Euro Zone Debt Crisis: Implications for Indian Banking Sector

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Abstract

The Euro zone debt crisis has indeed jeopardized the recovery plans put in place post global crisis by regulators, policy makers and the sovereigns. Though, the crisis is epicentered in the Eurozone, the knock-on effects of the crisis are felt all across the globe. The emerging and developing economies (EDEs) are also expected to post lower growth on account of worsening external environment and a weakening internal demand. This paper while presenting the contemporary literature on the topic, analyses the causes for sovereign debt crisis and presents the implications of sovereign debt crises and draws lessons for banking sectors more particularly in the context of emerging markets like that of India.

JEL classification: E05, E32, E42, F33, F36, G01

Keywords: Sovereign debt crisis, Credit Risk, Endogenous Default, Banking Crisis

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1. Introduction

The euro zone debt crisis[1], characterized by widespread instabilities has led to a crisis of confidence in the global financial markets amid growing market turmoil and the risk of contagion as many of the countries in the euro zone are struggling with a combination of high levels of indebtedness, budget deficits and frail or deficient growth. In addition, concern about the mounting government deficits and alarming debt levels across the globe coupled with a wave of downgrading of European governments' debts has also added to the fretfulness in the financial markets. The probability of default on sovereign debt has further compounded in congruence with the macro-economic misalignments, which include recession-triggered budget deficits, bailout-motivated fiscal measures, as well as country-specific strategies and political risks. Starting from Greece, Ireland, Portugal, Spain, and more recently Italy, these euro zone economies have witnessed a severe downgrade in the rating of their sovereign debt, fears of default, and a sudden rise in borrowing costs. These developments apart from threatening other euro zone economies and even the future of the euro have indeed triggered a global debate on the management of sovereign debts and their implications on other emerging markets. Given the large economic weight of the euro zone in the globe, the contagion of crisis and its potentially devastating effects are necessitating an increased attention from the researchers and international financial institutions towards analysing the nature and impact of euro zone debt crisis.

The objective of this paper is two-fold: first to analyse the nature and causes of sovereign debt crises in the context of euro zone debt crisis and, second to present the implications of sovereign debt crises and draw lessons for banking sector. Remainder of this

1 "*Aegean Contagion*", is an alternate nomenclature to the *2010 European sovereign debt crisis* with reference to its point of origin and a general term for an epidemic.

paper is structured as follows: Section 2 illustrates the nature, significance, and indicators of sovereign debt crises. Section 3 presents the economic impact of sovereign debt crisis from a theoretical perspective. Impacts of Euro zone sovereign debt crisis on Indian economy in general are analysed in section 4. Implications for banking sector and analysed in section 5 and finally conclusion is section 6.

2. Nature of Sovereign Debt Crises

Sovereign debt differs from corporate debt in that it is not enforceable by the courts, as a sovereign cannot credibly commit to hand over assets in the event of default. Sovereign debt storm erupts when nations and companies act as delinquent individuals and those responsible for monitoring them are slumbering on the job (e.g. of debt crises; Russia, Argentina, Turkey). Defining a debt crisis as a period of debt-services default for a specific country would lead to detecting only a few crises, with the extreme ones corresponding to official defaults (Russia 1998, Argentina, 2001). In practice, countries rarely officially announce that they are defaulting, since the consequences for their credibility would be terrible. According to Moody's Investors Service (2003), only seven rated sovereign bond issuers would have defaulted on their foreign currency-denominated bonds since 1985, and all those defaults occurred between 1998 and 2002. Sovereign ratings provide an indication of the ability and standing of the sovereign governments in servicing their debts.

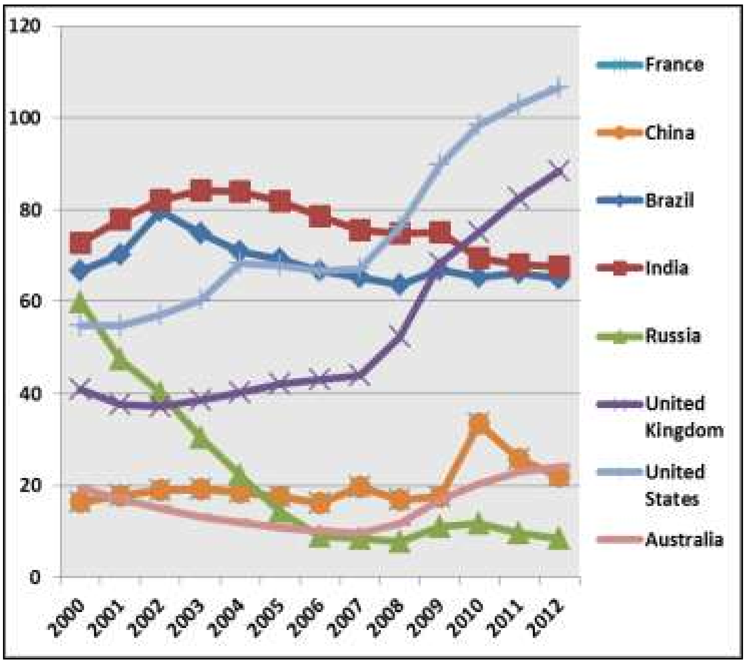
Sovereign ratings are imperative because not only major issuers in the global capital markets are national governments, but also because these appraisals affect the ratings assigned to borrowers of the same nationality too. A comparison of the movement of sovereign ratings for select economies is presented in table-1. Further, in and figure-1 we present the trend of government debt to GDP of select developed economies and BRIC countries.

Table-1: A comparison of the movement of Sovereign ratings for select economies

Country	2012	1995
Australia	AAA	AA
Brazil	BBB	B+
China	AA-	BBB
France	AA+	AAA
Germany	AAA	AAA
Greece	CC	BBB
India	BBB	BB+
Ireland	BBB+	AA
Italy	BB	AA
Portugal	BB	AA-
Russia	BBB	
South Africa	BBB	BB
Spain	BB	AA
UK	BBB	AAA
US	AA	AAA

Source: Compiled by author based on S&P publications

Figure-1: Government Debt (percent of GDP) – Developed economies and BRIC countries



Source: GFSR data of IMF

3. Impact of Sovereign Debt Crises

The euro zone debt crisis has brought to light that international financial integration will not automatically lead to an efficient allocation of capital, as predicted by neoclassical theory, and has raised doubts about the ability of free markets to efficiently allocate capital (Volz, 2012). Though there have been notable sovereign debt crises, to mention, like the ones faced by Russia and Latin American countries during the 1990s, the current euro zone sovereign debt crisis is significant in terms of the transition that is taking place globally in the geo-political context.

The seminal model of Flood and Garber (1984) provides a theoretical explanation for the occurrence of a currency crisis stemming from incoherent macroeconomic policies, and in particular, an uncontrolled monetary expansion, which can be easily extended for monetized excessive public deficits (Corsetti and Mackowiak, 2006). On the contrary, only few papers have scrutinized the potential mutation of banking crises into sovereign debt ones. However, Reinhart and Rogoff (2011) in their detailed study on the topic, argue that external debt surges are an antecedent to banking crises and banking crises are often preceded or accompanied by debt crises. In addition, they also observe that public borrowing surges ahead of external sovereign default, as governments have "hidden domestic debts" that exceed the better documented levels of external debt. Sovereign debt crises impact the cross-border capital flows and corporate market access (Reinhart, Rogoff and Savastano, 2003).

The most prominent channel linking sovereign and private sector balance sheets is the insolvency of banks. The largest ticking bomb for public balance sheets is the debt of the banking sector. Banking crises often develop into sovereign debt crises, or vice versa. Since the crisis started in 2008, we have witnessed unprecedented write-down by financial institutions and large-scale government bailouts. The collateral damage from banking crises spills over to public balance sheets in the form of increasingly unsustainable debts. Given that the sovereign debt of the affected countries is present in the balance sheets of banks and insurance companies across the world, contagion effects and financial instability could spread through the global financial system. The financial crisis has demonstrated that the globalized banking system can play a crucial role in transmitting the crisis from the advanced economies to various parts of the world, particularly emerging markets. The euro zone debt crisis also bears lessons for making a choice on the manner in which foreign banks operating in emerging economies should be allowed by the regulators to expand, that is, through the route of subsidiaries or through branches.

The extent of the impact on banks has been broadly in line with the perceived deterioration in the credit worthiness of the home sovereign suggesting that investors focus on the banks' jurisdictions as well as their creditworthiness. According to the BIS (2011), there are, broadly, four channels through which sovereign risk affect banks' funding costs, given the pervasive role of government debt in the financial system: First, losses associated with government debt weaken balance sheets of banks making funding more costly and difficult to obtain. Second, higher sovereign risks reduce the value of the collateral that banks can use to raise wholesale funding and central bank liquidity. Third, sovereign rating downgrades generally flow through to lower ratings for domestic banks, as banks are more likely than other sectors to be affected by sovereign distress. As the banks' credit ratings decline, their wholesale funding costs rise. Fourth, a weakening of the sovereign reduces the funding benefits that banks could derive from implicit and explicit government guarantees.

3.1. Debt Crises and Procyclicality

Financial markets are prone to exaggerations, which in turn add to the pro-cyclicality inherent in asset valuations. Typically, during "good times", (when risk appetite is zealous and economic conditions are favorable) asset prices tend to be high and risk spreads tend to be low. On the other hand during "bad times" (when the degree of risk aversion heightens and GDP growth shrinks), asset prices tend to decline and risk spreads rise. Further, during bad times, the procyclicality gets amplified by market exaggerations, as investors tend to over-price certain types of risk and thus underpricing the respective financial assets. Exaggerated pro-cyclicality of this type has hit the sovereign bond market during the debt crisis. Besides, it has exerted severe adverse effects on other segments of financial markets, such as the funding markets for banks and financial institutions. Accordingly, the funding costs of those Indian banks who were expecting to raise funds from global markets would escalate severely though not the liquidity.

4. Impact of Sovereign Debt Crisis on Indian Economy

With the euro zone seeming to head for a recession and the global growth decelerating again after a dumpy recovery, growth in India too has toned-down more than that was expected earlier. Upsurge in global uncertainty, feeble industrial growth, and slowdown in investment activity and deceleration in the resource flow to commercial sector led to dip in output growth. Inflation risks emanating from suppressed domestic energy prices, incomplete pass-through of rupee depreciation and slippage in fiscal deficit2, further fuelled by food and commodity inflation have led to policy tightening. Europe being one of the largest trading blocs for India, the austerity measures by European countries and falling consumer expenditures have negatively affected exports, more so services exports from India. According to RBI (RBI Monthly Bulletin June 2012), share of India's exports to euro zone to total exports has come down from 20.1 percent in 2009-10 to 18.6 percent in 2010-11 and 17.5 percent in 2011-12. In view of the weak position of European banks, capital has flown back, leading to a sharp depreciation of the Indian Rupee (INR), which is already weak (Figure – 2 presents the impact of the crisis on GDP growth and Indian currency).

Figure – 2: Impact on GDP growth and INR

Source: Changing Contours of Global Crisis – Impact on Indian Economy, RBI Monthly Bulletin April 2012, pp. 725-737

2 Fiscal position of select economies in the context of euro debt crisis is presented in exhibit-6

4.1 Impact on Capital Flows

Investments into Indian economy have slowed down due to protracted euro zone sovereign debt crisis. Foreign direct investment (FDI) to India (excluding disinvestments/repatriation) during April-December 2012 at US$ 21.1 billion stood lower as compared to the level attained during the corresponding period of previous year (US$ 28.7 billion). The moderation in FDI to India was recorded under both equity and debt flows. Net FDI inflows to India (inward FDI minus outward FDI), however, declined during Q3 of 2012-13 to US$ 2.5 billion from US$ 5.0 billion in Q3 of 2011-12. Net inflows under financial account rose to US$ 31.1 billion during Q3 of 2012-13 (US$ 20.6 billion during Q3 in previous year). This was mainly on account of net portfolio inflows of US$ 8.6 billion during Q3 of 2012-13 as compared with an inflow of US$ 1.8 billion in Q3 of 2011-12 (Table – 2).

Table–2: Disaggregated Items of Financial Account

	Oct–Dec 2011	Oct–Dec 2012	Apr–Dec 2011	Apr–Dec 2012
Foreign Direct Investment (FDI) to India	6.9	4.8	28.7	21.1
FDI into India – Financial Services	2.4	2.2	-	-
FDI into India – Business Services	1.3	0.5	-	-
Loans to India	8.1	7.2	15.7	14.4
External Commercial Borrowings (ECB)	-0.8	3.1	6.9	4.7
Loans by India - ECB	0.5	-0.1	1.2	-0.2
Reserve Assets	12.8	-0.8	7.1	-1.1

Note: Figures in (US$ Billion)
Source: Developments in India's Balance of Payments during Third Quarter (October-December) of 2012-13, RBI Monthly Bulletin June 2013. Available at www.rbi.org.in

Net external loans availed by banks stood at US$ 2.7 billion in Q3 of 2012-13 as against outflows of US$ 8.7 billion in Q3 of 2011-12 mainly due to drawing down of Nostro balances and higher overseas borrowings by the banks.

Table – 3: Sector-wise FDI Inflows

FDI into India	Apr–Dec 2011	Apr–Dec 2012
Financial Services	2.4	2.2
Business Services	1.3	0.5
Communication Services	1.5	0.1
Manufacture	8.0	4.8
Electricity and other	1.0	1.0
Computer services	0.5	0.2
Construction	1.7	1.0
Restaurants and Hotels	0.7	3.1
Others	2.1	1.0
Total	19.2	13.9

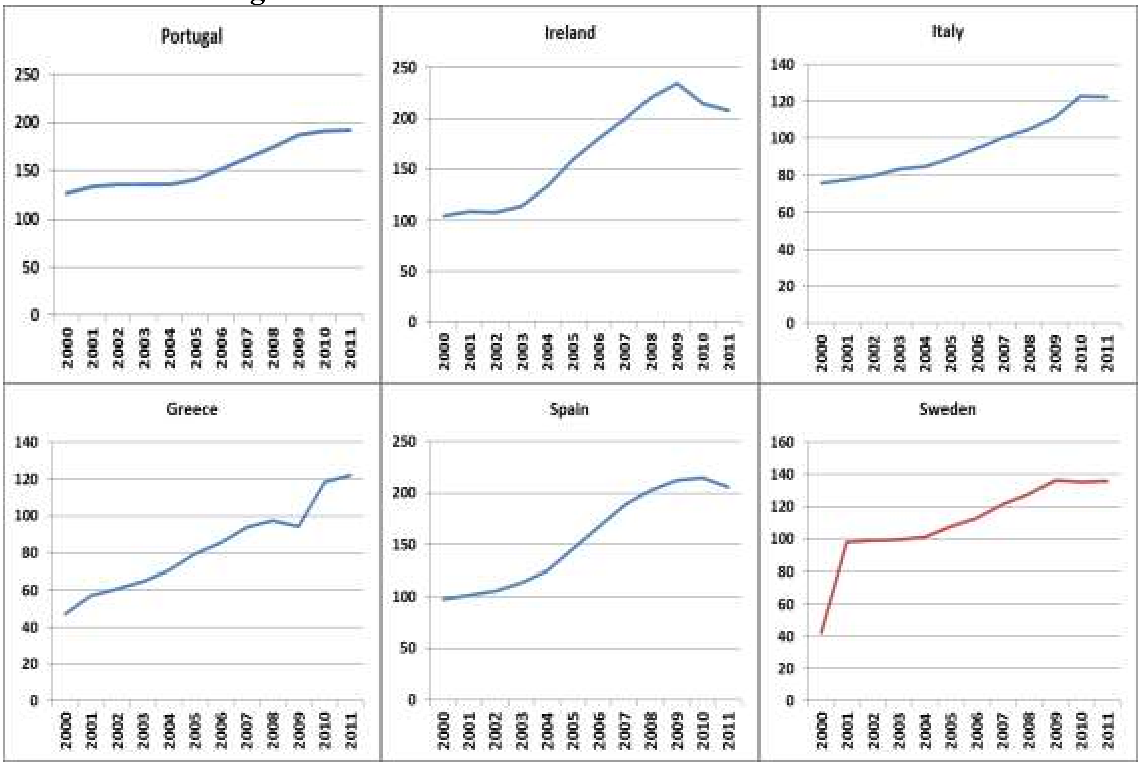
Note: Figures in (US$ Billion)
Source: Developments in India's Balance of Payments during Third Quarter (October-December) of 2012-13, RBI Monthly Bulletin June 2013. Available at www.rbi.org.in

Sector-wise, the decline in FDI inflows during the period was mainly in case of manufacturing, financial services, business services and communication services (Table 3).

5. Implications for Banking Sector

In the run up to the crisis, the eurozone experienced strong credit booms as the euro banks could easily borrow from international financial markets in their own currency – euro. Further, with lower interest rates and easy credit availability stimulated the consumption and mortgage borrowing (Fagan and Gaspar, 2007). This led to sharp shooting up of the domestic credit levels in the euro zone. Figure 6 illustrates the growth of domestic credit in select euro zone countries viz., Portugal, Ireland, Italy, Greece, Spain, and Sweden. One of the key predictors of a banking crisis is the scale of the domestic credit preceding the boom (Gourinchas and Obstfeld, 2012). There was a sudden upshot in the dispersion of domestic credit and heating up of current account deficits during 2003-07 though not during the onset of euro in 1999. (Lane and Pels, 2012; Lane and McQuade, 2012).

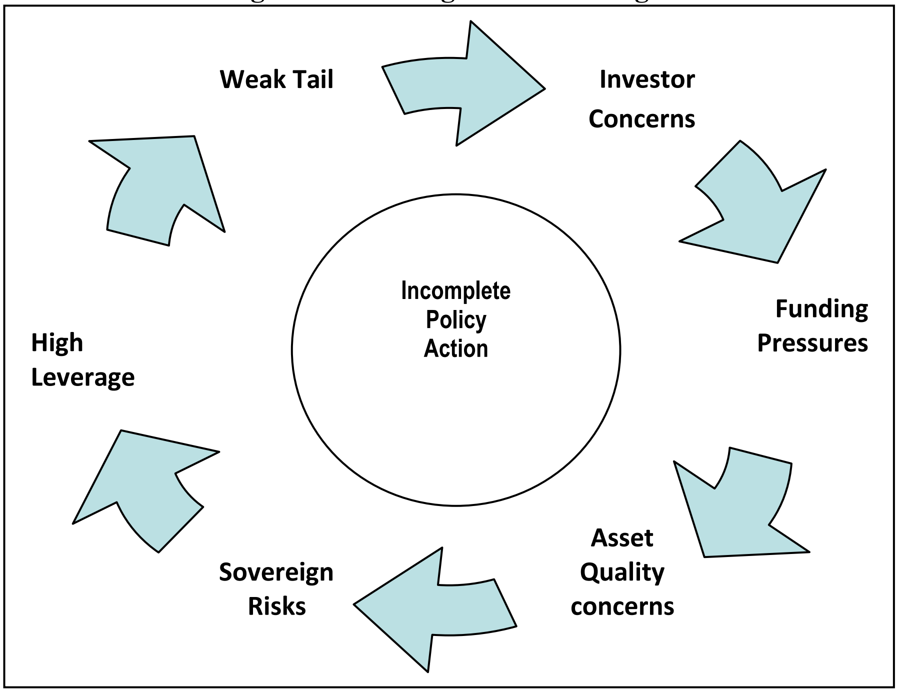
Figure – 6: Growth of domestic credit in Euro zone



Note: The figure captures domestic credit to private sector (percent of GDP) select Euro zone countries
Source: The figure is developed based on the data sourced from World Development Indicators of Data Bank of the World Bank

The crisis has posed serious challenges for the banking sector. Deficient policy actions and not enough reforms of the banking sector have left segments of the global banking system vulnerable to further shocks. Many institutions—particularly weaker European banks—are caught in a maelstrom of interlinked pressures that are intensifying risks for the system as a whole (Figure-4).

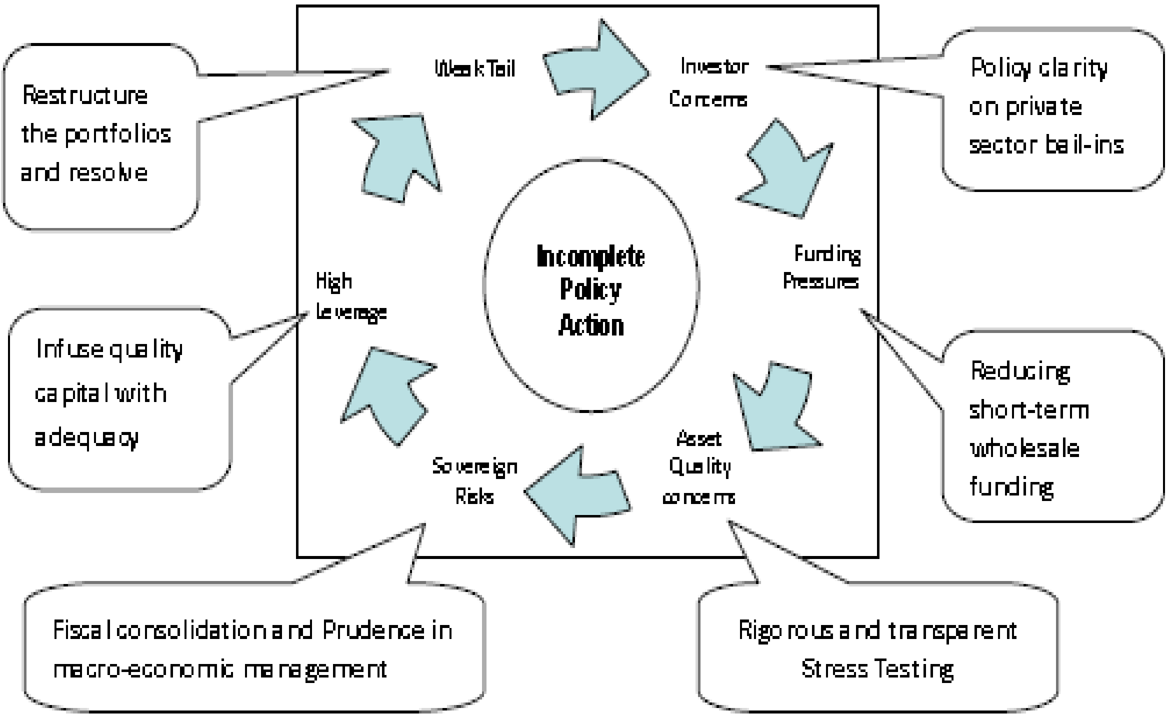
Figure-4: Banking sector challenges



Source: Designed by the author

In order to address the challenges posed by the debt crises the affected countries could consider some of the solutions like: (i) restructuring the portfolios of the banks to strengthen the tail, (ii) providing policy clarity on the private sector bail-ins to address the investor concerns, (iii) reducing the reliance on short-term wholesale funding to relieve the funding pressures, (iv) introducing rigorous stress tests and transparency in governance mechanisms to address to the asset quality concerns, (v) tightening fiscal consolidation and being prudent in macro-economic management than populist to address the sovereign risks, and (v) infusing the enough quality capital to address leverage concerns (refer Figure-5).

Figure-5: Banking sector challenges – Suggested measures



Source: Designed by the author

The worries about Europe's banks have been teeming in the background for some time as inadequately capitalized banks were holding up poorly financed governments, which in turn are expected to support those banks. After a brief lull reflecting the hefty liquidity injection by the European Central Bank (ECB), concerns have again arisen about a sustainable solution to the sovereign debt crisis and the escalating vulnerability of the banking sector. Heightened risk aversion and the ensuing decline in capital flows will have an adverse impact on emerging economies including India. For the emerging markets like China and India, Europe and the euro zone accounts for a significant market. Therefore, stagnation or a downturn in the euro zone will undoubtedly dent their export growth. While the for the Chinese – who are looking for opportunities to make bargains during the fire sale of assets, the euro zone debt crisis poses both – the threats as well as opportunities, however, for India – for whom EU is a major trade partner accounting for almost 20% of India's exports and 13% of imports. India. This apart FDI from EU during 2010 amounted to €3.0 billion while

India invested about €0.6 billion in the EU. Per se, a slowdown in the euro zone and the EU is likely to have a major adverse impact on India's exports. Exhibit-2 presents the India's external debt position and its debt-service ratio. Exhibit-5 captures the Government of India's overall debt position.

5.1 Implications for Indian Banking Sector

Though trade channel is the dominant channel of transmission of the euro crisis contagion to India, but there will be negative spillovers on India's financial sector as well. Aizenman et al. (2012) assessing the likelihood of financial contagion from the eurozone to Asian financial markets using event study have traced the impact of distinct eurozone news on the dynamics of equity and bond prices in developing countries.

In general, eurozone has been a vital source of foreign bank loans for developing Asia. The conflux of funding strains and sovereign risks led to fears of a precipitous deleveraging process that could hurt financial markets and the wider economy via asset sales and contractions in credit. Many European banks have announced medium term business plans for reducing assets. The impact is likely to differ significantly across regions, with larger effects expected in emerging Europe than in Asia or Latin America. In the Indian context, the claims of European banks, amounting to US$ 146 billion, formed 53 per cent of total consolidated foreign claims. Of this, 56 per cent pertained to claims of banks in United Kingdom. According to data from the Bank for International Settlements, in September 2011 India's borrowings from eurozone banks amounted to around $ 57 billion. While share of borrowings from eurozone in total foreign bank borrowings was to the extent of 17.9 percent, borrowings from Eurozone banks as share of domestic credit was at 4.4 percent.

Indian banking system has not been notably impacted by the euro debt crisis as neither does it have any significant presence in countries impacted by the current crisis nor Indian banks have any significant exposures to bonds issued by them. Though there is no first-order impact of the sovereign debt crisis, there could however, be second-order impact through various channels including trade. There could be funding constraints for Indian bank branches operating overseas if European banks deleverage. The cost of borrowing for banks and corporates, as a result, may go up leading to concerns over refinancing foreign currency liabilities. Due to the slump in the overseas demand and the associated downturn in investment activity, there has already been some sluggishness in the credit as well as asset growth of Indian banking sector during 2011-12.

The direct impact of the Eurozone crisis on Indian banks is expected to be limited as the Indian banking sector is largely dominated by domestic banks with foreign banks accounting for only 8 per cent of total banking sector assets and 5 per cent of banking sector credit. However, there could be indirect impact on Indian banks due to their exposures to other countries, especially in the Eurozone. Further, though the direct impact of deleveraging is not expected to be significant on domestic credit availability, there definitely would be an impact on specialized types of financing like structured long-term finance, project finance and trade finance could be impacted.

According to RBI data, at the end of September 2011, there are only 37 branches and 3 subsidiaries of Indian banks in the European Union, and none of them is in Portugal, Italy, Greece and Spain. Out of the 37 branches, 30 branches are in the UK, 3 branches in Belgium and 2 each in Germany and France. All of the three subsidiaries are in the UK. Their combined share in the aggregate banking sector assets stood at 3 per cent as at end September 2011. Moreover, none of the Indian banks has any exposure to bonds issued by Portugal, Greece and Spain while exposures to Italian bonds are insignificant.

One significant lesson from the euro debt crises for Indian financial system that is relatively more open than that of Chinese. For example, wholesale debt funding has been the undoing for banks in the euro zone. Though it is hard to argue that banks should only raise debt resources through retail deposits, at the same time, the current episode shows that large-scale reliance on wholesale debt, specifically, from across borders can tilt the financial stability. Of course, though the Indian banking system has conventionally relied on retail deposits, which despite higher cost serve as a stable source of funding, any substantial shift towards wholesale debt funding may not be a desired. The second important inference, we can draw from the euro debt crisis is that India's continuance of making the banks hold the public debt (due to its high fiscal deficit) hitherto as a vestige of the era of financial repression may not hold prudent all the time as the euro debt crisis raises the question of whether sovereign debt of a country can be held largely outside a country in portfolios that keep getting churned and subject to day to day re-pricing. While exhibit-3 presents the amount of investments in T-Bills of the Government of India by the Indian banks, Exhibit-4 captures the investments of Indian banks in the government securities.

Sovereign debt crises have far-reaching consequences and usually go hand in hand with (or can be traced to) banking and – in many cases – currency crises. Hence, managing and resolving sovereign debt crises pose unexpected challenges to policymakers. Crucial actions and reforms have been taken over the past two years to tackle the current European debt crisis. However, given their numerous transmission channels, these measures have been the subject of intense debate among decision-makers, experts, the media, and the general public. Though the euro zone sovereign debt crisis can impact Indian economy through five broad channels such as; banking sector, commodity markets, currency markets, investments and trade, this paper has focused exclusively on the implications for the banking sector, as the banking sector in view of all pervasive nature interacts with all the other channels too.

The global financial crisis and the current euro zone crisis have severely impacted the banking sectors in the advanced economies and the spillover is ricocheting on banks in emerging economies including India. Indian banking sector has not been impacted by euro zone debt crisis, as it does not have any substantial presence in euro zone countries nor Indian banking sector has any significant exposures to bonds issued by them. Though there is no first order impact of the euro zone debt crisis, there could, however, be second-order impact through various channels including trade. There could be funding constraints for Indian bank branches operating overseas if European banks deleverage. The cost of borrowing for Indian banks and corporates has shoot up leading to concerns over refinancing foreign currency liabilities. Owing to the drop in the overseas demand and the associated downturn in investment activity, there has already been some sluggishness in the credit as well as asset growth of Indian banking sector.

Consequent to the European banks suffering huge losses and liquidity constraints, the supply of foreign credit to emerging markets has dried up which has added to the pressure on investing spending in emerging markets which are already struggling to cope with rising capital costs due to tight monetary policies. India is experiencing similar situation and the Indian banks are forced to look inward and explore domestic sources of capital though relatively to costlier to compensate for the shrinking global market. As European banks suffered due to the sovereign debt crisis, capital has flown back, leading to a sharp depreciation of the rupee, which was already weak. A falling rupee has hurt the industries and their profit margins both within and outside the country. This has negatively affected the profitability and credit deployment activity of the banking sector.

5.2 Impact on foreign claims on Indian banks

In view of the prolonged euro zone debt crisis, net external loans availed by banks stood at US$ 2.7 billion in third quarter (Q3) of 2012-13 as against outflows of US$ 8.7 billion in Q3 of 2011-12. Similarly, the consolidated claims of foreign banks on India have experienced a gradual decline due to the impact of the crisis (Table-4). Particularly on the Indian banks, the outstanding consolidated claims of the foreign banks have experienced a negative change of 2.22 percent i.e., from US $ 83,553 mn in End-September 2011 to US $ 81,731 mn in End-September 2012.

Table – 4: Consolidated claims of reporting banks – immediate borrower basis on India by maturity and sector

(Amounts outstanding figures in millions of US dollars)

	Total foreign claims on a contractual basis	Consolidated cross-border claims in all currencies and local claims in non-local currencies					
		Total International Claims	Maturities			Sectors	
			Upto and including One year	Over One year and upto two years	Over two years	Banks	Public sector
	(A+L)	(A)	(B)	(C)	(D)	(E)	(F)
End-September 2011	320,914	224,460	139,213	12,311	51,892	83,553	10,632
End-September 2012	331,902	234,763	139,515	11,598	57,739	81,731	10,530
Percentage change	3.4	4.5	0.2	- 5.79	11.26	- 2.22	- 0.96

Source: BIS Quarterly Review, March 2012 and BIS Quarterly Review, March 2013

Further, the external positions of foreign banks on India (according to BIS statistics) have nosedived from US $ 36,987 mn in December 2010 to US $ 32,194 mn in December 2011, US $ 30,092 mn in June 2012 and US $ 29,515 mn in September 2012.

On a comparison of the consolidated foreign claims and other exposures of foreign banks on ultimate risk basis on India by sector type, we find that, consolidated cross border claims on the Indian banks experienced downward trend with a negative growth of 3.15 percent with the outstanding level of US $ 75,413 mn in end-September 2011 to US $ 73,039 mn in end-September 2012 (Table–5). Similarly, the exposures under derivatives contracts have nosedived to negative growth of 30.98 percent. Guarantees extended have experienced a fall of 19.45 percent and the credit commitments have declined by 24.60 percent.

Table – 5: Consolidated foreign claims and other exposures of reporting banks – ultimate risk basis on India by sector and type

(Amounts outstanding figures in millions of US dollars)

	Consolidated cross border and local claims in all currencies					Other exposures (not included in Foreign Claims)		
	Total foreign claims of 24 countries	Of which on			Of which cross-border claims	Derivatives contracts	Guarantees extended	Credit commitments
		Banks	Public Sector	Non-bank private sector				
End-September 2011	283,645	75,413	32,033	176,039	174,439	17,594	42,465	54,576
End-September 2012	287,707	73,039	37,614	176,838	174,124	12,143	34,202	41,153
Percentage change	1.43	- 3.15	17.42	0.45	- 0.18	- 30.98	- 19.45	- 24.60

Source: BIS Quarterly Review, March 2012 and BIS Quarterly Review, March 2013

Our observation that euro zone sovereign debt crisis has impacted on the Indian banking sector further stands supported by the fact that there has been a significant fall in the claims of the euro zone banks on India. Table – 6 presented here below depicts the consolidated foreign claims on India of the foreign banks based on their country of origin. Claims of European banks on India came down from US $ 13,354 in end-September 2011 to US $ 12,362 mn in end-September 2012, thus experiencing a downfall of 7.54 percent. Most of the foreign claims from countries like Italy, Ireland, Denmark, France, Luxemburg, Cyprus, Norway and Netherlands have drastically come down during the crisis period.

Table – 6: Consolidated foreign claims of reporting banks - ultimate risk basis on India

(Amounts outstanding figures in millions of US dollars)

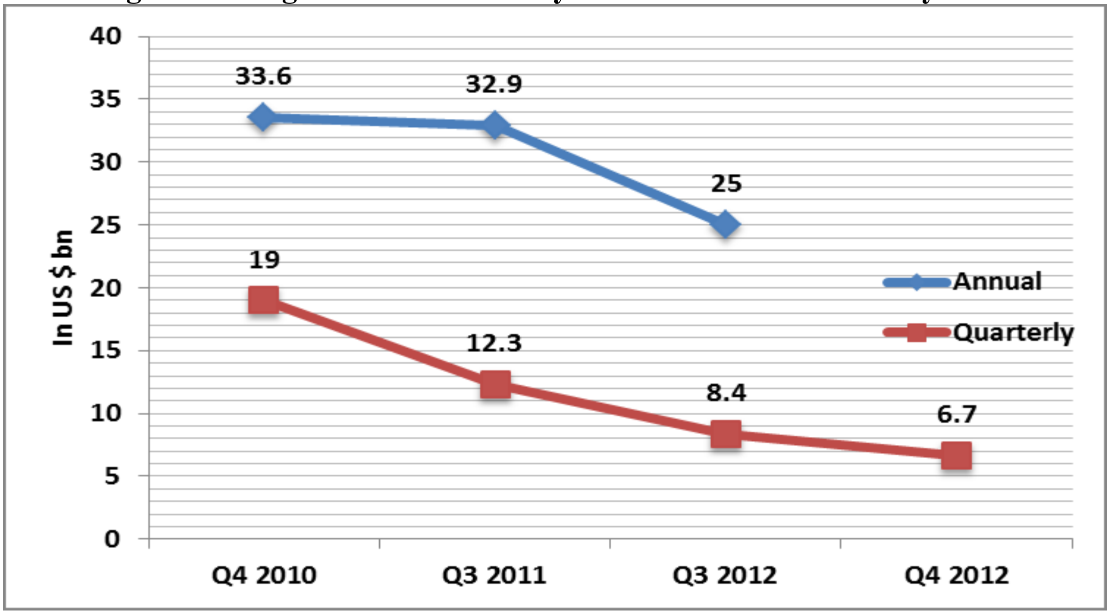
	End-September 2011	End-September 2012	Percentage change
All countries	44581	46198	3.62
Developed Countries	27108	26122	- 3.64
Other Developed Countries	13754	13760	0.04
Developing Countries	8735	9498	8.73
Offshore centers	7965	9500	19.27
Europe	**13354**	**12362**	**- 7.54**
Belgium	969	1122	15.78
Cyprus	197	183	- 7.10
Denmark	99	85	- 14.14
Finland	45	41	- 8.88
France	964	762	- 20.95
Germany	2461	2077	- 15.60
Ireland	258	71	- 72.48
Italy	233	160	- 31.33
Luxembourg	161	58	- 63.97
Malta	275	1	- 99.63
Netherlands	1468	1276	- 13.07
Norway	101	17	- 83.16
Portugal	32	34	6.25
Spain	109	125	14.67
Switzerland	684	714	4.38
United Kingdom	5172	5361	8.87

Source: BIS Quarterly Review, March 2012 and BIS Quarterly Review, March 2013

5.3 Impact on Syndicated credit facilities

We also analyse the trend of the international syndicated credit facilities by India for the period from 2010 to 2012 in order to discern the impact of the euro zone sovereign debt crisis. We observe that international syndicated credit facilities for India have slipped down from US $ 33.6 bn in 2010 to US $ 32.9 bn in 2011 and US $ 25.0 bn in 2012 (see Figure–3).

Figure – 3: Signed international syndicated credit facilities by India



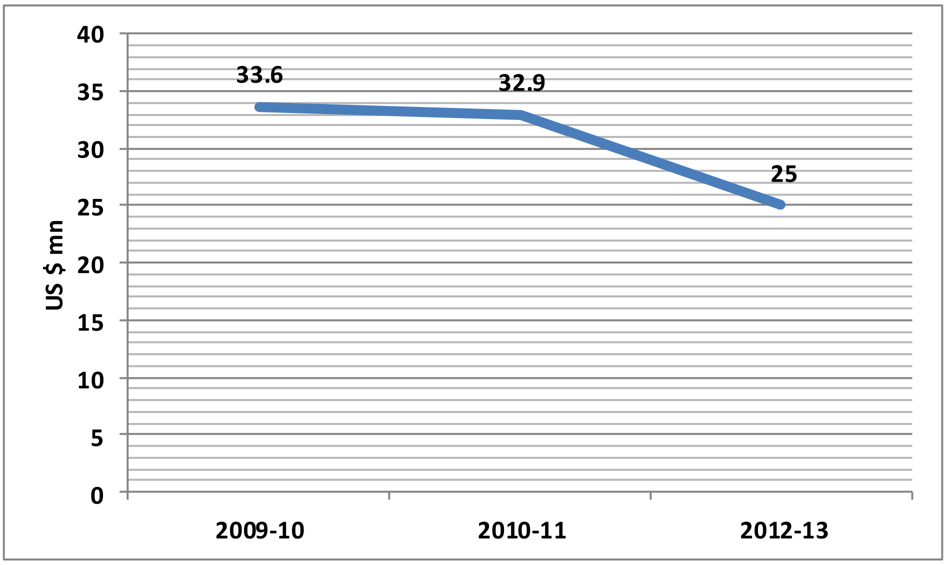
Source: BIS Quarterly Review, March 2012 and BIS Quarterly Review, March 2013

This reduced activity under syndicated credit facilities has dampened the fund raising scenario for the Indian banks, financial institutions, and institutional investors.

5.4 Impact on Portfolio Investments in India

There has been a steady slide in the portfolio investments in India due to the impact of the euro zone sovereign debt crisis. We find in our analysis that, portfolio investments in India (according to RBI Monthly Bulletin June 2011 and June 2013) came down from US $ 32,376 mn in 2009-10 to US $ 31,471 to 2010-11 (Figure–4) and came further down to US $ 27,264 mn in 2012-13.

Figure – 4: Portfolio Investments in India



Source: Data sourced from RBI Monthly Bulletin June 2011 and June 2013

Euro zone debt crisis, apart from its negative impact on portfolio investments capital inflows, could also affect the European involvement in the merger and acquisitions (M&A) activities in Indian corporate sector. With the Euro zone remaining sluggish, the appetite of European companies for M&A in India has declined.

6. Conclusion

When banking markets are closely integrated, each individual country is de facto responsible for preserving the stability of the entire international financial system. As Bolton and Jeanne (2011) rightly observed that by maintaining a sound fiscal position, each country provides a public good to all other countries. The recent financial crisis has demonstrated that the globalised banking system played a key role in transmitting the crisis from the advanced economies to other parts of the world, including the emerging economies. Euro debt crisis also holds lessons for making a prudent choice on the manner in which foreign banks should be allowed to expand in emerging economies, i.e,. whether through the route of subsidiaries or through branches. This study has analysed the causes and consequences of euro debt crisis on the emerging markets' banking sectors in general and Indian banking sector in particular, in the light of the widely believed argument that bank exposure to sovereign debts and the weak economy are perpetuating financial sector fragility, which in turn is spurring continued deleveraging. It is suggested that the emerging markets need to strengthen their firewalls to protect themselves from the ill effects of euro debt crises.

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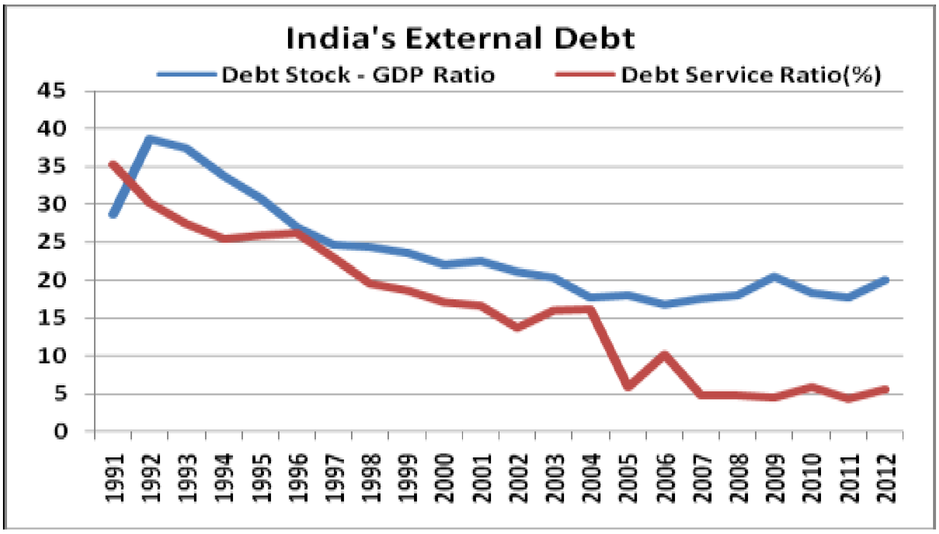
	Exhibit-1: Euro zone debt crisis – A timeline of events
Oct 09	Greek prime minister George Papandreou discloses the country's severe fiscal problems in his first parliamentary speech.
Nov 09	The Greek government reveals a revised budget deficit of 12.7% of GDP for 2009, double the previous estimate.
Jan 10	The European Commission publishes a report criticizing the Greek budget deficit.
Feb 10	Euro zone leaders promise to provide financial support to Greece if it reduces its fiscal deficit.
Apr 10	Standard & Poor's downgrades Greece (to BB+) and Portugal (to A-), with Spain downgraded (to AA) on the following day.
May 10	The Greek government accepts the €110 billion EU-IMF support package. The Spanish parliament approves a fiscal austerity package. Fitch downgrades Spain to AA+.
Jun 10	The Portuguese parliament approves a fiscal austerity package. Spain's Council of Ministers approves the labour market reform. The European Council announces that the EU bank stress test results will be published. In Italy, union rallies force the government to redraft its fiscal austerity package.
Jul 10	The Committee of European Banking Supervisors (CEBS) releases the results of the EU bank stress tests.
Oct 10	The French and German governments agree to take steps that would make it possible to impose haircuts on euro area sovereign bonds. A European Council statement makes it clear that other EU governments have agreed to the proposal on government bond haircuts.
Nov 10	The Irish prime minister announces that the government has requested financial support from the European Union and the IMF. The Irish government accepts a €68 billion EU-IMF support package
Mar 11	Portuguese Prime Minister José Sócrates resigns when opposition politicians reject his proposed austerity budget. Portuguese government bond yields rise to unsustainable levels as Fitch and Standard & Poor's cut their ratings of Portuguese sovereign debt.
May 11	European leaders approve a €78 billion ($110 billion) bailout package for Portugal on the condition that Portuguese officials implement a series of austerity measures.
June 11	Standard & Poor's downgrades Greece's credit rating to CCC, making it the country with the world's lowest-rated sovereign debt.
July 11	Unimpressed with Portugal's recovery in the wake of the May 2011 bailout package, Moody's rating agency lowers the country's debt rating to junk status.
Sept 11	Switzerland, a non-EU country surrounded by euro-zone economies, has watched its currency, the franc, appreciate dramatically against the struggling euro. With export and tourism revenues falling, the Swiss National Bank stuns the international currency market by devaluing the franc and pegging its value to that of the euro.
Jan 12	Standard & Poor's downgrades nine euro-zone countries, stripping France and Austria of their AAA ratings and classifying the debts of Portugal and Cyprus as junk. This makes Portugal the second European country (after Greece) to have its debt downgraded to non-investment status by all three ratings agencies. Portuguese 10-year-bond yields skyrocket in response to the news, eventually reaching a euro-era record 18.29 percent.
Mar 12	On March 2, 25 EU countries sign the new pact on fiscal discipline. While it will be binding only for those countries that use the euro, the other signatories can choose to abide by its guidelines.
Jun 12	On June 9, the Spanish government requests €100 billion (about $125 billion) in financial

	assistance from the EU to recapitalize its banks.
July 12	Spanish 10-year bond yields again top 7 percent, while yields of German and Austrian 2-year bonds drop to below zero. German, Austrian, French, and Belgian borrowing costs reach historic lows as investors seek a safe financial haven at the core of the euro area.

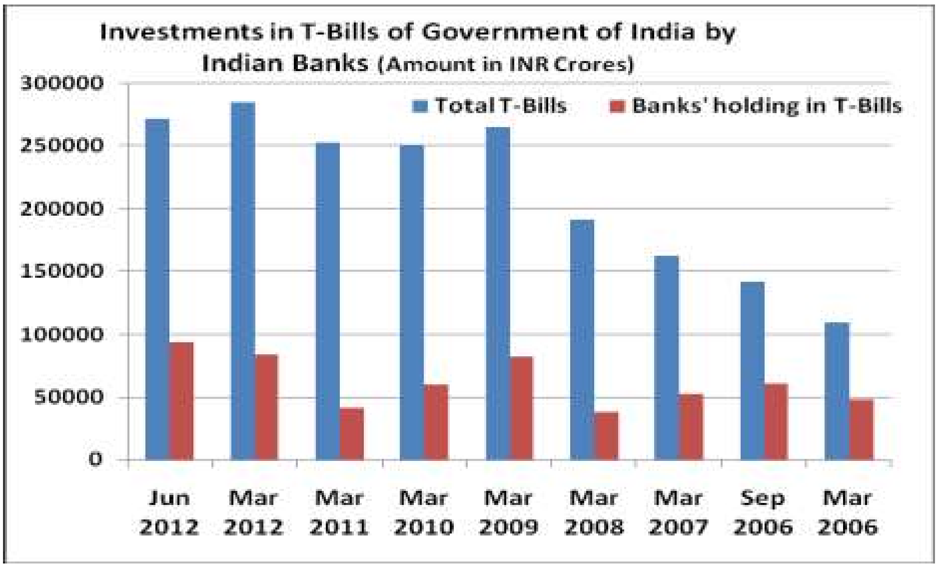
Source: Compiled by the author

Exhibit-2



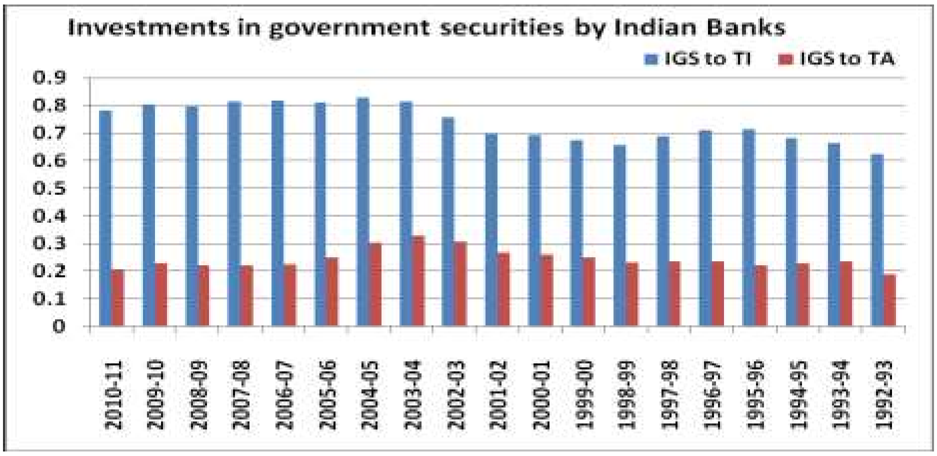
Source: Data sourced from RBI database

Exhibit-3



Source: Data sourced from RBI database

Exhibit-4



Source: Data sourced from RBI database

Exhibit-5: Government of India's debt position

Year	Domestic Liabilities of the Centre	External Liabilities of the Centre	Year	Domestic Liabilities of the Centre	External Liabilities of the Centre
1980-81	33.33	7.77	1996-97	45.08	3.93
1981-82	32.70	7.22	1997-98	47.34	3.62
1982-83	37.26	7.16	1998-99	47.66	3.27
1983-84	36.02	6.80	1999-00	49.31	2.99
1984-85	38.84	6.67	2000-01	52.45	3.14
1985-86	42.42	6.45	2001-02	56.82	3.14
1986-87	46.45	6.45	2002-03	61.09	2.43
1987-88	48.16	6.49	2003-04	61.37	1.67
1988-89	48.06	6.06	2004-05	59.64	1.88
1989-90	49.18	5.81	2005-06	58.64	2.55
1990-91	49.69	5.53	2006-07	56.72	2.39
1991-92	48.53	5.64	2007-08	54.65	2.25
1992-93	47.79	5.62	2008-09	53.93	2.19
1993-94	49.74	5.47	2009-10	52.59	2.08
1994-95	48.01	5.01	2010-11	49.19	2.04
1995-96	46.57	4.30	2011-12	46.92	1.92

Source: RBI database

Exhibit-6: Fiscal position of select economies in the context of euro debt crisis

Country	Fiscal and Debt Fundamentals			Financing needs		External Funding	Banking System Linkages			Sovereign Credit		Sovereign CDS
	Gross general government debt 2011	Net general government debt 2011	Primary balance 2011	Gross general government debt		General Government debt held abroad	Domestic depository institutions' claims on general government		BIS reporting banks' consolidated international claims on public sector	Rating/Outlook (notches above speculative grade/outlook) (as of 3/10/11)		Five-year (basis points) (as of 3/9/11)
				2011	2012		(percent of 2010 GDP)	(percent of 2010 GDP) (percent of depository institutions' consolidated assets)				
Australia	24.1	7.8	–2.1	4.5	3.3	43.4	2.2	1.2	3.2	9	Stable	51
Canada	84.2	35.1	–4.1	18.5	16.4	19.6	19.6	10.3	3.6	10	Stable	n.a.
Denmark	45.6	4.4	–3.2	9.3	9.8	41.8	15.5	3.2	6	10	Stable	44
France	87.6	77.9	–3.5	20.6	19.7	64.4	19	4.7	8.8	10	Stable	85
Germany	80.1	54.7	–0.3	11.4	10.5	52.8	25.4	7.6	10.4	10	Stable	48
Greece	152.3	n.a.	–0.9	24	26	61.5	27.4	12.2	23.3	–1	negative	1,037
Ireland	114.1	95.2	–7.5	19.5	18	59.4	28.2	2.8	8.7	3	negative	587
Italy	120.3	100.6	0.2	22.8	23.1	47	32.1	13.1	15.2	7	Stable	180
Japan	229.1	127.8	–8.6	55.8	52.5	6.9	76.3	23.7	1.6	7	negative	77
Korea	28.8	27.5	3.5	8.9	5.8	11.5	6.1	4.4	4.8	5	Stable	98
Netherlands	65.6	30.5	–2.2	19.9	16.6	66.4	13.8	3.6	9.2	10	Stable	47
Portugal	90.6	86.3	–1.6	21.6	21	56.7	15.7	4.8	17.2	5	negative	498
Spain	63.9	52.6	–4.6	19.3	18.7	49.6	22.3	6.8	7.1	8	negative	253
Sweden	37.3	–13.8	–0.9	5.4	4.6	45.2	6.5	2.3	5.3	10	Stable	33
UK	83	75.1	–5.5	15.7	13.6	26.8	6.9	1.5	2.9	10	Stable	58
USA	99.5	72.4	–9.0	28.8	25.6	31.9	7.7	5.3	3.7	10	Stable	43

Source: Compiled by the author from World Economic Outlook updates of IMF