ONLINE MASTERS IN THE EUROPEAN UNION AND CENTRAL ASIA IN THE INTERNATIONAL SYSTEM

THESIS

THE COMPLIANCE AND EFFECTIVENESS OF THE EUROPEAN UNION CRISIS MANAGEMENT PRACTICES WITH THE PRINCIPLES OF NEW KEYNESIAN VIEWS BY JOSEPH STIGLITZ WITHIN THE FRAMEWORK OF WORLD ECONOMIC CRISIS OF 2008

SUBMITTED BY

AMINJONOV AZIZBEK

BUYUK IPAK YULI STREET 139-57

TASHKENT 100077, UZBEKISTAN

Institut für Europäische Politik (IEP)

Centre international de formation européenne (CIFE)

Berlin, Germany

March 2015

Supervisor: Dr. Hartmud Marhold

Abstract

The area of economics and different economic theories and ideologies have emerged. These ideologies starting from Keynesianism to new Keynesian theory to market fundamentalism have witnessed different peaks and downs during the economic crisis from Great Depression in 1929 to Great Recession in 2008. Special attention of this paper turns to the "Freefall" where Stiglitz explained flawed policies, management decisions and practices with regards to the economy led to the crisis which consequently resulted in failure to manage the crisis effectively. The research covered the writings and principles of Stiglitz by analyzing the case of European Union and its crisis management practices within the theoretical and practical framework. Hence, research paper is to endeavor to bring a contribution to answer the research question of "*To what extent are the practices and vision of EU in World Economic and Finance crisis management is compliant with the views of Stiglitz and effective in handling economic problems*?".

The research attempted to identify the compliance of Eurozone crisis management practices with of those shared by Stiglitz and to what extent they are effective. As per results of the document analysis in qualitative part of the research, most of the policies pursued by EU is fully compliant with the theoretical framework or views of Stiglitz. However, it should not be forgotten that discrepancies or absence of policies exist like in the case of higher level taxation for financial sector and regulations pertaining the distinction of big bank's commercial banking and investment banking functions clearly. On the quantitative part of the research, the effectiveness of crisis management practices showed a moderate level of correlation where Stiglitz's view on government spending ought to be true as there is direct linkage between increased government spending and deficit towards economic growth. Hence, policy implications arise including softening of fiscal austerity policies to stimulate the demand side of the economy but also to stabilize the political situation in the country. Likewise, further reforms on taxation of financial sector, limitation of risky activities of the big banks in financial markets and strong fiscal policy should be carried out while showing high EU level solidarity to other depressed regions.

Acknowledgement

Taking this opportunity I would like to thank all people who have provided great support, understanding, patience and solidarity in preparation of this master's thesis.

Undoubtedly, my sincere gratitude goes to my supervisor Dr. Hartmud Marhold who have been very enthusiastic about my topic of concern and provided great guidance on choosing clear path towards conducting the research and its objectives.

Likewise, I would like to thank my colleagues and friends for their understanding and cooperation in successful accomplishment of the project.

Finally, I would like to thank my family, my parents, brother and sister for their continuous support, care and love. These are the people who have made me a person to write this thesis.

Table of Contents

Abbreviations

EU	European Union
EC	European Commission
ECB	European Central Bank
EERP	European Economic Recovery Plan
US	United States of America
IMF	International Monetary Fund
GDP	Gross Domestic Product
OECD	Organization for Economic Cooperation and Development
WTO	World Trade Organization

1. Introduction

"Economists might feel proud about the advances in economic science over the seven decades since the Great Depression, but that does not mean that there has been unanimity about how crises should be handled". (Joseph Stiglitz[1])

A lot of discussions, papers, researches and books have been written and conducted about the crisis of 2008 or so called "Great Recession" which has left an ongoing bottleneck in the process of recovery of the world economy, especially Europe in the first two decades of twenty first century. Though, turning back to previous century one can undoubtedly say that twentieth century had become the revolutionary century in the history of humanity with rapid development of societies, markets, industrialization, financial systems, technologies and science.

In line with these changes, the area of economics and different economic theories and ideologies have emerged. These ideologies starting from Keynesianism to new Keynesian theory to market fundamentalism have witnessed different peaks and downs during the economic crisis from Great Depression in 1929 to Great Recession in 2008. Though, one of the emerging and debated notion among well-known economists of today – a new Keynesianism became part of the modern world economics and science. Though following chapters will grasp the full analysis and discussion of this economic theory and views, it is worth to describe this notion in simple terms as a theoretical view where major failures in the market affect negatively to the way business operate with fluctuations and also overall economy turns into stagnation unless government takes respective measures to clear the problematic areas. A prominent supporters of this view is a Nobel Prize winner Joseph Stiglitz who have contributed into this area of the economics and policy making more than 3 decades since 1970s with his numerous research articles, books like "Globalization and Its discontents", "Freefall: America, Free markets, and the sinking of World Economy". Special attention of this paper turns to the "Freefall" where Stiglitz explained flawed policies, management decisions and practices with regards to the economy led to the crisis which consequently resulted in failure to manage the crisis effectively where he reviews the case of United States

[1] Stiglitz (2010a)

while little information is given with regards to Europe – one of the largest victims of the crisis[2].

Even though most of the part of this thesis is based on the writings of Stiglitz, the author of the thesis analyzes different views on economic crisis management in different parts of the world via referring to researches conducted in this field. Accordingly, the question arises whether it is important to relate the notion of new Keynesian views or views supported by Joseph Stiglitz in review of the economic crisis in Europe taking into account latest situation in the countries located in Eurozone.

First of all, so called economic theory of market fundamentalism with the ideology that markets fail and correct themselves without government intervention has failed to be on the agenda starting from the early days of world economic and financial crisis of 2008[3]. Everyone has witnessed the cases where without government interventions markets collapsed and brought to disastrous situations in various part of the world, especially US and Europe. This is mainly the result of the practice of deregulation of the markets and economy supported by policy makers, economists, politicians with liberal views to the economy. Nevertheless, bubbles emerged and collapsed in 2008 by pulling different countries into its failure. Recalling back to the details of the recent world economic and financial crisis in European continent, most of the issues that crisis brought were the result of deregulation of financial systems, especially in Iceland, United Kingdom and Netherlands who have followed US style liberalization mechanisms. Consequently, politicians and economists were left with the task of recovering the economies, markets and systems where US has to greater extent progressed in this field despite several contradictory views on its crisis management practices from new Keynesian economist Stiglitz.

On the other side, as was mentioned in previous paragraphs, new Keynesian economist Joseph Stiglitz proposed different views on management of the economy by objecting to the supporters of market liberalization who had brought the world economy into the collapsed condition. Accordingly he proposed more balanced approach towards the economy with the aim of avoiding future crisis. As a result, the author will try to elaborate on the writings and principles of Stiglitz by analyzing the case of European Union and its crisis management practices within the theoretical and practical framework based on the literature review and ideology of Stiglitz in the field.

[2] Stiglitz (2010b).
[3] Stiglitz (2010a), Preface

In support of the importance of the paper, the author summarizes the significance of the research taking into account the ongoing economic and political crisis in Europe, the experience and contribution of the prominent economist Stiglitz, importance of economic stability in sustainability of European integration project and an analysis of the practices of European Union to overcome crisis in the continent.

Research question and objectives

Consequently, the research paper is to endeavor to bring a contribution to answer the research question of "*To what extent are the practices and vision of EU in World Economic and Finance crisis management is compliant with the views of Stiglitz and effective in handling economic problems*?". Thus, following research objectives are set to be met by the author.

- To compare principles of new Keynesianism and market fundamentalism (neo classical)
- To identify main visions and principles of Joseph Stiglitz with regards to World Economic and Financial crisis of 2008[4]
- To review and compare crisis management practices of EU and USA within the framework of new Keynesianism supported by Joseph Stiglitz
- To analyze the effectiveness of crisis management practices of EU using Stiglitz principles

While conducting the research on European Union case, the author's geographical location and limited access to the political and economic staff members of the EU institutions are regarded as one of the limitations of the research.

The rest of the paper includes the review of the past and ongoing researches, theories and arguments in relation to research question, discussion of the methodological part of the research followed by the results and their analysis. Final chapter includes the concluding remarks of the

[4] According to The Economist, "The collapse of Lehman Brothers, a sprawling global bank, in September 2008 almost brought down the world's financial system. It took huge taxpayer-financed bail-outs to shore up the industry. Even so, the ensuing credit crunch turned what was already a nasty downturn into the worst recession in 80 years. Massive monetary and fiscal stimulus prevented a buddy-can-you-spare-a-dime depression, but the recovery remains feeble compared with previous post-war upturns. GDP is still below its pre-crisis peak in many rich countries, especially in Europe, where the financial crisis has evolved into the euro crisis. The effects of the crash are still rippling through the world economy: witness the wobbles in financial markets as America's Federal Reserve prepares to scale back its effort to pep up growth by buying bonds." (The Economist 2013)

research with further research areas to be conducted given the importance of the topic. As the next chapter follows, it should be noted that an intention is not to comprehensively review the whole array of papers in this field, however the attempt will be to review the most important areas relevant to the research and topics.

2. Literature review

The issue of effectiveness of different economic models and theories with regards to management of the economies in different countries has been at the core of debates from early days of XX century. One interesting phenomena observed by Simons is the substantial debate of that time is the clash of free market liberalism from England and the tight control of the economy and development of industries per German view[5]. Though, it is well known belief that if the specific type of economy theory provides stable ground for prosperity and growth, it is ought to be a good source for policy making. However, some most advanced theorists in the field argue that the effectiveness and applicability of economic views and ideologies should be sustainable while keeping the countries away from possible economic crisis or to greater extent allow them to manage crisis without depressed and continuous losses both for the economies and ordinary people[6]. One of the advocates of this view is Joseph Stiglitz whose views are the cornerstones of this paper. By being one of the custodians of modern New Keynesian movement, Stiglitz's views frequently blame the drawbacks of the liberalization or market fundamentalism theory and argues that the policies based on this theory have turned out to be misleading while creating room for misbalanced income distribution and asymmetric information in the economies[7]. His ideas were greatly supported by the views by Kuttner[8],

[5] Simons (1941)
[6] Stiglitz (2010a)
[7] Stiglitz (2010b)
[8] Kuttner (1999)

Rodrik[9] and Polanyi[10] where they argue that capitalism and unregulated markets a combination of system where social relations are built on only economic relations causing market insufficiencies. This in its turn leads to the requirement where an intellectual government intervention is to proceed to achieve higher and sustainable results. Hence, what is the theory of liberalization or Keynesianism and what are their ingredients?

Keynesianism versus market fundamentalism

According to The Library of Economics and Liberty, Keynesianism is the movement of the general theory developed and proposed by John Maynard Keynes[11] in early 20th century and covers the notion where full employment is achievable through investments, consumption and government spending[12]. Hence, it is obvious from the theory that role of the government is highly stressed out in management of the economy and markets. Due to the achievement of full employment or near to full level of achievement presumes the condition where economy grows and in stable condition. Accordingly, in times of depression or recessions, balanced government intervention in the economy would abstain the economy from collapse and recovery. Moreover, turning back to history during the times of post-World War I when the economy was collapsing and crisis emerged, Keynes provided contrary view, in his book "*The Economic Consequences of the Peace*", on the payments to be paid by Germany to the winners where he implied the negative impact on the economy and political system in Germany could undermine the future peace of Europe[13]. As a result, a phenomena arises which allows to

[9] Rodrik (1997).
[10] Polanyi (2001).
[11] John Maynard Keynes is a prominent economists in the history of modern economics who has proposed the notion of General theory based on the function of aggregate demand including the investments, government spending and consumption. The theory implies that without government intervention and spending full employment cannot be reached (The Library of Economics and Liberty 2008).
[12] The Library of Economics and Liberty (2008).
[13] The Library of Economics and Liberty (2008).

criticize the current policies adopted by the biggest so called agents like IMF, World Bank on the countries in crisis, like Greece which could be a bottleneck in the future of European Union and its integration project. This can be attributed as Keynesian theory's another dimension on peace and stability concerns of the draconian crisis management imposed by capitalists.

Nevertheless, this paper covers the policy implications of New Keynesian economics which is according to Joseph Stiglitz has four major ingredients namely efficient wage theories, credit rationing mechanisms, imperfections in the capital markets and one of the most important aspect is the monetary policy taking into account its role in today's world economies[14]. Despite all ingredients of New Keynesian economics are equally important, the impact of credit rationing, imperfect capital markets with asymmetric information and flawed monetary policies brought the world economy into the recession. Thus, while building theoretical framework for this research, author will emphasize these elements of New Keynesian economics while reviewing the case of European Union. One might figure out that these theories of Keynesianism to some extent remind the socialism or so called anti-capitalist movement, however, it should be of high value to recall the causes of the World economic and financial crisis in 2008 which came as a result of the failure of governments in respective economies pushing liberal market policies while increasing the gap in information asymmetries and flawed policies[15]. Even modern economics publishers admit the new rise of Keynesianism as monetary policies in conventional way have lived their lives and looser governmental fiscal policies need to be pursued to get the economies out of the recession[16]. Interestingly, despite being the so called enthusiasts of free markets, liberalized economies, several prominent

[14] Greenwald & Stiglitz (1987).
[15] Stiglitz (2010b).
[16] The Economist (2009).

economists also to some extent proposed government interventions as to avoid the clash of private interests with public interests[17][18].

While it is already profound that nowadays arguments against market fundamentalism and unfettered markets are abundant, it is worth to define this term in order to be able to compare it with the New Keynesian proponents. Market fundamentalism is the ideology of the combined views where markets to be operating themselves without government interventions and they should bring the adequate responses to the challenges in economy and social life of the country[19]. Accordingly, it encompasses privileged policies of tax cuts on companies, considerable reduction of regulations with further cuts on government spending. Whereas John Stuart Mill, in his Principles of Political Economy, calls for laissez-faire[20] policy by governments in order to give freedom for building their lives[21]. Whereas the term of 'market fundamentalism' was mentioned by one of the wealthiest and well-known investor George Soros in his writings of "The Crisis of Global Capitalism: Open Society Endangered" where he mentions the proponents of this view as those who has misguided vision that free markets are the way towards prosperity and equity[22]. Though, the origins of the ideology of economic liberalism arose in XVI century especially in France with regards to the liberalization of trade and this notion was one of the most important factor in economic growth of that time[23].

During its early development, the ideology surpassed the different parts of the economy by being welcomed warmly, especially business people. Adam Smith in his famous masterpiece *The Wealth of Nations* argues that free market competition leads to prices being kept low,

[17] Viner (1927)
[18] Williamson (2000)
[19] Longview Institute (2014).
[20] The terminology "laissez faire" comes from the writing of Benjamin Franklin in his "Principles of Trade", where the meaning says "leave us alone" or non-interference into the businesses (cited in Handman et al. 1931)
[21] Mill (1909).
[22] Soros (1999a).
[23] Handman et al. (1931).

building incentives for diversified sectors of the economy and also growth of society though he also gives a signal of warning indicating that these policies could become a way towards a political systems ruled by the business[24]. Accordingly, this last remark on political system based on the interests of businesses is one of the roots of causes, of world economic and financial crisis of 2008, mentioned by Stiglitz in his “Freefall”[25]. In this case, the author of this paper points out the financial sector as the interested party in the economies of the countries, especially United States and Europe where billions of bailouts have been carried out in order to minimize damage caused to ordinary citizens of the countries. Thus, free unregulated markets as proposed by the market liberalists showed the negative impact on world economy, especially ordinary citizens. Though, another aspect of the liberalism or market fundamentalism is the institutions that are pursuing or promoting this economic policy. They are as most of the modern economists claim as Washington based institutions including World Bank, International Monetary Fund. John Williamson, a well-known economists of late twentieth century, proposed a plan of actions as part of his principles summarized in the notion as Washington Consensus dating back to early 1990s and summarized in Figure 1.

[24] Smith (2000)
[25] Stiglitz (2010a)

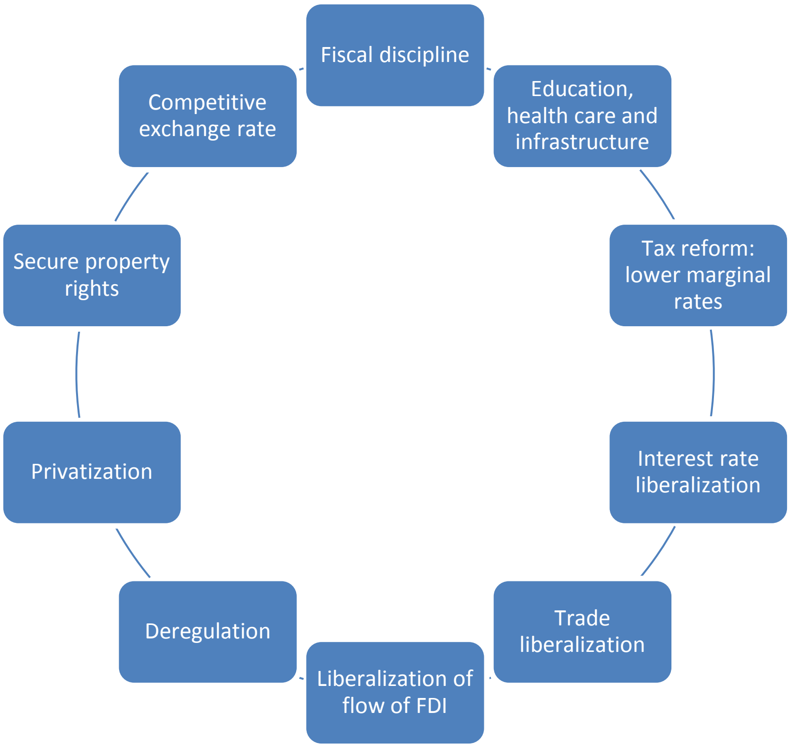

Figure 1. Washington Consensus: Plan of actions by John Williamson

According to Williamson, the policies in Figure 1 were aimed at Latin American countries to overcome economic stagnation and problems, whereas as he claims most of his work on Washington Consensus had been severely misinterpreted and was attributed towards neoliberalism or market fundamentalism[26]. As can be seen from the Figure 1, most of the policy actions are directed towards liberalization thus putting Williamson among the supporters of market liberalism movement. Though, as he points out "…an active policy to supervise financial institutions is needed if financial liberalization is not to lead to financial collapse"[27].

[26] Williamson (2000).
[27] Williamson (2000).

Financial liberalization as part of market fundamentalism

As was mentioned in earlier paragraphs, the most important factor that played a great role in facilitating the World Financial and Economic crisis in 2008-2009 was the so called financial liberalization. The term financial liberalization is a set of policies directed towards leaving room for the financial markets including banking sector to behave on its own while limiting government control over its activities[28]. As Stiglitz says so called capital market liberalization policies and ideology were heavily pushed by the US Treasury and IMF not only in US but also in different parts of the world[29]. That is to liberalize the banking and financial system and also integration into global financial markets including imposing of special pre-requisites in Investment Agreements with emerging countries – "Singapore issues"[30]. Interestingly, according to the research conducted by Demirguc-Kunt and Detragiache[31], staff members of one of the key players of Washington Consensus institutions-the IMF, solid econometric empirical evidences suggest that financial liberalization causes a systematic instability and problems for the country adopting it and associated countries. Moreover, as Stiglitz[32][33] asserts financial liberalization can have a positive impact on the economic growth and stability only in case of perfect competition, perfect markets and perfect information which is not the case in the real world. Besides, as Stiglitz mentions, "The last time a country tried unregulated (free) banking was Chile under dictator Pinochet, and it was a disaster"[34].

[28] In "Freefall", Stiglitz (2010a) mentions Professor Allen Franklin and Douglas Gale from Wharton and Pennsylvania universities who has made a convincing explanation for the absence of any financial crises during the period after World War II till 1970s by indicating the strong support for government regulation of the markets.
[29] Stiglitz (2004).
[30] Stiglitz (2004).
[31] Demirguc-Kunt & Detragiache (1998).
[32] Stiglitz (2011).
[33] Stiglitz (2004).
[34] Stiglitz (2010a: Chapter 7).

Turning to the empirical evidence and extent to which countries have adopted financial liberalization mechanisms, John Williamson and Molly Mahar had conducted a survey on liberalization for the period of 1973-1996. According to the results of the survey (Figure 2), most of the countries with initial repressive regulations pursued movement towards liberalization though most of them have not gone farther towards "largely liberalized". Though, a special attention can be paid towards countries in Asia-Pacific region who have been the target of liberalization policies promoted by Washington based institutions and most of them have largely liberalized financial and banking systems whereas developed countries still leave room for policy intervention[35].

[35] Gnos & Rochon (2004).

TABLE 1
HISTORY OF FINANCIAL LIBERALIZATION, 1973–1996

		Credit Controls	Interest Rates	Entry Barriers	Gov't. Reg. of Operations	Privat-ization	Int'l. Capital Flows
United States	1973	B: L; S&L: R	LL	PR	L	L	LL
	1996	L	L	LL	L	L	L
Canada	1973	L	L	PR	L	L	L
	1996	L	L	LL	L	L	L
Japan	1973	R	PR	R	R	LL	R
	1996	LL	L	D: LL; FB: PR	LL	LL	L
Britain	1973	LL	B: LL	B: LL	L	L	PR
	1996	L	L	L	L	L	L
France	1973	PR	R	D: PR	—	PR	R
	1996	LL	LL	D: LL	—	LL	L
Germany[a]	1973	LL	L	L	—	LL	L
	1996	L	L	L	—	LL	L
Italy	1973	R	LL	PR	—	R	PR
	1996	L	L	L	—	PR	L
Australia	1973	B: R	B: R	R	—	R	R
	1996	L	L	L	—	LL	L
New Zealand	1973	R	R	R	—	PR	R
	1996	L	L	L	—	L	L
Hong Kong	1973	L	LL	B: R; NBFI: LL	L	L	L
	1996	L	L	L	L	L	L
Indonesia	1973	B: R	B: R[b]	R	R	R	LL
	1996	LL	L	LL	R	R	LL
Korea	1973	R	R	R	R	R	R
	1996	LL	LL	B: PR; NBFI: LL	PR	LL	PR
Malaysia	1973	R	R	R	LL	LL	LL
	1996	LL	L	B: PR; NBFI: LL	LL	LL	LL
Philippines	1973	R	R	R	PR	PR	PR
	1996	PR	LL	LL	PR	LL	LL
Singapore	1973	L	L	B: R; NBFI: LL	L	L	LL
	1996	L	L	B: R; NBFI: LL	L	L	L
Taiwan	1973	R	R	R	R	R	R
	1996	PR	LL	B: PR; NBFI: LL	PR	R	PR
Thailand	1973	R	R	R	—	PR	R
	1996	LL	L	LL	—	LL	LL
Argentina	1973	R	R	R	—	R	R
	1996	LL	LL	L	—	PR	L
Brazil	1973	R	R	R	—	PR	R
	1996	PR	LL	PR	—	PR	R

Figure 2. Results of survey of financial liberalization by John Williamson and Molly Mahar, 1973-1996 data[36] (R-repressive, regulated, PR-partly regulated, L-liberalized, LL-largely liberalized, NBFI-nonbanking financial institutions)

[36] Williamson & Mahar (1998).

Joseph Stiglitz and his principles on economic crisis management

> *"Adam Smith may not have been quite correct when he said that markets lead, as if by an invisible hand, to the wellbeing of society. But no defender of Adam Smith would argue that the system of ersatz capitalism to which the United States has evolved is either efficient or fair, or is leading to the well-being of society"*[37]

Turning back to the author of the book "Freefall", Joseph Stiglitz, the author picks several principles on managing economies of the countries during crisis periods and also to minimize the risks of collapse of the economies. Though, in his book "Globalization and Its Discontents", Stiglitz lists policies including austerity, increasing interest rates, liberalization of trade and capital markets and also heavy promotion of privatization of assets belonging to states[38] as the negatively affected policies which lead to creating vulnerable economies. Another belief of Stiglitz was the way national economy is managed by international regulators as Washington Consensus organizations like IMF, World Bank and WTO, according to Stiglitz, is closed, not transparent and lack public debate (absence of citizen's consensus)[39]. Accordingly, the remaining part of this chapter will include detailed review of the principles recommended by Stiglitz in pursuing economic policies directed towards recovering the state from crisis and also build sustainable system for minimizing future crises.

From the theoretical perspective, the set of policies, that Stiglitz and other Keynesian economists suggest, is within the approach of interpolating micro theory with macro theory. A more simple term used for this, as proposed by Greenwald and Stiglitz[40], is the inconsistency of issues of unemployment, business processes and credit rationing with the benchmarks of macroeconomics. While most of the ideologies of Joseph Stiglitz has been discussed from the theoretical perspectives, the following policy recommendations encompass the practical aspects of his principles or the principles of New Keynesianism.

Designing of bail out programmes – rescue policies

[37] Stiglitz (2010a: Chapter 7).
[38] Stiglitz (2002).
[39] Stiglitz (2002).
[40] Greenwald & Stiglitz (1987).

Before reviewing the long term policy implications of Stiglitz, it would be of great importance to elaborate briefly on the bailout programmes or rescue policies to be carried out during the early stages of the crisis. In his books Stiglitz summarizes the policies in a way that caused the problems- the roots of the crisis.

First of all, stimulus package should have been directed towards the real economy rather than directing funds towards the original catalysts of the emergence of this crisis[41]. By injecting a lot of liquidity into the banking and financial sector who has brought the economy into the distressed condition, US government did follow the ongoing market fundamentalism by allowing the bad banks to grow further by creating a room for catastrophic condition – too-big-to recover banks. Secondly, money to rescue the economy should be directed towards creating more jobs and business operations by supporting small and medium sized businesses as they are the drivers of the employment in the economy[42].

Policy agenda for the government

On short to long term perspective, Stiglitz proposed policy interventions in various areas that have caused the crisis but also the areas which may pose a threat to the economy and society by managing further problems with more flexibility. One of the most important factor that played a great role in the world economic and political structure is the corporate governance mechanisms. According to Stiglitz, poor governance with unregulated incentives for financial markets without being accountable for the failures have caused the structural crisis in the United States and the rest of the World, especially Europe[43]. That is those people in Wall Street and other financial markets around the globe and including bankers in investment banks have enjoyed the freedom of acting as per market fundamentalism or liberalized markets where any active player could practice the moral hazard[44]. Thus, it is important to review and incorporate strong corporate governance mechanisms for better management of the economy, especially in the financial system by looking forward for long term benefits and performance of the managers while sharing the gains and losses from the operations by them as well. This,

[41] Stiglitz (2010a).
[42] Stiglitz (2010a).
[43] Stiglitz (2010a).
[44] In simple terms, within the area of financial markets and banking sector, when the managing people of these institutions take on risks and leverage by using the ordinary citizen's funds, they will less likely to bear accountability for the damage as there is ideology of moral hazard.

according to Stiglitz, will bring to more equitable pay for the services of managers but he also points out the importance of regulations on access to information by shareholders including the pay determination with participation of them[45]. This in its turn leads to another policy area of transparency. Most of the Keynesian economists opt for the repeal of the offshores and tax heavens depicting them as a treasury of the capitalists who enjoy the looser regulations in these countries as Cayman Islands.

One of the most important policy implication of Stiglitz with regards to the financial system is the prohibition or limitation of as he calls "unbridled risk-taking" by players in the financial institutions. He supports his view by the incorrect implementation of so called "Gramm-Leach-Bliley Act[46] in US in 1999 by the Congress instead of the famous post-war Glass-Steagall Act where as a result of this new Act competition decreased with concentration of banks engaging in risky trading activities increased. Most Keynesians would argue that Glass-Steagall Act draw a clear distinction between investment banks and commercial banks whose role is to safeguard the savings of ordinary people while the former one to work in securities market only. Accordingly, in order to limit the risky operations in the financial system, Stiglitz proposes the limitation of leverage by financial institutions and to adjust them in accordance with business cycle by implementation of the mechanisms of the abandoned Glass-Steagall Act by tailoring its principles to today's peculiarities.

As a continuum of the role of financial institutions, due to the heavy liquidity injections into the financial sectors by US government as quick response, it created the room for growing the bad banks into even bigger ones or so called too-big-to-fail banks[47]. As Stiglitz argues it was inadequate action to make the roots of the crisis to become even bigger to be recovered and he called for the policy to break them either per Glass-Steagall Act or into manageable level in order to avoid future crisis problems[48]. A former Chairman of Federal Reserve, Paul Volcker, also supports this view by calling for restrictive measures for too-big-to-fail banks from engaging in proprietary trading[49]. Stiglitz mentions the limitation of derivatives and predatory

---

[45] Stiglitz (2010a).

[46] Consequences were less competition and concentrated banks (too big) engaging more on investment risk taking for higher returns. SEC was arguing that self-regulation will clear the market risks and banks can effectively police themselves. High leverage rate from 2004, 40 to 1. (Stiglitz 2010a).

[47] According to Moosa (2010), "Significant financial failures re-emerged in the 1980s, and with that came the notion of TBTF as the government became a 'rescuer of last resort'. In 1984 Continental Illinois became the first big bank to be offered the TBTF status".

[48] Stiglitz (2010a).

[49] Cho & Appelbaum (2010).

lending practices by financial institutions so that financial system will not be put at risk and for that purpose he proposes to establish "Financial Products Safety Commission" to ensure the safety of certain financial products including access to full information by customers[50]. The Figure 3 summarizes his views on limiting risky activities of the financial market participants and regulatory framework to be established.

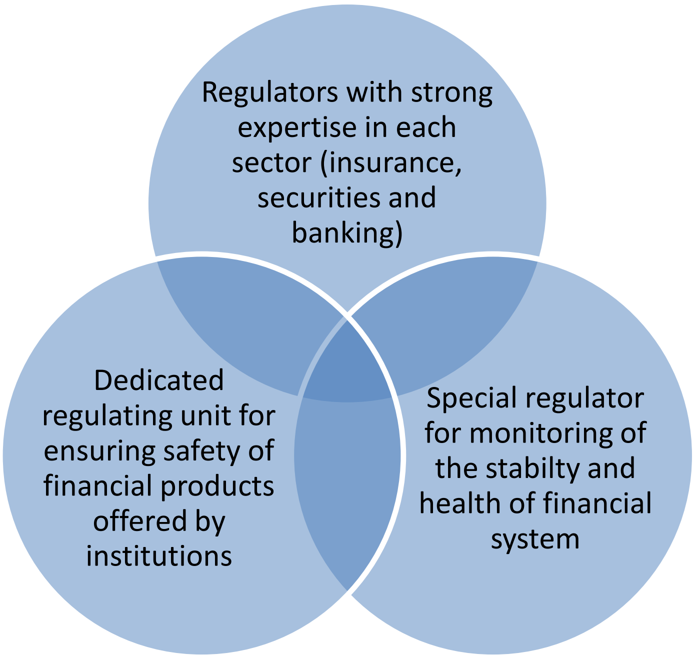

Figure 3. Multiplicity regulatory framework for financial sector monitoring by Joseph Stiglitz[51]

Turning back to the Keynesian economic policies, one of the tools for managing the economic failures or crisis is the appropriate use of taxation mechanisms. From the perspective of market fundamentalism or new neoclassic theory (liberalism) lower tax rate[52] promotes the higher household savings and spending without governmental intervention though Stiglitz argues that due to the existence of worldwide global imbalances in income distribution, taxation policies should be used progressively[53]. Progressive taxation embraces the special taxation regime where higher rates are set for higher incomes and lower rates accordingly to lower incomes thus moderating the imbalance between poor and rich. This will ultimately bring to the so called

[50] Stiglitz (2010a).
[51] Stiglitz (2010a).
[52] In Freefall, Stiglitz (2010a), brings a good example of the taxation policy of Sweden where country have managed to provide social protection and market economy based on the strong support of good education and job security as a result of high tax rates.
[53] Stiglitz (2010a).

balanced budget multiplier by balancing the overall economic expenditures[54]. Universal lower taxes may create more disposable savings and spending by higher income people or businesses whereas people or businesses with lower income rates will not contribute much to the wellbeing of the society. Stiglitz[55] and Blundell-Wignall, Atkinson and Lee[56] also warns about the sectors for tax reliefs or lower taxes that should be directed towards the public benefit like climate change, innovation, manufacturing and small businesses in contrary to tax benefits for financial sectors.

Furthermore, as mentioned by Stiglitz, innovation plays a crucial role in modern economics and political life. A classic example of an innovation in practice during the times of crisis is an Argentinian case where this country made an interesting innovative approach to pay its public debts in front of foreign debt providers by introducing so called GDP-indexed bonds[57]. Consequently, it promoted mutual interest for Argentina's growth as debt amount to be repaid is linked to the economic growth of the country. Although, Greece used this kind of tools, the situation remains critical while signalling for diversified approach towards crisis management by going beyond the innovations and pursuing traditional government policies including stimulation of the real economy and social sector.

By traditional government policies, as proposed by Stiglitz and his proponents of Keynesianism, include the manipulation of government spending by either going into deficit or surplus. Though, a long series of debates continued during the last decades on the issues of what governments are to do in order to bring the economy and employment into better conditions. Greenwald and Stiglitz have also addressed the importance of an increase of public expenditures as part of Keynesian theory by provision of strong theoretical justification to the opponent economists from liberalism theory who advocated the government's policy should be keeping distant from the economy as markets will clear.[58] Similarly, despite being supporter of New Classical theory (liberalism and market fundamentalism), John Williamson proposed in his version of the notion of Washington Consensus that state's reform needs to be directed towards moving public expenditures to healthcare and education which consequently will lead to enhanced human capital and decrease of unemployment[59]. Though, market fundamentalists

[54] Stiglitz (2010a).
[55] Stiglitz (2010a).
[56] Blundell-Wignall, Atkinson & Lee (2009).
[57] Sandleris & Wright (2013).
[58] Greenwald & Stiglitz (1987).
[59] Williamson (2000).

argue that by running a deficit by governments, the expected result will be neutral as households' savings will increase with a mind that higher government expenditure will lead ordinary people to be prepared for future tax increases to cover those public expenditures. Nevertheless, Stiglitz argues that, in real world, an increase of household savings is not directly affected by the increase in government spending as household behavior is linked to the condition of the economy which is in recession period[60].

While it is debated issue, numerous researches and studies have been conducted to identify the role and degree of government spending on economic growth. Based on the results of the studies conducted by Keynesian economists like Yasin[61], Easterly & Rebelo[62] and Kelly[63] the increased public expenditures have a strong positive impact on the economic growth. For instance, a study conducted by Trish Kelly to evaluate the impact of public expenditures on economic growth in 73 countries during the period of 1970-1989 revealed that state's spending on social and public investments have positive correlation with economic development[64]. Though, it should not be forgotten that in his book "*The General Theory of Employment, Interest and Money*", Keynes notes that spending should be directed to respective activities and return generating policies as effective government spending is a key to success rather than simple increase of overall spending[65].

Fiscal austerity policy – accelerating the downward process

In support of the increase of government spending, the author discusses negative aspects of the so called Washington Consensus with the team of market fundamentalists of IMF, World Bank. One of the policies that were implemented by the requesting party (country) is the cutting of state expenditures, in other words deficit minimization on contrary to the call for increased public expenditures per Keynesian views. The special well-known terminology for this practice is austerity policy. According to the Financial Times, "Austerity measures refer to official actions taken by the government, during a period of adverse economic conditions, to reduce its budget deficit using a combination of spending cuts or tax rises"[66]. In his book "*Globalization*

[60] Stiglitz (2010a).
[61] Yasin (2000).
[62] Easterly & Rebelo (1993).
[63] Kelly (1997).
[64] Kelly (1997).
[65] Keynes (2007).
[66] Financial Times (2015).

and its Discontents", Stiglitz mentions the instability and protests against the austerity policies implemented by the states per instructions of globalized institutions like IMF and most of the countries where people riot are developing countries[67]. This view is to greater extent true taking into account the latest instability issues in countries with austerity policies such as in Greece.

Low inflation policy – a risk?

Last but not the least instrument that was used by the states in stimulating the economy and markets was inflation targeting. Inflation targeting was heavily used during the last two decades in managing the economies in developed countries to balance demand and supply. Though, Stiglitz views this the deflationary policy could lead to the risks associated with fall of salaries, prices in the markets and low level of readiness to repay the money owed by households and businesses[68]. This in its turn could bring new waves of the crisis in different format while making it difficult to recover from the previous crisis.

World Economic and Financial Crisis: A US perspective for crisis management

As part of this paper, the author will analyze the case of European Union within the framework of World Financial and Economic crisis of 2008 and while building on solid theoretical framework, a special attention is given to the practical aspects of what has been done in the next mostly affected country but also the root of the crisis-the United States of America.

As "Freefall" has been written in response to the crisis within the example of US, Stiglitz's principles have been derived from this aspect as well. So, what has been done in severely affected parts of the world, especially United States in crisis management?

Stiglitz discussed that flawed policies including unlimited incentive schemes, shortsighted behavior and high level risk taking by the financial system have caused the crisis substantially though he also pointed to the authors of these policies – market fundamentalists (liberalism and New Classical theory) advocates[69]. Turning to the early response from the US government, series of bailout programmes have been implemented and mostly were directed towards the

---

[67] Stiglitz (2002).
[68] Stiglitz (2010a: Chapter 5).
[69] Stiglitz (2009).

financial sector, while creating room for further enlargement of the banking sector via TARP and PIPP programmes. Moreover, Soros recalls back the history when the Federal Reserve pursued the easing of monetary policy by signaling that further money could be printed in order to support stability of the financial sector during the crisis of 1998s[70]. On the other side of the coin, Stiglitz blames the US government for not addressing the structural problems of the system while making some of them worse including the enlargement of "too-big-to-fail" banks and called this policy as the policy where gains are privatized and losses are spread to ordinary citizens[71].

Furthermore, with respect to taxation, no fundamental changes were introduced by US government while leaving unfair taxation to be alive where financial market gains taxed at lower rate despite being the causes of the crisis[72]. Moreover, with regards to governance, no changes were made in the Bankruptcy Abuse prevention and Consumer Protection Act which has liberalized the way banks lend to any person[73]. This in its turn indicates that US government carried out a one stop therapy of the problematic area of the economy – financial sector only without going deeper into structural problems of the economy, social sphere.

Thus, as part of its monetary policy, US government like other countries such as United Kingdom opted for quantitative easing[74] policy in three phases to stimulate the economy and which is to be the last resort to improve the economy[75]. Although, it was of high importance to stimulate the capital market in the culmination of the crisis, US government pursued to continue with the next rounds of quantitative easing. Keynesians despite welcoming the first round of quantitative easing, objected to the next rounds as according to the Keynesianism policies, this method is no longer a panacea for liquidity problems in the market and in the long-run it can undermine the increase of aggregate demand[76].

---

70 Soros (1999b).
71 Stiglitz (2010a: Chapter 5).
72 Stiglitz (2010a).
73 Stiglitz (2010a).
74 According to the Bank of England "Quantitative easing (QE) is an unconventional form of monetary policy where a Central Bank creates new money electronically to buy financial assets, like government bonds. This process aims to directly increase private sector spending in the economy and return inflation to target". (Bank of England 2015)
75 Klyuev, Imus & Srinivasan (2009).
76 Palley (2011).

3. Theoretical framework

In previous chapter, the author brought an analysis and review of the view and theories on Keynesianism and market fundamentalism approaches towards stimulating the economy during the economic crisis. Recalling back to the research objectives and question, in order to provide a solid input to answer the question, it is decided to split the research with regards to the framework to be used: compliance of practices and effectiveness of the practices.

Compliance of crisis management practices

First of all, the author will conduct research analysis to identify to what extent the practices of crisis management of European Union is compliant with the views discussed in previous chapter, specifically with the Keynesian views by Joseph Stiglitz. Based on the principles mentioned in previous chapter, in following areas EU crisis management practices will be identified, analysed and compared with that of Stiglitz: monetary policy, corporate governance, taxation, fiscal policy, innovation, financial sector regulation and government spending.

Although this part of the paper does not necessarily deal with the use of special hypothesis, the results and analysis of information in areas of concern will be a good source for future policy implications while answering the first part of the research concern: the compliance of the policies and practices.

Effectiveness of crisis management practices

On the other hand, the next aspect of this research is to identity the effectiveness of the policies by EU towards stimulating the economies and recovering from the crisis while at the same time looking forward towards sustainability of the policies and their results. Thus, the framework for quantitative analysis will cover the taxation, public spending and its structure, monetary policy indicators, inflation, interest rate movement, remuneration schemes for financial sector management structures and debt structures of the member states in EU. Accordingly, the direction of the movement of the indicators in these areas, as per Stiglitz, should have a positive impact on economic growth and recovery. Consequently, the author categorizes the indicators in seven areas of policies into independent variables while the economic growth into dependent variable. Hence, the general hypothesis is to be covered in this paper with regards to effectiveness of crisis management practices according to Stiglitz principles is as follows.

The higher the level of compliance and positive movement of

Stiglitz (Keynesian) indicators the higher the post 2008-crisis economic growth in European Union

Table 1 summarizes the list of indicators to be used in an attempt to analyze the policies pursued by European Union (its member states).

POLICY AREA	INDICATOR
Monetary policy	Monetary aggregates (money supply, interest rate for refinancing)
Monetary policy	Inflation
Monetary policy	Impact of money supply to real GDP[77]
Fiscal policy	Public spending
Fiscal policy	Public deficit or surplus
Fiscal policy	Correlation of public spending with economic growth
Early stimulus package	Amount of resources and areas of direction
Financial regulation (credit markets and predatory lending regulation)	Ratio of credits to GDP

Table 1. Policy areas (practices) of EU in crisis management and respective indicators

[77] According to Cliff Notes (2015), there is a strong belief among Keynesians that the level of money supply has an impact of the growth of real GDP though they indicate it as indirect impact as there are conditions under which real GDP can increase as a result of expansionary monetary policy.

4. Methodology

The research process for answering the research question of "*To what extent are the practices and vision of EU in World Economic and Finance crisis management is compliant with the views of Stiglitz and effective in handling economic problems*?" encompassed two methodologies per theoretical framework discussed. These are the review and analysis of compliance of crisis management practices with Stiglitz's principles and analysis of effectiveness of the crisis management practices with regards to economic growth and recovery.

Case selection

Consequently, the research process for the thesis started with the general understanding Keynesianism and market fundamentalism by approaching the respective bibliographical information, especially the books by Joseph Stiglitz. This included the background information gathering before formulation of the research design. Accordingly, the author kept full attention towards the ongoing issues in the heated parts of the economy with regards to the impact of recent world economic and financial crisis of 2008, especially Europe taking into account the importance of policy implications of the research for resolving ongoing crisis. Hence, the case study method is chosen as research method with the case of European Union (especially Eurozone area). The choice of Euro area is in the peculiarities and success of the UK and other non-Euro countries in managing the crisis whereas the Eurozone countries are still facing the ongoing problems with crisis and debt crisis. Though, throughout the analysis of results, author chose selectively countries of specific interest for more detailed review of the practices and its results. The countries in this list include Germany, France, Spain, Italy, Greece, Cyprus and Ireland. Rationale for the choice of these countries lie in the degree of success and failure with regards to crisis management by each country. For instance, Germany is mainly a good player in the economy of Euro area with France, but Spain and Italy are progressing relatively at slow rate whereas Greece has gone into more troubles and causing serious problems for Eurozone and European Union itself. Turning to Ireland and Cyprus, these countries are good examples of the success of IMF and EU crisis management and stimulus package. Furthermore, it would be more interesting to reveal the crisis management practices in these countries, peculiarities and theoretical movement compliance whether they followed liberalists or New Keynesians.

Sources

As a result, two data analysis methods are chosen to conduct the research: qualitative data analysis and quantitative. As a result, thesis was constructed with the usage of various secondary data sources and an in-depth analysis and examination of primary documents, governmental reports in EU countries, policy papers and resolutions of EU institutions, surveys conducted by international organizations. The use of official sources for secondary data by Eurostat, European Central Bank, EU institutions' publications and reports, World Bank, Organization for Economic Cooperation and Development will ensure their credibility and reliability for research analysis and inferences to be made. Moreover, by utilization of so called triangular research strategy for finding various sources for single indicators, the author tried to gather data which is more reliable and consistent throughout different reports and statistics sources.

Qualitative data analysis

This part of the research has been based on the partially interpretative and descriptive method via comparison of the collected data with the framework established by the author taking into account Keynesian policy implications. In other words, process tracing analysis will be carried out to examine and evaluate the compliance of the crisis management practices. Special attention is given to the countries mentioned in the case selection, policy makers, role of governments and degree of liberalization or regulation in the countries. Likewise, differences in policies and visions will be analyzed to identify the factors affecting to make these policy choices and decisions.

Quantitative data analysis

In quantitative analysis of the research data, special indicators mentioned in the theoretical framework will be examined. The methods used in the quantitative analysis will include the correlation analysis by using special regression with the joint examination of the variables (indicators) through empirical estimations[78]. Specifically, in the regression model all indicators are used in order to get the correlation indicator affecting economic growth, thus for instance,

[78] Based on econometric calculations (analysis).

results can be observed as to what is the change in economic growth due to change in one of the specified indicators of either monetary and fiscal policy.

Actual regression analysis has been carried out with the use of statistical software Stata, one of widely used and powerful tools in econometric analysis for identifying correlations between various indicators. Accordingly, in order to get better picture and impact of various variables towards economic growth, data for correlation has been per country level data in Eurozone area. Data for this analysis have been derived from the Eurostat and OECD statistics.

Drawbacks of the methods and limitations

Due to the complex nature of the research process and methods chosen, the author recalls back limitations that may affect the results of the research or full accuracy of the regression models. First of all, with regards to qualitative data analysis, it should be noted that generalizations cannot be made with full confidence due to the author's own analysis method and nature of the data which is secondary. However, with usage of official sources of the European Union and international organizations, the risk of credibility of the results are mitigated. Secondly, the regression model by using predefined variables (indicators) do not cover full aspect of the economy and economic policies pursued as there may be factors indirectly impacting the overall results – correlations.

5. Results

Compliance of crisis management practices

With the emergence of the financial crisis in USA in 2007, the wave of affects transformed to the European countries. This is due, as mentioned in previous chapters, free movement of capital and financial products across the borders and also the active implementation of liberalized financial markets mechanism.

Despite the fact that EU response to crisis was slower but it in general provided good ground for emergence from the crisis gradually. It should be noted that prior to 2007 there were no special crisis management doctrine or legislative policies at EU level for mitigation of the consequences of the financial crisis[79]. This is an indication of the widespread implementation of market liberalization mechanisms opposed by Stiglitz and Keynesians.

Early response – stimulus package?

As most of the economics, experts and policy makers agree, despite having a highly complex economic and political integration and structure, EU's response to the crisis was immense and rapid. Although most of its economic policy mechanisms are centred on the monetary policy in connection with Euro currency, like in US, EU launched special anti-crisis plan called European Economic Recovery Plan in late 2008 in order to impact positively on demand by using investment mechanisms and acceleration of business activities in the Union[80]. This is to greater extent in compliance with the views of Keynesian in quick response to the crisis by targeting the demand side of the economy which is the core to boost economic activity in the European Union, especially Eurozone countries.

According to the EERP plan, it had two major dimensions or pillars to be addressed in tackling the economic and financial crisis[81]. First pillar of the plan covered the stimulation package of 200 billion euros to increase demand in accordance with Stability and Growth Pact so that confidence in the economy can be returned, whereas second pillar covered a wide-ranging plan

---

[79] Veron (2012).
[80] European Commission (2008).
[81] European Commission (2008).

of actions to increase investments into the knowledge economy, energy efficiency and also innovation in the sphere of high technologies and infrastructure[82]. The package is deemed to be in compliance with the Lisbon Strategy for Growth and Jobs.

As a result of this early stimulus package or in other terms, the fiscal stimulus covered the almost five percent of overall EU GDP which approximately equals approximately to 917 billion US dollars.[83] Though, it should not be mixed with the stimulus package towards recovery of financial institutions as EC has worked on this issue separately whose financial means and limits are far more than the amount devoted towards EERP.

Turning to the banking sector, from fall of 2008, the European Commission's approval for the State aid towards this sector amounted to 3.5 trillion euros which represents almost 30 percent of total EU GDP[84]. The range of areas within this aid is broad including recapitalization of banks, support to manage liquidity, debt guarantees and management of impaired assets where the latter is specifically connects to the regulation of risky operations by financial institutions.

Monetary policy area practices

Despite early mechanisms for stimulating the economy with initial EER plan, most of the policy makers in the European Union urged for the monetarist interventions to initially save the financial institutions from insolvency and also to bring short-term confidence in the banking sector by introducing the higher level threshold for deposit insurance. The first round of interventions comprised of cuts of ECB's refinancing rates to 2.5% by end of 2008 and also announcement by EC on recapitalization of the monetary financial institutions[85]. In connection with deepening of the situation in the financial sector and with the purpose of further stimulation of the borrowing by the banks for further lending to the real economy, the basic rate was set to 1% in 2009 with further decrease to 0.05% in 2014 while deposit facility set at -0.20%[86].

[82] European Commission (2008).
[83] European Commission (2009).
[84] European Commission (2009).
[85] European Commission (2009).
[86] European Central Bank (2014).

Stress tests – unsuccessful attempts

With the purpose of bringing confidence into the banking sector and also to simulate to what extent banks are reluctant and flexible with regards to the crisis situations and shocks, ECB has conducted several rounds of stress tests from 2009 to 2014. Though it was completed successfully, trust in the banking sector in Europe has not been brought back and the recessionary conditions in the banking sector was accelerated with the emergence of Greece and other hardly affected countries[87].

Financial sector regulations

One of the special aspects in managing the crisis was the bringing back the regulation of the financial sector to avoid occurrence of such downturns in the future. With this purpose, European Commission had adopted various EU level regulatory frameworks which are summarized in Table 2.

Regulatory framework	Area of concern	Adoption year
Bank capital requirements regulation	Capitalization of banks	2009/ revised 2010
Deposit insurance	Confidence in banking sector	2009
Credit rating agencies	Adequate ratings for better assessment of banks	2009/ revised 2011
Hedge funds and private equity	Prevention or tight control of risky activities	2011
High EU level supranational supervisory authorities	Control and regulation of EU wide financial sector	2010
Bank crisis management and resolution framework	Control and regulation of EU wide financial sector Crisis prevention	2014
Establishment of integrated banking regulatory authorities: - European Banking Authority; - European Securities and Market Authority; - European Occupational and Pensions Authority[88]	Banking and financial regulation	2011

Table 2. EU level major financial sector regulations adopted since 2008[89]

[87] European Banking Authority (2014).
[88] European Commission (2012).
[89] European Commission (2009) ; Veron (2012).

Nevertheless, despite the list of regulatory shown in Table 2 is limited, these are the policies that were high of importance and been adopted whereas there are wide range of legislative proposals being debated and subject for further approval at EU institutions and national governments. Furthermore, the EU level financial regulation and legislative framework have also been implemented in different countries of the European Union at national levels. Although most of the regulations have been implemented in these countries in the Eurozone area, one of the most important regulation on imposing of new taxes on the financial sector is still pending and being highly debated issue[90].

Governance and macroeconomic regulations

As a continuum of the regulatory reforms during the recession period, in line with EU institutional structures of supranational aspects, high level supervisory body was established in 2010 and was named as a European Systemic Risk Board – an independent institution joining EU family under the auspices of European Central Bank[91]. Furthermore, an interesting and very vital comprehensive report on critical review of the financial regulation and future institutional framework for EU with regards to crisis management, financial supervision, regulation, corporate governance has been prepared in 2009 under the Chairmanship of Jacques de Larosière[92]. The report is well known among the policymakers, politicians, economists as *de Larosière report.* The report has been prepared via covering all aspects of the failures of regulations, policies and new framework proposals with regards in these areas to avoid future crisis. Figure 4 summarizes the vision of de Larosière in building an innovative solution for the supervision of financial sector in the European Union taking into account crisis prevention and management policies while leaving room for economic stimulus of the member states.

[90] Veron (2012).
[91] European Commission (2010).
[92] de Larosière (2009).

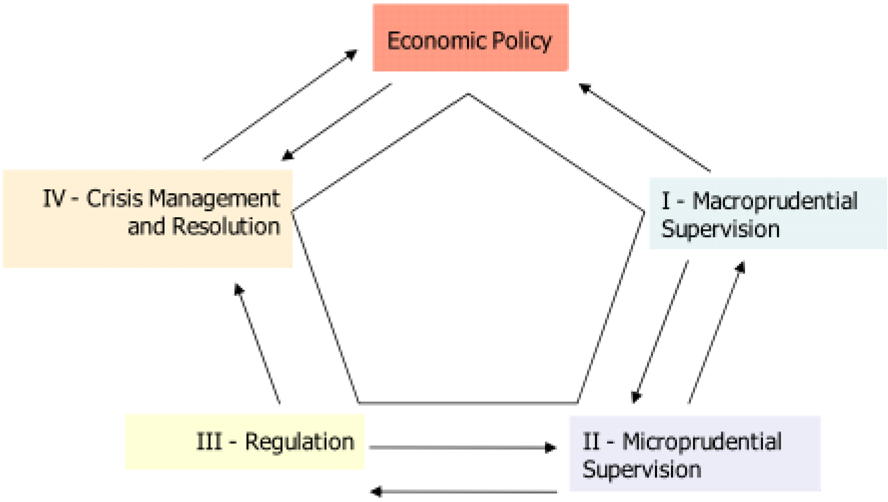

Figure 4. De Larosière vision towards building an innovative framework to financial regulation[93]

Consequently, the Commission welcomed the report in 2009 and took as a policy agenda for further elaboration and formulation of proposals for implementing this scheme. In 2011, after several debates and consultations, special legislative package has been adopted which has expanded the initial vision of the de Larosière's vision and included a more comprehensive surveillance mechanisms in order to prevent and manage imbalances in the economies. Figure 5 summarizes this scheme including Macroeconomic Imbalance Procedure covering early warning system and unconventional monetary policies.

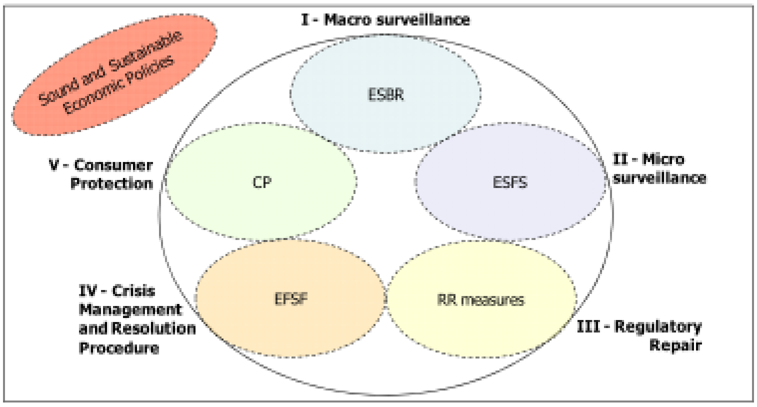

Figure 5. European Framework for Financial Supervision and Regulation[94]

As Grigoryan points out that with the usage of the alert functionality of the MIP, EU member states will be able to assess the possible risks and not only prepare respective policy

[93] Masera (2010).
[94] Masera (2010).

interventions including different fiscal stimulus packages, governmental guarantees for non-deposit banking liabilities but also initiate respective punitive measures to remove these discrepancies and problematic areas[95].

Unconventional policies

One of the tools used by the European Central Bank as part of its crisis management practices in monetary sphere was the adoption to use Outright Monetary Transactions to inject liquidity via secondary bond market. Although this mechanism is directed towards stimulating the economy via monetary policy, the Governing Council of the ECB reserves the right to terminate this mechanism if so called "macroeconomic adjustment programmes" are infringed or misplaced[96].

Fiscal policy

In continuation of the fiscal stimulus package adopted as part of EERP in 2008, more attention in fiscal policy of EU is paid towards so called fiscal austerity policy. Despite the fact that fiscal stimulus has been carried out extensively within the EU during the early periods of the crisis, in connection with financial and debt crisis in selected regions, EU regulatory bodies and so called "troika" group has implemented measures where government spending is limited and intended towards minimization. This policy in its turn, according to many policymakers, economics, has pushed the Eurozone economies back into recession whereas Tilford asserts that easing of the policy of austerity from the second half of 2013 contributed towards the emergence from recession[97].

[95] Grigoryan (2012).
[96] European Central Bank (2012).
[97] Tilford (2014).

Taxation

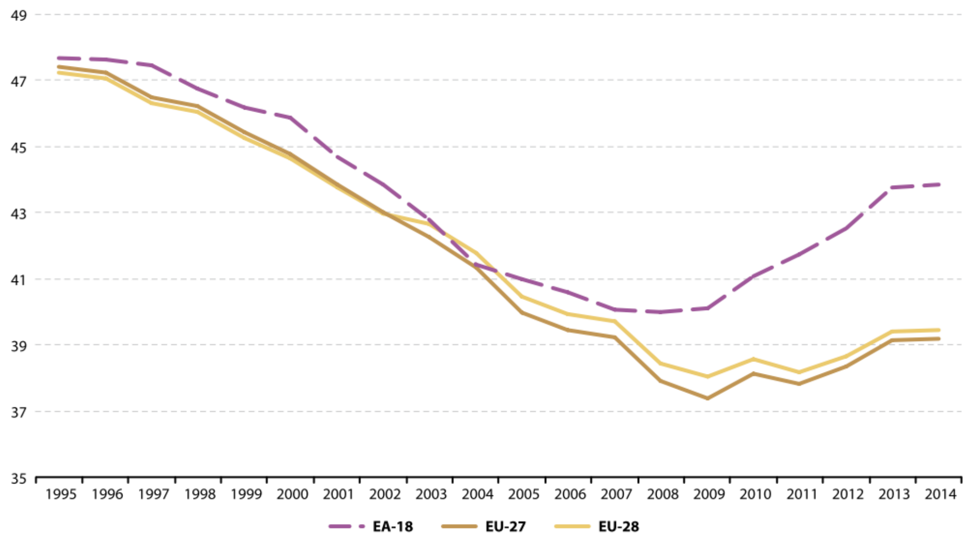

Figure 6. Top rate labour tax rates 1995-2014[98]

In the areas of taxation issues, EU member states pursued individual policies which are to greater extent represent the gradual increase of tax rates, especially top rate levels from 2010. As can be seen from Figure 6, starting from 2007, top level taxation rate of labour started to increase gradually till 2014.

Corporate governance

As one of the most important part of the crisis management practices, corporate governance has been on the agenda of the EU countries in its policy formations. One of the early corporate governance recommendations by the EC was to regulate the remuneration schemes for financial sector management taking into account the risky behaviours conducted which were not transparent to the shareholders and other supervisory bodies. Thus, EC brought its recommendation in April 2009 to regulate this area with implementation of sound mechanisms for risk management, remuneration setting and monitoring of the behaviour of management in financial institutions[99].

[98] Eurostat (2014).
[99] European Commission (2009).

Effectiveness of crisis management practices

This part of the results has been derived using the econometrical regression model for identifying correlation between several variables including gross public debt, governmental expenditures, interest rate, inflation rate, loans by monetary financial institutions (i.e. banks) and budget deficit/surplus towards economic growth[100].

Table 3. Fixed-Effects Estimation results for selected Eurozone countries during 2000-2013

	GDP growth rate	GDP level
	(i)	(ii)
Government expenditure	0.000006	2.463095
	(4.38)***	(10.96)***
Gross Debt	-0.000000	0.012357
	(1.99)**	(3.79)***
Short-term interest rate (3-month)	-0.000956	937.098413
	(0.63)	(3.70)***
HICP inflation rate	0.024917	1,533.045004
	(10.22)***	(3.74)***
Loans by monetary financial institutions	-0.000000	0.009013
	(3.53)***	(3.09)***
Budget deficit	0.000000	0.371320
	(2.09)**	(10.39)***
Constant	-0.142642	72,719.279007
	(4.38)***	(13.33)***
R^2	0.24	0.79
N	494	500

t-statistics in parenthesis. * p<0.1; ** p<0.05; *** p<0.01

Table 3 summarizes the results of the regression analysis based on the quarterly data for Eurozone countries. The inclusion of various indicators are in accordance with theoretical framework developed in this paper and to observe the impact of each indicator of the interest of the paper on the economic growth. The fixed effects model for panel data has been used in order to eliminate unobserved heterogeneity within the countries over period of time.

According to the table, government expenditures, inflation rate and budget deficits with positive coefficients are found to have stimulating impact on the economic growth, that is an increase in the above stated indicators result in the higher GDP growth rate. On the other hand, gross debt, short-term interest rate and loans by financial institutions have opposite impact on the economic growth. However, the estimate for short-term interest rate is statistically

[100] Economic growth is measured by GDP growth rate.

insignificant which means there was no impact on the economic growth taking into account the data period of 2000-2013 including crisis periods for selected sample. Furthermore, it should be noted that all other coefficients are statistically significant at 5 percent significance level which means those coefficients are statistically different from zero (i.e. correlation exists).

Turning to column (ii), it shows the impact of selected indicators on GDP level for the same period and all indicators present positive relationship with GDP level. It should be noted that first column (i) and second column (ii) should not be mixed and confused since estimates in the first column (i) shows the impact on pace of the growth whereas second column (ii) estimates represent the impact on GDP level in nominal terms.

6. Discussion & Conclusion

Compliance of crisis management practices

Based on the results of the document analysis with regards to the crisis management practices implemented by European Union during the Great Recession which has joined with sovereign debt crisis in some parts of Europe from 2010, most of the policies followed the principles of Keynesian economist Stiglitz.

In the areas of financial regulation, where Stiglitz has insisted for implementation of prudential regulatory reforms to enhance state control of financial markets and system, EU level supervision and crisis management policies were adopted in shorter periods. Accordingly, by implementing various regulatory frameworks, especially, in revision of bank capital requirements, EU member states have managed the risks of exposure to high leverage based on the deposits of ordinary citizens in the banks. It is truly compliant view generated by the report of de Larosière where Stiglitz's ideology for independent and comprehensive supervision scheme with early warning system. Though, little has been done with regards to the organization of the work of tax heaven zones which were not touched by the regulatory reform and likewise.

In the areas of corporate governance and financial sector remuneration package determination, despite EC has communicated its position and recommendations on this area, Stiglitz's view was more of requirement for such adoption of strong measures and mechanisms for it.

Likewise, an absence of special high rates for financial sector participants is another differentiation with the Keynesian view by Stiglitz who has urged for the equitable rates for financial sector as those brought the economies into current state.

Turning to the early rescue package, it should be noted that in contrast to US rescue pack, EU has made different approach by adding early fiscal stimulus pack to its stimulus package for financial sector. Thus, this indicates a more balanced approach than Stiglitz's principles where he focuses only the real economy side rather than financial sector. Consequently, the fiscal policy approaches by EU in selected countries severely affected by the crisis of 2008 and sovereign debt crisis represent a different view that of Stiglitz where austerity policies (deficit minimization) has been pursued. Quantitative analysis will give broader answer to this difference. Though, fiscal austerity policies of EU, according to Stiglitz, cause the countries receiving it to become even more vulnerable to external shocks while undermining the stability in the country[101]. In contrast to these policies, Stiglitz proposed the use of European solidarity and provide technical assistances or grants for under periphery countries so that extra burden on the debt structure of the countries will not be increased while strengthening the importance of European integration project[102]. George Soros also supports this view as Western countries will emerge from the crisis whereas those under periphery will have a damaged banking sector and economy[103].

Effectiveness of crisis management practices

Recalling back to Table 3 (*Results part*), all of the indicators have correlation with economic growth rate and GDP level. The implication of the positive coefficient of government spending, budget deficits and inflation rate on economic growth is in that, Stiglitz' position on increased government spending and deficit impacting positively the economic growth is true in the case of Eurozone level data based on the regression model. Nevertheless, this data cover the EU average level data and therefore the level of impact on the economic growth differs from country to country, where crisis severely hit countries like Spain, Greece, Italy show very low level of impact correlation between higher government spending and higher economic growth. From this analysis, it can be derived that fiscal austerity policy of the European Union with

[101] Stiglitz (2014).
[102] Stiglitz (2010a).
[103] Soros (1999a)

IMF has very low level of negative impact on economic growth. So, the controversies arise and room for further research is in place as Stiglitz's position with regards to fiscal stimulus by increase of government spending during crisis period did not turn out to be true in the case of Eurozone as per regression analysis.

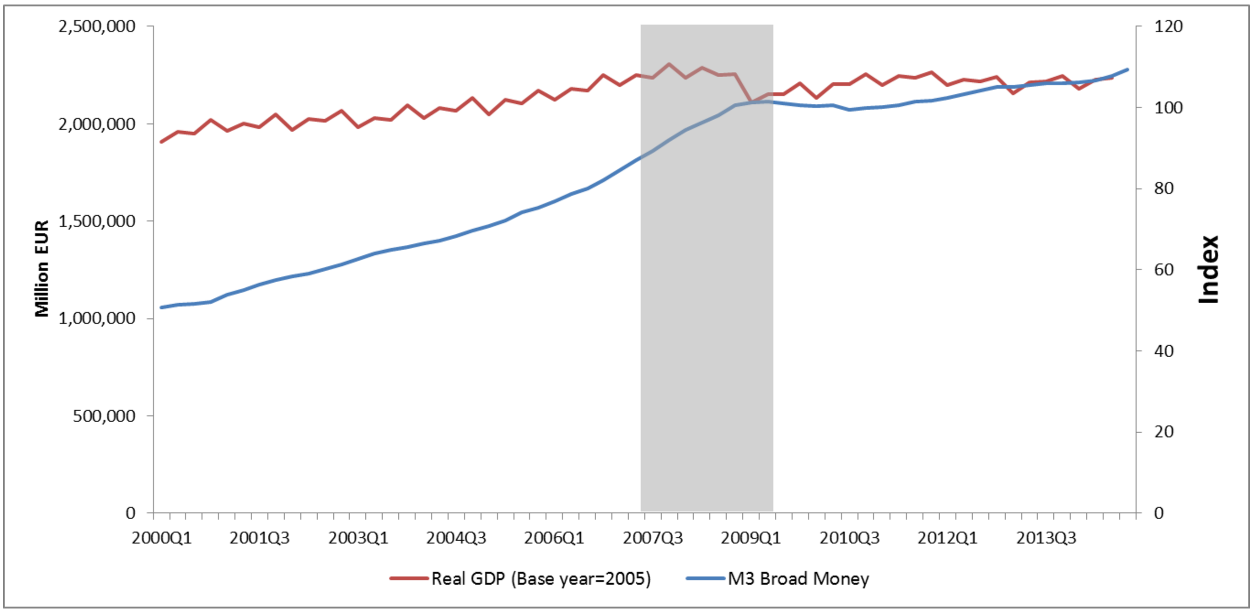

Figure 7. Relationship of money supply (M3) to real GDP

In addition to the regression model, Figure 7 shows the movement of money supply and real GDP between 2000 and 2013. It should be noted that during 2007-2008, money supply was increased at greater level to affect the economic growth though the impact was not as expected. Though, drop in GDP could have been triggered by other factors as well. Money supply (M3) increases in substantial forms are the tools practiced by liberalists or market fundamentalists. If the above mentioned correlation is to be true than the position of Stiglitz with opposing the increase of money supply in the financial sector is strong.

In conclusion, the research attempted to identify the compliance of Eurozone crisis management practices with of those shared by Stiglitz and to what extent they are effective. As per results of the document analysis in qualitative part of the research, most of the policies pursued by EU is fully compliant with the theoretical framework or views of Stiglitz. However, it should not be forgotten that discrepancies or absence of policies exist like in the case of higher level taxation for financial sector and regulations pertaining the distinction of big bank's commercial banking and investment banking functions clearly. Though, the direct impact of these missing policies are lower than those which are already being pursued by EU in areas of corporate governance, financial regulations and surveillance, fiscal stimulus via addressing energy saving, innovation, high technologies spheres.

On the quantitative part of the research, the effectiveness of crisis management practices showed a moderate level of correlation where Stiglitz's view on government spending ought to be true as there is direct linkage between increased government spending and deficit towards economic growth. Hence, policy implications arise including softening of fiscal austerity policies to stimulate the demand side of the economy but also to stabilize the political situation in the country. Likewise, further reforms on taxation of financial sector, limitation of risky activities of the big banks in financial markets and strong fiscal policy should be carried out while showing high EU level solidarity to other depressed regions.

7. Bibliography and References

Bank of England (2015), What is Quantitative Easing?, Monetary Policy, Available from http://www.bankofengland.co.uk/monetarypolicy/pages/qe/default.aspx , Accessed December 20, 2014

Blundell-Wignall A., Atkinson P. & Lee S.H. (2009), Dealing with the Financial Crisis and Thinking about the Exit Strategy, Financial Market Trends, OECD, Vol.1/2009

Cliff Notes (2015), Monetary Policy, Economics, Houghton Mifflin Harcourt, Available from http://www.cliffsnotes.com/more-subjects/economics/fiscal-and-monetary-policy/monetary-policy , Accessed December 20, 2014

Cho D. & Appelbaum B. (2010), Obama's 'Volcker Rule' shifts power away from Geithner, Politics, Washington Post, Available from http://www.washingtonpost.com/wp-dyn/content/article/2010/01/21/AR2010012104935.html

De Larosière (2009), Report of The High-Level Group on Financial Supervision in the EU, The de Larosière Group, European Commission.

Demirguc-Kunt A. & Detragiache E. (1998), The Determinants of Banking Crises in Developing and Developed Countries, IMF Staff Papers, Vol.45, No.1, International Monetary Fund

Easterly W. & Rebelo S. (1993), Fiscal policy and economic growth, Journal of Monetary Economics, Vol.32, pp.417-458, Elsevier Science Publishers B.V.

European Banking Authority (2014), EU-wide stress testing, Risk analysis and data, Available from http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing

European Commission (2008), Communication from the Commission to the European Council - A European Economic Recovery Plan, COM(2008) 800 final.

European Commission (2009), COMMISSION RECOMMENDATION of 30 April 2009 on remuneration policies in the financial services sector, 2009/384/EC, Official Journal of the European Union

European Commission (2009), Economic Crisis in Europe: Causes, Consequences and Responses, European Economy, No.7, Directorate-General for Economic and Financial Affairs.

European Central Bank (2014), Key ECB interest rates, Monetary operations, Statistics, Available from https://www.ecb.europa.eu/stats/monetary/rates/html/index.en.html

European Central Bank (2012), Technical features of Outright Monetary Transactions, Press Release, Available from http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html

European Commission (2012), Memo, MEMO/12/413.

Eurostat (2014), Taxation trends in the European Union, Data for the EU Member States, Iceland and Norway, Taxation and Customs Union

European Commission (2010), Memo, MEMO/10/434.

Financial Times (2015), Definition of austerity measure, Financial Times Lexicon, Available from http://lexicon.ft.com/Term?term=austerity-measure, Accessed January 4, 2015.

Gnos C.& Rochon L.P. (2004), Reforming the International Financial and Monetary System: From Keynes to Davidson and Stiglitz, Journal of Post Keynesian Economics, Vol.26, No.4, pp.613-629, M.E. Sharpe, Inc.

Greenwald B. & Stiglitz J.E. (1987), Keynesian, New Keynesian and New Classical Economics, Oxford Economic Papers, New Series, Vol. 39, No. 1 (Mar., 1987), pp. 119-133, Oxford University Press

Grigoryan K.(2012), An overview of EU macroeconomic and structural policies, International Conference Paper, Yerevan 2012, Yerevan State University.

Handman M., Usher A.P., Stocking G.W., Bladen V.W., Mitchell B., Jaffe W., Hansen A.H. and Goodrich C. (1931), Economic History-Decline of Laissez Faire, The American Economic Review, Vol.21, No.1, American Economic Association, Supplement, Papers and Proceedings of the Forty-third Annual Meeting of the American Economic Association, pp.3-10

Kelly T. (1997), Public expenditures and growth, Journal of Development Studies, Vol.34, No.1, pp.60-84, Taylor and Francis

Keynes J.M. (2007), The General Theory of Employment, Interest and Money, 2007 edition, Palgrave Macmillan.

Klyuev V., Imus P. & Srinivasan K. (2009), Unconventional Choices for Unconventional Times: Credit and Quantitative Easing in Advanced Economies, IMF Staff Position Note, IMF, SPN/09/27

Kuttner R. (1999), Everything for Sale: The Virtues and Limits of Markets, University of Chicago Press, Chicago.

Library of Economics and Liberty (2008), "John Maynard Keynes." The Concise Encyclopedia of Economics., Retrieved February 1, 2015 from the World Wide Web: http://www.econlib.org/library/Enc/bios/Keynes.html

Longview Institute (2014), Market Fundamentalism, Available from http://www.longviewinstitute.org/projects/marketfundamentalism/marketfundamentalism/index.html , Accessed November 20, 2014

Mill J.S. (1909), Principles of Political Economy, London, Longsmans, Green and Co., 7th edition

Masera R. (2010), Reforming financial systems after the crisis: a comparison of EU and USA, PSL Quarterly Review, Vol.63, No.255, pp.299-362

Moosa I. (2010), The myth of too big to fail, Journal of Banking Regulation, Vol.11, pp.319-333, Palgrave Macmillan

OECD (2014), "Country statistical profile: European Union", Country statistical profiles: Key tables from OECD.

Palley T.I. (2011), Quantitative Easing: A Keynesian Critique, Working Paper, No.252, Political Economy Research Institute, University of Massachusetts.

Polanyi K. (2001), The Great Transformation: The Political and Economic Origins of Our Time, 2nd edition, Beacon Press, Boston

Rodrik D. (1997), Has Globalization Gone Too Far?, Washington, DC: Institute for International Economics, Kluwer Academic Publishers

Sandleris G. & Wright M.L.J (2013), GDP-Indexed Bonds: A tool to Reduce Macroeconomic Risk?, In: Balling M., Gnan E. & Holler J. Eds., The Future of Sovereign Borrowing in Europe, Vienna: SUERF.

Simons C.H. (1941), For a Free-Market Liberalism, the University of Chicago Law Review, Vol. 8, No. 2 (Feb., 1941), pp. 202-214.

Smith A. (2000), The Wealth of Nations, Modern Library (first published in 1776), New York.

Soros G. (1999a), The Crisis of Global Capitalism: Open Society Endangered, Public Affairs.

Soros G. (1999b), Capitalism's Last Chance?, Foreign Policy, No.113, pp.55-66, Washington Newsweek Interactive LLC.

Stiglitz J. (2010a), Freefall: America, Free Markets, and the Sinking of the World Economy, W. W. Norton & Company, New York, Preface.

Stiglitz J. (2010b), "Freefall: From the failure of the markets to the re-organization of the world economy", Current Concerns, No.10, June 2010, pp.1-4.

Stiglitz J. (2004), Capital-Market Liberalization, Globalization, and the IMF, Oxford Review of Economic Policy, Vol.20, No.1, pp.57-71, Oxford University Press.

Stiglitz J. (2011), Rethinking macroeconomics: What failed, and How to repair it, Journal of European Economic Association, Vol.9, No.1, European Economic Association, p.592

Stiglitz J. (2002), Globalization and its Discontents, Ney York: W.W. Norton & Company.

Stiglitz J. (2009), Interpreting the Causes of the Great Recession of 2008, Bank of International Settlements Conference, Proceeding, Basel, June 2009.

Stiglitz J. (2014), Europe's Austerity Zombies, Project Syndicate, Available from http://www.project-syndicate.org/commentary/joseph-e--stiglitz-wonders-why-eu-leaders-are-nursing-a-dead-theory , Accessed January 15, 2015.

The Economist (2013), *The origins of financial crisis*, Crash course, The Economist, Available from http://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article , Accessed December 10, 2014.

The Economist (2009), Keynesian Principles, Debate, Economist Debates, Available from http://www.economist.com/debate/overview/140, Accessed December 20, 2014.

Tilford S. (2014), Europe has failed to learn the lessons from history when tackling the economic crisis, Policy Review, Available from http://www.policyreview.eu/europe-has-failed-to-learn-the-lessons-of-history-when-tackling-the-economic-crisis/ , Accessed December 20, 2014.

Veron N. (2012), Financial Reform after the Crisis: An early assessment, Bruegel Working Paper, 2012/01.

Viner J. (1927), Adam Smith and Laissez Faire, Journal of Political Economy, Vol.35, No.2, pp.198-232, The University of Chicago Press, Chicago

Williamson J. (2000), *What Should the World Bank Think about the Washington Consensus?*, The World Bank Research Observer, Vol.15, No.2, pp.251-264, Oxford University Press.

Williamson J. & Mahar M. (1998), A survey of financial liberalization, Essays in International Finance, No.21, Princeton University.

Yasin M.(20000, Public Spending and Economic Growth: Empirical Investigation of Sub-Saharan Africa, Southwestern Economic Review, pp.1-10

Appendixes

Fixed-Effects Estimates

	GDP growth rate			GDP level		
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Government expenditure	0.000	0.000	-0.000	2.463	2.463	-0.436
	(4.38)***	(4.38)***	(2.21)**	(10.96)***	(10.96)***	(0.05)
Gross debt	-0.000	-0.000	0.000	0.012	0.012	0.030
	(1.99)**	(1.99)**	(0.70)	(3.79)***	(3.79)***	(0.05)
Short-term interest rate	-0.001	-0.001	0.032	937.098	937.098	713.224
	(0.63)	(0.63)	(0.62)	(3.70)***	(3.70)***	(0.08)
HICP inflation rate	0.025	0.025	-0.017	1,533.045	1,533.045	-1,979.996
	(10.22)***	(10.22)***	(0.61)	(3.74)***	(3.74)***	(0.43)
Loans by monetary	-0.000	-0.000	0.000	0.009	0.009	0.132
financial institutions	(3.53)***	(3.53)***	(1.15)	(3.09)***	(3.09)***	(0.21)
Budget deficit	0.000	0.000	0.000	0.371	0.371	0.911
	(2.09)**	(2.09)**	(3.78)***	(10.39)***	(10.39)***	(0.78)
Country dummy variables						
Belgium		-0.017	0.482		-3,350.701	-10,720.571
		(1.07)	(0.18)		(1.24)	(0.02)
Cyprus		0.000	0.000		0.000	0.000
Estonia		0.042	-0.049		-29,756.700	-7,528.610
		(2.18)**	(0.02)		(9.18)***	(0.02)
Finland		0.013	-0.649		-15,264.555	-15,701.207
		(0.88)	(0.25)		(6.25)***	(0.04)
France		-0.375	0.190		132,252.884	-65,408.346
		(4.02)***	(0.07)		(8.47)***	(0.15)
Germany		-0.320	0.979		244,853.575	347,859.903
		(3.85)***	(0.37)		(17.67)***	(0.78)
Greece		0.022			-15,018.341	
		(1.00)			(4.11)***	
Ireland		0.048			-6,587.638	
		(2.08)**			(1.69)*	
Italy		-0.167	2.636		111,559.031	924,971.599
		(3.33)***	(0.46)		(13.33)***	(0.96)
Latvia		0.000	0.000		0.000	0.000
Lithuania		0.000	0.000		0.000	0.000
Luxembourg		0.059	0.792		-29,456.525	-12,267.707
		(3.18)***	(0.30)		(9.46)***	(0.03)
Malta		0.000	0.000		0.000	0.000
Netherlands		-0.075	-0.180		9,136.217	64,681.548
		(2.85)***	(0.07)		(2.07)**	(0.14)
Portugal		0.023	0.613		-15,381.680	14,741.819
		(1.51)	(0.23)		(6.13)***	(0.03)
Slovakia		0.031			-22,671.718	
		(1.37)			(5.96)***	
Slovenia		0.044	0.210		-28,423.261	-14,088.985
		(2.53)**	(0.08)		(9.78)***	(0.03)
Spain		-0.088	0.202		79,042.805	50,360.153
		(3.08)***	(0.08)		(16.59)***	(0.11)
Government expenditure by country:						0.000

Belgium	0.000	4.324
	(2.47)**	(0.44)
Cyprus	0.000	0.000
Estonia	0.001	1.788
	(7.21)***	(0.07)
Finland	0.000	5.236
	(4.78)***	(0.56)
France	0.000	5.417
	(2.33)**	(0.59)
Germany	0.000	0.419
	(2.15)**	(0.05)
Greece	-0.000	-5.918
	(1.63)	(0.39)
Ireland	0.002	36.334
	(1.08)	(0.11)
Italy	0.000	-0.289
	(1.81)*	(0.03)
Latvia	0.000	0.000
Lithuania	0.000	0.000
Luxembourg	0.000	4.277
	(0.39)	(0.26)
Malta	0.000	0.000
Netherlands	0.000	2.163
	(2.63)***	(0.23)
Portugal	0.000	1.306
	(2.41)**	(0.14)
Slovakia	-0.001	-7.899
	(1.56)	(0.10)
Slovenia	0.001	5.170
	(3.80)***	(0.22)
Spain	0.000	5.011
	(2.53)**	(0.55)
Gross debt by countries:	0.000	0.000
Belgium	-0.000	-0.030
	(0.81)	(0.05)
Cyprus	0.000	0.000
Estonia	0.000	0.231
	(1.11)	(0.03)
Finland	0.000	-0.114
	(0.50)	(0.20)
France	-0.000	-0.051
	(0.74)	(0.09)
Germany	-0.000	0.105
	(0.68)	(0.19)
Greece	0.000	0.282
	(2.52)**	(0.46)
Ireland	-0.000	-1.196
	(0.93)	(0.09)
Italy	-0.000	-0.186
	(0.72)	(0.33)
Latvia	0.000	0.000

Lithuania	0.000	0.000
Luxembourg	0.000	0.023
	(0.08)	(0.03)
Malta	0.000	0.000
Netherlands	-0.000	-0.024
	(0.62)	(0.04)
Portugal	-0.000	-0.042
	(0.68)	(0.08)
Slovakia	0.000	-0.439
	(0.61)	(0.09)
Slovenia	-0.000	-0.006
	(0.18)	(0.01)
Spain	-0.000	-0.049
	(0.70)	(0.09)
Interest rate by country:		
Belgium	-0.039	-613.682
	(0.75)	(0.07)
Cyprus	0.000	0.000
Estonia	0.019	-586.687
	(0.31)	(0.06)
Finland	-0.025	-133.093
	(0.48)	(0.02)
France	-0.039	4,051.845
	(0.75)	(0.47)
Germany	-0.032	12,231.243
	(0.62)	(1.41)
Greece	-2.581	-82,976.350
	(2.33)**	(0.45)
Ireland	0.000	0.000
Italy	-0.040	-5,874.962
	(0.40)	(0.35)
Latvia	0.000	0.000
Lithuania	0.000	0.000
Luxembourg	-0.031	-494.029
	(0.60)	(0.06)
Malta	0.000	0.000
Netherlands	-0.035	1,895.184
	(0.58)	(0.19)
Portugal	-0.032	-474.484
	(0.63)	(0.05)
Slovakia	-5.336	-47,913.036
	(2.63)***	(0.14)
Slovenia	-0.040	-471.674
	(0.77)	(0.05)
Spain	-0.020	765.305
	(0.39)	(0.09)
HICP inflation rate by country:		
Belgium	0.016	2,248.717
	(0.57)	(0.48)
Cyprus	0.000	0.000
Estonia	0.040	1,955.189

	(1.33)	(0.39)
Finland	0.005	1,180.045
	(0.16)	(0.25)
France	0.016	6,145.726
	(0.57)	(1.28)
Germany	0.014	-621.810
	(0.48)	(0.12)
Greece	0.119	4,540.383
	(1.92)*	(0.44)
Ireland	1.951	33,109.555
	(0.97)	(0.10)
Italy	0.028	2,407.247
	(0.97)	(0.49)
Latvia	0.000	0.000
Lithuania	0.000	0.000
Luxembourg	0.038	2,168.783
	(1.37)	(0.46)
Malta	0.000	0.000
Netherlands	-0.000	1,261.014
	(0.01)	(0.23)
Portugal	0.038	2,176.310
	(1.38)	(0.47)
Slovakia	-0.434	-3,347.850
	(2.03)**	(0.09)
Slovenia	0.052	2,067.922
	(1.88)*	(0.44)
Spain	0.039	3,946.154
	(1.40)	(0.85)
Loans by monetary financial institutions by country:	0.000	0.000
Belgium	-0.000	-0.110
	(1.19)	(0.18)
Cyprus	0.000	0.000
Estonia	0.000	-0.413
	(0.09)	(0.11)
Finland	-0.000	-0.094
	(1.58)	(0.15)
France	-0.000	-0.134
	(1.15)	(0.22)
Germany	-0.000	-0.137
	(1.15)	(0.22)
Greece	-0.000	-0.100
	(1.22)	(0.21)
Ireland	-0.000	-0.116
	(1.68)*	(0.30)
Italy	-0.000	-0.235
	(1.17)	(0.36)
Latvia	0.000	0.000
Lithuania	0.000	0.000
Luxembourg	-0.000	-0.128
	(1.14)	(0.21)

Malta			0.000			0.000
Netherlands			-0.000			-0.131
			(1.15)			(0.21)
Portugal			-0.000			-0.109
			(1.17)			(0.17)
Slovakia			0.000			0.962
			(0.74)			(0.07)
Slovenia			-0.000			-0.113
			(2.22)**			(0.17)
Spain			-0.000			-0.145
			(1.20)			(0.23)
Budget deficit by country:						
Belgium			-0.000			-0.455
			(2.13)**			(0.39)
Cyprus			0.000			0.000
Estonia			0.000			-0.183
			(6.04)***			(0.02)
Finland			-0.000			-0.662
			(1.58)			(0.54)
France			-0.000			-0.960
			(3.59)***			(0.82)
Germany			-0.000			-1.130
			(3.79)***			(0.97)
Greece			0.000			0.036
			(0.17)			(0.01)
Ireland			-0.000			-5.295
			(0.97)			(0.10)
Italy			-0.000			-0.294
			(3.30)***			(0.25)
Latvia			0.000			0.000
Lithuania			0.000			0.000
Luxembourg			-0.000			-1.110
			(3.10)***			(0.35)
Malta			0.000			0.000
Netherlands			-0.000			-0.569
			(3.36)***			(0.48)
Portugal			-0.000			-0.779
			(3.35)***			(0.61)
Slovakia			-0.001			-4.627
			(1.95)*			(0.10)
Slovenia			-0.000			-0.854
			(1.62)			(0.44)
Spain			-0.000			-0.529
			(3.77)***			(0.45)
Constant	-0.143	-0.063	-0.709	72,719.279	29,040.824	13,476.070
	(4.38)***	(3.66)***	(0.27)	(13.33)***	(10.14)***	(0.03)
R^2	0.24	0.24	0.72	0.79	0.99	0.99
N	494	494	494	500	500	500

t-statistics in parenthesis .* p<0.1; ** p<0.05; *** p<0.01

Note: Columns (ii) and (v) shows how intercept (constant) term differs among countries and initial constant determined by regression belongs to country Austria and to see constant term for other countries one must add (subtract) coefficient of country dummies to this constant term. Columns (iii) and (vi) shows how slopes (coefficients) of indicators differ among countries and initial coefficients determined by regression belong to country Austria and to see slopes for other countries one must add(subtract) coefficient of country dummies for each indicator to the predetermined coefficient for Austria.