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Risk Management in Enterprises Listed on the Warsaw Stock Exchange. The Role of Formal and Legal Determinants

Abstract

The aim of the present paper is to present the role of formal and legal determinants in risk management in enterprises listed on the Warsaw Stock Exchange. Theoretical part shows the essence, types and role of stock exchange risk in shaping risk management processes in stock enterprises. While the empirical part includes research findings from analysis of formal and legal requirements for risk management in this enterprise group.

Key words:

risk, risk management, Warsaw Stock Exchange (Giełda Papierów Wartościowych w Warszawie, GPW), formal determinants, legal regulations.

Introduction

Risk management is currently one of the key management domains conditioning development and continuity of contemporary economic entities which manifests itself in the steadily growing number of scientific texts in this field [Bromiley, McShane, Nair, Rustambekov 2015, pp. 265–276; Christopher, Mena, Khan, Yurt 2011, pp. 67–81; Elahi 2013, pp. 117–131; Frigo, Andersen 2011, pp. 81–88].

Implementation of risk management processes in stock enterprises is governed by its defined specifics and running a comprehensive risk management in case of

these businesses is particularly important because of additional stock exchange risk factors and because of the necessity to meet formal requirements resulting both from stock exchange regulations and national law together with international regulations of supreme authorities, including stock exchange supervisory authorities. Furthermore, intensification of scientific research on the role of stock market risk in risk management of enterprises has been noted after the financial crisis from early 2007 [Grout, Zalewska 2016, pp. 326–345].

The aim of the paper is to present the role of formal and legal determinants for risk management in enterprises listed on the Warsaw Stock Exchange, GPW. In order to achieve the aim of the paper, literature review and analysis of legal regulations covering the studied area have been applied.

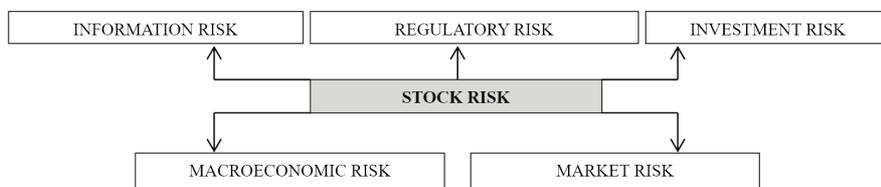
Stock market risk – essence, types, role in the risk management process

Listed companies are particularly exposed to different types of risk. Moreover, due to the obligation of meeting restrictive formal and legal requirements negative consequences of risk materialisation may in their case be far more severe than in the case of not listed companies. This is why it is so vital to implement and maintain efficient risk management systems in this group of enterprises.

Risk in relation to listed companies is interpreted largely as a threat of not obtaining expected return on investment [Maheu, McCurdy 2007, pp. 560–590]. Therefore, it is an inherent factor determining profit. Risk management in listed companies is a process aimed at identification and evaluation of risk, based on which management strategies are developed in order to minimize the risk at simultaneous profit maximization (which is a risk premium). Stock exchanges as regulated markets integrated in the form of a global financial market give companies new possibilities to earn income on the capital employed [Derrabi, Leseure 2005, pp. 35–55], however with concurrent multiple barriers to investing in financial assets resulting from global deregulation [Al Janabi 2005, pp. 91–136]. In order to mitigate the investment risk listed companies use models for assets valuation implying risk-return relation. These include inter alia R.C Merton's model [1973, pp. 867–887], J.Y. Campbell's model [1993, pp. 487–512] or CAPM Capital Asset Pricing Model [Lintner 1965, pp. 13–37; Mossin 1966, pp. 768–783; Sharpe 1964, pp. 425–442; French 2003, pp. 60–72].

Investment risk (specific) is, nevertheless, only one of risk dimensions listed companies are exposed to. Figure 1 presents an overview of main stock risks.

Figure 1. Main types of stock risks



Source: own study.

Market risk (systematic) is a type of risk inherent to activity of listed enterprises since it is connected to the system created by capital market. Systematic risk is mostly experienced by enterprises in times of crises on stock markets. It is then when increased trading risk and risk of shortfalls in demand for shares and other securities of depreciating companies can be observed. Market risk is inherently related to investment risk because growing market risk instantly increases uncertainty of investment in securities of jeopardized companies [Grout, Zalewska 2016, pp. 326–345; Escobari, Jafarinejad 2018, pp. 1–28].

Stock exchange markets play an important role in shaping economic growth in general and growth of national economies, especially in developed countries [Nyong 1997, pp. 13–38; Wu, Hou, Cheng 2010, pp. 879–891], what is related to macroeconomic risk for listed companies. Country's economic policy, production growth rate, average rate of return on investment in financial assets, inflation rate, political situation are only selected factors determining entire risk adequate for a given country and to which listed companies are exposed [Grinols, Turnovsky 1993, pp. 1–36; Liow, Faishal, Huang 2006, pp. 295–323]. What is more, also global political and economic situation in the world play a significant part in shaping assets prices and investment conditions [Bali, Cakici 2010, pp. 1152–1165].

Regulatory risk is yet another dimension of stock risk. It embraces the obligation of the stock companies to meet formal requirements for issuers of securities included in internal regulations of a specific stock along with country and international legal regulations, mostly of stock exchange supervisory authorities, authorities supervising capital and financial markets. Regulatory risk imposes on issuers the obligation to continuous updating of the actions adjusting to changes in legal regulations which might increase operating costs, decrease investment attractiveness, or change the competitive landscape among listed companies [Konzelmann, Wilkinson, Fovargue-Davies, Sankey 2010, pp. 929–954]. It is also vital to remember about the issue

of harmonizing regulatory systems of financial markets, such as stock exchange markets, which increases potential investment possibilities between markets. It is not infrequently that discrepancies in country law are impediments to shaping this type of global cross-system connections [Lee 2017, pp. 291–321].

Another type of stock companies risk related to regulatory risk is information risk. It results from a number of information duties obligating enterprises to make public all information concerning economic, asset and financial position. Then the risk arises for the published information to be used by unauthorized entities or for illegal purposes [Slimane 2012, pp. 47–71].

The above presented selected risk categories of listed companies have a number of implications for risk management systems of these entities (see Table 1).

Table 1. Role of stock market risk in risk management process of listed companies

Risk category	Role in risk management process of stock companies
Macroeconomic risk	Determines conditions for investment activities, defines the scope of catalogue of risk factors identified in a given market/country.
Market risk	Imposes obligation for continuous monitoring and analysis of capital market in terms of early detecting grounds for stock market collapse or crisis.
Investment risk	Determines investment risk management strategies, defines level of insecurity of obtaining expected profits (risk premium).
Regulatory risk	Conditions starting stock activity, forces to adjust to formal and legal regulations and continuous updating of risk management system resulting from changes thereof.
Information risk	Expands the catalogue of risks by threats resulting from inadequate use of public information, mitigates the risk resulting from investors' partial access to information.

Source: own study.

Research methodology

The main research objective is analysis of formal and legal determinants for risk management in enterprises listed on GPW. In the course of research process the following research questions have been formulated:

- 1) What requirements for risk management in enterprises listed on GPW result from internal regulations of this stock market?
- 2) If, and to what extent, risk management in enterprises listed on GPW is determined by country and international legal regulations?

Literature review, analysis of GPW internal regulations, country law and provisions of European Union law regulating requirements for risk management in en-

terprises participating in trading on a regulated market were carried out in order to achieve research aim. The following documents were analysed:

- The GPW Rules [2018],
- Best Practice of GPW Listed Companies [2016],
- GPW Detailed Exchange Trading Rules in UTP system [2018],
- Act on Public Offerings and Conditions for the Introduction of Financial Instruments to Organised Trading and on Public Companies [2005],
- Act on supervision over the capital market [2005],
- Act on Trading in Financial Instruments [2005],
- Regulation of the Minister of Finance on detailed terms and conditions that must be satisfied by the official stock-exchange listing market and issuers of securities admitted to trading on such market [2010],
- Regulation of the Minister of Finance on current and periodic information provided by issuers of securities and the conditions of regarding as equivalent of the information required by the non-member state [2018],
- Directive of the European Parliament and of the Council on the admission of securities to official stock exchange listing and on information to be published on those securities [2001],
- Directive of the European Parliament and of the Council Transparency II [2013],
- Regulation (EU) of the European Parliament and of the Council on market abuse (MAR) [2014],
- European Securities and Markets Authority (ESMA) guidelines on regulation MAR [2016, 2017].

Regulations of GPW as internal source of determinants for risk management in enterprises listed on this stock

Internal regulations of GPW impose for the listed companies a number of obligations fulfilling of which requires modification and substantial expansion of their scope of activities run in the area of risk management. Requirements set for the companies can be categorized as follows (Table 2): 1) information responsibilities, 2) risk management responsibility, 3) internal control/internal audit, and 4) safety and risk.

Table 2. Areas of requirements for risk management in GPW internal regulations

Area of requirements Regulation	Information responsi- bilities	Risk ma- nagement responsi- bility	Internal control/ internal audit	Safety and risk
The GPW Rules [2018]	X			X
Code of corporate gover- nance „Best Practice of GPW Listed Companies [2016]	X	X	X	X
GPW Detailed Exchange Trading Rules in UTP system [2018]	X			X

Source: own study.

Detailed requirements for risk management according to areas included in internal GPW regulations are presented in Table 3.

Table 3. Requirements for risk management included in internal GPW regulations

Regulation	Area of require- ments	Requirements
The GPW Rules [2018]	infor- mation responsi- bilities	Publication or provision of information documents ap- proved by adequate supervisory authority as a condition for admission to trading, Provision of current and periodic information.
	safety and risk	Ensuring safety of stock trading and interest of its parti- cipants, Applying safety principles included in code of corporate governance in order to mitigate stock risk, Implementing procedure for protecting the secrecy of information related to stock transactions, Optional use of GPW application – Risk Management Access for entities completing stock transaction and increasing trading safety.

Code of corporate governance "Best Practice of GPW Listed Companies" [2016]	information responsibilities	Information policy of stock enterprises should be transparent and efficient to provide investors with fast, safe, easy and efficient access to information, Presentation of threats and ways of managing them in periodic reports, Presentation of events influencing financial results and financial forecasts.
	responsibility for risk management	Holding audit committees or supervisory board functioning as audit committee, Meeting independence criteria by the chair of audit committee, Board's responsibility for risk management, internal control system, compliance and internal audit.
	internal control/ internal audit	Supervisory boards evaluating condition of a company along with evaluation of internal control and risk management system, Maintaining efficient internal control systems, risk management systems, and supervision of compliance, as well as efficient internal audit.
	safety and risk	Listed company should have transparent procedures preventing conflicts of interests and making transactions with related entities in case of conflict of interest. Procedures should anticipate ways of identification of such situations, their disclosure and management.
GPW Detailed Exchange Trading Rules in UTP system [2018]	information responsibilities	Publication of information document approved by adequate supervising authority, Provision of information about events influencing assessment of issuer or of their assets.
	safety and risk	Assessment of stockbrokers' qualifications to ensure efficient and safe trading and safety of its participants.

Source: own study.

Country legal regulations and European Union regulations as external source of determinants for risk management in companies listed on Warsaw Stock Exchange

Risk management in companies participating in trade on GPW in Warsaw is also determined by country legal regulations and provisions of law of European Union authorities. Requirements of these regulations can be categorized on the basis of the following areas (Table 4): 1) information responsibilities, 2) responsibility for risk management, 3) internal control/ internal audit and 4) safety and risk.

Table 4. Areas of requirements for risk management in country legal regulations and EU regulations

Area of requirements Regulation	Information responsibilities	Responsibility for risk management	Internal control/ internal audit	Safety and risk
COUNTRY LEGAL REGULATIONS				
Regulation of the Minister of Finance on current and periodic information... [2018]	X		X	X
Regulation of the Minister of Finance on detailed terms and conditions... [2010]	X			
Act on Trading in Financial Instruments [2005]	X	X	X	X
Act on Public Offering... [2005]	X			X
Act on supervision over the capital market [2005]	X			X
EUROPEAN UNION LEGAL REGULATIONS				
Directive 2001/34/EC of the European Parliament and of the Council on the admission...[2001]	X		X	X
Regulation (EU) No 596/2014 of the European Parliament and of the Council on market abuse (MAR) [2014]	X	X		X
Directive 2013/50/EU of the European Parliament and of the Council Transparency II [2013]	X			X
ESMA guidelines on regulation MAR [2016, 2017]	X			X

Source: own study.

Detailed requirements for risk management as per areas included in country legal regulations and EU regulations are presented in Table 5.

Table 5. Requirements for risk management included in country legal regulations and EU regulations

Regulations	Area of requirements	Requirements
COUNTRY LEGAL REGULATIONS		
Regulation of the Minister of Finance on current and periodic information... [2018]	information responsibilities	<ol style="list-style-type: none"> 1. Provision of current and periodic information in order to enable evaluation of their impact on economic, asset and financial position of a company, 2. Information provided should mirror specifics of described situation in a true, accurate and complete way.
	internal control/ internal audit	<ol style="list-style-type: none"> 1. Examination of financial statements by an impartial and independent auditor.
	safety and risk	<ol style="list-style-type: none"> 1. The financial statements provided must include true picture of development and achievements of issuer's situation, including description of basic threats and risk.
Regulation of the Minister of Finance on detailed terms and conditions... [2010]	information responsibilities	<ol style="list-style-type: none"> 1. Only companies which for at least three years prior to submitting and application have made their financial statements public together with audit opinion on them can be admitted for trading on official listing market.

Act on Trading in Financial Instruments [2005]	information responsibilities	<ol style="list-style-type: none"> 1. Publication of internal information to provide investors with universal, equal and simultaneous access to market information, 2. Apart from listed company information responsibilities are imposed on: members of management and supervisory bodies, proxies of issuer and individuals holding managerial positions in issuer's organization structure, 3. Transfer of market information should minimize risk of data distortion and should prevent unauthorized access.
	responsibility for risk management	<ol style="list-style-type: none"> 1. A company operating a regulated market is liable for risk related to entrusting performance of respective activities in risk management system and for counteracting an occurrence of risk.
	internal control/ internal audit	<ol style="list-style-type: none"> 1. Investment companies should develop, implement and maintain internal audit system.
	safety and risk	<ol style="list-style-type: none"> 1. Issuer's investment decisions should be based on adequate risk assessment, 2. Activities related to stock trading should be performed adequately to the risk level, 3. Character and scope of stock transactions should depend on risk level, 4. Mechanisms used for technical processes management should take into account fallback procedures enabling risk management, 5. Issuers' actions should ensure safety of stock trading and mitigate the risk of conflict of interests, 6. Investment opportunities should be assessed on the grounds of ability to incur losses and level of acceptable risk.
Act on Public Offering... [2005]	information responsibilities	<ol style="list-style-type: none"> 1. Information document of a company should be made accessible to the public, 2. Companies are obliged to transfer current, periodic and inside information in a reliable, true and complete manner simultaneously to Financial Supervision Authority (KNF), GPW in Warsaw and to the public, 3. Issuer is liable for damage caused due to provision of untrue information to the public.
	safety and risk	<ol style="list-style-type: none"> 1. Information responsibility should include information concerning issuer's risk factors and other information necessary for assessment of risk related to investing in issuer's securities, 2. Trading of securities should not pose threat to investors' interests or safety.
Act on supervision over the capital market [2005]	information responsibilities	<ol style="list-style-type: none"> 1. Issuers are obliged to provide specific information to the public.
	safety and risk	<ol style="list-style-type: none"> 1. Aim of supervision over capital market is, inter alia, ensuring safety of trading and protection of investors and its other participants, as well as observing the rules of fair trading.

EUROPEAN UNION LEGAL REGULATIONS		
Directive 2001/34/EC of the European Parliament and of the Council on the admission...[2001]	information responsibilities	1. Issuers' are obliged to provide and make public information necessary for assessment of financial situation, including financial statements, information on issued securities and information related to admission to public trade.
	internal control/ internal audit	1. Obligation to control companies with respect to enforcement of obligation to publish detailed data on admission to trade and required information on issuers' situation.
	safety and risk	1. Obligation to implement safety means regarding interests of current and future investors among companies from regulated markets of member states.
Regulation (EU) No 596/2014 of the European Parliament and of the Council on market abuse (MAR) [2014]	information responsibilities	1. Issuers cannot commit market abuse (illicit market behaviours) interpreted as using inside information, illicit disclosure of inside information and manipulations on the market.
	responsibility for risk management	1. Issuers should adopt and develop compliance programme – management of risk related to lack of compliance with legal environment.
	safety and risk	1. Issuers are obliged to follow principles of market safety and transparency, 2. Due to interdependence and global character of regulated markets they cannot commit market abuse generating substantial systemic risk.
Directive 2013/50/EU of the European Parliament and of the Council Transparency II [2013]	information responsibilities	1. Issuers are obliged to publish their periodic statements and payment statements.
	safety and risk	1. Issuers should operate on regulated market upon the principle of transparency ensuring safety of trade and interest in all member states.
ESMA guidelines on regulation MAR [2016, 2017]	information responsibilities	1. Guidelines concern establishing consistent, efficient and effective supervisory practices in the areas of delaying disclosure of inside information and indicative list of inside information on commodity markets.
	safety and risk	1. In order to ensure safety, issuers cannot disclose received inside information in an unlawful manner.

Source: own study.

Discussion

The carried out studies allowed to establish that the analysed regulations by imposing obligations on issuers participating in stock trading create formal and legal determinants for risk management in these entities. Furthermore, it was observed that

these requirements to a great extent are related to the necessity of ensuring safety of stock trading, protecting interest of its participants, as well as information responsibilities concerning information on risk factors and threats and other information key assessment of issuer's condition.

Research findings carry the following implications for risk management in the enterprises listed on GPW in Warsaw:

- it is recommended to adopt and develop risk management programme with respect to lack of compliance by: selecting responsible structures, adopting and successful implementation of procedures respecting law, continuous monitoring regulatory environment and updating internal procedures in order to adopt to changes in this environment,
- evaluation of internal control system and risk management should obligatorily include control of implementing procedures resulting from regulations of GPW authorities, country law, European Union law and stock market supervising authorities (KNF on country level, ESMA on EU level),
- information policy should be transparent to ensure transaction safety and to minimize systematic risk,
- developed and implemented internal audit system should be founded on the principles of independence, objectivity, reliability and completeness,
- risk management procedures should be extended procedures preventing conflict of interest, procedures protecting secrecy of confidential information and fall-back procedures for capital market risk management,
- investment decisions and other activities related to stock trading should be based on measuring risk level and its adequate assessment.

Conclusions

In the article an attempt was made to identify the formal and legal determinants for risk management in enterprises listed on GPW in Warsaw. Stock risk factors were characterized together with their role in risk management process and key requirements for risk management were identified in this group of enterprises determined by regulatory risk.

From the carried out analysis it can be concluded that enterprises listed on GPW in Warsaw are obliged to reorganize their risk management systems with respect to internal procedures of this stock market and to regulations of European Union authorities defining requirements for all issuers of securities admitted to trading on regulated markets of member states.

Regulatory environment, as it appears, directly determines the sole possibility of seeking the status of an issuer as well as later operating on capital market.

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