

Department of Business Economics

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Centralisation and Economic Crisis

Toward the Management Accelerator Effect

PhD dissertation thesis summary

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Content of the main chapters

The following part summarizes the main chapters of the dissertation which are three different papers about centralisation.

Both summaries describe the background of the research, the main questions and motivations, the research methods, the results and conclusions. Every paper summary ends with suggestions for managers and fellow researchers. The description of these chapters are crucial for the final section because they provide theoretical background for the management accelerator effect.

1. Comparison of Calculation and Corporate Planning Debate about Centralisation

The first chapter is a theoretical paper about the historical background of centralisation theory describing the similarities between two debates about central planning. The first one was Hayek and Langes's calculation debate happened between 1930s and 1950s and the second was the corporate planning debate of the 1990s between Ansoff and Mintzberg. The paper shows the similarities of the debates and analyses the general nature of planning which provides theoretical basis for the next two chapters.

Research background. This research was conducted between 2012 and 2014. The main inspiration for the research came from Kornai's system theory works (1990; 2011; 2012; 2013) which

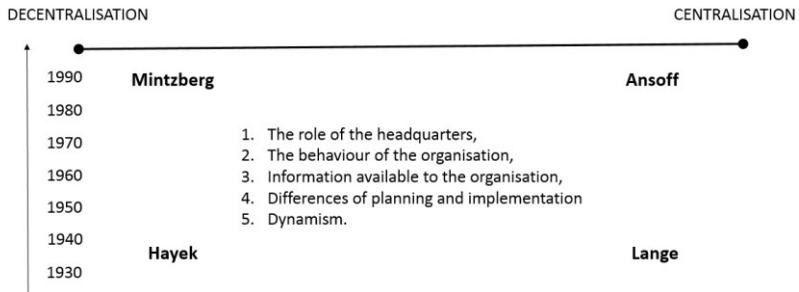
analyse the nature of socialist and capitalist economies. Based on my previous management science background I found some similar phenomena between corporate and economic planning. In 2012 I had the opportunity to visit professor Kornai's research seminar where I could elaborate my research. That time I started to examine the calculation debate in-depth.

During 2013 I could also visit professor Balaton's strategic management seminar. Once during an office hour he mentioned if I was interested in planning I should have read the debate of Ansoff (1991; 1994) and Mintzberg (1990; 1991) as well. After understanding the most important papers of the topic I realised two things. (1) The two debates have a lot of similarities. Albeit they happened in different times and contexts but both of them are about the nature of planning. (2) These similarities are not widely researched. I found very few papers analysing the relationship of economic and corporate-level planning.

Moreover I had to realise that economics and management sciences develop the field of planning in separate ways. In 2015 I had the opportunity to take part in a Strategic Management Society conference about headquarter-business unit relationships where very few planning or centralisation-related papers

examined economic theories. Therefore I started to look for a general nature of planning based on the two debates mentioned above.

In 2015 this paper was published by the Hungarian Economic Review.



1. Figure Content of the first chapter.

Source: Author's compilation.

Question and method. The purpose of the first chapter is to answer the following question: what the main arguments of centralisation can be identified. The method of the paper is based on content analysis of the most significant articles of the field. During the examination of the sources I noted the main breakpoints and statements. Then I looked for patterns and similarities in both the calculation and the corporate planning

debate. Of the dozens of characteristics, five criteria were the most frequently recurring elements in both debates which will be elaborated in the following chapter.

Results. The five issues are the following: the role of the headquarters; the behaviour of the organisation; information available to the organisation; differences of planning and implementation; and dynamism (Figure 1). Both debates pay a lot of attention on these topics which can be used to identify the most important centralisation-related arguments listed below (Table 2).

Conclusions. This research has several implications which are used in the following chapters. First, planning has general nature. On the one hand, it is worth applying or at least examining each other's planning models of economics and management science. On the other hand, one can identify political and economic arguments in such debates that are independent of the specific historical era or business entity concerned. Two of the most important statements are the following: (1) centralisation is good at global efficiency because it can make company-wide optimisations. (2) Decentralisation fosters innovation by local adaptation because it allows experimentations on the lower levels of the organisation as well.

	Arguments for central planning	Arguments against central planning
Role of the centre	Central planning could ensure optimisation for the whole organisation.	The central body cannot redistribute the resources properly.
Behaviour of the organisation	The plans of the centre are designed according to the interests of the whole organisation, so it is in the interest of its members to cooperate.	Unless the members of the organisation are directly encouraged to cooperate, the central plans will not be useful for the organisation.
Information available to the organisation	The centre is capable of (quasi) optimal resource allocation; that's where every piece of information should be directed.	The members of the organisation will always possess more topical local information that cannot be transferred to the centre adequately.
Planning and implementation	Both planning and control are facilitated by the strict separation of the planning and the implementation stages.	The implementation of plans drawn up earlier may not be adequate for the organisation at the given moment of time.
Dynamism	Significant change can only be realised by central planning.	Adaptation to significant change can only be ensured through the trials and errors of the members of the organisation.

1. Table Arguments for and against central planning.

Source: Author's compilation.

Second, centralisation and decentralisation are the two ends of the same continuum. The “illusion of extremities” part of the paper describes that neither end of the scale can provide successful long-

term solution for the organisations. Too much decentralisation can result in uncoordinated activities and thereby in failure of organisational operations. On the other hand too much centralisation can cause too rigid structures and too much overhead costs. Instead of choosing only one side, companies are moving on the continuum perpetually to find the right balance between global efficiency and local adaptation.

Suggestions for researchers. It is always hard to identify the borders of a research but in the case of a comparison of two or more debates it is a crucial question. It is easy to add only one more article to the analysis but in the long run it can significantly deform the original research focus. To avoid this threat researchers must clearly identify the definitions beforehand (e.g. planning or centralisation). It helps keep research in order.

Suggestions for managers. Considering centralisation there is always a trade-off between global efficiency and local adaptation (or efficiency and innovation). It is not easy to find the right balance or to choose the adequate structure. But the main arguments of centralisation and decentralisation are always the same. The next chapter helps better understand how managers change concentration of authority in the time of crisis.

Further researches. This paper examined *where* the decisions should be made within the organisation (in the central headquarters or in the subunits). I think one of the most important theoretical topics of this field is the question of *how* decisions should be made (in authoritarian or democratic way). My master thesis examined democratic leadership therefore I could see how developed the management science is in this field. I think it would be interesting to compare a management science and a political science debate about authoritarian and democratic leadership. That can develop an alternative theoretical background for centralisation as well.

2. Centralisation of strategic decisions during the Great Recession

The second chapter is an empirical paper describing how economic crisis influences concentration of authority. Based on the EFIGE dataset this chapter can analyse one of the largest samples (more than 14,000 companies) of centralisation researches. The most important results of the multinomial logistic regression model are the following: (1) crisis increases the probability of centralisation; (2) centralisation is associated with other short-term policies; and (3) those companies which centralised during the crises realised slower growth in the next 3

years. These findings are the empirical background of the centralisation cycle conjecture.

Research background. Crisis and centralisation relationship was the original research topic of my PhD thesis which idea came from my master thesis. During analysing democratic leadership I conducted several interviews with organisational development consultants. The crisis-centralisation inspiration was based on two different interviews. One interviewee mentioned that in the time of crisis democratic forms decrease in populace. And few days later another consultant stated centralisation is less good at innovation. Based on these sources I formulated a research plan which was accepted to the PhD program in 2012.

I am sure this paper (or probably the whole thesis) could not have been completed if I had not met professor Muraközy in 2014. That time I asked him to give me feedback on my research when he mentioned he had a dataset with information about centralisation and crisis of thousands of companies from 2009. Thankfully I could join professor Muraközy's research group at Institute of Economics of the Hungarian Academy of Sciences where I could finish this study. During my research between 2014 and 2015 I

could examine centralisation from both economics and management science perspectives.

Different versions of this paper were presented in several conferences such as symposiums of Association for International Business (2014), Hungarian Society of Economists (2014) and Strategic Management Society (2015). Based on several feedbacks, in 2016 with professor Muraközy, we rewrote the paper of which first draft is published as a working paper (Bakonyi and Muraközy, 2016). The final version is under review at an international journal.

Question and method. The main question of the second chapter is that how crisis influences concentration of authority. There are several papers which examined centralisation in the time of depression. This paper has three main contributions to the literature (1) it analyses one of the largest sample of the field; (2) it examines the relation of centralisation to other crisis policies as well; and (3) it investigates the mid-term performance differences on the same sample.

The European Firms in Global Economy: international polices for external competitiveness (EFIGE) project surveyed 14,759 companies about various topics between 2009 and 2010. It is a

representative sample of European industrial (10+ employees) firms from seven countries: Austria (443), France (2,973), Germany (2,935), Hungary (488), Italy (3,021), Spain (2,832), and the United Kingdom (2,067) (Altomonte and Aquilante, 2012, p. 6.).

Examining the main question a multinomial logistic regression model was applied where the dependent variable was the change in authority concentration. It could be -1 if the company became more decentralised in 2009; +1 if it became more centralised; or 0 if there was no change at all.

Crisis, as the main dependent variable, was measured by the change of turnover from 2008 to 2009 (%). It was supported by various control variables such as country, size, and industry. To test the robustness of the results additional control variables were added to the original model as well.

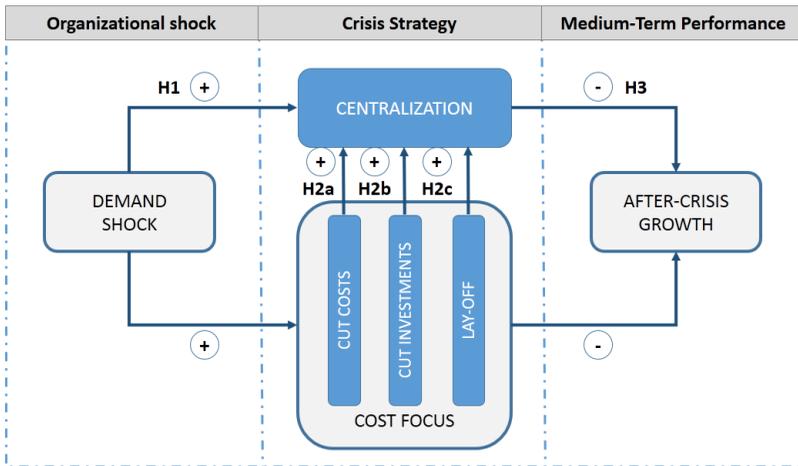
In terms of measuring short-term strategic focus, we use a number of variables. The first of these measures was whether the firm considers cost-cutting as key to future success. This is measured by the answer to the following question: “With respect to your business, indicate the main competitive factors which will determine the success of your firm in the next years”. Managers

answered to the question spontaneously, and the dummy is 1 if they mentioned lowering production cost as such a factor. Change in investment is a dummy coming from a similar question: “During 2009 has your firm reduced its planned investments in machinery, equipment or ICT?”. Finally, we also include a variable measuring whether the firm laid off any employees.

We have complemented these survey data in two respects. First, we were able to collect balance sheet and income statement data for 2009 and 2012 from the AMADEUS database for a large subset (nearly 8,000 firms) of the dataset which enables us to study the post-crisis performance of these firms. Second, during 2014 and 2015 we have made follow-up interviews with the top managers of 7 Hungarian and 6 UK firms to understand better their experience and help us to formulate our hypotheses. The chapter will use a few quotes from these interviews when discussing our hypotheses. Please note, in this paper the interviews are only illustrations for the theory-building. The methodology will be described in depth in the third chapter of the dissertation.

Results. The main findings of the paper were the following: (1) crisis increases the probability of centralisation; (2) centralisation

is a complementary tactic to other crisis policies; and (3) centralisers realise smaller mid-term revenue growth. Interestingly there was no industry effect while most countries have different centralisation habits (Figure 2).



2. Figure Content of the second chapter.
Source: Author’s compilation.

Conclusions. Albeit centralisation decreases three-year growth, companies implement such policy. This reaction emphasises the importance of behavioural approach to centralisation. There are several papers in the literature which state, during crisis decentralisation is the optimal choice, but still companies prefer

centralisation. The purpose of the third chapter is to understand this behaviour.

Second, if crisis fosters centralisation, recovery may do the opposite. This hypothesis leads us to centralisation cycle conjecture describing that concentration of authority changes according to economic cycles. This concept will be the basis for the third chapter and the management accelerator effect.

Suggestions for researchers. Certainly definitions of centralisation can vary among papers. But even companies can define it in different ways which can hamper the clear understanding of the results. This paper focused on centralisation in strategic decision-making.

Suggestions for managers. In the short run centralisation can be very useful for companies to support cost-cutting and short-term actions. But in the long run it hampers firm growth, thus firms should reconsider their strategic decision-making systems regularly.

Further researches. This chapter was a cross-sectional analysis but a longitudinal one could better describe the centralisation cycles.

Because of the lack of time-series data, the cycles remain only a conjecture.

3. Why do firms centralise during the crisis even if it is not optimal?

This qualitative chapter shows that companies centralise because (1) managers think it is more effective; (2) they expect it makes communication easier; and (3) they lose their confidence in the middle managers during crisis. The interviews with British and Hungarian senior managers support the hypothesis of centralisation cycles viz. there may be a link between decentralisation and prosperity. Based on the empirical results a theoretical model is formulated which describes why companies maintain centralisation longer than it is optimal. Furthermore it provides a concept describing how adequate adaptation to economic cycles can result in competitive advantage.

Research background. The third chapter starts where the second one ended, namely after the econometric description of crisis-centralisation relationship it focuses on the root-causes of authority concentration during depression.

The methodological background of the chapter was mostly inspired by professor Bokor's qualitative methods PhD course

which I could visit in 2012. In 2013 a preliminary research was conducted based on some unofficial meetings with company managers and some interviews in Hungary and in India where I spent three months as a business intern of Tata Consultancy Services. The information and interview experiences acquired during this stage became extremely important when I formulated the final research plan.

The actual research was conducted between 2014 and 2015. After a long period of interview making, the empirical data was analysed and structured. The current version of the paper was finished in 2016.

The previous versions of this paper were presented in the following forums: Conference of Hungarian Society of Economists (2015); Strategic Management Society Conference (2016); and Budapest Management Review (2016). The final version is under review at an international journal.

Question and method. The main contribution of this paper to the literature is the qualitative analysis of centralisation decisions. As it was discussed before the second chapter showed that crisis fosters centralisation. But based on a longitudinal empirical analysis Aghion and Bloom (2014) state decentralisation is more

beneficial during the crisis because it increases total factor productivity and growth. Therefore the main question of this chapter is that if decentralisation results in better performance why companies still centralise in the time of depression.

This research is an interview-based grounded analysis. The sample was based on the dataset of the EFIGE described in-depth in the previous chapter. Because of language barriers only English and Hungarian companies were analysed this time. To understand the centralisation decisions I tried to find those companies which (1) faced more than 20% turnover decrease in 2009; (2) centralised or decentralised their strategic decision making in 2009; (3) still operate (in 2014 or 2015); and (4) have at least one senior executive who was the manager of the company in 2009. To meet these selection criteria I searched the EFIGE dataset and the internet.

As a result 6 Hungarian and 6 English interviews were conducted in 2014 and 2015. Therefore with the one preliminary research interview from 2013 I had a sample of 13 companies. All of the (approximately 45-90 minute-long) interviews were recorded, typed word-by-word and after that sent back to the interviewees

for possible edition or comments. Only the final, reviewed versions were used for the analysis.

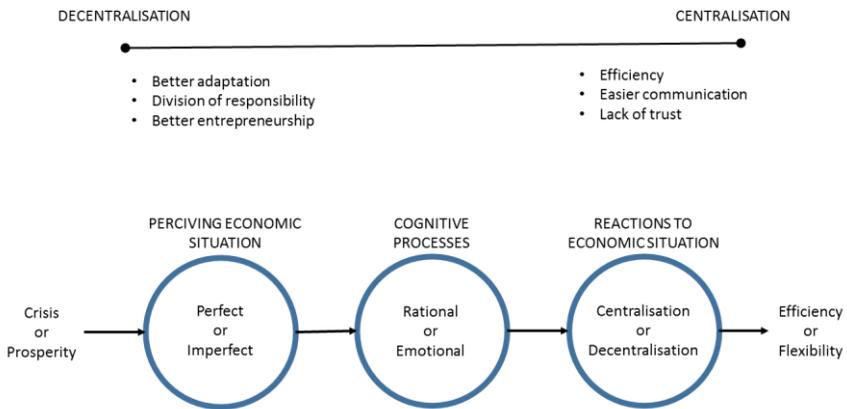
At this point I must mention that all of my interviewees were very helpful and kind, therefore I would like to thank them. Unfortunately because of confidentiality agreements their names must remain hidden.

Results. Before examining the reasons of centralisation or decentralisation the chapter provides a rather long description about the process how companies react to crisis. Later it becomes very important because it will be the theoretical background for the model of centralisation cycles.

Based on the interviews centralisation is a crisis tactic. It can strengthen efficiency because it decreases the time of decision-making and allows firms to have a company-wide focus during considering crisis tactics. Furthermore even lack of trust can foster centralisation. Interestingly very few disadvantages of centralisation emerged during the interviews. Moreover nobody mentioned that centralisation may hamper innovation.

While crisis and centralisation relationship was rather strong and clear during the interviews I hardly find evidences for a link

between depression and decentralisation. Companies in the sample decentralised because they wanted to involve new knowledge or information to the top decision units. But most of these decentralisation programs started before the crisis and they were related to previous growth or diversification rather than the depression (Figure 3).



3. Figure Content of the third chapter.

Source: Author's compilation.

Conclusions. The qualitative study supported the centralisation cycle conjecture viz. in the time of crisis companies centralise while during prosperity they do the opposite. But based on the interviews this adaptation to the economic cycles is not perfect

namely, some companies maintain centralisation even in prosperity. The final part of the paper formulates a theoretical model describing why companies maintain centralisation. The two main reasons are (1) the imperfect perceiving of economic cycles; and (2) the love of power.

Thereby we can state some companies are better at adaptation to economic cycles than others which can provide competitive advantage. Those companies which can centralise faster in the time of crisis can gain more efficiency than their competitors. And if the recovery starts those firms which decentralise more quickly can become more flexible than the rivals. This is the adaptation advantage.

Suggestions for researchers. First, very few interviewees remembered centralisation immediately. They either forgot it or did not use the word of centralisation for their action. Therefore I decided to mention their survey answers from EFIGE database which helped them recall the happenings.

Second, interestingly some kind of positive nostalgia emerged during recalling downturn. This “veteran” or “survival” emotion can influence their memories about the time of crisis. This phenomenon can be a very interesting research topic as well.

Suggestions for managers. First, centralisation has downsides therefore if it is maintained in a long run it can decrease company profitability. E.g. very few interviewees mentioned that centralisation can hamper innovation. Second, adequate reaction to economic cycles can provide competitive advantage. (1) Insightful environment perceiving mechanisms (e.g. controlling systems, relationship with stakeholders) and (2) thoughtful change management skills (e.g. small resistance to change or lack of power hunger) can lead to adaptive advantage.

Further research. In addition to “crisis nostalgia” phenomenon it would be interesting to conduct a longitudinal case study analysis about economic cycles and adaptive advantage. Furthermore this research should be continued on an Italian sample because according to previous results Italian companies are more open to centralise than Hungarian and English ones.

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