THE DYNAMICS OF THE ACCOUNTING MODELS AND THEIR IMPACT UPON THE FINANCIAL RISK EVALUATION

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Abstract: *All the companies are exposed to risks and circumstances can take an unexpected turn at some point in time. What the company can control is how these risks are managed and firstly the steps to be taken to avoid them. The way how the scientific expertise, data and the advice on devising the risk strategies are understood, represented and incorporated into a structured system has visibly evolved since the 19th century until present, along with the accounting models and the main factors that triggered a higher concern in this sector.*

Keywords: *accounting model, evaluation, financial risk, accounting information, financial risk reporting, corporatist governance, risk management.*
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1. Introduction

The successful companies use the information technology in order to change the role of the accounting, from 'counting' into a trustworthy partner for the business. A part of this transformation comes from the latest technologies in use. The most part has to do with the changes in the strategies of the companies. The financial departments are no longer and solely interested in figures, but they concentrate now on the **analysis of the information**.

The information technology has allowed the profession of accountant to focus on the strategic issues hiding behind the data. Hence, this profession has been restructured and promotes a change in how the companies can evaluate their business prospects. High technology is vital but not the only ingredient in this recipe for success. Another important element is the shift in the organizational culture and the need that the accounting and reporting system of the company to reflect an advanced business model. This type of governance requires estimations in due time and assessments regarding the assets, liabilities, income and expenses, as well as the exposure of the assets and of the liabilities in a more exact and analytical manner than before. The management of the leading companies in their activity sector has decided to have a future-oriented strategy rather than to the past and want the accounting professionals do the same. And this thing happens as the research prior the emergence of the problems is a key factor in business (Chorafas, 2008, p. 26) should we look at risks, costs, sales or any other major element in the business.

All the companies are exposed to risks and circumstances take an unexpected turn at some point in time. What the company can control is how these risks are managed and firstly the steps to be taken to avoid them. A dysfunctional culture, the failure of the management and the behavior of certain individuals are the main reasons of an ineffective company running. Very often, such failure comes from the lack of awareness about the risks and their potential significance and from difficulties when avoiding and managing the risks (The Association of Chartered Certified Accountants, 2012). Prior to 1970, the risk management in most companies used to be broadly defined by the acquisition of insurance – a partial strategy of risk management. The risk management was also rudimentary in the financial sector. The banking regulatory authorities did not have instruments to be applied on a large scale for measuring the risks in the system, thus making difficult a constructive intervention. The banks were missing the instruments of modeling the interest rate risk for their portfolios of credits, useful to protect themselves from their change. They also did not

have instruments to quantify and manage the credit risk as they only would understand the elementary notions of the operational risk (Buehler, Freeman and Hulme, 2008, p. 4).

The way how the scientific expertise, data and the advice on devising the risk strategies are understood, represented and incorporated into a structured system has visibly evolved since the 19th century until present. More reforms regarding the methods to evaluate and manage the risks have been established (Millstone, 2010, p. 1).

2. The Accounting Model – Financial Risk Binomial in a Historic Perspective

As in any branch of history, the building and the understanding of the accounting models dynamics cannot be grasped without a constant reference to the general evolution of the society. The field of accounting is, of all the historic research issues, the one that has the closest connections with the political state, the economic situation, social organization, as well as with the cultural level of the country and the time the reference is being made to. Along the centuries, a constant relation has been noticed between the accounting development and the circumstances and the needs of a changing society (Tremblay, Cormier and Magnan, 1994, p. 1). Similar to the accounting, the perception of risk and the financial risk has been changed along the line by the society needs and the degree of economy development.

The connection between the two concepts is obvious, firstly, from the objectives that these have within the organizations. Even though the accounting objectives differ as a function of the company activity object and the accounting model being adopted, there are punctual objectives that need to be followed up on. Thus, this is about the recording, classification and presentation of the data and information concerning the financial activity. The financial risk management represents the process to be able to face the ambiguities of a financial nature that may arise, aiming to develop certain strategies correlated with the priorities and policies of a company for lowering, transfering or elimination of the financial risks.

From the very beginning, both concepts can be noticed to refer to the financial activity of the company, where the accounting information is the bridge between the accounting model and the evaluation of the financial risks, the drive and the key factor of the success in business, more exactly reaching the objectives (fig. 1).

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Fig.1. The accounting model - financial risk connection

Source: personal adaptation

The Table 1 shows the stages and the highlights in the evolution of the **accounting models**, in parallel with the methods of risk evaluation for the same historic periods.

Table 1. The parallel development of the accounting models and the methods of risk evaluation

Dates	Features of the accounting model	Features of the methods of risk evaluation / financial risk
Ancient times	Registering the facts and happenings via the slitter on the cave walls, animal bones, silver plates, papyrus. Recordings in the chronological order, with no correspondence between elements.	There is no proof to measure the risk in the ancient times, except for the writings in the Egyptian crypts of gambling and betting.
Middle Ages	Private property, trade, writing, money and arithmetic are main factors that led to the development of accounting in a double entry (1494).	The emergence of the Arabic counting allowed the introduction of the scientific basis for betting.
Middle Ages – The industrial revolution	The factors: the development of the large capitalist companies, the industrial revolution and the increase of the volume of transactions brought on the emergence of certain combinations of closing balances and of a system of internal control.	New statistical concepts will emerge – the standard deviation and normal distribution. T. Bayes demonstrates the usefulness of the old and new information in the decision-making process. The emergence of the credits led to the development of the solvability analysis by which the banks had the guarantee of their reimbursement.
The Industrial Revolution – Mid 20th century	The highlights are represented by the two world wars and the great economic depression. There will be concerns about building a chart of accounts and improvement of the financial communication. The shareholders will request for financial statements and reports that will include the derived results. The first accounting theories and generally accepted principles emerge (USA). The accounting will be given new functions, of control, decision and forecasting.	The first risk theories emerge. In the economy and finance, there will be analytical economy, compensating variation and the theory of games, of the dynamic systems in the theory of decision. In the same sector of the bank credits, the notion of liquidity has been come up with, by the development of the liquidity rates and of the trading capital.

End of 20th century	The outlining of certain different accounting models, in dependence on historic, cultural and social factors. The first discussions related to normalization, standardization and the accounting harmonization are initiated.	The period of the great evolutions in the risk evaluation methods. There will be initiated vital methods for the companies, such as the Black-Scholes formula, MonteCarlo simulation, the value at risk, RAROC, the methods RiskMetrics and CreditMetrics, etc. The orientation towards the implementation of certain methods depends on the features of the accounting model in use.
The 21st century	The accounting normalization – with the purpose to build uniform accounting practices and the implementation of certain identical accounting norms.	Underlining the importance of the risk management process via the IFRS requirements.

Source: personal adaptation

The table mentioned above helps us draw the conclusion that, for a long time, the risk management and the evaluation methods have been one step behind the development process of the accounting. The approach and concern that the risk evaluation process had towards the end of the 20th century were the result of certain combinations of internal and external factors. The modern risk management started after 1955 and until the 70's, it witnessed a huge rise – during that time, this concept went through a genuine revolution in the financial sector (Dionne, 2013, pp. 3-6).

While examining the table, it can be noticed that the development of accounting and of the risk evaluation methods took place in times quite close, namely 1494 and 1654. The emergence of the accounting in a double entry was followed by a time of growth, when the volume of transactions surged and so did the number of the capitalist companies. This lucrative period in economy resulted in a higher interest in risk evaluation, the development of the statistical methods and it had an impact upon the decision-making process, also due to the emergence of credits.

Since T. Bayes wanted to observe how causes interfere with the effects, he performed certain experiments and reached to the conclusion that the existent data, plus new probabilities of the observations, take to results that are closer to the reality. This statement is a major part of the risk management process and the forecasting their impact is a particular stage.

The attention paid to this process is visible in the publication of magazines of literature in review, followed by the emeregence of the risk-related theories. The implementation of the evaluation methods of the financial risk relies on the information derived from accounting and the improvement of the financial communication and the devising of the reports useful for the shareholders to find out the results is a foundation for the risk analysis.

The studies aiming the history of accounting render the fact that the accounting models have also known various periods of development. To make a parallel between France and United Kingdom, we notice that the profession of accountant was acknowledged as an independent profession in 1943, while in England this recognition took place at the end of the 19th century.

During the first part of the 20th century, France slowly shifted from a predominantly agricultural economy to an industrial economy, with gigantic corporations. Back then, the main interest points were the financial accounting and the basic principles of record-keeping. A modest success was achieved in the implementation of the accounting techniques related to costs and management control. The major efforts were steered towards the accounts and the chart of accounts during the last decade of that time window. This research area has always fascinated the theoreticians, researchers and scholars (Mattessich, 2008, p. 124). That interval was not memorable for the French accounting but it was the time when the accounting model took a certain shape. The English speaking countries witnessed a higher development during that time. Thus, the Wharton School of Finance and Economy had already been established and more business schools were about to open in the USA; in Great Britain, the School of Economics and Political Science in London has started teaching since 1895. These schools helped a great deal with a faster development of the accounting.

Prior to the 1929 economic downfall, which led to an attitude change over against the risk, the profession of banker/financier consisted in providing the transfer between the accounts. The initiation of the exploitation credits resulted into an awareness related to the credit risk, closely connected to the solvability of the company. The balance is the one that allows stressing upon two judgment points concerning the decision in credits assistance: the security interests granted and the financial statements of the debtor (Vernimmen, 2013, p. 332). Hence, it will be necessary to focus more on the financial structure of the company. For a long time, the bankers were satisfied with the solvability criteria but they became aware of the importance held by the liquidity degree and by the concept of working capital. The financial risks thus gained in their significance, along with the development of the credits and investments. In the second half of the 20th century, a new academic spirit comes to life. R. Mattessich points to the relevance of the notions of statistics and of the analytical methods applied in accounting, particularly in audit. Such notions are also the foundation of the risk management, so that they can be looked at as another factor that has impacted both concepts, namely the accounting model and the evaluation of the financial risks.

3. Accounting Models for the Non-Quoted Companies and the Interest in Evaluating the Financial Risks

The different valencies acquired by the accounting in double entry, along with the factors that have acted upon in time have resulted in different accounting models, depending on the degree of capitalization and culture of the countries. The most recognized accounting models are the continental and the Anglo-Saxon ones.

The Anglo-Saxon accounting model is defined by a strong capitalization, focusing on the needs of investors and is essentially run by the capital markets. The continental model relies on macro-economy, as being under the influence of the taxation system and of the government. The accounting objectives vary as a function of the accounting model, as such:

Table 2. The differences of the accounting objectives, according to the accounting model

Objectives of the accounting	The continental accounting model	The Anglo-Saxon accounting model
The accounting information in the decision-making process		
- The main users **- The accounting principles** **- The purpose of the accounting strategies**	Creditors, fiscal authorities, investors dominate the principles of prudence and the influence of taxation method on the financial accounting More options for acknowledgment and evaluation	Firstly, the investors True and fair view Not too many alternatives for acknowledgment and evaluation
The calculation of the sharable income		
	The prudent calculation of income, by using the conservatorism principle, the limitation of the income distribution, the trend of increasing reserves	The income calculation is part of the utility of decisions, relies on the true and fair view, there is no limitation of the income distribution, the accrual principle is dominant
The tax basis		
	A mutual influence between the taxation and financial accounting	There is no reciprocity between the fiscal system and the financial accounting

Source: adaptation after M.Galum, U.Mandler, „Global Accounting Harmonization from a German Perspective: Bridging the GAAP," Journal of International Financial Management & Accounting, Vol.7, no.3, 1996, p.28.

As already mentioned above, the risk management is in a close connection with the objectives of the accounting. Hence, the conclusion is that every group of companies that applies the accounting models in the previous table handles the risk management in a different way.

From a historic perspective, the accounting regulations have patterned themselves upon the cultural differences in other management areas, the Anglo-Saxon and the European continental ones. Similar with other areas, such cultural distinctions even out, due to the consequences of the financial markets globalization and to the attempts of making these markets more efficient. In fact, a separate division between culture and the accounting needs of the small and medium companies (SMEs) and the multinationals comes to the first plan. While the regulations in the Great Britain mainly targeted the large companies and the SMEs had to adjust these regulations in dependence on their needs, the traditional system in the Continental Europe aimed at the small and medium companies and so the multinationals had to adjust to it. Such inefficiencies have resulted into a disorganized and expensive accounting for the Anglo-Saxon SMEs and the European multinationals, which have surely paid too much for financing.

The destination of the accounting information and the main users play a significant role in the risk management process. The disposition of the companies to adopt a continental accounting model to manage the credit risk is logical, as its financing mainly comes from bank credits. Due to the exposure on the financial markets and also to the

requirements of the investors, the companies that embrace the Anglo-Saxon model have prioritized the market risk analysis (fig.2).

Fig.2. Types of risks targeted by different accounting models for the non-quoted companies

Source: personal adaptation

Even though these risks are approached by each company in itself, we have noticed, post-research, that the methods of evaluation and analysis in use for the financial risks are the same. The structure of the financial reporting varies – the continental model provides more detailed information, including an analysis of the company activity during the year and its future goals. Such additional reporting facilitates the building of an analysis frame for the risks.

In England, in 1998, the Institute of Chartered Accountants in England and Wales (ICAEW) recommended that the financial report to incorporate statements of the risks affecting the business good performance (Linsey and Shrives, 2000, pp. 115-118). The risks reporting was not a premiere, as the Accounting Standard Board (ASB) had suggested in 1993 that the quoted companies present their main risks and uncertainties, along with comments related to their management and, for the quality sake, the nature and the possible impact upon the result. There was no particular format for these statements, and the companies construed this requirement at their discretion.

Going back to the ICAEW's recommendation, introduced in "Financial reporting and risk – suggestions for statements on business risk," it also meant the quoted companies. There have talks about its implementation by the SMEs, thanks to the importance of risk awareness, but it was decided that it would apply to only the quoted ones for the beginning. The recommendation said that the companies should voluntarily report information concerning the business risks that could be of a real help for the investors and the companies. The main reason for this type of reporting was that the companies had no choice and performed in a world where the risk is present – hence, the exposure to the risk has to be lowered to a minimum and the opportunities for potential profit to be maximized (Linsey and Shrives, 2000, p. 118).

The discussions of the Financial Reporting Council (FRC) in United Kingdom with the companies, investors and consultants in 2011 (Financial Reporting Council, 2011) pointed out that they thought it was enough room for improvement regarding the risk reporting and the internal control.

Among the upgrades that are possible, there are the including of risk-related comments in the entire reporting and not only in a single section, building a connection between the risk reporting and the discussions referrring to strategy and the business model, explanation of the changes occurred while exposing to risk during the 12 precedent months as a response to the modifications in strategy or in the economic environment and, if possible, references to the future changes. Likewise, it was highly necessary to present the method that helped the key risks be reduced.

Upon examining the standards in the financial reporting issued by FRC in March 2013 (Financial Reporting Council, 2013), it can be noticed that a part of the upgrades

have already been implemented – hence, for each reporting item, there will be identified the requirement to indicate the impact on certain risks (credit, market, liquidity).

In terms of risk reporting in USA, FASB issued FAS133 in June 1998. This is a document concerning the accounting of the financial instruments and the insurance activities, which mentioned the necessity to present information on the financial risks.

According to a SEC report in 2011 (Secutity and Exchange Commission, 2011) about the differences and similarities between US GAAP and IFRS in how they handle risks and uncertainties, with the purpose of their merging, it is stated that US GAAP includes certain risk-related requirements that are missing at IFRS. For instance, US GAAP requires the presentation of certain concentrations of factors that can turn the company vulnerable to the risk of a severe short-term impact or discussions pertinent to the estimations alreade made whether they can significantly change in the following year.

Starting with 2012 (Financial Accounting Standards Board, 2012), FASB affirms that there have been upgrades regarding the provision of more detailed and pertinent information on the exposure of the companies to the liquidity risk and to the interest rate risk.

For the companies in France, risk reporting falls into two categories; the large companies implementing IFRS and reporting accordingly and the individual companies subjected to the national regulations. The stipulations of the French legislation, in compliance with the European directives, underlines the necessity of risk reporting in the report compiled by the managers, which has to include the presentation of the main risks and uncertainties, as well as the exposure to the market risks, of the market, the liquidity and the cash flows. This applies for the companies that fulfill certain size criteria, while the small companies are exempt from such stipulations.

In Romania, the legislative document that regulates the reporting process of the companies is OMFP 3055/2009, along with further amendments. Upon reading this document, a special importance is noticed to be assigned to the risk reporting process. The document in which the risks and their management are presented to the interested parties is called “The Manager’s Report.”

This is a document devised for each fiscal year of the Administration Council of the company and needs to include a true presentation of the development and performance in the company’s activities, of the financial position and also a description of the main risks and uncertainties. Besides other information, it has to contain the goals and strategies of the company pertaining to the financial risk management, the all-risks coverage policy for each major type of transaction that uses the risk coverage accounting, and the exposure to certain types of financial risks (market risk, credit risk, liquidity risk and the cash flow risk). Their reporting is mandatory for the companies that compile the Manager’s Report. The companies that do not fulfill the criteria of a certain size are not required to report the exposure to the financial risks.

According to this regulation, the market risk comprises of the currency risk, the interest rate risk at fair value, the price risk and it refers to the possibility of a profit following the exposure to it.

It can be noticed that the risk evaluation relevance is gaining ground and this reflects in the requests of the regulations criteria. Table 3 shows the criteria of the regulations, as introduced above, for an overview upon this issue.

Table 3. Requirements for the reporting of the financial risks, depending on the current regulations applying to the unrated companies that do not employ IFRS

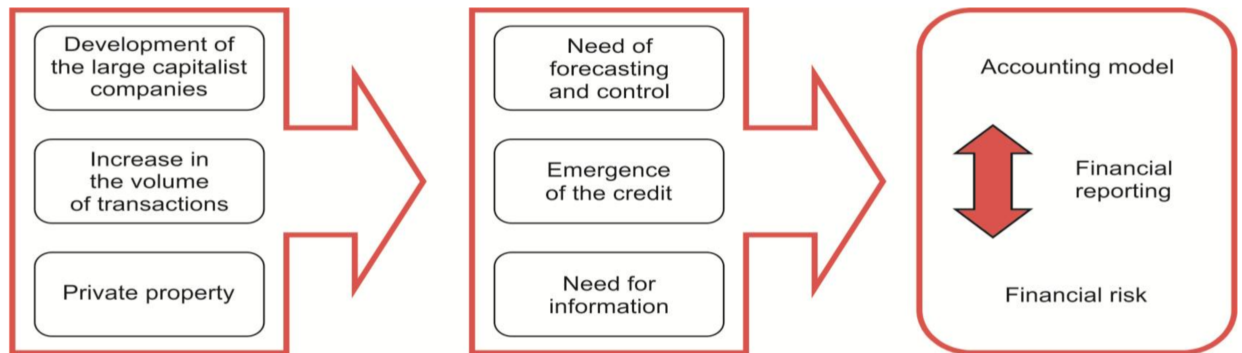
	Country	Requirements pertinent to the financial risks
Anglo-Saxon accounting model	UK	**The standards of financial reporting for UK and Ireland** Comments regarding the market risks, of credit and liquidity along the financial reports and not in only one section.
	USA	**US GAAP** Requirements concerning the liquidity risk and the interest rate risk.
Continental accounting model	France	**The General Chart of Accounts, the Commercial Code** The main risks and uncertainties challenging the company Exposure to the market risks, credit risks, liquidity risks and of the cash flow.
	Romania	**OMFP 1802/2014** Goals and strategies related to managing the financial risks Risks coverage policy Exposure to certain types of financial risk: Market risk Credit risk Liquidity risk Cash flow risk

Source: personal adaptation

4. Conclusions

The background of the concepts and the analysis of the factors underlining their development have revealed a connection between the accounting models and the evaluation of the financial risks. The factors influencing both concepts can be resumed as presented in the diagram below:

Fig. 4. The impact upon the accounting models and the methods of financial risks



Source: personal adaptation

The research herein has proved that the dynamics of the society and its needs have the most notable impact upon the development of accounting, and the methods of evaluating the financial risks have been a step behind it for a long period of time. Once the financial markets have been globalized, the demands of the investors have resulted into a genuine revolution of the "financial risk" concept and the importance of the risk management have gained new valencies.

In the 21st century, the "uncertainty" and the associated concepts dominate the scientific perspectives. The shift from a determinist view to stochastic notions is no longer considered a singular case, but a part of a general trend, which includes our vision on the modern world. We live in a stochastic universe, and thinking from the probability perspective seems to be the "best bet" (Mattessich, 2008, p. 322).

The future of the accounting models can be looked at in terms of information, and its perspective is a true paradigm. The need for information is higher than ever and this is the path to success, either in the results included in the financial statements of the companies or information that is useful to the calculation of the financial exposures.

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