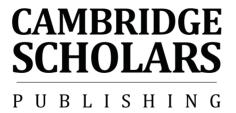
# The European Debt Crisis

## The European Debt Crisis: Causes, Consequences, Measures and Remedies

Edited by

Ali Ari



#### The European Debt Crisis: Causes, Consequences, Measures and Remedies, Edited by Ali Ari

This book first published 2014

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data A catalogue record for this book is available from the British Library

Copyright © 2014 by Ali Ari and contributors

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-4438-5616-9, ISBN (13): 978-1-4438-5616-4

## TABLE OF CONTENTS

List of Tablesvii
List of Figuresix
Introduction
Part I: Causes
Chapter One
Chapter Two
Part II: Consequences
Chapter Three
Chapter Four
Chapter Five
Lacin Davider and Time you Dui gazogin

#### Part III: Measures

Chapter Six	1
Efficiency of the FED's Monetary Policy during the Global Financial	
Crisis	
Cemil Erarslan and Yuksel Bayraktar	
Chapter Seven	55
Chapter Eight	15
Part IV: Remedies	
Chapter Nine	9
Chapter Ten	ŀ5
Chapter Eleven	3
Notes on the Contributors	55
Index 27	12

## LIST OF TABLES

Table 1-1 Greek international trade (1925-1938)	23
Table 1-2 Budget balance and gross national debt over GDP (%)	36
Table 1-3 Greece's macroeconomic performance (1980s-2000s)	38
Table 1-4 Public revenue over GDP (%)	41
Table 1-5 Public expenditure over GDP (%)	42
Table 1-6 Greece export and import volumes (in millions euro,	
1999-2008)	43
Table 1-7 Bond and interest convergence criteria in the EMU	44
Table 1-8 Comparison of government debt risks in 2010	50
Table 2-1 Results of the step-wise algorithm for the sustainability	
of debt stock over GDP	75
Table 2-A1 Sustainability analysis of public debt stock to GDP ratio	
for 9 countries	96
Table 2-A2 Reconstructed credit ratings of 25 selected world economie	s 97
Table 4-1 Variables: definitions and sources	139
Table 4-2 Logit maximum likelihood estimations	141
Table 4-3 Forecast performance of logit models	143
Table 6-1 FED's total reserve assets (in billion US\$, 2007-2009)	181
Table 7-1 Average domestic currency credit growth (%)	189
Table 7-2 Year-end inflation rates (%)	193
Table 9-1 General budget balance over GDP (%)	223
Table 9-2 Government debt over GDP (%)	224
Table 9-3 Inflation rates (%)	225
Table 9-4 Interest rates (%)	225
Table 9-5 Government revenues over GDP (%)	231
Table 9-6 Government expenditure over GDP (%)	
Table 9-7 Turkey's leading export markets, (Share in total, %)	240

# LIST OF FIGURES

Figure 1-1 Inflation development in Greece (1924-1938)	24
Figure 1-2 Monetary aggregates for Greece (1922-1939)	
Figure 1-3 Industrial activity (1932-1939, 1928=100)	26
Figure 1-4 Sector combinations (1928-1939)	27
Figure 1-5 GDP and income per capita (1926-1939, 1926=100)	27
Figure 1-6 The Drachma exchange rate by the US Dollar (left scale)	
and the British Pound (right scale)	32
Figure 1-7 Balance of payments (in millions of drachmas)	33
Figure 1-8 Foreign reserves of the Bank of Greece (1932-1939)	34
Figure 1-9 Greece and the Euro area inflation rates (2001-2010)	38
Figure 1-10 Fiscal deficit, total expenditure and total revenue	
(% of GDP)	45
Figure 1-11 Comparison of Greece with 16-EU countries in terms	
of government gross debt (% of GDP)	48
Figure 2-1 Composite indicator of sustainability vs credit ratings	83
Figure 2-A1 Poland's gross debt stock to GDP ratio	92
Figure 2-A2 Greece's public gross debt stock to GDP ratio	92
Figure 2-A3 Portugal's public gross debt stock to GDP ratio	93
Figure 2-A4 The UK's public gross debt stock to GDP ratio	93
Figure 2-A5 Ireland's public gross debt stock to GDP ratio	94
Figure 2-A6 Turkey's gross debt stock to GDP ratio	
Figure 2-A7 The UK primary surplus over GDP	95
Figure 3-1 Financial stress in emerging countries by region (Monthly	
data, 1996M11-2010M07)	103
Figure 3-2 Financial stress in developed countries and emerging	
economies (1997-2009)	104
Figure 3-3 Equity markets performances in developed and emerging	
countries (Daily data, January 02 2006=100)	105
Figure 3-4 Emerging markets: exchange rate against USD (2002:	
	106
Figure 3-5 International capital flows to emerging and developing	
countries (net, USD billions)	107
Figure 3-6 External positions of reporting banks vis-à-vis all sectors,	
Assets (Quarterly changes, %)	
Figure 3-7 The VIX index and the EMBI spreads	108

Figure 3-8 Primary commodity prices (2005=100, Monthly data,	
1992M01-2012M03)	
Figure 3-9 The world trade and the financial crisis	109
Figure 3-10 Public financing conditions in selected Euro area countries	
(Daily data)	110
Figure 3-11 Spillovers from the sovereigns to banks and from banks	
to sovereigns	111
Figure 3-12 Tensions on interbank funding markets and sovereign	
debt crisis	
Figure 3-13 Banking sector CDS spreads (Basis points, Daily data)	
Figure 3-14 The VIX index (Daily data)	114
Figure 3-15 Sovereign CDS spreads in selected emerging markets	
(Daily data, Basis points. Simple average by region)	114
Figure 3-16 External positions of reporting banks vis-à-vis all sectors,	
Assets (Quarterly changes in %)	115
Figure 3-17 Imports of the Euro area (Growth rate M/M-12	
of the volume indices, %)	
Figure 3-18 Current account balances (% of GDP)	118
Figure 3-19 Loans denominated in foreign currency as a share of GDP,	
Selected countries in Emerging Europe, 2007 and 2011 (%)	
Figure 3-20 The De-dollarization process in Latin America	
Figure 3-21 Discount rates in some emerging countries	120
Figure 3-22 Nominal effective exchange rates in some emerging	
countries (2005=100)	
Figure 3-23 Policy responses in Latin American countries	121
Figure 3-24 The ratio of foreign liabilities to money and the money	
market interest rates (2004M1-2010M12, %)	122
Figure 4-1 The crisis index (ISP) and crises identified by the ISP	
at the threshold of 2 standard deviations	136
Figure 5-1 The relationship between GDP and the automotive sector	
(EU-25)	
Figure 5-2 Germany's car export revenues (in millions US\$)	155
Figure 5-3 Car export revenues: France, Italy, Spain, the UK	
(in millions US\$)	
Figure 5-4 Portugal's car export revenues (in millions US\$)	
Figure 5-5 Germany's car production	
Figure 5-6 Car production in France, Italy, Spain, the UK	
Figure 5-7 Portugal's car production	
Figure 5-8 Car Sales in France, Germany, Italy, Spain, UK	
Figure 5-9 Car Sales in Portugal	
Figure 5-10 Employment in automotive sector in Germany	161

Figure 5-11 Employment in automotive sector in France, Italy,	
Spain, the UK	162
Figure 5-12 Employment in automotive sector in Portugal	162
Figure 5-13 RCA index (France, Germany, Italy, Portugal, Spain,	
the UK)	164
Figure 6-1 The FED's target rate (1988-2011)	174
Figure 6-2 Unemployment rates, inflation rates and target Federal	
fund rate in the US (1988-2011)	177
Figure 6-3 Interest rates and the FED's total reserves	179
Figure 7-1 Required reserves (RR) held at the CBT and the short-term	
borrowing of the banking sector from the CBT (OMO, September	
3, 2010-July 1, 2011 (billion lira, weekly data)	188
Figure 7-2 Short-term interest rates of the CBT and the short-term rate	
determined in the overnight market (market rate, October 1, 2010-	
December 31, 2011, %)	191
Figure 7-3 Consumer inflation rates: January 2009-October 2012	
(annual % rates)	192
Figure 9-1 Turkish exports (2008-2011 average)	
Figure 9-2 Foreign direct investments in Turkey (2008-2011 average)	242
Figure 11-1 The performance of the different countries in terms	
of real GDP (2005Q1=100)	255

### INTRODUCTION

## EUROPEAN DEBT CRISIS: CAUSES, CONSEQUENCES, MEASURES AND REMEDIES

## ALI ARI Kirklareli University

This collection brings together most interesting papers presented at the CES International Conference on the European Debt Crisis, held in Kirklareli in Turkey on May 17-18, 2012. The idea of organising this Conference developed in late 2011 when the advanced economies, in particular the US, the Eurozone member states and the UK were struggling to find a way out of the on-going global financial crisis which has been affecting the world economy since late 2007. Today, the US authorities seem to have resolved the crisis, although growth and employment rates are not yet encouraging: however, Europe remains in crisis. This book intends to provide answers, from both theoretical and empirical perspectives, to the following questions, which have been posed many times since 2007 but remain unanswered: What caused the global crisis? What are the consequences of this crisis? Why, despite the implementation of several measures, is the crisis still affecting the world economy? How can the situation of on-going crisis be brought to an end, particularly in the European Union (EU)? Will the Eurozone be dismantled? Finally, how can future crisis episodes in the world economy be prevented?

In this introduction, I shall begin by presenting a brief account of the global financial crisis and the European debt crisis; then, I shall provide a brief overview of the papers included in the volume.

### A brief account of the global financial crisis

The crisis that started in the US mortgage credit market in 2007—the now world-famous subprime market (Bénassy-Quéré et al., 2009)—is a

typical banking crisis. This crisis occurred as a result of banks increasing non-performing loans, which in turn prevented them from honouring their obligations to other banks or financial institutions. Here, the important question is: why did banks' non-performing loans increase to such an extent in 2007?

The answer to this question lies in a number of global economic and financial developments of the 1990s and early 2000s: firstly, the increasing financial instability and crisis episodes in emerging markets during the 1990s resulted in capital flows to advanced economies, particularly to the US (the "flight to quality"); secondly, increases in savings in some emerging economies like China (due to distortions in the Chinese economy which artificially keeps savings high) and Middle Eastern countries (due to a sharp rise in oil prices between the end of 1998 and August 2007) increased the demand for US financial assets; in parallel, US equity prices rose and the dollar appreciated. The rise in equity prices increased the level of perceived wealth in the US, thus reducing domestic savings (Siebert, 2010).

This excessive money supply, accompanied by a lax FED monetary policy after 2001 (Obstfeld and Rogoff, 2009), reduced real interest rates and eased credit conditions in the US financial sector. This led to extensive leverage, i.e., debt-financed financial investment, which tended to cause consumption to rise and savings to fall. As a result, US house prices rose steadily, by 7-8% per year in the period 1998-1999, by 9-11% per year from 2000-2003 and by 15-17% in 2004-2005 (Bernanke, 2010). This "bubble" was also fed by the self-fulfilling expectations of market participants: households, investors and financial institutions. This euphoric atmosphere led banks to take riskier investment decisions (i.e., investment in subprime mortgages) in a lax regulatory environment. Subprime mortgage credits are financial products that aim to give access to home ownership to poorer and therefore less credit-worthy households. These high-vield mortgages are riskier, and contracts are designed to mitigate these risks by collateralizing them, on the assumption of rising house prices. This strategy was effective while house prices were rising, which was the case until late 2006 (Bénassy-Quéré et al., 2009).

On the other hand, increasing consumption in the US economy, due to eased credit conditions in the presence of low interest rates and the overvalued US dollar reducing the country's trade competitiveness, led to huge trade deficits. Those deficits were generally financed by the high saving surpluses of the emerging economies, particularly China and the Middle Eastern countries. Thus, at the time of the the outbreak of the

financial crisis, the world economy was characterised by significant global imbalances

#### The outbreak of the crisis

In the second half of 2006, when some regulatory agencies in the US criticized excessive risk-taking and leveraging of the financial institutions and put forward the existence of a housing bubble, the FED increased nominal interest rates. This led to a decline in house prices, and thus to an increase in default rates. On the other hand, increasing interest rates reduced the already-low level of investment in the US real sector, causing an increase in unemployment rates. Increasing unemployment also led to rising default rates on mortgages. Increases in default rates substantially increased banks' non-performing loans. Although mortgaged homes were taken back by banks through foreclosure, banks recorded huge losses because of declining home prices (collateral). This resulted in a liquidity squeeze in the financial markets.

However, as stated by Bénassy-Quéré et al. (2009), this liquidity problem could have been tolerated if these subprime loans had not been securitised. Securitisation is the technique through which bank loans are transformed into marketable securities. Furthermore, securitised subprime loans were also pooled with other types of mortgage-based securities to form structured assets (which are riskier, but with a higher return in comparison to standard fixed-income instruments). This is why defaults on subprime securities affected the whole range of asset-backed securities. In this sense, the more complex a product was, the more difficult it became to value it (Bénassy-Quéré et al., 2009). The financial innovation process, initially considered favourable to long-term growth, led to the emergence of what are now termed "toxic products". All this financial innovation is indeed related to the excessive deregulation of the financial system, a process which has been on-going since the 1980s.

Once liquidity dried up, and risk was re-priced in August 2007, interbank rates sharply rose. This led to the failure of two large hedge funds, and a run on Northern Rock. Central banks provided direct and instant liquidity to financial institutions, in order to help them face debt repayments. However, this lender of last resort action did not calm the existing tensions in the financial markets, as market participants were unwilling to lend to potentially bankrupt counterparties. This uncertainty and loss of confidence forced banks to sell their assets. This resulting fall in asset prices in turn led to a further deterioration in the banks' balance sheets. Furthermore, as the value of many complex assets became unclear,

the banks' published accounts did not provide accurate information concerning the true extent of the damage, which exacerbated the lack of confidence in the financial markets even further. As a result, many banks, illiquid or insolvent, were condemned to a bail-out by the national authorities.

The panic spread worldwide in September 2008, when the investment bank Lehman Brothers went bankrupt. This caused a massive loss of confidence, and illiquidity became the most important problem in the financial system. Central banks cut interest rates to zero and engaged in a near-total substitution of the interbank market (Bénassy-Quéré et al., 2009). The global crisis seriously affected the real economy, as credit conditions became completely restrictive, while the fall in equity prices reduced the ability of large companies to finance their investments. As a result, advanced economies recorded large contractions, unemployment rates increased substantially and world trade decreased considerably. Emerging countries were also heavily affected by the global financial crisis, as they also recorded a decrease in economic growth and employment. One may affirm that trade and finance were the two main channels in crisis contagion, from advanced to developing economies.

Governments and central banks in the US and the EU responded to the crisis with a more aggressive interest rate policy, and substantial liquidity provisions to the financial markets (Blanchard, 2009). They also used expansionist fiscal policies in an effort to increase consumption, production and employment. Moreover, to prevent further collapses in the financial system, bank rescue and guarantee plans were implemented: bail-outs, recapitalisation and nationalisation of illiquid and insolvent banks, and a provision for credit and debt guarantees to all banks (Aït-Sahalia et al., 2010). The IMF, the World Bank and regional development banks were also mobilised to counter the effect of the global crisis. These measures could not prevent a world recession in 2009, but in 2010 and its aftermath the world economy recorded positive growth, thanks to the rapid recovery of the emerging markets. However, these expansionary policies, accompanied by nationalisation of the private sector debt stock, resulted in a dramatic rise in public debt, and created serious roll-over concerns. As a result, some Eurozone countries, namely the so-called PIIGS countries, have suffered the on-going sovereign debt crisis.

#### A brief overview of the Eurozone debt crisis

As stated by Wolf (2012), in its origin the Eurozone crisis is not a fiscal crisis, although fiscal deficits and massive debt stocks caused the

sovereign debt crisis in the Eurozone. Prior to the outbreak of the global financial crisis, the debt stocks of the crisis countries were actually quite low, with the exception of Greece and Italy. Liquidity provisions and the nationalisation of private banks during the period 2007-2009 resulted in an increasing debt burden in these countries. Of course, the crisis was not caused only by increasing fiscal deficits and rising public debt. There are other macroeconomic and structural factors that have led to the outbreak of the sovereign debt crisis in Eurozone.

First, as affirmed by many economists, the Economic and Monetary Union (EMU) is a monetary union without a fiscal union. Nonetheless, this design, permitting the free riding of fiscal policies within a framework of common monetary policy, led to differences in inflation rates within the Eurozone member countries. Inflation differences in turn led to a decrease in the trade competitiveness of high-inflation countries, i.e., Greece, Spain. As the option of improving the competiveness of the economy through exchange rate depreciation was not available, because of the common currency, trade deficits rose steadily in the Southern peripheral countries. One may also affirm that while the Maastricht criteria and the Stability and Growth Pact (SGP) had put in place some strict fiscal rules to be respected, these rules were violated several times, even by "good students" such as France and Germany.

Moreover, the continuing structural differences between member countries impacted on the effectiveness of the common monetary policy implemented by the European Central Bank (ECB), which, over time, created macroeconomic imbalances within the Union. The main structural differences between member states were reflected in aggregate productivity and price and wage competitiveness, which in turn directly affected external balances (Darvas, 2012).

Furthermore, with the transition to monetary union, capital inflows increased towards peripheral countries. The resulting low interest rates led to a decrease in household savings and increased consumption, causing external deficits and an increase in private debt stock. As in the pre-crisis period, the focus on fiscal issues within the SGP or Maastricht criteria targeted the public sector, neglecting private-sector behaviour, which resulted in unsustainable credit and housing booms in countries such as Ireland and Spain. This observation explains quite clearly why countries with very low public debt stock at the beginning of the global crisis in 2008 suffered a sovereign debt crisis in its aftermath.

Last but not least, the governance problems and decision-making issues within the Union were also important factors in the deepening of the crisis. In several cases, the response of European policymakers was partial,

inadequate and late, which undermined their credibility in terms of resolving the crisis (Darvas, 2012).

What, then, is to be done, if the on-going crisis is to be resolved? For us there is only one option: beyond putting together a large enough financial bail-out to restore market confidence, a complementary economic union with well-defined and re-written rules, to be respected by all members and supported by the key institutions, must be adopted. This will strengthen the real economy and restore sustainable growth within the Union

#### The Book

This book is divided into four interlinked sections: Causes, Consequences, Measures, and Remedies.

*Part One* is composed of two papers that, taken together, provide a systematic theoretical and empirical overview of the global financial crisis and the European debt crisis.

In their paper "Greece in the Great Depression and the European Debt Crisis: Transmission and Process", Ayfer Gedikli and Abdullatif Ceviker compare the situation of the Greek economy during the Great Depression of 1929 and the global crisis of 2008. The authors first show that the effects of both crises on the world economy (and on the Greek economy in particular) lead to similar consequences in terms of economic recession and rising unemployment rates. However, they state that during the recent global crisis, central banks were quite active, as they injected substantial amounts of liquidity to ease borrowing conditions. This is contrary to the situation during the Great Depression, where central banks did not take enough measures. Moreover, again contrary to the Great Depression, governments acted together through international cooperation instead of launching protectionist policies, which contributed to the international economy recovering more quickly. On the other hand, the authors show that although the economic situations were different, both crises affected the Greek economy deeply. Greece's entry to the EU, and then the EMU. boosted its economy by providing the country with large funding opportunities at low interest rates. Nevertheless, the acceptance of the euro as the common currency put the Greek monetary policy in the hands of the EMU authorities, resulting in a lack of adjustment mechanisms to deal with the crisis at a supranational level. In this sense, Greece heavily depends on the actions and implemented measures of the European authorities, if it is to successfully overcome the present debt crisis.

In his paper "Public Debt Crises in the Eurozone and Possible Effects on Sovereign Credit Rankings", Ata Ozkaya provides an econometric analysis of whether selected European countries and Turkev have followed sustainable debt policies over the last 12 years. He shows that Ireland, Portugal, Greece and Spain pursued unsustainable debt policies over the reviewed period, contrary to France, Italy, Poland and Turkey. On the other hand, he observes that during the same period, the primary balances of Poland, Portugal, Ireland, Greece, and the UK economies deteriorated and exhibited a negative trend, while the debt stock to GDP ratio of each country increased. Moreover, the author finds that even if the UK's debt stock is sustainable in the long-run, the disrupted structure of the UK primary surplus may lead to instability. Finally, Ozkaya reconstructs the credit ratings of the 25 selected countries, according to a set of macroeconomic fundamentals during three non-overlapping periods: 2005-2010, 2011, and 2012-2013. He illustrates the mismatch between actual credit rankings and the current situation of countries: the US and Italy do not merit their actual ratings; Turkey should have a better rating; and it is also probable to expect a further downgrade in the credit ratings of the UK, France and Spain.

Part Two is composed of three papers that analyse the consequences of the global and European crises on the financial system and the real economy. It also examines, from a theoretical and an empirical perspective, how the crisis was transmitted to other economies

In his paper "The Effects of the Global Crisis on Emerging Economies", Jean-Pierre Allegret first analyses the transmission of the global financial crisis to emerging economies and, second, he examines the responses of policymakers in emerging markets to this crisis. He shows that financial and trade linkages were the main transmission channels of the crisis, as the sudden capital outflows and the collapse in export demand severely affected emerging economies. The author emphasizes that the impact of the global crisis on emerging markets was relatively short-lived, in contrast with past crises, as the majority of developing markets (except the emerging European countries) were better equipped in terms of macroeconomic fundamentals—to respond to the current crisis with more counter-cyclical policy easing. Moreover, Allegret claims that the dramatic rebound of net capital inflows to emerging economies is now the main challenge for policymakers, as these capital flows raise many concerns for monetary policy and exchange rates. He thus suggests a more extensive use of capital controls to contain massive capital inflows, as implemented in Brazil and South Korea.

Ali Ari and Raif Cergibozan's paper "The Transmission of Financial Crises from Advanced to Emerging Economies: The Turkish Case" analyses, via logit models, the transmission channels of external shocks to the Turkish economy. The authors show that US interest rates representing global shocks and variables representing financial linkages had a significant impact on the occurrence of crises in Turkey. Therefore, they affirm that even if the Turkish economy seems more stable in the post-2001 period, it still remains vulnerable to external shocks as the May 2004, May 2006 and October 2008 events confirmed. According to the authors, the economic growth strategy, which is heavily dependent on export earnings and short-term capital inflows, is the main reason behind the problems of external vulnerability for the Turkish economy.

In their paper "European Automotive Industry: Before and After the Global Financial Crisis", Adem Baltaci and Huseyin Burgazoglu focus on the impact of the global financial crisis on the real sector, particularly on the European automotive industry. Through a descriptive analysis, they show that like other manufacturing sectors, the automotive sector in the EU—the biggest motor vehicle manufacturer in the world—was severely affected by the global crisis, in terms of production, export revenues, employment and new car sales. They show that the competitiveness of the sector was nevertheless affected positively by both the global financial crisis and the European debt crisis.

Part Three, composed of three papers, assesses the effectiveness of policy measures taken to fight the global and the European crises.

Cemil Erarslan and Yuksel Bayraktar's paper, entitled "Efficiency of the FED's Monetary Policy during the Global Financial Crisis", assesses the effectiveness of monetary policies pursued by the FED in fighting the global financial crisis. Firstly, the authors show that the occurrence of the 2007-2008 financial crisis in the US economy was caused by inconsistencies in the FED's monetary policy. On the other hand, they show that the traditional and unconventional monetary policy implemented by the FED during the crisis was quite successful in preventing a further deepening of the crisis within the US financial system. Here, the authors emphasize the importance of buying troubled assets on financial markets in order to resolve the current crisis, even if this policy places the burden of the crisis on the taxpayer. Finally, the authors underline the fact that international coordination with other central banks would increase the effectiveness of monetary policy in fighting the global financial crisis.

In his paper "A Note on the New Monetary Policy of the Central Bank of Turkey", Fatih Ozatay discusses the new objective imposed on central banks, in the aftermath of the global financial turmoil: monetary policy should focus on financial stability in addition to price stability. Through the example of the Central Bank of Turkey (CBT), Ozatay analyses a new monetary policy framework designed with two ultimate aims, the development of appropriate policy tools and new institutional setups. He shows, through an analysis of the Turkish case, that inflation targeting and macroprudential policy can undermine each other's effectiveness if appropriate monetary policy tools are not selected. He also states that to develop an effective monetary policy, which aims at both price and financial stability, appropriate institutional arrangements should be implemented, with the responsibilities and powers of the institutions clearly identified.

In their paper "Central Banking since the Eighties", Philippe Gilles and Cecile Bastidon assess—from a historical perspective—the evolution of central banking and monetary policies and the emergence of several financial crises over the last three decades. They show that until the global crisis, the role of central banking was limited to conventional lending of last resort, with only minor variants. In contrast, in the current crisis, central banks have been forced to adopt so-called "unconventional monetary policies" which are threefold: large official interest rate cuts, new credit facilities and large asset purchases. However, a worsening of central banks' credibility may occur as a result of the implementation of unconventional monetary policies, as central banks purchase part of the government bonds issuances, required to finance the banking sector rescue programmes and recovery policies, in order to maintain the desired level of liquidity. The authors conclude that crisis management monetary policies should be strictly limited in time and that central banks should conduct a particularly careful monitoring of market liquidity indicators. which are for the most part, correlated to the interbank market.

Part Four, composed of three papers, evaluates the policy options available to exit the European debt crisis. It also proposes economic policy actions and structural measures to counteract global or common shocks in the future.

The paper "The European Crisis and its Reflections on Turkey" prepared by Ali Ari, Mehmet Hondur, Muhsin Kar, Kivilcim Metin Ozcan, Guray Vural and Dilek Yigit, aims firstly to identify the causes of the European debt crisis. The authors show that the Eurozone structural problems and expansionary fiscal measures taken to offset the negative impacts of the global crisis were the main causes of the European debt crisis. The paper also examines the policy measures taken to fight the crisis, and their effects on the financial market and the real economy. The authors show that emergency expansionary policies could not offset the

effects of the crisis on the real economy, but that structural reforms have been relatively successful in re-establishing confidence in the financial markets and in overseeing a slight recovery in the real sector. Finally, the paper evaluates the following four probable exit scenarios from this ongoing crisis: monetary expansion, fiscal austerity, exit from the EMU, and fiscal transfers from Northern European countries to Southern ones. The authors conclude that Europeans need to make a quick decision, and that the solution is closely related to the following questions: which option will result in the least cost, who will shoulder the burden of the crisis, and what future do Europeans imagine for themselves?

Eleftherios Thalassinos' paper, entitled "Country Risk and Financial Crisis", analyses the concept of country risk and its evolution since the 1980s. The author shows that credit ratings assigned to a particular country by rating agencies actually plays an important role in the opinion-making of investors about a country. Bearing this in mind, such ratings may lead to a crisis in a country by influencing capital flows. As stated by Thalassinos, even if a country's risk is affected by many "objective" determinants including domestic and external political, economic and financial factors, the rating is not free of "subjective" elements, and the scoring systems of different agencies do not necessarily converge, as can be observed in the current global crisis. The author adds that the ratings have a pro-cyclical effect, which can encourage speculation. Therefore, some necessary reforms should be implemented.

In her paper "De-coupling in Global Economic Activity: Trends and Some Predictions for the Future", Sumru Altug discusses the phenomenon of "de-coupling" in the recent global financial crisis and its aftermath. Through a series of graphs, she shows that a form of de-coupling exists in global economic activity, as developing and developed economies performed quite differently during the global crisis. She states that cyclical fluctuations are driven by a complex set of factors. While the nature of trade and financial links and the role of alternative policy regimes have often been considered, country-specific and idiosyncratic differences also imply a role for institutions in the transmission of global or common shocks, especially informal institutions such as norms, codes of conduct or other behavioural factors. Lastly, the author affirms that with increased globalisation, the future of both emerging and developed economies will depend on their mutual reactions and institutional changes. In this sense, Altug suggests a policy for sustainable development which focuses on both macroeconomic indicators and the institutional and cultural environment.

#### References

- Bernanke B.S. 2010, "Monetary Policy and the Housing Bubble," *Speech at the Annual Meeting of the American Economic Association*, Atlanta, GA, 3 January.
- Aït-Sahalia Y., J. Andritzky, A. Jobst, S. Nowak and N. Tamirisa 2010, "Market Response to Policy Initiatives during the Global Financial Crisis", *NBER Working Paper*, 15809.
- Bénassy-Quéré A., B. Coeuré, P. Jacquet and J. Pisani-Ferry 2009, "The Crisis: Policy Lessons and Policy Challenges", CEPII Working Paper, 2009-28.
- Blanchard O. 2009, "The Crisis: Basic Mechanisms, and Appropriate Policies", *IMF Working Paper*, 09-80.
- European Commission 2009, "Economic Crisis in Europe: Causes, Consequences and Responses", *The European Economy Series*, 7.
- Darvas Z. 2012, "The Euro Crisis: Ten Roots, but Fewer Solutions", Bruegel Institute Policy Contribution, 2012-17.
- Obstfeld M. and K. Rogoff 2009, "Global Imbalances and the Financial Crisis: Products of Common Causes", *CEPR Discussion Papers*, 7606.
- Siebert A. 2010, "Global Imbalances and the Financial Crisis", *European Parliament Policy Note*, IP/A/ECON/FWC/2009 040/C7.
- Wolf M. 2012, "Why the Eurozone Crisis is not Over", Speech at the Peterson Institute for International Economics, Washington, DC, 3 May.

# PART I:

# **CAUSES**

### CHAPTER ONE

## GREECE IN THE GREAT DEPRESSION AND THE EUROPEAN DEBT CRISIS: TRANSMISSION AND PROCESS

AYFER GEDIKLI
ISTANBUL MEDENIYET UNIVERSITY
AND ABDULLATIF CEVIKER
ISTANBUL MEDENIYET UNIVERSITY

#### 1. Introduction

It is the "Holy Grail" for economists to analyse the macroeconomic effects of the Great Depression. The effects of the 1930s were so deep that economic science broke with the traditional "classical school" and launched Keynesian economics to overcome the effects of the Depression (Bernanke, 1994). In particular, monetary shocks and budget deficits played an important role in the Great Depression. Although those shocks had a destructive effect upon all economies, these effects were much deeper in developing countries such as Greece. Nowadays, according to some economists, the world is experiencing a second depression. When we compare the Great Depression with the current global crisis and European debt crisis, it is obvious that we understand the challenges of the world's economic system very poorly, and that we may indeed be prisoners of our own traditional beliefs. Thus, in this paper, we aim to understand the transmission channels and the influence of the Great Depression and the global financial crisis on developing countries, particularly on the Greek economy, via an analysis of the impact of fiscal and governmental policies.

Before explaining the transmission channels of the two crises to Greece, it is necessary to give a theoretical explanation of the nature of contagion. In the recent literature, contagion is defined as the transmission

of economic shocks and fluctuations from one country to another. A broad definition of contagion for the World Bank is "the cross-country transmission of shocks or the general cross-country spillover effects".

Moser (2003) defines financial contagion as a result of adverse shocks that have the potential to trigger financial crises. Further, Fratzscher (2003) defines contagion as the "transmission of a crisis to a particular country due to its real and financial interdependency with countries that are already experiencing a crisis". More specifically, contagion is a process observed through co-movements in exchange rates, stock prices, sovereign spreads, and capital flows.

In the last 30 years, open economy activities and globalisation have led to closer relations between countries. Some crisis transmission problems and volatility have arisen, due to these close relations, such as common creditors and the actions of investors operating in international financial centres. Furthermore, trade links, regional patternships, and deep connections between economies and macroeconomic similarities make countries vulnerable to volatility. Microeconomic conditions, institutional factors, and the actions of specific financial agents are also effective in spreading shocks (Dornbusch et al., 2000).

The IMF categorises crisis transmission channels into two groups: country-specific factors and common factors. Country-specific factors include a country's vulnerability, its economic characteristics, and its trade and financial links. Financial stress can increase as a reaction to capital outflows following a financial strike. In addition, financial stress can increase as a result of asset losses in a country that has invested in the country which is in crisis (IMF, 2009).

Common factors comprise commodity prices, global output and interest rates. These can also be called global factors, and may be manifested in herd market behaviour, cross-country contagion, and common lender effects (the blanket withdrawal of funds by highly exposed financial institutions). The process of contagion by spreading market disturbances from one country to another can be explained by investors' irrational behaviour, or the "herding" effect. In many ways, a crisis results in large capital losses for international institutional investors. These losses may induce investors to sell off securities in other markets to raise cash in anticipation of the higher frequency of redemptions. Commercial banks may also face liquidity problems when there is a great outflow in the financial sector. If there is such a panic, investors exert pressure in order to pull their funds urgently. This situation may lead banks to experience difficulty satisfying the demands of their clients. Liquidity and incentive

problems can also be considered as financial links in contagion (Dornbusch et al., 2000).

Like the IMF, the World Bank classifies the transmission of a crisis in terms of fundamental links and herding behaviour. Fundamental transmission links cover both real and financial links. Fratzscher (2000), Camarazza et al. (2000) and Kaminsky and Reinhart (2003) highlight the financial channel. The greater the degree of financial integration, the more extensive the contagious effects of a common shock or a real shock to another country. Under these circumstances, local and global shocks can be transmitted across countries because of their financial linkages. For example, if the collateral value of leveraged institutions falls, because of a negative shock in one country, leveraged companies need to increase their reserves. To fulfill this transaction, they need to sell their valuable holdings in countries which are as yet unaffected by the crisis. This transaction transmits the shock to the target countries.<sup>2</sup> Balakrishnan et al. (2009) show that the current crisis affected all segments of the financial system, and spread to all major regions in both advanced and emerging economies. Nearly 70% of the stress experienced in advanced economies was transmitted to emerging economies, and transmission was fast. Differences among emerging countries in the degree of transmission were associated with the extent of these financial linkages, and were generally measured according to the stock of foreign liabilities to advanced economies. Bank lending, portfolio flows, and direct investments were important channels in the transmission of the current crisis. In fact, the most virulent responses to the crisis were initially experienced in Emerging Europe, which has strong banking linkages to Western European banks (Balakrishnan et al., 2009).

On the other hand, transmission of a crisis can occur through real/trade links. Glick and Rose (1999), Eichengreen and Rose (1999), Forbes (2001) emphasize trade links as the mode of crisis transmission. Real links represent the basic economic relationships among economies, and these are mostly associated with international trade. Real links of contagion can be explained as affecting the economic fundamentals of a related country through trade links and currency devaluations in an economy where local shocks occur. Strikes of banks, firms or industries, the spread of business fluctuations across economies, and the diffusion of technology and growth convergence across countries are all are categorised as fundamental links. Because of the financial crisis in the source country, the major trading

<sup>&</sup>lt;sup>1</sup> For further information, see Eichengreen et al. (1996), Dornbusch et al. (1999), Khan et al. (2005), Kaluza (2010).

<sup>&</sup>lt;sup>2</sup> World Bank, http://go.worldbank.org/JIBDRK3YC0

partner of that country encounters a sharp currency depreciation that may result in declining asset prices and large capital outflows, initiated by investors in advanced economies following a crisis (IMF, 2009).

In parallel with these problems, the partner country could become the target of speculative attacks as investors anticipate a decline in exports to the crisis country, and these attacks may lead to a deterioration in the trade balance. The herding effect is due to international investors. Speculative trading by the behaviour of agents determine, for the most part, the change in prices which can lead to the spreading of shocks. After a shock strikes a country (or a group of countries), a significant change in asset prices in the local economy is to be expected (Kaluza, 2010). According to Corsetti et al. (1999), a game of competitive devaluation can result in deep and harmful currency depreciation. If market participants expect that a currency crisis will lead to a game of competitive devaluation, their intention is to sell their security holdings in other countries, curtail their lending, or refuse to roll over short-term loans to borrowers in those countries (Dornbusch et al., 2000). To overcome the harmful effects of the contagion of a crisis, countries may launch economic policies to immunise themselves, such as high trade barriers, tariffs or certain acts or agreements.

This paper is organised as follows: Section 2 analyses the Greek economy in the great depression years. Section 3 proposes a review of the Greek economy over the last decade. Finally, Section 4 concludes with a comparison of the impact of these two crises on the Greek economy.

### 2. The Greek economy in the Great Depression years

### 2.1 The Great Depression: Facts and process

The Great Depression lasted from 1929 through to 1939. Most economists agree that shocks to the domestic US economy were a primary cause of both the US and the world depressions. Friedman and Schwartz (1971) note that during the period of August 1929 to August 1931, the US transmitted the depression to the rest of the world. They refer to US gold stocks, the flow of gold, whether the US adhered to gold standard rules, and to the balance of payments. On the other hand, according to data from the Federal Reserve Bulletin of June 1933, between August 1929-August 1931, US reserves increased from 3.995 billion to 4.632 billion US\$, and total reserves for the world (fifty countries) increased from 10.250 billion to 11.297 billion US\$. Hence, gold reserves outside the US increased from 6.255 billion to 6.665 billion US\$. From this data, one can conclude that