

Sovereign risk in bank regulation and supervision: Where do we stand?

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Introduction

It is an honour and a pleasure to speak at the High-Level Meeting for the Middle East and North Africa Region jointly organised by the Arab Monetary Fund and the Financial Stability Institute. Let me start by drawing your attention to the invitation of the BIS Board this year to the Central Bank of the United Arab Emirates to become a BIS member. Its acceptance will make it a part of the Basel process of cooperation among central banks, and I would like to congratulate Governor Al Suwaidi on this occasion.

Before my address proper, I would like in passing to underline the significance of the new global standards for banking regulation and supervision that were agreed in 2010. No less important was the reform introduced in 2009 in the process of regulatory standard setting at the global level. Before then, G10 countries set these standards and market forces led banks and authorities outside the G10 to adopt them. Since then, both the Basel Committee on Banking Supervision (the global standard setter for bank regulation), and the Group of Governors and Heads of Supervision (its oversight body) have expanded and now include all G20 countries. To take a Middle Eastern example, the Saudi Arabian Monetary Agency has joined the global standard-setting process and also participates in the Financial Stability Board. The enlargement of the Basel Committee, the Governors and Heads of Supervision group and the Financial Stability Board has materially contributed to the Basel III framework, a key G20 success of the past three years.

My topic today is the treatment of sovereign risk in banking regulation and supervision. This theme has been spotlighted by the sovereign debt strains affecting most advanced economies. My conclusion is that market participants' complacent pricing and accumulation of sovereign risk in the decade up to 2009 was a market led phenomenon that cannot be attributed to the Basel standards. However it becomes crucial for regulators and supervisors of large banks to clarify that although sovereign assets are still a relatively low risk asset class, they should no longer be assigned a zero risk weight and must be subject to a regulatory capital charge differentiated according to their respective credit quality.

Let me start by describing the recent rise in sovereign risk incurred by banks. I will then discuss how bank regulation and supervision currently treat that risk. Then I will suggest how to bridge the current gap between the pricing of sovereign risk in financial markets and its treatment in bank regulation and supervision.

¹ Deputy General Manager, Bank for International Settlements. Speech given at the Financial Stability Institute High-Level Meeting, Abu Dhabi, United Arab Emirates, 26 October 2011.

I. The rise in sovereign risk incurred by banks

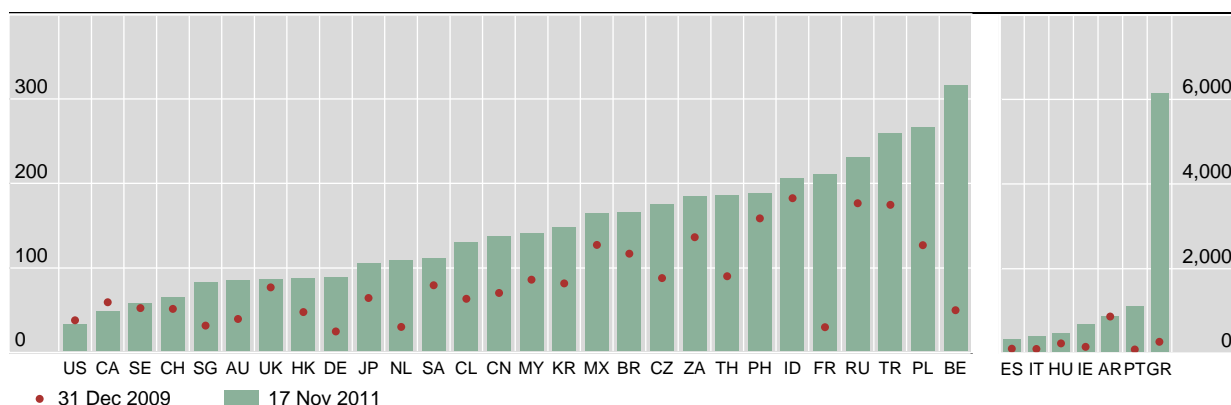
A Pricing of sovereign risk in financial markets

To set the stage, I first summarise a few features of **sovereign risk pricing in financial markets**. This pricing is based on sovereign spreads in the cash bond markets and sovereign CDS spreads in the credit derivatives markets. It is both influenced by and reflected in sovereign credit ratings.

Sovereign CDS premia

Five-year on-the-run CDS premia, in basis points

Graph 1



AR = Argentina; AU = Australia; BE = Belgium; BR = Brazil; CA = Canada; CL = Chile; CN = China; CZ = Czech Republic; FR = France; GR = Greece; HK = Hong Kong SAR; HU = Hungary; ID = Indonesia; IE = Ireland; IT = Italy; JP = Japan; KR = Korea; MY = Malaysia; MX = Mexico; NL = Netherlands; PH = Philippines; PL = Poland; PT = Portugal; RU = Russia; SA = Saudi Arabia; SG = Singapore; ZA = South Africa; ES = Spain; SE = Sweden; CH = Switzerland; TH = Thailand; TR = Turkey; UK = United Kingdom; US = United States.

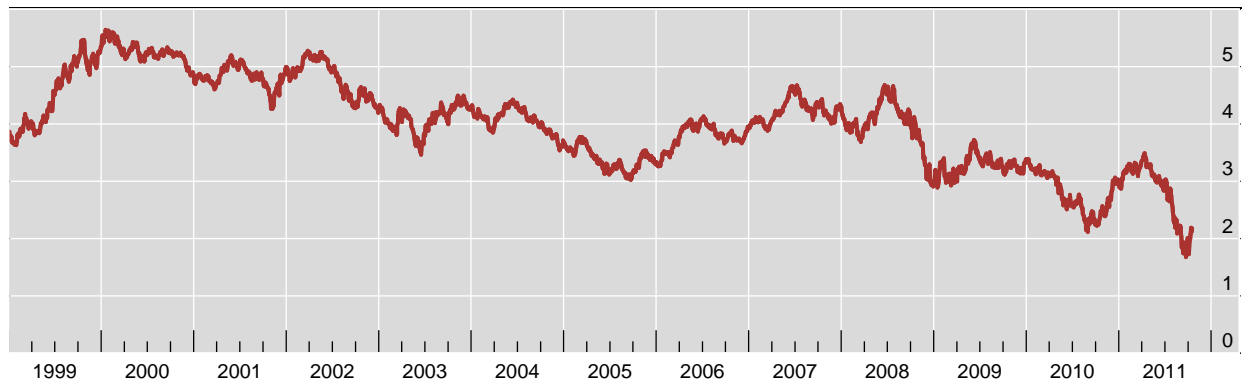
Source: Markit.

- If we take a long-term perspective, sovereign risk pricing in financial markets follows a well known pattern: we observe long periods of complacency during which risk premia and risk perceptions are unusually low while risks are building up. These periods of complacency are followed by sudden changes in market sentiment, which are both too abrupt and too late. A prolonged period of risk underpricing, reflected in excessively compressed spreads, corrects in a dramatic widening of credit spreads. Market discipline works spasmodically rather than consistently. It cannot be relied upon to foster fiscal rectitude. This is illustrated by these graphs on the evolution of sovereign yields and spreads within the euro area from 1999 to 2011.

German 10-year government bond yield

In per cent

Graph 2

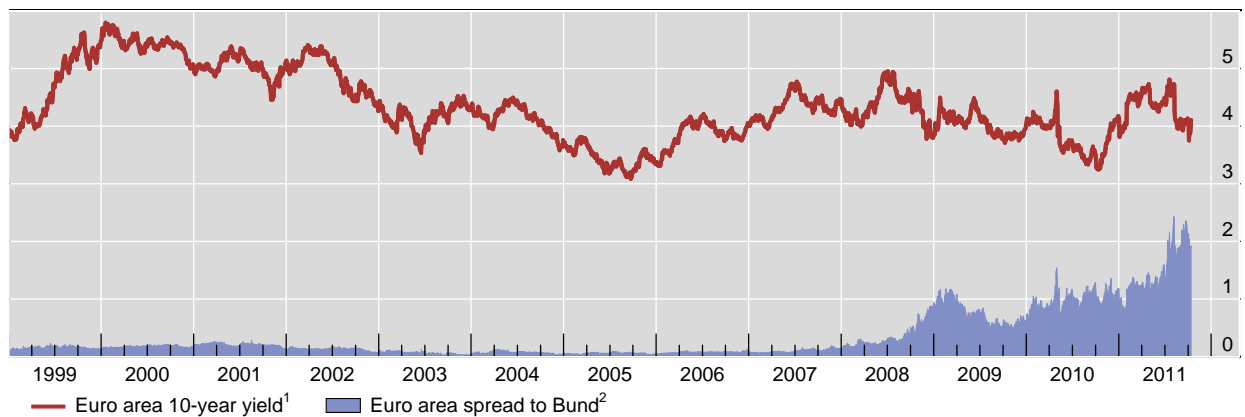


Source: Bloomberg.

Euro area 10-year government bond yield

In per cent

Graph 3



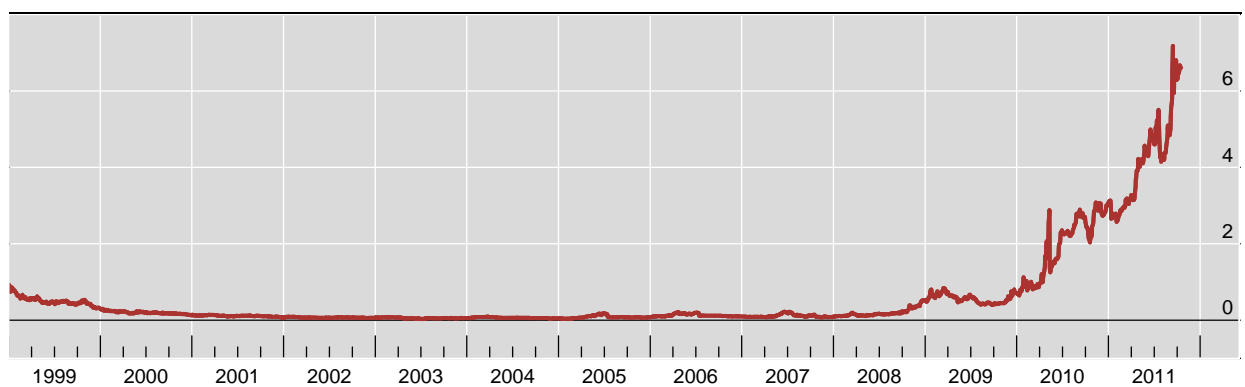
¹ Weighted average of 10-year national harmonized euro area government bond yields. The weights are the nominal outstanding amounts of government bonds in each maturity band. ² Spread vis-à-vis 10-year German government bond yield.

Sources: ECB; Bloomberg.

Standard deviation of 10-year euro area yield spreads to Bund¹

Dispersion of spreads to Bund, in per cent

Graph 4



¹ Daily standard deviation across the spreads between 10-year government bond yields of Austria, Belgium, Spain, Finland, France, Greece, Ireland, Italy, the Netherlands and Portugal and the 10-year German government bond yield.

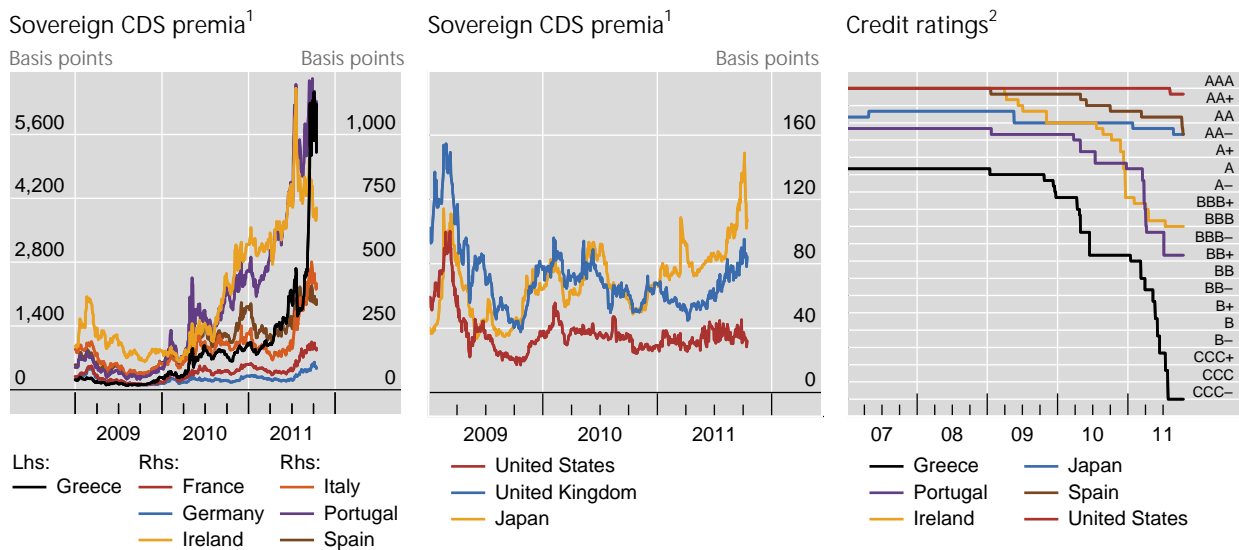
Sources: Bloomberg; BIS calculations.

The repricing of sovereign risk since 2009 follows a prolonged period of underpricing, especially in the euro zone where the compression of sovereign bond spreads (vis-à-vis German bund) reflected complacency among market participants. Market discipline broke down between 1999 and 2009 but has kicked in with a vengeance over the past 18 months.

- If we take a shorter-term perspective, the recent period has seen **an across-the-board rise of sovereign risk in financial markets**. This is reflected in the widening of sovereign spreads in the bond (cash) markets and sovereign CDS premia as well as in sovereign ratings downgrades (Graph 5).

Sovereign risk in financial markets

Graph 5



¹ Five-year on-the-run CDS premia. ² Average of Fitch, Moody's and Standard & Poor's foreign currency long-term sovereign ratings.

Sources: Bloomberg; Markit.

The rise in sovereign risk in financial markets reflects a rise in the probability of default of most sovereigns as implied by their CDS spreads (Table 1).

One-year CDS implied probability of default

(in per cent)

Table 1

Sovereign	United States	Canada	United Kingdom	Germany	Japan	France	Spain	Italy
30/9/2010	0.05	0.05	0.09	0.04	0.07	0.10	0.57	0.43
30/9/2011	0.05	0.06	0.11	0.11	0.21	0.28	0.99	1.42

Source: Moody's capital markets research.

Highly rated sovereigns are still low-risk assets but they are no longer perceived as risk-free, they are no longer zero credit risk assets.

In terms of risk management, it is important to distinguish between credit risk (default risk) and credit spread risk. Credit risk reflects the risk of potential credit losses due to a counterparty default event (default risk), or a credit migration event (a downgrade from one rating grade to another) or a country transfer event. Credit

spread risk, which is part of the market risk incurred by a bank, reflects the market risk due to fluctuations in daily credit spreads (assuming no rating change) as distinct from the credit risk arising from a rating downgrade.

Both credit risk and credit spread risk are reflected in the sovereign spreads measured in the bond (cash) markets and in the CDS (derivatives) markets. Adequate capital requires coverage of both risks.

→ **Sovereign assets are no longer risk-free assets, and have increasingly become spread products or credit products**

“Markets are questioning the risk-free status of debt issued by a number of governments worldwide. This morphing of sovereign debt from a risk-free into a ‘credit risk’ instrument has far-reaching implications, not least for the smooth functioning of financial systems. It creates adverse feedback effects on financial institutions and, in particular, it magnifies counterparty credit risk and creates significant funding challenges for banking systems.”²

B Volume of banks’ sovereign exposure

The rise in sovereign risk incurred by banks is also reflected in the volume of banks’ sovereign exposures. Since 2005, the BIS has compiled comprehensive data on national banking systems’ exposure to sovereign borrowers on an ultimate risk basis, which take into account guarantees and other off-balance sheet exposures. Such exposures include not only cross-border exposures but also the local claims on governments of subsidiaries of foreign banks. But, and this is an important limitation, banks’ claims on their home sovereigns are not included, although they often represent the major part of banks’ sovereign exposure.

The earliest available data compiled on this basis pertain to the first quarter of 2005. The latest data published in the BIS *Quarterly Review* relate to the first quarter of 2011 (Table 2). Clearly, sovereign exposures of banks are very substantial. Given these exposures, sovereign debt strains immediately become bank debt strains.

Foreign claims¹ on the public sector of selected countries, by bank nationality Table 2

		Foreign claims on						
		Belgium	Greece	Ireland	Italy	Portugal	Spain	Total
Bank nationality	Euro area	81.1	38.3	9.8	215.4	30.1	80.1	454.8
	France	51.5	13.4	2.9	105.0	8.6	32.6	214.0
	Germany	11.3	14.1	3.2	51.0	8.8	29.4	117.7
	United Kingdom	5.3	4.0	4.6	12.7	1.8	8.6	37.0
	United States	11.4	1.9	1.7	14.4	1.3	6.1	36.8
	Japan	9.4	0.2	1.1	29.8	1.1	10.4	51.9

¹ Foreign claims consist of cross-border claims and local claims of foreign affiliates. Not included are bank claims on their home sovereigns.

Source: BIS consolidated banking statistics (ultimate risk basis).

² J Caruana, “Basel III: New strains and old debates – challenges for supervisors, risk managers and auditors”, speech delivered at the Bank of Portugal conference, Lisbon, 14 October 2011.

C Interaction between bank and sovereign spreads: probabilities of default

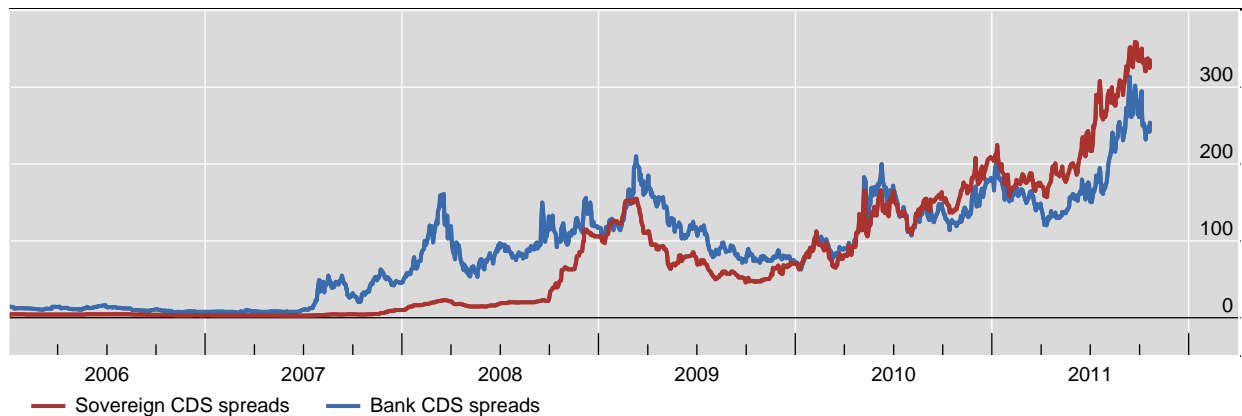
The following graphs illustrate the malign feedbacks between weak sovereigns and still fragile banking systems.

- Since the bank bailouts of 2008–09, market participants have priced sovereign and banking default risks as closely intertwined, with varying situations from country to country (eg contamination of banks by the sovereign in Greece, contamination of the sovereign by banks in Ireland).

iTraxx Europe CDS spreads

Five-year on-the-run CDS premia, in basis points

Graph 6



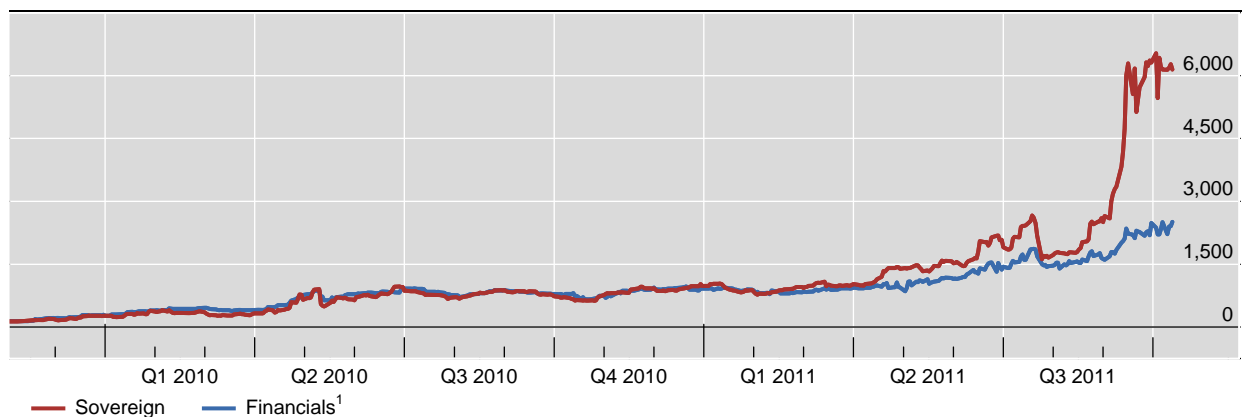
Source: JPMorgan Chase.

- Contamination of the banks by the sovereign (Greece)

Greek CDS spreads

Five-year on-the-run CDS premia, in basis points

Graph 7



¹ Simple average over a sample of domestic financial institutions.

Source: Markit.

- Contamination of the sovereign by banks (Ireland)

Irish CDS spreads

Five-year on-the-run CDS premia, in basis points

Graph 8



¹ Simple average over a sample of domestic financial institutions.

Source: Markit.

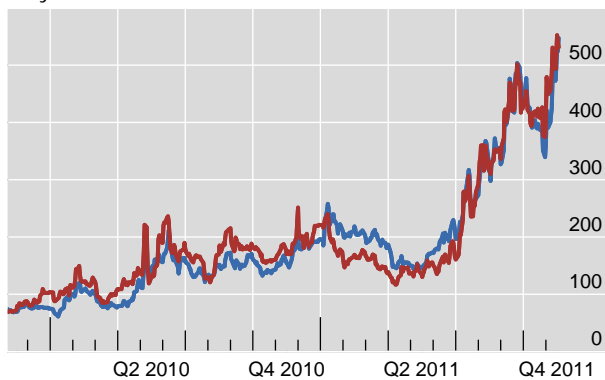
- Banks and sovereign spreads are highly correlated (in Italy, Spain, Belgium, and France).

CDS spreads

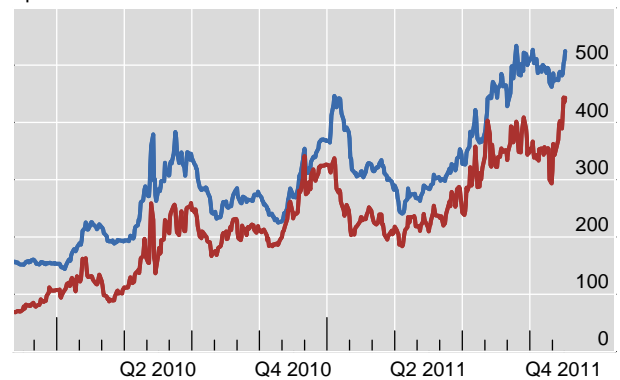
Five-year on-the-run CDS premia, in basis points

Graph 9

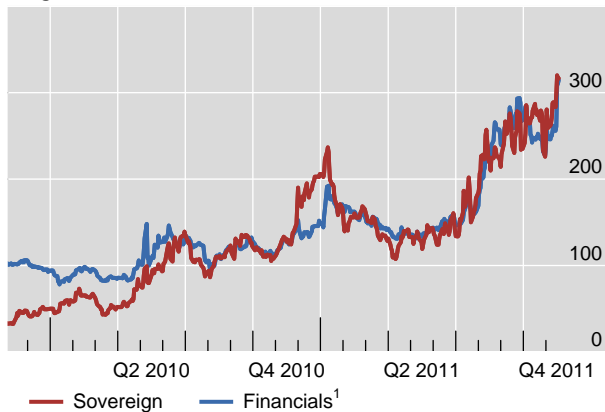
Italy



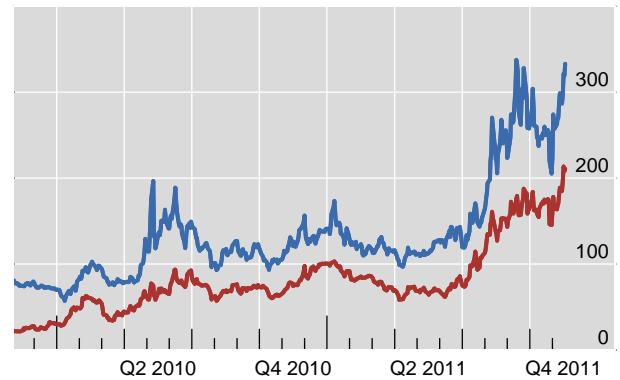
Spain



Belgium



France



¹ Simple average over a sample of domestic financial institutions.

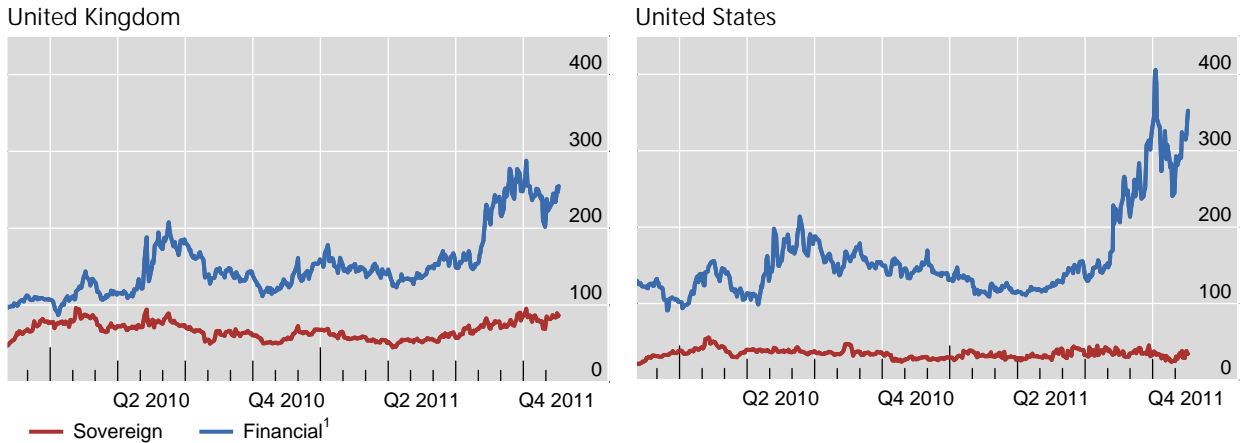
Source: Markit.

- The lower correlation in the US and UK cases is worth noting.

CDS spreads

Five-year on-the-run CDS premia, in basis points

Graph 10



¹ Simple average over a sample of domestic financial institutions.

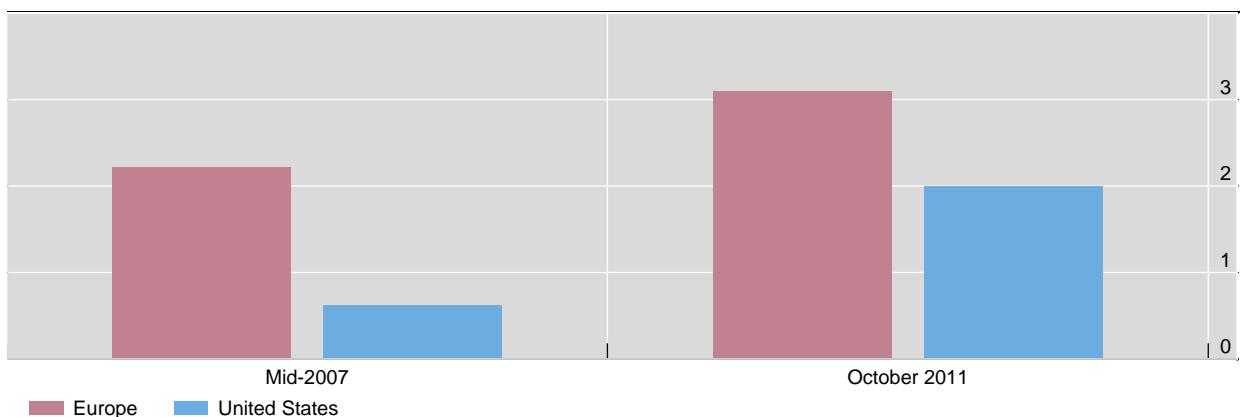
Source: Markit.

D Interaction between bank ratings and sovereign ratings: probability of bailout

- The bank rating methodology used by credit rating agencies takes into account not only a bank's standalone credit profile but also the prospect of government support in times of stress. As shown in Graph 11, rating upgrades that reflect implicit government support have increased since 2007. This means that credit rating agencies are still inviting investors to price in a large degree of public support for large banks – and this despite any “no bailout” policy stance that denies the use of public funds to rescue “too big to fail” institutions. The “probability of bail-out” as perceived by markets doesn't seem to have declined

Rating upgrade due to implicit official support¹

Graph 11



¹ Rating upgrade is the number of notches that banks' ratings are increased based on the implicit expectation of official support.

Sources: Fitch Ratings and FSB calculations.

so far. However a number of recent downgrades of banks' ratings have been motivated by the recognition that the implicit government support may be weakening due to fiscal strains.

E The rise in sovereign risk in financial markets is not fully reflected in banks' accounting framework

In the absence of a full fair-value accounting framework, the sharp widening of sovereign credit spreads is not fully reflected in banks' financial reporting. This explains the very divergent estimates of the recapitalisation needed by European banks, depending on whether their sovereign holdings are marked to market or accounted for as held to maturity (amortised cost).

According to a recent IMF analysis of sovereign holdings by European banks, 12% of these exposures were included in the trading book (with fair value reflected in profit and loss), 49% were classified as available for sale (with any unrealised loss reducing equity, but with no hit to profit and loss) and 39% were classified as held to maturity (valued at amortised cost net of any impairment provision). As a result, the pricing of sovereign risk in financial markets currently diverges from the accounting framework applicable to the banking book, which does not reflect the widening of sovereign spreads in the profit and loss until an impairment provision is taken.³ The repricing of sovereign risk in financial markets has found its way into banks' financial reporting only to a limited extent.

European banks: loss recognition on sovereign exposures

Table 3

	Percent of total exposures ¹	Accounting standards		Accounting practices
		Impact		Valuation method
Trading book	12	Realized loss/gain in profit and loss account	Fair value	Generally MTM. Mark-to-model if the market is inactive. As some banks, internal models for "illiquid" assets are used.
Available for sale	49	Unrealized loss/gain, impact on equity	Fair value	Generally MTM. Mark-to-model if the market is inactive. As some banks, internal models for "illiquid" assets are used.
Held to maturity	39	Provisions in profit and loss account	Amortized cost, net of any impairment provision, based on "incurred loss"	Provisions mostly taken on eligible Greek government debt.

¹ Based on the European Banking Authority's data on banks' exposures to high-spread euro area sovereigns. Held-to-maturity value is calculated as the residual. MTM = mark to market

Source: IMF Global Financial Stability Review, September 2011.

³ That said, this same banking book accounting doesn't reflect in the profit and loss any capital gains resulting from the decline in "risk-free" rate (US Treasuries and German bunds), which may partially offset the widening of sovereign credit spreads.

II. Treatment of sovereign risk in banking regulation and supervision: Basel rules, Brussels rules, National rules

The global sovereign debt crisis has exposed fault lines in the regulatory treatment of sovereign risk. However, the deficiency is not in the Basel standards but in the way the global standards have been applied in some countries and especially in the European Union. But, as mentioned earlier, the main anomaly with hindsight remains how complacently sovereign risk was priced by financial markets in the decade up to 2009. At most, European regulation especially the zero risk weight assigned to sovereign exposure may have encouraged a complacent assumption among market participants that a “euro area umbrella” existed.⁴

A Mounting criticism of the regulatory treatment of sovereign risk

Critics have charged bank regulators and supervisors with tilting the treatment of sovereign risk to provide regulatory incentives for banks to accumulate large sovereign exposures. They cite three aspects:

- a) Number one: a zero risk weight is applied to AAA and AA- rated sovereigns. The chairman of the IASB is said to have gone so far as to call this the “biggest accounting scam in history”.
- b) Number two: government bills and bonds form a substantial part of the liquid assets required in the newly established liquidity coverage ratio (LCR). This new ratio could be seen as incentivising banks to hold sovereign debt.
- c) Number three: the large exposure regime in Europe excludes highly rated sovereigns from the 25% of equity limit on large exposures.

Combined, these three elements in the regulatory treatment of sovereign risk could be seen as supporting “financial repression” (ie policies that require private savings to be invested in government bonds and are likely to end up with a long-term misallocation of capital).

B Such criticism does not apply to Basel regulatory standards:

Let me explain why:

1. Risk weights for sovereign assets in Basel II and Basel III

(a) sovereign exposures in the banking book

True, the Basel II standardised approach allows a zero risk weight to be applied to AAA and AA- rated sovereigns⁵ (Table 4).

⁴ R McCauley and W White, “The euro and European financial markets”, in P Masson, T Krueger and B Turtelboom (eds), *EMU and the international monetary system*, IMF, 1997, pp 352–53.

⁵ Paragraph 54 of Basel II (comprehensive version published in June 2006) also mentions that, “At national discretion, a lower risk-weight may be applied to banks’ exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded in that currency.” Many jurisdictions have applied zero risk weight to such exposures. This paragraph relates to the standardised approach only.

Basel II standardised approach: sovereign risk weights						Table 4
Credit assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	0%	20%	50%	100%	150%	100%

However, large and sophisticated banks are expected to implement the IRB (internal ratings-based) approach and not the standardised approach. The Basel II internal ratings-based approach for calculating credit risk capital does not imply a zero risk weight for highly rated sovereigns. It calls instead for a granular approach allowing for a meaningful differentiation of sovereign risk. The IRB approach requires banks to assess the credit risk of individual sovereigns using a granular rating scale, accounting for all relevant measured differences in risk with a bespoke risk weight per sovereign.

Basel II: illustrative IRB risk weights and capital charge for sovereigns¹ Table 5

Asset class: LGD: 45% Maturity: 2.5 years		Sovereign exposure	
Probability of default (in %)	Risk weight (in %)	Capital charge (in %)	
0.01	7.53	0.60	
0.02	11.32	0.91	
0.03	14.44	1.16	
0.05	19.65	1.57	
0.10	29.65	2.37	
0.25	49.47	3.96	
0.40	62.72	5.02	
0.50	69.61	5.57	
0.75	82.78	6.62	
1.00	92.32	7.39	
1.30	100.95	8.08	
1.50	105.59	8.45	
2.00	114.86	9.19	
2.50	122.16	9.77	
3.00	128.44	10.28	
4.00	139.58	11.17	
5.00	149.86	11.99	
6.00	159.61	12.77	
10.00	193.09	15.45	
15.00	221.54	17.72	
20.00	238.23	19.06	

¹ Assumes loss-given-default of 45% and maturity 2.5 years.

Source: Basel Committee on Banking Supervision.

Under the IRB approach to credit risk, there is no explicit stipulation with regard to sovereign exposure, except that the 3-basis point probability of default (PD) floor that was prescribed for corporate and bank exposures does not apply. However,

there are qualitative requirements that govern the design and operation of the IRB approach. In particular, paragraph 389 of the Basel II framework requires that there be a “meaningful differentiation” of risk. Banks opting for the IRB approach are allowed to use their own internal measures for key drivers of credit risk and, in this context, have the obligation to determine their own estimates of sovereigns’ probabilities of default. Further, banks using the Advanced IRB approach can also rely on their own estimates of loss-given-default for each sovereign. These risk measures form the input parameters (PDs, LGDs...) that are converted into risk weights and regulatory capital requirements (Table 5). Treating a significant portion of sovereign exposure as risk-free contradicts the granularity required for a meaningful differentiation of risk. This does not comply with the Basel II framework.

(b) Sovereign exposures in the trading book

With the introduction of an incremental risk charge on the trading book, Basel III also goes in the direction of risk differentiation (not zero risk weight) through the capture of default risk (including sovereigns) in the trading book. In addition, other risks like interest rate risk are captured under the trading book rules.

(c) Leverage ratio: guarantees a non-zero capital charge for sovereign exposures.

In addition, the introduction in Basel III of a leverage ratio backstops the risk-based system of capital requirements and reduces the costs of any model risk in the system of risk-weighted assets. Sovereign exposures are fully included in the denominator of the leverage ratio, another step away from a zero risk weight for them.

2. Liquidity requirements (Basel III)

The liquidity requirements under Basel III do not designate government securities as the only qualifying liquid assets. In the Basel III liquidity rules, high-quality liquid assets are categorised into Level 1 and Level 2 assets. Level 1 assets (mainly highly rated sovereigns) are considered to be of the highest credit quality and best market liquidity. But highly rated corporate and covered bonds also qualify as liquid assets (Level 2), albeit subject to some limits, including a 40% limit for Level 2 assets. Therefore the Basel III liquidity requirement cannot be seen as “financial repression”. On the contrary: it recognises that, for most banks, corporate and covered bonds will help promote a diversification of the liquid asset pool. Indeed, the Basel Committee’s quantitative impact study found that banks currently hold Level 2 assets amounting to well below 40% of their total liquid assets. Moreover, banks are free to diversify both their sovereign and corporate liquidity buffers globally, provided they have sound processes to manage any foreign exchange risk.

3. Large exposure regime

The large exposure regime is part of the EU capital requirements directives (CRDs). The exemption of sovereigns from the large exposure limits is not part of a global standard but a regional decision. It is important to recall, however, that Basel II

addresses concentration risk through the Pillar 2 provisions,⁶ and that the BCBS established in June 2011 a group to review the large exposures regime.

C Brussels standard: a generalised zero risk weight

The European CRDs have introduced a generalised zero risk weight which is not in line with the spirit of Basel II. Article 89(1)(d) of the CRD (amended by Directive 2009/111/EC or “CRD II”), and Annex VI Part 1 paragraph 4 assign a risk weight of 0% for “exposures to Member States’ central government [...] denominated and funded in the domestic currency of that central government”. The main criticism which can be levelled at the European directives is that, instead of confining the zero risk weight to the standardised approach, they permit a generalised zero risk weight through the so-called “IRB permanent partial use” rules. According to these rules, a bank can apply the IRB approach to corporate, mortgage or retail exposures, while applying a one-size-fits all zero risk weight to the sovereign debt of EU member states. This is equivalent to a mutual and unqualified exemption of certain sovereign risks from capital charges, an exemption inconsistent with Basel II’s risk-sensitive framework.⁷

In fact, it is evident from the 2011 European stress test report that only 36 out of the 90 participating banks applied their own internal model to sovereign risk, a lower fraction than for the corporate, mortgage or retail asset classes (see Table 6).

Usage of IRB approach by banks involved in the 2011 European stress test Table 6

Portfolio	Number of banks participating: 90 of which: number of banks with IRB models: 59
Sovereign	36
Institutions	44
Corporate	58
Retail residential mortgage	53
Retail revolving	31
Retail SME	44
Total retail	53
Commercial real estate	54
Total	59

Source: European Banking Authority, EU-wide stress test results, 2011.

To avoid this risk of “cherry picking” (applying IRB to most portfolios but the zero risk weight for sovereigns), some jurisdictions (Australia, Canada) prohibit the partial use of the standardised approach by IRB banks.

⁶ Supervisory review process.

⁷ In effect, this was a reversion to the risk-insensitivity of Basel I’s treatment of sovereign risk: absent for OECD countries, present for non-OECD countries.

D US standard

The US situation regarding the treatment of sovereign risk is also unsatisfactory. It continues to be based on the zero risk weight applicable to OECD countries in the old Basel I framework, as the Basel II IRB approach is not yet fully in place.

III. Supervisory recognition of sovereign risk: the way forward

A Need to put an end to the fiction of a uniform zero risk weight for sovereigns

To that effect an amendment to the CRDs is, in my view, necessary. That said, it is fair to say that we do not know precisely how other jurisdictions treat sovereign risk. The EU directives have the merit of being transparent and it may well be that elsewhere in the world a zero risk weight is also widely applied to sovereign exposures in a more opaque, purely domestic, regulatory process.

B Need for supervisory recognition of sovereign risk: work in progress

In a number of advanced economies, sovereign debt has lost its apparent risk-free status. This cannot be ignored by the regulatory capital framework: Basel II (banking book) and Basel III (trading book and leverage ratio) allow for this recognition. But it is up to supervisors to enforce this recognition of sovereign risk in banks' risk measurement and capital adequacy.

The newly established European Banking Authority (EBA) has taken a major step in this direction. The 2011 EU-wide stress test included a stress test with haircuts applied to sovereign exposures in the trading book and increased impairment provisions for these exposures in the banking book. To prevent underestimation of risk for sovereign debt held in the banking book, the EBA set a floor on the sovereign

Probability of default used in the EU wide stress test for sovereign exposures		Table 7
S&P rating	Average two-year PD implied by external ratings in % (EBA calculations)	
AAA	0.03	
AA	0.03	
A	0.26	
BBB	0.64	
BB	2.67	
B	9.71	
CCC-C	36.15	

Source: EBA: methodology note for the 2011 stress test.

risk parameters. In particular, the EBA set probabilities of default based on external ratings (Table 7). For instance a non zero probability of default (0.03%) is applied to AAA and AA rated sovereigns. This represents a much more rigorous approach than before and paves the way for a sound implementation of Basel standards in the European Union, moving away from the zero risk weight for sovereigns.

C Importance of a consistent implementation of Basel standards across jurisdictions Basel Committee review of the consistency of risk weighting of assets

While the Basel standards are not liable to the criticisms regarding the regulatory treatment of sovereign risk, their implementation in national jurisdictions can be in some cases. To address this type of problems, the Basel Committee has initiated a full review of its members' implementation of the Basel regulatory capital framework. This includes the measurement of risk-weighted assets in both the banking book and the trading book, to ensure that the implementation of the global standards is consistent in practice across banks and jurisdictions. No doubt that the treatment of sovereign risk will be an important dimension of this review.

Conclusion

The sovereign debt crisis has revealed the full implications of lax fiscal policies in a number of advanced countries. These include large increases in the perceived default probability of a number of highly indebted sovereigns whose bonds were previously thought to be risk-free. These changed perceptions have understandably had a large impact on financial institutions and markets. I have argued, nevertheless, that the Basel II standards provide a framework that allows for an adequate reflection of these risks in banks' capital requirements. However, this requires that the national rules which implement the Basel global standards do not allow the sovereign risk exposures of domestic banks to be underestimated. The European directives that introduced a generalised zero risk weight for sovereign exposures provide an example of bank regulation that stands at variance with the spirit of Basel II. By contrast, efforts such as the 2011 EU-wide stress tests, which required additional capital backing for sovereign exposures, represent a step in the right direction towards sound implementation of the Basel II rules. In any case, it is clear that the European experience vis-à-vis sovereign risk offers useful lessons for the regulators and supervisors elsewhere.

A key objective for governments in advanced economies is to earn back the quasi-risk-free status of their debt. However, the return to fiscal discipline will bring public debt down only progressively and, in the meantime, the sovereign risk incurred by banks will have to be properly measured and covered by adequate capital. As the IMF recently pointed out, "Attempts to suppress adverse indications of sovereign risk (be they credit ratings, CDS positions or other indicators) may ultimately undermine market liquidity and the credibility of the authorities."⁸ Moving from denial to recognition of sovereign risk in bank regulation is one key element that will help to restore confidence and to foster fiscal discipline.

⁸ *IMF Global Financial Stability Report*, September 2011.