

EXPLORING IMPACTS OF ECONOMIC CRISIS ON PROJECT MANAGEMENT IN THE CZECH REPUBLIC

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Abstract

The late-2000s economic crisis with worldwide implications has received a lot of attention mostly from global and macroeconomic point of view. A gap is evident: not as much attention is paid to real consequences and responses on microeconomic level. Strategies, either expansion, stability or retrenchment ones represent complex and multidimensional issues and are therefore executed in organisations via project management.

The paper presents primary results of a current research, covering the periods 2007-mid-2010. The scope relates to a sample of companies operating in the Czech Republic. Quantitative and qualitative data obtained from an expert survey were analyzed to reveal changes in managing projects under impacts of economic crisis on project management. The major contribution of the paper is a delivery of evidence and therefore a better understanding whether and how serious was the impact on project management in a particular country. The findings can contribute both to further research and practical purposes.

Key words: project management, project, economic crisis, survey, Czech Republic

JEL Code: O22, D22, M19

Introduction

“Executive will be facing”, predicted Kerzner in his book on project management (2006, p. 1), “increasingly complex challenges the next decade”. Definitely, we all agreed. “These challenges”, Kerzner continues (2006, p. 1), “will be the result of high escalation factors ... accompanied by a mild recession ...”. These ‘complex challenges’ however perceived from the perspective of last 5 years have gotten a new dimension and understanding.

The globe experienced economic crisis (e.g. Buti & Székely, 2009) which has impacted on worldwide economies (e.g. Čevorová & Drotár & Spálovský & Straňák, 2010)

and on business entities (Kislingerová & Krause, 2010), namely e.g. on their orders, production volume, sales, turnover, profit, employment rate, debts, investment, bank loans, introduction of new products, advertisement. Changes are necessary (Garies & Huemann, 2008). Both operational and strategic management must react under more risky and uncertain situation caused by a crisis (Geraldí & Kutsch & Lee-Kelley, 2008). Link between strategy and project management needs to be kept vital (Meskendahl, 2010). The economic crisis is a typical example of a project – a unique, risky and temporary multi-task for achieving a specific goal.

Besides economic crisis as a natural stage of economic cycle, other types of crisis are apart of the company's life-cycle. We need to say that there is a gap in knowledge and available literature on project management under crisis. One reason is that to manage projects under crisis is not easy and companies try to avoid such potential situations. Another reason is that such huge economic recession as we witness now has not appeared so far in 'the history of project management' (Kerzner, 2006; Hřůzová, 2010b). Last but not least reason is that the recession still is very fresh, more or less unexpected (e.g. Buti & Székely, 2009), all-embracing, more or less unpredictable. Lessons learned from the crisis impact on project management remain to be developed and shared. Nevertheless some usable and new pioneering works on this topic can be found (e.g. Geraldí et al., 2008; Hällgren & Wilson, 2008; Hřůzová, 2010a; Hřůzová, 2010b; and Hällgren, & Wilson, 2011).

We do believe that the research presented in this paper contributes to the current level of knowledge of impacts and in treatment of crises in projects.

1 Research question

A gap in knowledge about impacts of economic crisis exists especially on a micro level in companies. As explained earlier, we consider project management as a tool for accomplishing managerial decision making about companies' strategies and needed changes. The key question (descriptive one) is therefore: "What is the impact of economic crisis on project management in our country during monitored period?" We also seek answer one analytical question: "What were responses to the economic crisis from project management side?"

2 Research methodology

2.1 Questionnaire design and layout

In order to answer the questions, we used (on-line) questionnaire to collect empirical data.

The survey questionnaire tested on a small pilot sample was total of 19 questions contained in two sections.

Section One was designed for recognizing the situation in project management during the economic crisis in years from 2007 to 2009 and by mid-2010 in sample organizations in the Czech Republic. This part had ten main questions comprising eight closed-ended questions and two open-ended questions. Five of closed-ended questions were multiple-choice, one of which was divided into four sub-questions. Three multiple-choice questions used also an option for “other” to be freely filled in. Two closed-ended questions used four-point ranking-scale with categories of: None or negligible, Small, Noticeable, and Huge. One closed-ended question worked with five-point ranking-scale in categories of: Not at all, Seldom, Occasionally, Often or very often, and Always.

Section Two was created for understanding the demographic profile of the respondents. It consisted of five closed questions and the final voluntary open-ended question.

The questionnaire started with easier questions asking about data that could be obtained from corporate database. Afterwards, the reflective questions followed.

The respondents marked the answers very easily, either by ticking the box or typing their responses into the answering box of the questionnaire. The written version of the questionnaire was transferred to the web site for open access by the respondents and random participants respectively.

Alongside to the questionnaire design, the cover letter was formulated. It provided with information and explanation. Firstly, the respondents were assured that they both as individuals and as companies’ representatives are kept anonymously and that their data and responses are treated confidentially. They were supplied with details on the purpose of the whole research and were explained how their data and responses are used. To encourage the response rate, they were offered to ask for the result of research. At the end, contact name and address were given. Shorter version of the cover letter was sent to experts’ e-mail addresses.

2.2 Sample of respondents

From the beginning we wanted to get the most valuable results and address the right people. Our primary intention for selection of respondents was their professionalism in project management. We decided for this reason to use purposive, expert sampling.

We addressed 150 practitioners with experience in project management to participate in research. Participation was entirely voluntary. There were no financial or other incentives for participants.

2.3 Questionnaire distribution

The questionnaire itself was not distributed but it was accessible by respondents on the web in time when they received the invitation to participate in research. Because we used the expert sampling method, we could distribute a questionnaire link directly on e-mail addresses of the experts.

2.4 Data collection

Data were collected in a standardized form by on-line survey questionnaire. They were collected anonymously via the web link and continuously after completion of each survey. To increase sample size and its response rate, we collected data in two rounds so far. One round was taking place from September until October 2010 (Hrůzová, 2010) and the second one from March until May 2011.

We collected 48 usable questionnaire responses. The response rate to the survey was 32% which is slightly higher due to the type of sample used. We did not receive any request from respondents to clarify any questions during data collection.

3 Data analysis

3.1 Demographic characteristics of respondents

The demographic profile of a total of 49 participating respondents represented well balanced, even if random, structure of companies according to their size. Out of 21% respondents equally reported that their company is small business¹, medium-sized enterprise and a large company (totally 73%), remaining 37% counts to multinational organizations.

In terms of length of companies' exposure in the market, a large majority of organization (81%) existed more than 10 years, 10% less than 5 years, and 8% of 5-10 years.

By legal form, the whole one half of the organizations (53%) was represented by limited company (Ltd.), then 45% by joint-stock company, 0% by cooperative or other type of association, university, municipality or non-governmental organization, and left 2% by another type of business.

¹ Small business with fewer than 50 employees, medium-sized enterprises with 50-250 employees, large companies with more than 250 employees.

Majority ownership was represented by a domestic subject in 33%, by a foreign owner in 10%, and joint ownership of business by domestic and foreign partner in 56%.

The positions of surveyed experts related either directly to project management as in case of project managers (29%), project team members (6%), managers and members of project management office (17%), and project board members and other top managers (25%) or indirectly in case of functional managers (13%) and other job positions (10%).

3.2 Empirical results – research question one

We start with the first important result conveying that, except one responding company, the projects were used at least occasionally. The data showed that respondents' companies commonly used projects and basically represented (in 92%, namely 53% often or very often and 39% always) a project-driven organization.

The key question in our survey which was concentrated on the impact of economic crisis during monitoring period therefore looked for answers on when, how much and which types and character of projects were allowed to carry out.

According to the scale of the projects, medium projects were the most frequent ones during the whole monitoring period; large projects followed them. The changes were not dramatic at all, just a small decline was observed in 2008 while small rise (less than 5%) of the large projects continued. Concerning the project contracting authority, the growing tendency to concentrate on internal projects was evident from 2008. The economic crisis affected the projects at any degree of their completion; however the new, initiated projects most (in 60%). Tab. 1 shows the quantitative data and basic descriptive statistics.

Tab. 1: The number of projects solved in the organizations

Period \ Value	2007	2008	2009	mid-2010
Sum	3425	3493	3181	2053
Mean	85.6	87.3	86.0	57.0
Median	12	15	18	10
Mode	5	8	10	8

Source: data and tablet by the author, 2011

Looking at absolute numbers it must be taken into account that data for 2010 are given just for the first half of the year.

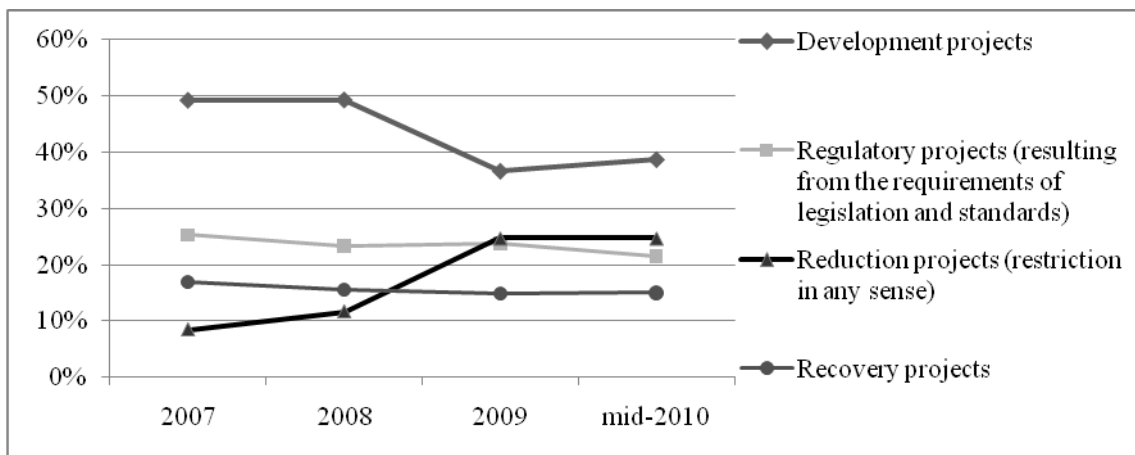
The mean value which is influenced by the sum here is distorted of outlier data (the variation range equals to 1280 in 2008 and to 579 in mid-2010).

In terms of median, the middle value of projects ranges from 10 to 18 with the lowest number in mid-2010.

We see from mode value that the most commonly observed number of projects performed by a company ranged from 5 to 10 during the monitoring period with a peak in 2009 and a bottom surprisingly in 2007.

Fig. 1 - 2 show further details about carried projects from different points of view. They provide us with relative values.

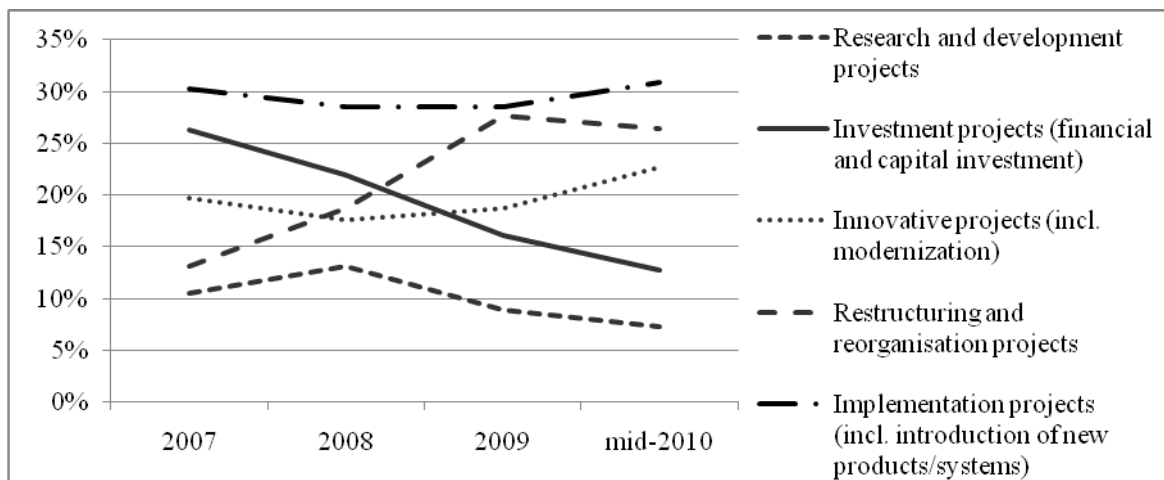
Fig. 1: Types and character of projects according to the focus/target of the project



Source: data and graph by the author, 2011

While the regulatory projects and recovery projects - with no surprise - had tendency to stagnate, the reduction projects jumped up by 2.5 times on a year-on-year basis in 2009.

Fig. 2: Types and character of projects according to the purpose of the project

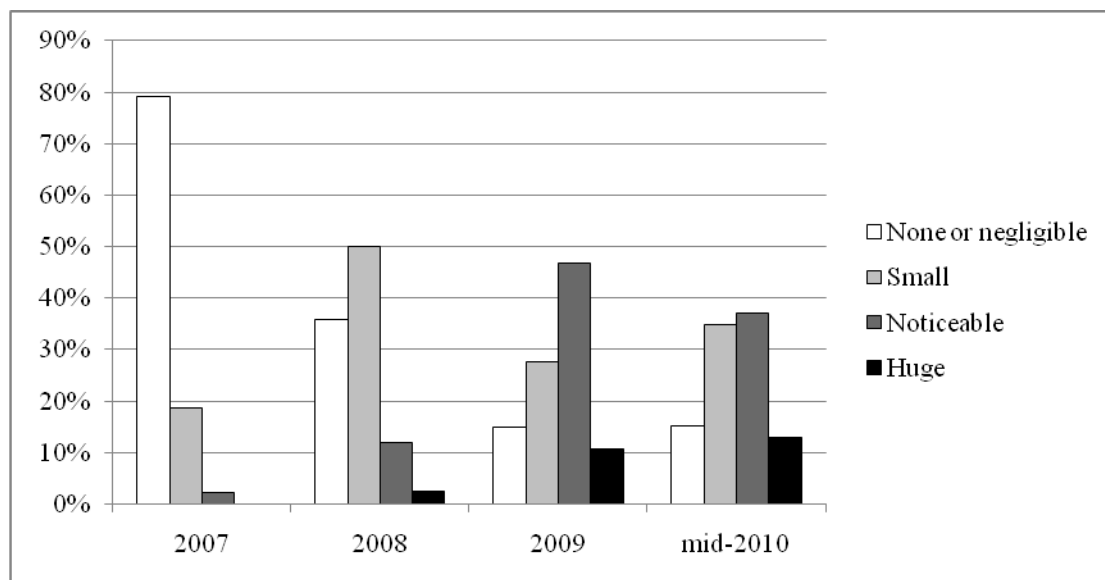


Source: data and graph by the author, 2011

Investment projects were markedly reducing during the monitored period while research and development projects increased significantly until 2009 with a moderate decline in mid-2010.

The particular impact of the economic crisis on projects in terms of their number and range is given on the Fig. 3.

Fig. 3: The impact of the economic crisis on the quantity and scale of the projects



Source: data and graph by the author, 2011

We see from the Fig. 3 for instance that the impact scale of the category Huge was not significant (maximum 13% in mid-2010) but had an increasing trend.

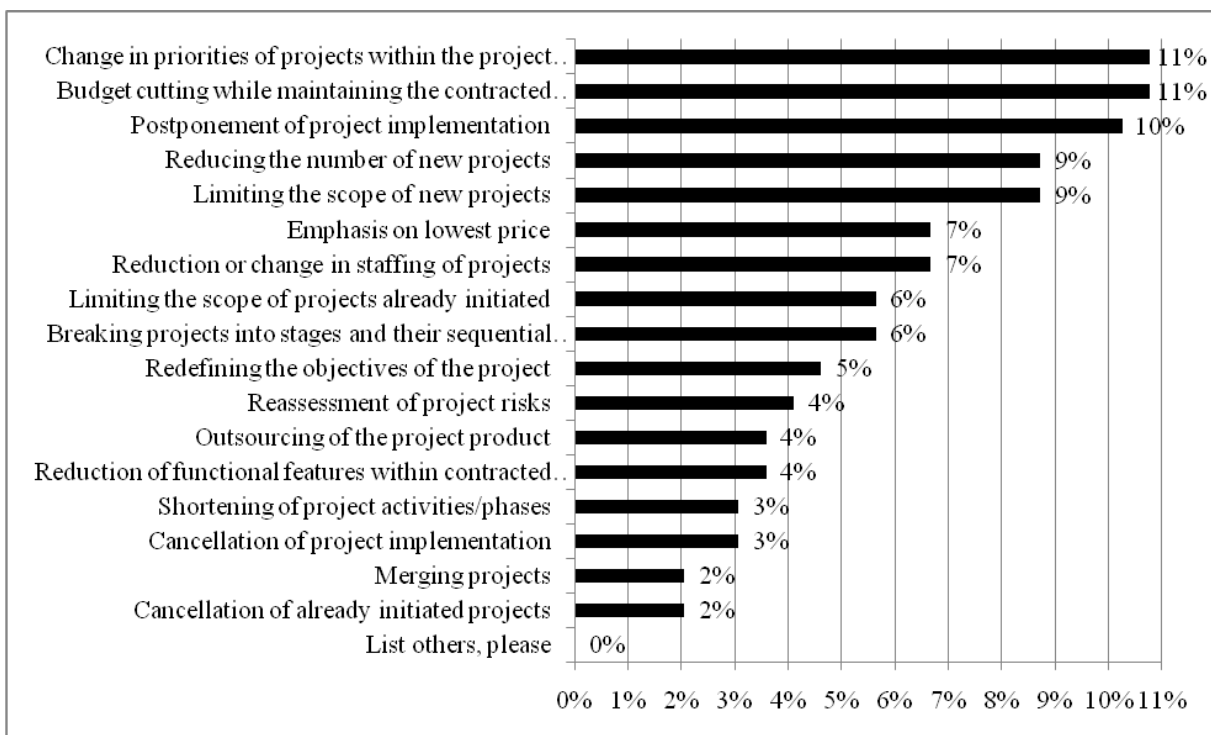
If we could compare results according to quantity of projects with success of projects, impact on the later was smaller especially in mid-2010. We explain this by strategies which companies used in treating the crisis.

3.3 Empirical results – research question two

Fig. 4 shows how the second question is answered – “What were responses to the economic crisis from project management side?”

This multiple-choice question offered 16 possibilities plus one “other”. Data plotted on the figure are related directly to and only to project management issues. To execute these solutions may not be the responsibility only of a single team member or particular project manager but it might be the authority of project board or project stakeholders.

Fig. 4: Response if the economic crisis affected the projects



Source: data and graph by the author, 2011

The “winning” response is in responsibility of the project board or the project management office; it is a good message. A cut the project budget is not a surprise because it is in practice often a “standard” easily-available method. Question remains if good one. All

these responses despite of their “importance” given by their order are related to project triple-constraint imperative: scope, time, and cost. Not only the orientation and ease of use but especially efficiency of responses implemented should be considered. They might differ company by company, project by project.

Conclusion

This research paper opened as we believe some new important issues (interesting also for their topicality) not solved enough yet. We managed to get empirical data and to answer the research questions. Depending upon sampling method used we obviously got the results which are most probably better than in the whole population due to orientation on the experts in project management. Sample size and concentration on just one country are limitations which to be considered in next research activities.

Summary of our key findings are as follows:

1. Managing business tasks by projects is in the surveyed country common (92% of respondents used projects often up to always);
2. We have recognized that the projects did not fully disappear during the economic crisis period – the mode value of projects ranged with minimum of 5 projects per a company in the period 2007-mid 2010;
3. We also recognized that companies started to differentiate and prioritize projects in order to be more efficient and to survive the crisis – reduction of small projects, new projects and external projects are the good examples of this attitude;
4. Up to 82% of respondents indicated that they were not affected significantly by the economic crisis; this however can not be generalized;
5. Conversely, if companies were affected, their most frequent response was a change in project priorities and project budget cuts;
6. The biggest positive surprise of the research outcomes is the recognition that research and development projects had absolutely the greatest frequency among all projects in monitoring period even though they declined in 2009.
7. Based on the data it seems that the culmination year of crisis impact on project management in the country within the period 2007-mid 2010 is 2009. The future nevertheless confirms or disproves this result.

We do believe that new information and results of this research will make contribution to the existing both academic and practical knowledge.

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