The Debt Crisis – Causes and Implications

Ana-Maria Minescu

Unicredit Tiriac Bank, Str. Grigore Mora, nr. 37, Bucuresti sector 1, 011888
e-mail: ana.minescu@unicredit.ro

Abstract

The recent global crisis had multiple causes: The general cause appears to be a rapid growth of the level of debt (especially in the case of households), accompanied by sharp increases in real estate prices. However, the complexity of the crisis was increased by the existence of individual reasons in each country. The article aims to synthesize some of the most important reasons that led to the current crisis – both general and country-specific (USA, Iceland, Ireland, Greece, Portugal, Spain). Last but not least, the article analyses some of the implications of the crisis for the markets and for the regulators.

Key words: European debt crisis

JEL Classification: G01, F33, F34

Introduction

The financial crisis that hit the global economy in 2007 and is still continuing in 2011 has been the largest such crisis in the post-world war period. Its implications have been so numerous and some of them so radical that understanding this crisis has become a necessity for all of us. Having started as a liquidity crisis, it developed to the extent that it generated a recession in many countries, and it has had implications not only on the banking system, but also on the real economy and on the economic dynamics. The current article aims to make a synthesis of current research on this topic with regard to the multiple causes of the recent crisis (in the USA and in Europe) and to its implications.

Causes of the Crisis

Despite the unprecedented global reach of the recent crisis, the European Commission (2009) believes some of its causes are similar to causes of previous crises, such as the Asian crisis in late 1990s or the crisis of the Nordic countries in the early 1990s. The common feature was that all these crises were preceded by “long periods of rapid credit growth, low risk premiums, abundant availability of liquidity, strong leveraging, soaring asset prices and the development of bubbles in the real estate sector”. Indeed, McKinsey (2010) made a quantitative and qualitative analysis of the evolution of debt levels during the pre-crisis period in several countries in the world, which revealed that after 2000 debt grew significantly in most mature economies,
“enabled by the globalization of banking and a period of unusually low interest rates and risk spreads”. The borrowing increased substantially in the case of households, especially through home mortgages. The household debt level increased significantly relatively to the household disposable income, which was ignored because the ratio of debt to assets appeared stable before the crisis due to the rising house prices. The level of debt was less worrying at the start of the crisis with regard to the business sectors, with the exception of the commercial real estate sector and some banks.

Coming back to the level of debt, the McKinsey (2010) piece of research also quantified the structure of debt for a selection of 10 developed countries and 4 emerging countries in 2008. These results are summarized in the chart below, which shows what percentage of the debt of each country was issued by government, financial institutions or non-financial institutions, and what percentage of a country’s total debt is represented by household debt. All the numbers represent a percentage of the country’s GDP.

![The sectoral composition of debt across economies](image)

**Fig. 1.** The structure of debt for several countries as of 2008, as % of GDP. (Source: McKinsey (2010) report).

These numbers have also been used by the Economist (2010a), which took the previous study further by analysing the dynamic of the increase of the government debt in analysed countries. Thus, in the 10 developed countries, the total debt increased from 200% of GDP in 1995 up to 300% of GDP in 2008. Some countries displayed even higher increases in the ratio between debt and GDP, such as 1200% for Iceland and 900% for Ireland. In the case of the latter two countries, the debt level proved unsustainable and pushed them into crisis in 2010. The chart shows that the countries for which the ratio between debt and GDP reached the highest level are the peripheral countries of the Eurozone (Greece, Portugal, Italy), but also USA, Japan, Canada and others. The countries with the lowest ratio of debt to GDP in the sample were Russia, India and China, which also happened to have a spectacular recovery recently following the crisis.
At a more specific level, each of the countries hit by the recent financial crisis had individual causes which influenced the development of the crisis both in specific countries and overall, since in some situations a strong contagion effect of the crisis could be noticed.

With regard to the specific country reasons detailed below, several economic indicators may be mentioned. The charts below detail the evolution of these economic indicators for the countries included and for the period 1995 – 2011. All data is available from the IMF and it is updated as of October 2010:

![GDP % change for a selection of countries, 1995 – 2011](image)

**Fig. 2.** GDP % change for a selection of countries, 1995 – 2011

Source: IMF Database

Note: The numbers represent the percentages of year-on-year changes for the constant price GDP. The numbers for 2010 and 2011 are IMF estimates, updated as of October 2010.

![Current account balance for a selection of countries, 1995 – 2011](image)

**Fig. 3.** Current account balance for a selection of countries, 1995 – 2011.

Source: IMF Database.

Note: The current account includes all transactions other than those in financial and capital items. The major classifications are goods and services, income and current transfers. The focus of the balance of payments is on transactions (between an economy and the rest of the world) in goods, services, and income. The numbers for 2010 and 2011 are IMF estimates, updated as of October 2010.
The USA was the first country to be hit by the crisis, and this was due to a series of issues. Firstly, the large mortgage debts, which were mentioned above. Secondly, some large financial institutions in the USA were confronted with a gradual decline in the quality of capital, as “they had asset growth with increasing amounts of hybrid capital instruments, such as certain forms of preferred stock” (McKinsey (2010)). Such capital instruments were unable to compensate for credit losses during the crisis, which brought a degree of vulnerability for those financial institutions in front of the crisis. Thirdly, instead of keeping loans on their own balance sheets, the banks moved towards the “originate and distribute” model, which led to a decline in lending standards (Brunnermeier (2009)). The banks used to create diversified portfolios of credit instruments (mortgages, corporate bonds, credit card receivables etc), then slice these portfolios into a number of tranches and sell these slices to various categories of investors. Each slice used to receive a credit rating from rating agencies and as a result, the slices were ranging from the superior senior tranche (the safest tranche, AAA credit rating, the first in line to be paid out of the cash flows of the portfolios, but with the lowest interest rate) to the equity tranche (the most...
junior tranche, lowest credit rating among the tranches, the last in line to be paid out of the cash flows of the portfolios, but with the highest interest rate). The low lending standards generated by such actions from the banks, combined with the cheap credit available at that time “resulted in the housing frenzy that laid the foundations for the crisis”.

Iceland’s specific reason behind the financial crisis was, according to The Economist (2008), the fact that it had “built a financial house of cards”. “Iceland represents an extreme case of a huge financial system towering over a small economy”. Behind the encouraging image of low unemployment, income per person above the average in the European Union, huge investments in green energy and inflows of foreign investment, the country’s 3 largest banks and its households built huge amounts of debt. The credit crisis was enough to make Iceland’s banking system, its credit rating and its currency all collapse at the same time. As a result, Iceland’s GDP fell by 15% from its top point to the bottom reached during the crisis.

Ireland also proved to be different with regard to the way in which it was hit by the crisis. Morgan Kelly, an economist at University College Dublin, cited by The Economist (2011a), said that “What happened in Ireland was very boring. There were no complex derivatives or shadow banking systems. This was a good old 19th-century, or even 17th-century, banking collapse”. It appears that Ireland’s only reason to become hardly hit by the crisis was that during the previous decade, Ireland had “turned into a nation of property developers”. Ireland enjoyed average annual GDP growth of almost 10% between 1993 and 2000, which continued even afterwards, fueled by the low interest rates environment and excessive lending. Ireland’s fall started when property prices started falling in 2006 – 2007, and it continued with the crash of shares in Irish banks, the transformation of the banking crisis into a sovereign-debt crisis, the big rise in its borrowing costs and it culminated with Ireland’s acceptance of a bail-out from the EU and the IMF in November 2010 (the second such situation for a EU country). The rescue package received was EUR 85bn, out of which EUR 35 bn is aimed at recapitalising the Irish banking system. The cost of recapitalising the Irish banks has indeed proved to be significant. According to Deutsche Bank (2011), if the EUR 35bn amount previously mentioned would be fully used for this purpose, the estimated total cost of recapitalisation of Irish banks would reach 52% of Ireland’s 2009 GDP.

Greece was the first EU country to receive a bail-out from the EU and the IMF in May 2010, worth EUR 110bn. Some of its greatest issues have been its high level of public debt and its high budget deficits. As The Economist (2010c) noticed, in 2001 when joining the euro, Greece already had a public debt in excess of 100% of GDP. Adoption of the euro currency allowed more favourable terms for the refinancing of government debt, and the strong GDP growth masked the weakness of Greece’s public finances. Greece’s government debt reached 115% of GDP in 2009 and its current account deficit reached 14.6% of GDP in 2008. Greece had “leant too heavily on consumer spending” and relied on foreign capital to supplement its low savings (The Economist (2010c)).Nelson et al (2010) went into further detail and listed additional reasons behind the Greek crisis: high government spending, weak revenue collection, weak enforcement of EU rules regarding debt, and others. In addition to these facts, Greece also faced certain restrictions, such as: impossibility to devalue the currency due to the membership into the eurozone, and the lack of competitiveness of its economy partly due to overhiring and overpayment in the public sector (The Economist (2010d)). Last but not least, Nelson et al (2010) noticed that complex financial instruments may have played a role in helping Greece accumulate and conceal its debt. One implication of the Greek crisis was the contagion effect to other European countries. Even if these countries only shared few of Greece’s issues, investors still have become more prudent with respect to Portugal (which also has a high budget deficit), Spain (in need to restructure its economy) and Italy (heavily indebted).

Portugal increasingly started to be seen as a potential victim of the sovereign debt crisis following Greece’s crisis. Portugal’s weaknesses have been a large public debt and a high budget deficit, but its situation has been slightly different from that of Greece. Portugal enjoyed
rapid economic growth before joining the euro in 1999, but afterwards it has been impacted by a steady loss of competitiveness in wages. The 1990s have been a “lost decade for the economy” and as a result, it became difficult to manage the country’s public finances (The Economist (2010c)). Moreover, the further expansion of the European Union towards Eastern Europe in 2004 has diverted part of the foreign direct investment away from Portugal towards the new members. Investors expect April and June 2011 to be an important test for Portugal, as Portugal will need to refinance EUR 9.5bn of public debt then. The yield of 6.7% paid by Portugal for the ten year bonds sold in January 2011 is very close to 7%, which some Portuguese officials have declared that is not a sustainable level (FT, 7th Jan 2011).

Spain also started to be seen as a potential victim of the sovereign debt crisis following Greece’s crisis, even if Spain’s public debt level (at less than two thirds of its GDP) is not large relatively to the other countries. However, Spain’s problems lay with its local banks (cajas) and its housing bust. According to The Economist (2010b), Spanish banks have outstanding loans of EUR323bn to property developers (equivalent of 31% of GDP); and they already had provisions of EUR87bn for bad loans by the end of 2010. Deutsche Bank (2011) explains that in addition to this exposure of the banking system to the constructions sector, Spain is also negatively impacted by the highest level of unemployment among the major developed countries. In this respect, Spain is similar to Ireland. Deutsche Bank (2011) also highlights the major differences between the Irish and Spanish banking systems: the better condition of the two largest and internationally diversified Spanish banks (vs the major Irish banks), the heavier reliance of the Irish banks on inter-bank sources of funding, the stronger banks’ overall capital adequacy before the intensification of the crisis in Spain vs Ireland.

Implications of the Crisis for Europe

The implications of a crisis can be numerous and they can refer to the financial sector, the real economy, regulations etc.

As Cogman & Dobbs (2008) pointed out, the impact of previous crises on the real economy has not always been the same. The direction of the impact was due to the actions pursued by governments for recapitalizing banks, introducing stimulus measures and restoring investors’ confidence in the economy. According to Reinhart & Rogoff (2008), countries usually need two years in order to start recovering from past recessions after major banking crisis. However, there were several situations when a much longer period was needed for starting the recovery: Japan needed almost a decade (“the lost decade”) following the crisis in the 1990s; the USA also needed a longer time to start recovering after the Great Depression in 1929 – 1933, when 28% of GDP was lost.

Cogman & Dobbs (2008) suggest that one important aspect to assess is the impact that financial crises have on the availability of credit – in relation to this, the impact of a potential shortage of credit has on the real economy and on consumer confidence has to be assessed.

With regard to the availability of credit, the McKinsey (2010) report proved that 44 out of the 45 crises identified between 1929 – 2010 were followed by periods of deleveraging, where they defined deleveraging episodes as periods in which the ratio between total debt and GDP declined for at least 3 consecutive quarters and the total fall was at least 10%. Along these results, the report would expect that a series of sectors in some countries would deleverage in the near future (UK, USA, Spain, Canada and South Korea). The report also concluded that deleveraging episodes usually last 6-7 years and their initial years may also witness a recession.

On a different note, it is interesting to mention that Lund & Ruxburgh (2009) have tried to assess how the fortunes of the “power brokers” have changed following the recent crisis (McKinsey Global Institute defined in 2007 the “power brokers” to be four large groups of investors which seemed to have an edge over others: oil exporters, Asian sovereign investors,
hedge funds and private equity firms). Their conclusion was that in almost any scenario (depending on the future development of the crisis) the previously defined power brokers would remain significant players in the global capital markets. The big winners are the oil exporters and Asian sovereign investors, as the source of their wealth will persist: trade surpluses. As noticed by the authors, the rapid growth of hedge funds and private equity firms has stopped abruptly, but they are still expected to recover in the future.

With regard to Europe, the implications have also been very diverse and of a very diverse nature: the decoupling of the core European countries from the peripheral ones, the creation of the European Financial Stability Facility (EFSF), debates on the topic of European integration, debates on complex derivatives and their regulation, implications for the government debt issuance, and others.

As mentioned above, one important aspect of the crisis is that it has not impacted all European countries uniformly. In fact there is a big divergence between the core countries (Germany, France) and the crisis-hit peripheral countries (Greece, Ireland, Portugal and Spain): while the core countries have been enjoying an economic recovery since 2010, the peripheral countries are still struggling with recession. Being part of the same monetary union (i.e. the eurozone), they are governed by the same monetary policy. While all eurozone countries were at the height of a financial and economic crisis, there was no debate regarding the appropriateness of the monetary policy. However, following the recent divergence, such debates have increased, showing a difficult task ahead of the European Central Bank regarding the rising of the interest rate for the euro. The four main peripheral countries mentioned above do represent a significant 18% of euro area GDP. However, Germany and France together represent 50% of euro area GDP. (Deutsche Bank (2011))

One of the consequences of the financial crisis in Europe was the creation of the European Financial Stability Facility (EFSF) in June 2010 by the 16 euro area member states. The EFSF has been fully operational since August 2010 and its purpose is to finance loans for euro area member states which are experiencing difficulty in obtaining financing at sustainable rates (EFSF (2011)). EFSF will be able to borrow up to EUR 440 bn by issuing bonds guaranteed by the euro area member states, and it has received the best possible credit rating (AAA) from all three credit rating agencies (Fitch, Moody’s and Standard & Poor’s). The money borrowed through such bonds will then be lent to struggling euro zone countries.

EFSF issued its first bond on the 24th of January 2011 and met spectacular demand on this occasion, bankers not being able to recall such a large order book for any bond, government or corporate (EUR 40bn in orders vs EUR 5bn notional sold) (FT (2011b)). This first bond has been seen as a “landmark deal” and some investors said it could be “a precursor to the first common eurozone bond”.

The European Commission also agreed on the creation of a permanent crisis mechanism: the European Stability Mechanism (ESM). ESM will become operational in 2013 when the EFSF expires and it will build on the existing EFSF. The aim of ESM will be to support countries of the euro zone which may find themselves in financial distress. ESM loans will enjoy preferred creditor status and they will be junior only to IMF loans (EFSF (2011)).

The recent crisis also brought changes in the government debt issuance practices in the 16 euro zone countries. Before the crisis, these practices had converged to a common standard which involved placement of long-term, fixed rate debt denominated in national currency via competitive auctions. De Broeck & Guscina (2010) have proved that after mid-2008 this standard could not be followed anymore, because of the increase in sovereign funding needs and the fall in investor risk appetite, which made risk premia rise. They performed a research on a sample of 3,000 debt issuances by governments in the euro zone and Denmark in 2007 – 2009, which was divided into a pre-crisis period (mid-2007 to mid-2008) and a crisis period (mid-2008 – Dec 2009). The main findings of the research were that the new standard for issuing
government debt in the countries studied was defined by shorter maturities (because such debt is less risky for the investor), foreign currency denomination (because such debt shifts currency risk exposure from the investor to the debtor), and/or floating rates (because such debt transfers the risks related to changes in global interest rates and in the country’s perceived creditworthiness from the investor to the debtor). Therefore, the impact of the crisis was that it has forced governments to assume additional risk. This negative effect was especially pronounced in countries with high deficit and high debt. De Broeck & Guscina (2010) concluded that the mentioned change in the standard for government debt issuance allowed governments to deal with the reduced risk appetite of investors and to limit the impact of high deficits and debt on interest payments, but at the same time exposed them to significantly higher risks of refinancing and repricing, and sometimes to exchange rate risk as well.

One other implication of the crisis was that the use of complex financial instruments has been more and more questioned, and so were the financial regulations that are concerned with them. Nelson et al (2010) remind that during the crisis, the Greek governments used derivatives to conceal the true level of Greece’s debt. For example, they traded currency swaps through which they were receiving upfront payments which under EU accounting rules could not be recorded as loans, even if in essence they were. Some do believe that derivatives played an important role in creating Greece’s debt crisis and as a result, an urgent need to tighten financial regulation for derivatives has been identified.

Last but not least, on a global level, the development of the crisis also brought critics of the credit rating agencies. As stated in a previous article (Minescu (2010)), following each financial crisis there has been a lot of talk on the failure of ratings issued by credit rating agencies to predict the crises. This failure may be understood in multiple ways, such as: failure of a rating to predict default, failure of a rating to be stable, failure of multiple agencies to issue similar levels of credit rating for the same country at the same time, or failure of an agency to issue a rating in the correct category of ratings (ie investment grade or junk). Talk of the failure of ratings has been central to this recent crisis as well and in August 2007 the head of Standard & Poor’s even resigned amid criticism received from politicians and investors about the agencies’ failure to signal the risk of securities backed by sub-prime mortgages. As a result of the new wave of critics directed at rating agencies during this crisis, regulators are again aiming to improve the legislation concerned with conflicts of interest that result from the business models used by certain agencies (FT (3rd Feb 2011)).

**Conclusions**

The recent global crisis had multiple causes: The general cause appears to be a rapid growth of the level of debt (especially in the case of households), accompanied by sharp increases in real estate prices. In this respect, the crisis may have similarities with previous crises, such as the Asian crisis in the early 1990s. In addition to this, there have been individual causes for each country: In USA – the increased use of hybrid capital instruments and the adoption of the “originate and distribute” model by the banks, which involved the creation of diversified portfolios of credit instruments and their resale as a redesigned product; in Iceland – the huge growth of the debt to GDP ratio to 1200%, which led to the fall of local banks; in Ireland – the burst of the real estate bubble in the context of a debt to GDP ratio of 900% generated huge costs for recapitalizing the Irish banking system; in Greece – unsustainable budget deficits, lack of competitiveness of its economy due to overhiring and overpayment in the public sector, inappropriate use of complex financial instruments; in Portugal – large public debt and high budget deficit; in Spain – the housing bust and its negative impact on the Spanish banking system, and the highest unemployment rate among all developed economies. Several countries have already received external help from the IMF and other organizations: Greece, Iceland, Ireland etc.
The implications of the crisis have also been very complex: lower availability of credit, the decoupling of the core European countries from the peripheral ones, the creation of the European Financial Stability Facility (EFSF), debates on complex derivatives and their regulation, implications for the government debt issuance, criticism of the credit rating agencies for failing to predict the crisis, and others.

References

17. The Economist (2010b): Lessons from Iceland. Coming in from the cold. – Iceland has been tough with creditors and kind to itself. Ireland may wish it had done the same.”, from The Economist print edition, 16th Dec 2010.
18. The Economist (2010c): “Greece’s sovereign-debt crunch. A very European crisis. – The sorry state of Greece’s public finances is a test not only for the country’s policymakers but also for Europe’s, from The Economist print edition, 4th Feb 2010.
20. The Economist (2011a): Ireland’s crash. After the race. – Once among the richest people in Europe, the Irish have been laid low by a banking collapse and the euro zone’s debt crisis. What now?, from The Economist print edition, 17th Feb 2011.

Criza creditului – cauze și implicații

Rezumat

Recenta criză globală a avut numeroase cauze; cauza principală pare să fie creșterea rapidă a datoriilor (în special în ceea ce privește persoanele fizice), însotită de creșteri spectaculoase ale prețurilor imobiliarelor. Însă complexitatea crizei a fost amplificată de existența unor motive individuale în fiecare țară afectată. Acest articol își propune să sintetizeze câteva dintre cele mai importante motive care au dus la criza curentă – atât generale, cât și specifice fiecărei țări în parte (SUA, Islanda, Irlanda, Grecia, Portugalia, Spania). Nu în ultimul rând, articolul analizează câteva implicații ale crizei pentru piețele de capital și pentru legiuitori.