UNIVERZITA PALACKÉHO V OLOMOUCI

Filozofická fakulta

Katedra politologie a evropských studií



Judita Horváthová

An analysis of policy options to mitigate or resolve the global financial crisis through the lens of mainstream and alternative theoretical perspectives

Bakalářska diplomová práce

Vedoucí práce: Prof. G. B. Assenza, D.Phil. (Oxon), M.P.A. (Harvard)

Olomouc 2011

Judita Horváthová		

Hereby I declare that I compiled this bachelor thesis independently, using only the

listed literature and resources.

14 April 2011

Olomouc

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Introduction

The year 2007 brought with it the realization that the worldwide collapse of the economic sector is becoming of global importance. The eruption of the crisis in the United States has lead to a domino effect of faltering economies. Every single nation state is beginning to experience the hindrance of the economic slowdown, in some cases economic breakdown, caused by the global financial crisis. The fact that the recession of one country has sent reverberations through the global society highlights the need of a global analysis with regards to the issue of systematic interdependence. The spread of the global financial and economic crisis drew attention on the dominant position of political and economical interconnectedness. In the wake of the far reaching consequences of the current recession this does not leave any other option but to find a solution with the help of international cooperation. A suitable solution has to be found which would not just improve the current economic conditions, but would help avoid possible future recessions. The global financial crisis is not over and the creation of a concept of dealing with the situation remains a burning issue. Almost four years after the beginning of the crisis and despite of several policy responses the economies are still functioning in strained circumstances. The aim of the thesis is to compare two mainstream frameworks with an alternative model and find out whether any of them are able to offer a corresponding solution to the crisis. This bachelor thesis will analyze the undertaken policy options in the US and in the United Kingdom both from a theoretical as well as a practical perspective. Although the economic difficulties of these two global players appear to be similar, they have taken different directions of tackling the recession. The thesis will use illustrations for the examination of the two mainstream economic theories, and in particular it will draw from the examples of the post-crisis US and the UK and the way that they implemented their recovery plans suggested by these two mainstream models. The main aim is to show that these two mainstream theories do not offer a long-term solution, which will be visible from the examples of these two world economies and it will be proven that they do not represent an adequate solution to the problem. The thesis will implement a third option in the form of a new theoretical model, which is believed that points out the main challenges of the previous theories as well as offers possible solutions. From the provided analysis it will become clear that the crisis is not just an issue of the

financial system but it is a societal issue. The thesis will also attempt to explain the reasons behind the crucial changes, which are contrivable: it emphasizes the factor of global interdependence and therefore outlines a concept of systematic change. By clarifying the main problems that have been emphasized by the crisis, the thesis concludes the differences between the three theoretical models.

The topic area of this bachelor thesis is the mitigation or resolution of the global financial and economic crisis. On the manifestation of its spread and extent, the significance of economic interconnectedness will be underlined. The analysis and the following comparison of the three frameworks will give a conception of issues that need to be addressed. The topic of this thesis was chosen because the reconsideration of policy options towards resolving the economic crisis is crucial. There is a need for a new path, a new economic model, which would stabilize the economy and later go on to heal the system in general.

The thesis will answer the following research question: What are the systematic differences between policy options (solutions) suggested by mainstream perspectives such as Keynesianism and Austerity and those suggested by the alternative theoretical perspective such as Systems Theory?

The goal of the thesis is to point out the significance of indebtedness and global interconnectedness. The thesis will reveal that unless the model of economic existence based on debt will not be changed, the economic system would not be able to function in a long-term. With regard to the factor of global interconnectedness the issue of the US dollar as a global currency will be also discussed.

The global financial crisis 2007+ is an interdisciplinary issue: it influences the economic, political, and social structure. Therefore the thesis has a relevance to society as a whole.

There are significant differences in the level of research of the applied theoretical perspectives. While the interpretations of Keynesianism have been widely discussed since the Great Depression, the Austerity model can not be characterized with such professional engagement. Keynesianism occupies the main part of today's theoretical framework because of its largely-conducted research. However, when comparing both alternatives, a comprehensive, unbiased and critical evaluation was not provided by scholars. The framework of the third perspective, the Systems Theory, has not been fully developed yet by academic community. In connection to the financial crisis, the Systems Theory was conducted by Ervin László.

The comparative analysis will test the following hypothesis: Mainstream theoretical perspectives such as Keynesianism and Austerity are mostly focused on concrete economic events and mechanisms, and are oriented toward short-term solutions that keep the current economic system in place, whereas the alternative perspective such as the Systems Theory (in particular the Chaos Theory) are oriented toward a long-term solution, and go to the roots of solving societal problems.

The thesis will enlighten the importance of the financial globalization it but it will not engage in examining the role of financial institutions. Even though financial markets (both on national and international levels) play an influential role in the financial system, from the perception of this thesis addressing their mechanism is not relevant.

The thesis is composed as follows.

Firstly, an introduction to the background of the global financial crisis will be made. The explanation of its worldwide spread will be also outlined. To underline the importance of global interdependence, a description of the causes of the US economic collapse will be provided. Nevertheless, the roots and causes of the crisis will not be the focus of this thesis. However, in order to analyze the policy options it is necessary to shed light on the antecedent circumstances.

Secondly, an interpretation of the applied theoretical perspectives will be made. This part of the thesis will address the main aspects of each theory with regard to the solutions for the financial crisis. The first of the applied theoretical models is the Keynesian economic theory. This theory holds the view that a recession happens because consumers are accumulating their financial capital instead of spending. The Keynesian model believes that state intervention and increased public spending (with an artificially created demand) will heal the damaged economy. The second applied theoretical model is the theory of economic Austerity which recommends the use of regulatory responses. This model advises cuts and saving measures in almost every sector of the economy in order to balance the budget deficit. The alternative theoretical model applied in the thesis is the Systems Theory, in particular the Chaos Theory. This framework is a complex model with implications to every sector of the society, therefore to the economic system as well. The Systems Theory views the occurrence of the financial crisis as a complex issue which leads to systemic changes. It holds the views that the response for the crisis should not be left just on

the recommendations of an economic policy. The economic recovery plan should not just be based on returning back to the pre-crisis structure. In order to find a long-term solution the principal causes of the crisis have to be eliminated.

Thirdly, the two mainstream economic models, Keynesianism and Austerity, will be compared. The comparison is based on particular policy options recommended by the two diverging models. Both the advantages and the disadvantages of these policy options will be taken into consideration. The standpoint of each of them on a particular issue will enlighten the similarities and differences between the two models. To make the comparison more adequate with regard to the issue of the ongoing crisis the views and opinions of leading economists will be investigated. Consequently, a comparative analysis of these models will be illustrated on the specific cases of the US and the UK. These two dominant world economies have decided for the adoption of diverging economic models. The thesis will present an overview of the implemented policy responses. The outlined differences between the undertaken policy measures in each country will serve to the comparative evaluation of the two mainstream theories. To underline the dissimilarities between the applied approaches and in order to ease the comparison, concrete data will be used from both countries.

The following part of the thesis will give an insight to the fundamental problem of the economic crisis – the indebtedness both on national and international level. With focus on the interdependence of the economies the analysis of Systems Theory renders down why it is inevitable and possible to provide these changes. The opportunity to outline the principal issues which have to be resolved in connection with the crisis, to emphasize the significance of these problems, and to acknowledge the possibility for these changes has set the main ground for this thesis. The following comparison of the mainstream and alternative perspectives will enlighten the similarities between these three models, but mainly it will critically outline the shortcomings of the mainstream frameworks.

By means of the comparison of the three theoretical models the thesis will emphasize that the ongoing global financial crisis is a systemic problem which cannot be solved with simple economic models. In order to resolve this global issue is not sufficient to recover the economy as such, but a global economic transformation is needed.

Lastly, the thesis will go on to conclude with the differences between the three models and will give recommendations for crisis mitigation and resolution.

The main sentiment of the thesis will remain that the mainstream theoretical frameworks are not to resolve the crisis in a long-term, and that an interdisciplinary approach is needed to be implemented.

Methodology

This bachelor thesis is a comparative policy analysis. By comparing three theoretical models and empirical data concerning the global financial crisis I am trying to answer the question whether the mainstream frameworks are advising diverging policy options from the policy options suggested by the alternative framework.

I chose three theoretical frameworks:

- 1. Keynesian Economic Theory (henceforth Keynesianism)
- 2. The Theory of Economic Austerity (henceforth Austerity)
- 3. Systems Thinking and Systems Science (henceforth Systems Theory), in particular Chaos Theory.

These frameworks are divided into two categories: mainstream and alternative theories. The first two theories, concretely Keynesianism and Austerity are mainstream theoretical frameworks, while Systems Theory is an alternative theoretical model, which has not been widely used in the social sciences. This thesis is primarily a theoretical analysis, but it is based on empirical data relating to the global financial crisis. The role of the empirical data is more to illustrate than to test the theories. A proper scientific testing procedure would go far beyond the scope of a BA thesis. Nevertheless, some groundwork is done here, so that it can be properly tested in later research. The empirical data serves to enable a comparison of the fundamentals of the theories.

The goal is to find out if the alternative theory says anything substantially different relative to the mainstream framework, and if it makes a contribution to these frameworks in several possible ways: For example, to highlight possible areas of research that have been overlooked; to detect possible errors or one-sided interpretations of data; to suggest possible extensions or modifications of the theory; or to discard the mainstream frameworks altogether.

The three chosen theories could be applied to numerous phenomena and events in economic history and economic policy. In this thesis, the case of the global financial crisis 2007+ was chosen, because it is the most recent and most dramatic economic phenomenon, and it requires not only an economic analysis but also elements of political science and other social science disciplines. The origins of the financial crisis can be found to a large extent in political decisions made in recent decades concerning the regulation and governance of the financial system. Moreover, the financial crisis has major political consequences, as it forces governments to choose between various possible incrementalist tactics as well as possible fundamental strategic revisions in economic policy.

Given the sheer quantity of empirical data that could be included in this analysis, the thesis further narrows the scope to the case of the US and the UK. By choosing two countries, the thesis becomes a diachronic comparison, which has the following advantages. The main indicators of an economic recession such as public debt level, external debt level, unemployment rate and GDP real growth rate crisis in both of these economies are of similar character.

I further distinguish between policy options that mitigate the financial crisis (i.e., options that are symptomatic, with short-term policy horizon), and policy options that resolve the financial crisis (i.e., options that have a long-term policy horizon and that are fundamental/go to the roots).

The thesis was developed using interviews, but given the limited number, I decided not to create a systematic analysis of the interview results. Instead, the knowledge from the interviews was used to generate the research design. This means that the thesis is based on secondary data – in particular from three sources:

- 1) Books The most valuable information were provided by the economists focusing on the financial crisis and crisis resolution. The works from Paul Krugman, Dean Baker and Nouriel Roubini were very helpful during the research. The book carrying the name *The Ascent of Money. The Financial History of the World* by Niall Ferguson was essential in understanding the role of the economic sector on a global level.
- Article Additional information that contributed to the thesis were found in economic journals and magazines. Also articles from the daily press, such as The Financial Times, The New York Times, The Guardian and specialized

- magazines such as The Economist proved to be valuable for the purposes of this thesis.
- 3) Internet Because of the actuality of the issue analyzed in the thesis, the information found on internet were essential during the research as profound analysis has not yet been developed in academic community.

While designing the thesis useful information were provided from the book *Doing Research in the Real World* by David E. Gray, and also from the book called *Research Design in Social Research* by professor David de Vaus.

Some literature, for example the famous book *Irrational Exuberance* by Robert A. Shiller, was consulted but not used as a reference. These works I placed into a category in the bibliography entitled Works Consulted so as to give the reader a sense of the entire research that was conducted for this thesis.

1. Background: The causes of the global financial crisis

The global financial crisis 2007-2011 is one of the most dominant affairs in current national, international and global environment. The extent of its impact on each and every society throughout the world is getting more and more visible. The ongoing economic recession is the most profound since the 1930s. Although there are similarities between the crises experienced in the past decades in certain aspects, the current crisis is substantially different. In order to find and implement suitable solutions it is necessary to understand the causes which led to the current condition of both the financial and economic system. Without the explanation of the roots the responses for the crisis can not be adequate. There are several significant factors which should be highlighted while examining the forerunner events before the signs of the recession became evident: both within the US economy and also within the global economies. Because of the tight interconnectedness between the economies, the US slowdown of economic activity reflected itself worldwide right away.

1.1. The causes of the US financial crisis

The financial crisis struck the US in the summer of 2007, marking a turning point in global financial history. The years between 2001 and the middle of 2007 mark an era of continuous financial expansion. Despite the terrorist attacks of 2001, the invasions of Afghanistan and Iraq, the US economy was growing strongly.² This economic growth was fueled by easy credit enabled by the Federal Reserve's monetary policy of low interest rates since the burst of the tech-stock bubble in 2000-01.³ There are scholars who claim that the interest rates were kept deliberately low as a result of the terrorist attacks, and not just because of the above mentioned tech-stock bubble.⁴ During this exact period of time a massive build-up of imbalances of capital accounts occurred as a result of the extremely low policy rates.⁵ As the Fed eased monetary policy, it stimulated a boom in the housing market which turned into a housing bubble.⁶ Low interest mortgages and the easing of creditworthiness standards made home ownership seem affordable to the lower middle class, which

¹ Soros 2009, introduction.

² Ferguson 2008, 6.

³ Yifu Lin 2008.

⁴ Comiskey and Madhogarhia 2009.

⁵ Saleh 2010, 4.

⁶ Yifu Lin 2008.

had a hard time to make ends meet. The US housing bubble has been forming concurrently with stock bubble from the middle of the 1990s. Those who made a fortune thanks to the run-up of stock prices, created a growing segment in the consumer society disposing with increased wealth. This led to the consumption boom of the late 1990s, and to the fall of the savings rate from close to 5 percent in the middle of the decade to just over 2 percent by 2000.⁷

The above mentioned consumption boom fueled by higher housing prices were a decisive step leading to the 2007 crisis scenario. The Fed's expansionary monetary policy which was causing excess liquidity was also worsening the situation. Because the housing bubble was stimulating the consumption, it extended from \$400 billion to \$650 billion a year. At the time of the burst of the housing bubble, its size was not less than \$8 trillion. At this point, one may legitimately ask: how was such a huge purchase of real estates feasible?

One of the reasons is that low interest rates and subprime and adjustable-rate mortgages led to immoderate risk taking. Dean Baker, an American macroeconomist from the Center for Economic and Policy Research, argues that the bad mortgages were not the principal problem, even though they had a negative impact on the bubble. According to him the root of the US crisis was the bubble itself which was fed by these mortgages. As a consequence of the growth of the bubble, several imbalances were created within the economic cycle. Baker is convinced that the growth of the housing bubble was enabled by the Fed because it left the bubble uncontrolled. It is necessary to clarify the concept behind these two types of mortgages. The subprime mortgage is customized for potential borrowers with lower credit ratings. Borrowers qualifying for subprime mortgages usually belong under a high risk category and are unable to get prime mortgages. This type of mortgage ordinarily comes with very low or teaser rates in the beginning of the borrowing, and the interest rates are increased to normal or higher levels later on. During the

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⁷ Baker 2008.

⁸ According to Tomáš Sedláček, Americans for a long time have been consuming more than they were earning. Savings of an average American citizen in 2009 were minus 2.5 percent of their salary. [Sedláček 2009, 237.]

⁹ Yifu Lin 2008.

¹⁰ Baker 2010, 34-35.

¹¹ Chaturvedi 2009.

¹² Taylor 2009.

¹³ Baker 2010, 6-7.

¹⁴ Chaturvedi 2009.

1990s, and the first years of the following decade, subprime loans represented 6 to 8 percent of the mortgage market. By 2006 the share of subprime mortgages exploded to 25 percent. The depreciation of house prices made the repayment of these mortgages in many cases unrealizable, which resulted in a wave of bankruptcies in August 2007 onwards. August 2007 onwards.

The interest rate of an adjustable-rate mortgage varies in accordance with a specific benchmark. At the start of borrowing the interest rate is usually fixed for a period of time. Afterwards it is reset periodically, often every month. The borrower pays an interest rate which is based on a benchmark plus an additional spread. This is called the ARM margin. ¹⁷ Borrowers who were not able to pay their mortgages could indeed always refinance, so if a mortgage became unaffordable they took out a new mortgage with a new teaser-rate period. ¹⁸ This led to a high level of inflation on the housing market ending in a near-record level of new house construction. By the first quarter of 2007 the vacancy rate for ownership units was 50 percent higher than in 2005, when it began to rise. The fact, that the house prices went low led to an inability of mortgage refinancing on the side of homeowners because they owed more than the value of their house itself. According to the analysis provided by Dean Baker: 'practically anyone who bought a house during the peak bubble years, even if he or she put 20 percent down, was going to end up with negative equity – with a mortgage worth more than the house.

The outcomes of this "financial development" turned out differently than it was expected. The housing boom, the following implosion of mortgages and mortgage-related securities caused turmoil at financial institutions. According to researchers at the OECD this trend was evident in other countries as well: 'The greater the degree of monetary excess in a country, the larger was the housing boom.'²⁰ The break-down of one sector resulted in a collapse of almost every sector of the US economy. To answer the question how could that happen it is essential to emphasize that housing construction was an outstanding sector: during the post-war era it created almost 4 percent of GDP, and in 2005 it expanded to more than 6 percent of GDP. In the aftermath of the burst of the housing bubble the sector

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¹⁵ Baker 2010, 26-27.

¹⁶ Chaturvedi 2009.

¹⁷ INVESTOPEDIA News & Articles.

¹⁸ Baker 2010, 31.

¹⁹ Baker 2010, 32.

²⁰ Taylor 2009.

represents less than 3 percent of GDP. This shrinkage caused a loss of more than \$450 billion in demand annually and a loss of millions of jobs in the housing sector: in construction, mortgage banking and real estate.²¹ Like a chain reaction the 'instability has surged from sector to sector, first from housing into banking and other financial markets, and then into all parts of the real economy.²² The above described circumstances which were leading the US economy since 2001 explain the background of what is generally known as the financial collapse of 2007.

1.2. The causes of the global financial crisis

After the clarification of the origin of the US financial crisis, a comprehensive overview of its worldwide spread is essential. The domino effect causing macroeconomic imbalances in global economies was first and foremost the outcome of the financial globalization. The predominant position of the US within the international financial system is the primary factor because of which a crisis of one nation resulted in a global recession. The fact that the US disposes of the right of veto in the Bretton Woods institutions (the IMF and the WB), and that the US dollar has served as the main international reserve currency created an unprecedented interdependence between the developed and developing economies of the world.²³ As Nouriel Roubini, a professor of economics at the New York University, points out: "As the US economy shrinks, the entire global economy will go into recession. In Europe, Canada, Japan, and the other advanced economies, it will be severe. Nor will emerging market economies—linked to the developed world by trade in goods, finance, and currency—escape real pain."24 The implications of the US economic disaster for the world are also the consequences of the reality that the 'American output presently accounts for more than a quarter of total world production, while many European and Asian economies in particular are still heavily reliant on the US as a market for their exports.'25 On the basis of the above described indicators it was evident that the US financial crisis will have global consequences.

By the summer of 2007 the increased number of defaults on mortgages and foreclosures were already the signs of difficulties on the US subprime market. On

²² Yifu Lin 2008.

²¹ Baker 2010, 34.

²³ Soros 2009, 95-96.

²⁴ Roubini 2009.

²⁵ Ferguson 2008, 10.

September 7, 2008 Fanny Mae and Freddie Mac were nationalized by the US government. Afterwards, on September 15, 2008 Lehman Brothers announced its bankruptcy. This bankruptcy was the largest in the US history so far (US\$639 billion in assets). These events were followed by a panic at almost every financial institution: it led to a large-scale sale of stocks which wiped out the investment banking industry in the US. The financial system became affected by the securities containing bad subprime mortgages. Most of the financial institutions lost control over these securities. Due to the internationalization of the financial institutions, the banks in Europe were immediately affected. On October 8 the UK government decided for recapitalization of eight bank institutions. With regard to European countries, this step was followed by an agreement amongst the Euro-zone members from October 15. The agreement included capital injection into banks with difficulties, and also provision of guarantees for interbank loans. The whole amount of this financial aid represented more than US\$1.3 trillion.²⁶ The US economic predominance resulted in a quick spread of difficulties inside financial institutions, and soon in every sector of the economy. It has to be emphasized that the tight relations between the American and European financial institutions were not the only cause of the global character of the economic melt-down. A housing bubble was not just a phenomenon in the US. In 2005 house prices were already over-valued in the UK, Australia, New Zealand, Spain, France, Ireland, Belgium and the Netherlands.²⁷ The burst of the US bubble created a precedent followed by developed economies: the UK, Spain and Ireland. Later on problems came to the surface also from other economies worldwide. But the countries with problems inside their national economies were not the only ones which were shocked by the crisis. Even economies with a budget surplus were negatively affected by the recession.²⁸

After the analysis of these circumstances it can be seen that the main factors which led to the globalization of the financial crisis were: the interconnectedness of global economies (mostly on the level of financial institutions) and the difficulties inside national economies (the housing bubble; government budget deficit). Starting with the summer of 2007 the worsening economic conditions of one country were systematically influencing all the economies of the world.

Naudé 2009.
 The Economist, 2005.

²⁸ Rosselet-McCauley, 2009.

2. Theoretical frameworks

2.1. Keynesianism

Keynesianism is one of the most prevailing economic theories created by the British economist John Maynard Keynes in the 1930s. One of the key messages of his work was a reaction to the prolonged global depression of that period of the 20th century. Furthermore, it was a critical response to the neoclassical economic theory which holds that the economy balances itself and there is no need for state intervention. Before the Great Depression the neoclassical principles were applied and were believed to bring full employment and "equilibrium" in the economic cycle. ²⁹ According to Keynes the economy was chronically unstable and subject to fluctuations. He saw this imbalance as a result of inadequate investment and oversaving. ³⁰ Keynesianism is generally known as public debt management; it is concerned with the level of expenditures in the economy and its relationship with economic output and inflation. ³¹ There are several main principles which have to be described.

Firstly, it has to be understood that this field of macroeconomics focuses on fiscal policy — public spending, deficits, taxes, and considers these tools manageable aggregate demand and thus ensure full employment.³² The aggregate demand is determined by both public and private economic decisions, and because of its irregularity it should be regulated by fiscal and monetary policies. Unemployment depends on aggregate demand, and gradual price adjustments.³³ In a Keynesian view the states should take 'an ever greater responsibility for directly organizing investment. The theory has a general confidence in the ability of government to intervene and manage effectively.³⁴

In the view of this approach the appropriate solution in the times of crises is replacing the missing private investment with public investment financed by deliberate deficits. The theory endorses the government to borrow capital in order to spend on such things as public works. Even though the government would increase its deficit spending, the whole process would create jobs which can increase

³⁰ Yergin and Stanislaw 1998, 22.

²⁹ Cypher 2011.

³¹ Blinder 2008.

³² Yergin and Stanislaw 1998, 23.

³³ Blinder 2008.

³⁴ Yergin and Stanislaw 1998, 23.

purchasing power.³⁵ Increased purchasing power stimulates growth; growth stimulates employment and increases tax revenues which enable the state to pay back the borrowed money. So the primary objective why the states should run a budget deficit is to increase overall public investment and thereby stimulate the economy. When private investment is insufficient, government expenditures of public spending are added to ensure full employment levels in the economy. For this purpose, either an increase in a balanced budget or deficit financing is required.³⁶ In favor of increased investment, the interest rate must be lowered (cheap money and tax policy). But this low interest rate policy can be ineffective, if the expected rate of profit falls below the interest rate. From the two existing investment types, private investment is much more responsive to market changes therefore during an economic decline it also declines.³⁷

Nevertheless, the state budget can not always be in deficit that is why the periods of prosperity and sorrow (in the economic cycle) have to be distinguished. Keynesianism supports government spending and short-term deficits during times of recession, but on the other side it suggests saving and less government spending during the times of expansion.³⁸ An application of Keynesianism only in times of crisis means disregarding the basic message that in good times the state must save money.

Increased rate of unemployment is a peculiar consequence of an economic recession. With regard to the unemployment factor there is another characteristic sign of this mainstream economic theory which is a so-called multiplier effect. This economic activity means that: 'output increases by a multiple of the original change in spending that caused it.'³⁹ It assumes that if people will be receiving government money for public-works, then they will also be able to spend money, which will automatically lead to the creation of new workplaces. ⁴⁰ According to Alan Blinder, Keynesianism proclaims that 'fluctuations in any component of spending—consumption, investment, or government expenditures—cause output to fluctuate. ⁴¹ So fighting against high unemployment levels is also a necessary reaction in a

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³⁵ Yergin and Stanislaw 1998, 22.

³⁶ Burkhead 1971.

³⁷ Chong Yah 2003.

³⁸ Yergin and Stanislaw 1998, 23.

³⁹ Blinder 2008.

⁴⁰ Yergin and Stanislaw 1998, 23.

⁴¹ Blinder 2008.

situation of weakened economic conditions. And because income and employment are symmetrically determined, they can be handled more easily under high employment levels.⁴²

Keynesianism also suggests a stabilization policy in order to reduce the extent of the business cycle. The theory believes that if properly applied it may be able to limit the impact of business sphere on the state economy.⁴³

The reason why this macroeconomic theory has been so widely accepted by several leading economists is (among others) in historical experiences. According to Daniel Yergin and Joseph Stanislaw: 'Keynesian positions were bolstered by the fact that there were no economic crises of any sizable proportion from the second half of the 1950s to the mid-1960s in those Western European countries whose governments regulated the economy.' Until the 1970s there were almost no questions about the effectiveness of Keynesianism. The majority of the government budgets where this mainstream macroeconomic theory was applied were showing positive balances. To make the definition of the Keynesian school of thought complete it is needed to mention the two other conceptions which are founded on it. The post-Keynesianism corrected and completed the original theory, while neo-Keynesianism optimized it based on the changed circumstances.

2.2. Austerity

While searching for the solutions to mitigate the impacts of the economic repression, the Austerity has been introduced as an option. Except few commonalities it is the opposite of the previously discussed Keynesianism. In straitened circumstances the Austerity reform is about to balance the budget deficit, ergo decrease the level of internal and external debt of the economy. The clarification of the main concepts of the Austerity model reveals the merits of the theory itself.

An Austerity program refers to a fundamental reform in government outputs involving cutbacks mainly in the public sector. This type of economic reform is usually implemented in the aftermath of an extraordinary situation, for example if a state debt is out of control. The implementation of this economic policy requires

⁴² Burkhead 1971.

⁴³ Crespo 2009.

⁴⁴ Osadchaia 1982.

⁴⁵ Yergin and Stanislaw 1998, 23.

carefulness, particularly in times of financial stagnation. Otherwise, in the case of quick implementation the reforms can worsen the already adverse economic conditions. The reforms can lead to a chilling effect on the whole economy, because in addition to reduced spending the economy could also suffer from reduced tax revenues. 46 As for the description of the Austerity theory and relative to the issue of the current recession there are several indicators which need to be addressed.

One of them is general cuts of payments and subsidies in the civil service. This type of economic policy brings lay-offs, closing down of departments, or reducing of working hours in the government sector. 47 Lowering subsidies for transport, petrol costs, and for new business is another feature of this economic policy. The implementation of an Austerity reform refers to saving measures in almost every sector of the national economy. More precisely it brings lowering the level of state expenditures mostly in public services. The government cancels its contribution in some areas in which it had previously engaged itself. Increased taxes are also a part of the austerity package. Normally, these higher taxes are introduced for supplementary goods, such as alcohol, cigarettes or luxury products. However, if the level of state indebtedness is extremely high, it is a common step to raise taxes for basic goods and services as well. The introduction of higher rates in income tax is also a feature of the Austerity model.

The launch of an austerity reform leads to a shift in social security system as well. As this shift comes in a form of cuts in pensions, poverty-based programs, and other forms of previous state subventions, it leads to a reevaluation of the current welfare system. The sale of state assets is also a widespread procedure when austerity measures are being applied. The basic concept behind this step is that while the state ownership is reduced, the government immediately gets access to funds. Another characteristic of this macroeconomic conception is that by lowering interest rates it is aimed to achieve lower-valued currency. The theory holds the view that currency depreciation would boost domestic investment and improve trade balance.⁴⁸

One of the basic arguments for the economic austerity is that 'fiscal adjustment (with higher taxes and lower government spending) will reduce the government's demand on the economy's resources thereby allowing the private sector

 ⁴⁶ Jayadev and Konczal 2010.
 ⁴⁷ Medley 2010.
 ⁴⁸ Baker 2010c.

to make better use of these resources.'49 The concept of Austerity is to tighten government spending for an exact period of time while the state debt is being largely repaid. Advocates of this approach claim that once government spending gets under control, the probability for economic recovery gets higher too. With regard to the ongoing crisis the economic Austerity is becoming an accepted recovery plan for several economies.

2.3. Systems Theory

Ervin László⁵⁰ is generally recognized as the founder of Systems Theory. László's Systems Theory suggests a diverging approach in order to solve the crisis.

Both of these scientific models originate from the general system theory of Ludwig von Bertalanffy, the cybernetics of Norbert Wiener, and the information theory of Claude Shannon. The elemental conceptions were developed in several fields of the natural and social sciences as well as in philosophy. 51 László is convinced that the ongoing crisis is not just a failure in the field of finance and it results from the way of thinking of the society as a whole. Referring to the case of the economic recession, the Systems Theory is one of the relevant explanations of its causes. Moreover, these theories present a noteworthy model with regard to the way out from the crisis.

Everything in the world consists of complex systems that are never symmetric. When a change happens, sudden and nonlinear "chaotic" processes occur.

⁴⁹ Baker 2010c.

⁵⁰ 'Ervin László is generally recognized as the founder of systems philosophy and general evolution theory, serving as founder-director of the General Evolution Research Group and as past president of the International Society for the Systems Sciences. He is the recipient of the highest degree in philosophy and human sciences from the Sorbonne, the University of Paris, as well as of the coveted Artist Diploma of the Franz Liszt Academy of Budapest. His numerous prizes and awards include four honorary doctorates.

His appointments have included research grants at Yale and Princeton Universities, professorships for philosophy, systems sciences, and future sciences at the Universities of Houston, Portland State, and Indiana, as well as Northwestern University and the State University of New York. His career has also included guest professorships at various universities in Europe and the Far East. In addition, László worked as program director for the United Nations Institute for Training and Research (UNITAR). In 1999 he was awarded an honorary doctorate by the Canadian International Institute of Advanced Studies in Systems Research and Cybernetics.

László serves as president of the Club of Budapest and head of the General Evolution Research Group, which he founded. He is an advisor to the UNESCO Director General, ambassador of the International Delphic Council, member of both the International Academy of Science, World Academy of Arts and Science, and the International Academy of Philosophy. He is the former president of the International Society for Systems Sciences.'

The biographical information of Ervin László are cited from Ervin László's official website. ⁵¹ László 2005, 113.

They, either restructure the system create a new one or destroy the preceding system. Because there is a sensitive dependence on initial conditions, even a small change can drastically change the long-term behavior of a system. The Chaos Theory 'proves that the evolution of complex systems always involves alternating periods of stability and instability, continuity and discontinuity, order and chaos.'52 The existence of periods of prosperity and sorrow in the economic cycle supports this consideration. For the sake of understanding the fundamental concept beyond the Chaos theory, the term of bifurcation has to be clarified. According to László, 'bifurcation accurately describes the single most decisive event shaping the future of contemporary societies.' Bifurcation is a behavior of complex systems which are far from equilibrium, and it occurs after the destabilization of these complex systems. It has a high probability that the collapse of the economic structure is the outcome of a bifurcation process. This supposition is also supported in Systems Theory. The Systems Theory points out that because contemporary social, political and economic systems are more and more stressed, their evolutionary paths must eventually bifurcate.⁵³

Bifurcations have different backgrounds, and relative to the crisis the likelihood of a so called "E-bifurcation" is extraordinarily high. The "E-bifurcation" is usually caused by the disruption of the local economic or social order as a consequence of expanding crises. These instabilities caused by the bifurcation in almost every case are about to spread to every segment of the society. Because when a process of bifurcation occurs the system does not follow the trajectory of its initial attractors anymore. Instead, it responds to new attractors that make the system behaving randomly. The Chaos Theory believes that the bifurcation offers an opportunity for rapid and fundamental changes. It does not perceive the chaos necessarily fatal to the system, but as a prelude to a new development. The relation between pre-crisis and post-crisis order is never linear, because the process is not a result of one simple cause and effect. This is why the ending of a bifurcation is not determined either.⁵⁴

What is currently happening in the financial and economic segment of the society is an analogous chaotic process or a combination of chaotic processes, which

László 2010, 11-25.
 László 2010, 24-32.
 László 2010, 27-33.

will have a destructive or restorative implication. Regarding the responses for the economic recession the Systems Theory's statement is, to find a solution which can be functional in a long-time period. The primary goal is not to return back to the precrisis economic structure but to eliminate the factors which led to the crisis. Only this will be able to ensure the functioning of the global economy.

The Systems Theory advises to reconsider the policy options for the crisis resolution, and calls for a combined approach from different economic and social models.

3. Policy options

3.1. A comparison of the policy options suggested by mainstream economic frameworks

The recommendations of Keynesianism and the Austerity are being discussed as a suitable answer for the consequences of the financial meltdown. The following comparison of the standpoints on the main features of each macroeconomic theory enlightens the similarities and differences between them. In order to increase the relevance of the comparison, the analysis includes suggestions from several distinguished economists. The comparative analysis also outlines the possible advantages and disadvantages of the two models.

Stimulus spending

Stimulus spending is one of the primary features of Keynesianism. When a Keynesian reform is being launched as a response to the crisis, a stimulus spending is an inevitable part of it. Advocates of the Keynesianism Michael Kennedy, a former economic adviser at the Treasury and Robert Skidelsky, a professor emeritus at Warwick University proclaim that emerging from recession is through further deficit spending and also that decreasing deficit should be postponed.⁵⁵ The main aim is to restore the functioning of economic processes. According to Dean Baker, an economist and co-director of the Center for Economic and Policy Research, argues that without a large stimulus package the level of unemployment would stay high and it would not return to its precession level at least until 2013.⁵⁶ Paul Krugman, a recipient of the 2008 Nobel Prize in Economics and professor at Princeton University⁵⁷, is a proponent of demand-side macroeconomics. He believes that the recovery of the economy can be achieved through increased spending, and suggests a creation of more demand by putting in more capital. Even though this step means massive deficit spending, it would assist to restore the ability of banks to lend, and this way unfroze the credit markets.⁵⁸ He further suggests that the injected money

⁵⁵ Skidelsky and Kennedy 2010.

⁵⁶ Baker 2010, 41.

⁵⁷ Paul Krugman received his B.A. from Yale University in 1974 and his Ph.D. from MIT in 1977. He has taught at Yale, MIT and Stanford. At MIT he became the Ford International Professor of Economics.

The biographical information of Paul Krugman are cited from the New York Times official website.

⁵⁸ Krugman 2009, 182-185.

should be used: 'to finance public investment projects (if possible to good purpose, but that is a secondary consideration) and thereby provide jobs, which will make people more willing to spend, which will generate more jobs, and so on.'⁵⁹ Keynesians claim that 'at high employment, continued growth will steadily reduce the national debt as a percentage of gross domestic product.'⁶⁰ However, creating more state debt raises doubts about the sufficiency of this option.

Advocates of Austerity are opposing the capital injections. They argue that despite increased government spending, the reactions on behalf of the private sector are hardly predictable. Austerian economists point out that it is not ensured that the public will start spending and thereby enliven the economic cycle. However, Niall Ferguson admits that the stimulus may have some short-term impact. In the same time he warns about the unsustainability of deficit spending. The austerity approach recommends returning the national budget to a balanced condition as quickly as it can be done.

On the case of the current condition of the US economy (which will be addressed further on), Ferguson points out that even a massive fiscal and monetary stimulus have been thrown at the economy it does not seem to be efficient. The US economy is still growing slowly and the level of unemployment is not lowering.⁶³ But the Keynesian reaction to that claim is: the stimulus packages were not sufficient and more money should be artificially pumped into the economy.

Ferguson explains his concerns about the US stimulus with another argument. The US is reliant on foreign lenders (mostly on China which holds 11 percent of US Treasuries in public hands), and also because of the openness of the economies, he is on the opinion that the US stimulus can end up benefiting Chinese exporters.⁶⁴

There is a contrast between the two mainstream frameworks regarding the application of stimulus spending. While Keynesianism considers pouring money into

⁵⁹ Krugman 2009, 71.

⁶⁰ Skidelsky and Kennedy 2010.

⁶¹ Edwards 2008.

⁶² Niall Ferguson, MA, D.Phil., is the Laurence A. Tisch Professor of History at Harvard University and William Ziegler Professor at Harvard Business School. He is a resident faculty member of the Minda de Gunzburg Center for European Studies. He is also a Senior Research Fellow of Jesus College, Oxford University, and a Senior Fellow of the Hoover Institution, Stanford University.

The biographical information of Niall Ferguson are cited from his official website.

⁶³ Ferguson 2010.

⁶⁴ Ferguson 2010.

the economic cycle as the right reaction to the faltering economy, the Austerity model is against increased level of spending.

Spending cuts

Austerian economists argue for cutting back government spending. According to them the amount of money which is saved in government expenditure, means money in private sector spending.⁶⁵ Wesbury and Stein believe that: 'the benefit of spending cuts is that they can set off a virtuous cycle, reducing expectations of future taxes while invigorating the incentive to participate in the private sector.'⁶⁶

On the contrary, Keynesianism opposes reduced spending during a recession. Krugman, instead of restrictions on spending advises to implement liberal policies which encourage people to spend more and not less. ⁶⁷ He is convinced that decreased state spending hurt the economy. Opponents of austerity argue that reduced public spending will not help to restore the confidence in the state economy. According to Keynesians, when private spending is already depressed, the government should not worsen this situation with reducing financial support. Moreover, they declare that if the governments are cutting public deficit now, it will cause a burden on both present and future generations. They claim that lowering income and profits straight away will result in difficulties for the future generations by having been deprived of assets they might otherwise have had. ⁶⁸ Another Keynesian argument against reduced spending is its negative impact on the living standards of the middle sector. The reduction in welfare sector expenditures and the implementation of fiscal adjustment could have a destabilizing effect on society. ⁶⁹

Austerity opposes the bailouts of troubled financial institutions and recommends restrictions on their budget deficits. Otherwise the bailouts will create a dangerous precedent with long-term consequences. Private companies would not start to take responsibility for their own actions and would misuse the financial resources of the state economy. On the contrary Keynesian economists believe that the government should take responsibility in saving financial institutions from

⁶⁵ Ferguson 2010.

⁶⁶ Wesbury and Stein 2010.

⁶⁷ Krugman 1998.

⁶⁸ Skidelsky and Kennedy 2010.

⁶⁹ Medley 2010.

⁷⁰ Edwards 2008.

bankruptcy. They claim that further breakdowns within the financial sector would deepen the recession.

With regards to the policy of spending cuts the crucial difference between the two economic theories lies in the time of its application. While Keynesianism suggests increased spending during an economic poverty, the Austerity approach advises to spend only in a budget surplus and cut spending in the times of recession. However, both of the models consider deficit spending acceptable: the borrowing of capital for government expenditures depends on the period of prosperity or sorrow in the economic cycle.

Reduction of workplaces

The reduction of workplaces in the state sector is a part of a fiscal adjustment plan. Through saving on salaries and other expenditures for the employees, the government is trying to counterbalance the level of the state debt.

Keynesianism holds that the level of employment should not be decreased by lay-offs, and it does not agree with cuts in wage rates, neither. According to Keynesians these steps would lower the consumption level which would further aggravate the recession and increase unemployment. According to Keynesians the government should not add to unemployment queues, and advises to employ more people and create workplaces (by increased spending). 72 Robert MacCulloch, a professor of economics at Imperial College in London points out: if the cuts in jobs will prove too big, there is a risk of sudden collapse in demand. 73 Keynesianism believes that the buying power on behalf of the private sector is necessary to make the economy functioning again and that is why they are opposing this particular reform.

The question of taxes

The two macroeconomic models have different perception on taxes. The taxes are to be increased in the Austerity model with a goal to collect more money for balancing the budget deficit. Contrarily, Keynesianism decreases taxes in order to boost private expenditures. Keynesianism believes that the expanded level in private

⁷¹ Chong Yah 2003. ⁷² Baker 2010b.

⁷³ Kirby 2011.

spending will help to recover the economy. Furthermore, Keynesian economists stand against higher taxes and argue that they will slow economic growth compared to what it would be otherwise. According to Keynesians high tax rate produces weak market conditions and correspondingly diminished profit opportunities. Logically, increase of taxes is not a feasible plan for countries where tax rates are already high. In these cases the implementation of higher taxes would mean a danger of reducing the size of the economy. As far as the Austerity plan is discussed, it is true that increasing taxes is not a sufficient solution on its own, because in Europe and also in many US states the deficit is so high that taxation can not pay for it all. This is the reason why the Austerity model implements this policy option simultaneously with additional reforms.

Debt (public and external debt)

The indebtedness (both on a national and global level) is an issue which has to be resolved. From the mainstream economic models the Keynesian theory does not include a concrete strategy concerning this issue. In the view of Keynesianism the issue of state deficit should be addressed after the crisis is over. The goal of the Keynesian economic model is the restoration of the pre-crisis economic mechanisms. Therefore, achieving this condition should be pursued by every means even if it leads to growing debt levels. They believe that the government should cope with the problem of debt after the economic processes start to function as they used to in the past.

Carmen Reinhart and Kenneth Rogoff warned that debt burdens of more than 90 percent of GDP tend to result in lower growth and higher inflation.⁷⁸ This effect should not be underestimated if an economy bases its recovery on additional borrowing. The repeated large injections of money are automatically increasing the level of debt.⁷⁹ On the contrary, the Austerity model tries to achieve deficit reduction. The Austerity framework points out that as a consequence of additional borrowing a debt burden will fall on future taxpayers. Baker opposes these

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⁷⁴ Skidelsky and Kennedy 2010.

⁷⁵ Wesbury and Stein 2010.

⁷⁶ Pollin 2010, 23.

⁷⁷ Wesbury and Stein 2010.

⁷⁸ Ferguson 2010.

⁷⁹ Kirby 2011.

allegations and claims that government debt is not a convenient indicator of intergenerational fairness. Moreover, he believes that the future generations can be prosperous even if a country has a large public debt. 80 Keynesians argue that government, unlike private individuals, is able to repay its maturing debts by borrowing again or printing money. 81 However, this leaves the issue debt reduction without solution on behalf of Keynesianism.

The role of the US dollar as an international reserve currency

The extent of the global financial crisis has highlighted worldwide significance of the US currency. 82 Therefore, the next widely discussed issue related to the recovery process in the aftermath of the crisis is the question of currency depreciation. The US dollar and the country's external debt are tightly interrelated. The level of import in the US has been much higher than its export level, which has caused significant trade deficit and the overvaluation of the dollar. Because China is the main accumulator of the US government debt, the dollar's revaluation to the yuan would be a fundamental step to reorganize the international currency system. It is not surprising that the Chinese government holds concerns regarding this step, because if the US currency fell against the Chinese currency, goods imported from China would be more expensive to buy in the US. This would lead US consumers to switch from Chinese products to goods produced in their homeland or to import from other economies.⁸³ At the same time American exports would be also cheaper. This concept explains why would have the revaluation of the dollar positive impact on the US economy. In the longer term, Baker considers the revaluation unavoidable in order to restore balance in the US trade.⁸⁴ Due to the importance of international trade in US economy, the reduction of imports and increase in exports would help in the recovery process.⁸⁵ According to some experts the role of the US dollar has already reached a turning point and 'the current crisis marks the end of an era of credit expansion based on the dollar as the international reserve currency.¹⁸⁶

⁸⁰ Baker 2010, 110.

⁸¹ Skidelsky and Kennedy 2010.

⁸² The US dollar's status as a global currency was created in 1944 when it was linked to gold as a part of the Bretton Woods agreement. [Winnett 2008.]

⁸³ Baker 2010, 114.

⁸⁴ Baker 2010, 3.

⁸⁵ Baker 2010b.

⁸⁶ Soros 2009, introduction.

Nevertheless, as long as the definite outcomes of the recession are not clear, it would be too quick to conclude such change in the dollar's position.

Ferguson also considers the dollar's depreciation necessary in the recovery process. With regard to the indebtedness of the US he warns that if there would be no decrease in debt, the dollar would not depreciate fast enough to reduce the debt burden. Afterwards, the economic stagnation would result in serious social and political problems and the US will loose its credibility. 87 With regard to the solutions of the crisis the depreciation in the value of the US dollar represents a policy accepted by both mainstream economic model.

3.2. Comparison of policy measures implemented in the United States and in the United Kingdom

The economies of developed and developing countries around the world have been affected diversely by the credit crunch. In many cases the definite outcomes of the global financial and economic crisis are still hardly predictable. Although, there is a variety of already applied responses worldwide it is impossible to determine when these changes are going to influence the economy in a required direction.

The US along with the UK are presumably the most seriously affected world economies 'as they already had large deficits and have had to spend heavily to bailout their banking sector.'88 The contrast between the decisions taken by the US and the UK governments represents a convenient example for the comparison of the Keynesian and Austerity approaches. Even though both countries are dealing with similar problems (huge fiscal deficit, consequences of the burst of the housing bubble, etc.) they have taken fundamentally different paths with their economic policies.89

The table below shows the most important indicators of the recession in the two analyzed countries. 90

⁸⁸ BBC News, 'The cost of the financial meltdown: Deficits and spending'.

⁸⁷ Ferguson 2010.

⁹⁰ The content of the table is based on information and data from the CIA – The World Factbook.

	United States		United Kingdom		Global country comparison	
	2009	2010	2009	2010	US	UK
Public debt ^a	53.5% of GDP	58.9% of GDP	68.2% of GDP	76.5% of GDP	36	23
External debt ^{bc}	\$13.75 trillion (31 Dec. 2008)	\$13.98 trillion (30 June 2010)	\$9.041 trillion (31 Dec. 2008)	\$8.981 trillion(30 June 2010)	1	3
Unemployment rate	9.3%	9.7%	7.6%	7.9%	108	86
GDP real growth rate ^d	-2.6% 0% (2008 est.)	2.7%	-5% -0.1% (2008 est.)	1.6%	134	164

The following explanations are given in the CIA World Factbook (direct quote):

^a This entry records the cumulative total of all government borrowings less repayments that are denominated in a country's home currency. Public debt should not be confused with external debt, which reflects the foreign currency liabilities of both the private and public sector and must financed out of foreign exchange earnings.

https://www.cia.gov/library/publications/the-world-factbook/ [cited 18 March 2011]

^b This entry gives the total public and private debt owed to nonresidents repayable in internationally accepted currencies, goods, or services. These figures are calculated on an exchange rate basis, i.e., not in purchasing power parity (PPP) terms.

^c External debt US – approximately 4/5ths of US external debt is denominated in US dollars; foreign lenders have been willing to hold US dollar denominated debt instruments because they view the dollar as the world's reserve currency.

^d This entry gives GDP growth on an annual basis adjusted for inflation and expressed as a percent.

3.2.1. Policy measures implemented in the US

In December 2008 the US economy was declared to be in recession since December of 2007 by the National Bureau of Economic Research. ⁹¹ The NBER is an independent committee of economists which is responsible to determine whether the US is experiencing an economic slowdown or not. On the basis of several indicators (as the level of GDP, industrial production, employment, consumer spending) it declares recession. A decline in all these indicators is implies to a serious deterioration in the state economy. ⁹² The following overview of the adopted policy responses evidently shows the features of Keynesianism. The analysis is based on concrete data and information regarding the undertaken economic policy measures in periodic order.

The first Keynesian reaction in the US was four months after the eruption of the crisis. In December 2007 the Federal Reserve⁹³ brought into existence the Term Auction Facility (TAF) which was aimed to create more liquidity. This mechanism was meant to reduce interest rate spreads in the financial markets and increase the credit flow. In February 2008, the acceptance of the Economic Stimulus Act from was also a representative example of Keynesianism. It gave cash totaling over \$100 billion to individuals and families expecting them to boost the consumption and the economy as such with more spending.⁹⁴ This stimulus package contained mainly tax cuts, and the help for individuals came in the form of an extension of unemployment insurance benefits.⁹⁵

In April 2008 there was a sharp reduction in the target federal-funds rate to 2% from 5.25% since August 2007. This led to the devaluation of the US dollar and to oil price increases. In September 2008 the financial panic led to a substantial decline in the US economy but the upcoming elections decelerated the decision-making procedure. In the view of Baker, a quick adoption of a stimulus package would have helped. It is sure, that even though the policy responses on the side of the US government were not adequate, for crisis preemption it was already late anyway. A Keynesian intervention carried out in November 2008 included nearly US\$1

⁹¹ Gravelle, Hungerford and Labonte 2009, 1.

⁹² Krugman 2009, 151.

⁹³ The Federal Reserve – Fed is the central banking system of the US.

⁹⁴ Taylor 2009.

⁹⁵ Swagel 2009.

⁹⁶ Taylor 2009.

⁹⁷ Baker 2010, 99.

trillion in new spending and tax reductions. 98 99 An additional \$787 billion fiscal stimulus plan was adopted in January 2009 carrying the appellation: The American Recovery and Reinvestment Act of 2009. The Act was signed into law by President Barack Obama on February 17, 2009. 100 Although the whole amount of finances was supposed to be used in a period of one decade, by the end of 2010 the two-third of it was already invested into the economy. This concrete stimulus package was meant to be used on supplementary spending and tax cuts. Furthermore, by propping up spending the package was aimed to create new workplaces and keep the unemployment levels low. 101 Nevertheless, this goal was not achieved: in the middle of 2009 the level of unemployment had hit 9.5 percent. 102

The undertaken policy measures on behalf of the US government during the first two years of the slope were financially demanding and led to the increase of state deficit. However, the US have not changed its policy preferences and continued in responding to the recession with Keynesian means.

In July 2010 the DODD-FRANK Wall Street Reform and Consumer Protection Act¹⁰³ was signed into law. The act brought the most radical change in financial regulation since the Great Depression. It was designed to promote protection for American consumers by getting access to clear and accurate information about financial products. It ended taxpayer bailouts of financial firms that threaten the economy. The act also launches an Advance Warning System to identify and address risks in the financial sector. 104 The fact that the government (after almost three years of bailing out troubled financial organizations) adopted a restriction in this area represented a certain deviation from the Keynesian theory. The DODD-FRANK act was the first reaction on behalf of the US Congress which differs from the previously adopted mindset.

Nonetheless, in November 2010 the Fed introduced a purchase of \$600 billion worth of US Government bonds. This amount of capital was aimed to keep

⁹⁸ Kirby 2011.

⁹⁹ The unemployment rate hit 7.2 percent in December 2008. [Baker 2010, 99.]

¹⁰⁰ Gravelle, Hungerford and Labonte 2009, 7.

¹⁰¹ CIA - The World Factbook.

¹⁰² Baker 2010, 39.

¹⁰³ An Act to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes.

104 United States Senate Committee on Banking, Housing, and Urban Affairs, 2010.

interest rates from rising until June 2011. ¹⁰⁵ In December 2010 another round of stimulus package of \$892 billion was launched by the US government. ¹⁰⁶ This decision came along with an approbation of tax cuts for two more years. At the same time, the administration decided for the extension of the unemployment benefits too. ¹⁰⁷ According to Prasad and Sorkin, 'in 2010, the US accounted for over 60 percent of planned stimulus. ¹⁰⁸ The estimation of The Congressional Budget Office is that these programs have already added another US\$30 billion to the deficit over the next decade. ¹⁰⁹ The US is trying to recover from the recession with the help of stimulus spending, tax cuts and increased government expenditures. The American policy makers believe that this will help to restore the condition of the national economy. Dealing with the enormous budget deficit ¹¹⁰ is not yet a part of the recovery plan.

One may ask why is such an outstanding credibility of this particular economic framework present in the circle of US policy makers. It is true, that Keynesian policies were applied only in a few economies. But because of the dominance of the US economy they had international effects. In most Western countries the Keynesian model has laid the basics of a managed and welfare-oriented form of governance. In the aftermath of the WWII, the Keynesian policies kept the unemployment levels low in industrial countries of the Western world. These past experiences also serve as an argument for the advocates of the Keynesian model.

3.2.2. Policy measures implemented in the UK

The critical magnitude of the global financial crisis in the UK at first started to be perceived in the middle of 2008. Due to the weight of its financial sector it hit the country with sudden decline in house prices and high consumer debt, which indicated the damaged financial system. According to Michael Wickens, a

¹⁰⁵ CIA – The World Factbook.

¹⁰⁶ Kirby 2011.

¹⁰⁷ Kirby 2011.

¹⁰⁸ Prasad and Sorkin 2009.

¹⁰⁹ Kirby 2011

¹¹⁰ On the basis of information from the Congressional Budget Office the federal debt in public hands is set to rise from 62 percent of GDP this year to above 90 percent by 2021. [Ferguson 2010].

¹¹¹ Crouch 2009.

¹¹² Yergin and Stanislaw 1998, 23.

¹¹³ CIA – The World Factbook.

professor of economics at the University of York: 'the UK's deficit problem has nothing to do with the recession.' He thinks that the financial collapse brought the persistent problems into sharp focus.¹¹⁴ The UK has a \$173 billion (£109 billion) structural deficit which is the largest in Europe. Furthermore, it is saddled with \$68 billion (£43 billion) a year in debt interest charges.¹¹⁵ ¹¹⁶

At the start of the recession ex-Prime Minister Gordon Brown and his cabinet were responding to the crisis in a Keynesian sense. The Brown government decided to implement several measures to stimulate the economy. It introduced a \$315 billion (£500 billion) banking bail-out plan: it included buying stocks in banks in order to raise cash. The UK's first responses to the global slump involved partial nationalization of banks, cutting taxes, and public spending on capital projects. The government also provided state guarantees for loans between banks. But with the change of government in May 2010, a radical shift occurred in the UK's economic policy.

In the middle of 2010, the newly established UK government under the leadership of Prime Minister David Cameron began implementing its five year fiscal adjustment plan. The plan included cuts in government's spending in almost all sector by 25 percent. Because of the country's budget deficit UK policy makers argue, that immediate Austerity measures are the only real policy option. The adopted measures mean that until 2015, the UK is predicted to have the third largest reduction in the share of government borrowing in national income. The Austerity plan aims to reduce the budget shortage from over 11% of GDP in 2010 to nearly 1% by 2015. The purpose of these steps is to eliminate the deficit by 2014, and start with paying down the country's debt. In May 2010 the Office for Budget Responsibility was established to make independent evaluations of the status of

¹¹⁴ Kirby 2011.

¹¹⁵ Mayer 2010.

¹¹⁶ 'In 2010, the UK's share of headline borrowing in national income was the third highest among the high-income countries, after the US and Ireland.' [Wolf 2011.]

¹¹⁷ Borger 2008.

¹¹⁸ CIA – The World Factbook.

¹¹⁹ Borger 2008.

¹²⁰ Pollin 2010, 3-4.

¹²¹ CIA – The World Factbook.

¹²² Kirby 2011.

public finances and the economy as whole. 123 The organization is responsible for the evaluation of success in reducing deficits. 124

From twenty-nine high-income countries Iceland and Ireland are the only exceptions who are cutting more than the UK. 125 Taking into account that these countries are among the most seriously affected by the crisis, it is a radical cutback on the side of a country which was not in an explicit danger of economic breakdown - as there was no fiscal crisis in the UK. The reductions are forecasted to be the second-largest in Europe right after Greece.

The total amount of cuts in spending stands for \$131 billion. Almost every segment of the UK public sector is affected by the regulatory measures. The spending plan of the military sector is about to being cut by eight percent by 2014. The Ministry of Defense and the armed forces are facing cuts of more than 40 000 jobs by 2015. The government department funding is getting nineteen percent less in its budget, which means cancelling of about half a million government jobs. This reform comes with reduced payments and benefits for government workers too. There are nearly 30 percent reductions for local governments by 2015. The budget of the police department is being reduced by 16 percent.

The austerity actions also comprise rising the retirement age to 66 from 65 by 2020. 129 130 On the basis of previous calculations this will save \$8 billion (£5 billion) a year. The cuts in the welfare sector approximately represent \$28 billion (£18 billion). 131 There will be no more child-benefit payments to middle-class households, and cuts in school sports programs are also being considered. 132 The higher education sector was also affected by the Austerity reforms: university funding is slashed by 40%. 133 The budget for energy and climate change is also being reduced. Over the following years it will get 5 percent less subsides than in the past. 134 Another feature of an Austerity theory is being implemented in the UK: at the

¹²³ Office for Budget Responsibility.

¹²⁴ Traynor and Allen, 2010.

¹²⁵ Wolf 2011.

¹²⁶ Pimlott, Giles, and Harding 2010.

¹²⁷ Kirby 2011.

Pimlott, Giles, and Harding 2010.

¹²⁹ Mendleson 2011.

¹³⁰ Currently the retirement age for women is 60, and for men is 65.

¹³¹ Mayer 2010.

¹³² Kirby 2011.

¹³³ Mayer 2010.

¹³⁴ Euronews.

beginning of the year 2011 the value-added tax (VAT) was increased to 20 percent from 17.5 percent. Although, these tax revenues mean a certain increase in the national budget, they evoked complications on macroeconomic level. As a result of VAT hike the country is beset with higher inflation. The increase in the inflation level in the aftermath of tax rises represents a side-effect of the policy of fiscal adjustment. There are tax increases in other areas as well: the insurance premium tax for households and cars rose from 5% to 6% in January 2011.

The UK is currently undertaking the sharpest cuts in public spending since the end of the WWII. On the basis of information from Capital Economics, an independent macroeconomic research consultancy, during 2011 the household disposable incomes will be reduced by an average £500 (approximately US \$790). 138 Almost all of the undertaken measures have a direct influence on the living standards of the UK citizens. The policies of fiscal adjustment mean high unemployment and cuts in health care, education, pensions, public safety and in other social benefits. 139 Considering that people do not dispose with the money to finance their costs for living, it does not leave other option for them just to borrow. According to the estimations of the Office for Budget Responsibility households will go further into debt each year between 2011 and 2015. 140 And although the national deficit would be decreased, this could lead to huge public indebtedness.

Even though the Austerity plan may be effective in eliminating the national deficit it does not give any guidance for the post-crisis economic policy.

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¹³⁵ Wesbury and Stein 2010.

¹³⁶ Giles and Pimlott 2011.

¹³⁷ Brignall 2010.

¹³⁸ Chakrabortty 2011.

¹³⁹ Pollin 2010, 22.

¹⁴⁰ Chakrabortty 2011.

4. The implications of Systems Theory for the crisis response

The organization of the world economy as it has developed during the twentieth century became unsustainable. It could not manifest itself better as in the ongoing economic recession: the economy is not able to grow anymore as it was growing during the previous decades. According to Fareed Zakaria: 'between 1990 and 2007, the global economy grew from \$22.8 trillion to \$53.3 trillion, and global trade increased 133 percent.' Years before the financial crash, László already predicted that the overspending policy on behalf of the economic sector would not be sustainable and in the case of a possible collapse it would have a worldwide impact. 142 The two mainstream economic frameworks are offering an almost completely different type of solution. A fundamental argument of the Austerity approach against Keynesianism is: Keynesianism has a short-term focus and it does not offer a long-term set of solutions. 143 However, after a thoroughgoing analysis of these economic models it turns out that none of them offer any long-term solutions to these issues. After considering the recommendations made by these two frameworks it becomes clear, that they are not able to resolve the main problems of the global economic structure. The two main issues with regards to this topic became evident with the spread of the economic crisis.

Firstly, the issues of the extreme indebtedness of states as well as on global levels become the main focus. Secondly, the problem also arises with regards to the immoderate interdependence of states on the US as a whole, and also on the US currency of the Dollar.

The main concern with retrospect on the indebtedness of states can be explained through infinite spending, regardless of the disposable capital. Private, public, state and global sectors of the world economic structure were leading a life based on borrowings. With the financial crisis it became obvious: using debt for production in the current global economic system is dangerous. ¹⁴⁴ Tomáš Sedláček, a recognized Czech macroeconomist, argues that one of the main causes of the crisis is the ongoing trend among the societies of the developed world, namely: that people

¹⁴¹ Zakaria 2008, 20.

¹⁴² László 2010, 30.

¹⁴³ Edwards 2008.

¹⁴⁴ Even a response for a crisis was more borrowing and not just in the case of US or with the application of the Keynesian model. For the Greek crisis the European Union in May 2010 proposed a €750 billion (\$900 billion) rescue program largely consisting of even more borrowed money. [Coggan 2010]

consider materialistic values as their lives main purpose. The economic policies of these states are promoting this image and are trying to ensure the upcoming needs of the society. Consequently, economies are getting procyclical and the governments are increasing debts equally in times of prosperity as well as sorrow. This is one of the reasons, why the economic crisis of the past decades is more profound – because before the worsening of the economic situation the states already disposed with high levels of debt. Most of the economies of the developed world are functioning in a constant budget deficit. The stimulus packages of the states could be justified, if states would have chosen a strategy of saving in times of boom. But governments were pumping money into almost every sector of the economy even if it was unnecessary. People got dependant on excessively high growth and were choosing policies artificially creating this growth. 145 Irresponsible borrowing has become a common phenomenon in the private as well as the public sectors. However, both sectors seem to have forgotten that sooner or later every debt has to be repaid. 146

Contemporary economics should abandon this trend and rediscover the meaning of enough. From the perspective on assets and economic power the current global society owns the most in the history of western civilizations. Sedláček points out that people should start to appreciate what they already have. 147 Philip Coggan from The Economist also emphasizes this ascertainment. According to him, the debtfinanced model of the developed world has reached its limit. 148 The failure of the previously adopted policies is becoming evident, as one economy is collapsing after the other. According to László the time of previously applied economic models has now passed, regardless of what benefits they may have brought in their time. 149

On the other hand, the next critical matter, which led the worldwide to an economic collapse was the dominance of the US economy and its currency (more than two-thirds of global reserves are held in US dollars)¹⁵⁰, which resulted in several debates in the aftermath of the crisis. The fact that the international currency system is dependant on the US monetary policy does not offer a positive prospect for the future of the global economy. The trend of reliance on one country or one currency is not functional anymore. The reality that the international currency system

¹⁴⁵ Sedláček 255-258.

¹⁴⁶ Coggan 2010.

¹⁴⁷ Sedláček 2009, 255-258.

¹⁴⁸ Coggan 2010.

¹⁴⁹ László 2010, 63.

¹⁵⁰ László 2010, 29-30.

is not working properly is also directly responsible for the follow-ups of the global crisis. Because the currency system has always been linked to geopolitics, the ideas regarding the creation of an alternative currency system should have been considered on a global level. The existence of a new international currency structure, which would fit to the multipolar economic system, could help avoid the possibility of a domino effect (such as the one in 2007). The United Nations Conference on Trade and Development (UNCTAD) is the first multinational institution that came up with the idea of replacing the US dollar in this position. The question regarding the reorganization of the global currency structure has to be answered; the control and coordination of the structural imbalances should be realized multilaterally. In order to achieve this, the reorganization of the IMF is also inevitable. ¹⁵¹

As long as there will not be any radical changes implemented regarding these two areas, there is little chance of avoidance of future crises. Unless the most fundamental causes of the crisis are not recognized, the right solutions will be hardly found. Nothing represents this scenario better than the current condition of the economic structure, namely four years after the eruption of the global crisis. Even though there were several measures implemented in almost every economy of the world with the purpose to mitigate the impact of the recession, the post-crisis economy is durably and significantly smaller than was expected before the crisis. 152 The global financial crisis should be seen as an opportunity for restructuring, and not returning back to economic concepts, which have already led towards recession in the past. A crisis indicates the need for reforms and change.

This clearly shows that the path chosen in the past would not be valid anymore. Sedláček sees the crisis as an essential part of existence. The essentiality of this is visible in the mistakes and weaknesses of the past, which are able to push people towards new knowledge. He believes that a crisis comes with a purpose to uncover something new. He is also convinced that the economic crisis of 2007-2011 is a sign to change direction in the economic system. The statement, with the help of better regulations or on the contrary with pumping up spending can be a solution towards the avoidance of next crises is a big mistake. Sedláček further declares that the ongoing crisis is a part of a development, which pushes the society somewhere

 $^{^{151}}$ Časlavka and Lukáš 2011. 152 Wolf 2011.

further (to the next level). 153 All of this would mean a significant remodeling of the economic structure, and therefore of the global society as well. But in the view of the Systems Theory this shift is contrivable.

There is a very high possibility that a bifurcation has occurred in the economic sector, and that the global financial crisis of 2007-2011 is at its culmination. The fact that the collapse in the sphere of economics resulted in problems and difficulties in almost every sector of the society endorses the feature of bifurcation. Instabilities in one segment of the society are spreading towards other sectors without exception. Few months after the first signs of the economic meltdown and its affect was visible in almost every sphere of public sector. The sudden shortage of public finances caused substantial difficulties in health care, education and the cultural sector, social services, etc. As it was described and explained in the theoretical part of this analysis, after a bifurcation of the system (in this case the economic system) responds to new factors.

László supports his apprehension of the crisis on the basis of these scientific findings. According to the Systems Theory the ongoing crisis can signal a change, which can lead to a global reform. However, when a society enters a chaotic state it is sensitive to every small fluctuation. This means that it is open for new ideas, thoughts and even ready for a radical change of condition. 154 The instigators of the chaos in the case of the crisis are the economic unsustainability (consumption and growth led model of the economy), and the unsustainability of the current developments in the financial system (the global economic crisis itself). David A. Westbrook also holds the view that: 'the current financial crisis increasingly seems to be historically transformative.'155

László believes that the global society has entered a so-called "decision window". It means that the prevalent social order is experiencing changes that raise doubts about the continuity of the previously applied (not just) economic governance. Because a bifurcation is not determined either by the history of a system neither by its environment, 156 the outcomes of the crisis are not determined either. They depend only on the policies adopted by the government of each state and the actions taken by the international community. Sedláček also agrees that the economy

¹⁵³ Sedláček 2009, 226-232.

¹⁵⁴ László 2010, 60. 155 Westbrook 2010, introduction.

¹⁵⁶ László 2010, 29-31.

is not deterministic (like it was believed in the 19th century). ¹⁵⁷ As the economy does not behave linearly, even a small change can have significant consequences for the whole system. After the examination of the causes and outcomes of the crisis it is apparent what has to be changed. 158 The consumption-led model of the society has to be replaced, and the role of economy both on a personal and societal level has to be reformed.

Whether there are limits to growth altogether is questionable, but there are clearly limits to the kind of growth that is occurring today. The mistakes should be corrected and the governments should avoid the policy of debt - life on debt is not feasible anymore. Sedláček also warns that the role of the economy must be changed on a personal and societal level and the debts have to be repaid before another crisis occurs. 159 After the evident consequences of the economic reprisal it should be clear to everybody that the naive solution of reduction of everything and everybody to its economic value is not rational anymore. 160 László supports his thought (that the economic sector, and the crisis itself can be a way through which meaningful changes can be implemented with findings) from governmental agencies as well. 161 The national economies have to start managing their budget without creating debt. They have to take bigger responsibility in controlling public finances because it is a property of the future generations as well. 162 The economic crisis has proven that the problems lay deeper than it was estimated.

The global financial crisis enlightened the contrast between the social classes not just in developing countries, but also in the US and the UK. 163 There are

¹⁵⁷ Sedláček 2009, 249.

¹⁵⁸ Coggan 2010.

¹⁵⁹ Sedláček 2009, 255-258.

¹⁶⁰ László 2010, 6.

¹⁶¹ 'The unclassified report of the US National Intelligence Council, Global Trends 2015: A Dialogue about the Future with Nongovernmental Experts, was published in 2000. According to this document, the state of the world in the year 2015 will be determined by the unfolding of key trends, catalyzed by key drivers. The seven key trends and drivers in demographics, natural resources and environment, science and technology, the global economy and globalization, national and international governance, future conflict, and the role of the United States.'

[[]László 2010, 6.]

¹⁶² Sedláček 2009, 255-258.

¹⁶³The global economic crisis sharpened concerns about unemployment, uncertain economic prospects, and the growing move toward the informal sector in the world economy. Almost half the world's workforce, some 1.5 billion people, is classified by the International Labour Organization as being in vulnerable employment arrangements. More than 1.2 billion workers are mired in poverty, earning less than \$2 a day. Close to 190 million people were unemployed altogether in 2008, a number that was expected to rise by 30-60 million in 2009. North Africa, the Middle East, Eastern Europe, sub-Saharan Africa, and Latin America have particularly high rates of joblessness. The

substantial disproportions inside the public sector and the society as a whole. 164 The relevance of mutual interrelation between social classes manifested itself both on national and global levels. In the view of the Systems Theory and the societal interconnectedness offers a solution (not just) for the crisis. Regarding the factor of interconnectedness Sedláček is on the same opinion and he adds: the crisis offers an opportunity to use it for better engagement with developing and poor countries. 165 The era of independently functioning economic sectors has reached its end. A cooperative and information-driven postmodern view can make the implementation of the needed changes possible. The present economic crisis can be reflected as an indicator of these reforms. The mainstream responses are trying to restore the profitdriven economic model and return back to the previously functioning policies. 166 But these models are only able to function as long as another "bubble does not burst" or the debt burden will be so big that there is not going to be any way out. The concept of bifurcation and the Systems Theory justifies László's assumptions that the above clarified shift is realizable.

4.1. Comparison of the mainstream and alternative frameworks

Keynesianism and Krugman recommend spend now and worry about the deficit later. This economic policy holds that in the case of spending the growth will come, and the debts can be paid down afterwards. It advises continued spending: according to Keynesianism, state intervention and more capital in the economic cycle will enliven the processes which were blocked as a result of the economic the breakdown. Cutting spending in the view of Keynesian economists would mean lower growth, lower confidence and rising unemployment levels.

On the contrary, Austerity advises massive cutbacks and saving measures in every sector of the state economy. Due to the straitened circumstances it opposes financial assistance and subsidies to the public sector. The policy of economic Austerity is being issued to provide reforms leading to the elimination of the state deficit. The policy holds that because the economy is beset with high levels of debt

unemployment figure for young people, at 12 percent, was double the overall rate.' [The Worldwatch Institute 2010, 128.]

 ¹⁶⁴ László 2010, 5.
 165 Sedláček 2009, 255-258.

¹⁶⁶ László 2010. 6-7.

the private sector should engage in fighting against these difficulties. After the comparison of likely benefits and disadvantages of the mainstream frameworks it is perceptible: the economic policy based on debt will not end. Whether there are Keynesian policy options applied, or on the contrary the Austerity model is implemented, surviving the crisis without more borrowing is not contrivable. Keynesianism causes state indebtedness, while Austerity results in increased public debt.

The Systems Theory does not recognize an economy built on debt. Although, it does not include a concrete recovery plan for the economic crisis, it offers a variety of changes which can avoid the emergence of economic recessions. The Systems Theory recognizes the fundamental roots of the economic breakdown and points out that neither endless spending neither massive cutting is an appropriate reaction for the crisis. The alternative model points out that the mainstream theoretical frameworks were applied in the past but they did not success in keeping the economy functioning.

However, the Systems Theory is a not a simple economic model, there can be found homogenous features between the alternative and the mainstream theoretical perspectives. Neither Keynesianism neither László's theory recognizes the concept of self-regulating economy. Keynesianism argues for organized state intervention into the economic cycle. The Systems Theory points out that because the economy is a complex system, its functioning should not be left without influence on the side of government. However, the character of the possible state intervention differs in these two models. The Systems Theory does not recognize the artificially created processes in the economic cycle. It holds the view that the state should ensure better competition in the economic sector. This way the benefits would be justly allocated by the system itself without need for radical intervention into the economic mechanism. 167

With regard to the relationship between the Austerity model and Systems Theory there is a noticeable link as well. Both approaches claim that the role of freemarket and deregulation in the end leads to imbalance and inequality. 168 There is a consensus between these two theories, that putting the state budget further into debt

¹⁶⁷ László 2010, 3. ¹⁶⁸ László 2010, 5.

could delay an economic recovery. Another similarity between the Austerity model and the Systems Theory is that both of the frameworks suggest a change in policy regime. However, Austerity advises modification in economic policy just until the debts are paid down.

The revaluation of the US dollar represents a policy option accepted and suggested by both mainstream theories and by the alternative framework too.

¹⁶⁹ Edwards 2008.

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Results

During the four years since the economic breakdown hit the world, various policy measures have been adopted with the aim to stop, mitigate or resolve the crisis. However, the consequences are still not dealt with as they should be, and economies around the world still not deal with the crisis as they should. The provided analysis in this bachelor thesis underlined this reality, and signalized the inevitability to continue in looking for new conceptions.

The thesis have analyzed and compared three theoretical approaches in connection with the possible responses to this complex issue. The theoretical comparison clarified the similarities and differences between two mainstream theoretical perspectives: Keynesianism and Austerity. On the cases of the applied policy options in the US and the UK, the thesis represented the characteristic features of these economic frameworks. The provided data from the observed national economies gave an overview about the likely consequences of the applied policies on the private and public sector of each examined economy.

In the case of the Keynesianism, the comparison along with the case study of the US revealed that the strategies suggested by this model are of short-term character. The application of this mainstream framework may lead to improvements in the economic system, such as higher employment levels, increased consummation and the resurrection of the business sector. However, these upturns do not lead to a complete recovery from the global financial crisis. As the improvements in these economic indicators are achieved by the means of deficit financing, the undertaken Keynesian instruments will have long-term consequences in the form of exorbitant budget deficit.

The comparison of Austerity with the Keynesianism concluded the main differences between them. The analysis of the applied Austerity measure from both a theoretical and practical perspective (the case of the UK) identified the likely effects of this economic model. Austerity is an economic policy aimed to mitigate the impacts of the crisis, but it does not include a long-term economic conception as it does not offer any recommendation on the post-crisis character of the economy. While the adoption of Austerity policy options may fulfill the fundamental thought

of the theory: the balance of the budget level, at the same time the growing levels of private sector indebtedness are a very likely side-effect of these reforms.

By clarifying the features of the Systems Theory the bachelor thesis outlined the relevance of systemic interconnectedness. Considering the case of the global financial crisis for a systemic problem, the observation of the basic aspects of this theoretical perspective has illustrated the feasibility of large-scale changes. The Chaos Theory, which can be identified as a part of the Systems Theory, underlined the global meaning of the economic breakdown.

The first main revelation of the thesis is that a debt-based economic model is not maintainable anymore. Both the public and private debt has to be eliminated, and the paradigm of growth intended economics has to be reformed. The second key issue which was addressed by the thesis is a need for a reformed global financial system. None of the economies should dominate upon other economies such as the US did and still does. Otherwise, the difficulties experienced in the dominating economy will always result in a chain reaction.

After reviewing the two mainstream economic models it became clear that none of them represents an adequate response to the crisis as they do not go to the roots of the economic breakdown. The Systems Theory recognizes the main causes of the global recession and suggests a fundamental restructuration of the economic sector. By the comparison of the three theoretical perspectives the hypothesis was verified. Both the Keynesian and Austerity models are oriented toward short-term solutions that keep the current economic system in place, as the main goal of these mainstream theories is the restoration of the pre-crisis economic structure. The alternative perspective is oriented toward long-term solution of the crisis. The Systems Theory has identified the roots of the breakdown, and with the concept of bifurcation it presented a possible way for the realization of the suggested changes.

The contribution of this bachelor thesis to the literature is that it does not merely contrast two well known theories, but it introduces a third one into the analysis, which has been overlooked in the academic debate.

Conclusion

One of the key messages of this bachelor thesis could be interpreted with the viewpoint of Nouriel Roubini: the crisis is not over and the already applied policy options are not able to mitigate its consequences. The roots of the crisis were not addressed, the crisis symptoms were merely covered over and the effects of the critical indebtedness can be destructive. It is therefore just a matter of time when the next crisis, or the next wave of the existing, will evolve. 170 The thesis addressed the necessity to reconsider the possible policy responses.

Four years ago the US economy was hit by a subprime crisis. It was merely a sub-segment of one market (the mortgage market) within one country, but it was sufficient to generate contagion in other markets and other countries, threatening to develop into a domino effect that could lead to a collapse of the financial system, with dramatic consequences on the real economy. The subprime crisis exposed structural weaknesses in the financial system, which are not addressed by governments such as to "too big to fail" problem. It also places in doubt the way in which money is created, the role of the central banks and the entire system of debt, based on which our prosperity was created. The current financial system is highly fragile, which explains the frenzy of activity of heads of states and finance ministers ever since 2008, when the crisis threatened to spin out of control.

The crisis has also exposed structural weaknesses in the scientific apparatus and leads to questions about the content as well as methods of economics. Although the crisis was predictable, almost no economist was able or courageous enough to predict it, and only a few economists promote the kinds of changes that are called for in order to avoid a second wave of the crisis. There are exceptions that prove the rule. For instance, Robert Schiller, a professor of economics at the Yale University, began warning of the housing bubble and the likely consequences of its burst in 2003. 171 But he did not foresee that the outcome of the US crisis in one segment of the mortgage market could be a global economic recession.

Most economic advisors along with the policy makers are missing the type of thinking that provides a more comprehensive real-world insight. Their recommendations lean on theoretical knowledge, which may be true for partial

¹⁷⁰ Freeland 2010. ¹⁷¹ Baker 2010a, 14.

analysis, but which do not reflect the overall anomaly of the process – the fact that the current crisis is not just a downturn in the economic cycle, but a broader transformation of society. The structure of the economy has to be changed; if not, future crises are pre-programmed. Before such new structures can be created, a new thinking needs to replace the old, and governments should avoid returning back to the failed financial policies of recent decades.¹⁷²

The limitation of this thesis is given by the fact that there was no single work that I could used in order to generate or replicate the analysis, not even a work that would have given directions as to how such an analysis is to be conducted. With hindsight, I realize that this work has been too ambitious, but I hope to get back to it when I pursue higher degrees, where this type of initial review and reflection can serve as a basis for more in-depth and systematic research.

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¹⁷² Westbrook 2010, introduction.

Bibliography

Works cited

Baker, Dean, 2008. *The Housing Bubble and the Financial Crisis* [Internet]. Real World Economics Review, 20 May 2008 [cited 8 February 2011]. Available from http://www.paecon.net/PAEReview/issue46/Baker46.pdf

Baker, Dean, 2010a. *False Profits: Recovering from the Bubble Economy*. Sausalito, CA: PoliPointPress.

Baker, Dean, 2010b. Taking Economics Seriously. Cambridge, MA: The MIT Press.

Baker, Dean, 2010c. *The Myth of Expansionary Fiscal Austerity* [Internet]. Center for Economic and Policy Research, October 2010 [cited 21 March 2011]. Available from http://www.cepr.net/index.php/publications/reports/the-myth-of-expansionary-fiscal-austerity

BBC News, 'The cost of the financial meltdown: Deficits and spending' [Internet]. [cited 10 March 2011]. Available from http://news.bbc.co.uk/2/hi/business/8214272.stm

Blinder, Alan S., 2008. *Keynesian Economics* [Internet]. The Concise Encyclopedia of Economics, 2008 [cited 24 February 2011]. Available from http://www.econlib.org/library/Enc/KeynesianEconomics.html

Borger, Sebastian, 2008. *Gordon Brown Saves the Banks and Himself* [Internet]. Spiegel Online, 14 October 2008 [cited 15 March 2011]. Available from http://www.spiegel.de/international/europe/0,1518,584124,00.html

Brignall, Miles, 2010. *Budget: Insurance Premium Tax Rises* [Internet]. The Guardian, 22 June 2010 [cited 20 March 2011]. Available from http://www.guardian.co.uk/uk/2010/jun/22/budget-insurance-premium-tax

Burkhead, Jesse, 1971. *Changing Styles of Planning. Fiscal Planning – Conservative Keynesianism*[Internet]. Public Administration Review, May/June 1971 [cited 24 February 2011]. Available from http://www.jstor.org/

Chakrabortty, Aditya, 2011. *George Osborne's cuts: Say goodbye to Britain and hello to Austeria* [Internet]. The Guardian, 8 April 2011 [cited 10 April 2011]. Available from http://www.guardian.co.uk/commentisfree/2011/apr/08/george-osborne-austeria

Central Intelligence Agency, Official Website, 'The World Factbook' [cited 8 March 2011]. Available from https://www.cia.gov/library/publications/the-world-factbook/

Chong Yah, Lim, 2003. 'Macroeconomic Management: Is Keynesianism Dead?' *The Singapore Economic Review*, vol. 48, no. 1: 1-12.

Coggan, Philip, 2010. *A special report on debt. Repent at leisure* [Internet]. The Economist, 24 June 2010 [cited 31 March 2011]. Available from http://www.economist.com/node/16397110?story_id=16397110

Comiskey, Michael and Pawan Madhogarhia, 2009. *Unraveling the Financial Crisis of 2008* [Internet]. Political Science & Politics, April 2009 [cited 17 February 2011]. Available from http://www.apsanet.org/media/PS%20April%2009%20Comiskey%20and%20Madhogarhia.pdf

Crespo, Ricardo F., 2009. 'Thinking About The Financial and Economic Crisis: Some Brief Notes On Its Causes and Remedies' [Internet]. *Think*, vol.8, no. 23 (8/2009): 97-103.

Available from http://journals.cambridge.org/

Cypher, James M., 2011. *Beyond Keynesianism: Irving Fisher's Depression-era debt-defiation theory, then and now* [Internet]. DOLLARS & SENSE, January/February 2011 [cited 17 February 2011]. Available from http://www.dollarsandsense.org/archives/2011/0111cypher.html

Časlavka, Jiří and Ivan Lukáš, 2011. 'Monetary and financial mess, globalization in danger and how all of this is connected to Chimerica.' ['Měnový a finanční nepořádek, ohrožená globalizace a co s tím vším má Čimerika.'] *Mezinárodní politika*, vol. 35, no. 2 (2/2011): 17-19.

Edwards, Chris, 2008. *10 Reasons to Oppose a Stimulus Package for the States* [Internet]. CATO Institute, December 2008 [cited 21 March 2011]. Available from http://www.cato.org/pubs/tbb/tbb 1208-51.pdf

Ervin László, Official Website, 'Ervin László Bio' [cited 12 March 2011]. Available from http://ervinlaszlo.com/notebook/biography/

Euronews, 'Austerity plan brings UK 'back from the brink' [Internet]. Euronews, 20 October 2010 [cited 14 March 2011]. Available from http://www.euronews.net/2010/10/20/austerity-plan-brings-uk-back-from-the-brink/

Ferguson, Niall, 2008. *The Ascent of Money. A Financial History of the World.* New York, NY: The Penguin Press.

Ferguson, Niall, 2010. *Today's Keynesians have learnt nothing* [Internet]. The Financial Times, 19 July 2010 [cited 18 February 2011]. Available from http://cachef.ft.com/cms/s/0/270e1a6c-9334-11df-96d5-00144feab49a.html#axzz1Hc0o5eme

Freeland, Chrystia, 2010. 'We can't say they didn't warn us. A guide who's still standing in the post-crash marketplace of ideas.' *Foreign Policy* (100 Top Global Thinkers of 2010), December 2010, 50-52.

Giles, Chris and Daniel Pimlott, 2011. *UK austerity measures expected to pay off* [Internet]. The Financial Times, 3 January 2011 [cited 19 March 2011]. Available from http://www.ft.com/cms/s/0/5eef6f92-1784-11e0-badd-00144feabdc0.html#axzz1J6NhpwAC

Gravelle, Jane G., Thomas L. Hungerford, and Marc Labonte, 2009. Economic Stimulus: Issues and Policies . *CRS Report for Congress Prepared for Members and Committees of Congress 11/2009*. Available from http://fpc.state.gov/documents/organization/132244.pdf

INVESTOPEDIA News & Articles, official website, 'Adjustable-Rate Mortgage - ARM' [cited 5 March 2011]. Available from http://www.investopedia.com/terms/a/arm.asp

Jayadev, Arjun, and Mike Konczal, 2010. *When Is Austerity Right? In Boom, Not Bust* [Internet]. Challenge, November/December 2010 [cited 18 February 2011]. Available from http://gesd.free.fr/jayadev10.pdf

Krugman, Paul, 1998. *The Hangover Theory. Are Recessions the Inevitable Payback for Good Times?* [Internet]. Slate, 4 December 1998 [cited 19 March 2011]. Available from http://www.slate.com/id/9593/

Krugman, Paul, 2009. *The Return of Depression Economics and the crisis of 2008*. 2nd edition. New York, NY: W.W. Norton & Company.

Kirby, Jason, 2011. *Which country is right?* [Internet]. Maclean's, 17 January 2011 [cited 2 March 2011]. Available from http://www2.macleans.ca/2011/01/10/which-country-is-right/

László, Ervin, 2005. *Vision 2020: reordering chaos for global survival.* New York, NY: Gordon and Breach Science Publishers.

László, Ervin, 2010. *The Chaos Point. The World at the Crossroads*. 2nd edition. London, UK: Piatkus Books Ltd.

Mayer, Catherine, 2010. *Administering the Pain: Britain's New Austerity Plan* [Internet]. Time, 20 October 2010 [8 March 2011]. Available from http://www.time.com/time/world/article/0,8599,2026641,00.html

Medley, Mark W., 2010. *What is an Austerity Package?* [Internet]. Ezinearticles, 18 May 2010 [cited 7 March 2011]. Available from http://ezinearticles.com/?What-is-an-Austerity-Package?&id=4314616

Mendleson, Rachel, 2011. *The year of cutbacks* [Internet]. Canadian Business, 14
February 2011 [cited 2 March 2011]. Available from
<a href="http://ehis.ebscohost.com/ehost/detail?hid=20&sid=d56d76fb-73c7-4264-b3b5-422d6fe50052%40sessionmgr12&vid=3&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=a9h&AN=5740923

Nashwa, Saleh, 2010. *An anatomy of the financial crisis. Blowing Tumbleweed.* London, UK: Anthem Press.

Naudé, Wim, 2009. *The Financial Crisis of 2008 and the Developing Countries* [Internet]. United Nations University - World Institute for Development Economic Research, January 2009 [26 February 2011]. Available from http://www.wider.unu.edu/publications/working-papers/discussion-papers/2009/en_GB/dp2009-01/

New York Times, 'Columnist Biography: Paul Krugman' [cited 18 March 2011]. Available from http://www.nytimes.com/ref/opinion/KRUGMAN-BIO.html

Niall Fergusson, Official Website, 'Biography' [cited 26 March 2011]. Available from http://www.niallferguson.com/site/FERG/Templates/General2.aspx?pageid=5

Osadchaia, Irina, 1982. *The evolution of Keynesianism* [Internet]. Problems of economic transition, January 1982 [cited 28 February 2011]. Available from http://econpapers.repec.org/article/mesprectr/v_3a24_3ay_3a1982_3ai_3a9_3ap_3a4

Pimlott, Daniel, Chris Giles, and Robin Harding, 2010. *UK unveils dramatic austerity measures* [Internet]. The Financial Times, 20 October 2010 [cited 16 March 2011]. Available from http://cachef.ft.com/cms/s/0/53fe06e2-dc98-11df-84f5-00144feabdc0.html#axzz1HMGHV5cF

Pollin, Robert, 2010. Austerity Is Not a Solution: Why the Deficit Hawks Are Wrong . *Working Paper Series Number 235; Septemer 2010.* Amherst, Massachusetts: Political Economy Research Institute. Available from http://www.peri.umass.edu/fileadmin/pdf/working-papers/working-papers_201-250/WP235.pdf

Prasad, Eswar, and Isaac Sorkin, 2009. *Assessing the G-20 Economic Stimulus Plans: A Deeper Look* [Internet]. The Brookings Institution, March 2009 [cited 4 March 2011].

Available from

http://www.brookings.edu/articles/2009/03_g20_stimulus_prasad.aspx

Pribac, Loredana-Ioana, 2010. *Austerity in Different Countries of the World* [Internet]. The Young Economists Journal, vol. 1, no. 15 (November/2010): 108-113. Available from http://ideas.repec.org/a/aio/rteyej/v1y2010i15sp108-113.html

Rosselet-McCauley, Suzanne, 2009. *Death of the decoupling myth* [Internet]. The Financial Times, 29 January 2009 [cited 15 March 2011]. Available from http://www.ft.com/cms/s/0/b3flea7e-ee2d-11dd-b791-0000779fd2ac.html

Roubini, Nouriel, 2009. *Warning: More Doom Ahead* [Internet]. Foreign Policy, 5 January 2009 [cited 8 April 2011]. Available from http://www.foreignpolicy.com/articles/2009/01/05/warning more doom ahead

Sedláček, Tomáš, 2009. Economics of Good and Evil. The Quest for Economic Meaning from Gilgamesh to Wall Street [Ekonomie dobra a zla. Po stopách lidského tázání od Gilgameše po finanční krizi]. 1stedition. Prague, Czech Republic: 65. pole.

Skidelsky, Robert, and Michael Kennedy, 2010. *Future generations will curse us for cutting in a slump* [Internet]. The Financial Times, 27 July 2010 [cited 18 February 2011]. Available from

http://www.ft.com/cms/s/0/307056f8-99ae-11df-a852-00144feab49a.html#axzz1HcAEFRuh

Soros, George, 2009. *The New Paradigm for Financial Markets. The credit crisis of 2008 and what it means.* 1stedition. New York, NY: PublicAffairsTM.

Swagel, Phillip, 2009. *The Financial Crisis:Comments and Discussion An Inside View* [Internet]. Brookings Papers on Economic Activity, Spring 2009 [cited 26 February 2011]. Available from http://muse.jhu.edu/journals/eca/summary/v2009/2009.1.swagel.html

Taylor, John B., 2008. *The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong* [Internet]. Festschrift in Honor of David Dodge's Contributions to Canadian Public Policy, Bank of Canada, November 2008 [cited 8 February 2011]. Available from http://www.stanford.edu/~johntayl/FCPR.pdf

Taylor, John B., 2009. *How Government Created the Financial Crisis* [Internet]. The Wall Street Journal, 9 February 2009 [cited 25 January 2011]. Available from http://online.wsj.com/article/SB123414310280561945.html?mod=djemEditorialP... %202/10/2009

The Worldwatch Institute, 2010. State of the World 2010: Transforming Cultures: From Consumerism to Sustainability. 1stedition. New York, NY: W.W. Norton & Company.

Traynor, Ian, and Katie Allen, 2010. *Austerity Europe: who faces the cuts [Internet]*. The Guardian, 11 June 2010 [cited 15 February 2011]. Available from http://www.guardian.co.uk/business/2010/jun/11/europe-deficit-crisis-austerity-budgets

Office for Budget Responsibility. Official Website, [cited 15 March 2011]. Available from http://budgetresponsibility.independent.gov.uk/

United States Senate Committee on Banking, Housing, and Urban Affairs, 2010. 'Brief Summary of the DODD-FRANK Wall Street Reform and Consumer Protection Act.' Conference Report Summary, 2010, Washington, DC.

Available from

http://banking.senate.gov/public/_files/070110_Dodd_Frank_Wall_Street_Reform_c omprehensive_summary_Final.pdf

Wesbury, Brian S., and Robert Stein, 2010. *Government Austerity: The Good, Bad And Ugly* [Internet]. Forbes, 27 July 2010 [cited 15 February 2011]. Available from http://www.forbes.com/2010/07/26/government-spending-taxes-opinions-columnists-brian-wesbury-robert-stein.html

Westbrook, A. David, 2010. *Out of Crisis. Rethinking Our Financial Markets*. Boulder, CO: Paradigm Publishers.

Williams, Armstrong, 2011. 2011-2020: The reality of austerity [Internet]. New York Amsterdam News, 6 January 2011 [cited 2 March 2011]. Available from http://content.ebscohost.com/pdf25_26/pdf/2011/ANE/06Jan11/57384815.pdf?T=P &P=AN&K=57384815&S=R&D=a9h&EbscoContent=dGJyMNXb4kSeprA4y9fwO
LCmr0meprdSsKq4TbeWxWXS&ContentCustomer=dGJyMPGtr0i2q7dLue3nfuex4
4Dt6fIA

Winnett, Robert, 2008. Financial Crisis: Gordon Brown calls for 'new Bretton Woods' [Internet]. The Telegraph, 13 October 2008 [cited 24 March 2011]. Available from http://www.telegraph.co.uk/finance/financialcrisis/3189517/Financial-Crisis-Gordon-Brown-calls-for-new-Bretton-Woods.html

Wolf, Martin, 2011. *Britain's experiment in austerity* [Internet]. The Financial Times, 8 February 2011 [cited 7 March 2011]. Available from

http://www.ft.com/cms/s/0/5e5a6d1e-33c9-11e0-b1ed-00144feabdc0.html#ixzz1FuwNK0gM

Yergin, Daniel, and Joseph Stanislaw, 1998. *The Commanding Heights. The Battle for the World Economy*. New York, NY: Simon & Schuster, Inc.

Yifu Lin, Justin, 2008. *The Impact of the Financial Crisis on Developing Countries* [Internet]. Korea Development Institute, 31 October 2008 [cited 26 February 2011]. Available from

http://www.undg-policynet.org/ext/economic crisis/WB -

The Impact of the Financial Crisis on Developing Countries Justin Yifu Lin.p df

Zakaria, Fareed, 2008. *The post-American World*. New York, NY: W. W. Norton & Company, Inc.

Works consulted

Baily, Martin Neil, Robert E. Litan, and Matthew S. Johnson, 2008. *The Origins of the Financial Crisis* [Internet]. The Brookings Institution, November 2008 [cited 26 February 2011]. Available from

http://www.brookings.edu/~/media/Files/rc/papers/2008/11_origins_crisis_baily_lit n/11_origins_crisis_baily_litan.pdf

Crouch, Colin, 2009. 'Privatised Keynesianism: An Unacknowledged Policy Regime.' The British Journal of Politics and International Relations, vol. 11, no. 3 (August/2009): 382-399. [cited 17 February 2011]. Available from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-856X.2009.00377.x/full

De Vaus, David, 2001. Research Design in Social Research. London, UK: SAGE Publications Ltd.

Grey, David E., 2004. *Doing Research in the Real World*. London, UK: SAGE Publications Ltd.

Morris, R. Charles, 2008. *The Two Trillion Dollar Meltdown. Easy Money, High Rollers, and the Great Credit Crash.* 1st edition. New York, NY: Public AffairsTM.

Palley, I. Thomas, 2010. The Simple Macroeconomics of Fiscal Austerity, Public Sector Debt and Deflation . *Working Paper 8/2010*. Düsseldorf, Germany: Macroeconomic Policy Institute (IMK) at the Hans-Böckler-Foundation.

Available from http://www.boeckler.de/pdf/p imk wp 8 2010.pdf

Reinhart, M. Carmen, and Kenneth S. Rogoff, 2009. *This Time is Different. Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press.

Roubini, Nouriel, and Stephen Mihm, 2010. *Crisis Economics: A Crash Course in the Future of Finance*. New York, NY: The Penguin Press.

Schiller, J. Robert, 2000. *Irrational Exuberance*. New York, NY: Princeton University Press.

The Economist, 2005. The global housing boom. In come the waves. The worldwide rise in house prices is the biggest bubble in history. Prepare for the economic pain when it pops [Internet]. The Economist, 16 June 2005 [cited 18 February 2011]. Available from http://www.economist.com/node/4079027?story id=4079027

Zakaria, Fareed, 2010. *Economic policy needs common sense, not Fed magic, for long-term growth* [Internet]. The Washington Post, 29 November 2010 [cited 12 February 2011]. Available from http://www.washingtonpost.com/wp-dyn/content/article/2010/11/28/AR2010112803334.html