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THE IMPACT OF THE STRENGTHENING CAPITAL REGULATION ON THE HUNGARIAN BANKING SYSTEM

Doctoral (Phd) Dissertation Thesis

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Content and Antecedents of the Research

The research, after studying the causes and extension of the 2008 economic world crisis, aimed to prove that the reasons of this crisis were different from the previous ones, responses and the method of managing the crisis were new and different from the others, and it also analysed the measures focusing on the capital adequacy of the credit banks, based on the EU regulations. The research focused on the changes in the solvency margin and capital adequacy ratio and their accordance with legal regulations. The author also extended her research to the operation and growth of domestic credit banks in relation with the increasingly severe capital adequacy and their correspondence with the regulations. Within the research, following the crisis, the sum-total and loans outstanding of the Hungarian credit bank sector were compared to the base year (the year of the crisis outbreak) as well as changes in the balance sheet total of the credit banks were detected and analysed.

As for the antecedents of the research, several years of research and publications on the topic by the author belong here. The author of this thesis has worked in the Hungarian financial sector for more than two decades, and has watched and analysed with interest the internal mechanisms and sectorial characteristics of the Hungarian credit bank system during her academic years. The research field of the author focused on the consequences and handling of the 2008 economic crisis, as well as the effects of the introduced regulations on the capital adequacy and operation of the Hungarian credit banks. During her research, the author participated and lectured at conferences, and published both in Hungarian and in English languages.

Goals Set, Hypotheses and research methodology

The aim of the research was to identify the unique characteristics of the reason of 2008 economic world crisis as well as to prove handle its divergence from the previous crises. Further goals of the research were to analyse the regulations introduced to mitigate the consequences of the crisis, including their effects on the capital structure, operation and growth of the Hungarian credit banks.

The research goals, hypotheses set and the list of the applied databases and research methods can be found in the following chart:

GOALS	HYPOTHESES	DATABASE	METHOD OF ANALYSIS
Causes leading to the 2008 world economic crisis, analysing the outbreak and defining its fresh characteristics.	H1: The reasons of 2008 economic world crisis were original of its type, all previous financial and/or economic global crises had different causes and courses from it, and the handle of this crises was different from previous ones	Hungarian and international literature and publications related to the topic.	Theoretical analysis by the applied literature.
The effects of the toughened bank regulations following the 2008 world economic crisis on the operation and capital strength of the Hungarian bank sector	H2: Over ten years after the crisis outbreak, among the large and middle sized Hungarian banks the rate of deposit rose compared to the balance-sheet total; even the absolute deposit amount showed no decrease ceteris paribus, so the negative effects of the crisis cannot be recognized in this field.	Hungarian banks participating in the research, the data extracted from their IFRS consolidated annual reports. Data published on the Hungarian Central Bank's homepage.	Statistical analyses using SPSS (univariate approach, frequency distribution)
	H3: Hungarian banks met the requirements of capitalisation and strengthening appointed by the Basel III regulatory package, by raising their level of solvency; meeting these requirements did not put their crediting activity back.		Statistical analyses
	H4: Meeting the requirements of the Basel III regulatory package, within the solvency margin of the Hungarian banks, the rate of the core capital increased compared to the rate of the ancillary capital, and the rate of the solvency margin shows an increase when looking at the total sector.	Data published on the Hungarian Central Bank's homepage.	Statistical analyses
	H5: If we look at their balance-sheet totals (2008-2019), we can see that large banks show a larger rate of increase compared to the middle and small sized banks. Following the crisis, the large and medium sized banks reached a bigger growth.	Hungarian banks participating in the research, the data extracted from their IFRS consolidated annual reports. Data published on the Hungarian Central Bank's homepage.	Statistical analyses, using SPSS (frequency distribution, bivariant cross chart analysis)

During the research, following the studying and analysis of the Hungarian and the international literature and regulations, relevant data published by the Hungarian Central Bank and the credit banks participating, with the help of the SPSS program were processed, the results of which led the author to the conclusions, to proving or discarding the hypotheses set earlier.

The 2008 economic world crisis severely affected not only the global financial market, but also the individuals beside institutional participants in world economics, and this effect is still in action. Analysing the causes of the crisis, its course and the measures taken as an answer to it, especially their short and long term effects and results are essential in understanding the crisis. The above analysis and research are justified to be able to see the adequacy of decisions aimed to handle the crisis on the one hand; on the other hand, being aware of the antecedents and causes and their research results, our system can be better prepared for handling a similar crisis, and to prevent a similar crisis outbreak in a congenial case.

Research Results

Results of the research carried out by the author are summarized below:

H1: The reasons of 2008 economic world crisis were original of its type, all previous financial and/or economic global crises had different causes and courses from it, and the handle of this crises was different from previous ones

The 2008 crisis followed the "outburst of the real assets bubble", and started from the mortgage market crisis deriving from the recession of the real estate market in United States of America. The causes leading to the crisis outbreak are different from those of the preceding crises and the originally local financial crisis became global. The uniqueness and characteristics of this crisis come from the appearance of a variety of new financial products in relation with real estate loans – these were earlier completely unknown, developed and changed fast and bore a high risk. Exactly because these financial products were unknown and spread fast, the related supervising regulations could not keep pace which resulted in the danger of a potential crisis outbreak. The bonding, rising from the dynamic increase of the mortgage system bore moral risk beside the risk of an inappropriate bank supervision and, as it was later experienced, lead to a crisis of confidence among the participants of the financial market.

The American household sector's over-indebtedness preceding the 2008 crisis outbreak also made this crisis unique of its kind. The level of indebtedness was worsened by its quality, as on the mortgage market most of the debtors were secondary debtors, whose willingness and abilities to redeem were fairly worse compared to primary debtors, and this bore further risks.

The originality of the 2008 crisis is also proved by the fact that it was a financial as well as a liquidity crisis (markets "became dry"), beside a crisis of confidence arouse (market participants' confidence wavered in other participants' creditability), as well as a bank crisis developed, and a number of banks needed recapitalization or went bankrupt. Also, this crisis is revolutionary as it started from not an underdeveloped country or region, but from the highest-developed economy owner, the United States of America.

Because of its diversity and originality, handling the crisis has been revolutionary, too. Governments of the crisis-struck countries intervened at national level with liquidity aiding measures and bank-saving packages. National governments took a sufficient part in handling the crisis, to an extent precedent earlier only during the 1929-1933 world crisis.

The 2008 crisis made the financial markets and their participants notice that bank regulations and bank supervision both showed imperfections and needed transformation. There did not use to be common decisions and steps taken during earlier crises, but in this case, the United States of America and the European Union took new measures and showed directions in accordance with the crisis handling.

H2: Over ten years after the crisis outbreak, among the large and middle sized Hungarian banks the rate of deposit rose compared to the balance-sheet total; even the absolute deposit amount showed no decrease ceteris paribus, so the negative effects of the crisis cannot be recognized in this field.

In the last more than ten years since the outbreak of the 2008 world economic crisis, the rate of deposits showed a sufficient rise among the Hungarian large and middle sized banks, not only in comparison with the balance-sheet total, but also in comparison with the basic year's (2008) data. Depositors who wanted to deposit their money showed a rising confidence, which resulted from the way the crisis was handled.

H3: Hungarian banks met the requirements of capitalisation and strengthening appointed by the Basel III regulatory package, by raising their level of solvency; meeting these requirements did not put their crediting activity back.

All banks under my research managed to reach the minimum 8% level of solvency rate by the time of the examination, what is more, in many cases they even reached a much higher level of solvency rate.

The crediting activity of the banks shows a different tendency from their deposit accepting tendencies. Following the crisis, in most of the banks taking part in the research, the amount of credit showed decrease compared to that before the crisis.

H4: Meeting the requirements of the Basel III regulatory package, within the solvency margin of the Hungarian banks, the rate of the core capital increased compared to the rate of the ancillary capital, and the rate of the solvency margin shows an increase when looking at the total sector.

The solvency margin of the Hungarian credit banks has showed a permanent increase in the examined time since the introduction of Basel III., the capitalisation is becoming stronger and stronger, the bank sector meets the regulatory obligations.

H5: If we look at their balance-sheet totals (2008-2019), we can see that large banks show a larger rate of increase compared to the middle and small sized banks. Following the crisis, the large and medium sized banks reached a bigger growth.

The result of my hypothesis analysis is that – just opposite to what was expected -, it was just the large sized banks who did not show a sufficient increase, as opposed to the small sized banks, most of which appeared among the middle-rate increase in the statistics, still in this category the most characteristic growth was “largely” or “to an extremely large scale”.

What makes this Thesis original and interesting is that following the theoretical examination and prove of the first hypothesis, the further hypotheses do not direct to theoretical questions, rather they are built on the conclusions drawn from the first hypothesis, according to which the 2008 world economic crisis was an original type, requiring new and divergent steps for handling it – thus, the demand for new types of regulations appeared.

Conclusions and proposals

It can be concluded from the research results that the 2008 world economic crisis did not shatter the Hungarian bank system, and it can be mostly explained by the fact that differently from Western-European or American banks, Hungarian banks were not really related to speculative transactions and they were not really exposed to the products of the American mortgage market either. However, Hungarian banks were naturally also affected by several negative side-effects, for example the changing circumstances and conditions, based on which it became more difficult and more expensive to reach resources on the interbank market. According to the research results, it can be stated that the directives set by the European Union to handle the crises proved to be efficient and effective, the Hungarian national legal system implemented them properly and the bank sector met the legal obligations. As a result of the tougher requirements and fulfilling them, the world economic crisis did not shatter the Hungarian bank sector sufficiently and thus, following the crisis, it could continue to grow and become stronger. It is still needed for the bank sector to meet the regulatory requirements related to handling the crisis and to ensure the prudent operation in order to avoid similar crises in the future.

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