Risk managers in the largest construction and assembly companies in Poland – survey research

Piotr Tworek¹

Abstract

Risk management in construction and assembly companies requires a professional approach. Risk managers are the representatives of this profession, who ensure comprehensive and effective risk management. First of all, they have the appropriate background to perform this function, especially in terms of risk management methods in the construction business. These issues are addressed by the paper, which aims to discuss the place and role of risk managers in construction and assembly enterprises. Therefore, the paper is both theoretical and empirical in its character. It presents the results of the empirical research conducted among the largest construction and assembly companies operating in Poland. In general, the research concerns the presence of risk managers in the Polish construction industry.

Key words

risk, risk management, risk managers, contractors, construction industry, Poland

JEL Classification: G32, L26, L74, M12

Introduction

In business practice, risk management is an integral part of corporate management processes in construction and assembly companies. In order to manage risk effectively, an appropriate person needs to be appointed in a company to be in charge of it. Risk management is a practical skill and a process which consists of a number of stages and activities that need to be completed in order to ensure that risk is identified, quantified and ultimately, responded to properly. All over the world risk managers are responsible for handling risk in enterprises. In the construction sector in Poland, though, this function is still not very popular. The Polish construction industry demonstrates quite a traditional approach to this issue. Risk management functions are usually performed by construction engineers, who have more experience in the art of building, construction technique and technology. Risk management in the largest construction companies in Poland is, in a way, dispersed and not integrated. This lack of integration is manifested by the fact that many departments and units within companies handle specific risks on their own and independently from the others. In order to integrate the risk management function a separate position with this responsibility has to be created in a construction company or external experts have to be brought into the company to manage risks in a comprehensive way. These problems are addressed in the paper, which is aimed at discussing the importance and role of a risk manager as a person responsible for risk management in a construction and assembly company. In particular, the paper presents the results of the empirical research conducted among twenty-five, out of the hundred largest

¹ dr Piotr Tworek, Assistant Professor, University of Economics in Katowice, Faculty of Finance and Insurance, Department of Investments and Real-Estate: Investment Economics Unit, 1 Maja 50 Street, 40-287 Katowice (Poland); e-mail: <u>piotr.tworek@ue.katowice.pl</u>

construction and assembly companies in Poland in 2009. The surveyed group of companies comprises e.g. companies included in the stock exchange index of WIG- Construction (WIG-Budownictwo). The criterion for the selection of the contractors was a ranking table published by *Rzeczpospolita* daily, in which such entities were listed, based on the revenues generated in the previous financial year. The research was conducted using a questionnaire interview, supplemented with face-to-face interviews. In the paper, the author draws on the experience gained during his long-term studies into risk management in the construction industry. The studies were a part of his individual research project carried out in the Department of Investments and Real-Estates, the University of Economics in Katowice.

1. Role of risk managers in construction

The term of *risk manager* is used both in theory and in practice. In many companies all over the world, including construction ones, there are risk management departments. In Poland, the risk manager's function is not very common and popular. In business practice, however, it's increasingly recommended that such executive positions should be created in the largest Polish construction and assembly companies. Contractors would then be able to handle risk in a more effective way. This would lead, first of all, to integrated risk management and risk managers would then take over all the related functions which have previously been performed by heads of other departments in a company. Currently, in the largest Polish construction and assembly companies, various managers from different departments manage risk within their own areas. In particular, the risk manager's role should be to support the risk management process in a company, including the management process related to execution of the construction project, in order to increase efficiency and limit losses suffered as a consequence of risks. Risk management may help the company to achieve better performance. In business, typical risk management tasks are often fulfilled by project managers. This is natural as risk management is one of project management areas. In particular "(...) the role of project manager may include:

- encouraging senior management support for project risk management activities,
- determining the acceptable levels of risk for the project in construction with stakeholders,
- developing and approving the risk management plan,
- promoting the project risk management process for the project,
- facilitating open and honest communication about risk within the project team and with management and other stakeholders,
- participating in all aspects of the project risk management process,
- approving risk responses and associated actions prior to implementation,
- applying project contingency funds to deal with identified risks that occur during the project,
- overseeing risk management by subcontractors and suppliers,
- regularly reporting risk status to key stakeholders, with recommendations for appropriate strategic decisions and actions to maintain acceptable risk exposure,
- escalating identified risks to senior management where appropriate: such risks include any which are outside the authority or control of the project manager, any which require input or action from outside the project, and any for which the release of management reserve funds might be appropriate,
- monitoring the efficiency and effectiveness of the project risk management process,
- auditing risk responses for their effectiveness and documenting lessons learned"[1].

The primary task is the co-ordination of the risk management process, which comprises the following activities:

- action taken to mitigate risks, such as the provision of reports, given a timescale in which the risk management process and review of any outstanding actions,
- short lists issued to all members of the team to highlight the actions required from the allocated risk managers prior to the next meeting,
- risk registers and estimates updated on a pre-agreed regular basis,
- advice given on specific topics such as emergency plans, risk assessment for CDM, etc.[2].

In the Polish construction industry, risk management is often limited to arranging insurance for a construction site. In this case, risk in a company is managed by people responsible for insurance. In practical terms, however, insurance alone is not enough. When performing their tasks, risk managers need to take many different risks and risk factors into consideration, in macro- and micro-dimensions. These issues are illustrated in Table 1.

Risks	Expected effects	
	- directing exports to a country where an unfavourable change in	
Political risk	political power is going to happen	
	+ directing exports to friendly countries	
Market risk	- negative drop in product prices by 30%	
	+ sudden rise in product prices by 20%	
Reputation risk	- negative campaign launched by Internet users	
	+ high level of acceptance for CSR projects and business model	
Cash flow risk	- rise in costs of merchandise credit by 100%	
	+ stock turnover quicker by 30%	
Foreign exchange risk	- drop in prices of exported products	
	+ rise in prices of exported products	
Operational risk	- loss of key customer database	
	+ rise in customer confidence	
Talent flight risk	- loss of best specialists	
	+ recruitment of best specialists	
Investment risk	- budget exceeded by 20%	
	+ project execution time shorter by six months	
Regulatory risk	- rise in administrative expenses by 2 million zlotys per annum,	
	due to new regulations	
	+ reduction in costs of adjustment to new environmental	
	requirements by 5 million zlotys	
Energy risk	- unreliable supplies of energy	
	+ reliable and regular supplies	
Fraud risk	- revaluation of stock	
	+ achieving results from training in preventing behaviours which	
	are not acceptable for a company	

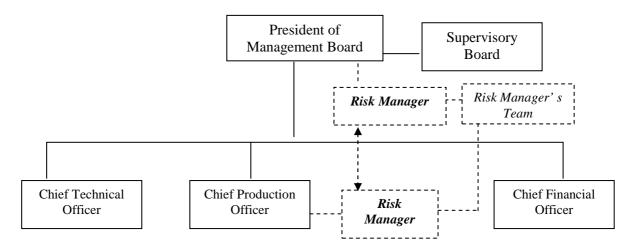
Table 1: Professional attitude of managers in the risk management process

Source: [3].

The literature on the subject defines the risk manager's role and function in the construction industry. Risk managers operate in departments, created within the personnel and organisational

structure of a given company for this particular purpose, which may be regarded as risk departments or just separate risk management units [4]. Contractors often bring in external professionals who do not belong to the company's organisational structure but just act as experts. This is illustrated in Fig 1.

Figure 1: Risk Manager is the personnel and organisational structure of construction companies in Poland



Source: based on:[4].

In particular, the tasks which should be performed by risk managers in construction and assembly companies (...) could include:

- assistance with the formulation of an initial risk management policy statement for discussion and approval at board level,
- assistance in agreement of an organisational risk financing strategy,
- undertaking initial and then periodic general reviews of current risk management procedures, staff resources and loss financing within the organization,
- identification of those matters requiring priority attention including risk management lines of communication,
- the provision of advice and assistance to line managers on how to systematically and regularly deal with risk identification, quantification, control and prioritisation,
- the ongoing identification, recording, quantification and reporting of the physical risks and loss trends associated with the organisation's activities,
- the ongoing identification and reporting of business, economical, political, litigious, statutory and other risks associated with the countries with which the organisation is associated in its purchasing, production and sales operations,
- the submission of proposals for the optimum allocation of resources to eliminate, reduce or otherwise control the risk of losses,
- co-ordination of a risk financing programme including insurances,
- advice and assistance with contingency plans for tackling major losses,
- the education and training of employees in risk matters,
- the preparation of risk-related reports,
- the engagement of external risk consultancy services where appropriate,
- liaison with authorities concerned with hazards arising from the organization's activities including employee organization representatives"[5].

These are the basic tasks which are usually fulfilled by risk managers in construction and assembly companies worldwide, but the most important one is to provide support in the company's management process.

2. Risk managers in the largest Polish construction and assembly companies – results of the empirical research

The empirical research conducted among the selected group of the largest construction and assembly companies in Poland may lead to the conclusion that practical risk management is usually handled, in a limited scope, by individual executives or company owners themselves. The respective results of the research are presented in Table 2.

	Yes	%	No	%
1. Do you have a person (risk manager) or a special unit in your company to directly (exclusively) deal with risk?	1	4	24	96
2. If yes, how many people and who exactly directly (exclusively) deals with risk management? (job title:)	Contractors' replies: Risk Management Officer; Risk Management Coordinators, site/department managers defined as risk owners			
3. If no, is there anybody in your company who indirectly deals with this problem?				
	21	84	4	16
4. If yes, who is it? (job title:)	Contractors' replies:			

	Controlling specialist,
	Management Board,
	•
	Chief Contracting Officer and project
	leaders/ division managers,
	Chief production planning specialist,
	Investment development specialist,
	Executives,
	Chief Contracting Officer,
	Financial Controller,
	Management Board, Legal
	Department, Contract Managers,
	Chief Production Officer,
	Contract Managers,
	President of Management Board,
	Chief Financial Officer,
	Chief Executive Officer,
	Management Board,
	Chief Financial Officer,
	Investment planning, department
	managers,
	Management Board,
	Chief Financial Officer, management
	representative for quality,
	Chief Executive Officer,
	Chief Financial Officer
Table 2. European and the for mick was a convert in summer of a	construction and assembly companies

Table 2: Employees responsible for risk management in surveyed construction and assembly companies

Source: prepared by the author on the basis of the replies given.

Table 2 presents the staff members who, directly or indirectly, manage risk in the surveyed companies. In case of twenty-four contractors, i.e. 96% of the respondents, the question: Do you have a person (risk manager) or a special unit in your company to directly (exclusively) deal with risk? is answered negatively. Only one contractor has a staff member who deals directly with this problem. This may mean that Polish contractors do not attach such importance to formal risk management. It can also be concluded that many contractors seem to underestimate the problem of risk, assuming that financial consequences of risks (losses) are built into a company's day-to-day operations or that the consequences of risk in the company will be financed by insurers. Only one contractor created a position of Risk Management Officer. The Risk Management Officer cooperates with heads of specific sites and departments, who are also, to a certain extent, responsible for risk. Furthermore, as many as 84% of the contractors surveyed indicate that in their companies there are staff members who are indirectly responsible for risk. On the other hand, 16% of the respondents do not indicate any such individuals. Therefore, twenty-one contractors employ people who deal with risk to a limited extent only, and in four entities this problem is considered so insignificant that there is nobody in a company to be responsible for risk management. In conclusion, in most cases, the largest contractors in Poland are aware of the problem of risk and in the majority of them, i.e. 84% of the companies surveyed, there are specific individuals whose task is to manage risk indirectly. Table 2 shows the people in a company who deal with risk indirectly. Based on the research findings it may be concluded that the contractors have not worked out any schemes or procedures to clearly identify the people responsible for risk. In general, in the companies surveyed risk is managed by specific board members, (production) contract managers and chief financial officers. There seem to be three main groups of employees who deal with risk in construction and assembly companies in Poland. This is illustrated in Fig. 2.

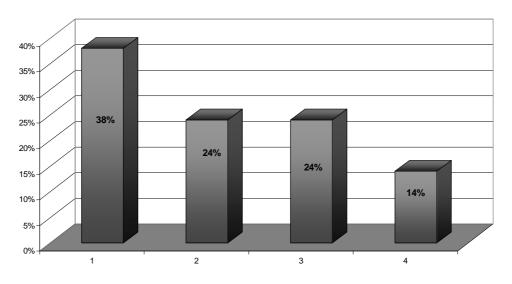


Figure 2: Employees in construction companies who are indirectly responsible for risk

1 – management board (specific members)

2 – people involved in planning of construction and assembly production (e.g. Chief Production Officers)

3 – financial and accounting staff (Chief Financial Officer)

4 – other (e.g. people who draw up contracts, controlling specialists)

Source: prepared by the author on the basis of the replies given.

As can be seen in Fig 2, from among the entities surveyed, in as many as 38% of the contractors, the problem of risk is addressed, first of all, by a company's management board, i.e. its specific members, where and as needed, and then by people responsible for construction and assembly production (24%) and financial and accounting staff (24%). In the remaining part, i.e. 14% of the surveyed companies, risk is dealt with by other professionals, e.g. people who draw up and/or are responsible for contracts. Furthermore, it may be concluded that the most competent people to manage risk are executives. The main reasons behind the lack of attention devoted to formalised and direct risk management, however, as indicated by the contractors surveyed, are as follows [6]:

- four contractors believe that risk mitigation methods which are now in place, e.g. insurance, are sufficient,
- seven contractors believe that companies which run similar operations do not have such people (units) at all,
- four contractors think that there is no sufficiently big risk to justify the employment of a person to deal directly with risk,
- none of the contractors thinks that their companies may afford to suffer some possible losses,
- one contractor believes that the existence of risk cannot be fully identified,
- nine contractors give other answers.

The research findings in this area are shown in Fig. 3.

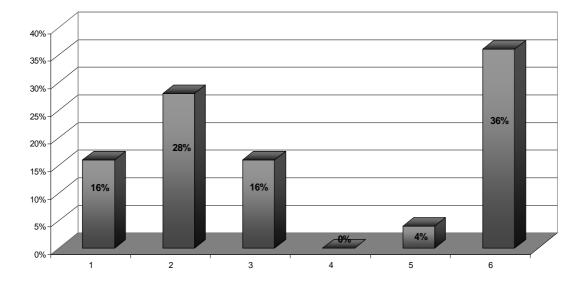


Figure 3: Reasons why construction companies do not manage risk in a formalised way

1 - risk mitigation methods now in place, e.g. insurance, are sufficient

2 – similar profile companies do not have such people

3 - there is no sufficiently big risk to employ an individual (create a unit) to deal with risk directly

4 – a company may afford to suffer possible losses

5-risk cannot be fully identified

6- other reasons

Source: prepared by the author on the basis of the replies given.

As can be seen in Fig. 3, the biggest part, i.e. 36%, of the contractors indicate other reasons why their companies do not manage risk in a formalised way. In the research, the following specific reasons are given by the contractors, in sequence: (...) existing employees perform their tasks in the right way; risk management is integrated into corporate management; risk evaluation procedures are specified in appropriate instructions; these issues have been passed onto the executive staff; employment costs need to be reduced; risk occurs in all areas of the company's activities; contract managers sufficiently limit risk themselves; there is no such need; people responsible for risk management have also other tasks and functions in an organisation". (The replies are transferred directly from the questionnaires, i.e. the original replies are quoted.) The research findings show that 28% of the contractors believe that similar profile companies, i.e. their competitors, do not employ the people to directly deal with risk. Therefore, there is no need to employ such individuals in their own companies. At the same time, no contractor says that they can afford to suffer some possible losses in this respect. According to 16% of the contractors currently used risk mitigation methods are sufficient and the same percentage of the contractors believe that there is not sufficiently big risk to employ an individual or create a special organisational unit in their company to directly deal with risk. Only 4% of the contractors think that risk cannot be fully identified, therefore there is no need to employ anyone to perform such functions in their companies. Summing up, the vast majority of the contractors are aware that risk occurs in a company but, because of various reasons, do not want to or cannot afford to employ anybody to be (directly) responsible for risk, i.e. they do not manage risk in a systemised and formalised way. These research findings correspond to the replies given by the contractors to another question, i.e. Would you be willing to employ an external expert, e.g. risk manager? As many as 92% of the companies surveyed give negative answers to this question and only 8% of the contractors would be willing to employ a risk expert from outside. This result is the best summary of the issues presented above.

Conclusions

The importance of risk in operations of construction and assembly companies and, in particular, its impact on project execution time and project costs, has led to the need to find answers to a number of vital questions, which are referred to and discussed in the paper. In particular, the paper gives an empirical overview of the contractors' attitude to direct and indirect risk management by staff members employed by companies for this specific purpose. The research shows that the largest construction and assembly companies in Poland do not manage risk in any formalised or integrated way. There are no risk managers to directly manage risk in the Polish construction industry, contrary to business practices in numerous countries all over the world, especially the USA. The research findings in this respect indicate that:

- the contractors are aware of the need to manage risk in a formalised and systemised way, but construction and assembly companies have not managed to create special risk management departments yet, i.e. only one contractor has appointed employees (or has created a special risk management department) to directly deal with risk; most of the companies surveyed make risk identification efforts to a limited extent only, and the most popular method to do that is brainstorming (68% of the respondents); the second most popular technique here is an interview with main participants of the investment and construction process;
- so far in construction and assembly companies there has been no integrated risk management system in place; in most cases there are also no appropriate schemes or procedures to manage risk;
- if there are any individuals to deal with risk, to a limited extent, these are executives i.e. most frequently management board members, e.g. chief financial officers;
- contractors are not willing to engage any external risk experts (risk managers), i.e. as many as 92% of the respondents are not willing to do that; while for 28% of the companies surveyed the main reason for not employing such people (not creating such units) to be exclusively responsible for risk is the fact that similar profile companies (competitors) do not employ such people either.

References

- [1] *Practice Standard for Project Risk Management. Global Standard.* 2009. Newtown Square: Project Management Institute Inc., p. 12.
- [2] BOOTHROYD, C., EMMETT, J., 1996. *Risk Management. A Practical Guide for Construction Professionals.* London: Witherby & Co. Ltd., p. 21.
- [3] Zarządzanie zintegrowanym ryzykiem przedsiębiorstwa w Polsce. 2011. Edited by KASIEWICZ, S., Warszawa: Oficyna Ekonomiczna Wolters Kluwer, p. 156
- [4] TWOREK, P., 2010. *Ryzyko wykonawców przedsięwzięć inwestycyjnych*. Katowice: Akademia Ekonomiczna im. K. Adamieckiego w Katowicach, p. 112, 116.

[5] EDWARDS, L., 1995. Practical risk management in the construction industry. London: Thomas Telford Ltd., p. 41.

Ostrava

[6] Based on: MADYDA, A., ZIMA, A., 2000. Stan zarządzania ryzykiem w polskich przedsiębiorstwach budowlanych. In: Strategie zarządzania ryzykiem w przedsiębiorstwie - elementy wiedzy teoretycznej i praktycznej. Edited by BIZON-GÓRECKA, J., Bydgoszcz: Wydawnictwo BGJ-Consulting, p. 162.