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CREDIT CYCLES AND THEIR IMPACT ON SOCIAL WELFARE

- THESIS SUMMARY -

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RESEARCH ISSUES

Over the millenary history of the development of human society, the economies of the world clashed with periods of boom and crisis as a result of action of different endogenous and exogenous factors, which is why the economy evolves in "waves", with ups and downs. In other words, evolution and dynamics of the economy is not linear and uniform, but a *fluctuating* one.

In this paper we are focused not so much on the seasonal or random fluctuations caused by hazard, natural, social, political factors, but especially on those fluctuations on whose path are found elements and features with character of regular repeatability, but without being classified in an exact pattern. We are therefore heading our attention towards the cyclical fluctuations under the form of *business cycles* and *credit cycles*. The business cycles are different from the commercial convulsions happened in the past centuries or from the seasonal fluctuations and other short-term variations types from our age through the fact that are widely propagated throughout the entire economy, with impact on all the economic sectors. However, we must understand that the cyclic evolution is an inherent characteristic of the market economy and it contains of the fluctuations in overall economic activity, occurring recurrently over several months or years. Despite the repetitive nature that is assigned to the business cycle, it has a very low degree of predictability with regard to its frequency and magnitude.

Participation in a high proportion of the credit at financing the economy, its implications over the economic growth and ensuring monetary equilibrium explains the interest of this field literature for delimiting the content of *credit* and, especially, the *credit cycle*. Following the extension of international economic exchanges, economic development programs and technical progress, the credit has begun to play an increasingly important role in international economic relations, especially at the European Union level. Given the fact that the European Union was often described as having a financial system mostly based on banks (or hybrid), understanding of the particularities of credit flows and, especially, the analysis of these interferences with the various phases of the business cycle (either this phase of economic expansion or the crisis one) is essential not only for policymakers, but also for the actors on the market.

Many economic theories put at the basis of credit cycles attach this phenomenon to the business cycles, affecting the global economy. Some economists go further, arguing that the credit cycle is the main factor and the driving force of a business cycle. In this context, it is considered that the spread of credit cycles has direct effects on the business cycle, economic stability and, inherently, on the *social welfare* of the states.

Welfare is seen by most of the people as a state of contentment of the population, due to the quality of life, environmental quality (air, soil, water), the level of crime, the degree on drug abuse, the availability of basic social services and religious and spiritual aspects of the social life.

Fluctuations in the welfare of society are most often associated with cyclical fluctuations in the economy. Growth phases correspond to high levels of well-being, while decreasing phases meet the proportional levels of social welfare.

From the perspective of the main economic thinking, one of the actors involved unselfconsciously in promoting social welfare and propagation of business cycles is the state.

From the position of vehement adherents of economic liberalism, classical school of economics and the Austrian school of economics, blamed and discouraged the state interventionism in the economic activity, considering that the absenteeism of political power in the economy would lead to prosperity and a better life. In their view, government interventions in socio-economic areas unbalance the system, disturbing the harmony established in society. As Adam Smith noted, the best government policy for increasing wealth of a nation is that which governs / intervenes the least.

On the other hand, advocates of socialist thinking claim that only the state helps individuals and groups to achieve satisfactory standards of life and health and personal and social interaction allowing them to develop to their full capacity and in harmony with the needs of their families and their community.

Keynesianism promoters converged also towards the need for state intervention in the economy to achieve economic stability and full use of labor, to establish welfare in society. Keynes sees the state as a direct agent of economic life. State is that actor, which through its interventions, helps overcoming the negative aspects of the capitalist economy. Activist macroeconomic policies (especially fiscal) are crucial to stimulate aggregate demand (replacing the missing private demand in episodes of recession) and removal of the economy from the state of prolonged recession.

Fruit of fundamental debates of the largest schools of economic thinking on the international arena appears welfare state, a concept of government in which the state plays a key role in protecting and promoting economic and social wellbeing of its citizens. It is based on principles of equality, fair distribution of wealth and public accountability for those who cannot rely on minimum provisions for a better life. The welfare state is seen as a response to the socio-economic pressures facing all modern societies due to urbanization, population growth and economic development. The issue of redistribution of wealth is essential for evaluation of social policies of the welfare state. For some, the central objective of the welfare state intervention is to prevent poverty and supporting vulnerable groups, while others argue that social policies should be directed not only to the poor, but to all citizens of the welfare state.

Despite the monopoly of interventionist-type thinking, libertarian approach has not been forgotten. The leading representatives, Austrians scholars argue that the *expansion of credits* and deposits without savings (fiduciary media) as a result of the coefficient of fractional reserve and guided by a central bank, generate a cyclical rise and uncontrolled money supply, with negative direct effect on wellbeing.

MOTIVATION AND THE IMPORTANCE OF RESEARCH

The motivation for choosing this research theme appears precisely from the need to know and better understand how the credit cycle or the expansion of credit affects social welfare of a nation, and to propose appropriate responses to questions showing an increased interest in literature, academic circles and in everyday life. The need to study the impact of the credit on social welfare appears also as a result of a small number of studies that deal with this topic. Therefore, the present study comes to cover this niche research, trying to contribute qualitative and quantitative to this goal.

PURPOSE AND OBJECTIVES OF RESEARCH

The research purpose is to achieve a qualitative as well as quantitative analysis of propagation of credit cycles, their interference with business cycles and the synchronicity of credit cycles and, especially, the impact of credit expansion on social welfare in the context of the financial crisis in the economy, especially in the context of the most recent global financial crisis.

To achieve this goal, we have established a set of benchmarks as the following specific objectives:

1. Description and analysis of business cycles and credit cycles from the perspective of the main schools of economic thinking.

2. Conducting a theoretical analysis of the main models for describing the business cycles and credit cycles.

3. Determination with clarity and using the specialized vocabulary of the theoretical universe regarding social welfare, paying a particular attention to the vision of the most important schools of economic thinking.

4. Identification of the interdependencies / causality between business cycles and credit cycles based on the study of interference between them at the level of European Union states.

5. Study of synchronicity of the credit cycles in Europe and testing the euro area for the status of monetary and social stability area.

6. Determination and quantification of the impact of credit expansion on social welfare on the example of European countries.

STRATEGY AND RESEARCH METHODOLOGY

In the first part of the research it is proposed an inductive, transversal and qualitative strategy. The applied research strategy is an inductive one because it assumes the selection of the specialists' opinion on cycle's theory and social welfare. The strategy is a transversal one because it aims the various positions regarding economical cyclicality, lending cyclicality and their impact. The research involves a qualitative strategy in the first half as it tries an analysis of business cycles, credit cycles and social welfare in terms of major schools of economic thinking. The research will try adopting an objective position regarding the targeted opinions, although this very selection has strong subjective influences.

The research methodology is based on the consensual inductive system (Locke), because it proposes the collection of opinions and judgments of experts in the field, which will lead to a formalization of the problems mentioned.

The research method consists of studying the documents. In the first part of the research that contains the deepening in the specialized literature will be used the disagreements that exist in the literature about the nature and causes of business cycles and credit cycles. On one hand, the Austrian School of Economics headed by Ludwig von Mises, Friedrich A. Hayek and Jesús Huerta de Soto asserts that credit and deposit expansion without the contribution of savings (fiduciary media) as a result of fractional reserve coefficient and directed by a central bank, generates a cyclical rise and uncontrolled money supply, with direct effect on the business cycle and profound impact on financial stability. On the other hand, John Maynard Keynes argues that a fundamental feature of the economic cycle is primarily due to how the marginal efficiency of the capital fluctuates, while Paul Samuelson lets the business cycles on account of the multiplier and accelerator interdependence.

As techniques applied for data collection will be used: average data collection techniques and collection techniques through direct contact and as procedure will be used the selection of the most representative arguments for the proposed objective. The instruments used are: monographs, treaties, journals, specialized articles and other publications.

The second part of the research involves an inductive and quantitative strategy. Inductive strategy derives from exposure of different behavioral examples of European countries in the context of cyclical development in the economy. The quantitative approach assumes the econometric study of interference between credit cycles and business cycles, the synchronicity between credit cycles and, especially, the impact of credit expansion on social welfare in the context of manifestation of some financial crises in the economy, but especially in the context of the most recent global financial crisis.

The research method will be comparative analysis. This will be achieved on a sample of 22 EU countries, including Romania. The technical procedure of the research will be the documentary analysis. The instruments used are articles, the Internet, central banks' official reports, reports of international bodies.

Another technique that will be used consists of completion of a quantitative analysis, and the methods used are: systematization (tabulation and graphical representation), indicators (economic and financial) indices, correlation and regression. Instruments used for this analysis are statistical software Eviews (Econometric Views) and other econometric software.

Econometric analysis that will be carried out in the thesis will consider, as I mentioned earlier, the study of interference between credit cycles and business cycles, the analysis of synchronicity of credit cycles and, in particular, assessing the impact of credit expansion on social welfare in the context of the financial crisis in the economy, especially in the context of the most recent global financial crisis. The methodology used will vary from one study to another, but it is not limited to the auto regression vector model (VAR), cross-correlation matrix, rolling correlations method, multiple linear regression model, etc. The choice of these methodologies is justified by the nature of the investigation set forth above. In studies were used the statistical databases Eurostat, the ECB - Statistical Data Warehouse, Bank of International Settlements, as well as databases of central banks of the member states of the European Union.

RESEARCH STRUCTURE

As regarding the structure of the paper, the thesis is divided into four chapters, wanting to cover as much as possible the problems mentioned above.

In the first chapter, *Comparative analysis of business cycles and credit cycles: synthetical approach from the perspective of the main schools of economic thinking* are fixed elements regarding the structure, functionality and typology of business and credit cycles, but especially the vision of the most important schools of economic thinking on the issue of economic cyclicality.

The second chapter, *Interference between credit cycles and business cycles: empirical study* provides a concluding picture based on an econometric analysis of the interference of the business cycle and credit cycle in 22 advanced and emerging economies from the European Union. This chapter provides the behavior of credit and business cycles and the impact of their interactions. In order to achieve the proposed objectives on one hand, it had been analyzed the short-term dynamics of the relationships between credit expansion and economic growth and, on the other hand, it had been investigated the cyclic components of the two descriptive variables of the targeted phenomena through performing a statistical analysis on the medium-term relationships between them (volatility, amplitude, persistence, correlation, side effects/ contagion).

In this chapter were tested the following hypotheses:

- ✓ Hypothesis 1: *the business cycle is the driving force of the credit cycle;*
- ✓ Hypothesis 2: *the credit cycle is the driving force of the business cycle*;
- ✓ Hypothesis 3: *both the credit cycle and the business cycle have independent trajectories and they do not interfere.*

The third chapter *Synchronicity of the lending cycles at EU level*, tests the euro area for the status of monetary stability and social area. The synchronicity analysis of economic phenomena is a topic of great interest for researchers, and especially for decision makers from the economic and monetary unions. Synchronicity of the economic phenomena is the litmus test of economic and social stability of the member states. Through this chapter it has been proposed the study of synchronicity of the credit cycles for a total of 22 member states of the European

Union, member states and non-members of the euro zone in between the first quarter of 2000 and the second quarter of 2014, to see how much the group of European states is approaching of an optimum currency area and how it is reflected in the economic and social stability of European citizens. In this chapter were tested the following hypotheses:

- ✓ Hypothesis 1 ("endogenous hypothesis"): the economic integration process causes an increase in the credit cycle synchronicity among member states of the European Union;
- ✓ Hypothesis 2 ("specialization hypothesis”): the economic integration process determines the concentration of industrial activities on the regions, transformation of divisionary shocks into specific shocks for each region (regional shocks), which will increase the share of asymmetric shocks and will differentiate the credit cycles among the member states of the European Union;
- ✓ Hypothesis 3 ("small economies hypothesis"): the synchronicity of the credit cycles is larger between smaller economies geographically closed one to another;
- ✓ Hypothesis 4 ("financial crisis hypothesis"): the global financial crisis has had a negative / positive impact over the synchronicity of credit cycles among member states of the European Union;
- ✓ Hypothesis 5 ("cluster hypothesis"): creation of the euro area and the introduction of the single currency led to the creation of clusters of countries that synchronize their credit cycles on a greater extent;
- ✓ Hypothesis 6 ("policy makers hypothesis"): the degree of synchronization of business cycles among a group of countries is influenced by historical, economic, geographical proximity or even cultural affinity of the countries concerned;
- ✓ Hypothesis 7 ("clusters crisis hypothesis"): the global financial crisis led to the creation of clusters of countries that synchronize their credit cycles on a greater extent.

The fourth chapter, *Study of the impact of credit expansion on social welfare* emphasizes literature review and provides a mosaic of social welfare. Also in this context, we have determined what were the effects of accessing the credit on livelihoods/social welfare through an applied econometric study on a 22 European countries. Through this chapter we have tested the hypothesis submitted by Misses and we have analyzed if credit and deposit expansion without savings contribution (through fiduciary media) as a result of fractional reserve coefficient and directed by a central bank, generates a cyclical rise and uncontrolled money supply, with a direct effect on social welfare.

FINAL CONCLUSIONS

The recent financial crisis has shaken the world's major economies, leaving deep scars into the European financial-economic system. The intensity of the crisis, the poor preparation of the states in facing such phenomena, but especially the totally wrong behavior of economic actors questioned the veracity and applicability of interventionist type of economic thinking. In a world still dominated by interventionist approach, reappears in the landscape the libertarian thinking, which tries to give some answers to many questions emerged from the crisis. It is in this context where it appears the necessity of knowing and understanding how the *credit cycle* or *the process of credit expansion* influences *social welfare* of a nation.

The leading representatives of libertarian thinking, Austrian scholars argue that *credit* and deposit *expansion* without their savings (fiduciary media) as a result of fractional reserve coefficient and directed by a central bank, generates a cyclical and uncontrolled money supply rise with negative direct effect on wellbeing. Through this study we tried to test the hypothesis advanced by the Austrian school of economics and see if it can be validated at EU level.

In a first phase of research, which coincides with the first chapter of our study, we have analyzed the economic and lending cyclicality approaches from the perspective of the major schools of economic thinking. This approach allowed us to outline the mosaical cyclical picture and understand how these approaches may alter the propagation of cyclic phenomena. Also in this phase of the research we discussed the structure of the business cycle, arguing for a business cycle into five phases. Although some schools of economic thinking deal boom as a natural phase of expansion and crisis as a terminal phase of economic recession, in this way recognizing 3 or 4 phases of the business cycle, we believe the boom and crisis as distinct phases of the cycle. We believe that both boom and crisis have features which are not found in other stages. Even if the economic boom extends over a period of time less compared to other phases (this may take a few weeks) in this period appear the first negative signs, harbingers of recession, economic policies become restrictive and people start feeling a decrease in the level of social welfare. As regards the crisis, here it takes place the most significant changes that produce flexion of involution of the economy. Therefore, we believe that the economic cycle has the following five stages: *expansion, boom, recession, crisis and resuming the economic activity*.

As the economic cycle and the credit cycle do not propagate independently in the economy, but interact with various economic, social and political phenomena, the second chapter of our research was devoted entirely to the study of interference between economic and credit cycles. Many economic theories at the basis of credit cycles bind this phenomenon on the business cycles affecting the global economy. Some economists go further, arguing that the credit cycle is the main factor and driving force of the business cycle. In this context, we have conducted an econometric study through which, on one hand, we have analyzed the short-term dynamics of the relationships between credit expansion and economic growth and, on the other hand, we have investigated the cyclical components of the two descriptive variables of the concerned phenomena through performing a statistical analysis on medium term relationships between them (volatility, amplitude, persistence, correlation, side effects / contagion).

The results of the analysis of short-term correlation between credit expansion and economic growth were not found uniform for any of the clusters analyzed. The only cluster that tends to include states with a close correlation is cluster B (correlation between 0, 44 and 0, 47), but here we find also an economy that shows a distinct behavior: Greece (correlation of 0, 29). This deviation from the trend cluster can be explained by the impact that had the financial and debt crisis on the Greek economy. An interesting finding is related to the distribution of correlation on countries depending on their membership in the euro area. The states with the strongest degree of correlation, Poland and Hungary are countries outside the Economic and Monetary Union (EMU). Moreover, on the forth place is situated Great Britain, a strong economy outside EMU that records a correlation of 0, 6 (so, from the first four states, three are outside the euro area). The other concerned states which have not yet adopted the euro, the Czech Republic, Lithuania, Bulgaria and Romania, embrace an average correlation of 0,36 to – 0,46. We certainly can support that, in case of the countries situated outside the euro area, the correlation takes values from medium to high, while the single currency states have more modest asset values. We try to relate this distribution to specific monetary policy in the abovementioned states: while monetary policy in EMU states is a goal of the European Central Bank, in the case of outside states, this represents the set of levers available to national banks. If the states with a single currency have also a single monetary policy, the states from outside promote an individual monetary policy, which also influences specific correlation between credit expansion and growth in these countries. Another interesting finding is related to the distribution of the correlation based on the geographical proximity of the states. There are groups of neighbors who have a very close degree of correlation: Ireland and the UK (0,63 / 0,60), Latvia and Estonia (0,59 / 0,59), Spain and Portugal (0,45 / 0,44), Bulgaria and Romania (0,38 / 0,36), Austria and Germany (0,23 / 0,22). Although this doesn't happen with regularity (eg. Poland and Germany, being neighboring countries are at different ends of the axle), we can assume that there is some spillover regional effect, which is reflected also on the homogenizing of some indicators.

In almost all concerned countries, the *Granger causality test* points to an interdependent relationship/influence between the analyzed variables (credit and GDP). In the case of 15 economies from 22 (more than 2/3), GDP is the active variable that influences credit, so an increase in economic activity is reflected in an increase in the volume of loans in the market (credit expansion) within a range from 1 to 7 quarters. Accordingly, for most countries in the analyzed sample, we have validated the **hypothesis 1** (on Chapter 2) submitting that the business cycle is the driving force of the credit cycle. Referring to the distribution of states on the clusters depending on the direction of influence of the analyzed variables, we cannot detach any regularity. However, certain trends can be observed in some clusters levels: for example, in the case of cluster B, in virtually all economies there is a unidirectional influence, GDP being the variable that influences the lending activity. Also, just in case of cluster A there are bidirectional relationships between credit and GDP. Even so, the cluster A, as well as C, remain quite heterogeneous.

The analysis of medium-term relationship between the credit cycle and the business cycle has revealed that the credit cycle in the analyzed countries is, on average, two times more volatile than the economic cycle. The average results for the three examined clusters makes us sustaining that economic cycle volatility is quite low among economies from clusters A and B and quite high in cluster C. In other terms, it appears that economic cycle volatility is higher in the countries outside the euro area, compared with the single currency states. Volatility is kept quite high even among the countries that have for a few time access in EMU (the case of Estonia or Latvia). As if the economic cycle, the credit cycle is twice as volatile in less developed countries compared to countries with better economic position. Another important feature to be noted here is the amplitude of the cycles. Given that the relative volatility of the credit cycle is higher than the one of the business cycle in most cases (except Finland, Germany and the Netherlands), the credit variable has a cyclic amplitude higher than the total production variable.

The highest amplitude of the credit cycle is found in Greece (credit cycle exceeding almost 4 times the economic cycle). Cross-sectional correlation coefficient values indicate a strong relationship between the cyclical components of the two variables. Positive values of cross-sectional correlation coefficients also show that real GDP and the credit component are pro-cyclical; it means that credit follows the same direction as the output. The results of the indices that measure the spillover effects are not uniform in the three clusters. At the country level, there seems to be significant spillover effects in terms of credit expansion. The most important streams of contagion seems to originate in the banking systems from Austria, Germany, Slovenia, Slovakia, the Netherlands, Bulgaria and Ireland, while the states receiving the bulk of turbulence are Spain, Italy, France, Portugal, Romania and Finland.

Since economic stability and, implicitly, the social one, of a group of states can be analyzed in terms of behavior and interaction of lending cycles in the member states, through the third chapter we have studied the synchronicity of credit cycles for the European Union between the first quarter of 2000 and the second quarter of 2014.

The results of this study points to an imperfect synchronicity of credit cycles at the level of the analyzed sample of countries. The evolution of the credit cycles in the member states of the European Union is characterized by heterogeneity at a global level or synchronicity at a regional level (valid only for some regions).

From the *statistical perspective*, at the level of the analyzed sample of countries, 88% of couples are positively correlated, which motivates us to say that, in terms of credits given to non-banking private sector from the credit institutions (data series processed with the filter BK) at the European Union level there is a powerful synchronicity of the credit cycles. The results also demonstrated that the synchronicity of business cycles increases as the level of economic development decreases (in the limit of the development indicator GDP /capita). Depending on the geographical distribution, we sustain that the sample of countries from South and South-East Europe is characterized by a weak to moderate synchronicity of credit cycles, the states from Central Europe have a moderate to strong synchronicity, while the highest level of synchronicity can be seen in the states of Northern Europe and Western Europe. Analyzed separately, the cluster of PIIGS countries (Portugal, Italy, Ireland, Greece and Spain) succeeds in synchronizing their lending cycles at a quite low-level. The contagion risk, which was sent through the channel of PIIGS states, had a profound impact on the lending policies of these countries, therefore, on the synchronicity of the credit cycles as well.

From a *dynamic perspective* (retrospective radiography), the conclusions differ a little from those mentioned earlier. At the level of the development cluster A we can sustain that the economic integration process doesn't cause an increase in the synchronicity of the credit cycles among member states of the European Union. The same conclusion we drew for cluster C too, where despite the relatively high level of synchronicity of credit cycles between 2000-2014, there can be noted a stronger synchronicity between two countries outside the euro zone than between a single currency state and one that has not yet fulfilled the convergence criteria or between two states from EMU. Moreover, we found that countries that joined the euro area in this period have registered a decrease in the synchronicity degree with two years before adherence (see the case of Estonia, Latvia and Lithuania, which are related to the participation of these economies to ERM) or beginning with the adherence year (see the case of Slovakia). Cluster B registers a very high level of synchronicity of credit cycles between 2000-2014, especially between two countries from the euro area, compared to a state with a single currency and one that has not yet fulfilled the convergence criteria, where the synchronicity level is lower.

The study in this chapter shows that the euro area cannot be regarded as an optimum currency area, at least in terms of synchronicity of credit cycles. The results showed that the degree of synchronization between two countries from EMU is quite low. On the other hand, if we look at the overall picture of the analyzed sample of the states, we can conclude that the degree of synchronicity at EU level of credit cycles is quite high. From this perspective we can afford validating **hypothesis number 1** (*endogenous hypothesis* from Chapter 3) and sustaining that the economic integration process causes an increase in synchronicity of credit cycles among the member states of the European Union, and the EU as a whole, can be considered an area of economic and social stability.

This chapter has allowed us to make some more interesting findings. The static analysis of the synchronicity of credit cycles revealed a very high level of correlation between the Baltic States and the dynamic analysis showed pronounced synchronicity of lending cycles in Ireland and the UK, which can be explained through the common historical ties, closed economical relationships, geographical proximity or even cultural affinities of the Baltic States, acknowledging on this path, hypothesis **number 6** (*policymakers hypothesis*, from Chapter 3). Baltic States' concerted behavior motivated us to validate also the **hypothesis number 3** (small *economies hypothesis* from Chapter 3), arguing that the synchronicity of credit cycles is higher among smaller economies nearer geographically.

The fourth and also, *the last chapter* gives the final verdict on the identified issue, even in the introduction to this work. *Summary analysis of social welfare from the perspective of the main schools of economic thinking*, as well as *the critical study of the methods and indicators of quantification of social welfare* are only preliminary steps of *the study on the impact of credit expansion on social welfare* on the example of the European Union. Following the analysis of causal relationships on short term between credit expansion and social welfare under the Granger causality test, the investigation of the intensity of the relationship using crossed correlation analysis and the determination of the impact of the credit expansion process over the social welfare in the medium and long term using multiple linear regression model, we have discovered that the process of credit expansion influences social welfare in most of the analyzed countries. The reaction time of social welfare to the variation of the credit volume from the market is generally very short, up to a quarter, which denotes a very high speed of propagation of the credit. There are, however, uniform cases, when social welfare reacts to the credit variation in a longer period of time, but not more than nine quarters.

The intensity of the interdependent relationship between total volume of credits given to the private non-banking sector by the credit institutions and real GDP per capita is basically quite low, rarely the correlation coefficient exceeding the level of 0,3. Even in these circumstances there is a distribution of the states depending on the membership in a development cluster: in general, the impact of the process of credit expansion is stronger for countries with a real GDP per capita higher, so development cluster A, and lower in countries from the cluster C.

The expansion of credit process has a poorly positive impact over the social welfare in countries with a real GDP per capita of more than 20,000 EUR, a very weak positive impact, almost nonexistent in countries with a real GDP per capita between 10,000 and 19.999 EUR and a very weak negative impact, almost nonexistent in countries with a real GDP per capita below 9.999 EUR. From this perspective, the libertarian hypothesis can be validated only in the case of the less developed countries (compared to other countries from the sample), where the credit expansion has a negative impact on wellbeing.

In other words, the recent financial crisis has negatively impacted social welfare, but its impact was not very strong (as to which factors converge to zero).

THE MOST IMPORTANT CONTRIBUTIONS OF THE AUTHOR

In the end of this scientific research, we can only synthesize *the most important contributions*:

1. *Making a mosaic image on business cycles and credit cycles* in terms of the most important economic schools of thinking.

2. *Argumentation and supporting a business cycle in five phases*: expansion, boom, recession, crisis and resumption/recovery of the economic activity.

3. *Investigation,* in the light of a critical comparative approach *of the interference between business cycles and credit cycles.*

4. *Proposal of three indicators to measure spillovers or contagion* (input, output and net) regarding banking disturbances at a group of states level.

5. *Examination of the synchronicity of credit cycles* at EU level, to test the euro area for the *status of economic and social stability area*.

6. *Delimitation of the most important milestones in defining social welfare* (synthesizing both institutional approaches and those of the authors).

7. *Making of a critical study of methods and indicators* to quantify social welfare.

8. *Assessment of the impact of credit expansion process on social welfare* in the European Union.

FUTURE DIRECTIONS OF RESEARCH

Present research results urge us to advance the following proposals, which may take the form of future research:

1. The debate of *economic cycle structure* and completion of its economic cycle.

2. Utilization of *contagion built indicators* to quantify contagion spillover effects (input, output and net) regarding the disturbances of banking activity at the level of various groups of states.

3. *Improving the methodology for analyzing the credit cycle synchronicity* by proposing some indicators for assessing the concerted movement level.

4. *Defining and building a genuine indicator of social welfare*, which incorporates all dimensions of sustainable socio-economic development and have a constant recording frequency (annual or quarterly).

5. *Extending of the study regarding the impact of credit expansion on social welfare*, to other economic areas, with other specific than of the European Union.

REFERENCES

For the accomplishment of the thesis were consulted several bibliographical sources, represented by books, monographs, scientific articles, reports of similar bodies, from Romanian and foreign literature (65 books and monographs and 192 scientific articles and reports).

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