organisations of the International Federation of Accountants (below IFAC) should consider the education standards and guidelines in order to develop their education and development programs. The member organisations of IFAC are obliged to give recommendations in legislative matters and bring domestic standards into accordance with the international standards to the greatest extent possible. The standards cover certain elements that are significant only for professional accountants.

- IES 1. Entry Requirements to a Program of Professional Accounting Education.
- IES 2. Content of Professional Accounting Education Programs.
- IES 3. Professional Skills and General Education.
- IES 4. Professional Values, Ethics and Attitudes.
- IES 5. Practical Experience Requirements.
- IES 6. Assessment of Professional Capabilities and Competence.
- IES 8. Competence Requirements for Audit Professionals.

The following is an overview of the qualification systems, the requirements set for an accountant’s qualification and their accordance with the international standards and guidelines in different countries. The focus is laid on the requirements for education, experience and continuing qualification training. The countries under discussion are the Scandinavian countries (Sweden, Norway, Finland) and the Baltic countries (Latvia, Lithuania, Estonia). First, domestic systems are analysed, the last part of the article contains a comparative analysis, in addition the accordance of the domestic systems with the standards has been outlined.
7.1 Certification and Assignment of Professional Qualification in Sweden

Sweden has an organisation, which joins professional accountants – Association of Swedish Accountants (accounting consultants) (SRF – Sveriges Redovisningskonsulters Förbund). Accountants and auditors can become members of SRF but they must have an accountant’s licence. The licence entitles the person to use the title “Authorized Accounting Consultant” (in Swedish Auktoriserad Redovisningskonsult). Those who do not have a licence are called accounting consultants. There are no qualification levels for accountants in Sweden.

Licensing has been performed since 2006. To become a licensed accounting consultant, one should have 3 years of auditing or accounting experience in a company and a higher education in the field of business, taxation or business law.

No qualification exams are run to determine theoretical knowledge or practical skills. The qualification is for a fixed term and to retain it, the consultant has to give proof of the accomplishment of a qualification-training course of at least 60 hours in accounting, taxation and/or related fields.

Licensing is based on the cooperation and agreement between two main organisations FAR (Föreningen Auktoriserade Revisorer) and SRF. Institutions have assured that they want to regulate it in such a way. An accountant’s qualification is not related to the European Qualifications Framework, EQF.

In Sweden smaller enterprises (approximately 250,000 enterprises) have not been subject to obligatory auditing since 2011 and instead of voluntary auditing they may opt for accounting by a licensed company to verify the annual report. Two years earlier Standard Reko had been enforced which dealt with providing accounting services. Since then and due to the abolition of obligatory auditing, Reko standard and licensing have been the focus of attention (by companies, banks and the tax office). Reko standard will contribute to the promotion of licensing as well as the level required for accounting consultants.

7.2 Certification and Assignment of Professional Qualification in Norway

In Norway accountants have one professional qualification (in the local language an accountant is referred to as regnskapsfører), and auditors have two categories: registrert revisor and statsautorisert revisor.

Individuals who work as accountants in an entity do not have to have professional qualification. All individuals who provide accounting services have to be licensed in accordance with the Norwegian legislation. Those who have at least one of the auditor’s qualifications are allowed to provide accounting services without any additional accountant’s examination.

The Authorisation of External Accountants Act was enforced in 1993. The first clause of the act reads that everyone who takes on a responsibility to someone else for preparing financial statements for the latter has to be licensed by FSA – Finanstilsynet - The Financial Supervisory Authority of Norway in accordance with the given act. The act also determines the requirements for accounting companies and their responsibility.

According to the Authorisation of External Accountants Act FSA may make exceptions regarding licensing or decide whether it is feasible to apply a certain legal act or not by passing a decree or making an individual decision.

In order to become a licensed accountant in Norway, one has to have at least a three-year higher education (bachelor’s degree), which comprises accounting, taxation and business administration and at least two-year experience in accounting within the past five years.

Accountants have to be licensed by FSA. The requirements for accountants have been outlined in the fourth part of the Authorisation of External Accountants Act. In addition to the education and experience an accountant has to be a resident of a member state of the European Economic Community; has to have a
business location in Norway; has to be financially reliable, have a good reputation and be a person of legal capacity.

To maintain their licence accountants have to continuously improve their knowledge and keep up-to-date with changes. For that reason licensed accountants have to participate in different courses with the minimum duration of 77 hours within three years. In Norway there is a professional association, which monitors and promotes the activities of licensed accountants and defends their economic and social interests. This is the Norwegian Association of Authorised Accountants (NARF – Norges Autoriserte Regnskapsforerers Forening), which provides a wide range of qualification training programs and courses, which cover various fields (accounting, taxation, economics, business development, legal aspects, etc.) A prerequisite for becoming a member of NARF is a licence given by FSA. Membership provides better opportunities for (contracts for) working as an accountant.

All Norwegian entities that provide accounting services to other entities have to employ at least one accountant who has received a qualification certificate from FSA (Doving and Gooderham, 2005 [18]).

In addition to accounting companies the following requirements have been set to be eligible for a licence in the Authorisation of External Accountants Act:

- the managing director has to be an authorised auditor;
- the main purpose of the entity’s activities is provision of accounting to other entities;
- the entity has to have a high financial rating;
- the entity has to have a permanent representation in Norway.

FSA is responsible for administration and control in Norway. By the supervision of entities and markets the supervisory authority aims at promoting financial stability, regulating market conditions and insisting on the belief that the contracts signed are honoured and services provided in the way initially agreed on. In addition to its proactive function the supervisory authority is ready to deal with arising problems.

The aim of certification is to ensure accountants’ adequate competences and the accordance of their work with the legislation and guidelines regulating accounting (Doving and Gooderham, 2005) [18].

7.3 Certification and Assignment of Professional Qualification in Finland

In Finland the activities of accountants and entities providing accounting services are not regulated by laws. However, it is customary to outsource accounting services in Finland.

The Association of Finnish Accounting Firms (Taloushallintoliitto) has been working in Finland since 1968. One opportunity to recognise experts in the field is to choose a company that is a member Taloushallintoliitto for providing accounting services. The members of the Association have to follow stringent regulations and meet high professional standards. The Association also organises seminars every year to keep their members continuously competent.

The Accounting Institute (Tili-instituutti) is a private institute in Finland founded by the Finnish Association of Accounting Companies in 1980. Hereafter the institute has been organising KLT accounting examinations. The institute issues also licences to accounting companies if the company has employees with a KLT certificate. As of September 2012 2,639 people had a KLT certificate in Finland.

In Finland accountants have only one qualification level. A person may apply for a KLT examination if he/she has education in the field of business and accounting experience of several years. The following options apply:

- A university degree (master or bachelor) and accounting experience of 3 years.
• Vocational qualification in business administration or a graduate from a business school and working experience of 10 years in an accounting company or accounting experience of 20 years.

• If the person does not meet the above requirements he/she may apply on the exceptional basis in accordance with Clause 6 of KLT-säännöt.

KLT examination takes place once a year. Problems are prepared by people from diverse institutions: the tax office, universities, and non-governmental organisations. The examination is a paper-based one, not a computer-based one. Legal acts/laws are allowed to be used at the examination. The examination takes place on one day and consists of two parts: Part I (1/3) includes business law and taxation, Part II (2/3) paper-based accounting and auditing. The problems are based on real-life cases and issues, thus competences are tested in real situations. The requirement for passing the examination is decided each year. As a rule, approximately half of those taking the examination pass it. The examination can be considered to be rather difficult/challenging.

The preparation for the examination is mainly on the self-study basis. There is a list of 11 publications, which are helpful for preparing for the exam. Courses are also organised. The examination questions and answers are published every year.

The service fee is 50 euros on application, the examination fee is 133 euros (if the person participates in the exam) and the annual maintenance fee for the KLT book is 57 euros. A person who has passed the exam is allowed to use the title KLT accountant or KLT (in Swedish EBR-bokförare, in Finnish KLT-kirjanpitäjä).

In order to have KLT qualification a person first has to pass the examination and then maintain a high level of competence. An eligible person who has successfully completed the examination will be issued a permanent KLT book. However, to renew the validity of the KLT book an application has to be submitted every three years. A KLT has to report on his/her working experience and qualification training to the institute. A KLT accountant has to participate in a minimum of six (acceptable) training days within a period of three years. A KLT accountant who works for a registered (licensed) office has to participate in a minimum of nine (acceptable) training days. At least four of the training days must cover the following areas:

• business and management accounting and

• direct and indirect taxation and other training in the field of legislation related to the company’s activities.

Despite the above minimum requirements for qualification courses, a KLT accountant must continuously take care of training and continuing updating of his/her professional knowledge in order to ensure professional competences. If no application is submitted on time to renew the validity of the KLT book or the KLT book does not meet the requirements, the KLT book will be invalid.

KLT certificate is highly appreciated by Finnish accounting companies. Research has shown that those having a KLT certificate are better paid in the labour market.

In conclusion, we can say that a certified accountant, who has proved his/her qualification in Finland is able to prepare financial statements, advise on investments and is informed about legislative issues regarding business activities and financial documentation. A certified accountant is a specialist who can be asked for advice on and further directions about entrepreneurship but not about tax declaration. The latter falls in the field of competence of taxation accountants who have a special certificate.

The KLT system is specific in Finland. But the developments of professional qualification in Scandinavia and Europe are being followed. At the moment the KLT system is not related to EQF.
7.4 Certification and Assignment of Professional Qualification in Latvia

In Latvia there are several independent organisations which provide accounting services: the Latvian Association of Accountants or LAA (Latvijas Republikas Grāmatvežu Asociācija), the Certifying Centre of Accountants (Grāmatvežu Sertifikācijas Centrs) and the Educational Centre Latvikon. The latter issues IAB certificates. The given section touches only upon aspects related to LAA.

Latvia started the certification of accountants in 2000 and as of March 2012 the country had 1,057 certified accountants. LAA has issued 360 and Grāmatvežu Sertifikācijas Centrs 697 certificates.

Certification programs have been prepared according to the qualification programs of Professional Accountants of the UN Geneva Conference of 1999. In the first years of certification there were two qualification levels for accountants (certificate of lower and higher level). Later the certification of the lower level was abolished due to lack of demand. Those applying for a professional certificate preferred the higher level.

The lower level required at least vocational secondary education (specialisation in accounting) and working experience of at least three years as an accountant. Working experience as a financial analyst, auditor, economist, etc. was also accepted in case it was closely related to analysing, checking, preparing, etc. accounting data. The higher level examination can be taken by an individual who:

- has a higher education (at least a bachelor’s degree);
- has at least
  - 3-year experience as a chief accountant or
  - 5-year experience as an accountant or a manager in the field of business and economics.

At first candidates had to take 8 examinations to obtain a higher-level certificate: microeconomics, macroeconomics, financial accounting (Latvian and IFRS), management accounting, financial management and analysis, Latvian taxation system, business law, auditing and internal control. Candidates for the lower level had to take 4 examinations: financial accounting, management accounting, Latvian taxation system, and business law.

At present the requirements are not that strict. An applicant for the higher level has to take an examination in financial accounting, management accounting, Latvian taxation system and business law. The higher-level certificate gives evidence of one’s ability to administer and manage a financial department, monitor and analyse an entity’s economic performance, consult in the field of accounting and taxation.

The preparation of examination questions is the responsibility of a certification committee, which is elected for three years and comprises five members. The committee is also responsible for the preparation of the examination programs and the study program, the election of the members of the qualification examination committee, the organisation of the examination, etc. As a rule examination questions are prepared by the Accounting Department of the University of Latvia. The examination is paper-based, usually legal acts and minister’s decrees can be used.

The duration of the examination is not officially regulated. As a rule the examination lasts for 2.5 to 3 hours. All the 4 examinations are organised separately and it takes about one year to take them. The exam is paid and it costs 60 LVL, i.e. a total of 240 LVL, plus the application fee of 70 LVL.

As a rule the examination is a pass if the number of the correct answers is higher than 50–60%, the latter depends on the examination.

Questions and correct answers are not disclosed after the examination. If one fails the examination, he/she has the right to call for another review of the examination and he/she will be given an opportunity to prove the correctness of his/her answers.
The preparation for the professional qualification examination has changed over years. Earlier several preparatory courses were organised which started in September: accounting standards, Latvian taxation system, business law, auditing and internal control (each 48 hours costing 90 LVL); management accounting (40 hours, 80 LVL), financial management and analysis, microeconomics, macroeconomics (each 32 hours and 70 LVL). Approximately 65% of all applicants for the professional qualification participated in the studies. Approximately 80% of the participants were successful at the exam.

At present the applicants may also participate in preparatory courses. Every 32-hour course costs 90 LVL, total 90 × 4 exams = 360 LVL. The content of the courses is identical to what is being taught to students, there are no specific books or materials and the lecturers are from the faculty of the Accounting Department of the University of Latvia. Considering the fact that most individuals taking the examination are practising accountants they do not attend courses because the level of the latter is quite low.

At the moment a need for engaging external specialists has been identified (starting with the Association of Certified Auditors, Ministry of Finance), who would prepare the examination questions and assess the examination papers objectively. At the moment the examination procedure is not “transparent” and reminds of an additional examination to students, organised by accounting lecturers.

Professional qualification is for a fixed term; the certificate expires in 5 years. Approximately 80% of the accountants apply for re-certification. A certified accountant is eligible for the re-certification of professional qualification if he/she has participated in qualification training (in the field of economics and business administration) during the validity period of the certificate and obtained at least 250 points. The scale is the following:

- An international scientific conference – 25 points, a presentation 50 points;
- An international qualification training course or seminar – 10 points (8-hour course);
- A local course or seminar – 8 points (8-hour course);
- Courses organised by LAA– 4 points per course in case it is none of the above;
- University studies (in an accredited programme) – 50 points (per academic year).

“International” means a course/seminar held in Latvia by a foreign lecturer or a course/seminar abroad. There are certain restrictions on lecturers in case of local seminars/courses. The courses have to be held by university lecturers, certified accountants, tax consultants or certified auditors or by the Ministry of Finance or Tax Office.

An applicant for re-certification must have participated in the compulsory qualification training courses organised by LAA, the topics of which have been determined by the certification committee.

A prerequisite for re-certification is also that the person must have been working as an accountant, a chief accountant or an economist during the past three years prior to re-certification.

The certification is invalidated if the professional activity has been suspended for more than three years. A certified accountant cannot be a person

- who has been declared an insolvent debtor by court;
- who has been sued for an economic criminal offence;
- who has been discharged by a court judgement due to a criminal case.

The reason for a small number of accountants’ professional certificates can be seen in the fact that the system is voluntary and not regulated by law. In addition, a role is also played by the fact that employers do not value the certificates issued by Latvian associations and these do not guarantee a higher salary level to the extent
comparable to ACCA, CIA or IIA certificates. However, the procedures and regulations of qualification assignment and re-certification can be considered highly appropriate.

7.5 Certification and Assignment of Professional Qualification in Estonia

At present it is not essential that accountants should have a professional certificate in order to find a job and certification of professional qualification is voluntary. In the Republic of Estonia only the Estonian Accountants Association, in Estonian Eesti Raamatupidajate Kogu (below ERK), which is the organisation assigning the profession, has the right to issue registered professional certificates.

In Estonia three levels for accountants have been determined: Assistant Accountant (I), Accountant II and Accountant III. Qualification examinations have been organised only for the levels of Assistant Accountant and Accountant II. 1,825 people have taken the examination of Assistant Accountant, i.e. Level I during 8 years, 1,530 of whom have been successful. 136 people have taken the examination at Level II, 76 of whom have been successful (thus 56% on average have passed the exam). One of the reasons why only few people have taken the examination of Level II is supposedly being afraid of failure. The examination is paid and the certificate is valid for five years. However, at the moment the professional certificate does not give any advantages in the Estonian labour market, nor does it guarantee a higher salary.

To obtain professional qualification one has to take a written examination. Qualification examinations for accountants usually take place twice a year. In May/June and in December. The examination is paid (the fee for Level I is 47.90 €, for the members of ERK 38.35 €, the fee for Level II examination is 159.75 €, for the members of ERK 127.80 €). The examination can be taken either in Estonian or in Russian. The examination includes multiple choice questions and problems. The examination takes place on one day, in two parts. Calculators are allowed. The examination for the Assistant Accountant is considered a pass if at least 65% of the maximum is scored (until spring 2011 75%). The change in the minimum requirement was due to a change in the structure of the examination – problems were added to the multiple-choice test. The examination for Accountant II is considered a pass if at least 60% of the maximum is scored.

The procedure of certification and assignment of professional qualification in the field of accounting imposes restrictions on the term of the qualification certificate. Only the qualification certificate for Accountant I is permanent, the qualification certificates for Accountant II and Accountant III are valid for 5 years. To maintain the professional qualification of Accountant II and Accountant III the holder of the certificate is obliged to participate in professional qualification training of 40 academic hours in a company of his/her own choice within the past 3 years (according to the requirements for professional skills set in the Professional Standard for Accountants) and apply for re-certification of the professional qualification. It can be replaced by a training of 20 academic hours being in the role of the lecturer. In addition general working experience of 3 years within the past 5 years is required. Re-certified qualification is valid for five years. On re-certification the Professional Committee may insist on retaking the exam or submission of additional documents, or the combination of the two if required.

The remarkably higher popularity of the qualification examination of the Assistant Accountant can be explained by the fact that the examination is free of charge for the students of vocational schools or schools of applied higher education (also up to a year after graduation). The Ministry of Education and Research pays the examination fee per one student once. The level of Assistant Accountant (and thus also the qualification examination) calls for basic knowledge of accounting, not thorough knowledge of the profession. Accordingly, we may assume that the examination may be taken also by those students who are not planning to start working in the field of accounting but take advantage of the legal opportunity to obtain the professional qualification free of charge. Another important aspect is that the qualification level of the Assistant Accountant does not require working experience. Thus the examination can be taken by young people at the start of their accounting

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careers. According to the professional standard the assistant’s level calls for secondary education, completion of qualification training or working experience as an assistant accountant whereas the level of Accountant II calls for the vocational secondary education at the minimum.

The qualification examination for Accountant II is much more difficult and it also calls for 2-year working experience in the field of accounting. Therefore, as a rule, the qualification examinations for that level cannot be taken immediately before or after graduating from an educational institution, when the graduates remember well the theoretical knowledge from school but lack practical working experience, which would reinforce the knowledge and skills. Accountants can be also discouraged by a high rate of failure - almost half of the ones taking the exam have failed (especially in the first years). The analysis of the examination results has shown that the main problems are related to the areas, which are relatively new (time value of money, securities, real value, transition from accrual-basis figures to the cash-basis ones or vice versa, the methodology of financial accounting, cost accounting and financial statements).

According to the Ministry of Finance there are two fields of activity where the implementation of the qualification certificate requirement for accountants could be considered. These are the public sector (i.e. the state and municipal authorities) and businesses providing services in the field of accounting. Imposing the certification requirement on accountants in the private sector is not under consideration at present (Penjam, 2011) [47].

7.6 Certification and Assignment of Professional Qualification in Lithuania

The Lithuanian Association of Accountants and Auditors, LAAA is a non-profit organisation, which was founded in 1989. According to LAAA there may be up to 15,000 potential members (professional accountants) in Lithuania. Thus the members of the association are estimated to make up less than 1% of the Lithuanian professional accountants. The low involvement of accountants in Lithuania is due to various factors. First, there is little recognition and demand for the membership in the market (i.e. a large number of employers do not consider the need for membership in employing an accountant). Another important factor is related to the inability to encourage accountants to become members of the professional association. So far LAAA has not been able to make itself attractive enough in the market, but they are working on it. LAAA is not a member of IFAC, but the code of ethics that has recently been introduced for its members is based on the code of ethics by IFAC. The latter is hoped to demonstrate employers the usefulness of an accountant’s membership.

The professional association has been trying to make itself more visible to potential new members. One step in this direction is a plan to distinguish between three qualifications: i) bookkeeper, ii) professional accountant, and iii) expert accountant. The Lithuanian Accounting Act is being amended and hopefully certification will be compulsory for accountants starting from 2016. At present the diploma of higher education is given on graduation from a university and the qualification of an accountant is obtained. It must be noted that no official certificate is required in order to work in the field of accounting. Most accountants do not belong to the professional association and thus do not have a formal qualification. A large number of them have received their schooling and education during the previous societal regime and system. Lots of accountants have never obtained modern and internationally recognised training in accounting and financial reporting (except to a limited extent at university or college).

Very few Lithuanians have obtained an internationally recognised accountant’s qualification (e.g. from ACCA in the UK or CPA from the USA). Even large international accounting companies only sometimes sponsor their employees so that they could obtain an internationally recognised qualification.

As the Lithuanian professional association does not organise qualification examinations for accountants or issue qualification certificates, Lithuania has been excluded from the following section.
7.7 Comparison of State Systems and Their Accordance with Standards

In all the countries under discussion professional associations for accountants have been established, a few of them (in Finland, Sweden) also issue licenses to companies providing accounting services. In Norway licenses are issued by FSA. The requirements for membership are different in professional associations. For instance, in Estonia also non-certified individuals may belong to ERK, whereas in Sweden and Norway an accountant’s license is a prerequisite. Although it is possible to become a member of NARF only on the basis of a license in Norway, the membership is not obligatory.

In Latvia, Estonia and Finland certification of accountants is based on examinations. These are voluntary and non-certified individuals my practice in the given field. In Sweden and Norway no examinations are organised, the qualification is obtained through working experience, by meeting the educational and other requirements (see Table 1). All other countries have one organisation issuing qualification certificates, but Latvia has two of them.

The professional activities of accountants and requirements for practicing accounting offices are not regulated by law in Estonia, Latvia and Finland. Although in Finland the acquisition of a qualification certificate has not been determined by law or the requirements fixed for the activities of accounting companies, differently from Estonia and Latvia their certification of accountants is highly appreciated and the professional activities in the given field are much more actively dealt with. Also several international portals, where profiles of countries have been prepared by fields of activity, recommend that accountants or service providers should be selected from respective associations, which have specialists and/or offices as their members, who have obtained an official evidence (certificate or license) of their competence.

Norway is the only country among those under discussion where accountants are licensed in accordance with the specific Accountants Licensing Act adopted in 1993. The preamble of the act reads that all those (accountants and accounting companies) who provide accounting services to others (business entities) have to be licensed.

Table 1. Requirements for obtaining the accountant’s qualification in different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Educational level required</th>
<th>Professional working experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>No exam Auktoriserad Redovisningskonsult</td>
<td>higher education</td>
<td>3 years</td>
</tr>
<tr>
<td>Norway</td>
<td>No exam Regnskapsfører</td>
<td>higher education</td>
<td>2 years within the past 5 years</td>
</tr>
<tr>
<td>Finland</td>
<td>exam KLT-kirjanpitäjä</td>
<td>Higher education and 3-year working experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vocational education and 10-year working experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 years of working experience</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>exam Augstākās pakāpes profesionālā grāmatveža</td>
<td>higher education</td>
<td>3 years as a chief accountant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 years as an accountant or a manager in the field of business</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>exam Raamatupidaja assistent I tase,</td>
<td>Secondary education</td>
<td>Not required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raamatupidaja II</td>
<td>Vocational secondary education</td>
</tr>
</tbody>
</table>

Source: authors’ analysis
Although the International Education Standards and Guidelines are not compulsory for countries, IEG 9 provides for the existence or introduction of a relevant assessment procedure of accountants’ professional skills. A required component in the assessment procedure is an examination, in which a remarkable part should consist of written answers, in addition there is a requirement for education and (if required) experience.

The present IES 5 states that the period of practical experience should be at least 3 years.

The devised IES 5, which would be enforced on 1 January 2014, requires that the member organisations of IFAC should use one of the following approaches to assess practical experience: outcome-based, input-based or a combination of the input-based and result-oriented approach. According to Clauses 12 and 3 of the International Standard the outcome-based approach should comprise such characteristics as the accordance of learning outcomes with the qualification certificate; in case of the input-based approach the list of participants, registers of working hours and work places, service records could be considered. Traditionally the basis of the input-based approach is time (e.g. hours spent on the respective activity) or the duration of practical activity (days, months or years). The input-based approach is often used so that it would be easier to measure and control. The constraint of the latter is that it is often impossible to measure learning outcomes or the development of competence.

A member organisation of IFAC may decide that if a person has a master’s degree in accounting, the component of practical experience may be reduced. For instance, if the input-based approach is chosen, the requirement for three-year practical experience or two years, if the person has a master’s degree in accounting or other relevant area, or at least five years of a combined record of education and practical experience, could be considered.

Comparing the valid requirements with standards, in Norway and in Estonia the minimum requirements for professional working experience are not met.

The following is a comparison of accountants’ qualification examinations by countries (Table 2). At present, qualification levels are differentiated only in Estonia. Initially Latvia had two levels since 2000 when the first examinations were organised. The lower level was abolished in 2003 due to lack of demand (applicants preferred the second, i.e. higher level). Estonia also differs from other countries by the fact that accounting students can take the first level exam (Assistant Accountant) free of charge and they are granted a permanent professional qualification of Level I (lower level).

All countries have written paper-based examinations. In Latvia and Finland legal acts may be used at the examinations. Differently from other countries the examination questions and correct answers are disclosed only in Finland.
Table 2. Comparison of accountants’ qualification exams, March 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Estonia</th>
<th>Latvia</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level I</td>
<td>Level II</td>
<td></td>
</tr>
<tr>
<td>Exams have been organised</td>
<td>Since 2004</td>
<td>Since 2005</td>
<td>Since 2000</td>
</tr>
<tr>
<td>Frequency of exams</td>
<td>Twice a year (one day)</td>
<td>Twice a year (one day)</td>
<td>All 4 exams in different fields are run separately, it takes approx. a year to take them.</td>
</tr>
<tr>
<td>Valid certificates</td>
<td>1,530</td>
<td>76</td>
<td>1,057</td>
</tr>
<tr>
<td>Exam fee</td>
<td>47.90 €, for members of ERK 38.35 €</td>
<td>159.75 €, for members of ERK 127.80 €</td>
<td>4 exams × 60 =240 LVL, application fee 70 LVL</td>
</tr>
<tr>
<td>Validity of the qualification certificate</td>
<td>permanent</td>
<td>fixed term, 5 years</td>
<td>fixed term, 5 years</td>
</tr>
<tr>
<td>Exams passed</td>
<td>Approx. 80%</td>
<td>Approx. 60%</td>
<td>Approx. 80%</td>
</tr>
</tbody>
</table>

Source: authors’ analysis

In all countries observed the minimum score for passing the examination is determined every year, but in general the number of correct answers must be 50–60%.

To maintain an accountant’s qualification all countries have established the requirement for continuing professional development (CPD). However, there are differences in volumes (Table 3). Estonia is the least demanding (40 hours within the past 3 years although the qualification certificate is valid for 5 years), where there are no predetermined requirements for training companies or topics covered either. The Latvian system is the most demanding one – estimated at 200 hours of training courses within 5 years (the specific calculation of points is given in the section on the Latvian system). However, in most countries professional working experience is also required in addition to qualification training (e.g. in Estonia and Latvia at least 3 years of professional work within 5 years).
Table 3. CPD requirements for accountants by countries

<table>
<thead>
<tr>
<th>Country</th>
<th>CPD minimum requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>60 hours within 3 years</td>
</tr>
<tr>
<td>Norway</td>
<td>77 hours within 3 years</td>
</tr>
<tr>
<td>Finland</td>
<td>48 hours within 3 years</td>
</tr>
<tr>
<td>Latvia</td>
<td>250 points (estimated at 200 hours of training courses) within 5 years</td>
</tr>
<tr>
<td>Estonia</td>
<td>40 hours within 3 years to maintain Level II</td>
</tr>
</tbody>
</table>

Source: authors’ analysis

The requirement for continuing professional development in Guideline IEG 2 arises from the objective to maintain and improve one’s professional knowledge and skills to ensure society that the required professional skills are adequate to provide services.

IFAC guidelines recommend that a professional accountant should receive at least 30 hours of continuing professional training a year. It is not feasible to require the minimum each year, but at least 90 hours of structured studies are recommended within 3 years. Professional associations or regulatory organisations should monitor compliance and create mechanisms to ensure its observation [64].

Comparing recommended requirements with the real ones, the only country that has been able to follow them is Latvia, closely followed by Norway. The other countries have set lower minimum requirements.

In conclusion we can state that joining the qualification system is voluntary and it is not regulated by law in most countries. In all countries an accountant may also practice without a qualification certificate but in Norway a license is required to provide accounting services. An accountant’s qualification certificate is not significant in the labor market in Estonian or in Latvia. In Finland, Sweden and Norway the certificate is appreciated by accounting companies and a certified accountant is also better paid in the labor market.

Research has shown that more than a half of small and medium-sized enterprises in Finland, Sweden and Norway use external consultants (outsource accounting service) to perform their accounting. Their accountants are not only those who insert data and archive documents but an accountant is also expected to act as a consultant in making significant decisions for the customer (enterprise) and giving further directions for the business’s activities. In all the countries observed accounting and auditing are separate fields. An accounting entity is not allowed to outsource accounting and auditing from the same service provider.

References


An Analysis of the Disequilibrium between the Business Environment’s Expectations and the Modern Curricula

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1 Introduction and Methodology

This study presents and analysis of the antitheses that exists between the expectations business environment has from graduates and the modern curricula used din universities nowadays. This topic is not a new one. Efforts in reaching a symbiosis between these two elements have been done lately, with less or no practical effect. The business environment is in a continuous change and development in the last decades. The share held by production in total Gross Domestic Product (GDP) decreases while the service sector is increasing, which determines the appearance of new business models. New business models create new jobs therefore the job market is constantly changing. Universities, the last ring in the chain, are responsible to prepare graduates well trained for this changing environment. The problem is that universities fail to offer a proper education due to the educational model they use.

The scope of this study is to highlight the discrepancies that exist between the graduates’ competencies and the business environment’s expectations in our hope that things will be changed someday. The structure of the chapter is described below and presented in the following figure:

Figure 1. The research model

Source: author’s analysis

The global economy is changing dramatically and it creates new expectations and opportunities for graduates. On the other hand, the academic environment prepares graduates to have a set of competences that don’t serve properly the business environment. A natural question arises from here: what is to be done?

The study is structured in four main parts. In the first part of the study we tried to highlight the important role service sector has in the global economy. In this sector, there is a higher demand for high skills jobs. In order to satisfy this increasing demand, the only solution identified so far is to increase the workforce competitiveness through investing in education. In the second part we tried to sketch the European institutional reaction to education by presenting the competences someone has to acquire until graduation. Because we didn’t find a similar conceptual framework in US, we directed our attention on the opinions American researchers have in
establishing competencies. This part of the research is useful because it allows us to analyze more in depth how specialists tackle the issue of competencies in education as a useful tool for the business world. In the third part of the study we briefly presented and characterized the periods of the modern curricula, based on competencies, and pro and cons versus the actual stage of the curriculum development. In the last part of the research we drew or conclusions.

The literature review is based on official documents issued by the Council and European Parliament, peer-reviewed articles, curricula publications, newspapers’ articles, and books. We analyzed and compiled the information presented in the indicated sources in order to offer a more comprehensive view of the analyzed topics. Also, we presented on comparative basis different information founded in the investigated literature. The analysis of the data is interpretative. The conclusions are based on the analysis developed and they are subject to interpretation and debate.

2 The Leading Role of the Service Sector in the Global Economy and Its Manifestation

Globalization is a process of interaction between countries, companies and people. Started with 18th century, societies developed tremendously and transformed fantastically. The First Industrial Revolution that took place between 1750 and 1850 changed profoundly the agriculture, manufacturing, transportation and technology. The First Industrial Revolution merged into the Second Industrial Revolution around year 1850, characterized by a large development in industry. It was the era of mass production and production line. According to some historians, like Blinder cited here, we still are in that phase. According to others, like the American economist Rifkin, and according to the documents issued by the European Parliament we are in The Third Industrial Revolution, a period of communication technology and energy convergence. I believe it is much more important to realize where we are now and not necessary the name of the period. It is more important to understand that the global economy faces a massive shift of employment away from manufacturing and toward services (Blinder, 2008:5) [1]. In his book “The world is flat” published in 2005, the American economist Thomas Friedman catches the effects of globalization. He identifies three stages of globalization: Globalization 1.0 started in 1492 when Columb discovered America and therefore the world transforms itself from big into medium, when power was held by countries; Globalization 2 started around year 1800 and lasts until year 2000, when the world diminish its dimensions from medium to small. The entire force of the economy was held by multinational companies or corporations and the global economy expands dramatically. Globalization 3 starts around year 2000 and has as the central point the individual instead the company. The individual has the power to cooperate, to collaborate and to compete globally manly due to the development of internet. Indeed, we can see how sensitive is the financial market when a key manager leaves a corporation like in Microsoft’s case: “Steven Sinofsky’s departure from Microsoft didn’t go over well with investors. The stock declined by as much as 4% in early trading Tuesday to below $27 a share, shaving off $10 billion from the company’s market cap.” (Wasserman T., 2012) [11].

As a consequence of the Second Industrial Revolution, that increased the automation of the production processes, the sector services developed dramatically in the last decades. In the following table we have the world GDP composition for years 1999 and 2011. Figures show us that services sector hold a huge proportion from the total economy: over 60%, and only about 30% is held by industry. GDP composition by sector is listed below:
Table 1. GDP composition for 1999 and 2011

<table>
<thead>
<tr>
<th>Sectors in GDP</th>
<th>1999</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Industry</td>
<td>32%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Services</td>
<td>64%</td>
<td>63.4%</td>
</tr>
</tbody>
</table>


Two types of jobs can be found in service area: personal services and impersonal services. Traditionally, we have thought of service jobs as being largely immune to foreign competition (Blinder, 2008:7) [1]. And for certain service jobs the situation is still unchanged, if we take the case of a plumber or a dentist; still, some service jobs can be done from all over the world, like doing tax declarations online, consultancy, coaching, and so one.

Another characteristic of the globalization process is that, even in service sector, high skills job leave developed countries and move to developing countries. At the global level we see the case of United States, from where jobs have been migrated to Asia and at European level we witnessed the same situation when jobs went from developed countries to the Ex-Soviet block countries. “First, poor countries with around 3 billion people have broken into the global market for manufactures and services; whereas 30 years ago most exports from developing countries were of primary commodities, now manufactures and services predominate.” (WB Report: ix) This movement of jobs from a developed market to a less developed one was generated also by the lower level of income in the developing countries but also by the fiscal facilities offered by developing countries. A relevant example in this case is Intel’s case: “Intel’s recent decision to locate a semiconductor manufacturing plant in China instead of the United States was driven in part by the recognition that it can cost $1 billion more to build, equip, and operate a factory in the United States than it does outside, with 70 percent of the cost difference accounted for by lower taxes, and 90 percent of the cost difference explained by government policies (including grants and tax credits), not wages.” (FT 1). These pressures represent the effect of the economic progress of countries like China, India, Brazil and Russia. In addition to these, Ben Bernanke, chairman of the Federal Reserve, argued that new technologies, such as the internet, have increased the productivity of highly skilled workers more than low-skilled and said that many technologies invented in the past 60 years have replaced unskilled but helped skilled workers (FT 1).

Being in a continuously expansion, high skills jobs in services represent the segment where the new market requests more and more employees. In this context, can developed countries prepare high skilled personnel to cover the demand in a timely manner and to transfer them where the business operates? Will they, high skills personnel, be willing to change their homes and live in a poorer country for years with half of the wages they received in their home country? Will they be willing to change completely their life styles and embrace a new culture for a while? Maybe yes, maybe no. We don’t know, but it is always good to have a backup plan. Therefore, their second alternative would be to hire the workforce from the developing countries. In this point, another struggle appears: Can developed countries accelerate the research and development activities to maintain the competitiveness margins and compete with the development of the new markets? In February 2009, the Information Technology and Innovation Foundation’s (ITIF) issued the Atlantic Century report Benchmarking EU & U.S. Innovation and Competitiveness. This report assessed the global innovative-based competitiveness of thirty-six countries and four regions (the European Union (EU)-15 region, the EU-10 region, the EU-25 region, and the North Atlantic Free Trade Agreement region), both as they stood at
approximately 2007 and in terms of their progress between the early 2000s and then. The report relied on sixteen indicators from these broad categories: human capital, innovation capacity, entrepreneurship, IT infrastructure, economic policy, and economic performance. Two years later, in 2011, they revisit the initial questions and issued the Atlantic Century II report, where data gathered in 2009 were adjusted with the latter years and more countries were included. ITIF’s report examined the rate of change in innovation capacity over the last decade for 40 countries and found out that first top ten ranked countries are: Singapore, Finland, Sweden, US, South Korea, UK, Canada, Denmark.

Recognizing that the skills of their workforce form the fundamental source of their competitive advantage, leading countries have made education a core element in their innovation policies. “Finland has set a goal that all its high school graduates to be equipped with the technical, analytic, and communications skills to compete in a global economy the day they graduate from high school. It also consolidated three of its institutes of higher learning—the Helsinki School of Economics, the University of Art and Design Helsinki, and the Helsinki University of Technology—into a single institution, Aalto University, that by 2020 is meant to be one of the world’s leading academic institutions at combining business, technology, and design. Sweden introduced universal school vouchers in a sweeping reform to enhance the competitiveness of its secondary education system” (Ezell, 2009) [5]. Therefore, skillful workforces represent a crucial element for companies when they decide where to locate their businesses. As a consequence, countries should be interested to form skilled employees in order to attract foreign investments and keep the capital on their markets. Even if US holds the forth place in the above mentioned ranking, their representatives understand the problem of education is crucial for the future of their economy. Shirley Ann Jackson’s opinion as president of The American Association for the Advancement of Science – AAAS, the world’s largest general scientific society, who speaks extensively about the crisis US faces is that there is a quiet crisis building in the United States...The crisis stems from the gap between the nation’s growing need for scientists, engineers, and other technically skilled workers, and its production of them. As the generation educated in the 1950s and 1960s prepares to retire, our colleges and universities are not graduating enough scientific and technical talent to step into research laboratories, software and other design centers, refineries, defense installations, science policy offices, manufacturing shop floors and high-tech startups (Jackson, 2010) [8].

Education represents the crucial element that helps young generations to be better prepared for the future. It can help them to understand better the new approaches that will challenge their minds and limits. But they need an education that can help them to face all these challenges. So what type of education is the one they receive? We answer this question in the following paragraph.

3 Competencies for Tomorrow: How the Business World of Tomorrow Is Seen By Experts in Education

A conceptual framework that gathers competencies considered to be needed for the business world is The European Reference Framework of Key Competences, defined in the Recommendation on key competences for lifelong learning adopted by the Council and the European Parliament in December 2006 as a result of five years of work by experts and government representatives. The study was carried out to support the strategic framework of European cooperation in education and training, relating to the implementation of the revised Lisbon Strategy for the years 2010–2020. The European partners consider that the acquisition of key competences is a decisive factor contributing to the well-being of individual citizens as well as to social cohesion and to the development of the economy (CASE Network Reports 87:11). Competence, in this context, refers to achieving “a higher degree of integration between the capabilities and the broader social objectives that an individual has” (EC 2010:2). According to the study, key competencies are needed for personal fulfillment besides the social inclusion and employment in a knowledge society. A ‘key competence’ is one crucial for three aspects of life (EC 2010:3):
• personal fulfillment and development throughout life (cultural capital): key competences must enable people to pursue individual objectives in life, driven by personal interests, aspirations and the desire to continue learning throughout life;
• active citizenship and inclusion (social capital): key competences should allow everybody to participate as an active citizen in society;
• employability (human capital): the capacity of each and every person to obtain a decent job in the labor market.

Therefore, key competences are defined as a transferable, multifunctional package of knowledge, skills and attitudes that all individuals need for personal fulfillment and development, inclusion and employment; these should have been developed by the end of compulsory schooling or training, and should act as a foundation for further learning as part of lifelong learning (EC 2010:6). The Recommendation defines eight key competences:

• Communication in the mother tongue;
• Communication in foreign languages;
• Mathematical competence and basic competences in science and technology;
• Digital competence;
• Learning to learn;
• Interpersonal and civic competences
• Sense of initiative and entrepreneurship; and
• Cultural awareness and expression.

The study takes a particular focus on the last five competencies, which are cross-curricular in nature. These key competences are not finite and their development should be supported by transversal skills such as critical thinking, creativity, initiative, problem solving, risk assessment, decision making and the constructive management of feelings (EC 2010:11).

Digital competence involves the confident and critical use of Information Society Technologies (IST) for work, leisure and communication. These competences are related to logical and critical thinking, to high-level information management skills, and to well developed communication skills (EC 2010:14).

Learning-to-learn competence comprises the disposition and ability to organize and regulate one’s own learning, both individually and in groups. It includes the ability to manage one’s time effectively, to solve problems, to acquire, process, evaluate and assimilate new knowledge, and to apply new knowledge and skills in a variety of contexts — at home, at work, in education and in training. In more general terms, learning-to-learn contributes strongly to managing one’s own career path (EC 2010:15).

Interpersonal and civic competences cover all forms of behavior that one must master as an individual in order to be able to participate in an efficient, constructive way and resolve conflict in social life, in interaction with other individuals (or groups) in personal, family and public contexts (EC 2010:16).

Entrepreneurship has an active and a passive component: it comprises both the propensity to induce changes oneself and the ability to welcome, support and adapt to innovation brought about by external factors. Entrepreneurship involves taking responsibility for one’s actions, positive or negative, developing a strategic vision, setting objectives and meeting them, and being motivated to succeed (EC 2010:8).
Cultural awareness and expression comprises an appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, corporal expression, literature and plastic arts (EC 2010:8).

This conceptual framework was created to serve as a basis for those who are responsible for creating a learning environment. It should not be seen as an exhaustive plan, since it is recommended to be adapted to learners’ contexts. Therefore, each university should adopt and adapt the conceptual framework according to their mission.

If key competencies were keeping the headlines of the research in education’s area so far, defining key competencies for a sustainable development represents now the trend. In this way, the study conducted by Wiek et al. focuses on key competencies considered to be critical for graduating students to possess in order to offer a sustainable education. Wiek et al. address the issue of competencies for a sustainable development in their research Key competencies in sustainability: a reference framework for academic program development published in 2010. Firstly, they differentiate the term key competencies from competencies arguing that the former represent a critical reference point for developing the proper knowledge and skill profile of students expected to solve the problems of the future. They define the term competence as a functionally linked complex of knowledge, skills, and attitudes that enable successful task performance and problem solving (cf. Spady 1994; Baartman et al. 2007 cited by Wick et al., 2011:2 [12]). Applied to competencies in sustainability, these are complexes of knowledge, skills, and attitudes that enable successful task performance and problem solving with respect to real-world sustainability problems, challenges, and opportunities (cf. Dale and Newman 2005; Rowe 2007; Barth et al. 2007 cited by Wick et al., 2011:2 [12]).

Secondly, key competencies are those competencies considered essential for sustainability that have not been the focus of traditional education and therefore require special attention. (Wick et al., 2010:2) [12]. Their research indicates that the goal of academic sustainability programs is to enable students to plan, to conduct and engaged in sustainability research and problem solving based on the interplay of five key competencies: systems-thinking competence, anticipatory competence, normative competence, strategic competence, and interpersonal competence (Wiek, 2011:5) [12]. They define the competencies as follows:

- Systems-thinking competence is the ability to collectively analyze complex systems across different domains (society, environment, economy, etc.) and across different scales (local to global).
- Anticipatory competence is the ability to collectively analyze, evaluate, and craft rich “pictures” of the future related to sustainability issues and sustainability problem-solving frameworks. The term “pictures” is use here similar to “stories” or “images”.
- Normative competence is the ability to collectively map, specify, apply, reconcile, and negotiate sustainability values, principles, goals, and targets.
- Strategic competence is the ability to collectively design and implement interventions, transitions, and transformative governance strategies toward sustainability.
- Interpersonal competence is the ability to motivate, enable, and facilitate collaborative and participatory sustainability research and problem solving.

They emphasize the idea that these competencies should be built based on the competencies developed by the academic education. In this way, basic capacities in critical thinking, communication, pluralistic thinking, research, data management, and so forth ought to be conveyed in every quality academic program—and thus serve as the foundation of academic sustainability education. (Wick et al, 2010:9)

The interdependence between the key competencies and the basic competencies is illustrated below:
Figure 2. A layered set of competencies in academic sustainability education, linking basic competencies and key competencies in sustainability, as well as recognizing interpersonal competence as cross-cutting key competence in sustainability

Source: Wick et al. (2011, p. 12) [12]

These competencies allow us to form an opinion about how experts in education understood the needs of the business environment. Their existence, even in a variety of forms, was followed naturally by their application. Competencies represent nowadays the soul of the academic curricula. Therefore, in the third part of our study we analyzed how the universities adopted a curricula based on competencies.

4 A Short History of the Modern Curricula

Starting with period '60-'70 life started to became easier and easier to live, at least for the countries from Euro-Atlantic zone. Peoples’ desires and expectations increased dramatically in years ’80 when the standard of living started to increase: housewife wouldn’t accept living without a color TV and perfumes and middle class people wouldn't conceive life without a car or electricity. Computer, internet and TV have become a must of our existence and in this way we are assisting to the formation of the global village.

“At the beginning, the world of years ’70–’80 seemed friendly: a community whose scientific, economic and civilization’s borders tend to disappear and linguistic, cultural and religious’ borders tend to harmonize (Dobridor 2008:36) [4]. Later after this period, they have noticed that this idyllic world is not what it seemed to be, threatening to replace the individual freedom with the “liberty” imposed by the new world, so well described in Aldous Huxley’s book: The New World where most part of the population is gathered under the World State, which is a stable society where goods and resources are plenty enough, the population is controlled and divided in castes; population is inoculated from birth with the idea of constant consumption instead of fixing the old goods; the need for religion is eliminated by the drug soma, specially created by the World State to offer pleasant journeys to the consumer; sex is viewed as a social activity rather than an expression of love or a mean for reproduction, romantic relationships are considered obsolete.

In order to survive and to develop yourself in this new world, human being has to learn the standards of the society and its values. Therefore, a new curriculum has to be created for this new modern period, a curriculum that can serve individuals to adapt themselves to the needs of the society.

Started with years ’80 the modern curricula entered into a crisis period. The new curriculum has undergone a period of great faith by gathering objectivity and efficiency in satisfying one single beneficiary: the
manufactory companies. The modern curriculum has experienced a three stage development: pre modern period, modern period, and post modern period.

Pre modern period existed started with the year 1918 and ended in 1945. The beginning of this period was marked by the appearance of the Franklin Bobbitt’s book The Curriculum that develops a new theory of the curriculum based on the principles of Winslow Taylor’s scientific management. The scope of Taylor’s principles was to increase the efficiency of United States’s economy. Because of their success, they were applied in the educational area in Bobbitt’s second book published in 1924 How to Make a Curriculum. The institution considered to be the most important in that period was the manufacturing company. In order to have a growing economy, people had to be trained to become efficient employees and therefore to be well prepared for their jobs. As a result, the education process was designed and organized on efficiency’s principle. “The key principal for Taylor was the task idea, the notion that each worker should be given a narrowly defined production assignment that he was to perform at a specific rate using certain predefined procedures.” (Franklin Bobbitt Contribution). Moreover, the graduate was called “product of education”, based on the similarity with the production process, as we can observe in the paragraph “A fourth principle of general scientific management is: work up the raw material into that finished product for which it is best adapted” (Bobbitt, 1912:260) [2].

After the second war world the economic recovery, the scientific revolution and new technological innovations make the economy grow even more. Also, the world of education has been changing rapidly and drastically since the end of the Second World War, due to a combination of new familiar revolutionary forces that have shaken the entire world (Combs, 1970:17) [3]. Along with education, curriculum develops and new taxonomies have appeared. Therefore, in this new period called the modern period, curriculum develops rather subtly than effectively, keeping the management through objectives as main characteristic. We are still able to find the pragmatic approach of the pre modern curriculum in this period, even if some concepts are used slightly different than before. It is the case of the description of the objectives which is done in terms of human efficiency and not in terms of economic efficiency. A more refined treatment of the training and education of students is focused on the introduction and implementation of interactive and participative approaches. These methods seemed to exploit more in deep the psychological mechanisms of learning and also seemed more human, but, unfortunately, the were not (Dobridor, 2008:37) [4]. Modern curriculum was not extended to all dimensions of human personality and no modern curriculum designer would admit that, according to Dobridor, the madness that the scope of the education is human accomplishment. Indeed, “the purpose of education was to prepare youth for the specific work and citizenship roles, which they would hold when they reached adulthood, and in so doing render society more orderly and stable. The test for the schools and its program, as these thinkers saw it, was its utility in fulfilling this social purpose” (Franklin Bobbitt Contribution). As a consequence, the role of the modern university is to prepare experts, professionals with high competencies, and capable of standardized performances based on certain efficiency criteria (Mutiu et al., 2010:447) [10]. Therefore universities give priority to instruction processes, and celebrate as supreme values: “Intelect” “Truth” and “Practical utility” and leave on the second level Moral Education and Esthetics (Dobridor, 2008:37) [4]. Even though the curriculum has been improved somewhat in modern times from the pre modern period, though its stage is far from providing a complete formation of the human personality. Philosophers like Herbert Marcuse had noticed this in his study The one dimensional man – Studies in the Ideology of Advanced Industrial Society published in 1964. According to Marcuse, the private space of an individual, called by him the “inner freedom”, “has been invaded and whittled down by technological reality; mass production and mass distribution claim the entire individual…the result is an immediate identification of the individual with his society, and through it, with the society as a whole“ (Marcuse, 1964:11) [9]. The high industrial society shut down the ”inner dimension” of the mind. Doing so, it contributes to form just one dimensional man: that man with a great professional life, completely connected with the material world and absolutely isolated from the non-material one.

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Outbreaks of post modern thought in philosophy and literature occurred firstly around the 60s but had an effect on the curriculum only in 80s, when theorists curricular rebelled against the concepts of "engineering" "curriculum," handling " unilateralism" human training process by dehumanizing and based on efficiency curricula. The initiators of the post modern curriculum that started to appear in the 80s, tried to design a multidisciplinary, holistic, integrated curriculum that would have allowed to the formation of the modern human being as it should have been formed: as a creative personality, capable to adapt to the ever changing environment. This approach that tries to integrate all the necessities and values into the man personality is very similar with the ancient traditions of training sessions. David Solomon, one of the representatives of the post modern curriculum says that any curriculum has to be established from a broad anthropologic perspective and not from a narrow one, as is the modern curriculum, divided among scopes and abilities defined in a very pragmatic and technical way (Mutiu et al., 2010:448) [10].

The ideas of modern and post modern periods of curriculum reappear in the actual period of curriculum, called ultramodern or anthropological period. In this period, the old and fundamentals ideas of curriculum are brought on the table in their trying of re-humanizing the education.

Dobridor describes very briefly the new society we are living now: a computerized society transformed into a global village, a society that tends to replace reality with hyper reality, a society that can not survive except through education and creativity ... therefore a world so dangerous that only a man completely formed can survive (Dobridor, 2008:39) [4]. The content of education is criticized because it is irrelevant to individual needs, because it holds back scientific progress and social development, or because it is divorced from contemporary problems (Faure et al, 1972:61) [6]. This is the reason in Faure suggested in 1972 a “two radical measures treatment” to be taken for surpassing the actual crisis of education that exists combined with a new philosophy of education (Mutiu et al, 2010:448) [10]. Educational structures must be remodeled, to extend widely the field of choice and enable people to follow lifelong education patterns. Subjects matter must be individualized; pupils and students must be aware of their status, their rights and their own wishes; authoritarian forms of teaching must give way to relationships marked by independence, mutual responsibility and dialogue; pedagogical training must be geared to Snoozing and respecting the multiple aspects of human personality, guidance must replace selection; those making use of educational institutions must participate in their management and policy-making; the bureaucratic aspects of educational activity must be broken down and its administration decentralized.(Faure et al, 1972:80) [6]. This idea is supported also by Combs who observed that the industrialized nations have passed through three educational phases from 1945 to 1970 and now find themselves in a perplexing fourth phase: (1) the reconstruction Phase; (2) the Manpower Shortage Phase; (3) the Rampant Expansion Phase; and (4) the Innovation Phase (Combs, 1970:21) [3]. Regarding the developing countries, their educational needs are even larger and need to be reshaped more urgently in order to catch up the gap that exists between them and the developed countries. Being part of the “global village”, developing countries has to put more efforts to diminish this gap.

5 Conclusions
In this study we focused our attention on observing the European approach on long life learning and the key competencies people should have in order to be able to act sustainable in the business world. Then we took into account the efforts done so far by universities in order to improve the curricula and its effect on the business world’s expectations.

Our conclusions can be drawn on two main levels: the role universities play and the development of creativity and innovation through competencies.

In the second part of this study the characteristics of a key competence were presented, as they were understood by the European Council and Parliament. Beside the characteristics of active citizenship and employability, a
key competence must enable people to pursue their personal objectives, driven by their interests and aspirations. These can be found in the definition of a key competence, that specify human being must have knowledge, skills and attitude they need for personal fulfillment. The European framework doesn’t explain how these concepts can be reached by human beings, this being the prerogative of the universities. It is debatable if the modern curricula prepare man for life, since the education is based on routine and not on innovation. As we presented so far in this research, competencies, as they are developed in the presented materials, don’t help human beings to discover their inner resources, interests and aspirations. Basic abilities like creativity and innovations are a must for reaching personal fulfillment. Investigated literature is convergent in regard with the critical role that defining a key competencies play in designing the curriculum and the academic programs.

Competencies, as they are developed, prepare man for a standardized world. But businesses are no longer seen as a repetitive work, a sum of knowledge that someone has to acquire. Rather, they force human beings to react to diversity and to unknown situations. As we have seen so far, in the context of globalization, new businesses appear in new domains, especially in the service sectors. Novelty of the businesses requires more highly qualified personnel. However, employers also say they need human capacities for independent problem-solving, self-direction, collaboration in self-managing teams, ethical judgment, and the capacity for negotiation and empathetic interaction – qualities that sit uneasily with submissiveness (Hampson et al, 2010:2) [7].

Besides these, we observed that personally delivered services are more valuable than impersonally delivered services and there is an increased for the former more than for the latter. One of the future scenarios for the service sector is the development of an ‘hourglass’, or ‘barbell’ shaped distribution of skills. From this perspective, a ‘relatively small minority’ of knowledge workers will have ‘thinking skills’ but many more will rely on social competencies now defined as ‘low level’ (Autor, 2007; Thompson, 2007: 89 cited by Hampson et al, 2010:2 [7]).

We mentioned several times in this study the importance of creativity and innovation. At the beginning we discussed about the importance of competitiveness in the business world and how can it be stimulated through creativity and innovation. The analysis of the competencies developed in the European framework reveals that creativity and innovation are not emphasize as they should be. In the document Implementation of “Education and Training 2010” Work Programme, “Key competencies” 2004, the words “creativity” and ‘innovation” are used three times. Firstly, they are used in relation with the digital competence, “in understanding the potential of IST to support creativity and innovation for personal fulfillment, social inclusion and employability” (EU:2011, 14). Secondly, they are mentioned in relation with “the ability to use IST to support critical thinking, creativity and innovation in different contexts at home, leisure and work” (EU:2011, 14). The last time the word innovation is mentioned in this document is in relation with one of the attitudes of entrepreneurship: positive attitude to change and innovation. Neither the literature investigated mentioned anything significantly about creativity and innovation at all.

If competencies are not build based on creativity and innovations it become obviously that curricula are prepared similarly. As a consequence, curricula don’t offer the premises to contribute to the economic development. With such a conceptual framework for education as the European one, competitiveness cannot be reached. Therefore, a series of imbalances appear between the business environment and the educational one. Change is not easy and standing still causes disastrous long-term effects. The effects can be observed on many levels starting with the businesses and having at the other end mental fragility of human beings that cannot integrate themselves in the system.

References


The Role of the Professional Judgment and Decision-Making Process in the Relation External Audit – Corporate Governance

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1 The Implications of External Audit on Corporate Governance

The financial scandals of the beginning of the century, widely debated and analyzed by financial specialists and analysts, represented a turning point in which the representatives of the professional bodies and the researchers in the field have highlighted the need to identify solutions for improving the quality of the services provided by auditors. It all began with the collapse of the energy giant Enron, which practically became a contemporary symbol of corporate fraud and continued with a considerable number of companies that also failed dramatically. WorldCom, Tyco, Parmalat, Comroad are just a few examples that have shaped the global sphere of corporate failure. Along with the disastrous effects of these financial failures, the auditors’ image was severely damaged. The impossibility to detect the management entities’ lack of integrity or the repeated legislation’s failure have been attributed to the superficial way in which auditors worked. The vehement accusations brought to this profession have led to new responsibilities and as a result, the financial audit role increased due to the economic and social environment’s complex development. The financial audit is only a small part of the complex mechanism that has the responsibility of monitoring and verifying the conduct of the financial-economic activity of an entity. In recent years there have appeared a number of studies which deal with the importance of corporate governance in the company's success.

Generally speaking, by corporate governance we can understand the totality of implemented mechanisms and systems within a company in order to control and enhance its performance and value; more specifically, the way in which the decision-making systems and the internal and external control systems are organized, applied both strategically and operationally within an entity. Thus, together with the entity's management, the internal control system or the internal audit one, the financial audit plays an important role in achieving corporate governance. The purpose of an audit is to improve the confidence level of the financial statements’ target users; the auditor expresses an opinion regarding the financial statements which are prepared in all significant aspects in accordance with an applicable financial reporting framework. (ISA 200:3) Thus, the audit objectives fall under the corporate governance objectives and therefore it contributes to the growth of the entity value and to the maximization of the shareholders’ and the interested investors’ prospects.

In practice, the corporate governance focuses on the ethical principles and the social responsibility of the stakeholders in the decision-making and the control process, aiming at enhancing the transparency level in accordance with the existing technical and ethical regulations. The quality of corporate governance mechanism is provided thus by the efficiency of the decision and control systems entering the structure. Thus, the quality of the decisions taken by the entity's management, of the monitoring provided by the internal control system or the internal audit one, as well as the external audit mission effectiveness ensures the success of the corporate governance implementation at each entity level. From the three basic elements of the corporate governance
mechanism, we intend to pay special attention to the role of the external audit. To this end, in this chapter we want to approach in detail the aspects related to the quality of the decision-making process in external audit as well as to the principles and the factors that define a proper conduct of auditors in carrying out this work.

2 The Judgment and the Decision-Making in the External Audit Missions

2.1 The professional judgement in the performance of the professional activities

The judgment defines a profession. In fact, the ability to exercise an appropriate judgment or a superior one is essential to the success of any profession (Roy, 2011) [65]. The professional judgment is often mistaken for the decision. The literature notes a difference between judgment and decision, which is often difficult to reveal. Thus, Bonner (1999) [9] explains, "the term judgment refers to the formation of an idea, an opinion or an estimate on subject, success, status or other phenomenon". The judgment takes the form of future predictions or assessments of the current state of affairs.

The term decision envisages a mental realization of a theme and the choice of an action approach. According to Santa Perez (2001:9) [60] the judgment and the decisions are similar; the stages of the two processes are nearly identical from a cognitive point of view. The relationship between professional judgment and decision is that of part of the whole. In fact, the professional judgment is part of the decision making process. Graphically, the relationship between judgment and decision can be summarized as in Figure 1.

A fair judgment comes from experience, and experience comes from bad judgment (quoted by Jim Horning after the famous character from the novel Mulla Nasrudin Sufi Sage, from the sixteenth-century, with an unknown author). This statement emphasizes that the reasoning or the judgment can be learned or developed only by "the awareness of failures", having as background a rich experience. Oscar Wilde, a famous poet, novelist and Irish critic said that "experience is the name that each of us gives to our faults." If in the course of various professions the professional errors wouldn’t occur, they could not distinguish the right decisions from the wrong decisions and they wouldn’t be able to avoid those circumstances that previously led to wrong decisions. Learning from mistakes is an easy way to achieve performance. This requires being aware of the mistake, understanding the circumstances that led to them and identifying ways in order to avoid them in future actions.

A noteworthy aspect is reflected in the statement of the English logician and philosopher Bertrand Russell for whom "to believe that you actually know something you do not know is a fatal error to which we are all prone". It is important for professionals to be aware of the limitations that may interfere with their activities. When knowledge, experience or personal skills are not sufficient to carry out the mission it is advisable to consult other specialists. It is preferable to seek specialized support in order to take decisions than to opt for an individual judgment which will bring then errors difficult to correct. The professional judgment allows the knowledge of what is not known and the decision making regardless of the circumstances limits. According to Bonner (1999) [9] there are three basic elements from whose perspective a judgment can be evaluated and these are: the professional who applies the professional judgment, the task or activity requiring the exercise of judgment and the environment or context that influences the applied judgment. In order to know and analyze the three elements, all should start with proper documentation (see Figure 2).
Any deficiencies that may arise at the judgment level regarding the responsible professional refer to the lack of knowledge, experience and skills held by him. The work itself can also influence the decisional outcomes and the contextual factors require a particularization of the professional judgment on the specific activity. The professional judgment may be exercised by persons who have knowledge, experience and objective attitude to make decisions based on the facts and circumstances relevant to the targeted activity. The professionals’ judgment may differ depending on the level of knowledge, experience or skills, but these differences cannot suggest whether a judgment is correct or not. In our opinion, it is essential that there are several alternatives before making a final decision. They must be rigorously documented, otherwise it will become more difficult to justify the chosen decision or judgment.

The professional judgment can be permanently improved and developed through the participation in specialized trainings, by broadening knowledge based on experience and a thorough documentation. The justification of the decisions by an appropriate documentation has the role to increase the quality and the public confidence in the exercised judgment. Accurate and timely decision-making involves the exercise of critical thinking from professionals. Applying the judgment is a reflective and autocorrect process which takes into account knowledge, circumstances, evidence and records, methods and a variety of criteria and appropriate standards.
Researcher Xiling Dai (2010) [18] states that the professional judgment is the process by which the professional accountants take into consideration a complex of elements such as the current and predicted financial environment, the features of the client entity management, the accounting methods, the logical analysis ability and the professional experience. The exercise of the professional judgment involves the judgment and the selection of principles, methods and the scheduling of the daily accounting activities for the preparation of the financial reports. Many professionals argue the need to unify the way of exercising the professional judgment. The diversity of solutions demonstrates that, in the meaning of the term, it can hide a variety of cover-ups of less legal issues with which they operate.

The professional judgment is applied especially in the countries whose inspirational accounting system is Anglo-Saxon, based on custom, less regulated, where the professional’s judgment is major professional judgment. An important step towards the unification of the way in which accounting or auditing is practiced was represented by the involvement of the 4 major international audit companies, which are the companies from the group Big 4. The application of International Standards on Auditing and International Financial Reporting Standards (IFRS) is considered a method of unification and standardization of the auditors’ and accountants’ activity (Deloitte 2008, KPMG 2008, PWC 2009, Young 2009). The fact that these companies
operate internationally has enabled studies from which it resulted that the professional judgment is influenced by a number of factors that increase the complexity of the process (Chand and White, 2006 [16]; Patel et al., 2002 [59]).

The quality of services in accounting and auditing is greatly influenced by the professional judgment. The "climax" of the activity occurs when professionals try to apply the general professional standards on an infinite variety of complex situations that arise in the economic environment (Roy, 2011 [65]). Looking at things from the opposite perspective, we can state that without the flexibility offered by the application of the professional judgment, the complex system of the financial and accounting procedures, of the professional standards or of the rules would be unworkable. The exercise of the professional judgment can lead to good decisions or, conversely, to decisions that produce negative effects. The difference between a correct and an incorrect judgment is often difficult to see, because this border can be quite ambiguous.

Mamede et al. (2008) [50] believes that the erroneous judgment has as background the following factors:

- not integrating all data in the decision-making process;
- paying attention to the details and omitting general, important elements;
- the exclusion of the opposition (conflict) between different solutions (a decision may be contrary to another);
- the exercise of a responsible behavior in the most important stages of the process, but wrong decisions made in matters of less importance;
- making decisions based on current evidence and omitting prior, past information;
- the omission of less obvious and unimportant elements, but combined with others can distort the meaning of the made decisions.

A correct professional judgment, opposed to that described above may be applied if the following conditions are met (Mamede et al., 2008 [50]):

- the distinction of the key features of the problem in a more complex and comprehensive way;
- the development of the activity beyond the limits imposed by regulations and rules;
- some less radical decision-making, which can then be subjected to adjustments;
- the willingness not to take any decisions in the situations in which there is a lack of justification.

Ken Trotman (2006) [77], in a report regarding the professional judgment held at the University of New South Wales, discussed issues related to the fact that in most occupations, the difficulty of exercising the professional judgment is well known. In this respect, Trotman argues and discusses the way in which this judgment is applied in the medical, legal, financial, accounting and sales (marketing) field. Judgment errors can occur in any of these areas without a class professionals being exempt from responsibility or being required a greater responsibility than to other professionals. It is also noted that although professionals (i.e. auditors) perform missions at the highest standards, it is possible for them to fail to identify all fraud or errors, particularly since the management entity endeavors to cover these actions.

The efficiency of the audit engagement is given by a theoretical and practical approach to the entire process. A professional has the responsibility to maintain too high a level of his training and keep up with new scientific research and appearances in the field. The professional judgment will be subject to a continuous process of improvement that can be ensured through information and continuous training. The experience refers not only to the length of the activity in the field, but also to how the professional faced previous situations, bringing his contribution to the development of his skills, competence and knowledge. The expertise can be defined in terms...
of knowledge, experience, decision-making process and quality of professional judgments. The experience and the training create knowledge and this one, together with the skills support the quality of the services offered. In our opinion, without solid professional knowledge, the professional judgment is nonsense. In this case, its very etymology is meaningless. The main condition for its exercise is the professionalism. In many cases, however, the phrase "professional judgment" covers situations difficult to explain, coming to give a general answer when arguments and sometimes logics lack.

2.2 Necessary quality for professionals in the decision making process

Whether we talk about experts or beginners, the professionals show attitudes and make different judgments. Some practitioners are receptive to changes or new and free of restrictions, while others hardly accept the innovations that require a deviation from the template shaped during their career. Regarding their work, some professionals try to address the problems with diligence, focusing on systematic methods to solve them, and others tend to manifest a superficial attitude, unorganized or easily confused. Among experts there are two attitudes regarding the identification of solutions. The first option aims at analyzing the complexity of the problem and identifying multiple solutions, while the second approach is dualistic, such as "good or bad", "right or wrong", "true or false" (Facione, Facione and Giancarlo, 1997 [21]).

Libby and Thorne (2000) [47] made a study on the main qualities (virtues) that professionals, mainly those in accounting, must have in order to develop professional activities and, implicitly, to exercise an appropriate professional judgment. The two researchers started from the study of Pincoffs (1986) [62] in which the skills required to perform such a process were divided into two categories: instrumental and non-instrumental. The non-instrumental virtues, as named by Pincoffs, mainly the moral ones, represent the predisposition of the auditor to formulate a judgment inherently professional in accordance with a professional ethical standard. The instrumental virtues represent the essential traits and implicitly the behavioral characteristics. Table no. 1 shows the structure of these qualities presented in the research of Pincoffs (1986) [62] and completed by Libby and Thorne (2000) [47].
Table 1. Auditors’ qualities for exercising professional judgment

<table>
<thead>
<tr>
<th>Instrumental qualities</th>
<th>Non-instrumental qualities (moral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualities of an auditor that ensure that professional judgment is carried out.</td>
<td>Qualities of an auditor that are necessary to the formulation of “sound” professional judgment that complies with generally accepted practices.</td>
</tr>
<tr>
<td>Persistent (P)</td>
<td>Sincere (P)</td>
</tr>
<tr>
<td>Courageous (P)</td>
<td>Truthful (P)</td>
</tr>
<tr>
<td>Alert (P)</td>
<td>Reliable (P)</td>
</tr>
<tr>
<td>Careful (P)</td>
<td>Dependable (P)</td>
</tr>
<tr>
<td>Resourceful (P)</td>
<td>Trustworthy (P)</td>
</tr>
<tr>
<td>Determined (P)</td>
<td>Integrity</td>
</tr>
<tr>
<td>Diligent</td>
<td>Independent</td>
</tr>
<tr>
<td>Disciplined in action</td>
<td>Objective</td>
</tr>
<tr>
<td>Steadfast</td>
<td>Principled</td>
</tr>
<tr>
<td>Thorough in action</td>
<td>Healthy skepticism</td>
</tr>
<tr>
<td>Will not bow to pressure-stands on convictions</td>
<td>(P) = virtue also included in Pincoffs’ list (1986)</td>
</tr>
</tbody>
</table>

Source: Libby and Thorne (2000) [47]

Ritchard (2002) [64] draws attention on a typology of thinking that professionals may have and which determines the concentration on certain aspects in the decision-making process leading to different results. The researcher says that there is a creative thinking manifested by the professional’s curiosity and the openness to new, a detail-oriented reflective thinking or a critical thinking manifested through a strategic behavior and a skeptical attitude.

"The intellectual performance is not just an exercise of skills. It is more a provision of our actions in the field in which we operate ... skills transposed in practice. The provisions relate not only to what we can achieve, but also to what we effectively accomplish or what we tend to do, referring to the gap that often exists between skills and actions" (Richard, 2002) [64].

In any case, the professional is obliged to assume a certain level of uncertainty or risk appearing in the development of the activities he undertakes. Even if he has sufficient knowledge of his client, the substantiation of judgment by keeping a certain dose of skepticism is good, because certain situations may occur, which initially were hidden or displayed in a different manner than the real one. Through skeptical thinking it is recognized the possibility of false information or relevant information, unidentified, and other possible defects of the judgment, taking into account that any professional is prone to errors. Specialization improves performance by generating hypotheses and applying further investigation, which will lead to achieving superior results in terms of quality (Wright and Wright, 1997) [82].

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Another study in which there is a list of the most important attributes that a professional must possess in order to successfully apply the professional judgment is the study realized by Abdolmohammadi and Shanti (1992) [1]. Unlike Libby and Thorne (2000) [47] or Picoffs (1986) [62], Abdolmohammadi and Shanti [1] include in a single category both the professional’s features and the ethical principles to which he must obey (Table 2).

**Table 2. Others qualities of the auditors**

| 1. KNOWLEDGE OF WHAT IS RELEVANT |  |
| 2. RESPONSABILITY |  |
| 3. CURRENT KNOWLEDGE |  |
| 4. ADAPTABILITY |  |
| 5. RECEPTIVE/INTUITIVE |  |
| 6. EXPERIENCE |  |
| 7. DETERMINATION |  |
| 8. SELF-RELIANCE |  |
| 9. STRESS RESISTANCE |  |
| 10. COMMUNICATION ABILITIES |  |
| 11. CREATIVITY |  |
| 12. CURIOSITY |  |
| 13. PROBLEM SIMPLIFICATION |  |
| 14. EXCEPTIONS RECOGNITION |  |
| 15. PROBLEMS SELECTION |  |

Source: Abdolmohammadi and Shateau (1992) [1]

Through an overview of the information presented in this chapter, we can say that besides theoretical knowledge related to professional training, it is necessary that the practitioner should possess sufficient experience, communication skills and teamwork, the ability to distinguish the important and relevant elements for his task and the responsibility regarding the incumbent tasks. Manifesting a skeptical and objective attitude contribute to exercise control over the decisions made and the results achieved. Joining qualities and professional skills with psychological skills are designed to provide accurate, clear and persuasive solutions to the services’ beneficiaries.

**2.3 The factors which influence the professional judgment and the decisional process**

The research in auditing have debated aspects related to the evaluation of the auditors’ judgments quality, the description of decision-making ways, establishing the factors which contribute to the professional judgment, developing and testing certain theories based on cognitive processes, identifying methods for improving the way in which auditors exercise their professional judgment. (Libby et al., 1990 [44]; Trotman, 2006 [77]; Libby
and Luft, 1993 [46] etc). In the opinion of Trotman et al. (2011) [78], the professional judgment is exercised by:

- auditors – to the extent to which the whole audit process is influenced by the auditors’ judgment, as it appears in the contents of the International Standards of Audit;
- accountants or people who draw up financial statements – apply the professional judgment about the information which must be processed, to the necessary accounting treatments and the forecasts they make;
- users of accounting information (investors, analysts, bankers etc.) – make judgments about future incomes and cash flows, the decisions of either to invest or not in that business, the decision to grant a loan or not;
- managers – exercise the professional judgment in planning activities, assessing performance or allocating resources.

Five decades ago, the socio-economic environment was simpler than now and, implicitly, the accounting professionals were confronted with operations and transactions without too many implications which didn’t need a complex judgment when managing or checking them. In time, however, the diversification of the supply as an answer to the public’s more varied demands have led to more difficult situations which need continuous preparation and a good reasoning capacity. This aspect is reflected like in a mirror in specialized literature. More exactly, the studies from the beginning of the analyzed period (1960) demonstrated that exercising a good “judgment” means to know and understand the accounting information, as well as the treatments applied in processing it (Bruns 1965, 1966 [11, 12]; Jensen 1966 [32]). In the next 10 years, gradually, new elements appear and they are considered as important in grounding the judgments and making decisions. Among these, there are the characteristics of the environment entity client, the consensus between auditors referring to the decisions of the audit mission (Ashton 1974 [4], Joyce, 1976 [34]), accuracy (Weber, 1978 [80]), stability in time concerning the way of exercising the professional judgment, as the importance of the auditors’ individual traits in grounding their own judgments (Trotman, 2006 [77]).

Libby and Luft (1993) [46] made an analysis of the papers on the topic of professional judgment. Their study presents new trends in their research, modifications which are due to the increase of economic and social complexity. The research made by Libby and Luft (1993) [46] proposes a model for revising and assessing the performance, considering that the experience and the capacity to contribute to knowledge development affects directly the performance level. Other studies which followed the same research direction are those made by Wright, 1982 [83]; Kaplan and Reckers, 1985 [37] or Luckett and Hirst, 1989 [49]. If in the period 1960-1980 the analyzed factors referred mainly to the accounting information and the way of processing it, after 1980 the research in the field of professional judgment had as central point „human information processing”- (Trotman et al., 2011 [78]). The studies made after 1980 focused on the development of experimental research concerning the role of knowledge, motivation and environment upon the auditors’ performances. The ideas emphasized in these papers refer to the role of knowledge in increasing the auditors’ performance, as well as the necessity of drawing up specific tasks in mission development. In the same period 1980 appeared the studies which were based on the analysis of the professional judgment in determining the significance threshold (Messier, 1983 [52]), the auditors’ behavior in making forecasts (Danos and Imhoff, 1983 [19]), as well as the role of the internal audit system in grounding the professional judgment (Abdel-Kalik et al., 1983 [2]; Schneider, 1984 [69]).

Specialized literature brings forward a possible interference between cognitive–behavioral psychological factors and the way of exercising judgment in making decisions. Memory, motivation, disposition, as well as other similar factors are part of the category of elements which are able to make the difference in fulfilling the
decisional process. (Solomon and Shields, 1995 [75]; Nelson et al., 2005 etc. [56]) Next we are going to refer to each element which contributes to grounding the professional judgment in audit, starting from the synthesis presented in Figure 3.

**Figure 3. Development in Audit Judgments**

The reason for which we used an approach based on the nature of the elements which contribute to the development of a professional judgment is the desire to emphasize as obviously as possible the diversity of this process and the multiple perspectives from which it can be analyzed.

In our opinion, all these elements are complementary because the formation of a complex and efficient judgment requires an interdisciplinary correlation to eliminate as much as possible the risk of launching opinions or making wrong decisions. The successive apparition of these elements demonstrates the inexhaustible sphere of the judgment’s influences and the necessity of analyzing it from several perspectives to be better understood. If by the mid 80’s through the studies already made the issue of judgment had been solved probably the research would have continued in previously traced directions, but it is quite unlikely to have absolute knowledge about the process, which determined the apparition of other studies and other research directions in continuous diversification so far.

3 The Accounting Information: The Beginning of Specialized Studies

Any process or activity starts by knowing the data which will help perform the action in question. In our case, issuing certain judgments is a decision-making action for which we need information resources and other data associated to them. The accounting information is the main source which is at the basis of issuing decisions and formulating opinions. In fact, the accounting professional will issue a judgment about the financial statements after applying certain accounting policies and procedures on the financial information. The importance of this element for the decisional process was mentioned in studies such as those made by Bruns, 1965 and 1996 [11, 12]; Jensen, 1964 [32]; Asthon, 1965 [5]. These researchers proved that the way of processing the financial information by applying accounting treatments is a matter of professional judgment. Choosing the accounting
methods and policies for obtaining trustworthy financial reporting is the decision for which the professional will exercise the professional judgment.

An important part of the specialized literature is represented by the so-called model Belief-Adjustment Model, acronym BAM). The starting point is the premise according to which the order in which information (positive/negative) is received can affect the auditors’ decisions. Thus, it is considered that in the case of negative information which put the entity in disadvantage, if received by the end of the audit mission, will increase the probability that the auditor might not trust the evidence which appeared at the beginning of their activity. The Belief-Adjustment Model promotes the idea according to which the order of receiving first the negative information and then the positive ones will lead to more trust granted to audit evidence than in the situation in which the auditor first finds out the positive information about the entity and then the negative one.

Several studies were made on the basis of this model. Ashton and Ashton (1988) [6] are the first who used BAM in accounting. Through their studies, the two researchers demonstrated that there is a “recency effect”, which means that auditors grant a higher significance to the audit evidence obtained at a moment which is as close as possible to the moment when the opinion is issued in the audit report. Contrary to this opinion, But and Campbell (1989) [89] consider that the effect of the first information the professionals have access to „primary effect” is much more relevant for the opinion issued by the auditor. More precisely, these ones have the tendency to formulate an opinion about the entity’s situation based on the evidence and information obtained in the first stage of the mission. The apparition of unexpected fluctuations during the audit mission will have as an effect the generation of new hypotheses and the collection of new evidence in order to determine optimal solutions (Libby, 1983 [42]; Butt, 1988 [14]). An important step in formulating a decision is the revision of the information collected during the mission. Koonce (1993) [41] developed a revision sequential model.

The model has five stages:

- the mental representation of the process– we understand by this the formulation and understanding of the problem situation, making reference to the auditors’ expectations about the financial situations which are subject to auditing;

- generating hypotheses– on the basis of known information and the forecast made in the initial phase hypotheses should be generated which are going to be checked for confirmation or refutation.

- Collecting evidence–the auditors will collect the audit evidence for reducing uncertainty and for having the necessary basis in grounding decisions. In specialized literature there is a „motivated reasoning” which refers to the determination manifested by a professional in collecting supplementary evidence with the purpose of justifying as well as possible the obtained conclusions;

- Evaluating hypotheses– as information is obtained, the generated hypotheses can be analyzed and evaluated as valid or not. The negative evidence generate the tendency to re-evaluate the whole activity;

- Issuing the decision – includes exercising the reasoning about validating and accepting the hypotheses as well as confirming the representation of the trustworthy image of the activity in the financial statements.

This research have proved however insufficient for the period which followed which determined the development of new research directions. The closest element which could be associated with the accounting information and allowed the inclusion in the influence area of the professional judgment was the environment of the entity from where the information comes. As consequence, the researchers continued to study the particularities of the entity environment as a source for the information which is necessary for the decisional process.
4 The Entity Environment in the Decisional Process

Knowing the entity environment and its characteristics appeared in a research trend known under the name Brunswik Lens Model (BLM). This model was used on large scale for analyzing and examining the professional judgment applied by several specialties from auditing, psychology or even medicine. The BLM model specifies that human reasoning takes place in a context with uncertain situations based on a set of probabilistic information related to the field of interest for which the individual will exercise his own reasoning (Trotman, 2011) [78].

The influence of the audited entity environment will be felt in all the decisions made by the auditor during his mission, because they are based on the information coming from the entity and which are inevitably influenced to a certain extend by the subjectivity of the management or of those in charge of financial reporting. The audit program represents a mission planning based on the information provided by the entity’s management. The influence of these elements and the way in which the auditors perceive the trust given to the information provided by the entity’s management is very different. Joyce (1976) [34] analyzed the nature and the ampleness of the differences which can be noticed in setting up the audit mission, identifying significant inconsistencies between the judgments issued by professionals in relation to the volume and the credibility of the information.

A study in which the BLM model was used was made by Ashton (1974) [4] and it contains the examination of the internal control system of the audited entities and the trust auditors can grant to it. As a result of the study it was noticed that the evaluation of internal control and the establishment of its effectiveness is achieved in different ways by auditors and there are a lot of discrepancies in their opinions when evaluating the utility of internal control. A strong influence of the audited entity’s environment is found in the reasoning about the decisions connected to the significance threshold. It is true that this is about an important decision with implications for the whole audit process, but the existence of all these discrepancies and disputes which have in view the choice of the used reference point, of the percentage applied to it, as well as the qualitative aspect which conditions the level of the significance threshold have produced, starting with 1970, a “boom” of research on this topic. (Boatsman and Robertson, 1974 [8]; Moriarty and Barron, 1976 [54]; Ward, 1976 [79]; Hofstede and Hughes, 1977 [29]; Firth, 1979 [22] etc).

The audit evidence represents the information and documents with whose help we certify the correctness and exactness of the financial situations. The entity’s environment is certainly very important in grounding decisions, because it can indicate either a trustworthy source for the auditors, or a threatening and risky context for developing effective judgments. The researchers have tried to identify more effective methods for improving the decisional process, but the complexity of the practical situations could not be restrained between the boundaries of scientific theories and research.

5 “Human Information Processing” A Novelty in Researching Judgment and the Decisional Process

The Research made in the 1980’s had as objective „human information processing”. After analyzing the studies from this period we can notice that the syntagm refers to the characteristics and the professional abilities of the person who exercises the professional judgment. Among the analysis variables there are: the auditors’ experience and performance (Wright, 1982 [83]; Kaplan and Reckers, 1985 [37]; Luckett and Hirst, 1989 [49]) the knowledge which is necessary for grounding the professional judgment (Einhorn and Hogarth, 1981 [20]; Libby, 1983 [42]; Frederick and Libby, 1986 [23]) etc.

The vectors of an effective professional judgment are represented by a spectrum of factors such as the auditor’s knowledge and professional preparation, the abilities and the experience developed in time. There is a strong connection between the auditor’s experience and the audit mission, more precisely the specificity of the task. The information used by the auditors and the knowledge applied in performing a mission could be considered
as coming from long-term memory information. This is in continuous development, being enriched by the new things accumulated with experience. The performance in exercising the professional judgment cannot be achieved without the existence of rich knowledge in the professional activity field. In specialized research (Einhorn and Hogarth, 1981 [20]; Libby, 1983 [42]) a function of audit performance was drawn up. Performance can be expressed as a function of abilities, knowledge, external environment (context) and motivation.

\[ \text{Performance} = f(\text{Ability}, \text{Knowledge}, \text{Environment}, \text{Motivation}) \]

The ability of exercising the professional judgment and choosing the optimal solution is determined by the auditor’s capacity to identify solutions for the problems he is confronted with. (Libby, 1993 [46]). A necessary request in this area is structuring and delimiting as clearly as possible the tasks of the audit mission. Also, if the possibility of accumulating knowledge is limited, the result performance will be compromised. The effect of the knowledge upon the results can be obtained by respecting three basic principles (Frederick and Libby, 1986 [23]):

- The hypotheses (objectives) which are going to be confirmed must be sketched very clearly at the beginning of the mission on the basis of knowing the specific and the general elements about the audited entity;
- Developing some experimental tasks through which we can observe the necessity of using some knowledge or, on the contrary, their inefficiency. To increase the performance of the judgment and optimize the solutions it is necessary to know the resources used during the audit process. Inadequate allocation of knowledge and resources may lead to cost increase and inefficient results.
- The effect of the knowledge can be increased by manipulating the external stimuli and the contextual factors, using previous experiences.

In the United States of America the auditors’ performance is assessed by judges through the infringements made by them. The procedure supposes a comparison between the results of several auditors who benefited of similar conditions in performing the tasks they had. Libby (1989) [43] proposed a model which shows an interdependence relation between the auditor’s abilities, knowledge, experience and performance. The model considers as relevant two inputs, more precisely the ability and the experience together which determine the development of knowledge. The output variable is represented by the performance obtained and it is obviously influenced by the inputs. The higher the auditor’s ability and experience, the more knowledge and the performance will increase considerably.

Simnett and Trotman (1989) [72] and Libby and Libby (1989) [43] made a special study to determine audit performance. They analyzed the professional judgment, dividing it into components and making a re-grouping to increase the quality of the final results. Libby and Frederick (1990) [44] noticed that, as auditors accumulate more experience, their knowledge about potential errors in financial statements are deeper as they can recognize more easily the information which can be affected by misrepresentations. At the same time, on the basis of experience, the professionals may know the frequency with which various errors appear and develop a capacity to identify more easily the misrepresentations at the level of the audited financial statements.

The specialization of auditors on a certain sector or a certain industrial branch may represent a factor which contributes to the increase of the audit quality Solomon et al. (1999) [74] made a study meant to emphasize the differences obtained by the auditors specialized on a certain activity sector and the auditors who performed missions in those industries where they had general knowledge. Hoffman et al. (2003) [28] made a study in which they demonstrated the fact that the auditors who are specialized on a certain sector feel a bigger constraint in granting more attention to collecting and processing the audit proves, while the auditors who are less experienced in a certain field will perform the mission without feeling any special constraint for the task.
they have. Also, the ability to detect errors at the level of financial statements increases when the audit team is specialized in the sector the client belongs to. (Kennedy and Pecheer, 1997 [38]; Owhoso et al., 2002 [58]). Becoming familiar with the particularities and the risks of a certain activity field offers more self-confidence to the auditors about their capacity to detect errors and solve problems (Messier et al., 2008 [53]). Specialized literature confirms the major importance of the professional traits for the expert who exercises the professional judgment. As in any profession, the difference between the results obtained by practitioners can be caused greatly by their level of preparation as well as by the capacity to operate with their qualities and knowledge.

6 Another Approach To Professional Judgment: The Implication of the Cognitive-Behavioral Elements

The complexity of the professional judgment is due to the fact that its analysis comprises a series of interdisciplinary elements. A delicate side of the process is represented by the psychological factors. In fact, psychology is a field in which the behavior and the necessary qualities for the decisional process occupy a rich space in specialized literature. In 1980, Weber [80] researched the role of the memory in the evaluation of the internal control system noticing that memory is an important source of information when formulating decisions. In the same area we mention the study made by Plumlee (1985) [61] in which it was found out that auditors are obliged, sometimes, to re-evaluate their own work in order to observe, with the help of memory, the influence of the information they knew and processed before the decisional moment. The results demonstrated that auditors have a tendency to keep a previously formulated opinion because the effect of the order in which the information is received is rather important for the auditors’ perception.

The heuristic factors in audit are apparently unimportant elements, but the research from literature demonstrate the contrary. But since 1974, specialists have observed a strong involvement of the auditors in grounding the professional judgment based on generally accepted elements which can be assumed without risks. Heuristics representativeness refers to the evaluations made by specialists about an element which belongs to a population, which means that the evaluation of this element will be made on the basis of the similarity principle with the population it belongs to.

The operations and the transactions with a major weight in the activity of the audited entity (considered as representative) are thought to have a higher probability of repetition than those events which are less representative for the entity. The reasoning based on the representativeness principle presents a certain degree of risk, because it ignores the general data and information which create the framework for the activity itself. (Kida, 1984 [39]; Bamber, 1983 [7]; Cohen and Kida, 1989 [17]). The cognitive limitations do not represent professionals’ flaws as long as teamwork work capacity can lead to exceptional results. There can often be situations which auditors can solve only by consulting other specialists or colleagues in the field. Abdel-Khalik (1983) [2] analyzed the auditors’ judgment, after their participation at discussions and consultations with a specialized team. The consultation and analysis of opinions which are different than the personal ones can offer the auditor the possibility to re-evaluate his own opinion and to choose a more efficient solution (Schultz and Reckers, 1981 [70]; Solomon, 1982 [73]).

Decision aids contribute to increasing the judgment performance, trying to eliminate the deficiencies found in the individual decisional process. Group decision-making or using consultancy services increase the error identification degree at the level of financial statements decrease the dependence on the control system of the entity and grants major credibility to the results obtained after applying the audit tests (Libby and Libby, 1989 [43]).

In the 90’s teamwork meant the participation of the auditors to different discussions, debating and analyzing the obtained proves, but at the beginning of the 20th century the studies were based on modern decision-making methods such as brainstorming. Carpenter (2007) [15] observes the activity of a group of auditors formed at
random and the activity of another group formed of people who interacted before. The two groups had to make
decisions using the brainstorming method and the differences did not concern necessarily the number or the
value of the frauds and errors which were discovered, but mostly the nature and the complexity of the analyzed
elements. A similar study was made by Lynch et al. (2009) [48]. The difference between the two research is the
fact that the involved groups interact through e-mail or face-to-face. The results of the study show that through
the electronic method one can discover more fraud and error elements than in the case of the traditional method
through discussions between the members of the two groups. Other studies which debated the same issue are:

7 The Relation Auditor - Client Entity - External User

Judgment is a process applied by the auditor to the financial-accounting information whose beneficiaries are the
users of the financial statements. Under the circumstances, it is necessary to investigate some elements
associated to the relation between the auditors and the entity, the entity and the beneficiaries or a relation
between the three parties auditor-entity client-users. Shockley (1981) [71] examined the influence of the
management pressures on the auditor’s independence. The conclusions of this study show that the auditors of
those entities where the management puts pressure feel a high risk of losing their independence in comparison
with the auditors of those entities where such pressures do not exist. Anyway, the Code of Ethics in the field
specifies that independence is a typical condition for auditors in their relations with the client entity.

Libby and Lipe (1992) [45] examined the effect of the monetary stimuli upon the cognitive process
performance, more precisely upon codifying, taking over and combining information. There are unfortunate
situations in which auditors, under the influence of financial stimuli, adopt an unprofessional judgment
allowing their clients to apply an aggressive reporting method which later may lead to the misrepresentation of
the accounting information presented in the financial statements. (Hackenbrack and Nelson, 1996 [26]).
Changes may appear also in the judgment about the probability of future losses. In this respect, because of
financial benefits they receive, auditors may treat with a certain superficiality the uncertainty about the
continuity of their clients’ activity, while the users of the financial information are threatened by making risky
decisions in those situations. (Nelson and Kinney, 1997 [55]).

Another factor which apparently does not represent an impediment in grounding the professional judgment is
the time pressure of the audit mission. If it is necessary to finalize the mission in a short period of time imposed
by the client entity management, the program and the planning of the mission will be adapted to these demands.
On the contrary, as the time allocated to auditing increases, the program will be more detailed, granting more
attention to all tasks. Under circumstances in which auditors are confronted with situations characterized by a
high level of risk, there is a tendency they will use the information provided by the internal audit department
taking into account the policies and the procedures used at the level of the internal control system (Maletta and
Kida, 1993 [51]).

Gibbins et al. (2001) [25] propose a negotiation model based on four factors: the characteristics of the
accounting elements, the auditor-client relation, the accounting results which are going to be audited and the
variety of influences coming from contextual factors. The possibility of the apparition of accounting
depreciations changes the conditions of the negotiations between the auditor and the client (Ng and Tan, 2003
[57]). Sanchez et al. (2007) [68] investigated the way in which negotiation strategies affect the proposed audit
adjustments, the client’s satisfaction degree as well as the client’s reluctance about the expected results. The
effectiveness of the intervention methods used by the auditor in order to increase the quality of the negotiations
is debated in several research lately such as: Trotman (2005) [76], Hatfield et al. (2008) [27], etc.

Lately, in specialized literature there has been a new wave of research on the topic of audit committees. These
demonstrate that accepting a client for auditing is made not only according to the characteristics of the financial
statements, but also according to the judgment of the audit committee members and the relationships with the auditor (Kadous et al., 2003 [35]). The audit committees at the entities level have an important role in the relationships with the auditor because they decide whether the proposed adjustments and recommendations can be applied or not. (Hunton and Rose, 2008 [31]). More than that, the authority of the audit committees is extended until the decision to accept the auditors’ services. The whole relationship between the auditors and the client entity is mediated by the audit committees, in the direction of increasing the quality of the services performed and the rapport price-quality. (Gaynor et al., 2006 [24]).

References


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## Jiří STROUHAL
University of Economics Prague, Czech Republic

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*Jiří Strouhal* is an associate professor at the University of Economics Prague, from which he obtained his PhD in 2005. He holds a certificate of accounting expert from the Czech accounting certification scheme (based on ACCA professional scheme). He is an editorial board member of several referred international journals (in the USA, South Africa and Taiwan). From 2007-2009 he was a member of the Committee for Education and Certification of Accountants of the Union of Accountants; from 2011 he is President of Chamber of Certified Accountants Czech Republic. From 2010 he also acts as a consultant of financial accounting issues for Czech Statistical Office. His research interest is based in reporting of financial securities and reporting of SMEs.

## Ionela-Irina ANDREICOVICI
Babeș-Bolyai University Cluj Napoca, Romania

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*Ionela-Irina Andreicovici* earned her Master's Degree in 2008 at Babes-Bolyai University, Cluj-Napoca, Romania. Currently she is a PhD. Candidate at Babes-Bolyai University, Faculty of Economics and Business Administration, Accounting and Audit Department and she is teaching different accounting disciplines. Her research interest covers measurement for financial reporting, earnings quality, accounting conservatism, value relevance.
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<td><em>Georgeta V. Căilean</em> graduated from Babes-Bolyai University, the Faculty of Economics and Business Administration in 2011 with a graduation thesis analyzing the Financial Reporting Conceptual Framework. She is currently a master student, preparing a dissertation paper on accounting education. Her research interests cover international accounting, financial reporting, accounting education and accounting profession.</td>
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<td>Oana-Antonia COLIBAȘANU</td>
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<td><em>Oana-Antonia Colibașanu</em> holds her Ph.D. in field of international business and economic. Currently she is a vice-president for international marketing at Stratfor company. She also acts as associated lecturer at the Academy of Economic Studies in Bucharest and at the University of Bucharest. Her research interest covers geopolitics and international business. She is a founder of Books for Peace – an organization promoting peace through education.</td>
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<td>Maria Ionela DAMIAN</td>
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<td><em>Maria Ionela Damian</em> is a PhD. Student within the Accounting and Audit Department of the Faculty of Economics and Business Administration, Babeș-Bolyai University. She graduated from the same university, her dissertation thesis focusing on fair value accounting. Her research activities are focused in the area of fair value measurement and fair value accounting, international financial reporting, corporate governance and accounting theory.</td>
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<td>Crina FILIP</td>
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<td><em>Crina Filip</em> is an associate professor within the Accounting and Audit Department of the Faculty of Economics and Business Administration. She obtained her PhD. in economics in 2007 after developing her dissertation on the accounting information system with focus on Romanian entities’ import-export transactions. She is currently a member of CECCAR Romania (Body of Expert and Licensed Accountants of Romania). Her research activity mainly covers the area of financial reporting, currency risk and hedging in particular.</td>
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### Ionel-Alin IENCIU
Babeș-Bolyai University Cluj Napoca, Romania

- Ethical Behavior Regarding Environmental Reporting – An European Union Perspective

Ionel-Alin Ienciu holds a Ph.D. from Babes-Bolyai University and he is lecturer within the Accounting and Audit Department of the university. He graduated the PhD. program with a PhD. dissertation on environmental accounting and reporting. He is a current member of the CECCAR Romania (Body of Expert and Licensed Accountants of Romania) and his research interests cover environmental reporting, corporate governance, financial reporting, environmental audit, and environmental management.

### Tarmo KADAK
TTU – Tallinn School of Economics and Business Administration, Estonia

- The Supplement of the Diagnostic Tool for Assessment the Implemented Performance Management Systems: Theoretical Approach

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### Kaidi KALLASTE
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- Accounting Education, Profession and Accountability

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Cosmin Dumitru Matiș
Babeș-Bolyai University Cluj Napoca, Romania

chapters:
• Risk Management as a Component of Corporate Governance: Particularities of the Banking Industry

Cosmin Dumitru Matiș is a PhD. Student within the Management Department of the Faculty of Economics and Business Administration, Babes-Bolyai University. He is currently the CEO of the Romanian Cultural Institute and has significant practice experience working in the banking industry, mainly acting as Corporate Relationship Manager. He also holds a MBA degree from ASE Bucharest and CNAM Paris joint Executive MBA Programme. His research activity is focuses on the banking industry and relationship management.

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• Accounting Education, Profession and Accountability

Dumitru Matiș holds a PhD. from the Babes-Bolyai University, Cluj-Napoca, Romania. He is currently an accounting professor teaching different classes within the same university. He is also currently the dean of the Faculty of Economics and Business Administration within the university. He is a member of the Chamber of Financial Auditors of Romania and of the Superior Council of the Accounting and Financial Reporting Council of Romania. He is also member within the Board of the European Accounting Association as Romania’s representative. His activity includes coordinating a number of research projects in the area of financial reporting and business education. His research activity is focused in the area of financial reporting, international accounting, corporate governance and auditing.

Eugenia Ana Matiș
Dimitrie Cantemir Christian University Cluj Napoca, Romania

chapters:
• Risk Management as a Component of Corporate Governance: Particularities of the Banking Industry

Eugenia Ana Matiș holds a PhD. from the Babes-Bolyai University, having developed a dissertation on performance and risk management in the banking industry. She is currently an associate professor working for Dimitrie Cantemir Christian University in Cluj Napoca. She has significant practice experience in the banking industry where she was employed since 1975, acting as CEO of BCR Erste Bank for the 2007-2010 period and CEO of BCR Cluj regional office for the 2001-2007. Her research activity can be positioned in the area of international finance, banking industry and risk management.

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<tr>
<th>Victor-Octavian MÜLLER</th>
<th>Babeș-Bolyai University Cluj Napoca, Romania</th>
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**Victor-Octavian Müller** holds a PhD. from the Babes-Bolyai University and he is lecturer within the Accounting and Audit Department of this university. He obtained tenure at the Babes-Bolyai University after graduating the PhD. program with a PhD. dissertation on Consolidated Financial Statements. He also holds a MBA degree in International Management from the University of Applied Sciences Fulda, Germany. He is an active member of CECCAR Romania (Body of Expert and Licensed Accountants of Romania). His research interests are in the field of group financial statements, international financial accounting and reporting (IFRS), accounting harmonization and diversity, accounting in emerging economies and accounting education.

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<th>Răzvan MUSTAȚĂ</th>
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**Răzvan V. Mustață** holds a PhD. from the Babes-Bolyai University and he is an associate professor within the Accounting and Audit Department of this university. He obtained tenure at the Babes-Bolyai University after graduating the PhD. program with a PhD. dissertation on Measurement Systems for International Accounting Harmonization and Diversity. He is a former member of the Babes-Bolyai University Senate, member of the University Administration Council, Faculty Council and also former students’ Chancellor and Prefectum Studiorum of the University. His research interests are in the field of international accounting, accounting harmonization and diversity, accounting theory, accounting in emerging economies, accounting education and the accounting profession.

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<th>Alexandra Ileana MUȚIU</th>
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**Alexandra Ileana Muțiu** holds a PhD. in Accounting and she is an associate professor of Accounting at Babes Bolyai University and adjunct professor at Plymouth State University, NH, US. She teaches live and online courses in Managerial Accounting and Controlling and her current research interests are in Accounting Education and Pedagogy.

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<th>Irimie Emil POPA</th>
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**Irimie Emil Popa** holds a PhD. from the Babes-Bolyai University and he is an associate professor within the Accounting and Audit Department of this university. He is the president of the Budget-Finance Committee within the Babes-Bolyai University Senate, member of various national professional bodies and director of a Master Program in the field of auditing. His research interests are in the field of auditing, accounting education and the auditing profession. He deals with many accounting expertise and auditing missions.
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<td><strong>Georgeta Ancuta Span</strong> holds a PhD. from the Babes-Bolyai University. Her research interest is in the field of statutory auditing and her PhD. thesis treats the importance of professional judgment in the auditors’ decisions. She holds a trainee position within the Chamber of Financial Auditors in Romania and deals with many auditing missions under specialized supervision.</td>
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