

RESEARCH ARTICLE

A Revisit to European Sovereign Debt Crisis

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Abstract

The Euro Crisis or the European sovereign debt crisis is now seemed to be over and the euro nations are able to re-finance their government debts which seemed to be almost unfeasible at the time of happening of crisis. This crisis was not a result of a single decision or failure of system but the voyage to this destiny was full of wrong policy decisions implemented in the name of financial integration of European countries. The performance of macroeconomic factors like GDP, Gross Debt to GDP ratio and current account to GDP ratio give indication about the financial stability of a sovereign and ignorance of these factors may result in fatal consequences as observed in the case of Euro zone failure. The present paper has reviewed the journey of euro zone crisis and made an effort to see whether future forecasts for euro sovereign are better than the crisis period or not. The funding of this sovereign debt will be by third parties including international organizations. Under such conditions what will happen to rest of the world by financing these financially unstable economies? Will it be taking the world to more complex financial fiasco where more number of sovereign collapses will be witnessed?

Keywords: *CAD, European Monetary Union, Euro Debt Crisis, Gross Domestic Product, Gross Debt to GDP Ratio.*

Introduction

The Euro Crisis or the European sovereign debt crisis is now seemed to be over and the euro nations are able to re-finance their government debts which seemed to be almost unfeasible at the time of happening of crisis. This crisis was not a result of a single decision or failure of system but the voyage to this destiny was full of wrong policy decisions implemented in the name of financial integration of European countries. The performance of macroeconomic factors like GDP, Gross Debt to GDP ratio and current account to GDP ratio give indication about the financial stability of a sovereign and ignorance of these factors may result in fatal consequences as observed in the case of Euro zone failure. In a globalized world, the sovereign crisis like Euro zone has serious repercussion on rest of the countries across the world. The present paper has reviewed the journey of euro zone crisis and made an attempt to see whether future forecasts for euro sovereign are better than the crisis period or not. The structure of present paper is the road map of euro crisis. It has examined the journey of failure of euro project leading to one of the biggest sovereign crisis in the history of world economies. The constitution of the

present paper begins with the menology of emergence of Euro Zone as a great model of financial integration of economies. It includes

- Origin of Europe Economic and Monetary Union (EMU)
- EURO-The era of Financial Integration and De-regulation in Europe
- Understanding the root-cause and Implications of Financial Crises
- What was wrong in the design of Europe's Economic and Monetary Union (EMU)

The present paper reviews how distant Euro nations have travelled from the crisis time and what are the future indications for these economies when checked and cross-examined on the basis of forecasting of macro-economic parameters.

The Origin & Chronology of the Euro Project

The creation of the euro-formally the completion of Europe's Economic and Monetary Union (EMU)-is the latest step in a long process of politically motivated economic integration. In the wake of World War II, political leaders of the main

European countries sought to bind the economies of the former opponents. First they established the European Coal and Steel Council, which harmonized trade in these critical commodities. This in 1956 led to the creation of the European Economic Community (EEC), which, in principle, established a common market wherein goods were free to move across borders. This was quite an accomplishment, given that these countries had been at war a few years earlier.

After the breakdown of the fixed exchange rate system of Bretton Woods in 1971, the Europeans sought to minimize the variability of intra-Europe exchange rates. Central banks committed to intervening-by buying and selling foreign exchange-to achieve that aim. There was some modest success, especially after the 1979 establishment of the European Monetary System (EMS), which attempted to link other European Union (EU) member currencies to the Deutsche mark. After 1985, the system included most EU members and some non-members. In 1992, EU members agreed to a program of economic and monetary union, the culmination of which would be the creation of a common currency called the *euro* and managed by the European Central Bank (ECB). The plan envisioned a multi-stage process toward this single

currency. *First*, there would be a period of tight management by central banks so that currency values did not vary more than 3 percent from target, or “par,” values. Finally, the currency values would, under the careful management of individual central banks, converge toward the final conversion rates, established by common agreement. Along the way, authorities would have to bring inflation down to a sufficiently low level so that the rates did not diverge substantially. In addition, the agreement required that, as a share of GDP, national budget deficits shall not exceed 3 percent, and government debt shall not exceed 60 percent (most countries failed to abide by these conditions).

Despite the European Monetary System crises of 1992 and 1993, during which many member currencies were devalued or deviated from the par values by more than the allowed amounts (and Britain dropped out completely), the euro was put in place on January 1, 1999. The physical currency was rolled out in 2001. Latvia is the latest country who joined the Euro area. The euro zone eventually expanded to its 18 members. At present there are 28 countries in the Euro Zone. Following table shows the countries names and their respective year of joining the EU.

Table 1: Countries names and their respective year of joining the EU

S. No.	Country Name	Year of Joining EU	S. No.	Country Name	Year of Joining EU
1	Belgium	1952	15	Sweden	1995
2	France	1952	16	Cyprus	2004
3	Germany	1952	17	Czech Republic	2004
4	Italy	1952	18	Estonia	2004
5	Luxembourg	1952	19	Hungary	2004
6	Netherlands	1952	20	Latvia	2004
7	Denmark	1973	21	Lithuania	2004
8	Ireland	1973	22	Malta	2004
9	United Kingdom	1973	23	Poland	2004
10	Greece	1981	24	Slovakia	2004
11	Portugal	1986	25	Slovenia	2004
12	Spain	1986	26	Bulgaria	2007
13	Austria	1995	27	Romania	2007
14	Finland	1995	28	Croatia	2013

Source: Official website of European Union (http://europa.eu/about-eu/countries/index_en.htm)

EURO: The Era of Financial Integration and De-regulation in Europe

In early 1957, financial integration in Europe was begun when most countries started to lift capital control and de-regulate interest rates under the European directives, with an objective to craft a single market in banking and financial services. Encouraged by the single European Act 1987, most of the member countries did financial liberalization

in late 1980s and early 1990s. Following table 2 shows the liberalization of the banking activities in EU member state.

A new level of financial integration was brought by the Financial Services Action Plan (FSAP) (which was a five-year financial harmonization program) in 1999. This plan had main objectives like:

Table 2: Liberalization of banking activities by EU countries

	Year of lifting of capital controls	Year of interest rate deregulation	Year of first banking directive	Year of second banking directive
Belgium	1991	1990	1993	1994
Denmark	1982	1988	1980	1991
France	1990	1990	1980	1992
Germany	1967	1981	1978	1992
Greece	1994	1993	1981	1992
Ireland	1985	1993	1989	1992
Italy	1983	1990	1985	1992
Luxembourg	1990	1990	1981	1993
Netherland	1980	1981	1978	1992
Portugal	1992	1992	1992	1992
Spain	1992	1992	1987	1994
United Kingdom	1979	1979	1979	1993

Source: Buch and Heinrick [1]

- Expansion of solo market for wholesale financial services,
- making of open and protected retail markets,
- clear and efficient rules and supervision of the financial services, and
- Developing surroundings for a most favorable solo financial market.

In 2000, Lisbon agenda and again in 2005 Lisbon strategy reinforced the aim of making a single financial market. All these transformations

Table 3: Chinn-Ito index of capital account liberalization for selected groups

	1990-1994	1995-1999	2000-2004	2005-2009
Core Countries (Austria, Belgium, France, Germany and Netherland)	83.2	96.1	97.4	100
Non-Core Countries (Greece, Ireland, Italy, Portugal and Spain)	19.5	80.5	96.6	100
Other Euro Countries (Estonia, Malta, the Slovak Republic and Slovenia)	-37.9	-9.5	24.7	81.3
Non-Euro Countries (Sweden and United Kingdom)	8.8	39	66.9	87.9

Note: The Chinn-Ito Index is expressed in terms of its highest value for all countries considered in their sample. Thus, a value of 100 means complete liberalization. Core countries include Austria, Belgium, France, Germany, and the Netherlands. Non-Core countries include Greece, Ireland, Italy, Portugal, and Spain. Other Euro countries include Estonia, Malta, the Slovak Republic, and Slovenia. Non-Euro countries are comprised of Sweden and the United Kingdom.

Source: Chinn and Ito [2],

Kalmli-Ozcan et al [3] examined in larger detail the impact of the euro on financial integration and found that the following the implementation of the euro bilateral bank holdings and transections increased by 40% (appx.) among the Euro Area countries. The importance of the euro for this effect is highlighted by comparing the raise in bank holdings in twelve countries that initially adopted the EURO with three EU members (Denmark, Sweden and UK) which joined EU later on. Kalmli-Ozcan also examined the deep roots of the impact of the euro on financial integration and tried to find answer of the questions like whether introduction

resulted in a wholly integrated financial market. Use of *Chinn-Ito index* (a method which is used to measure the openness in capital account transactions) shows the status of liberalization adopted by these countries. Following table shows this.

of euro a) eliminated exchange rate fluctuations and currency risk or not, b) promoted legal

harmonization, and c) increased trade or not. They found that the euro's impact on the capital flows was mainly determined by the abolition of the currency risk. Abolition of currency risk and the easier access to international capital markets that followed by EMU membership. It was directed to unification of interest rates in periphery countries to the level of core countries. The resulting decrease in lending rates on commercial bank loans and the cost of sovereign debt in periphery countries was possibly the single most vital outcome of the

implementation of the euro and had thoughtful implications for the financial system in Europe and

the structure of European economies.

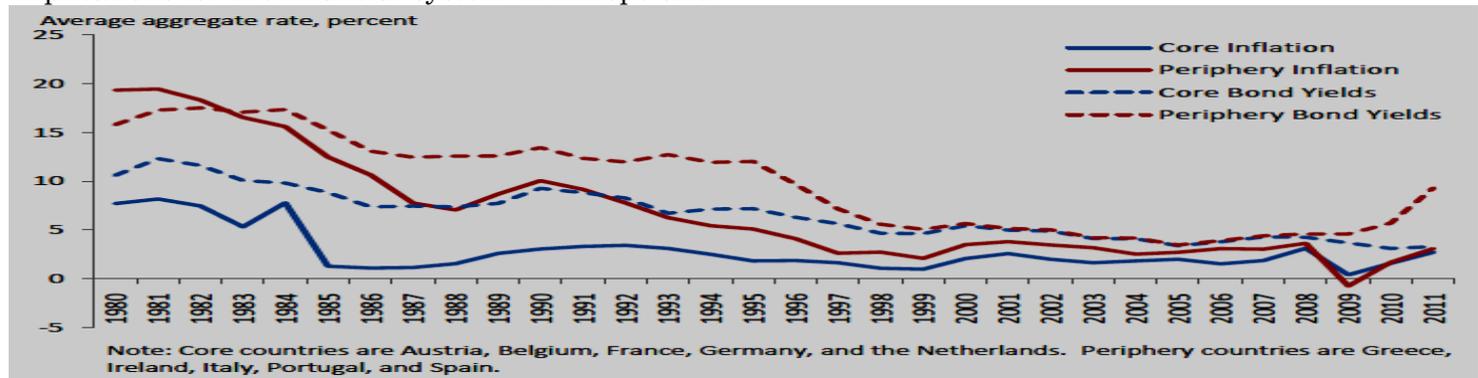


Figure 1:

Source: Kalmli-Ozcan et al [3]

In non-core countries interest rate union lowered the interest rate margins and as a result of this union in interest rates, interest rate margins declined from 3.2% to 2.8% whereas in core countries this interest rate margins remained almost constant. In periphery countries (especially in Germany) leverage ratio of major banks increased from 27% to 45% through 1996 to 2007.

This increased lending and reduced interest rates led to an awfully significant boost in consumer lending which specifically went to real estate sector in Ireland, Spain and somewhat in Greece. Consequently the housing prices were increased by 12.5% average in Ireland and 8% in Spain. While housing prices were increased by 4.6% in United States. In Spain construction (as share of gross output) increased from 9.8% to 13.8% and same in Ireland was increased from 7.9% to 10.4% whereas it increased from 4.6% to 4.9% in United States [4]. This over funding in real estate in Ireland and Spain was the core cause of the economic crisis.

Root Cause Analysis and Implication of Financial Crisis

Every event has some causes which are further divided in to proximate cause and intermediate cause. Triggers or proximate causes are consequence of another set of causes that could be called intermediate causes which are again influenced by another set of causes. When we add 'why' at every state of the root-cause analysis then we can come to a conclusion that what are the causes and what are the effects of those particular causes. The major objective of conducting a root-cause analysis is that when an in-depth analysis is done for such type of crisis one can identify the reasons to avert its recurrence and would be more helpful than just addressing the major problems. In

early 1900s root cause analysis had been used in the medical sciences and later it had been used in

the study of sustainable development. After conducting the root cause analysis on the recent financial crisis (euro crisis) we can support the argument that no two financial crises are the same and all these crises have some factors in common and some factors are unique to every financial crises.

Latin American Debt Crisis

During 1970s commercial banks began lending to a selected group of Latin American countries which resulted in to huge private capital flows from industrialized countries to the developing countries. In the post-oil shock period supply of petrodollars were in large quantity and many commercial banks, which had these dollars in excess, were ready to reuse these dollars to meet the financial demand of non-oil developing for development and oil imports. During 1980s current account deficit and fiscal deficit of Latin American countries increased dramatically and moreover significantly. Debt service ratio of Latin American countries increased from 13 percent of total exports in 1975 to 38 percent of total exports in 1978. This debt service ratio crossed 50 percent of total exports in subsequent years as there was second oil shock during 1979. All this resulted in recession in these economies during 1980s. At that time Latin American countries should tightened up their monetary and fiscal policies but they were failed to do so and continued their borrowings from the Global Market. After failure of Mexico on 18 August 1982, commercial banks stopped lending to the Latin American countries which resulted in distressing economic consequences all over the Latin America. From the above analysis we can say that proximate or trigger cause of the Latin

American Crisis were the large outflow of capital for the correction of fiscal deficits/current account deficit and external debts or in other terms we can say that it was the large amount of borrowings by the governments from the international markets as regional governments failed to control their expenses.

Asian Financial Crisis

After Latin American Crisis in 1980s, in 1990s private capital flows to the developing countries was at high level. Major dynamic economies of Asia were receiving almost fifty percent of this total global private capital flow. In the beginning, this large amount of private capital flow to these Asian economies helped in economic development and rapid economic growth but eventually it showed the way to explode in real estate and property market gurgle in 1997-98.

Thailand and Malaysia were the two most affected countries having large current deficits but these deficits revealed that large amount of capital inflows to these countries and not any expansionary monetary and fiscal policies. Consequently, blast of real estate and property bubble and withdrawal of capital by the private investors unexpectedly initiated the Asian Financial Crisis on 2 July 1997 and at that time affected several Asian Countries badly. The Asian Financial Crisis had two main causes (as rightly quoted by the Oatley in his study in 2008). The first reason was early capital account liberalization and option of pegged exchange rates. The Indonesia challenged the conventional wisdom of that time and in 1970s deregulated its capital account before deregulating current account. In early 1990s, Thailand and Malaysia deregulated their capital account as part of their economic reforms. All this led to a surge in short term capital inflows to these countries which led to increase in defenselessness or vulnerability in these economies. With this, continuation of the pegged exchange rates also contributed to unnecessary amount of short term capital inflows.

The second root cause of the Asian Financial Crisis was the fragile regulation and supervision of the banking system and corporate (which was mainly in Indonesia) and this thing led to overleveraging which means having more debt at lower interest rates and using these funds in a more risky investment. Many Commercial Banks had intermediated huge amount of foreign capital for domestic investment and projects having suspicious quality. All this led to “double mismatch problem”

(*currency and maturity mismatch*: one is, short term borrowings in foreign currency to finance long term investments in domestic currency and second one, vulnerability in the balance sheets of commercial banks and corporate (borrowers of funds) which opened them to the elements of risks of abrupt change in the currency values and interest rates). Swift capital inflows had directed these economies to overkill liquidity, overinvestment and asset market bubbles. After this, when the market started to drop the confidence in sustainability of the exchange rates, there was a gigantic withdrawal of capital by the investors which exercised large decline pressure on the currencies and this lay down impulsive brake on the overextended economic activities.

Subprime Mortgage Crisis [5]

The United States did not have any momentous capital flights during the Subprime Mortgage Crisis which advanced the Global Economic Crisis of 2008-2009. US financial institutions deleveraged their overseas activities and brought in capital to meet withdrawal needs at home. Likewise, Domestic investors hurriedly sold off their assets to meet their financial needs. Broadly the root cause of the Asian Financial Crisis and Subprime Mortgage Crisis were parallel- various policy blunders and feeble regulation and supervision structure of the financial institutions. The proximate cause of the Subprime Mortgage Crisis was the bursting of the housing bubble in the US during summer of 2007. At that time subprime lenders (borrowers who did not meet the requirements of the credit quality) began to default and foreclosures enlarged. Afterwards, this default in payment extends to the prime loans and other types of consumer credit. Various financial institutions having superior exposure to the subprime related structured products became pretentious leading to a sequence of failure of several large financial institutions like *Bear Stearns, American Insurance Group and Lehman Brothers*. The root causes of the Subprime Mortgage Crisis were policy errors by the US regulators in the regulation and supervision of the financial sector of the economy.

In past few decades, US regulators had made many policy errors. First of all was their loose monetary policy after the bursting of the dot.com bubble in 1999-2000. The Federal Funds rate dropped from a level of 5.98% in January 2001 to a level of 1.73% in 2003 and remains at that level up to 2005. All this decrease in the Federal Funds rate fueled a credit

explosion in the US during that phase. Second reason was the cancellation of the Glass-Steagall Act (which was introduced in 1933) in 1999 during the Clinton Administration. This cancellation opened the gate for US banks to acquire the complete variety of risky assets like securities, derivatives and structured products either straight on the balance sheets or indirectly through off-balance sheet instruments. This system worked well in Germany and many other European countries but failed in US as in US many of the activities of investment bankers and other kind of financial institutions were usually outside the preview of the regulators. All this resulted in to the complex derivative securities and extensively leveraged operations of the commercial banks and investment banks. The then regulatory system was too feeble to take control of the investment banks completely.

The flaws, in regulation and supervision of the financial and corporate sector which escorted overleveraging were quite serious. During 18 years of boom period in US economy, the chief of Federal Reserve System, Alan Greenspan admitted that he had faith that financial institutions were adequately sensible to ensure that they were lending money to people who could not repay it. But this Anglo-Saxon belief “the markets are efficient and rational” was confounded, because self-regulation means nonexistence of regulation. Financial institutions gave incentive compensation to their CEOs and this incentive compensation was also very high. All such activities were possible because Securities and Exchange Commission (SEC) had permitted such schemes of compensation in 2004. But afterward in 2004 Securities and Exchange Commission (SEC) dismantled its supervisory unit.

Banks through mortgage loans provide money to the home buyers. In past era, financial institutions would have lend money and recollect it in the form of interest payments and repayments of principal amount. But in the modern era, housing finance institutions, with their old functions, repackaged mortgage loans into pack of mortgage-securities (MBSs) with ‘AAA’ rating from credit rating agencies and sold these securities in the market. Financial institutions original model “originate and distribute” had been changed considerably. Mortgage-Securities (MBSs) were further “sliced-and-diced” into derivative products with the help of financial engineering and these new invented products were sold to the investor all over the

world. Major portion of these new invented derivative assets were moved to the separate structured investment vehicles so that financial institution’s balance sheets remain healthier and less risk but in reality they were not. In addition to this, large insurers like American Insurance Group gave credit default swaps insurance on such assets and made these assets secure against the default risk which boost leveraging and made irresponsible lending possible.

National financial regulators and supervisors were unsuccessful in locating the large buildup and concentrations of systematic risk in US, UK and other European Countries. As the scope of the financial institutions was limited to the insured deposit-taking firms and all financial activities having economic wide risk were out of their scope. During that time shadow-banking system (which comprise investment banks, mortgage-brokers and originators, special investment vehicles, insurance companies writing credit default swaps and other private assets pools) cherished as this system was lightly regulated by a ‘hodgepodge’ of agencies.

Financial supervisors were unsuccessful in recognizing the interconnections and links across the firms, sectors, assets and markets as they were not using a more comprehensive approach for supervision and regulation. In late 2008, Subprime Mortgage Crisis broadened its area and reached all most all over the world as many banks faced difficulties because they had “toxic” assets engineered in the US which made Subprime Mortgage Crisis, a Global Economic Crisis. The big and mounting global imbalances (constant rise in critical current account deficit of 5% of GDP in the US and excessive cash in the Asia) and recycling of Asia surpluses through purchase of US Treasuries, added further fire to the credit boom in the US. It is fascinating to note that the frequently repeated warnings that the global inequality could lead to a disorderly correction for dollar did not materialized and there were calls for a “shared approach” to address the problem but little was done in this direction.

Euro Zone Crisis

Broadly eurozone crisis comprises two different type of crisis. One is a Latin American type currency and sovereign debt crisis centered on Greece and other southern euro area country like Portugal. Reckless spending by the public sector in the form of unsustainable wages and pensions was the main reason for the crisis. Such overspending

was evident in the huge and continual fiscal and current account deficit. Another reason for this crisis was banking crisis which was first noticed in Ireland and then spread to the other countries of the region as all countries had concern over self-governing and several government had to rescue banks that had been ruined by the explode of housing bubble. Therefore, the root cause for the European Crisis was expansionary government policies in numerous countries and then feeble financial regulation that escorted them to overleveraging. At that time, a number of countries in the eurozone- Greece in May 2010 and February 2012, Ireland in November 2010, Portugal in May 2011, Spain in July 2012 for its banks and Cyprus in May 2013-have been forced into taking emergency loans from other eurozone and EU governments and the IMF.

Precisely, the Latin American crisis was a traditional current account currency crisis while Asian Financial crisis was liked a capital account crisis or in other terms was related to the huge inflows and abrupt turnaround of private capital flows. Whereas, Subprime Mortgage crisis (global economic crisis) and the eurozone crisis were of a combine nature having components of both a current account and capital account crisis.

Asian financial crisis had little to do with unsustainably large government borrowings and current account deficit, this feature of Asian financial crisis is just opposite to the Latin American Crisis. As already mentioned earlier, many countries had huge current account deficit because these countries were having large amount of short-term capital. The root cause of the Asian Financial crisis was the weakness in the banking sector. The banking sector of many Asian countries had a moment ago been liberalized and persuaded to borrow from abroad. But in Indonesia the situation was reversed as private corporate sector was overleveraged. For such type of crisis best remedy would have been to introduce liquidity in the economy and this can be done through loose monetary and fiscal policy only and rest regulatory collapse could be knobbed afterwards [6].

Krugman [6] conducted a study and concluded that the macroeconomic stabilization permitted by the International Monetary Fund (IMF) was failed to address the root cause of the crisis and these guidelines of IMF moved forward the countries into bottomless recession. As per another study Sachs [7] the crisis countries in Asia should have been encouraged to accept “constant or yet slightly expansionary macroeconomics policies” to neutralize the macroeconomic effect of the crisis.

Table 4: Showing Similarities and difference in above mentioned four Crisis

	Latin American Debt Crisis	Asian Financial Crisis	Subprime Mortgage Crisis	Eurozone Crisis
Proximate Causes	Huge capital outflow to sovereign debt overhaul	Massive capital withdrawal by the private investors	Bursting of housing bubble, subprime non-payment and growing foreclosures	Massive capital outflow to sovereign debt overhaul Property bubble burst (specifically in Spain)
Root Causes	Gigantic and mounting fiscal and current account deficit Weak Government disbursement	Mistakes on Policy side -- Precipitate capital account liberalization with pegged exchange rates Weak Financial Supervision and Overleveraging	Mistakes on Policy side – free Monetary Policy of the Federal Reserve Bank and rescind of Glass-Steagall Act and corporate sector and regulation, Gigantic and mounting payments	Gigantic and mounting fiscal and current account deficit Unsound Government disbursement Weak Financial Supervision and Over Faults in designing of Europe’s Economic and Monetary Union (EMU)

Source: Made by Author

What Went Wrong in the Design of Europe's Economic and Monetary Union

Other cause of the eurozone crisis was the mistakes in the design of the economic and monetary union [8,9]. In 1999, EMU were launched which include the EURO (the single currency) and European Central Bank (ECB) for a common monetary policy. However for synchronizing structural policies, this did not contain a fiscal union, banking union and other institutional mechanisms. A complete blueprint, Warner Report [10] (by European Commission 1970) in 1970 and Delors' Report (by European Council 1989) [11] in 1980s, had given a three-stage roadmap containing nearer economic coordination among members, building constraints on member states' national budget and a single currency. But founding members' of EMU had taken two convergence criteria more seriously- one a 3 per cent limit on annual fiscal deficit and second, 60 per cent limit on gross public debt to GDP ratio and had belief that these two conditions would be enough for the purpose. But in practice these two doorsteps were not compulsory for the member countries. So in nutshell EMU was not formed seriously and was an experiment with the member countries which were not similar and less integrated then the required by the optimum currency theory of Professor Robert Mundell [12]. Somewhere member countries had an opinion that monetary integration would lead to the economic combination, but that did not take place.

Recession in Europe was also driven by the global financial crisis since 2008 which activated the burst of the real estate bubble. Both these actions resulted in the ballooning of fiscal deficit and a gigantic worsening of debt indicators. All this set stage for the sovereign debt crisis in the Euro Zone that began with the Greek Crisis in early 2010.

The measures to correct the institutional defects have also been taken as the key design flaw in the EMU was that this union did not have lender of last resort in Bond market [13, 14]. Generally when a country issues Sovereign Bonds in its own currency, there is an implied assurance from the central bank that cash will always be on hand to reimburse the bondholder. But such assurance was absent from the monetary union which made its sovereign bond markets prone to liquidity crisis and contaminated. As there was no bailout clause in the EU treaty, the European Central Bank (ECB) was hesitant to follow the role of lender of last resort. As

an alternative, European Financial Stability Facility (EFSF) was established for the said purpose by the eurozone members. Till September 2012, a 700 billion euro European Stability Mechanism (ESM) was designed to replace the European Financial Stability Facility (EFSF), as EFSF was running out of money after it gave bailout packages to Greece, Ireland and Portugal. In September 2012 European Central Bank (ECB) Chief Mario Draghi announced the plans to the ECB the lender of last resort in government bond market. a new programme was launched called Outright Monetary Transaction (OMT) under which European Central Bank (ECB) will procure existing government bonds in the secondary market without disclosing it limits and will largely aid fiscally disturbed countries like Spain and Italy which are facing complexities in financing their debts. President of European Union Council publicized a vision for unwavering and affluent EMU comprising four building blocks these were: 1) an integrated budgetary framework, 2) an integrated financial framework, 3) an integrated economic framework and 4) a set of measures to promote democratic legitimacy and accountability of decision-making within the EMU (*European Council 2012a*) [15]. Afterwards, interim reports (one in October 2012 *European Council 2012b* and other in December 2012 *European Council 2012c*) [16, 17] were reveal which described the time frame for all these four building blocks.

In June 2012 summit; a statement was given "to break the vicious circle between banks and sovereigns" which shows that efforts are being taken to set up a banking union in the member countries. Under this a Single Supervisory Mechanism was proposed which works as the Europe-wide financial supervisor. Recently European Finance Ministers have approved this proposal of setting Europe-wide financial supervisor and this was a landmark verdict by which authority to supervise the financial sector would transfer from the national regulators to a super-national regulators. This supervisor will start supervision of 200 largest banks in Europe in 2014. A common banking resolution mechanism is also required to supervise the organized closing up of the troubled banks and a common deposit guarantee scheme is also obligatory. But this system have its drawback too as taxpayers may have to compensate for the faults of the banks in the other countries.

For the second building block, A Fiscal Compact (previously called as TSCG Treaty on Stability, Coordination and Governance in the Economic and Monetary Union) had been agreed upon by the EU members except Czech Republic and the United Kingdom in March 2012 which was enacted on 1st January 2013. This treaty requires all rectifying members to enact laws on national budgets to meet the two Maastricht convergence criteria i.e. Stability and Growth Pact and the Treaty on Stability, Coordination and Governance. This will be enforced by the European Court of Justice (EUJ) which give the member countries right to enforce any proceeding on the other member country if that country fails to meet their obligations. In December 2011 a Six- pack measure was approved to put in force Stability and Growth Pact. In long run a full-fledged Fiscal Union with taxes and expenditure handled by a universal authority is also forecasted.

For the third building block i.e. an integrated economic framework, existing framework for economic integration have to be make more enforceable so that unsustainable policies of member countries will not influence the stability of the EMU. Making and implementation os such policies should also be monitored at the super-national level.

For the last building block i.e. setting of measures to promote democratic legitimacy and accountability of decision-making within the EMU, a stronger mechanism is also required for such purpose. Suggestions have been made to enhance parliamentary oversight of various institutional and structural reforms.

In 1999, numerous course of action have been announced and many are under discussion with the objective of refocusing the experiment related to the “founding fathers” of the EMU. A broader roadmap for these experiments has yet to be made. A new supranational institution is to be made to work with the existing many other institutions which Europe previously has. This task of finding new institutions at international level is going to be the biggest challenge for the EMU. After World War II there were harmony on the need to promote peace and every country was strongly supported this will. But under euro crisis this feeling of strong cooperation is less and the results of the EMU II is still remain to be seen [18].

Conclusion and Road Ahead

The common currency of euro countries became one of major reason that so many euro countries got trapped in this crisis. The Financial crisis of 2008 made it worst as the debt became more severe burden for euro governments which was already too much in proportion to their GDPs. The current account deficit of some countries like Spain, Greece, and Portugal were at dangerous level and at that point of time these economies were forced to borrow funds from other countries and IMF increasing their debt burden. And the weak growth rate of many large European countries like Germany and France have resulted in setting of low interest rate by European Central Bank (ECB). The three major macroeconomic factors like GDP, current account deficit and debt to GDP ratio are global indicators of financial health of a sovereign. The Euro zone seems to be coming out of this crisis but have they really travelled far from the crisis situation. The recent forecasting by the IMF is not very much positive about Euro zone. If we consider the future forecasting trends for the above said three macroeconomic parameters then we can easily assess that the ten years far from the crisis period are not as glorious as the past decade was found for Euro zone. For a better view of the position of euro zone countries, only a sample of 22 countries out of 28 has been taken in the following diagrams. Majority of the euro zone nations have shown a similar trend. Before the outbreak of euro zone crisis, majority of the euro members were having GDP more than 3% and many had more than 5% and some others like Latvia, Slovak Republic were able to cross a rate of even 9% growth in GDP. But the impact of crisis has seemed to continue even after a decade. The countries performing the best were not able to have more than 3% growth rate in GDP. Only Latvia and Estonia are expected to grow at more than 3 percent followed by Czech Republic, Ireland, Luxembourg and Sweden. For rest the impact of this debacle seemed to be harder on the basis of forecast given by IMF.

The surmounted sovereign debt at the time of euro zone crisis will remain a big burden for many euro countries. The countries like Estonia, Latvia and Luxembourg had lower level of Gross Debt as a percentage of GDP. Cyprus, Greece, Ireland, Belgium, Portugal, Spain, France, United Kingdom and Slovenia will be among showing dangerous level of Gross Debt as a percentage of GDP. It is more than 100 percent for some of the countries mentioned previously.

The current account as a percentage of GDP is not expected to perform well even after a decade for many countries. The countries like Cyprus, Greece, Portugal, Malta and Spain will continue to handle the crisis of current account and even countries like Italy and UK are also not forecasted with sound level of current account balance in proportion to GDP.

The forecast shown by IMF are not positive enough indicating of Euro Zone as coming out of the sovereign debt crisis. The funding of this sovereign

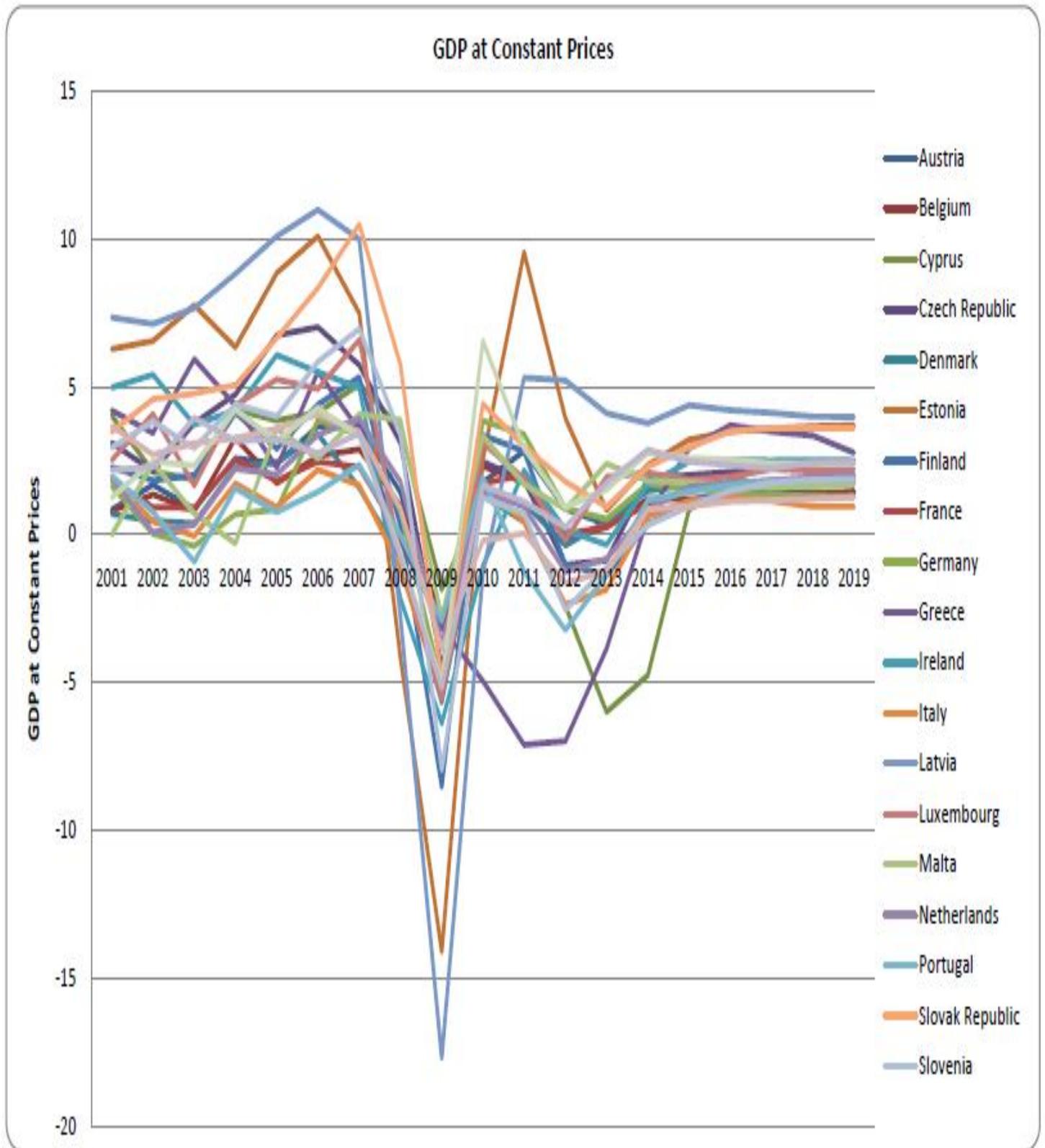
debt will be by third parties including international organizations. Under such circumstances what will happen to rest of the world financing these financially unstable economies? Will it be taking the world to more complex financial fiasco where more number of sovereign collapses will be witnessed? If the answer is yes, then the whole model of globalization and financial integration need to be revised for a better financial world for future generations.

Table 5
GDP at Constant Prices 2001-2019 (Forecasted after 2014 till 2019)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria	0.857	1.694	0.866	2.59	2.401	3.67	3.706	1.436	-3.822	1.769	2.834	0.871	0.35	1.693	1.746	1.64	1.435	1.439	1.395
Belgium	0.808	1.36	0.807	3.274	1.751	2.666	2.884	0.985	-2.801	2.323	1.769	-0.136	0.249	1.22	1.213	1.288	1.353	1.39	1.48
Cyprus	4.024	2.129	1.867	4.233	3.861	4.128	5.094	3.586	-1.856	1.309	0.442	-2.414	-6.001	-4.755	0.854	1.86	2.349	2.248	1.944
Czech Republic	3.097	2.149	3.766	4.743	6.752	7.02	5.735	3.099	-4.507	2.469	1.819	-1.021	-0.873	1.888	2.018	2.134	2.283	2.426	2.439
Denmark	0.705	0.466	0.384	2.296	2.445	3.395	1.583	-0.784	-5.666	1.387	1.071	-0.359	0.431	1.481	1.672	1.662	1.682	1.755	1.764
Estonia	6.282	6.56	7.765	6.343	8.853	10.097	7.492	-4.151	-14.098	2.565	9.558	3.939	0.831	2.361	3.211	3.489	3.59	3.67	3.707
Finland	2.284	1.834	2.012	4.126	2.915	4.411	5.335	0.294	-8.539	3.363	2.825	-1.008	-1.38	0.35	1.107	1.504	1.638	1.765	1.767
France	1.836	0.929	0.899	2.545	1.826	2.467	2.285	-0.081	-3.147	1.725	2.027	0.014	0.27	1.03	1.53	1.71	1.82	1.92	1.925
Germany	1.638	0.03	-0.387	0.694	0.846	3.886	3.389	0.807	-5.085	3.857	3.399	0.896	0.537	1.709	1.559	1.404	1.361	1.304	1.287
Greece	4.197	3.44	5.944	4.368	2.28	5.511	3.536	-0.214	-3.136	-4.943	-7.105	-6.979	-3.855	0.6	2.917	3.706	3.485	3.348	2.773
Ireland	4.985	5.417	3.73	4.2	6.08	5.505	4.97	-2.16	-6.384	-1.063	2.169	0.157	-0.339	1.699	2.466	2.521	2.513	2.522	2.513
Italy	1.863	0.451	-0.047	1.731	0.931	2.199	1.683	-1.156	-5.494	1.723	0.45	-2.368	-1.854	0.626	1.149	1.25	1.15	0.95	0.95
Latvia	7.349	7.129	7.656	8.827	10.098	10.988	9.987	-2.771	-17.699	-1.307	5.306	5.217	4.11	3.772	4.384	4.204	4.116	3.989	3.979
Luxembourg	2.52	4.088	1.669	4.376	5.253	4.933	6.588	-0.734	-5.556	3.101	1.905	-0.176	1.955	2.09	1.86	1.963	2.224	2.155	2.218
Malta	-0.002	2.434	0.716	-0.289	3.585	2.58	4.073	3.881	-2.812	3.339	1.715	0.863	2.4	1.828	1.769	1.678	1.61	1.643	1.698
Netherlands	1.926	0.076	0.336	2.237	2.046	3.394	3.921	1.804	-3.668	1.528	0.945	-1.247	-0.811	0.832	1.62	1.746	1.833	1.95	2.053
Portugal	1.975	0.764	-0.911	1.56	0.775	1.448	2.365	-0.009	-2.908	1.936	-1.25	-3.225	-1.351	1.166	1.451	1.68	1.8	1.84	1.84
Slovak Republic	3.482	4.583	4.775	5.058	6.655	8.345	10.494	5.751	-4.936	4.425	2.983	1.801	0.941	2.299	2.95	3.5	3.6	3.6	3.6
Slovenia	2.939	3.827	2.93	4.402	4.007	5.85	6.96	3.383	-7.943	1.258	0.709	-2.543	-1.107	0.328	0.949	1.481	1.759	1.854	1.875
Spain	3.671	2.707	3.088	3.257	3.588	4.075	3.479	0.893	-3.832	-0.203	0.052	-1.643	-1.22	0.868	0.962	1.128	1.172	1.213	1.268
Sweden	1.262	2.483	2.336	4.235	3.161	4.297	3.314	-0.613	-5.028	6.557	2.933	0.928	1.529	2.769	2.596	2.542	2.415	2.415	2.402
United Kingdom	2.185	2.295	3.949	3.173	3.235	2.755	3.427	-0.769	-5.17	1.66	1.117	0.251	1.756	2.878	2.463	2.352	2.255	2.429	2.442

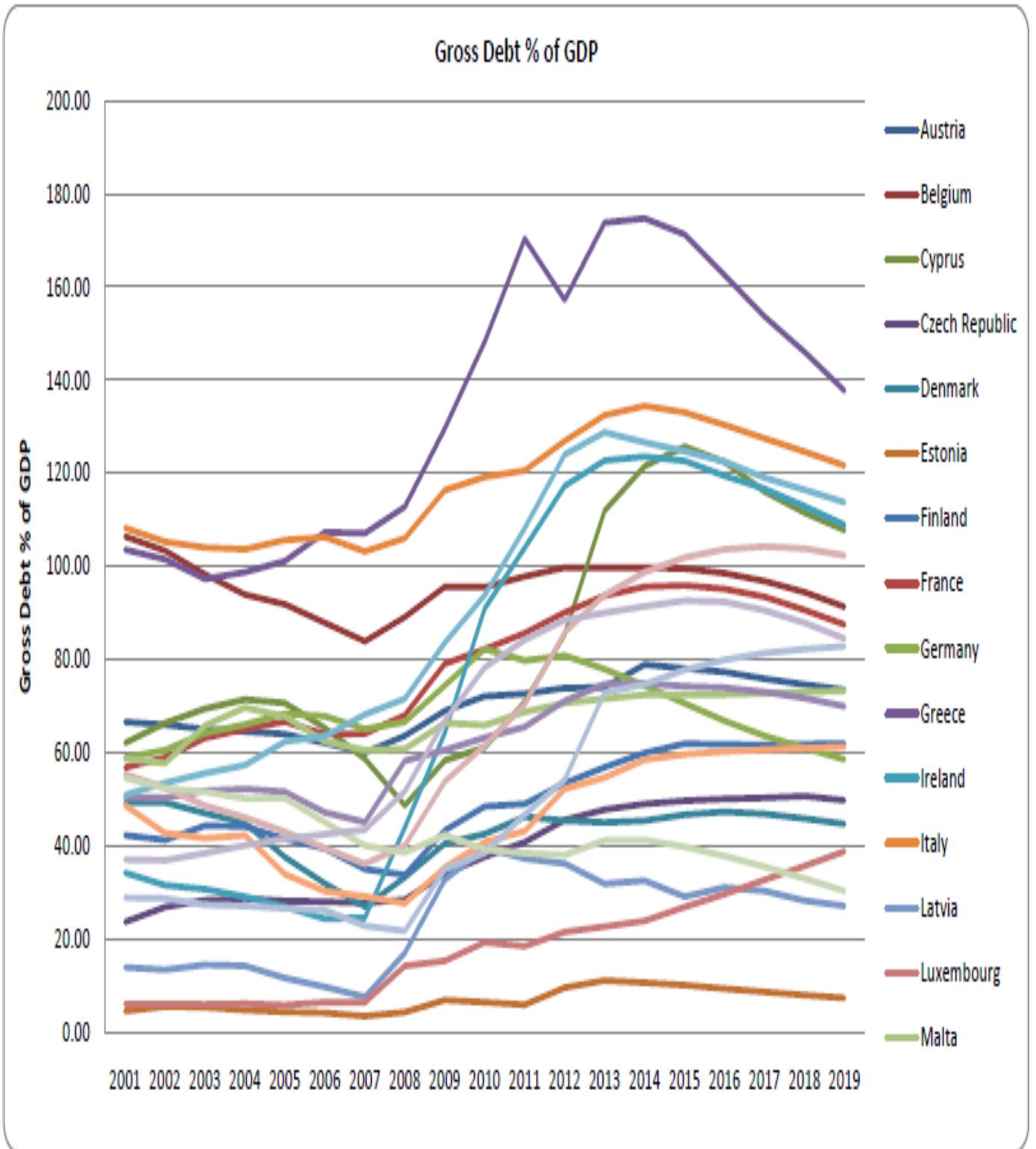
Source: Eurostat

Figure 2



Source: Eurostat

Figure 3



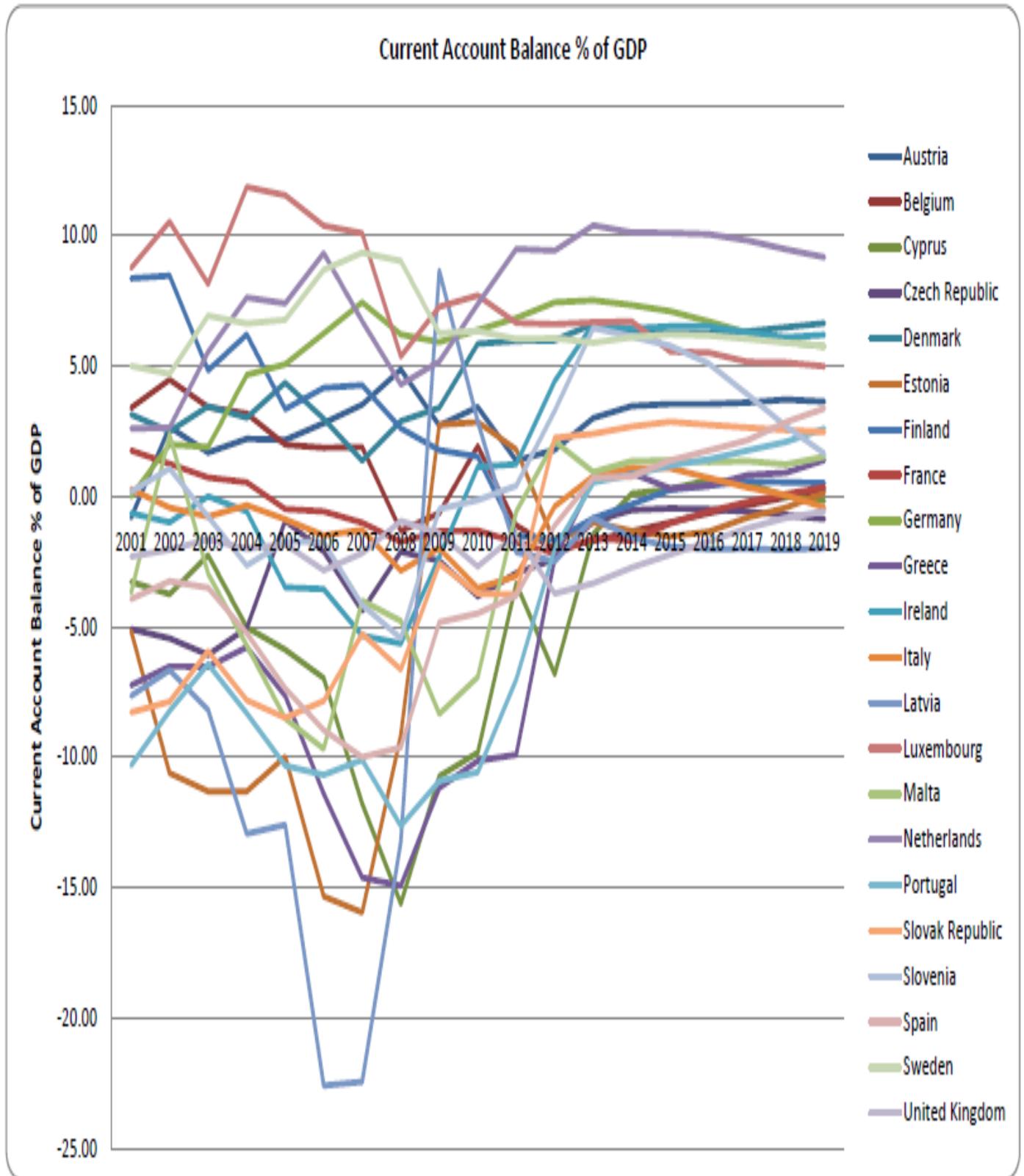
Source: Eurostat

Table 6
Gross Debt % of GDP

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria	66.81	66.21	65.27	64.71	64.19	62.31	60.22	63.83	69.17	72.27	72.81	74.08	74.19	79.09	78.21	77.46	76.05	74.82	73.69
Belgium	106.48	103.39	98.36	94.02	91.95	87.95	84.01	89.17	95.72	95.66	97.95	99.80	99.75	99.83	99.57	98.63	96.95	94.54	91.41
Cyprus	62.26	66.53	69.59	71.58	70.82	65.44	58.80	48.89	58.53	61.33	71.07	85.55	112.01	121.53	125.75	122.49	116.13	111.61	107.91
Czech Republic	23.89	27.07	28.58	28.94	28.41	28.28	27.94	28.70	34.20	37.91	41.04	45.73	47.94	49.21	49.90	50.28	50.52	50.86	49.94
Denmark	49.56	49.47	47.21	45.13	37.76	32.08	27.13	33.38	40.68	42.77	46.39	45.60	45.17	45.60	46.87	47.50	47.02	46.06	44.89
Estonia	4.78	5.73	5.62	5.03	4.57	4.41	3.69	4.54	7.10	6.69	6.14	9.83	11.35	10.92	10.34	9.62	8.91	8.24	7.59
Finland	42.46	41.47	44.51	44.39	41.70	39.63	35.16	33.94	43.52	48.66	49.19	53.62	57.04	60.16	62.10	62.01	61.87	62.08	62.13
France	56.94	59.11	63.29	65.20	66.80	64.08	64.22	68.21	79.19	82.36	85.79	90.23	93.88	95.76	96.06	95.30	93.58	90.80	87.66
Germany	59.14	60.75	64.44	66.23	68.55	68.02	65.22	66.81	74.55	82.46	79.96	81.02	78.06	74.55	70.76	67.02	63.79	61.23	58.74
Greece	103.72	101.66	97.44	98.86	101.23	107.47	107.23	112.90	129.69	148.33	170.32	157.19	173.81	174.70	171.27	162.52	153.67	146.09	137.77
Ireland	34.48	31.78	30.97	29.37	27.21	24.60	24.86	44.16	64.42	91.19	104.08	117.40	122.82	123.67	122.74	119.56	116.79	113.07	109.08
Italy	108.32	105.36	104.14	103.71	105.72	106.35	103.28	106.09	116.42	119.29	120.69	126.97	132.53	134.51	133.12	130.47	127.56	124.72	121.71
Latvia	14.14	13.60	14.66	14.45	11.85	9.90	7.79	17.20	32.86	39.74	37.47	36.42	32.06	32.71	29.28	31.26	30.46	28.42	27.26
Luxembourg	6.31	6.33	6.22	6.35	6.07	6.68	6.67	14.44	15.54	19.52	18.70	21.70	22.87	24.13	27.04	29.82	32.88	35.82	38.98
Malta	58.88	57.86	65.99	69.79	67.95	62.49	60.72	60.91	66.53	66.02	68.83	70.80	71.72	72.54	72.64	72.63	72.86	73.14	73.38
Netherlands	50.70	50.50	52.00	52.40	51.82	47.37	45.30	58.46	60.76	63.40	65.72	71.26	74.91	75.03	74.44	74.15	73.19	71.92	70.13
Portugal	51.07	53.68	55.70	57.46	62.53	63.69	68.38	71.69	83.70	93.99	108.25	124.07	128.84	126.69	124.80	122.56	119.13	116.56	113.85
Slovak Republic	48.86	42.88	41.83	42.49	34.16	30.49	29.38	27.86	35.56	40.97	43.37	52.39	54.87	58.62	59.78	60.42	60.82	61.13	61.40
Slovenia	29.07	28.92	27.55	27.34	26.76	26.43	23.07	21.96	35.15	38.71	46.90	54.33	73.02	74.86	77.91	80.03	81.48	82.37	82.95
Spain	55.59	52.58	48.79	46.26	43.17	39.68	36.30	40.17	53.98	61.66	70.47	85.95	93.91	98.81	101.95	103.74	104.34	103.87	102.41
Sweden	54.74	52.50	51.73	50.34	50.40	45.27	40.23	38.80	42.56	39.44	38.64	38.26	41.40	41.48	39.98	38.00	35.70	33.22	30.54
United Kingdom	37.26	37.12	38.68	40.32	41.69	42.71	43.72	51.89	67.10	78.46	84.32	88.56	90.10	91.50	92.72	92.47	90.68	88.02	84.62

Source: Eurostat

Figure 4



Source: Eurostat

Table 7
Current Account Balance % of GDP

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria	-0.82	2.66	1.68	2.20	2.17	2.80	3.51	4.87	2.71	3.42	1.36	1.78	3.00	3.46	3.54	3.55	3.60	3.71	3.63
Belgium	3.39	4.47	3.42	3.18	1.98	1.86	1.89	-1.32	-0.64	1.93	-1.12	-2.01	-1.70	-1.34	-0.99	-0.64	-0.34	-0.04	0.29
Cyprus	-3.29	-3.76	-2.26	-5.03	-5.88	-6.97	-11.78	-15.62	-10.73	-9.83	-3.35	-6.81	-1.45	0.11	0.27	0.63	0.50	-0.01	-0.17
Czech Republic	-5.08	-5.44	-6.07	-5.05	-0.93	-2.11	-4.39	-2.12	-2.46	-3.83	-2.94	-2.41	-0.95	-0.52	-0.46	-0.48	-0.59	-0.72	-0.87
Denmark	3.13	2.49	3.45	3.01	4.35	2.98	1.36	2.88	3.40	5.84	5.95	5.98	6.60	6.34	6.27	6.23	6.32	6.48	6.63
Estonia	-5.17	-10.61	-11.30	-11.31	-9.98	-15.33	-15.95	-9.15	2.74	2.84	1.80	-1.78	-1.00	-1.33	-1.54	-1.36	-0.81	-0.44	0.14
Finland	8.35	8.46	4.83	6.20	3.35	4.16	4.27	2.62	1.77	1.52	-1.50	-1.66	-0.83	-0.30	0.25	0.41	0.58	0.55	0.51
France	1.76	1.25	0.72	0.54	-0.49	-0.58	-1.00	-1.74	-1.33	-1.31	-1.76	-2.19	-1.61	-1.69	-1.03	-0.57	-0.20	0.09	0.35
Germany	0.00	2.00	1.89	4.66	5.06	6.26	7.45	6.21	5.93	6.39	6.84	7.45	7.52	7.34	7.10	6.71	6.28	5.93	5.75
Greece	-7.23	-6.52	-6.53	-5.79	-7.64	-11.39	-14.61	-14.92	-11.17	-10.13	-9.90	-2.39	0.68	0.90	0.31	0.41	0.82	0.92	1.40
Ireland	-0.64	-0.99	0.00	-0.58	-3.49	-3.55	-5.34	-5.64	-2.32	1.13	1.23	4.42	6.61	6.44	6.52	6.52	6.29	6.11	6.19
Italy	0.27	-0.43	-0.78	-0.33	-0.88	-1.50	-1.28	-2.85	-1.99	-3.51	-3.06	-0.38	0.78	1.11	1.08	0.72	0.35	0.05	-0.42
Latvia	-7.65	-6.67	-8.18	-12.94	-12.59	-22.59	-22.44	-13.23	8.65	2.88	-2.14	-2.49	-0.82	-1.59	-1.92	-2.01	-2.00	-2.04	-1.97
Luxembourg	8.76	10.53	8.14	11.86	11.55	10.37	10.09	5.36	7.26	7.70	6.65	6.60	6.68	6.70	5.55	5.50	5.16	5.13	4.98
Malta	-3.68	2.36	-2.96	-5.72	-8.51	-9.68	-4.00	-4.77	-8.34	-6.93	-0.60	2.11	0.93	1.36	1.38	1.32	1.35	1.23	1.52
Netherlands	2.60	2.64	5.54	7.63	7.40	9.34	6.72	4.29	5.18	7.38	9.49	9.43	10.39	10.12	10.11	10.05	9.82	9.48	9.18
Portugal	-10.32	-8.23	-6.43	-8.33	-10.32	-10.69	-10.10	-12.64	-10.92	-10.58	-7.02	-2.02	0.53	0.83	1.17	1.42	1.75	2.09	2.60
Slovak Republic	-8.27	-7.87	-5.93	-7.82	-8.49	-7.85	-5.27	-6.63	-2.59	-3.72	-3.77	2.24	2.39	2.67	2.86	2.74	2.63	2.55	2.46
Slovenia	0.18	1.07	-0.78	-2.65	-1.73	-1.75	-4.17	-5.45	-0.49	-0.14	0.40	3.28	6.46	6.14	5.78	5.09	3.92	2.69	1.64
Spain	-3.94	-3.26	-3.51	-5.25	-7.35	-8.96	-10.00	-9.62	-4.83	-4.49	-3.80	-1.12	0.70	0.76	1.37	1.75	2.15	2.84	3.37
Sweden	5.00	4.70	6.94	6.63	6.77	8.68	9.35	9.04	6.27	6.34	6.03	6.07	5.89	6.10	6.20	6.17	6.03	5.90	5.78
United Kingdom	-2.32	-2.05	-1.65	-2.01	-1.85	-2.84	-2.19	-0.94	-1.42	-2.69	-1.46	-3.73	-3.34	-2.73	-2.24	-1.74	-1.22	-0.82	-0.58

Source: Eurostat

References

1. Buch Claudia M, Ralph P Heinrich (2002) Financial Integration in Europe and Banking Sector Performance, Kiel Institute of World Economics, Paper written for the project "The Benefits of a Working EU Market in Financial Services".
2. Chinn Menzie D, Hiro Ito. (2008) A new measure of financial openness. *Journal of Comparative Policy Analysis* 10(3):309-322.
3. Kalemli-Ozcan, Sebnem, Elias Papaioannou, Jose Luis Peydro (2010) "What lies beneath the euro's effect on financial integration? Currency risk, legal harmonization or trade", *Journal of International Economics*, 81(1):75-88.
4. Dadush Uri (2010) Paradigm Lost: The Euro in Crisis", Washington D.C.: Carnegie Endowment for International Peace.
5. Dowling JM, Rana PB (2010) Asia and the Global Economic Crisis: Challenges in a Financially Integrated World, New York: Palgrave Macmillan.
6. Krugman P (1998) The Confidence Game: How Washington Worsened Asia's Crash", *New Republic*, 5 October.
7. Sachs J (1997) The Wrong Medicine for Asia, *The New York Times*, 3 November.
8. Kirkegaard JF (2011) Congressional Testimony: The Euro Crisis: Origins, Current Status, and European and US Responses. Retrieved from Peterson Institute of International Economics: <http://www.piie.com/publications/testimony/kirkegaard20111027.pdf>
9. Bergsten,CF (2012) Congressional Testimony: The Outlook for the Euro Crisis and Implications for the United States. Retrieved from Peterson Institute of International Economics:<http://www.piie.com/publications/testimony/print.cfm?ResearchId=2037&doc=pub>
10. European Commission (1970) Report to the Council and the Commission on the Realization by Stages of Economic and Monetary Union in the Community [Werner Report]. Brussels: European Council and Commission.
11. European Council (1989) Report on the Economic and Monetary Union in the European Community [Delors Report]. Brussels: European Council.
12. Mundell Robert A (1961) A theory of optimum currency areas, *American Economic Review*, 51(4):657-665.
13. De Grauwe Paul (2011) The Governance of a Fragile Eurozone, CEPS Working Documents, Economic Policy May 2011. <http://www.ceps.eu/book/governance-fragile-eurozone>
14. Wyplosz C (2011) An Open Letter to Dr Jens Weidmann, 18 November, Retrieved from Vox EU: <http://www.voxeu.org/article/open-letter-dr-jens-weidmann>.
15. European Council (2012a) Towards a Genuine Economic and Monetary Union (EUCO120/12). Brussels: European Union.
16. European Council (2012b) Towards a Genuine Economic and Monetary Union (Interim Report). Brussels: European Union.
17. European Council (2012c) Towards a Genuine Economic and Monetary Union (December Report). Brussels: European Union.
18. Justin Yifu Lin, Volker Treichel (2012) The crisis in the Euro Zone Did the euro contribute to the evolution of the crisis?, Policy Research Working Paper Series 6127, The World Bank Development Economics Vice Presidency available at <http://econ.worldbank.org>.

