

---

**EUROPEAN DEBT CRISIS – GENESIS AND IMPLICATIONS**

---

**Aleksandar Dejanovski**

MIT University – Skopje, Faculty of Management, Republic of Macedonia

**Sanja Nikolic**

MIT University – Skopje, Faculty of Management, Republic of Macedonia

**Sreten Miladinovski**

MIT University – Skopje, Faculty of Management, Republic of Macedonia

**ABSTRACT:**

European debt crisis cause disruption of the Macedonian financial sector, which was manifested by a decline in real GDP, decline in exports, tightening of financing and increased debt. The problems are even greater if we know that the European crisis was followed by the global financial crisis of 2008, whereby may state that devastating effects are even greater and more destructive on euro scale but also in the Macedonian economy, too. Issues about the effects of the European debt crisis are very interesting and actual because, there are still not finished and may accumulate negative outcome for both, the European Union and the Republic of Macedonia.

The main objective of this thesis is to investigate the problems and future challenges generated by the European debt crisis on the Macedonian financial and real sector, which can be ascertained by monitoring the following variables: movement of the real GDP, indebtedness, the trade deficit in the balance of payments.

The results shows that regarding current circumstances, Republic of Macedonia should focus on stimulating private sector as the main generator of economic growth, debt reduction and rational spending as well as an increase in lending, i.e. expansionary monetary policy.

**Keywords:** *European debt crisis, debt, trade deficit, balance of payments, credit risk.*

**INTRODUCTION**

The crisis in the Euro zone, first of all, appears in Greece and then extended to the other countries. Hereby, Greece wasn't the only one country that has highly accumulated external debt (by relatively low economic growth). Spain, Italy and Portugal also face the same problem.

In the beginning of 2011, the external debt of Italy increased 120% in relation to GDP, while economic growth was 3.9% (which represents an increase of 0.4% compared to the previous year). Prime Minister Silvio Berlusconi was forced to accept help from the IMF and the ECB.

This resulted with declining credit ratings of Italy, which is why interest rates on Italian bonds rose sharply and access to foreign funds reduced. Because this entire problem, the government of Berlusconi failed, and the new Prime Minister Mario Monti introduced strict austerity measures, effectuated by increasing taxes, reducing spending and changes in the pension system.

Portugal faced crisis problem yet in 2010 when agency Moody's significantly reduced credit rating, which led to a rise in interest rates on government bonds and create pressure for the return of current debts. In the beginning of 2011, Portugal received aid from 78 billion Euros by the IMF, in order to stabilize finances. However the debt continues growing, so in 2012 amounted to 124% in relation to GDP. European leaders expect that strong austerity measures will generate economic growth in the future.

Economy in Spain was characterized with relatively low level of debt, even lower than the Europeans' average. The problem occurs with the sharp decline in the prices of mortgages, i.e. depreciation of mortgage loans, which were massively approved by the Spanish banks. The Government spent lot of money to save the banks and to stabilize the market and therefore had to borrow from outside, generating growth and accumulation of the debt. Spain's debt is estimated at 1.1 trillion dollars with the largest obligations towards France and Germany. During this period, the share prices of banks fell 3.38% per year. Due to importance of this country for the whole euro region, the IMF and the ECB immediately took appropriate measures to stabilize the economy and the finance of Spain. Unlike Greece, Spain seriously respected the austerity measures, which caused reduce of the budget deficit from 11.2% in 2009 to 5.4% in 2012.

However in 2012, due to falling of the credit ratings, the interest rates on Spanish bonds rose sharply and the country was forced to require help from the "Big Three" in the amount of 100 million Euros. Rigorous implementation of reforms, the capitalization of banks and reducing the deficit, contribute to stabilization of the situation in Spain, increase of the credit rating and investor confidence. At the end of 2012, interest rates on Spanish bonds declined from 7% to 5.4%. These negative trends generated economic crisis, which was implicated through rise in unemployment and a decrease in industrial production. According to Reuters, the unemployment rate in 2012 rose by 22.9%, which caused additional social tension. However, the situation in Spain largely depends on general economic conditions worldwide, as well as the recovery of the countries of the global financial crisis.

France and Germany are considerate as the biggest creditors in Euro zone, and therefore bankruptcy of debtors is not in their best interest. Writing off demands can generate a financial crisis in these countries, which are also main engines in Europe and the world, thus the financial crisis could easily receive global range.

## **HYPOTESIS**

The basic hypothesis of this thesis is that the deepening of the European debt crisis will generate problems in Macedonian real and financial sector.

In order to obtain relevant conclusions and recommendation, results of this analyze will be arranged and presented in three chapters as: conditions of Macedonian financial sector during the European debt crisis incurrence; the condition of Macedonian public sector and the debt during the creation of the European debt crisis; the impact of the debt crisis on the Macedonian financial and public sector.

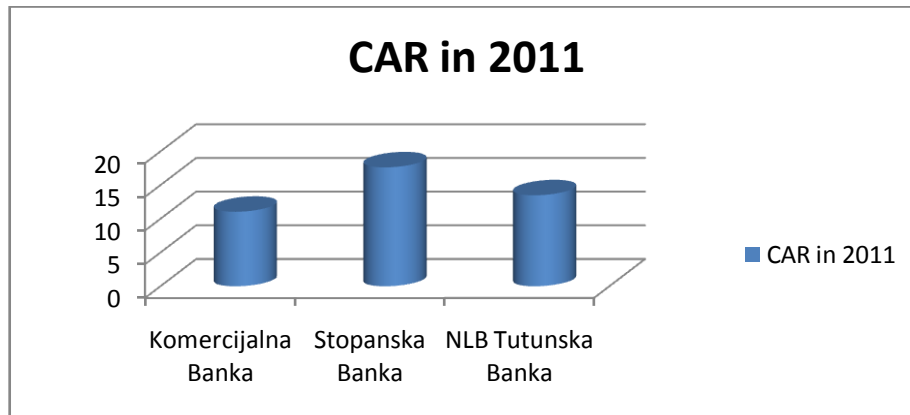
## **MATERIALS AND METHODES**

Methods used in this research are: positive analysis, deductive approach, graphical presentation, qualitative analysis.

## **RESULTS AND DISCUSION**

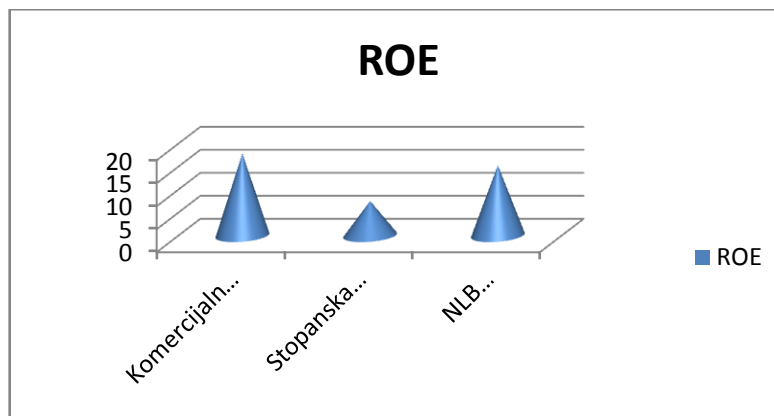
### **A) Conditions of Macedonian financial sector during the European debt crisis incurrence**

The banking sector in Macedonia is quite conservative, because banks do not trade derivative "toxic" financial instruments on the one hand, and pay great attention to the safety of the investments, maintaining a relatively high level of capital adequacy on the other hand. Respecting this, it can be said that banking sector in Macedonia is quite stable and resistant to external shocks.

**Chart 1: Capital adequacy of the three largest banks in 2011 – CAR in 2011**

Source: the financial reports of three biggest banks in Republic of Macedonia - Komercijalna Banka, Stopanska Banka, NLB Tutunska Banka

Considering the strategies and mechanisms for credit risks management, these three banks are applying the same instruments to reduce credit exposure, with increased caution in recent years have, due to the current debt crisis. However, there are certain differences in the policies of the largest banks in Macedonia. While the main goal of the Komercijalna Banka is generating high profitability and return on shareholders' Stopanska Banka focus on additional capitalization and increase the capital ratios.

**Chart 2: ROE of the three largest banks in Republic of Macedonia in 2011**

Source: Source: the financial reports of three biggest banks in Republic of Macedonia - Komercijalna Banka, Stopanska Banka, NLB Tutunska Banka

Finally, we can conclude that the banking sector in the country is quite stable, appropriately capitalized, conservative, well managed, successfully regulated and quite liquid, therefore financial shocks in the future are not threats, but it is necessary to highlight the possible risks:

- Main danger in the Macedonian economy is the poor liquidity of the real sector;
- Owners of Komercijalna Banka are Greek investors and due to the current crisis in the country, it is possible for them to sell their business in order to provide money and return to the country.

Although economists argue that such moves will not destabilize financial system, due to regulation by the Central Bank, some turbulence are possible related with the change in the share price.

- Great debt of Macedonian citizens - according to the Central Bank 80% of the employees lives by credit.

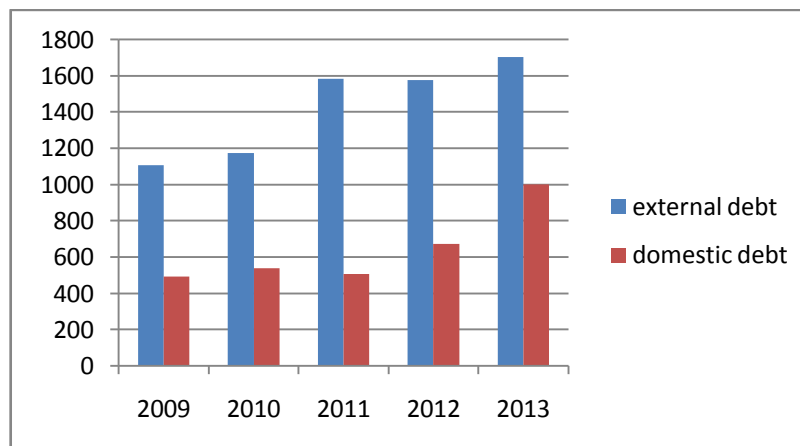
### B) The condition of Macedonian public sector and the debt during the creation of the European debt crisis

As already noted, states should be aware to its credit risk if they want to generate financial stability. For these reasons, governments pay great attention to the management of external debt in order to secure favorable credit rating and to neutralize possible debt and financial crisis. Governments should minimize foreign borrowing not to lead the state to bankruptcy or to insensitive austerity measures, as the case with Greece.

In 2012 the Republic of Macedonia has improved its credit rating from BB negative to BB positive, according to Standard and Poors, which was result of reduced risks, lower budget deficits, improved liquidity of assets in state and lower deficit in the balance of payments. The positive rating was confirmed by the agency Fitch, with stable viewpoint. Yet despite these positive signs, the country remains exposed to a credit risk. Considering the currency structure, the government debt is mainly in Euros and Denars due to stability arising from the objectives of monetary policy. According to the Ministry of Finance, the government plans to reduce debt, denominated in all other currencies at the expense of debt denominated in Euros and Denars.

An important characteristic is that external debt is relatively higher than domestic debt, which can be seen from the following graph.

**Chart 3: Structure of central government debt from 2009 to 2013 (in million Euros)**



*Source: Ministry of Finance, financial reports*

As can be seen, in recent years, there is a rise in the total debt of the Government, with growing of the external and the internal borrowing.

The internal debt is executed mainly through the emission of short-term government bonds with relatively low interest rate of 3.65% quarterly, ie 4.25% for 12-month bonds (according to data from the finance ministry in 2013). The interest rate is relatively lower than previous years, so in 2011 was 4.10% for the three-month bonds and 4.20% in 2012. The auctions were conducted every Tuesday wherein the

government started to sell government bonds with foreign currency clause and interest rate of 3.60% in 2013.

The foreign debt represents debt of the Government with the IMF, the World Bank and private creditors, through the emission of Eurobonds. The sale of Eurobonds is the most expensive method of external indebtedness and began to practice in 2005, when the first emission was made by the government with an interest rate of 4,625%. In 2009, the Government conducted another emission of Eurobonds, but at a higher interest rate of 9, 85%. Although the Government reduced the cooperation with the IMF (2008), in the future renewed cooperation with this institution is needed because of its strong significance particularly in terms of world crises and recessions. With the beginning of the crisis, the Republic of Macedonia took a loan from the World Bank in the amount of 7 million dollars to repair the budget and to provide the macroeconomic support. One year later, IMF and World Bank approved a loan of 600 million Euros to Macedonia, engaging so called "soft" credit line, with a very low interest rate of just 1.3%, and the condition that the state effectively uses the money next year if it wants to get more tranches. Regarding this, 200 million represented direct loan from the World Bank, while the remaining 400 million are possible loans from the IMF in order to overcome the macroeconomic problems during the crisis. (Nenovski, 2012)

External borrowing is characterized by the following positive effects:

- Maintenance of domestic liquidity,
- Maintenance of constant interest rates on the domestic market, unlike the domestic borrowing, which is characterized by the phenomenon of "crowding out" which generate a rise in the interest rate,
- Leaving space for domestic borrowing if needed, which will not affect much the financial system and liquidity.

Nevertheless the external debt is considerate to be more dangerous for the country, for the following reasons:

- reducing the credit rating of the country, which generates problems for future borrowings, possible debt and financial crisis,
- the possibility of state bankruptcy, with negative effects on the whole economy,
- if the state can reduce domestic debt through interventions of the Central bank, in the foreign debt, it is not the case
- burden of debt left to future generations

**Table.1: Timeline for repayment of external debt of Republic of Macedonia**

	Year			
	2010	2011	2012	2013
<b>Amortization of debt</b>	68,6	78,4	80,5	93,9
Official bilateral agreements	8,1	9,5	9,5	9,6
Obligations to the Paris Club	0	0	0	0
Multilateral commitments	45,8	54,8	59,7	69,1
Obligations to IMF	0	0	0	0
Other obligations	14,6	14,1	97,3	96,7
Interest	50	71,1	91,7	107,8
<b>Total debt serviced</b>	<b>118,6</b>	<b>149,5</b>	<b>172,2</b>	<b>201,7</b>

Source: Ministry of Finance, financial reports

As we can see, the external debt is relatively low, which classifies Macedonia among low - medium indebted countries, but it is necessary in the future, the external debt to be reduced in order to avoid the debt crisis. It is important to state that at the end of 2007, the Government pay off his debts to foreign creditors (the IMF and the Paris Club), with the gross external debt decreased repeatedly, ie from 52.5% of GDP in 2007 49.1% of GDP in 2008, to 34,3% in 2013.

In order to maintain the level of the Macedonian public debt in the framework of macroeconomic and fiscal sustainability, some targets, need to be fulfilled, within the fiscal policy:

1. The level of government debt in the coming three years not to exceed 30% of Gross Domestic Product
2. The level of total public debt in the next three years not to exceed 40% of Gross Domestic Product.

The fulfillment of these criteria should ensure financial stability in long term, but should continue to effectively manage all possible credit and non-credit risks that might arise.

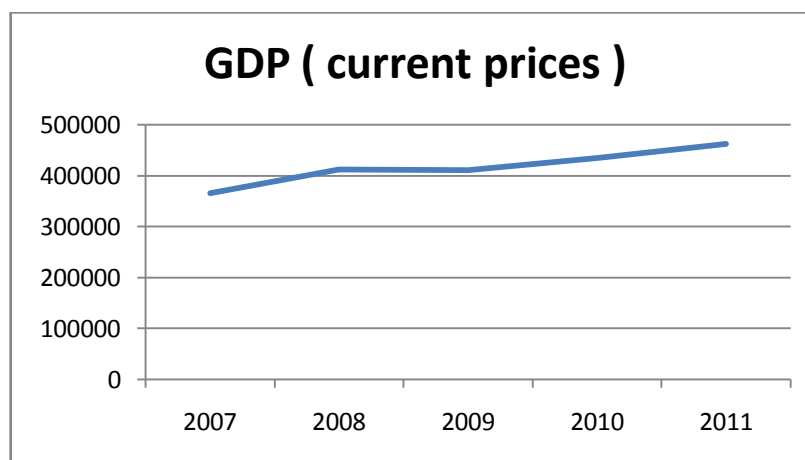
Main Government public debt management risks are: risk of refinancing, market risk (risk of changes in interest rates and the risk of changes in exchange rates), reducing the risk of liquidity, risks associated with contingent liabilities, operational risk (according to Ministry of Finance, 2010-2012).

### C) The impact of the debt crisis on the Macedonian financial and public sector

The European debt crisis hit Macedonia in a very awkward moment, when the Macedonian economy started recovering from the global economic crisis. Because the Republic of Macedonia is not a member of the Euro zone and is not involved in international or European financial markets, the debt crisis had no direct impact on the Macedonian financial sector. On the other hand, stability, capitalization and traditionalism of the financial sector, reduced the initial shock of the European financial crisis, but the problems in the economy that emerged as a result from the current economic crisis, increased credit risks of financial institutions in long terms. In other words, the financial sector suffered as a result of insolvency and problems originated from the real sector in the country. The rise in credit risk was minimal because the banks have traditionally been cautious in granting loans, on the one hand, and the National Bank of Republic of Macedonia effectively regulated intermediaries, limiting them to take risky interventions, on the other.

A prime characteristic of the financial sector, during the crisis, was a decreased foreign capital from domestic banks. This reduced the competition in the domestic market and contributed the interest rates to remain relatively high in the period and even after.

**Graph 1: GDP in Republic of Macedonia for the period 2007- 2011 year**



Source: State Statistical Office

As already mentioned above, the debt crisis has spread in the Republic of Macedonia through export transmission channel, i.e. by reducing export demand for Macedonian products from European countries or from countries with which Macedonia has most demand orders. Declined export has reduced the production and income of the export-oriented branches.

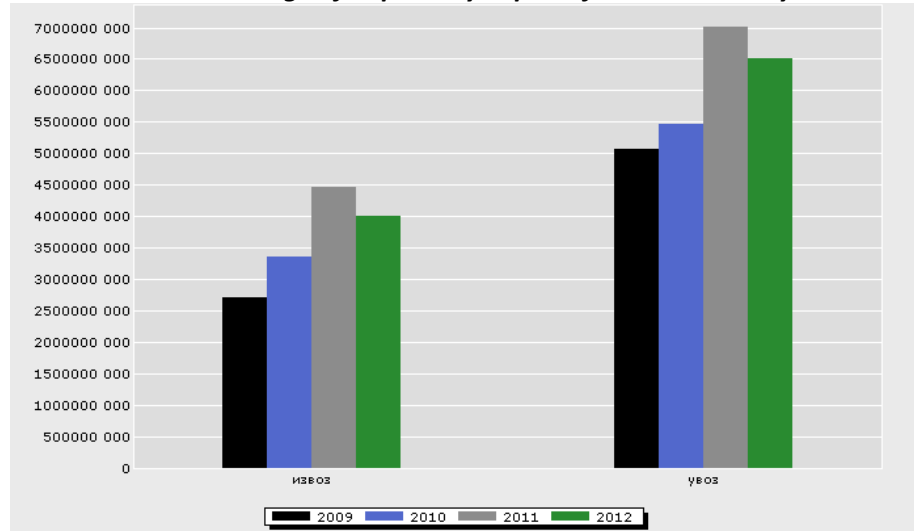
**Table 2: The Structure of the import and export in the Republic of Macedonia in specific areas for the period 2005-2009 (in millions of dollars)**

Area	EXPORT					IMPORT				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
<b>Food</b>	167,2	192,7	250,4	308,5	283,6	343,2	362,4	518,3	620,9	559,3
<b>Beverages and tobacco</b>	163,1	193,6	209,6	218,8	197,1	31,1	31,8	38,3	51,2	51,7
<b>Raw materials (except fuels)</b>	67,8	113,6	170,6	272,0	173,7	106,7	133,5	298,2	351,0	203,5
<b>Mineral fuels</b>	163,6	225,0	165,3	314,3	202,9	619,2	758,9	975,7	1.419,3	811,1
<b>Finished products</b>	590,5	612,0	800,3	892,8	745,1	252,9	257,7	355,9	451,6	392,7
<b>Materials</b>	682,8	853,8	1.513,2	1.602,8	771,5	682,8	950,5	1.121,0	1.509,2	1.862,9
<b>Reproduction goods</b>	1.110,4	1.398,9	2.086,1	2.444,1	1.369,3	2.099,0	2.453,5	3.427,8	4.452,7	2.907,5
<b>Consumer goods</b>	891,2	964,7	1.235,6	1.412,6	1.213,3	783,2	875,3	1.207,5	1.489,2	1.319,9

Source: National Bank of Republic of Macedonia

Regarding the structure of the foreign trade for 2012 and 2013 year, Macedonia traded the most with Germany, Russia, Bulgaria, Great Britain and Serbia.

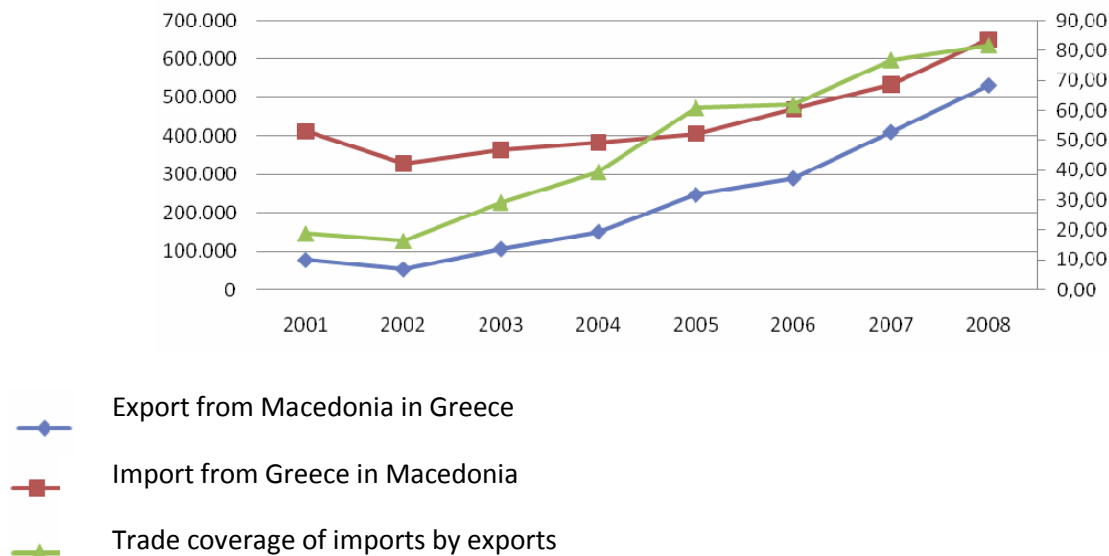
With these countries, Macedonia has achieved over 49% of the total foreign trade, where only with the Republic of Germany, our largest trading partner, and Kosovo are generating trade surplus, i.e. more export than import. Based on this graph, we can see the significance of the EU states on the external - trade flow Macedonia.

**Chart 4: Coverage of imports by exports for 2009 – 2012 year**

Source: State Statistical Office

The total export in the Republic of Macedonia in January 2013, an estimated 305.6 million dollars, while imports 497.2 million, generating a trade deficit of 191.5 million dollars. The ratio of import coverage by export in January 2013 was 61.5% which classifies The Republic of Macedonia as an import-dependent country. This ratio affects the rate of economic growth of the country through the component of net exports ( $X - M$ ), and the growth of the trade deficit.

For the Republic of Macedonia, resolving the debt crisis in Greece is of particular importance, because Greece is our important foreign - trade partner. The trade cooperation between the countries is particularly intensified the last few years.

**Graph 2: Trade cooperation between Macedonia and Greece**

Source: Center for Economic Analysis, "Analysis of the effects of the economic crisis in Greece on the Macedonian economy", June 2010, page 26



Also, the capital transfers from Greece to Macedonia are high, which underlines the importance of Greece for the capital account of the state, not only for the current account.

A major problem in the Macedonian economy remains the insufficient liquidity of the real sector, which is a result of excessive caution of banks in granting loans and relatively high interest rates, as a result of the restrictive monetary policy and the domestic indebtedness. On the other hand, the liquidity of the banking sector remained high in the past few years, which is a result of high financial stability and confidence in the financial system by all the subjects.

During the European debt crisis, the country generated minimum increase of the non-performing loans to total loans, that is a result of reduced liquidity grown and increased credit risk of the banks. The main risks regarding the banking sector in the future may result from the poor liquidity of the real-estate sector and the indebtedness of the companies, however, as already mentioned, the high capital adequacy, at least for now, is resulting in financial stability.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on this research it can be concluded that the European debt crisis has caused significant problems in the Macedonian economy, shown through declining export demand for Macedonian products and strengthening the restrictiveness of financial institutions. Considering that Greece is an important trade, and also financial partner of Macedonia, the problems and challenges caused by the European debt crisis most directly influenced the conduct of the crisis in Greece, associated with a major credit risk and possible bankruptcy.

As concluded from the research, the financial sector was not deeply affected by the European debt crisis, due to the negative effects are not as significant. However the risks are still present and will remain present considering a possible bankruptcy of Greece, which would have negative effects on the Euro zone.

Even started in 2010, the European debt crisis still has its implications. It is expected that the crisis will reach its culmination if Greece bankrupt, what will increase further problems and negative effect in Macedonia.

The recommendations that can be drawn from this research can be summarized in the following few points:

1. It is necessary to reduce the external debt in the long term, in order not to pass the limit of 60% of GDP.
2. Borrowing is not always an alternative to taxation.
3. The policies of austerity must be respected in order to generate economic growth in the long term and to reduce indebtedness.
4. The money should be used for capital investments.

Regarding current circumstances, Republic of Macedonia should focus on stimulating private sector as the main generator of economic growth, debt reduction and rational spending as well as an increase in lending, i.e. expansionary monetary policy.

---

**LITERATURE**

1. Andrew Fight, "Credit Risk Management", Elsevier Butterworth, Oxford (2004)
2. Angelidas Phill, (2011) "Financial Crisis – Inquiry Report", Washington DC
3. Babecku Jan, Havranek Tomas, "Bank, Debt and Currency Crisis", October 2012, IMF Working Paper n.o. 1485
4. Bukvic Rajko, (2011) "Svjetska Finansiska Kriza, Izazov I Strategija", Narodno Drustvo Srbije
5. Buchachan Timothy, (2008) "The History of Economic Bubbles", The Beacon Financial Times
6. Caugette John, Altman Edward, "Managing Credit Risk: The Great Challenge for Global Financial Markets", John Willey and Sons, New Jersey (2011)
7. Cecchety Stephan, "Financial Crisis and Economic Activity", Cambridge (2009)
8. Ceruty Eugenio, (2011) "Systemic Risks in Global Banking", IMF Working Paper, IMF
9. Center for Economic Analysis, (2010)"Analysis of the effects of the economic crisis in Greece on the Macedonian economy"
10. Tome Nenovski, "Shocks, achievements and prospects of the Macedonian economy," Nampres, Skopje (2012)
11. <http://www.bbc.co.uk/news/business-17232821>, (02.02.2013)
12. <http://www.investing.com/rates-bonds/spain-10-year-bond-yield-historical-data> , (02.02.2013)
13. [http://www.standardandpoors.com/en\\_EU/web/guest/home](http://www.standardandpoors.com/en_EU/web/guest/home), (25.02.2013)
14. [http://www.finance.gov.mk/files/u4/jba\\_na\\_dolg\\_na\\_centralna\\_vlada\\_30\\_04\\_2013\\_mk.pdf](http://www.finance.gov.mk/files/u4/jba_na_dolg_na_centralna_vlada_30_04_2013_mk.pdf), (07.03.2013)
15. <http://www.finance.gov.mk/node/57>, (12.03.2013)
16. [http://www.indexmundi.com/macedonia/public\\_debt.html](http://www.indexmundi.com/macedonia/public_debt.html), (12.03.2013)
17. [http://www.finance.gov.mk/files/u4/egija\\_za\\_upravuvanje\\_so\\_javen\\_dolg\\_2010\\_2012.pdf](http://www.finance.gov.mk/files/u4/egija_za_upravuvanje_so_javen_dolg_2010_2012.pdf), (12.03.2013)
18. <http://www.stat.gov.mk/pdf/2012/3.1.12.06.pdf> , (07.03.2013)
19. <http://www.nbrm.mk/?ItemID=8B29EF7A47984245AA5CD893BB8EACBA> , (07.03.2013)
20. <http://www.stat.gov.mk/PublikaciiPoOblasti.aspx>, (07.03.2013)
21. <http://www.nbrm.mk> (24.04.2013)
22. <http://www.economy.gov.mk> (24.04.2013)
23. <http://epp.eurostat.ec.europa.eu> (28.04.2013)