CAUSES AND MEASURES FOR PREVENTING FUTURE CRISES IN EU

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ABSTRACT

Authors summarized major causes of current financial crisis in EU on global and regional (European) level. On a global level these are credit rating agencies and compensations of CEO directors in financial sector. On regional level these are structural imbalance, increasing debts of EU countries, foreign trade imbalance among EU countries and loss of confidence in debt of EU countries. Measures for preventing future crises in EU according to the authors are improved debt management, application of Keynesian ideas for overcoming the crisis, reform of the criteria for entering the Eurozone, creation of a fiscal union, exit of the PIIGS countries from the Eurozone, taxation of the financial sector and creation of a banking union.

Keywords:
Global financial crisis, financial crisis in EU, causes of crisis, prevention of crisis in EU

1. INTRODUCTION

In the years before the crisis economic movements in the European Union were favorable. According to the Eurostat, unemployment rate was declining while inflation rate measured by harmonized consumer indices was low and stable. Also, in political sphere certain successes were achieved. In 2004. European Union welcomed ten new member states which was the biggest enlargement in the history of EU (Mintas Hodak, 2010).

European Union was achieving moderate economic growth until the world financial crisis in 2008. Unemployment rate was declining in the years before the crisis, form 9.3% to 7%. The inflation rate measured by the harmonized index of consumer prices was low and stable. European Union was achieving moderate economic growth, which was stopped with the start of the world financial crisis of 2008. This data is shown in the following table.

Table 1.: Movement of economic indicators in eu in pre-crisis period

Economic indicator	2004.	2005.	2006.	2007.	2008.
Unemployment rate (in %)	9.3	9.0	8.2	7.2	7.0
HICP1 (change in %)	2.3	2.3	2.3	2.4	3.7
Long-therm interest rates (in %)	4.38	3.70	4.08	4.56	4.55
GDP growth rate (in %)	2.6	2.2	3.4	3.2	0.4

Source: Authors' own design according to data by Eurostat.

Global financial crisis hit PIIGS countries especially hard[1] (Sarangi, 2014). A major economic recession started in 2009. in European countries. The starting point of that economic crisis was the subprime crisis in the US (Weill, 2014).

However, causes that led to the crisis in the EU were various and numerous. The aim of this paper is to give an overview of causes which generated crisis in the EU and measures that can be applied for preventing future crises in the EU.

This paper has three parts. First part deals generally with crises while authors emphasize world financial crisis of 2008. It is an introduction to the core of the paper. Second part gives an overview of external and internal causes that generated crisis in the EU. Third part gives measures for overcoming and preventing future crises in the EU.

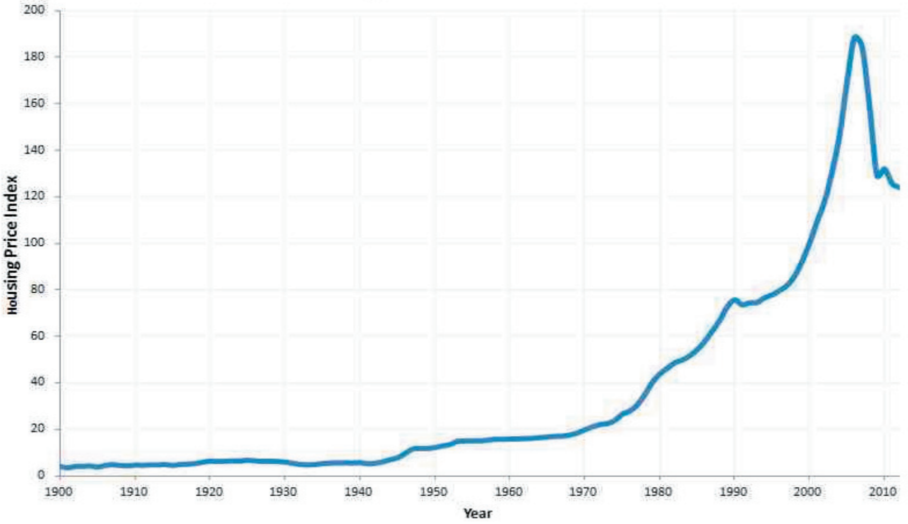
1 Due to the economic recession which started in 2008, several members of the European Union became known as PIIGS. These states include Portugal, Italy, Ireland, Greece and Spain and if combined together, they form the acronym PIIGS. The reason why these countries were grouped together is the substantial instability of their economies, which was an evident problem in 2009.

2. THE FINANCIAL CRISIS OF 2008

Financial crisis represents a disturbance in financial system that is accompanied by a decline in the value of assets and insolvency of many firms in financial and other sectors. Generally, it has negative impact on economy. There is no consensus among the economists for the crucial causes and methods for solving the crises. So, they continue to occur (Benić, 2012).

World financial crisis was generated by the crisis of the real estate market in the USA, popularly called "subprime crisis". During the period from 1997. to 2006. prices of the real estate were growing to unrealistic levels, until 2007. when started their sharp decline (Figure 1.).

Figure 1.: U.S. housing price index since 1900



Source: Observations, 2014.

During that period an increasing number of debtors weren't able to pay back their loans because of high interest rates and low incomes. Suddenly, high supply of houses appeared on the market and because of that came a sharp decline of prices. Insolvency of the debtors led banks to losses. Banks that had given the loans couldn't sell the houses so the consequence was the crash of the entire financial system. Crisis spread all over the banking system, insurance sector, stock exchanges and funds (Ribinak, 2011).

The hardest moment for the financial sector happened in the middle of 2008. when banks Lehman Brothers, Bearn Sterns and biggest real estate firms Fannie Mae and Freddie Mac went bankrupt (Steele, 2014). Bankruptcy of the Lehman Brothers was especially heavy shock for USA residents because of it's long tradition and because it was an icon of American banking system. The main cause of bankruptcy were very high managerial compensations that were given for short term successes. By giving loans for houses to debtors who weren't able to pay back their loans, managers generated the crisis which had grown to the economic crisis (Bebchuk et al., 2009).

Samuelson and Nordhaus (2007) state that the cause of financial crises is recession[2] whose features are:

- Reduced demand for products and services which leads to the increase of stock. It causes reduced production and consequently reduced GDP and investment.
- Reduced profit of the companies, stock prices, demand for credits and interest rates.
- Decrease in demand for labor and higher unemployment rate.
- Decrease of inflation rate because of reduced demand for products and services.

Financial crisis and recession that had officially finished in USA in 2009. just started in Europe. From USA crisis spread to the European Union through European banks which had bought financial products from American banks with AAA+ ratings (Kowalski, Shachmurove, 2014).

3. CAUSES OF FINANCIAL CRISIS IN EU

Authors summarized major causes of current financial crises in EU on global and regional (European) level. On a global level these are credit rating agencies and compensations of CEO directors in financial sector. On regional level these are structural imbalance, increasing debts of EU countries, foreign trade imbalance among EU countries and loss of confidence in debt of EU countries. Further in the text, authors give an overview of each cause.

Credit rating agencies

From their establishment, credit rating agencies became a very important factor in financial markets. Published ratings of companies and governments have long-term consequences because of the interconnection of national economies on macroeconomic and relationships between financial sector and real sector on microeconomic level.

Thus, credit rating agencies should inform the potential investors about the credit risk of the securities issuers. That kind of information should be based on objective and independent estimation about possibility of issuer to repay the debt.

2 Period of general economic decline; typically defined as a decline in GDP for two or more consecutive quarters.

Three largest agencies for credit ratings are Standard & Poor's, Moody's Investors and Fitch Rating (Host et al., 2012).

In the period before the crisis, credit rating agencies haven't given realistic ratings of EU countries which later faced the crisis. From 2003. to May 2010. Fitch Rating evaluated Spain with AAA[3] credit rating, in spite of Spain's problems with high unemployment and low economic growth in the observed period.

With it's ratings, the agencies haven't signalized the beginning of the Greek crisis and also crises in the rest of the European Union. Ratings for each countries haven't taken into account that, in spite of structural economic differences, the economies of the European countries are strongly interconnected.

Agencies haven't predicted that the crisis will spread from one country to the entire Eurozone. Only after 2009. have the agencies reduced credit ratings of countries affected by the financial crisis (Tichy, 2012). Negative impact of the credit rating agencies can be best seen on the example of Greece. Until 2009. Greece's credit rating was positive - agencies haven't taken into account the problems of Greece's public finances (Host et al., 2012).

Indications about Greek financial problems started to become obvious in January 2009. when Standard & Poor's reduced it's rating from A to A-. Then, in 2010. Moody's reduced Greece's rating by four levels, from A3 to Ba1 until 2011. when it reduced Greece's rating to Caa (Regional today, 2014).

Compensations of CEO directors in financial sector

Irresponsible corporative governance played a significant role in creation and development of contemporary financial crisis. Corporative governance of banks differs from other companies because they give higher incentives not only to executive directors but also to managers on lower corporative levels (Štefulić and Peša, 2012).

One of the major generators of the crisis were managerial compensations. Managers had been rewarded with high bonuses for their short-term performances without taking into account the risk that they can generate (Webinger, 2011). Hakenes and Schnabel (2014) state that if managers are rewarded with high bonuses for their short-term performances without imposing the limits to the risk they can create, that can be very dangerous for the long-term viability of the bank (Hakenes and Schnabel, 2014). Table 1. shows the amounts of bonuses that have been paid to managers in Wall Street and City of London.

3 The highest credit rating

Table 2.: Total bonus payouts in city of london and wall street from 2001. to 2009.

Year	Wall Street Bonuses $ billion	City of London Bonuses £ billion
2001	13	3.9
2002	9.8	3.3
2003	15.8	4.9
2004	18.6	5.7
2005	20.5	7.1
2006	23.9	10.1
2007	33.2	10.2
2008	18.4	4

Source: Mathews and Mathews (2010).

Level of bonuses before the crisis was raising constantly (except in 2002. in Wall Street). Bonuses should be paid on the basis of achieved success and not as a reward for bringing the bank to the brink of bankruptcy (Štefulić and Peša, 2012).

The financial crisis of 2007. has put the compensation structure of the banks at the forefront of many policy debates on the root causes of the banking crisis (Murphy, 2009). The positive relationship between bank CEO compensation and risk taking is a well established empirical fact. The global banking crisis has resulted in numerous demands to control banker's bonuses and thereby curtail their risk-taking activities in the hope that the world can avoid repeating the same mistakes in the future (Mathew and Mathew, 2009).

Structural imbalance in Eurozone

Macroeconomic difficulties in the EU are largely caused by structural imbalance in Eurozone which prevents macroeconomic stability. Prerequisite for the macroeconomic stability in Eurozone is a real cooperation among EU countries which currently doesn't exist (Razin, Rosefielde, 2012).

Good example for that is the lack of mobility of the workforce within the EU. EU members are fiercely protecting jobs in their country. Because of that, there is a huge problem with high number of unemployed persons in countries such as Greece, Ireland, Italy, Portugal and Spain that can't be eased by permanent or temporal migration of workforce to Germany or other developed countries of EU. Furthermore, there are no institutionalized requirements according to which the richer member countries should help poorer ones, as it exists in the USA (Kersan Škabić, 2012).

Eurozone countries faced restrictions and structural imbalance during the crisis. When it was useful to devalue their own national currency they weren't able to do that. Countries whose prices had become uncompetitive couldn't independently devalue the euro or get out of excessive debt by printing euros. Instead of that, they had to rely on internal devaluation by reducing wages and prices, goodwill of domestic and foreign creditors and fiscal help from richer EU members (Razin, Rosefielde, 2012).

The problem that the Eurozone is facing is a consequence of "impossible trinity". Ideal currency would enable the achievement of all three goals: monetary independence, exchange rate stability and complete financial integration. Impossible trinity represents the fact that a country can achieve only two of the three goals due to the effects of economic forces (Kersan Škabić, 2012).

Increasing debts of EU countries

In 1992. members of the EU signed the Maastricht Treaty according to which they pledged to restrict budget deficit and public debt. Maastricht Treaty decreased credit risk and with the elimination of currency risk had an impact on reducing the borrowing costs for the state members. However, some countries in 1992. already had their public debt higher than 60 percent of GDP (Badurina et al., 2012:77).

Some member states, including Greece and Italy found ways to bypass these rules. That enabled these states to cover the level of their deficit and debt by combining techniques which include inconsistent accounting and the use of complex derivatives (Simković, 2009).

Adoption of euro as a currency by different member states has led to very low interest rates on government bonds in a period before the crisis, which encouraged personal and government spending. Table 2. shows the movement of public debt by selected EU member states.

Table 3.: Movement of the public debt for selected eu member states from 2005. to 2013. (in %)

State	2005.	2006.	2007.	2008.	2009.	2010.	2011.	2012.	2013.
Germany	66.8	66.3	63.5	64.9	72.4	80.3	77.6	79.0	76.9
France	67.0	64.2	64.2	67.8	78.8	81.5	85.0	89.2	92.2
Netherlands	49.4	44.9	42.7	54.8	56.5	59.0	61.3	66.5	68.6
Portugal	67.4	69.2	68.4	71.7	83.6	96.2	111.1	124.8	128.0
Ireland	26.2	23.8	24.0	42.6	62.2	87.4	111.1	121.7	123.3
Greece	:	103.4	103.1	109.3	126.8	146.0	171.3	156.9	174.9
Spain	42.3	38.9	35.5	39.4	52.7	50.1	69.2	84.4	92.1

Source: Authors' own design according to data by Eurostat.

It's obvious that observed countries have increased their public debt from 2005. to 2013.

Sovereign debt crises have been recurrent events over the past two centuries. More recently, sovereign debt crises have been increasingly linked to the banking sector (Reinhart, Rogoff, 2009).

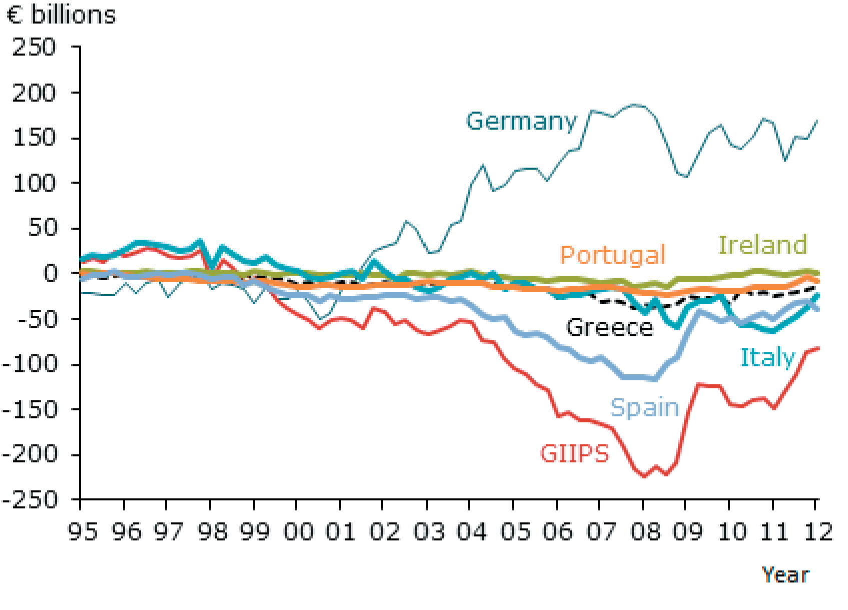
European sovereign debt crisis is a period of time in which several European countries faced the collapse of financial institutions, high government debt and rapidly rising bond yield spreads of government securities. The European sovereign debt crisis started in 2008, with the collapse of Iceland's banking system, and spread primarily to Greece, Ireland and Portugal during 2009. The debt crisis led to a crisis of confidence for European businesses and economies.

There are three ways in which the euro is connected to the European sovereign debt crisis. First, the initial institutional design of the Eurozone plausibly increased fiscal risks during the pre-crisis period. Second, once the crisis occurred, these design flaws amplified the fiscal impact of the crisis dynamics through multiple channels. Third, the restrictions imposed by monetary union also shape the duration and tempo of the anticipated post-crisis recovery period, along with Europe's chaotic political response and failure to have institutions in place for crisis management (Lane, 2012:50).

Foreign trade imbalance among EU countries

The foreign trade surplus of Germany grew in the period after 1999., while the deficits of Italy, Greece and Spain have worsened. That relationship is shown by Figure 2.

Figure 2.: Foreign trade balance of eu members from 1995. to 2012.



Source: Federal Reserve Bank of San Francisco, 2014.

Giday (2013) states that foreign trade deficit demands appropriate capital inflow for it's financing. Thus, in a period before the crisis, capital inflow created the illusion of wealth in these countries, as was the case in the United States. Asset prices were rising, currencies were strong but bubbles always burst sooner or later.

Foreign trade deficit can be caused by changes in the relative costs of labor. That led to the fact that the southern states have become less competitive and increased trade imbalances. From 2001. labor costs in Italy, Greece, Spain and Portugal were growing much faster than in Germany. The problem occurred in those countries that allowed labor costs to rise faster than productivity. Thus, these countries have lost their competitiveness (Nechio, 2011).

Eurozone countries that have a permanent foreign trade surplus, such as Germany, haven't had to deal with the appreciation of national currency in relation to other Eurozone countries. That allowed Germany stable exports, because their products remained cheaper. Thus, the value of German exports to Eurozone countries fell in 2012 compared to 2011 because its trading partners were no longer able to obtain funds to finance imports, while the value of exports to the rest of the world has grown due to the fall of euro against the dollar and other currencies.

Crisis was largely caused by foreign trade deficit. It has been shown that countries whose public debt exceeds 80% of GDP and have a permanent trade deficit are more vulnerable to the crisis.

Loss of confidence in debt of EU countries

Before the beginning of the crisis regulators and banks considered that the debts of Eurozone members are safe. Thus, banks held a significant amount of bonds of countries with weaker economies that offered low premiums and were equally valuable at first glance.

As the crisis evolved, it became obvious that Greek bonds and bonds of some other countries were significantly riskier. Loss of confidence is indicated by increase of the price of insurance against credit risk, which shows the market expectations about credit status of the country.

When investors on financial markets started losing their confidence that some countries can repay their debt, the first thing that happens is the increase of interest rates on loans granted to these countries. In line with the view that greater risk is associated with greater return, investors want a better return to cover the increase of potential losses. Thus, in the end no one is willing to grant loans to such countries. (Weill, 2014).

Also, considering the fact that countries which adopted the euro have a limited capacity for action in the field of monetary policy, impact of the crisis has become considerable, especially in peripheral countries.

4. MEASURES FOR PREVENTING FUTURE CRISES IN EU

Authors give an overview of following measures for preventing future crises in EU: improved debt management, application of Keynesian ideas for overcoming the crisis, reform of the criteria for entering the Eurozone, creation of a fiscal union, exit of the PIIGS countries from the Eurozone, taxation of the financial sector and creation of a banking union.

Improved debt management

In his paper Stancu (2013) states that there is a connection between debt management, financial instability and crises. Government debt portfolio is usually the largest financial portfolio in a country. It often contains complex and risky financial structures that can generate a significant risk for the financial stability of the country. Poorly structured debt, considering its maturity, currency or interest rate is an important factor in generating and expanding economic crises in many countries throughout history.

A preferred debt instrument according to Werner (2014) should have the following characteristics: can't be traded; is cheaper, with lower interest rates compared to the yields in the bond market during the crisis; available without rating of credit rating agencies; available on domestic market and therefore doesn't require external borrowing, resulting in lower total debt and increased fiscal and financial stability in the country and in the whole euro area; creates returns for the domestic banking sector, enabling growth of capital and reserves; stimulates domestic demand and overall economic growth; available without conditions such as austerity measures, sales of assets and deflationary structural reforms.

That kind of instrument would be the most attractive source of financing and it already exists. It's a bank loan - the oldest and simplest instrument.

According to improved debt management, governments of the crisis-affected countries should immediately stop issuing new government bonds and taking loans from International Monetary Fund or World Bank. Instead of that they should sign loan agreements with local banks which are able to provide all the necessary funding. Banks used to be involved in direct financing of government, which was common practice in developing economies. This practice was actively discouraged in the past twenty years (Werner, 2014).

The application of Keynesian ideas for overcoming the crisis

The European Union doesn't generally follow Keynesian ideas for overcoming the crisis. The political economy of austerity measures doesn't provide an adequate solution for the peripheral countries. Therefore, a new approach of managing EU economy is required (Maris, 2014).

In their paper Skilas et al. (2014) state that European leaders forgot they role as policy-makers. From the standpoint of Keynesian economics, European Union should implement the following measures to prevent further impoverishment of the European periphery:

- The creation of a common European tax system, through which the various regional asymmetries and risks could effectively be dispersed. This doesn't mean that state tax systems should be abolished, but that this should have a complementary role in achieving a redistribution of growth. The European Union should follow the example of the United States, where taxes are imposed at the level of federal states, individual states and local governments. European tax administration could be formed, similar to IRS[4] in USA, which would be in charge of collecting taxes.
- Creation of European unemployment benefits. This potential mechanism can serve as one of the major official mechanisms of growth redistribution in European social policy. The US unemployment benefits are essentially a federal program that is jointly funded by federal and individual states. This program could complement the programs of unemployment insurance in each member state.
- Implementation of joint investment projects in European peripheral countries for more uniform development. However, it doesn't mean that we should ignore the role of European Investment Bank and Social cohesion funds.
- Decentralization of EU institutions. There is no valid reason for current concentration of institutions mostly in Brussels and Luxemburg.
- Introduction of surcharges for internal European trade, especially for countries with large trade surpluses such as Germany. If a surplus of the member state exceeds agreed level, that country would have to pay a fee because their excessive surplus affects the stability of the European Union. The funds collected from taxes could be invested in member states with deficits.

The reform of the criteria for entering the Eurozone

Kersan Škabić (2012) in her paper points out that future members of the European Union must, according to the Maastricht Treaty meet certain criteria to be able to enter the Eurozone:

- Price stability - inflation rate measured by the harmonized index of consumer prices may vary up to 1.5% of the inflation in three countries with the most stable prices.
- The stability of long-term interest rates - long-term interest rates may vary up to 2% of the interest rates in the three countries with the most stable prices.

4 Internal Revenue Service.

- Fiscal discipline - the budget deficit must be less than 3% of GDP, and public debt less than 60% of GDP.
- Stability of currency exchange rates - currency fluctuations of EU countries and the euro must not be higher than 15%.

The criteria for entering the Eurozone were based on the economic situation of the early 1990s so it's applicability is questionable. Thus, possible reforms of criteria are given below:

One option is to replace the current limitation of the inflation rate with a new measure based on the inflation of Eurozone.

Another option is to replace the inflation rate measured by the harmonized index of consumer prices with unit labor costs.

Establishing criterion according to the combination of unit labor costs in euros and cumulative five-year changes in relation to the Eurozone average shifts focus on the main problem of many economies of the Eurozone which are in crisis.

Stability criterion of long-term interest rates currently has certain technical problems. The solution to this problem is to replace the current limit with a median interest rate of all Eurozone members.

Aside from the reform of existing criteria for entering the Eurozone, a new criterion could be introduced - criterion of optimum currency area. Adding a formal assessment for meeting the criterion of optimum currency area of the candidate countries would contribute to the assessment of their readiness for entering the Eurozone.

Creation of a fiscal union

Fiscal union represents the integration of member states' fiscal policies. In fiscal union, decisions related to tax collection and spending are made by joint institutions of the member states. For example, in the US fiscal policy is determined by the central government which has the right to increase taxes, borrow money and spend taxpayers' money.

Monetary union with strong relationships among banking systems, but without fiscal union can cause problems because the governments of member states are tempted to borrow too much. In the case of infection by the crisis, it can have serious consequences for other countries.

The Eurozone debt crisis is a consequence of the gap between the common monetary policy and national economic and fiscal policies of the member states.

Matheron et al. (2012) state that most decisions related to taxation and public spending are made at the state level, because fiscal policy is an expression of democratic sovereignty. Therefore, the European Union has limited fiscal power.

Fiscal union could be formed in two steps. First step would be the formation of the European Fiscal Institute, whose main task would be rescuing countries that are in debt crises and creating conditions for the subsequent formation of a federal fiscal union and a European treasury. Fiscal Institute could play a role in the implementation of fiscal union much like the European Monetary Institute had in the implementation of monetary union.

In the second phase it would be necessary to start issuing Eurobonds that would contribute to obtaining the necessary funds to achieve the recovery plan of the European economy (Sabau Popa, 2012).

The exit of the PIIGS countries from the Eurozone

The biggest benefit for economically powerful countries from the exit of the PIIGS countries from Eurozone would be the fact that they would stop giving help to these countries - they wouldn't have to finance their excessive consumption any longer.

The biggest benefit from leaving the Eurozone for the PIIGS countries would be that they would be able to devaluate their currency and could increase the competitiveness of its products (Babić, 2008).

Without its own currency and monetary policy, they aren't able to increase their competitiveness by devaluation. On the other side, devaluation of the national currency may lead to an increase in inflation and loss of confidence in the currency. Further, this would lead to the transfer of deposits from banks in economically weaker countries to economically stronger countries.

Therefore, economically weaker countries should, at the same time with the introduction of its own currency, introduce measures to limit the movement of capital, such as limiting the withdrawal of deposits (Babić, 2008).

Taxation of the financial sector

Taxation of the financial sector is a current topic imposed by the financial crisis. In recent years, many EU countries are considering the introduction of taxes on financial capital for various reasons (Bernardi, 2012).

Potential tax in the financial sector could be an important source of government revenues. Apart from that, taxing the financial sector is justified because of the fact that the financial capital is taxed at a much lesser extent in relation to consumption, wages and property. Taxes in financial sector are lower than taxes in other industry segments because financial activities are often exempt from value added tax.

Eugenia Ramona (2012) states that an important reason which justifies the taxation of the financial sector is correcting negative externalities arising from the activity of the financial sector, including the effects of excessive risk-taking that can prevent future crises.

An important cause of the economic crisis was the lack of regulation and supervision of the financial sector. Taxing the financial sector can be used as a measure to regulate this sector without direct intervention. Higher is a tax imposed on toxic financial instruments, stronger will be the effect.

Therefore, the taxation of the financial sector can be considered as a measure to address the negative externalities generated by the financial sector before, during and after the economic crisis.

Creation of a banking union

Banking union is a part of the deepening process of financial integration within the EU, and is necessary for finalizing the economic and monetary union.

Difficulties that the banks are facing during the crisis revealed a need for establishing financial stability and improving the management of the economy in the EU, and that includes the creation of a banking union (Howarth and Quaglia, 2013).

Financial stability can't be achieved at the national level because of the vicious circle that has been created between the banks and the government in which shocks are transmitted from the government to the banking sector and vice versa, so there is a need for stopping this vicious cycle by creating a banking union (Prisecaru, 2014).

Establishing a banking union should be a step in creating a fiscal union that would be characterized by high European budget, issuance of euro bonds, creation of a coordination mechanism for national budgets and harmonization of tax systems.

5. CONCLUSION

We can distinguish external and internal causes of the contemporary crisis in the EU. External causes are bad assessments of the credit rating agencies and high managerial compensations in financial sector which led indirectly to financial crisis in 2008. that has spread to the whole world.

Internal causes of the crisis in EU are structural imbalance, increasing debts of EU countries, foreign trade imbalance among EU countries and loss of confidence in debt of EU countries.

The main cause of the crisis in the EU is the way in which the European Union is structured. There is a monetary union without fiscal union that should be it's complement. This created an imbalance and huge differences between powerful member countries led by Germany and troubled PIIGS countries.

Therefore, authors summarize possible measures to overcome this and prevent future crises in the EU. The most important of them is formation of a fiscal and banking union.

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(Footnotes)

1 HICP is an acronym for harmonized index of consumer prices. HICP is an indicator of inflation and stability of prices used by European central bank. It is calculated using a methodology which is common to all EU member states.