

Mitigating the Euro Crisis





European Financial Stability Facility (EFSF) and European Stability Mechanism (ESM) have been deployed to ease the funding problems of the peripheral countries which are facing issues servicing their debt. In the near future, both these funding mechanisms, along with other steps, will become important tools in resurfacing the sinking European economy.

The Euro crisis was triggered post the global financial crisis of 2008 due to a number of contributing factors such as, the lending rates being similar due to the common currency for countries with poor public finances and countries with strong public finances and leadership; the interconnectedness of Eurozone financial system and currency movement inter alia. The presence of a monetary union, without any implementing institutions or mechanisms due to political logjam, led to the Euro crisis reaching levels wherein peripheral economies found it difficult to raise debt. This led to the bailout of Greece, Portugal, and Italy whereas Spain has appealed for a bailout for its banks. These factors have also affected the stronger economies leading to the recent downgrade of Germany. Hence, to contain this crisis, a funding mechanism was undertaken known as European Financial Stability Facility (EFSF) which will be eventually replaced by a more efficient mechanism known as European Stability Mechanism (ESM) which is in the pipeline.

European Financial Stability Facility (EFSF) was financed by members of the Eurozone to curb the European sovereign-debt crisis. Its major task is to provide monetary assistance to the struggling Euro zone countries

European Financial Stability Facility (EFSF) became fully operational on 4 August, 2010. It was financed by members of the Eurozone to curb the European sovereign-debt crisis. Its major task is to provide monetary assistance to the struggling Euro zone countries. EFSF is backed by guarantee commitments from the euro area Member States for a total of €780 billion and has a lending capacity of €440 billion. This facility comes in action only when a struggling country applies for assistance following a country programme negotiation with the major financial institutions and only then is the loan approved. However, there were many shortcomings of this facility which gave rise to the need for a better and more efficient mechanism called European Stability Mechanism (ESM).

The ESM will have a total subscribed capital of €700 billion, of which €80 billion will be paid in capital and €620 billion callable capital, while it will have a lending capacity of €500 billion and is expected to come in force on 1 July, 2013. The uniqueness of ESM is the capital structure which is more efficient than that of EFSF. ESM has the facility of callable capital which allows ESM to call for capital whenever the need arise, whereas, EFSF undertakes fixed guarantee commitments from financing countries restricting its funding capacity. ESM is expected to fast track the process of curbing the Euro crisis, as any major event in the Eurozone will have a bearing on economies around the world.

This paper presents the details of these funding steps that have been undertaken in order to mitigate this crisis

Euro Sovereign Crisis



Euro Sovereign Crisis is a term which describes Europe's ineffectiveness to pay the debts it has built up over the recent decade. Five major countries of the region – Greece, Portugal, Ireland, Italy, and Spain (GIIPS) – were allowed to borrow money at same low interest rates as other rich and financially prudent countries of European Union, but have failed to generate enough economic growth to make their ability to pay back debt holders. Although these five were seen as being the countries in immediate danger of a possible default, the crisis has far-reaching consequences that extend beyond their borders to the world as a whole.

This is one of most important problems facing the world economy, but it is also one of the hardest to understand.

Facts leading to Euro Sovereign Crisis

- 17 adopted the euro, which caused the interest rates to fall drastically and the confidence of investors surged in these countries as compared to the other more stable member of Europe.
- Due to this surge in confidence and low interest rates, domestic demand increased, causing the price of non-tradables to shoot up relative to tradables and of wages relative to productivity.
- Growth accelerated but mainly due to rise in domestic services, construction and expanding government, while exports stagnated and imports and the current account deficit soared amid abundant foreign capital.

These facts caused the other countries in Europe to expand their markets as they faced no competition from GIIPS. The growth pattern adopted by GIIPS was flawed and eventually, the domestic demand bubble burst. This scenario was present in all the peripheral countries comprising of GIIPS but the details and the time of burst varied. For example, Italy and Portugal saw the growth peak and the downfall early than their counterparts, while Greece, Ireland and Spain enjoyed their growth for a decade after which they went into a downfall during the global crisis.

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Current Situation

Due to crisis, Eurozone is currently ailing with:

- High debt levels and public deficits.
- Weakness in European banking system.
- Economic recession and high unemployment.
- Persistent trade imbalance within the Eurozone.

It also faces a political crisis. There are several disagreements among Germany, France, and the European Central Bank (ECB) over the appropriate response towards the crisis and complex European Union (EU) policy-making processes, causing anxiety in markets to intensify. Direct or indirect result of the crisis is that the governments in several European countries have also fallen.

Impact of Euro Sovereign Crisis on GIIPS



Ireland



Facts leading to crisis

- Ireland was an already booming economy before 1990s; adoption of Euro just gave an unsustainable boost. From 1995 to 2000, growth in Ireland accelerated to an average of 9.6% per year, and interest rates fell below German levels by 2005. This rapid growth and a European monetary policy that was far too loose for Ireland fueled the enormous overleveraging of the financial sector.
- From 1997 to 2006, housing completions grew by 9.6% a year, and by IMF calculations, Irish house prices grew by 90.0% more than fundamentals predicted, compared to 28.0% in Spain.
- In just ten years of adapting to Euro, financial and monetary institutions expanded their balance sheets by approximately 750.0% of GDP, and by 2007, gross financial exposure had reached nearly 1,400.0% of GDP, whereas in other GIIPS, balance sheets expanded by only 100.0% of GDP and exposure averaged close to 200.0%.

The crisis

- When crisis struck Ireland in 2008, in the next two years, domestic demand, investment and housing prices fell by 16.0%, 40.0% and 30.0% respectively.
- In June 2009, bank losses estimated for 2010 were as high as 35 billion euros, or 20.0% of GDP; with that of Anglo Irish Bank being the biggest loss in Irish history at 12.7 billion euros.
- Government contributed 13.9% of GDP as financial sector stabilization costs through 2009, which are the highest of any advanced country.
- Additionally output losses and increased unemployment caused the tax revenues to go down by 11.6% in 2009. This, along with public support of the financial sector, caused the government balance to go into deficit up to -14.8% of GDP in 2009.

Portugal



Facts leading to crisis

- The Euro's adoption led interest rates to fall sharply in Portugal from an average of 12.3% in 1991–1995 to about 6.0% in 1996–2000 which encouraged consumption.
- After formal adoption of the euro, monetary policy in the Euro area, was too loose for Greece, Spain, and Ireland, who saw housing booms, while it too tight for Portugal, where housing investment as a percentage of GDP had declined over time and inflation had dropped. Household and non-financial sector debt more than doubled in percentage of GDP terms between the mid-1990s and 2002.

The crisis

- External borrowing's role in financing consumption and investment caused the current account deficit to soar to 9.0% in 2000, up from near-zero in 1995.
- Moreover in Feb. 2012, the Portuguese government projected that the country's economy would contract by 3.3% in 2012.

- Portugal's 10 year bonds have yields above 11.9% for the past four months starting March 2012 and have topped 13.0% several times. If the country follows the same timeline as Greece, Portugal could suffer a serious financial crisis before the end of the year.

Greece



Facts leading to crisis

- Adoption of Euro caused inflation to fall from an average of 18.0% from 1980–1995 to just above 3.0% from 2000–2007, which stabilized Greece's economy thereby making it an attractive destination for foreign capital.
- Current account deteriorated from -3.7% of GDP in 1997 to -14.4% of GDP in 2008 and domestic demand surged due to surplus of cheap capital.
- Domestic demand growth drove up prices in Greece relative to that of the Euro area, increasing domestic labor costs and eroding Greek competitiveness. Competitiveness was hurt further by a shift away from manufacturing sectors in favor of the expansion of service and non-tradable sectors.
- As tax revenues rose, the government rapidly expanded spending, especially in social transfers and public sector wages. From 1997 to 2008, Greece increased government spending per capita by 140.0%, compared to 40.0% in the Euro area.

The crisis

- Since 1997, consumer prices have risen by 47.0% in Greece, compared to an increase of only 27.0% in the Euro area; while since 2000, per capita employee compensation has grown by over 80.0% in Greece compared to an increase of 23.0% in the Euro area.
- Social transfer spending rose from 13.9% of GDP to 18.9%, while the other countries in Euro area decreased such spending from 17.1% to 16.1% in the period of 1997 to 2008.
- With debt increasing from 96.0% of GDP in 2007 to 115.0% in 2009 and the IMF projecting it to reach nearly 150.0% by this year, Greece's borrowing costs shot up.

Spain



Facts leading to crisis

- At its peak, construction value-added reached 17.0% of GDP. Spain's housing prices more than doubled, and, at the peak in 2006, Spain constructed more homes than the UK, Germany, France, and Italy combined.
- Due to adoption of Euro, interest rates plummeted and confidence increased which lead domestic demand and inflation to rise more than 1.5 times faster than the Euro area average.
- The price of all non-tradable activities rose which was comparable to that of tradable causing the investment and labor to get pulled into these non-tradable sectors soaring the wages higher than in other Euro area members, which was more than the productivity.
- Swelling in tax revenues from 2005 to 2009 made the government capable to increase its spending up to 7.5% of GDP.
- Spain's weak productivity performance was due to rapid expansion of Spain's government sector which is smaller than that of some other large European countries.

The crisis

- Despite its surge in productive capacity, exports as a share of GDP fell by 3.0% points from 2000 to 2008 in Spain.
- Spain's hourly labor costs have been increasing by 1.0% every year which has caused the average cost of labor per unit of output to rise by more than 30.0% since 2000, whereas Germany's wages have grown roughly in sync with productivity.
- In 2009, the fiscal deficits reached 11.4% of GDP, comparable to that of Greece and more than double that of Italy. Spain's \$125.0 billion bailout approved by the European Union will increase its debt to GDP ratio by 10.0% which is 80.0% currently by the end of 2012. Though Spain's debt-to-GDP ratio remains among the lowest in the Euro area, it is rising more rapidly than in any other country.

European Financial Stability Facility (EFSF)

In the ongoing crisis, to bail the struggling countries out of it, it became necessary to form an organization with the objective of preserving financial stability in Europe by providing financial assistance to Eurozone states in economic difficulty. Thus a special purpose entity called European Financial Stability Facility (EFSF) was formed which was financed by members of the Eurozone to address the European sovereign-debt crisis. The basic structure EFSF was established on June 7, 2010 following its formation on May 10 as a result of the decision of the 16 euro area Member States. It became fully operational only on August 4, 2010. The EFSF is a temporary facility that can get into new support packages deals with the struggling countries as and when the need arise until June 30th 2013. In case of a financial operation, the EFSF would continue to exist until its last financial obligation has been fully repaid.

Functions

EFSF's key function is to provide temporary relief to euro-area members in difficulty in the form of monetary assistance at low rates which otherwise they wouldn't get due to their deficits. EFSF funds itself by issuing own debt instruments or by entering into other financing arrangements with financial and monetary institutions.

The EFSF can issue bonds or other debt instruments on the market with the support of the German Debt Management Office to raise the funds needed to provide loans to Eurozone countries in financial troubles, recapitalize banks or buy sovereign debt. Emissions of bonds would be backed by guarantees given by the euro area member states in proportion to their share in the paid-up capital of the European Central Bank (ECB). Another method by which EFSF finances itself is a Co-Investment Fund (CIF) which allows combination of public and private funding. It purchases bonds in the primary and/or secondary markets and comprises of a first loss tranche which is financed by EFSF. CIF provides funding directly to Member States through the purchase of primary bonds, this funding could, inter alia, be used by Member States for bank recapitalization. The CIF main aim is to create additional liquidity and to enhance market capacity to fund loans.

Operation

The Facility can only act after a support request is made by a Eurozone member state after which a country programme is negotiated with the European Commission (EC), European Central Bank (ECB) and International Monetary Fund (IMF). This covers strict conditions for budgetary discipline, economic policy and compliance. Once agreed, the euro area finance ministers approve a Memorandum of Understanding (MoU) that is then signed by the country and the EC. The main terms of the resultant Loan Facility Agreement are proposed by the EC while the technical details are dealt with by the EFSF. The terms of each loan are proposed by the EFSF, for approval by euro area finance ministers: the size of the loan, the amount available to be disbursed, the maturity, redemption schedule and interest rate.

EFSF is backed by guarantee commitments from the euro area Member States for a total of €780 billion and has a lending capacity of €440 billion. Initially the guarantee amount was €440 billion which on EU's request to the Eurozone countries was increased to €780 billion, majority of which was contributed by the AAA rated countries. In case of a default these countries and their tax payers will have to face the risk. The contribution of each country to a guarantee is based on the relative size of its ECB Capital Subscription, however once a country receives EFSF support, it becomes a "Stepping-Out Guarantor", which means that it can no longer contributes to future loan guarantees but the guarantee agreements which were initially made remain as it is even after the stepping out.

EFSF's key function is to provide temporary relief to euro-area members in difficulty in the form of monetary assistance at low rates

EFSF funds in its own name and its AAA rated by main three rating agencies and the criteria which is considered for the ratings is as follows:

- Over-guarantees by euro area member states of 120%.
- A cash reserve, which has three components – 50bp service fees, net present value of the margin charged on the loans and loan-specific buffer – is deducted from each loan and invested in high quality, liquid

The following table shows the top three contributors for EFSF funds:

In millions

Countries	Initial		Revised	
	Guarantee Commitments	Percentage	Guarantee Commitments	Percentage
Germany	€119,390.07	27.13%	€211,045.90	27.07%
France	€89,657,45	20.38%	€158,487.53	20.33%
Italy	€78,784.72	17.91%	€139,267.81	17.86%

Source: Credit Suisse, EFSF

Issues

There were various issues with EFSF which led to consideration of a new mechanism to solve the crisis efficiently and permanently. Some of these issues included- Firstly, EFSF having “migration risk” which meant that the contribution promised by the Eurozone countries was dependent on the credit ratings of that country and if that country got downgraded its contribution also decreases. Secondly, additional funds could not be called in as every country would contribute only the promised amount and if more capital is needed, the Board of Directors would not be able to call for the same. Thirdly, the debt owed by the EFSF was not classified as of the European institution rather it was classified as the debt owed by the individual Euro area country. There is also a risk that the guarantee is not enforceable against the guarantor. Fourthly, if EFSF uses its funds to provide financial assistance to any of the member states, the debt of guarantor member states is immediately impacted by the same amount; so in case of a default or a loss for EFSF, individual member states will have to take on deficits equal to the percentage of their contribution. Lastly, the decision on responsibility for guaranteeing the loans was made with reference to the nominal value, but the guarantee also covers the costs of the funding of the EFSF that is, the interest as well. The maximum amount of the guarantees is ultimately a political decision for the member states to make for example in Finland the guarantees are decided by Parliament. Lending capacity for EFSF is less as compared to the total bailout amount of all the countries struggling in crisis.

European Stability Mechanism (ESM)

The global financial crises has exposed major weaknesses in the design and implementation of the existing economic governance framework of the EU, and of the euro area in particular as the fiscal rules have been weakened over time. The European Council on 24th-25th March 2011 adopted a comprehensive package of measures to respond to the ongoing crisis as well as to avoid such crises in future. The main features of this package relate to the strengthening of the preventive and corrective mechanisms to address internal and external imbalances, the package also includes the establishment of a permanent crisis management mechanism as an ultimate solution to prevent financial imbalance. So Europe's leaders on 28th-29th October 2011 devised a bigger, permanent crisis management mechanism, the European Stability Mechanism (ESM). It is foreseen that the ESM will enter into force on 1 July 2013, following an amendment to the Treaty on the Functioning of the European Union (the Treaty) and the signing of an ESM Treaty by the euro area countries. In addition to that amendment the European Stability Mechanism itself will be established by a treaty among the Eurozone states: the Treaty Establishing the European Stability Mechanism. Formally, two treaties with this name were signed: one on 11 July 2011 and one on 2 February 2012.

There are four features that would enhance the effectiveness and facilitate the functioning of the ESM:

- It has been established by means of a Treaty subject to international public law approved by the Member States whose currency is the euro so that national laws have to be made compatible with the provisions of the Treaty.
- The rules for decision-making in the ESM should favor efficiency, for instance by providing for the activation of the ESM by mutual agreement of the Member States whose currency is the euro.
- In full compliance with the Treaties, the ESM should be granted the capacity to employ an appropriate range of instruments in order to be able to effectively fight against contagion in situations of acute market instability
- The ESM has to observe the principles of cautious and sound financial management and be subject to auditing by external and internal auditors.

Functions

The ESM has been set up to provide financial assistance, subject to strict conditionality, to euro area countries experiencing severe financing difficulties. The ESM will have the option to purchase the bonds of a beneficiary euro area country in the primary market. In such cases, the ESM could, for example, act as a backstop facility, absorbing portions of primary offerings which are not taken up by private bidders. Such a strategy could potentially help the country concerned to regain access to market financing, thereby improving the cost-efficiency of the support. The ESM will have a total subscribed capital of €700 billion, of which €80 billion will be paid in capital and €620 billion callable capital, while it will have a lending capacity of €500 billion. Starting in July 2013, the paid-in capital will be provided in five equal annual installments. The ESM will also finance itself through the issuance of debt securities. It should also be noted that the capital structure allows debt owed by the ESM to be classified as public debt of a "European institution" rather than of individual euro area countries. Euro area countries will contribute to the ESM's capital according to their share in the ECB's capital key, which gives equal weight to the country's shares in the total population and total GDP, respectively, of the EU. However, euro area countries that have a relatively low GDP per capita (i.e. below 75% of the EU average), will see their contribution reduced for a maximum period of 12 years after the entry into force of the ESM or after their entry into the euro area.

Operation

As with the EFSF, this assistance will predominantly take the form of loans, known as ESM stability support (ESS). ESS will be conditional on agreement to and compliance with a strict macroeconomic adjustment programme. The maturity of the ESS loans will depend on the nature of the imbalances and the beneficiary country's prospects of regaining access to financial markets. The interest rate on the loans, which may be either fixed or variable, will be the sum of the funding cost to the ESM.

ESM financial assistance will only be activated upon receipt by the Euro group and The Economic and Financial Affairs Council (ECOFIN) presidents, and the Managing Director of the IMF, of a request from a euro area country. Following this request, the European Commission, together with the IMF and in liaison with the ECB, will assess whether there is a risk to the financial stability of the euro area as a whole and will undertake a rigorous analysis of the sustainability of the public debt of the requesting country. If, on the basis of the sustainability analysis, it is con-

cluded that a macroeconomic adjustment programme can realistically restore the public debt to a sustainable path, the Commission, together with the IMF and in liaison with the ECB, will then assess the actual financing needs of the country concerned. All the above stated details will be included in the Memorandum of Understanding (MoU) after which the Commission will propose to the EU Council a decision endorsing the macroeconomic adjustment programme, while the granting and the terms and conditions of financial assistance will be decided by the Board of Governors of the ESM.

Comparison of EFSF and ESM

Parameter	European Financial Stability Facility	European Stability Mechanism
Legal/institutional form	Private company owned by euro area countries	Intergovernmental organization
Capital structure	Guarantees and over-guarantees from euro area countries	€80 billion paid-in capital and €620 billion callable capital
Lending capacity	€440 billion	€500 billion
Instruments	Loans, bond purchases on the primary market	Loans, bond purchases on the primary market
Duration	Until the end of June 2013. Will also remain operational thereafter until all outstanding liabilities are repaid	Permanent mechanism from the beginning of July 2013 onwards
ECB Involvement	Involved in programme design and monitoring, and as paying agent	Involved in conducting debt sustainability analysis, programme design and monitoring, and as paying agent
Main decision-making Bodies	Euro group/EFSF Board of Directors	Euro group/ESM Board of Governors and ESM Board of Directors
Legal basis Financing	Intergovernmental Decision	Intergovernmental treaty linked to amended Treaty Article 136
Conditionality	EFSF Framework Agreement by cross-reference with Memorandum of Understanding and EU Council Decision	EU Council Decision on basis of regulation under Treaty Article 136 (forthcoming)
Creditors status	Pari passu	Credit preferred status

Source: Credit Suisse, EFSF

Investor Protection

EFSF

On 17th February 2012 European Sovereign Bond Protection Facility (ESBPF) was launched so that the investors can be protected to some extent in case of a default. In the newly-issued European government bonds (EGB), EFSF will provide partial default protection certificate to investors in exchange for a premium which is to be paid by the investor; this function could be performed through a default protection purchase window available at the time of a new government auction or syndicated issue. The certificate could be detached after initial issue and could be traded separately. It would give the holder an amount of fixed credit protection of 20-30% of the principal amount of the bond. The partial risk protection can be used primarily under precautionary programmes and is aimed at increasing demand for new issues of Member States and lowering funding costs. An investor wishing to participate in the programme will need to certify ownership of a new primary market EGB to the EFSF to be eligible for the purchase of sovereign default protection. The investor is primarily providing the liquidity to the issuer of the newly-issued EGB while the EFSF carries the credit risk in exchange for a fee.

This programme will also have an immediate impact on the market as it will limit the investors' interest by creating speculative positions as sovereign credit will be shortened because of Credit Default Swap (CDS). The partial default protection certificate will help in keeping the bond yields in check and increase the investor base, which will increase the liquidity for the EGB issuer

According to our research it has been suggested that ESM debt should take up preferred credit status but we disagree because, if in case of a default by any member state (MS) ESM will get the first priority over the other investors; this will make the investors pull out their funds from these countries so as to protect themselves from any losses. Hence ESM should be at par with the other investors to maintain liquidity in that country. Secondly, for the investors ESM should keep their credit protection percentage higher than what it is for EFSF which can vary depending on different conditions prevailing in a particular MS, this will help in reducing the bond yield and thereby reducing the cost of lending to that MS. Lastly, it has also been suggested that ESM should provide bond guarantees instead of loans and we agree with it because- it will drastically reduce the need for immediate capital, which can be used to support much larger programmes, also issuing bond guarantee will help ESM provide relief to MS more swiftly and allows MS to retain market access moreover guarantee are cheaper for both ESM as well as MS.

Deployment

Lending by country

In millions

Country	Already disbursed	Pending disbursement	Total
Ireland	€12.00	€5.70	€17.70
Portugal	€14.80	€11.20	€26.00
Greece	€108.90	€70.70	€179.60

Source: EFSF Website



Lending details

The following table shows the lending details of EFSF till date. Ireland was the first country to be bailed out with a total amount of €12.0 billion. It was followed by Portugal with a total bailout amount of €14.8 billion. Greece was bailed out with the highest amount till yet of €108.9 billion in total.

Beneficiary country	Date of disbursement	Amount disbursed	Maturity
Ireland	02/01/2011	€3.6 billion	18/07/2016
	11/10/2011	€3.0 billion	02/04/2022
	15/12/2011	€1.0 billion	23/08/2012
	01/12/2012	€1.2 billion	02/04/2015
	19/01/2012	€0.5 billion	19/07/2012
	04/03/2012	€2.7 billion	04/03/2037
<i>Current average maturity 9.81 years</i>			
Portugal	22/06/2011	€3.7 billion	07/05/2021
	29/06/2011	€2.2 billion	12/05/2016
	20/12/2011	€1.0 billion	23/08/2012
	01/12/2012	€1.7 billion	02/04/2015
	19/01/2012	€1.0 billion	19/07/2012
	30/05/2012	€5.2 billion	30/05/2032
<i>Current average maturity 11.62 years</i>			
Greece			
- ECB collateral	03/07/2012	€35.0 billion	03/07/2013
- PSI	various dates	€29.7 billion	24/02/2042
- Accrued interest	various dates	€4.8 billion	28/08/2037
- 2nd progr. - Tranche 1	19/03/2012	€5.9 billion	19/03/2032
- 2nd progr. - Tranche 2	04/10/2012	€3.3 billion	04/10/2027
- 2nd progr. - Tranche 3 (Bank recapitalization)	19/04/2012	€25.0 billion	19/04/2032
- 2nd progr. - Tranche 4	05/10/2012	€4.2 billion	05/10/2027
- 2nd progr. - Tranche 5	28/06/2012	€1.0 billion	28/06/2027
<i>Current average maturity 12.5 years</i>			

Source: EFSF Website

- Timeline: The unfolding Eurozone crisis, 13 June 2012 (<http://www.bbc.co.uk/news/business-13856580>)
- The European debt crisis in eight graphs, 1 December 2012 (http://www.washingtonpost.com/blogs/ezra-klein/post/the-european-debt-crisis-in-eight-graphs/2011/12/01/gIQAsmR5GO_blog.html)
- Paradigm Lost The Euro In Crisis, 2010
- Why Portugal May Be the Next Greece, 27 March 2012
- Spanish Debt One Notch Above Junk, 13 June 2012 (<http://www.forbes.com/sites/afontevvecchia/2012/06/13/spanish-debt-one-notch-above-junk-moodys-says/>), Spain requests €100bn to rescue banks; To add 10% to debt/GDP ratio that will rise to 90% in 2012, 11 June 2012 (http://www.finfacts.ie/irishfinancenews/article_1024466.shtml)
- Eurostat for EU, 26 April 2011; CIA's World Factbook, 26 January 2011; IMF World Economic Outlook Database April 2012.
- EFSF (R)evolution, 16 August 2011
- EFSF users' manual, 28 October 2010
- International Monetary Fund, Seminar on Regional Financial Safety Nets—Background Information on Participating RFAs, 8 October 2010
- European Financial Stability Facility (EFSF), FAQ, 12 July 2012
- Maximizing the capacity of the EFSF Terms and Conditions, 29 November 2011
- Opinion of The European Central Bank, 17 March 2011
- The European Stability Mechanism, Monthly Bulletin, July 2011
- The Debt Crisis: Different Rules for a Different World New York, 17 May 2011
- Proposal for the Creating Efficient Firewalls through EFSF, 18 October 2011
- An Optimal Design for the European Stabilization Mechanism (ESM), 17 January 2011
- European Sovereign Bond Protection Facility launched, 17 February 2012
- Lending operations, 17 July 2012



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