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EXECUTIVE SUMMARY

The scope of this document is to identify market developments in the securities markets that could be viewed as conveying some sort of potential risk situation that could threaten the orderly functioning of the «national» or the «global» capital markets, with the potential to generate imbalances in the financial system overall or leading to macroeconomic imbalances. This is not always an easy task as the border between «national» and «global» becomes increasingly blurred as the Greek sovereign debt crisis is still amply showing.

On the global macroeconomic setting, the most recent EU and global forecasts point to stabilization in the macro setting in relation to the year before, in spite of a deceleration of the economic recovery. Despite an optimistic first half of 2011, no meaningful change of outlook since the autumn 2010 forecast is recorded. Global economic growth is set to be 4% in 2011 and 4.1% in 2012 in line with the previous forecasts. The euro area is closing the gap with the US. i.e. 1.5% annual GDP growth for Europe and 1.6% for the US. However, at the current juncture, a downward revision of the 2012 forecast seems very likely given the lackluster second half of the year. Leading economic confidence indicators gave some encouraging signs in the first half, but momentum seems to be waning.

The situation of Portugal's government finances measured by the selected indicators denotes improvement throughout the first three quarters of the year. However chances of improvement are dampened by the fact that the Portuguese economy plunged into recession. Portugal and Greece are the only EU members experiencing recession in 2011. Projections on government indebtedness for 2011 and 2012 point to a gross debt to GDP ratio of respectively 101.7% and 107.4%. The Portuguese direct government debt (€168,9bn as of 31 August) increased €18.9bn in 2011 so far. Part of the increase in the Portuguese debt is due to the new accounting procedures related to State-Owned Enterprises and Public-Private Partnerships, but also the effect of formerly uncovered liabilities of a regional administration.

Volatility remains high. The VIX is currently at 34.4% and the Vstoxx at 39.9% up from 17.8% and 23.9% in the beginning of the year, respectively. PSI20 historic volatility doubled between January and October. It is currently at a 34.0%-peak level. From a market risk perspective these figures require close monitoring and concern.

The intense market turbulence recorded in 2011 appears to be due *inter alia* to the downside risks that persist, in particular market risk and sovereign credit risk - economic and market confidence is not robust enough and the developed markets banking sector juncture is delicate. With the unfolding of the sovereign crisis, banks suffered losses from sovereign debt exposures, wholesale interbank funding was hit, and confidence among institutions weakened. The on-going economic deleveraging process entailed a slowdown in the credit supply growth (in Europe). European banks' solvency and liquidity problems justified government plans to recapitalize them so that they keep able to perform their role in the economy. Arguably, sovereign risk increased from last year – one more country required international financial assistance and two large countries were caught by the increasing selling pressure on government debt: Spain and Italy.

The 3-month Value-at-Risk of EuroStoxx 50 on 17 October 2011 was 39% determined with a 99% confidence level according to the parametric approach. This was one of the highest VaR figures recorded in 2011. However, the expected loss levels are not as strong as those expected losses during the “Lehman Brothers collapse moment” in October 2008, but at some point in September 2011, the Stoxx VaR exceeded the 53% mark. The Portuguese market 3-month VaR of PSI20 was similarly high in October and averaged 22% between January and October 2011 or 2 p.p. more than the year before.

From a long-term historic perspective, the Value-at-Risk of the Portuguese securities market may be considered relatively high. Current VaR levels are not far from those recorded in April 2010 when the Greek sovereign debt crisis erupted. In a nutshell, the current market risk levels of the Portuguese stock market should be looked at cautiously.

In 2010 Portugal was considered one of the three most at risk euro area countries due to its fragile economic situation and market-size linked vulnerability. In April Portugal turned to the EU and the IMF seeking financial assistance. A €78 billion-strong financing package was negotiated on the basis of economic policy conditionality. Adding to Greece and Ireland, there are now three programme countries in the euro area.

As a consequence of the government insolvency the Portuguese Republic was downgraded 5 times between March and April alone. In July, Moody’s downgraded the Portuguese Republic to below investment grade status, as well as Ireland. More recently, in October, DBRS, a Canada-based rating agency also downgraded Portugal to BBB, one notch above the above mentioned status.

The relentless widening of sovereign CDS spreads within the euro area is a cause for concern. The spread between the Portuguese and the German sovereign debt CDS has not ceased to widen since the beginning of 2011. October 5-year CDS prices of Portuguese sovereign debt (1068 bps in 19.10) were 12.2 times the German equivalent (87 bps).

Obstinately inverted interest rate yield curves for Portugal, Ireland and Greece denote a higher credit risk for short-termed maturities than for longer-term maturities. This unconventional market situation is consistent with the CDS spread evolution. Credit cost for the Portuguese economy has increased substantially. The 10-year government bond yield is 12.1% and the 2-year yield is 17.9%, new record highs since Portugal adhered to the euro. Italy and Spain sovereign debt markets were also subject to increased pressure. Sovereign risk is still increasing in the euro area.

Stock markets downward pressure was felt strongly in 2011 in large euro area markets, as well as in Portugal and Greece. Losses were mostly concentrated in the second part of the year further to the economic deceleration in the US and in Europe, as the first semester the macro environment was mildly benign. Greece’s major stock index declined -56.5%. Portugal’s PSI20 was also hit hard (-21.2%), followed by Italy’s MIB (-19.2%), Japan’s Nikkei (-14.2%), Spain’s IBEX (-10.2%) and Ireland’s ISEQ (-9.2%). The Eurostoxx (-16.6%) declined considerably more than the S&P (-3.8%) and the MSCI World (-8.2%). Reported trading volume in equities and debt securities via markets supervised by the CMVM fell on a yoy basis.

As a result of the combination of stock market price indices fall and increases in corporate earnings in 2011, the price-to-earnings ratio (PER) of the major European and US indices decreased in the first 10 months of 2011. From a pool of international indices composed by the FTSE100, the DAX40, the CAC40, the IBEX35, the S&P500 and Nikkei225, PSI20 displays a relatively low PER (11.9), similar to the French (11.7). CMVM analysis on the basis of the CAPE¹ and the PER indicators suggests that the Portuguese market could be considered as the least undervalued among a set of four European markets.

From the analysis of the distribution of the orders' quantity sent to Euronext Lisbon regulated share market broken down by the most relevant members the following emerges: On average, 62.4% of Euronext Lisbon share-related orders targeting the 10 largest issuers originated from 5 trading venue members. The orders concentration ratio varies according to the issuer, and ranges between 46.7% and 80.9%, the two extreme values. Three out of the 5 most prominent financial intermediaries sending orders to Euronext Lisbon (equity segment) emerge as dominant. These three members are often among the 1st, 2nd and 3rd positions in terms of the number of orders sent to the trading system.

In the same vein, 41.7% of actual trading activity was carried out by the very same 5 members. The data show a relatively high concentration among the largest 5 members across all securities.

Between January and September 2011, on average PSI20 order-to-trade ratio was 8. Two stocks displayed relatively high average order-to-trade ratios, of 26 and 16. Put another way, these two figures suggest a trading standard where more than 95% of the orders routed to the system materialize into no trade at all. In two extreme cases, concerning two different domestic stocks and two different non-resident members, the order-to-trade ratios were 481 and 265. These data suggests that some stocks might be subject to algorithmic trading, and need to be closely monitored.

The strong valuation of the Swiss franc against the euro (and other currencies) came to a halt in the beginning of August after the Swiss National Bank started increasing the supply of liquidity to the Swiss franc money market. Eventually the Swiss franc foreign exchange rate against the euro was fixed by the Swiss National Bank in September (at a target of 1.2 francs per euro). One among many undesirable effects of the overvaluation of the Swiss currency was the malfunctioning of the credit market in some Member States of the EU. According to the ESRB *«Excessive foreign currency lending may produce significant systemic risks [...] and may create conditions for negative cross-border spillover effects»*. These events are a learning opportunity for some areas of action by securities regulators. For example, insofar as lending for the purchase of securities and the distribution of complex financial products expressed in foreign currencies are concerned.

The Portuguese investment management asset pool is quietly declining. Total Assets under Management in September 2011 stood at €107.7bn, 17% less than in the same period in 2010. The erosion of the home-grown asset management industry is a long-dated process, involving all classes of funds but real estate's and venture capital. Among other possible causes for the decline, CMVM research² suggests that competing returns from other retail-oriented products are part of the industry's problem.

¹ See page 31.

² CMVM Annual Report 2010.

Turning to real estate funds specifically, the amounts under management remained relatively steady over the last 4 years, albeit recording a slight upward trend. Open-ended real estate funds AuM are €5,29trn, 15.5% higher than in 2007, although 5.7% less than 2010. Relative to the remaining asset management industry and on a long-term perspective, the AuM indicator would suggest that the real estate fund segment had so far withstood the industry's crisis. However, a detailed analysis shows that perhaps this is not the case, and that a slow adaptation to declining property prices and decreasing investor base is taking place. Between June 2010 and September 2011, open-ended real estate funds, traditionally bought by real estate investors, uninterruptedly lost investors for 5 quarters. The decline in the number of investors in Q3 2011 was the second largest since 2006, only exceeded by the 9.4% drop in 2008 during the Lehman crisis. The present situation appears to be a milder version of what happened in 2007-2008. Moreover, borrowing in the real estate fund industry is increasing. Between 2007 and 2010 such increase was largely due to closed-end funds' borrowing. However, from January 2011 onwards it was fully explained by open-ended funds' borrowing. Using a liquidity metric which consists of borrowing relative to overall property investment, open-ended funds recorded 5 consecutive quarterly increases up to September-2011: borrowing almost doubled in the first ten months of 2011. Also, real estate fund investments in money market instruments recorded a decrease. In spite of the borrowing growth magnitude, the current leverage levels are not yet as high as those reached during the liquidity squeeze that stormed the fund industry in 2008/2009.

From the perspective of the real estate fund manager, deteriorating market conditions may call for increased borrowing to offset outflows pressure linked to investors' redemptions from such funds, which could not be matched by property assets disposal within a reasonable timeframe. Liquidizing this asset type at a relatively attractive price may prove a challenging task amid a lethargic real estate market and an economic downturn. These two conditions combined are in place in 2011. Against this background, the performance of open-ended real estate funds is being closely monitored. This topic is thoroughly looked at in Section V.

The Portuguese securities market losses cannot be disconnected from the unfavorable local economic setting, the contagion effect from Greece and occasionally by other members of the euro area and by the short and medium-term downside risks stemming from above average leverage levels: public sector leverage, corporate sector leverage and household leverage.

The banking sector performance is playing and is expected to play a crucial role in the Portuguese securities market developments. Portuguese banks' stock market prices are decreasing, CDS spreads widen and volatility is above market averages. The quality of relevant parts of bank assets is still deteriorating. In the first 6 months of 2011 alone, non-financial corporate NPLs advanced 0.7 p.p., more than the full increase recorded throughout 2010. They now stand at 5.6%, the highest mark since 2002. Large exposures to troubled economies are also a part of the problem, especially in the sovereign debt space. Domestic financial institutions face severe funding and liquidity constraints. The peak of funding needs for the Portuguese banking sector over the next 10 years is expected to take place in 2012 when €17,8bn of principal is due by a set of the most representative banks. Against this backdrop, Portuguese banks are expected to contribute to increased

market risk and volatility to the Portuguese stock market. This topic is analysed in detail in Section IV.

To draw a clear-cut border line between sovereign risk and other risks looming for securities markets, especially banking sector risks, is a difficult task because of the strong interplay between the risks. While creative market solutions are necessary to overcome banks funding and capital problems, the use of traditional and innovative financial instruments should be looked at from a risk perspective. Covered bonds and contingent capital are a few examples.

The global covered bond market (understood as mostly European) is worth €2.5trn (2010) having grown roughly 5% per annum in 2009 and in 2010. Issuance in 2010 was €613.1bn, 15% more than the year before. 2010 was a record year for this asset class in Europe in terms of amounts outstanding, while issuance levels were at historical highs in H2 2010 and Q1 2011. Amid the financial crisis and the funding problems of several European banks, covered bonds have played a role in contributing to close bank funding gaps. In Europe, this top-quality credit exposure to banks has benefited from a privileged treatment from legal and monetary policy stances.

Valued at €29.1bn (2010), the Portuguese covered bond market is made up of public sector covered bonds and covered bonds backed by mortgages (*Obrigações Hipotecárias*). The latter, though, account for the overwhelming majority of the outstanding amounts. Eight Portuguese banking groups issued mortgage-backed covered bonds during the period 2008-2011, including the four largest institutions. Up to August 2011, CB issuance accounted for €8.6bn, a relatively high figure.

The use of covered bonds is not exempt of risks to the system as a whole and to investors in particular. Questions should be made on the extent to which the guarantees tied to covered bonds are not detrimental to other bank stakeholders. The fact that extensive pools of assets are allocated to covered-bond issues means that these are outside the scope of the asset recovery pool in the event of bankruptcy, hence reducing the amount of assets from which other less senior investors may claim upon. In the Portuguese market the proportion of outstanding covered bonds (2010) relative to the total banking system consolidated liabilities is still a small fraction (6% in 2010), however the figure increased 30% from the year before.

I. Introduction

The scope of this document is to identify market developments in the securities markets that could be viewed as conveying some sort of potential risk situation that could threaten the orderly functioning of the «national» or even the «global» capital markets, with the potential to generate imbalances in the financial system overall or leading to macro-economic imbalances.

With the globalization of the economy and markets, the distinction between «national» and «global» becomes increasingly blurred, as recently shown by the Greek sovereign debt crisis. Against this backdrop it is sometimes challenging to detach a specific «national» event or risk from its wider context, given the existing geographical linkages and the interplay between the economy and the securities markets.

Securities market is understood here as encompassing both debt and equity securities markets, as well as some alternative asset classes - real estate and private equity, and the investment fund industry in general. While acknowledging the relevance of derivatives market from a risk perspective, no comprehensive analysis about it is included at this stage, mainly because of data availability and collection challenges of this fundamentally opaque market. Notwithstanding the shortcomings, a closer look is taken at specific issues of this market where necessary or appropriate; in particular with regard to the credit default swaps (CDS) market.

A health warning is given regarding the absence of any risk categorization whatsoever guiding the presentation of the information contained herewith. Although the analysis presented implicitly and explicitly distinguishes the different types of risk such as market risk, credit risk, counterparty risk, liquidity risk or concentration risk, the analysis is not presented in a segmented way by risk type. These risks are cross-referenced in the appropriate context and relevant bits of the analysis.

The document starts by presenting a brief overview of the macro-economic context influencing the performance of the Portuguese market, against some major economic blocks and/or relevant economic partners, in Section II. In order to avoid making this section too lengthy, some macroeconomic indicators were left out of the analysis in spite of their importance, notably the external debt dimension.

Section III provides a brief analysis of the recent market developments comprising the identification of perceived risks which are relevant from the securities' markets regulatory and/or supervisory standpoints. This section emphasizes the equity markets, a few aspects of credit markets and a sub-set of the derivatives markets. It is not in the scope of this document to broach all the relevant domains of the securities markets, regardless of how important they may be. These could be dealt with in future issues of this document.

Two topics were chosen for this issue of CMVM's Risk Outlook. The first regards Portuguese bank securities markets and respective risks as well as the features and risks of

the covered bond market (Section IV). The second concerns developments in the domestic real estate fund market from a retail investor risk perspective (Section V).

The document uses a variety of data and information sources, although the data back-bone of the document is obtained via Bloomberg. Publicly available data sources like international and/or government bodies, and, to a limited extent, industry sources, are also used. CMVM data is also used. To the extent possible, data is presented for the period going as far back as beginning 2009 until October 2011 (depending on data availability in some instances). The time span used allows certain issues of the analysis to be put into a broader chronological perspective. However the main emphasis of the analysis goes to the most recent developments and more up-to-date risks, i.e. from January through October of the current year. Bloomberg daily data cut-off date is 19 October.

II. Macroeconomic snapshot

World economic recovery keeps it path, though at a slower pace...

On the global macroeconomic setting, the most recent EU and global forecasts³ point to stabilization in the macro setting in relation to the year before, in spite of a deceleration of the economic recovery. No meaningful change of outlook since the autumn 2010 forecast is recorded. Global economic growth is set to be 4% in 2011 and 4.1% in 2012 in line with the previous forecasts.

Although the recession came to a close in the last quarter of 2009, and the global economy entered positive territory in 2010, in 2011 some clouds lingered on the world economic environment in both sides of the Atlantic. US employment data figures caused considerable pain in the markets all the way through 2011 till October, as well as the government budgetary challenges faced by the US economy, recording a highpoint in summertime due to the harshness of the federal government debt ceiling political discussions. Rebalancing the economy is expected to be a lengthy process, not only because of the crisis scale, but also because of the magnitude of the de-leveraging path it entails. Furthermore, growth prospects are threatened by a number of risks, including (but not limited to), the EU sovereign debt crisis, the woes affecting several western countries financial systems, in particular their banking sectors, and, more generally, the volatility in the financial markets and the price performance observed in the commodities markets. The financial markets turmoil of 2011 is therefore still developing.

Spurred by strong private consumption and buoyant commodity prices, growth in emerging countries kept track, though the tightening monetary policies to combat inflationary pressures in some countries (e.g. emerging Asia and Latin America), the political unrest in some parts of the globe and the devastating effects of the Tohoku earthquake and tsunami in Japan weighed down on the global economy prospects. Although the disaster in Japan led to a reduction in economic activity in the short run, a “V-shaped short-term rebound seems to be under way”⁴ due to post-disaster reconstruction efforts.

...clouded by cooling economic expectations.

Some industry sources also show a moderate degree of optimism about the global economic recovery as of now. The Global PMI Output Index, compiled from national PMI manufacturing and service sector survey data, lost 7 points between February and September, when it reached 52, one of its lowest values for two years. This happened as the economy turned the corner (it is commonly accepted that the neutral level of the index stands at around 50 points). Driven by a decrease in the exporting activity of major global trading nations, namely China, Germany and Japan, the manufacturing component of the index lagged behind the services' one. The indicator's performance denotes cooling expectations about world output developments in the short term.

³ European Commission (EC) most recent (interim) forecast of September 2011.

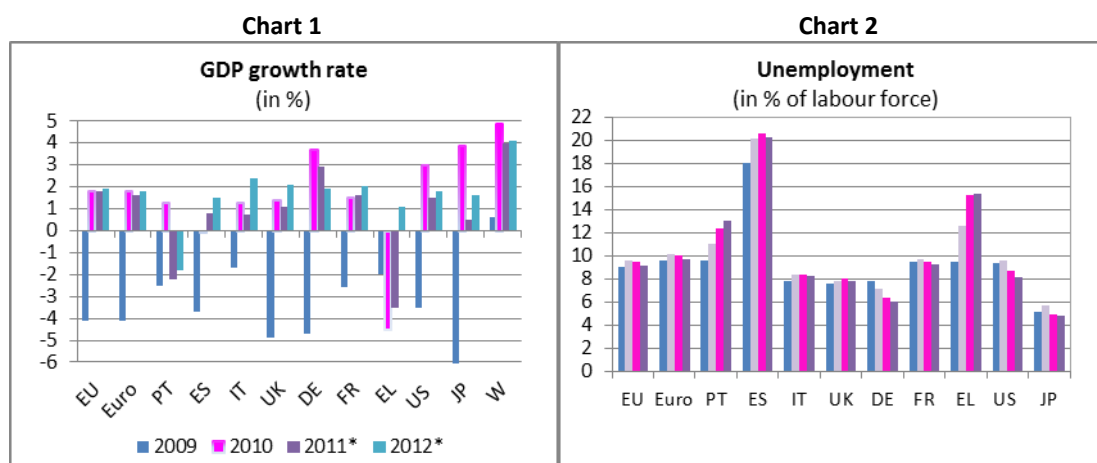
⁴ IMF WEO September 2011 (see references).

Despite some deterioration from August to September 2011, the IFO Business Climate Germany Trade and Industry indicator showed a positive trend during the year - it stood at an average value of 114.2 points. As of September the indicator displayed 107.5 points, which can still be considered a relatively good mark, close to pre-recession levels. The indicator encompasses both input about the actual economic situation and economic expectations.⁵

Notwithstanding the risks, EU economy projections remain broadly stable...

Chart 1 below depicts real GDP growth rates of Portugal and a number of selected European economies as well as the US and Japan.⁶ These are the countries that will be analysed throughout this document to provide an overview of the relative position of the Portuguese economy and respective securities markets. Similarly, Chart 2 presents unemployment figures.⁷

Macroeconomic indicators released in September by the European Commission (interim forecast) point to a minor upward revision in projected EU gross domestic product, which is now expected to grow 1.8% in 2011 instead of the previously estimated 1.5% and, for 2012 1.8%, in line with the previous forecast. In the employment spectrum the pattern was less rosy (spring forecast). The total unemployment rate in the EU remains stubbornly high at 9.5% in 2011 as forecast in autumn 2010. Some improvement is expected for 2012 though.⁸ These economic developments denote that the recovery follows its way, though at a somehow slower pace than last year. Still, there is room for optimism if one considers that in 2009 the EU economy contracted 4.2%.



Data source: European Commission (DG ECFIN/AMECO), IMF WEO; *forecast, W stands for 'World'.

⁵ Ifo Business Climate Germany - Results of the September 2011 Ifo Business Survey, 26 Sept 2011.

⁶ The acronyms used to denote countries are those of the EU interinstitutional style guide which can be found in <http://publications.europa.eu/code/en/en-370100.htm>.

⁷ Unless stated differently the source for the figures quoted in the text is the European Commission (see references).

⁸ European Commission spring forecast and AMECO database.

... closing the gap with the US...

As it was the case in 2010, in 2011 “emerging and developing economies” should contribute more to the world output growth rate (6.2%) while “advanced economies” are forecast to grow at a much slower pace, 1.6%.⁹ As far as economic growth is concerned, the euro area is closing the gap with the US. i.e. 1.6%¹⁰ annual GDP growth for the US and 1.5% for Europe.¹¹

The Portuguese fiscal imbalances and liquidity shortage warranted international financial assistance in May.

Although the Portuguese economy recorded a recession in 2009 – 2.5% GDP contraction¹² which was milder than that of its European peers’ (4.1% contraction in the euro area), its economic recovery was relatively weaker in 2010 and the country plunged into recession again in 2011. Conversely to a positive growth scenario as it is the case in Europe and in the euro area as a whole, the output growth forecast for 2011 and 2012, set at -2.2% and -1.8% respectively (spring forecast), reflects the ongoing recession. IMF September forecasts for Portugal, more up-to-date, coincide with those of the European Commission, reflecting the joint assessment of the Portuguese economy carried out by the Troika members. 2011 INE’s¹³ hard data on the quarterly output of the Portuguese economy point to a -0.5% and -0.9% growth rates in the first and second quarters respectively.

Portugal’s unemployment rate, at a forecasted 12.3% for 2011, deteriorated from its 2010 level (11%), and becomes further apart from its euro area peers (the euro average is 9.5%). The prospects for 2012 are bleak, with a forecast unemployment rate of 13%, or 3.3 p.p. higher than the euro area figure.

Whatever the sources used, the outlook for the Portuguese economy is certainly a matter of concern as it reveals the structural weakness of the economy when compared to the euro area, its closest economic and trading block. Furthermore, the country’s economic and financial systems face risks of their own which are not faced by many of its partners. Having joined Greece and Ireland, Portugal requested economic and financial assistance to the EU and the IMF in April. The three-year financial assistance programme,¹⁴ which entails economic policy conditionality, is a joint financing package worth €78 billion, of which a €6.1 billion-tranche was already made available on May. This situation heavily impacted the developments in the securities market as will be screened in Section III.

In a nutshell...

The macroeconomic data sources used take a cautiously optimistic tone, as the recovery both in Europe and the globe is in slow progress and threatened by a number of uncertainties. The recovery appears to have smoothly moved forth in the first semester but

⁹ IMF September forecast.

¹⁰ IMF September forecast.

¹¹ Unless stated differently the figures quoted in this paragraph are from the European Commission September interim forecast.

¹² 0.2 p.p. upward revision.

¹³ *Instituto Nacional de Estatística (INE)*

¹⁴ *Programa de Assistência Económica e Financeira (PAEF).*

gives signs of retrenchment in the third quarter. In Europe, despite a good export-driven first half and a moderately optimistic third and fourth quarter's prognosis, internal demand and risks linked to the sovereign debt markets and to frail financing systems are acting as deterrents to a stronger recovery.

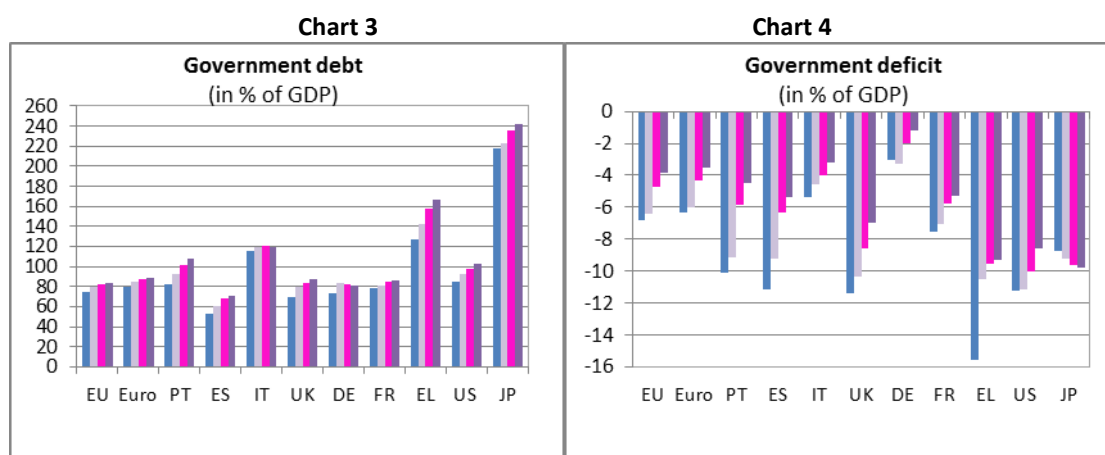
In Europe, despite the progress achieved in the redesign of the Economic and Monetary Union's governance, the critical economic and financial status of one euro area member, the fragile situation of other members, the selling pressure on sovereign debt markets of some euro area members and the increased credit and liquidity risk of a number of financial institutions were major sources of market volatility, risk aversion and deteriorating confidence in the market and in the banking sector during the first three quarters of the year. In the US the first semester of 2010 featured a below expectations job creation and financial constraints stemming from increasing government indebtedness and moderate economic growth.

Heightened volatility in the markets is a sign of financial instability and may dampen real economy prospects...

The intense market turbulence recorded in 2011 – illustrated by relatively high levels of market volatility (see Section III) – appears to be due *inter alia* to the downside risks that persist, in particular market risk and sovereign credit risk - economic and market confidence is not sufficiently robust and the developed markets banking sector juncture is delicate. With the unfolding of the sovereign crisis, banks suffered losses from sovereign debt exposures, wholesale interbank funding was hit, and confidence among institutions weakened. The on-going economic deleveraging process entailed a slowdown in the credit supply growth (in Europe). European banks' solvency and liquidity problems warranted government plans to recapitalize them so that they keep the ability to perform their role in the economy. Arguably, sovereign risk increased from last year – one more country required international financial assistance and two large countries were affected by the selling pressure on government debt: Spain and Italy.

... government finance fundamentals...

Chart 3 below shows the general government gross debt ratios in percentage of the GDP and Chart 4 the general government net lending/borrowing also expressed as a percentage of GDP, a.k.a. government surpluses/deficits. The figures used are those of the European Commission, including those for the US and Japan.



Data source: European Commission (DG ECFIN/AMECO), Gross debt figures, *forecast.

... show some improvement but are still rather depressing...

The situation in government finances is discouraging all across the board, with mounting debt *ratios* between 2010 and 2011 (forecast) and huge budget deficits, if the Stability and Growth Pact (SGP) 3% target is taken as the benchmark. The only country recording an improvement in its debt situation is Germany.

Following a raft of fiscal austerity measures in the EU it was possible to curb annual government deficits in 2011. Further decreases are expected in 2012 in the euro area and in the UK, as well as in the US. Despite the budget consolidation efforts carried out so far, part of the long-term debt reduction positive effects are expected to be felt in the longer run. The exception is Germany, who consequently benefited from heavy capital inflows into its government securities, viewed by investors as a safe haven in times of turmoil and heightened volatility. In 2011 German public debt yields reached historic euro era lows, making the cost of capital for this country relatively cheap.

The Greek economy is the one performing the worst among the European countries selected in terms of government debt (+15 p.p. between 2010 and 2011). The US and the UK annual budget deficits in 2011 are of the same magnitude as the Greek record. Portugal and Spain appear to be reducing their deficits in 2011 by 3.2 p.p. and 2.9 p.p. respectively (5.9% and 6.3% deficit respectively) and further decreases are estimated for 2012. Ireland (not featured) has the EU highest annual deficit, or 10.5% forecast in 2011. Unlike Portugal, Ireland stepped away from recession in 2011 and is expected to increase its economic output by almost 2% in 2012. Despite the economic policy effort to curb budget deficits, in the majority of the countries surveyed government indebtedness still increased, as expected while annual deficits persist. In Portugal the gross debt to GDP ratio increased 8.7 p.p., in Spain it raised 8 p.p., in the US grew by 6.3 p.p. and by 4.2 p.p. in the UK. The features of the euro area sovereign crisis will be discussed in detail in Section III.

Portugal diverging from the European recovery cycle.

The situation of Portugal's government finance measured by the selected indicators denotes improvement throughout the first three quarters of the year. Chances of

improvement are dampened by the fact that the Portuguese economy plunged into recession.¹⁵ Portugal and Greece are the only EU members experiencing recession in 2011. Government indebtedness projections for 2011 and 2012 point to a gross debt to GDP ratio of respectively 101.7% and 107.4%, just below the Greek and Italian records, and outside the EU, Japan's.¹⁶ The Portuguese direct government debt (€168.9bn as of 31 August) increased €18.9bn in 2011 so far. Part of the increase in the Portuguese government debt is due to the new accounting procedures¹⁷ which re-classify some State Owned Enterprises (SOEs)¹⁸ and Public-Private Partnerships (PPPs),¹⁹ leading to an enlarged base to determine the total amount of public debt. The SOE-related re-classifications produced a €3.17bn-increase²⁰ in the debt stock and PPP-related corrections led to a €1bn shortfall. More recently, the effect of formerly uncovered liabilities of the Madeira Administration (*Administração Regional da Madeira*) also negatively impacted the total amount of debt in 2010 by €1.1bn throughout the period 2008-2010 and by a €568.1m shortfall in 2011 accounts (Q1 and Q2).²¹

According to the European Commission projections the Portuguese government would show a 5.9% deficit in 2011 and a 4.5% deficit in 2012, denoting improvement in the fiscal situation. This effort appears strong if compared with the pattern observed in other countries (e.g. Greece, Ireland, UK, Spain and the US).

Despite a few positive signs the severity of the fiscal crisis required the financial assistance of the IMF-EU. Arguably it prevented the government from missing its obligations as a debtor. The announcement of the programme had the effect of cooling down market turbulence, of mitigating suspicion about the Portuguese economy's ability to balance government finances, the ability to recover from the economic recession and the ability to avoid further deterioration of confidence in the domestic banking sector and financial system overall. This effect was short-lived though.

EU-IMF Joint Financing Package to Portugal - Main Facts and Figures:

- ❖ April, 7 : The Portuguese authorities request financial assistance to the EU and the IMF.
- ❖ The financing arrangement totals €78bn over a three-year period (2011-2013). It is the combined effort of three entities which contribute €26bn each: the EFSF; the EFSM and the IMF. Total UE contribution, €52bn, accounts for 2/3 of the overall package.
- ❖ The first disbursement under the agreement took place on May, 24 (IMF), followed by the EFSM on May, 31. Disbursements under the programme totaled €30.3bn as of October, out of which 14.1€bn by the EFSM, €5.8bn by the EFSF and €10.4bn by the IMF. This corresponds to an execution rate of 39%.
- ❖ The financial assistance is granted on the basis of:
 - specific Economic Policy Conditionality as imposed by the EU in liaison with the ECB («Letter of Intent» and «Memorandum of Understanding»);

¹⁵ Defined as two consecutive quarters of negative output.

¹⁶ Japan gross debt is significantly different from its net debt, which is not usually the case in the other countries.

¹⁷ As released by INE in March and April.

¹⁸ *REFER, Metro de Lisboa and Metro do Porto.*

¹⁹ *SCUT Norte Litoral, SCUT Costa de Prata e Túnel do Marão.*

²⁰ Distributed over the period 2007-2010.

²¹ *Comunicado conjunto BdP/ INE "Contas da Administração Regional da Madeira", Setembro 2011.* Three corrections were operated in 2008, 2009 and 2010 debt figures (€139.7m, €58.3m and €915.3m respectively) plus a €568.1m correction in 2011 accounts.

- IMF standard conditionality («Memorandum of Economic and Financial Policies» and «Technical Memorandum of Understanding»).

In both cases the economic and financial adjustment programme put forward by the Portuguese authorities («Programa de Ajustamento Económico e Financeiro» (PAEF)) must aim at ensuring fiscal and financial stability, and promoting growth, and is subject to the approval of the entities involved.

- ❖ The main drivers of the programme are:
 - Redress the fiscal imbalances;
 - Recapitalize the banking sector aiming at achieving financial stability;
 - Foster economic growth and competitiveness.
-

... sluggish economic recovery, government finance imbalances and the lack of confidence in the European (and global) financial system: a dangerous mix disturbing the securities markets with increasing contagion risk.

Despite some macroeconomic positive signs in comparison with the 2009 crisis, hesitant economic fundamentals are driving an increased aversion to risk. Confidence in the financial system is at a relatively low level, shaken by large-scale bankruptcy and scandals in the banking sector (recent examples are Dexia, UBS and MF Global) and by the banks' funding woes, all adding to an intensification of market instability and a high volatility environment. The Greek sovereign credit problem was exacerbated by the economic recession and the respective political solution is still being worked out by EU and international policy-makers. There is a risk that the May 2010 market turmoil may storm the financial world again soon.

III. Recent market developments in selected segments of the securities markets

2011 EVENTS CHRONOLOGY

January	<p>Launch of the European Authority of Securities Markets (ESMA) and remaining entities European System of Financial Supervisors (ESFS).</p> <p>Speculation about default by the Portuguese Republic.</p> <p>Fears of inflation because of German booming economy and commodity prices increases.</p> <p>Ifo reaches 20-year high.</p> <p>S&P downgrades Japan to AA.</p>
February	<p>Data release on BCP, BES and BPI combined ECB loans of €19.8bn.</p> <p>Portuguese Republic issues first syndicated OT issue since February 2010.</p> <p>Borrowing costs reach 7.63%, exceeding the 7% political threshold beyond which the Government would seek international assistance.</p> <p>ECB buys Portuguese government debt securities.</p> <p>Global short covering.</p> <p>Credit Suisse sells €2bn of CoCos.</p> <p>UK inflation at 4.4%.</p>
March	<p>Portuguese and German governments meet to agree on the economic policy measures to redress the Portuguese fiscal situation.</p> <p>Gold hits new historic price high.</p> <p>Tohoko earthquake and tsunami in Japan.</p> <p>Euro area ministers decide on the EFSF enlarged remit and conditionality on loans.</p> <p>LCH.Clearent stops accepting Portuguese sovereign debt as collateral in the clearing and settlement of government securities.</p> <p>Pimco reveals it sold off its positions in US treasuries.</p> <p>Three major rating agencies downgrade the Portuguese Republic.</p> <p>Portuguese prime minister resigns.</p>
April	<p>LCH.Clearent revises the risk parameters for Portuguese government bonds cleared through the RepoClear service requiring higher margining.</p> <p>Moodys and Fitch downgrade the Portuguese Republic.</p> <p>BES CEO urges the government to accept an interim €15bn loan from the IMF/EU.</p> <p>Portuguese banks did not participate in the OT auction. Securities sold to the Social Security fund.</p> <p>Moody's cuts rating of 7 Portuguese banks.</p> <p>ECB raises policy interest rate by 0.25 p.p. to 1.25%.</p> <p>Portugal puts forward a request for economic and financial assistance.</p>
May	<p>Portuguese economic climate indicators - worst record since June 2009.</p> <p>EU/IMF approve a 3-year joint financing package of €78bn to Portugal.</p> <p>Portugal receives first tranches of the financial aid package.</p> <p>Portugal signs Economic Policy Conditionality with the EU and Memorandum of Understanding with the IMF.</p> <p>EU Council agreement on the pan-European regulation of short-selling and some aspects of the CDS market.</p> <p>Oil prices begin to slide.</p> <p>Civil servants general strike in Portugal.</p> <p>Government presents strategy agreed with the Troika.</p>
June	<p>ECB keeps policy interest rates unchanged.</p> <p>France and Germany agree on the private sector involvement (PSI) in the new financial assistance programme for Greece.</p> <p>IMF Global Financial Stability Report highlights the link between sovereign risk and financial sector risk.</p> <p>Commodity prices stabilizing due to unwinding speculative positions in derivatives.</p> <p>ECOFIN agrees on a general approach on a set of legislative proposals on the EU's economic governance – the «Six-Pack».</p> <p>FED holds policy interest rates on inflation concerns.</p>

	<p>EU Council adopts financial assistance programme to Greece worth €170bn. General election in Portugal.</p>
July	<p>ECB raises policy interest rate by 0.25 p.p. to 1.5%. EBA stress tests results are released. Sovereign debt yields hit new historic highs in some EMU members (Italy, Spain). Moody's downgrades the Portuguese and the Irish Republics to below investment grade status. Portuguese stock market experiences the worst week in 14 months. Italian assets' sell-off. Extraordinary Eurogroup/EU meeting to discuss the Greek crisis. Congress impasse on the federal government debt ceiling. Wall Street suffers heavy losses. US shorter tenor government bond CDS spread temporarily higher than Belgium, Kazakhstan, Russia and Turkey. Press weathers disappointing earnings of the European financial sector. 10-year US bond yields below 3%, at historic lows. German bund yields at historic EMU-era lows. BEA releases US economic output data below expectations. ECB suspends application of the rating threshold regarding Portuguese government securities for the purpose of collateral acceptance in Eurosystem's financial operations.</p>
August	<p>US job creation data below expectations. ECB announces deceleration of the economy in Europe. Reported fall in Portuguese banks' first semester profits. S&P downgrades the US. ECB announces strong implementation of the SMP (to cope with the Italian and Spanish governments' debt woes). US stocks suffer sharpest drop since 2008. French banks stock prices plunge. SocGen, BNP Paribas and Crédit Agricole lose 14.7%, 9.5% and 11.8% respectively of their price in one single trading day. Press releases Buffet plans to invest €5b in BoA. First review by the Troika on the implementation of the Portuguese assistance programme. Regulatory restrictions to short-selling imposed in France, Italy, Belgium, Spain and Greece.</p>
September	<p>Dismal job report in the US. Gold hits new historic highs (\$1.920/ounce). French government declares its support to the three largest domestic financial institutions. Fears of a worsening debt crisis in the euro area. Italian sovereign debt yields reach new EMU-era historic highs. Swiss National Banks starts intervening in the money market to prevent further appreciation of the Swiss franc. UK inflation rises to 4.5% in August. UK Vickers Commission suggests large banks to split-up. US data on increasing poverty levels. S&P downgrades the Italian Republic and 7 Italian financial institutions. ECB relaxes collateral requirements to offset the liquidity crunch. US FED states the US economy faces important risks of economic slowdown. US FED announces Twist Operation in support of the real estate market. PSI20 loses 5.2% in one single day (22.9). Portuguese PM states that if Greece defaults Portugal could need another international loan. German bunds and US Treasuries/Bonds continue to post multi-decade yield lows. INE and Banco de Portugal issue communiqué on the revision of government account relative to the Madeira Administration funding gap. IMF approves €3.98bn disbursement following the first economic performance review.</p>
October	<p>Goldman Sachs reports a quarterly net loss of \$428m. Moody's threatens to change the outlook for French sovereign debt from stable to negative. Moody's downgrades Italy and then Spain. CFTC approves new rules limiting speculation in 28 commodities. EU Council-EP agreement reached on increased transparency and limits on short-selling and naked CDS. ESRB issues first recommendations on the risks of lending in foreign currencies. Citigroup downgrades its investment recommendations relating to BPI and BES. Banco de Portugal reports decreasing reliance of Portuguese banks on ECB</p>

	funding facilities for the first time in three months. Fitch and S&P downgrade Spain and several financial institutions.
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As a consequence of the government insolvency the Portuguese Republic was downgraded 5 times between March and April alone. In July, Moody's downgraded the Portuguese Republic to below investment grade status, as well as Ireland. More recently, in October, DBRS, a Canada-based rating agency also downgraded Portugal to BBB, one notch above the below investment grade status (Table 1).

Table 1 – Rating changes of the Portuguese Republic

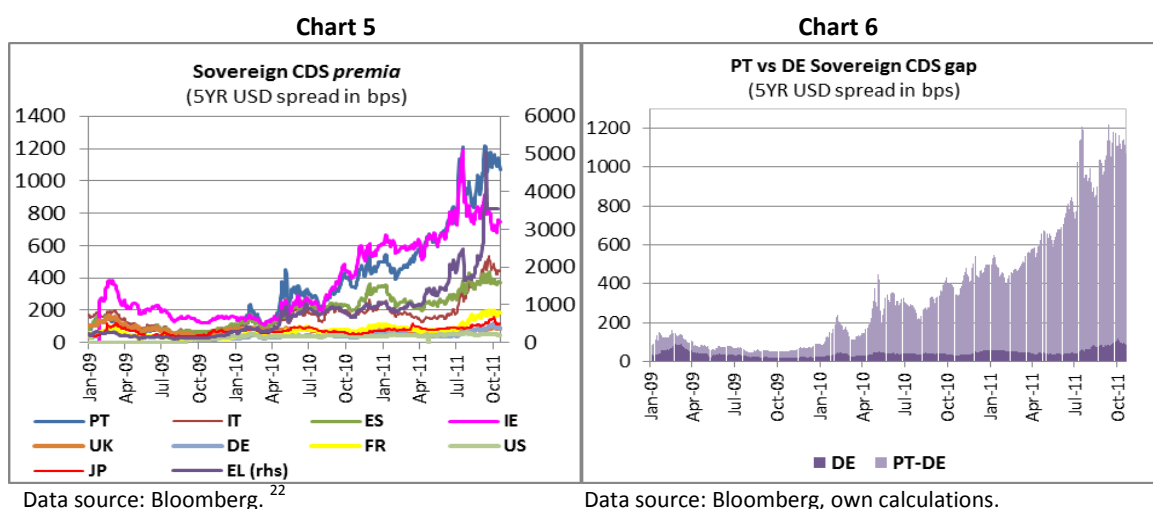
2011	Moody's	S&P	Fitch	DBRS
Mar	A3	BBB-	A-	
Apr	Baa1		BBB-	
May				BBB (high)
Jul	Ba2			
Oct (current)	Ba2	BBB-	BBB-	BBB
Outlook	Neg.	Neg.	Neg.	Neg.

Source: Rating agencies' websites. Long-term issuer ratings.

The sovereign CDS market performance mimics government finance imbalances and subdued macroeconomic performance ...

Following from the previous section, the accumulated debt of a nation and its current account balance are undoubtedly two among several indicators sophisticated investors look at, which are factored-in to the risk-return analysis underpinning their investment decisions. The recent performance of the sovereign CDS market was formidable and raises many questions about the sustainability of some western countries government finances amid a not so bright real economy performance.

Chart 5 below illustrates the evolution of sovereign debt CDS *premia* of 5-year USD-denominated contracts expressed in spreads (bps), of the countries selected for the analysis (see Section II). Chart 6 depicts the spread (difference) between 5-year Portuguese sovereign debt CDS and German sovereign debt CDS (the benchmark). Both charts cover the period between January 2009 and October 2011 (cut-off date 19.10.2011).



... unprecedented sovereign credit risk in Greece, spreading beyond Ireland and Portugal to reach large euro area economies: Italy and Spain...

Chart 5 clearly shows how the widening of sovereign CDS spreads accelerated its pace throughout 2011 in the euro area and beyond. It illustrates how CDS spreads of Portugal, Greece and Ireland have increased since the beginning of the year to date. More worryingly, it also shows how the sovereign debt woes of the three EU programme countries spread to two large economies of the euro area: Italy and Spain. These developments appear to have been fuelled by a mix of political instability and not so encouraging macroeconomic performance in the case of Italy, and in Spain, by relatively poor macroeconomic data coupled with solvency and liquidity problems in some financial institutions. However there is a common denominator for the performance of the European CDS sovereign markets which is the political uncertainty surrounding the resolution of the Greek solvency crisis and the establishment of a permanent legal-institutional and financial framework to deal with the solvency problems of EU members and EMU members in particular.

Greece's spreads in October (in excess of 3,500 bps) reflect the country's actual near insolvency status which was only prevented thanks to the cash made available by its European partners and the IMF under the first (May 2010)²³ and the second (July 2011)²⁴ financial assistance programmes. Battered by an economic recession (GDP contracted 4.5% in 2010 and is expected to contract 3.5% in 2011),²⁵ the internal social unrest added to the government's difficulty in re-establishing fiscal discipline, hence providing signs that would have helped re-establishing the confidence of investors towards Greek assets

²² From 29 Jan 2010 onwards the US CDS prices are expressed in EUR rather than in USD due to the lack of available sources in Bloomberg. Bloomberg data for Ireland sovereign CDS are only available from February 2009 onwards.

²³ €110bn-worth three-year financial support programme (Council of European Union, Statement by the President Van Rompuy of 2 May 2010 (PCE/80/10)).

²⁴ €109 billion-worth financing support programme; private sector involvement estimated at €37 billion, extended maturities, and softer lending rates (Council of European Union, Statement by the Heads of state or Government of the Euro-area and EU institutions, Brussels 21 July 2011).

²⁵ European Commission Spring Forecast.

and the Greek economy as a whole. The outcome of the fifth joint European Commission/IMF/ECB mission released in October did not provide room for much optimism, at least in the short term: the recession was worse than anticipated in June; the fiscal policy objective appears to have become a moving target and investor sentiment shows no signs of improvement. Currently a third rescue package is being discussed involving an amount estimated at €170bn.

The length of the EU political discussions leading to an agreement on a solution for the Greek debt problem is considered by many observers as having contributed to the volatility of the Greek and EU securities markets, and to the consequent widening of the CDS sovereign spreads.

Since January 2011 to date, daily closing prices of sovereign CDS averaged 1,720 bps in Greece, 748 bps in Portugal, 703 bps in Ireland, 297 bps in Spain and 251 bps in Italy. Although the developments in the Greek CDS market in the period covered by this analysis have no parallel with other small and troubled economies such as Portugal and Ireland, these latter were also subject to mounting pressure in 2011. From June 2011 onwards sovereign debt hedging became costlier for Portuguese securities than for the Irish's. To illustrate the magnitude of the spread increases, it is noted that October 2011 sovereign CDS prices of Portuguese debt averaged 1111 bps, while in January the correspondent figure was 481 bps. The Portuguese sovereign CDS prices recorded a 2.2-fold increase in roughly 9.5 months. This picture differs from the Irish case, where CDS sovereign spreads barely increased 100 bps. The Irish and Portuguese CDS markets increases in CDS *premia* in July could be attributed to fears of contagion from the Greek situation and of similar outcomes. Greece's sovereign issuer had been downgraded by the three major rating agencies to levels only a few notches above selective or outright default that same month. In the beginning of July Moody's downgraded both the Portuguese and the Irish sovereign issuers to below investment grade status. The release of disappointing US macroeconomic performance data in the end of July increased fears that these economies would not be up to the challenge of redressing their fiscal imbalances and thus reducing their credit risk outlook, adding further strain to the markets.

Though the remaining countries chartered showed significantly lower spreads, it is worth noting that in 2011, at least until October, sovereign credit spreads increased across the board. In Germany, for example, the average 2011 spreads were 48% higher than the 2010 average level. Similarly, they were 57% higher in France, 32% higher in Japan and 17% higher in the US, showing how sovereign risk increased in the industrialized nations. With the exception of the UK, all countries sovereign debt CDS recorded historic highs in 2011, mainly in September and October, and in July in case of the US market. The US peak (65 bps in 28.7) happens at the time of the US Congress discussions on extending the maximum allowed government debt ceiling. The increase in sovereign risk as gauged by sovereign CDS is intimately linked with an uninspiring economic recovery and the relatively high indebtedness levels discussed in Section II.

The market circumstances and specific episodes of the euro-area debt crisis behind the turbulence that occurred and is still expected to take place in the market for these financial instruments are understood to be the same as those which seem to be the causes and triggers for the stock markets movements and turbulence recorded since the beginning of 2011. These will be analysed with some detail ahead in this document.

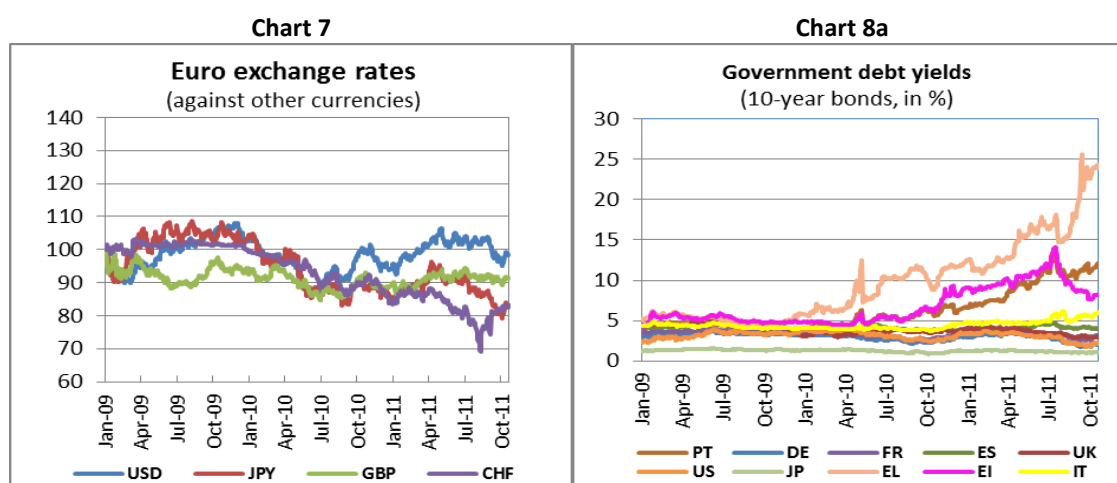
... the gap between the Portuguese and the German sovereign debt CDS spreads has not ceased to widen.

The gap between the Portuguese and the German sovereign debt CDS spreads has not ceased to widen since the beginning of 2011 to date. October 5-year CDS prices of Portuguese sovereign debt were 12.2 times the German equivalent (87 bps) (8 times in January 2011), making the comparison almost meaningless.

The increasingly diverging CDS spreads do not come as a surprise as Portugal became a programme country in May 2011. The causes for this outcome were previously identified: public sector leverage, corporate sector leverage and household leverage. Leverage at unsustainable levels which the global economy slowdown of 2011 exacerbated to the point of collapse. Also, the average maturity of Portugal’s public debt is amongst the lowest of western economies (estimated at 5.8 years by industry sources),²⁶ meaning that refinancing risk is relatively higher. The fragile situation of the Portuguese banking sector (see Section IV), intertwined with the state’s government finances became a vicious circle which requires stiff action to be broken.

Reflecting increased sovereign risk, government bond yields of the troubled euro area members continued to rise, while German bunds continued to be Europe’s safe harbor.

In 2011 the euro faced marked depreciation against the Japanese yen and the Swiss franc. The market turbulence and downward pressure in the equity markets led investors to look for shelter in lower risk assets like the Swiss franc, government debt of Germany, the US and Switzerland and commodities, most notably gold. Buying pressure on the Swiss franc was overwhelming, leading the Swiss National Bank in August to qualify the national currency as “massively overvalued”.²⁷



Data source: Bloomberg.

²⁶ DB research (see references).

²⁷ Swiss National Bank Press release: “Swiss National Bank takes measures against strong Swiss franc”, Zurich, 3 August 2011.

There was no significant change in the EUR-USD pair relationship between the beginning of the year and October data points. However, the euro recorded peaks of valuation against the US dollar, in April and May following the raising of policy interest rates by the ECB in April for the first time in two years signaling the need to refrain demand-driven inflation pressures and also in July during the US debt limit crisis, as illustrated in Chart 7.²⁸

The strong valuation of the Swiss franc against the euro (and other currencies) came to a halt in the beginning of August after the Swiss National Bank started increasing the supply of liquidity to the Swiss franc money market. Eventually the Swiss franc foreign exchange rate against the euro was fixed by the Swiss National Bank in September (at a target of 1.2 francs per euro).²⁹ One among many undesirable effects of the overvaluation of the Swiss currency was the malfunctioning of the credit market in some Member States of the EU. According to the ESRB «*Excessive foreign currency lending may produce significant systemic risks [...] and may create conditions for negative cross-border spillover effects*».³⁰ This was what eventually happened in Hungary in 2011. With the appreciation of the Swiss franc in relation to other currencies, including the Hungarian forint, many Hungarian citizens saw their loans (expressed in Swiss francs) increase in relation to their income (expressed in the national currency) to unsustainable levels.³¹ The Hungarian authorities had to intervene first by banning foreign-currency loans *tout court* in 2010, and by imposing a cap on exchange rate losses for Swiss franc (and euro) loans to Hungarian mortgagees in a move to protect bank clients, in September 2011. This latter measure led banks to bear significant losses. It is a matter of both currency and interest rate risk. The Hungarian case is an illustration. New Member States are prone to borrowing in foreign currencies, which, coupled with rapid credit growth, amplifies the risks described.

These events are a learning opportunity for some areas of action by securities regulators. For example, insofar as lending for the purchase of securities and the distribution of complex financial products expressed in foreign currencies are concerned.

Portugal still diverging from the core, while Ireland records some improvement... Italy and Spain under strain.

Government bond yields of southern European countries continued to rise in 2011, from their previous year values, as shown in Chart 8a (10-year yields). The yields of the Irish sovereign debt however only increased during the first half of the year, having started to fall in mid-July, back to its January levels. This could be attributed to the satisfactory evaluation carried out by the Troika on the achievement of Ireland's programme targets released in mid-July³² as well as to the release of favourable data on the real economy (the

²⁸ On 7 April there was another policy rate increase by the ECB, however the impact was not so strong as the April increase because it was largely anticipated and that information was probably already incorporated in market prices.

²⁹ «Short statement by Philipp Hildebrand on 6 September 2011 with regard to the introduction of a minimum Swiss franc exchange rate against the euro», Swiss National Bank, September 2011.

³⁰ Recommendation of the European Systemic Risk Board of 21 September 2011 on lending in foreign currencies (ESRB/2011/1).

³¹ Bank clients in Hungary were being offered personal credit (mortgages) in Swiss francs, apparently without being sufficiently warned about the risks incurred by having a debt obligation in a currency different from their income's currency.

³² Statement by the EC, ECB, and IMF on the Review Mission to Ireland, Press Release No. 11/281, July 14, 2011.

Irish economy started to recoup in the first quarter of 2011) and the fact that Ireland restructured problematic banks ahead of schedule.

Financial distress from Greece expanded to Spain and Italy in the third quarter of the year. Spanish yields averaged 5.4% in 2011, or 1.1 p.p. higher than the year before. Historic euro era peak values (6.3%) were attained in mid-July in occasion of the release of EBA banks' stress tests results amid a threat of downgrade³³ by a credit rating agency and press speculation that Spain was also planning to apply for financial support to the EU and the IMF. Subsequently, in the beginning of August, the Spanish Prime Minister had to make a communication aiming at stabilizing the markets highlighting the soundness of the economic fundamentals. Though still high, yields have returned to more sustainable levels (5.5% in October). Italy underwent similar tensions. Its yields averaged 5.0% in 2011, 1 p.p. higher than the year before. Historic euro era peak values (6.2%) were attained in the beginning of August, just a few weeks after the Spanish strain.³⁴ Traders informally reported purchases of Italian and Spanish government debt by the European Central Bank System (ESCB) banks on behalf of the ECB from August onwards. No official country-specific data on the Securities Market Programme (SMP) execution was found, although in the beginning of April the ECB announced its intention to actively implement the SMP by buying securities in the secondary market. Although it did not refer which countries it was envisaging, the market understood it to be Spain and Italy. ECB data on the purchases of euro area private and government securities under the SMP³⁵ as of 14 October indicates accumulated purchases totaling €165.2bn (held-to-maturity basis) since the programme's inception (May 2010). Launched at the height of the Greek government debt market crisis, the SMP scope was to alleviate selling pressure in stress-hit euro area members' (mainly government debt) markets, to ultimately deliver financial stability in the euro area.

Portuguese 10-year benchmark *Obrigações do Tesouro* (OTs) yielded between January and October 2011, on a daily average basis, 9.6% up from 5.3% the year before. This change means an exceptionally strong increase in the country's debt risk profile. The Portuguese Republic current level of funding cost would have been unsustainable if the country were not under a special financial support programme. At the height of the Portuguese debt crisis, weeks before the country eventually turned to the international community, government yields were close to 7%, a level that was then considered by the government as unsustainable. ECB purchases of Portuguese sovereign debt are reported by traders to have started in February 2011 at a time 10-year government debt yields had already hit 7.5%, and government sources kept denying the need for external financial assistance. The ECB announced in July the suspension *sine die* of the application of the minimum credit rating threshold in the collateral eligibility requirements for the purposes of the Eurosystem's credit operations. The market for debt instruments issued or guaranteed by the Portuguese government experienced thus some relief from the pressure it was being subject to in the previous months.

It is interesting though to note that despite the historic US sovereign issuer downgrade (5 August) the yields of US government debt did not rise, on the contrary. Monetary policy and investors' concerns about the economic uncertainty could help explain this apparent paradox.

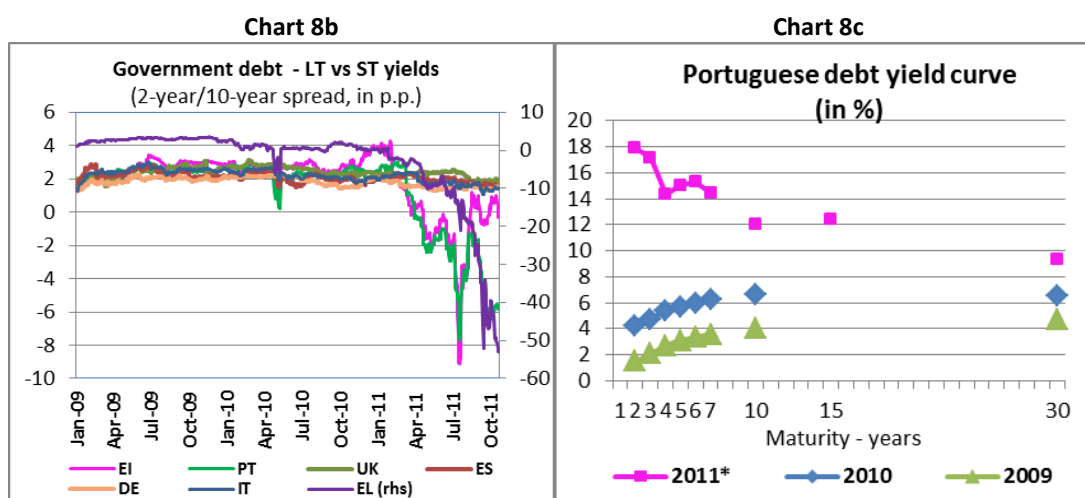
³³ Spain was downgraded on 28 April by S&P and on 10 March and 18 October by Moody's.

³⁴ Italy was downgraded on 4 October by Moody's.

³⁵ The ECB's Non-Standard Measures – Impact and Phasing-Out.

Greece, Portugal and Ireland with inverted interest rate yield curves...

As it is customary in interest rate term structure, long-term interest rates on government bonds yield returns higher than those of shorter-termed government debt securities to compensate for their additional risk. In times of deep market stress this “usual” pattern may be reversed and yield curves become inverted. Chart 8b shows the difference between the 10-year and 2-year government bond benchmark for a selection of countries. A negative observation in the line chart means a point in time where the short-term yield exceeds the long-term yield of the government benchmark securities.



Data source: Bloomberg, *October.

In the recent Portuguese case, the difference between 10- and 2-year interest rates between 31 March and October 19 averaged -1.4%, denoting a higher risk for short-termed maturities than for longer-term maturities. In October the situation deteriorated considerably, the difference between long and short term debt standing in the -5.5%, -6.5% range. Amid an economic recession and public-private solvency crisis, one possible interpretation for the current inverted yield curve situation in the Portuguese market could rest on market fears of an imminent restructuring, which would mean holders of Portuguese sovereign debt would face haircuts on these securities, leading them to bear losses. Portuguese interest rate yield curves exhibited in Chart 8c show how the curve has moved in different points in time, between 2009 (yearly figures, cut-off dates 31 December) and 2011 (19 October). Inverted yield curves are not the preserve of programme countries. For example, in May/July 2008 the same happened in the UK.

In order to stabilize the euro area markets affected by an intense turmoil the European Financial Stability Facility (EFSF) was created in May 2010. At inception the EFSF was a euro area members-funded Special Purpose Vehicle (SPV) conceived to provide loans to countries in financial difficulties at partially market-determined interest rates, on the basis of appropriate conditionality. The fund has a maximum lending capacity of €440bn (plus €780bn of guarantee commitments by Member States of the euro area).³⁶ However, in

³⁶ The Treaty establishing the European Stability Mechanism (ESM) was signed on 11 July the Eurogroup ministers following the European Council decision of 25 March.

2011, the magnitude of the euro area crisis and the extreme financial instability dictated the need to assign the EFSF other roles to boost its effectiveness and address contagion. Fund flexibility was enhanced. July measures taken by the EU Council included the possibility for the Fund: i) to intervene also in the secondary markets upon the existence of exceptional financial market circumstances and risks to financial stability; ii) to finance recapitalisation of financial institutions (loans to governments of programme and non-programme countries) and, iii) to act on the basis of a precautionary programme.

More recently, in October, EU politicians pursued efforts to “ring fence” the Greek effect, in order to stabilize the markets and avoid excessive speculation against selected sovereign debt. The financial assistance mechanisms were re-designed again though some details are still being worked out. A pack of regulatory initiatives to improve the economic governance of the EU agreed in March was finally approved in October. These and other measures taken in the October Euro Summit on the Euro Area are recapped in the box below.

October Euro Summit on the Euro Area Financial Crisis of 27 October: Main Decisions³⁷

Measures to tackle the euro area sovereign debt crisis:

- ❖ Greek solvency crisis:
 - New EU-IMF financial programme of €100bn in support of Greece;
 - Debt Restructuring – Private bondholders face a 50% voluntary nominal discount (“haircut”);
- ❖ Optimisation of EFSF resources:
 - Lending capacity expanded to €1trn via leverage (leveraged SPVs to be created);
 - EFSF gives credit enhancement to sovereign bonds issued by Member States;
- ❖ Strengthening the capital of European banks via requiring a 9% ratio of highest quality capital;
- ❖ Further fiscal consolidation by Member States (Italy was a special case);
- ❖ Reinforcement of euro area Governance and coordination and monitoring in economic and budgetary matters.

Turning to the Portuguese private debt market, primary market issuance accounted for €11.57bn between January and September, out of which more than two thirds were bank covered bonds. The 2010 and 2009 total issuance amounts were respectively €6.99bn and €7.42bn. These figures relate to public offers which outcome was subject to dissemination in CMVM website only plus bank covered bonds.

... the European equity markets losing ground since January 2011... Greece and Portugal worse hit.

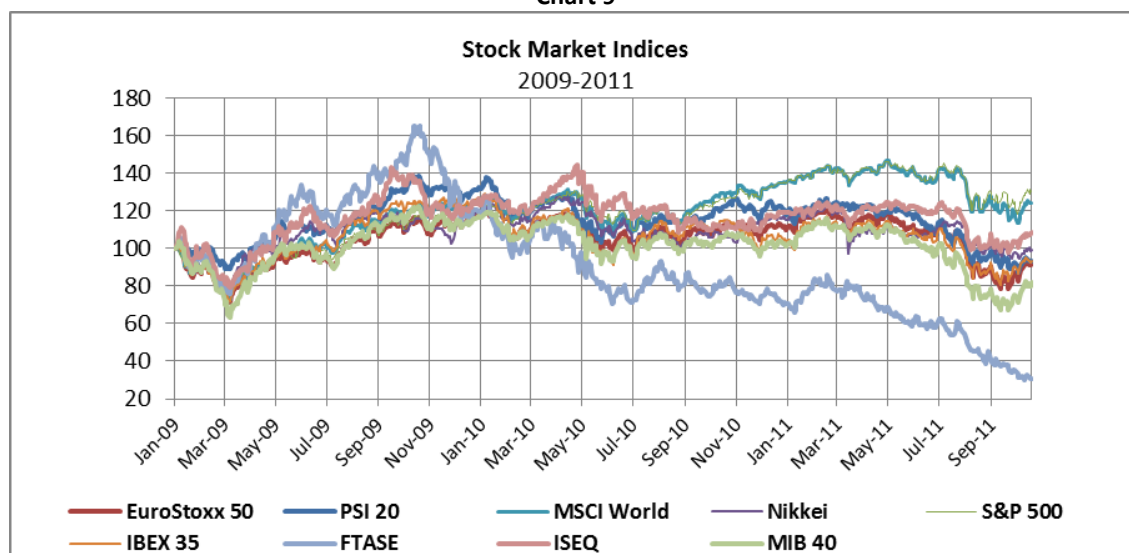
Chart 9 below depicts the daily performance of PSI20 stock index and major stock market indices of the usual selected countries, in the period January 2009 to October 2011. With the exception of the MSCI World, the S&P500 and the ISEQ, all major indices chartered posted losses in the period spanning from January 2009 to October 2011. Unsurprisingly, in line with the macro economic performance of emerging economies heavily represented

³⁷ Remarks by President of the European Council Herman Van Rompuy following the meeting of the Euro Summit of 27.10.2011, EUCO 116/11, Presse 400, PR PCE 81.

in the index, the MSCI index gained 23.4%. The Irish ISEQ gained 7.4%, favoured by the gains accumulated in 2009 and by the fact that the economic acceleration recorded in the first half of 2011 has allowed the market to withstand downward pressure rather well, in comparison to other European markets.

Stock markets' downward pressure was felt strongly in 2011 in large euro area markets, as well as in Portugal. Greece's was the hardest hit market. Losses were mostly concentrated in the second part of the year further to the economic deceleration in the US and in Europe, as the first semester the macro environment was mildly benign. Greece's major stock index declined -56.5%. Portugal PSI20 was also hit hard (-21.2%), followed by Italy MIB30 (-19.2%), Japan Nikkei225 (-14.2%), Spain IBEX35 (-10.2%) and Ireland ISEQ (-9.2%). The Eurostoxx (-16.6%) declined considerably more than the S&P (-3.8%) and the MSCI World (-8.2%).

Chart 9



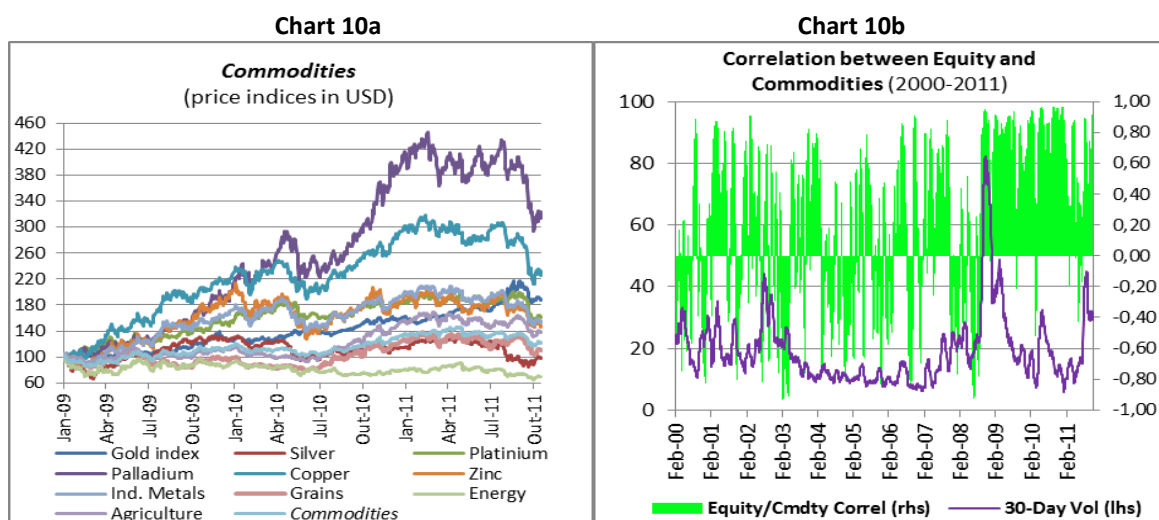
Data source: Bloomberg.

The March trough relates to the Tohoku earthquake and tsunami in Japan. Although the Japanese market was the most affected (-10.6% losses in the 15 March and -14.2% in the 5 trading sessions subsequent to the catastrophe) all the markets suffered meaningful losses in the period subsequent to the news. In the end of July stock markets plummeted another time entering a downward path until September. This fall can be broadly attributed to the political tensions in the US on the subject of the federal budget and to the escalation of the euro area debt crisis, influenced by the unfavourable performance of the euro area banking sector (see Section IV) as well as by the widening of sovereign CDS spreads between the core (Germany) and southern euro area members, now including also Italy and Spain. Italy was downgraded on 4 October by Moody's.

Commodity price rally on hold...

The idea of an economic slowdown, hence lower demand for commodities, drove prices down in the second half of the year. DJUBS commodity price indices signal a decrease in

the overall commodity index (-8%), influenced by oil, agriculture, energy, grains' and industrial metals price falls between January and October. In times of market turbulence, gold kept appreciating following a multi-year trend, although at a somehow slower pace: its price is still at historic highs (Chart 10a).



Data source: Bloomberg.

Notwithstanding the slowdown in commodities' prices increases, prices are still relatively volatile. Recent market data and industry research³⁸ suggest that in periods of higher stock market volatility, commodities, conventionally a non-correlated asset class, become also correlated with the developments in the credit and equity markets. Worthwhile noting that subsequent to the Lehman Brothers collapse in 2008 onwards there has been pattern-change towards a stronger positive correlation between equities and commodities, coinciding with a more volatile environment (Chart 10b).

... Third quarter volatility in Europe, as high as during the Greek crisis burst last year and similar to levels recorded in the Bear Stearns failure period in spring 2008.

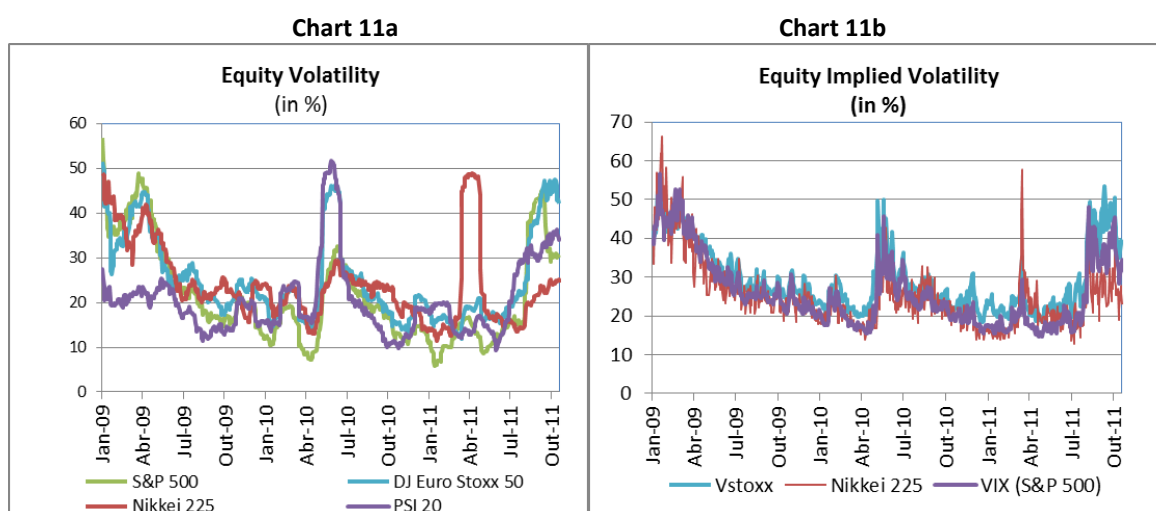
Chart11b shows the equities markets' implied volatility of three major indices representative of the European, US and Japanese markets.³⁹ Chart 11a depicts historic volatility of those indices, plus the PSI20. Although implied volatility is valuable to anticipate future trends as it incorporates market participants' expectations of future volatility, its predictive value is by no means granted.

In daily average terms, the high volatility environment of 2010 was maintained in 2011. During the first semester of 2011, implied volatility was relatively lower than in 2010 in

³⁸ Commodity strategy – Benefiting from normalcy, Morgan Stanley, July 2009.

³⁹ The implied volatility indices used are compound measures which consider both call and put options contracts on the underlying equity indices with a varied set of maturities. The implied equity volatility is a measure of expected equity volatility, to the extent that it represents the volatility of options contracts whose underlying asset are the equities belonging to the respective index basket. Based in the concept of option, exercisable at some time point in the future, the implied volatility incorporates market views as to the actual future market volatility. To our knowledge no comparable index relating to PSI20 is available.

Europe and in the US, albeit experiencing an above semester peak in April because of contagion from the Japanese market. There has been however a significant, and relentless, increase in the implied volatility starting in July. The events that led to an intensification of the turbulence in July appear to have been the US fiscal crisis coupled with daunting information on the Greek solvency crisis (already mentioned). In September volatility surged again on market fears of a Greek default. In October Greek yields of sovereign debt reached 24.3% and 76.6% (respectively for 10-year and 2-year tenor) and sovereign CDS traded at their highest ever levels (3536 bps or 35.4%). This pattern appears to be consistent with the stock market indices performance.

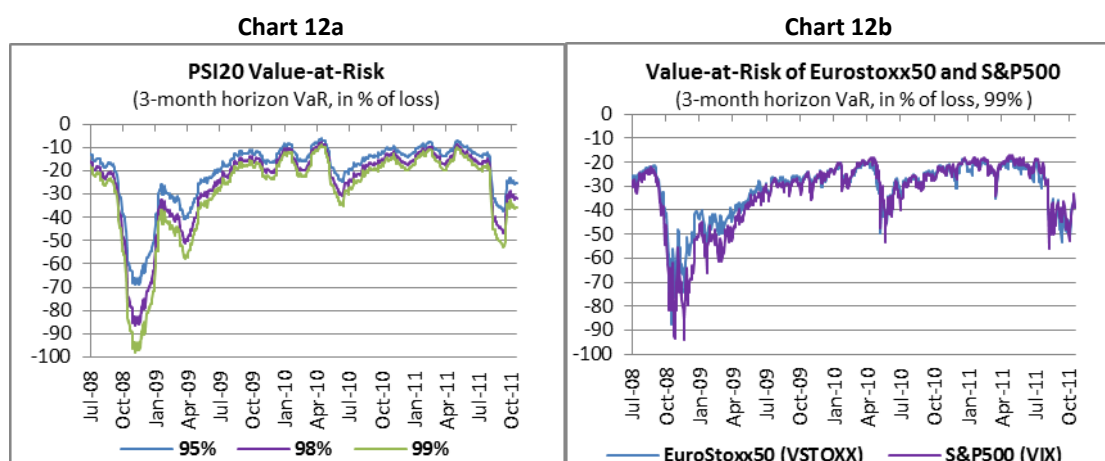


Data source: Bloomberg.

VIX⁴⁰ is currently at 34.4% and Vstoxx at 39.9% up from 17.8% and 23.9% in the beginning of the year, respectively. From a market risk perspective these figures warrant close monitoring and concern. PSI20 historic volatility is currently at a peak level (34.0%) (almost twice its initial year value), which can be explained by the domestic banking crisis amid an overarching economic depression and solvency crisis.

The risk of market turbulence can also be expressed in monetary terms through the calculation of the Value-at-Risk (VaR) for a portfolio of securities. Charts 12a and 12b illustrate the maximum losses investors may incur when holding a basket of securities representing the DJ EuroStoxx 50, the S&P 500 and the PSI20, excluding only the losses associated with very unlikely events, i.e. those which occurrence probability is equal to or less than 5, 2 or 1 per cent in accordance with the confidence levels applied. Implicit volatility is used for the EuroStoxx 50 and S&P 500, while for the PSI20 historic volatility is used.

⁴⁰ VIX is the implied volatility on the S&P 100 (OEX) option, calculated from both calls and puts. Vstoxx is the equivalent indicator for the Eurostoxx 50. Due to methodological differences in their calculations these two indices are not, strictly speaking, perfectly comparable to the implied volatility of Nikkei 225 portrayed in Chart 11b.



Data source: Bloomberg and own calculations; data until 17 Oct.

The 3-month Value-at-Risk of both the S&P and Stoxx averaged respectively 27% and 28% throughout 2011, pretty much the same values of 2010 (99% confidence level). However, in the most recent 3 months (notably in August, September and October), there was a substantial increase in risk levels: the 3-month VaR daily average exceeded 40% for both indices in October, denoting an increase in market risk. These risk levels are only comparable with those recorded during the Greek sovereign crisis in May 2010, and could be attributable to the events mentioned earlier on to explain the volatility performance, the evolution of the sovereign CDS market and the stock markets. The March inverted vertex relates to the natural catastrophe in Japan (see above), a rare (and unfortunate) situation, typically labeled ‘tail event’ in market risk predicting models like the VaR.

On 17 October 2011 the EuroStoxx50 3-month VaR determined with a 99% confidence level was 39%, one of the highest VaR figures recorded in 2011. These expected loss levels are not as strong as expected losses during the “Lehman Brothers collapse moment” in October 2008, but at some point in September 2011, the Stoxx VaR exceeded 53%.

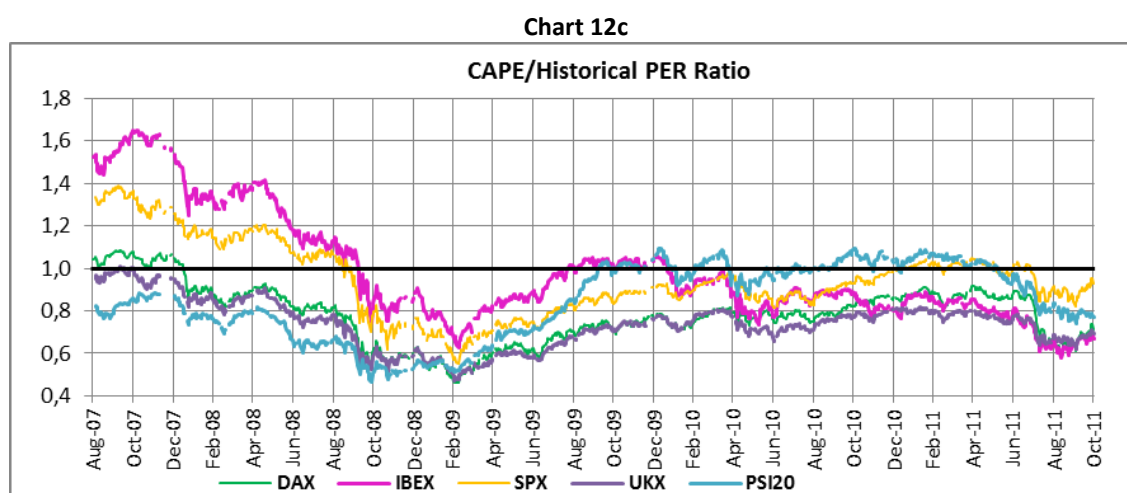
The 3-month VaR of PSI20 (99% confidence level) averaged 22% or 2 p.p. more than the year before. Although a direct comparison should not be established between VaR measures calculated with historic volatility and implicit volatility, it is worth noting that, similarly to the other indices analysed, PSI20 3-month VaR also increased substantially in the latest months of 2011 until October. Its October average was 36%. The 2011 figures are certainly linked to the fact that Portugal became a programme country in May and investors view the debt restructuring scenario in Greece as a possible outcome for Portugal too. Although debt restructuring is a matter of credit risk, and the VaR relates to market risk, the intertwining relationship between country market risk and country credit risk may easily explain the performance of the VaR indicators.

As we compare the historical data set for the VaR of the selected indices and the respective volatility, the relationship between them becomes rather obvious. For the same investment, higher volatility levels mean higher amounts at risk, hence higher potential for losses.

From a long-term historic perspective, the Value-at-Risk of the Portuguese securities market may be considered relatively high. Current VaR levels are not far from those

recorded in April 2010 when the Greek sovereign debt crisis erupted. In a nutshell, the current market risk levels of the Portuguese stock market should be looked at cautiously.

As a result of the combination of stock market price indices fall and increases in corporate earnings in 2011, the price-to-earnings ratio (PER) of the major European and US indices decreased in the first 10 months of 2011. From a pool of international indices composed by the FTSE100, the DAX40, the CAC40, the IBEX35, the S&P500 and Nikkei225, PSI20 displays a relatively low PER (11.9), similar to the French (11.7). The Spanish market index displays the lowest ratio among the indices set (9.7).



For additional insight about the stock markets undervaluation or overvaluation and/or increased market risk perception, a CAPE⁴¹ based indicator was used. The indicator is a ratio between each market CAPE and its historical average PER⁴². The market is probably undervalued when the indicator becomes progressively inferior to 1 or probably overvalued when it progressively exceeds one. More important than finding out whether the indicator is above or below 1, it is to analyze its chronological evolution and to compare the differences among markets.

Chart 12c shows the indicator built as computed for the DAX40, the IBEX35, the FTSE100, the PSI20 and the S&P500 covering the period from August 2007 until October 2011. The results show that since the end of July 2011 all the five markets' CAPE were below their historical 1997-2011 PER. The only time, since the end of August 2007, that this happened for more than two consecutive months was between the end of September 2008 and the end of August 2009, during and in the aftermath of the Lehman crisis. More recently, in September 2011 the indicator recorded the second-lowest values since mid-2009 for all the markets considered with the exception of the S&P500. The relatively low figures for the indicator are associated with the downwards movement observed in these

⁴¹ Source: John Campbell e Robert Shiller, full reference in the annex. The CAPE is the ratio between the assets current price and the 10- year average of the respective earnings.

⁴² Due to data limitations and in order to use a similar time-frame for all the studied markets, the average PER considered a period between 1st of September 1997 and the 31st of October 2011; a different time-frame could lead to different results.

stock markets in the same period (Chart 9) between mid-July and mid-August. The IBEX35 historic minimum during the period under analysis was reached in September 2011.

The fact that CAPE is below the historical average PER is most likely more due to an increase in the perception of market risk than to an actual markets undervaluation. Investors could be demanding a lower price to earnings than in historic terms if they believe the earnings are at particular risk in the future.

Even though the Portuguese market was the only not reverting from the September local minimums and thus maintaining the downwards trend that began near the beginning of 2011, it is still the highest ranking European market amongst the European markets analyzed. In 2010 the Portuguese market had the highest indicator, for longer, often above 1. If the indicator could be read just as a proxy for market valuation in historical terms,⁴³ then the Portuguese market could be considered as the least undervalued of the four European markets chartered.

According to the S&P500, the US market is the market with the highest CAPE/PER historical average indicator amongst the five markets since the beginning of 2011, something that was not seen since September 2007.

... given the magnitude of its economic and financial crisis, the Portuguese situation is not comparable with other markets.

Turning to volumes, tables 2a and 2b show trading activity in the Portuguese secondary markets between 2009 and September 2011 measured by deal amount. These data point to an activity slowdown. Overall secondary cash market trading volume lost 58% on a yearly basis. The amount of debt securities traded in trading venues supervised by CMVM declined 76% from September 2010.⁴⁴ The debt figures featured in Table 2a regard essentially government securities traded in *Mercado Especial da Dívida Pública* (MEDIP), the Portuguese branch of MTS Europe (90% to 99% of total debt traded).

Table 2a – Trading activity in Portuguese secondary cash market

	€ million							
	Sep 11		Sep 10		2010		2009	
	Value	%	Value	%	Value	%	Value	%
Equities	22.654	64%	31.372	37%	40.651	39%	31.597	30%
Debt (public and private)	12.280	34%	51.999	62%	62.600	60%	72.663	69%
Other	683	2%	458	1%	602	1%	990	1%
Total	35.618	100%	83.828	100%	103.853	100%	105.250	100%

Source: CMVM; end-of-period cumulative data. Trades carried out by resident and non-resident members of CMVM-supervised trading venues, most notably Euronext Lisbon and Medip.

⁴³ This is debatable taking in account the significant fluctuation in the perception of markets risks that seems to be in course as stated above.

⁴⁴ The lack of comprehensive data on the OTC debt market does not allow drawing conclusions on the overall debt market performance.

Table 2b – Trading activity in Portuguese secondary futures market

€ million								
	Sep 2011		Sep 2010		2010		2009	
	Value	%	Value	%	Value	%	Value	%
PSI 20 Futures	451	99%	713	99%	959	99%	458	93%
Equity Futures	3	1%	10	1%	11	1%	33	7%
<i>Total</i>	454	100%	723	100%	971	100%	491	100%

Source: CMVM; end-of-period cumulative data. Trades carried out by resident and non-resident members of CMVM-supervised trading venues.

Although CMVM does not compile comprehensive derivatives trading data, it is possible to ascertain a growing interest in some classes of derivative instruments via data collected on orders received by resident financial intermediaries. The overwhelming majority of derivative orders channeled to resident financial intermediaries relate to futures while CFDs come as the second single type. Out of a €247.5bn total derivative orders received between January and October 2011, 72.4% (€179.3bn) concerned institutional investor oriented futures and 17.4% (€43.0bn) related to retail-oriented CFDs. The relative importance of each derivative class changed from 2009 to date, CFDs continually losing ground.

In the international trading space the risks associated with the emergence of new trading systems anchored on high-technology information and innovative trading systems (e.g. algorithmic trading including high-frequency trading as a subset) are not yet fully understood by securities supervisors.

In the domestic scene, a brief analysis of the Euronext Lisbon share order activity in regulated markets in the first 9 months of 2011 reveals that 90.8% of the orders placed relate to PSI20 stocks and that the subset of the 10 most traded stocks account for 85.7% of Euronext Lisbon share order quantity.

From the analysis of the distribution of the orders' quantity sent to Euronext Lisbon broken down by the most relevant members (ranked by number of orders sent to the system) in relation to the 10 largest stocks of the PSI20, the following emerges: on average, 62.4% of orders targeting the 10 largest issuers⁴⁵ originated from 5 trading venue members. The orders concentration ratio varies according to the issuer, ranging between 46.7% and 80.9%, the two extreme values. Three out of the 5 most prominent financial intermediaries sending orders to Euronext Lisbon (equity segment) emerge as dominant. These three members are often among the 1st, 2nd and 3rd positions in terms of the number of orders sent to the trading system.

In the same vein, 41.7% of actual trading activity was carried out by the very same 5 members. The data show a relatively high concentration among the largest 5 members across all stocks.

Using the order-to-trade ratio, i.e. the ratio between the number of orders routed to the system and the number of trades actually carried out on the basis of such orders, it is possible to grasp to which extent sell/buy orders intentions materialize. Between January

⁴⁵ Ranked by number of orders to which they were subject between January and September 2011.

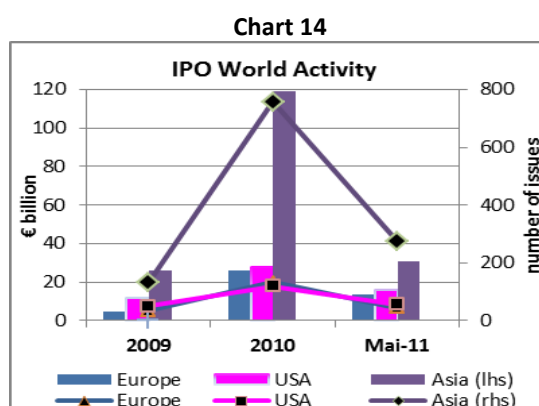
and September 2011, on average PSI20 stocks order-to-trade ratio was 8. Two issuers displayed relatively high ratios, of 26 and 16. Put another way, these two figures suggest a trading standard where more than 95% of the orders routed to the system materialize into no trade at all.

The three most active members measured by the amount of orders they send to the system across all domestic issuers are non-domiciled entities. In two extreme cases, concerning two different domestic issuers and two different non-resident members, the order-to-trade ratios were 481 and 265. These data suggests that domestic stocks might be subject to algorithmic trading.

Still in the context of alternative trading forms, in the international context, the emergence of relatively informal web-based share trading outfits such as ‘Second Market’ and ‘Sharespost’ is noted. These may be worth analysis insofar as the rights of investors are concerned.

Led by large emerging market deals, the global IPO market recovers...

According to Thomson Reuters figures as of May 2011, the European Initial Public Offering (IPO) show continued improvement as observed in 2010. In the first 5 months of 2011 IPO activity in Europe and in the US accounted for more than half of the total 2010 overall issuance volume. Total issuance volume in Europe between January and May 2011 was €13.6bn, 3 times more 2009’s issuance. The supremacy of the Asian market (excluding Japan) persists in 2011, although a substantial decrease in activity in relative terms can be observed in the first months of 2011 measured by the number of deals. 2011 IPO proceeds in Asia already account for 47% of the total 2010 value. The largest IPOs of the first 5 months of 2011 took place in Europe and concerned Glencore, a Swiss commodities producer and marketer, generating €6.8bn in proceeds (Chart 14).

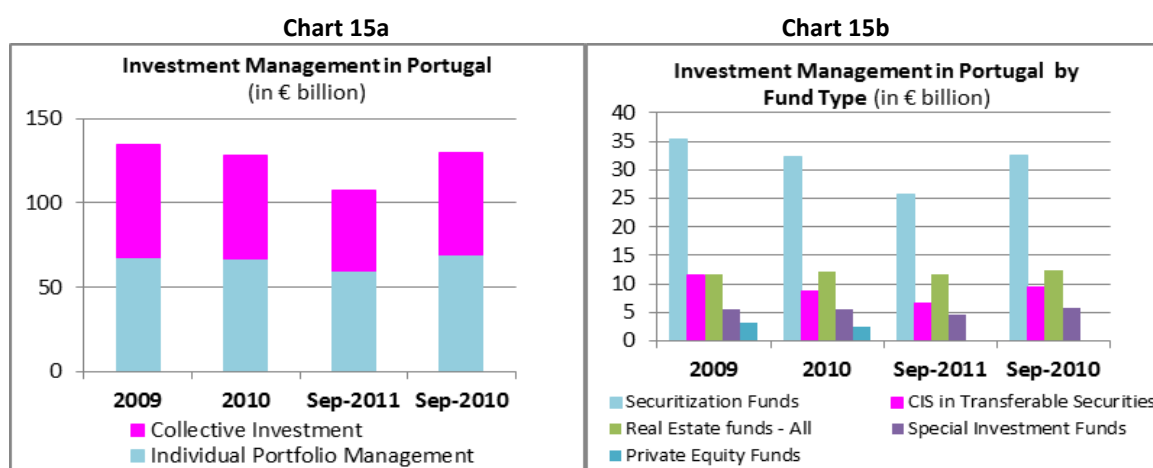


No mergers and acquisitions involving companies listed in any of the trading venues supervised by CMVM took place in 2011 so far. The Portuguese government approved in October the 8th phase of re-privatization of EDP – *Energias de Portugal, S.A.* and is expected to approve the 2nd phase of re-privatization of REN – *Redes Energéticas Nacionais, SGPS S.A.*’s re-privatization very soon. The last IPO involving a Portuguese company in the Portuguese market was *EDP Renováveis*’ 2008 deal. The Portuguese market is slim, with only 5 IPOs totaling €3.4bn over the last 10 years.

There was some activity in other types of equity issues (follow-on issues and rights' issues). Between end-2010 and October 2011, equity issues totaled €1.5bn, a figure which is almost fully explained by a single operation by *Banco Comercial Português* (BCP). Two other companies issued shares in 2011: *Sociedade Comercial Orey Antunes, SA* and *Reditus – Sociedade Gestora de Participações Sociais, S.A.* (data from ReutersKnowledge and CMVM).⁴⁶

... *the domestic investment management business quietly declines.*

In Chart 15a on the evolution of the domestic investment management industry, assets under management (AuM) are split between collective investment and individual portfolio management activities between 2009 and September 2011. Chart 15b presents collective investment only, broken down by the major classes of fund types, also for the period 2009-September 2011.⁴⁷



Source: CMVM; Private equity data n.a. for September.

The Portuguese investment management activity has been quietly declining since 2007. The total AuM of in September 2011 were at €107.7bn, 17% less in the equivalent September 2010 figure (, €129.5bn). Collective investment, which accounted for 47% of total investment management in 2010, or €58.6bn, kept losing ground, having declined to €48.4bn, or 45% of total assets, in September 2011.⁴⁸ The erosion of the home-grown asset management industry is a long-dated process, involving most asset classes of funds.

Relative to the remaining asset management industry, and on a long-term perspective, the AuM indicator would suggest that the real estate fund segment had so far withstood the industry crisis. However, regulatory valuations of real estate assets are not frequent enough to mirror market developments in such a timely fashion as it is the case of collective

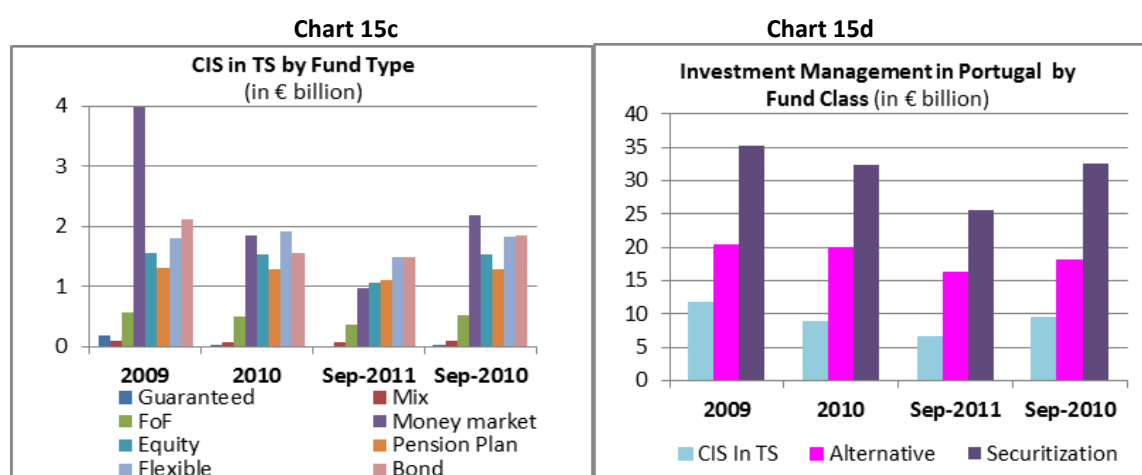
⁴⁶ *Sacyr Vallehermoso, S.A.*, also issued equity in Euronext Lisbon, however it is not included in the Portuguese data figures as it is not incorporated in Portugal. The compulsory offer relating to *Progado Centro-Sul, S.A.* was not considered either.

⁴⁷ This section presents data as of September; however, Section V on real estate funds provides more updated and more granular data on this type of funds.

⁴⁸ The total industry figures do not include private equity funds as there is no finalized data available for 2011. Foreign funds are excluded either (account for roughly 1% of the total).

investments schemes in transferable, mostly liquid, securities.⁴⁹ A detailed analysis though shows that perhaps this is not the case, and that a slow adaptation to declining property prices and decreasing investor base is taking place. This analysis is presented in Section V under the heading “Topical Issues – a closer look at the real estate fund market”. Securitization funds apart, which are not common retail products in Portugal, real estate funds are still the major fund type by amount under management, outnumbering funds of listed securities (for the purpose of this analysis these are classified as “Collective Investment Schemes in Transferable Securities (CIS in TS)” and include all funds except real estate, private equity, special investment and securitization funds), harmonized or non-harmonized.

Chart 15c shows CIS in TS total AuM, i.e. €6.57bn split into eight fund categories. Worth noting is the staggering reduction in the amount of AuM of money market funds, which dropped 47% between December 2010 and September 2011, heavily contributing to the 25% decrease in the overall CIS in TS shrinkage of the first three quarters of 2011. This development mirrors a similar development in 2010, though this time other classes of funds also recorded meaningful decreases in the amounts of assets managed, notably, equity funds and flexible funds.⁵⁰ Internal CMVM research suggests that money market funds yielded negative real returns over the period 2007-2010. Industry figures do not conceal this fact either.⁵¹



Source: CMVM.

As an illustration, annualized yearly returns as of 31 August 2011 displayed an average 0.84% gross nominal rate of return for money market funds,⁵² clearly below the inflation rate for the corresponding period (3.27%).⁵³ Some funds post negative gross nominal rates of return.

⁴⁹ Regulatory valuations are performed at least on a bi-annual basis.

⁵⁰ Flexible funds are harmonized funds in transferable securities which investment policy may change over the fund’s life. These are legally defined in Article 9 of CMVM Regulation n.º 7/2007 as «those which do not assume any undertaking in relation to the composition of the portfolio in their instruments of incorporation.». As an example, a harmonized equity fund may switch its policy in order to become a bond fund.

⁵¹ APFIP.

⁵² “Medidas de Rentabilidade e Risco dos FIM e F. Pensões Abertos”, 31 Agosto 2011, by Associação Portuguesa de Fundos de Investimento, Pensões e Patrimónios (APFIPP).

⁵³ INE, Índice de preços no consumidor (Taxa de variação média anual - Base 2008 - %).

The fact that equity funds lost value due to market price decreases in 2011, as illustrated in Chart 15c, could work as an explanation for the downward movement in CIS (price component) but a reduction in the number of funds available in the market could also indicate a quantity effect in the overall decrease. Currently 196 funds operate in the market, five less than in December 2010. The sell-off recorded during this period was accompanied by an increase in the amounts of money channeled to conventional (and non-conventional) private individuals' bank deposits in domestic institutions. Seen from a wider perspective, not only CIS in TS lost ground in 2011, as both securitization and many alternative investment funds so did (Chart 15d). The most recent securitization fund launch dates from February 2010. However the decrease in securitization funds AuM is partly explained by the fact that in 2011 fund managers privileged the issuance of ABS via incorporation (*Sociedades de Titularização de Créditos* (STC)) rather than through a fund vehicle. Indeed, STCs total AuM recorded a €8.39bn increase, to €37.14bn in 2011, or 29% more than in the previous year (a €14.56bn increase in 2010).⁵⁴ The Portuguese securitization market is overwhelmingly composed of mortgage-backed securities. In this same period the Portuguese mortgage covered bond market activity expanded. This topic is analyzed in detail in Section IV.

Alternative investments account for €16.2bn AuM, or a third of total collective investment (excluding private equity assets).⁵⁵ 2010 year-end data on the total private equity funds managed by resident funds and investment show that AuM (at cost portfolio) decreased by 24%. This is however due to change in accounting rules.⁵⁶ Portuguese private equity investment made via private equity vehicles is overwhelmingly sponsored by financial institutions and government agencies. Although it was anticipated that in 2011 the combination of a liquidity shortage environment for Portuguese banks and government budgetary constraints would take a toll on the fundraising environment for private equity, preliminary figures point to a slight increase. The outlook for 2012 suggests a significant increase in AuM due to the launch of turnaround funds.

In the retail space, the manufacturing and commercialization of Exchange Traded Products (ETP), especially synthetic ETFs also deserve scrutiny. These funds do not invest in the assets they mean to track, making use of derivative instruments instead. Investors may not be aware of the counterparty risk they involve, as well as the risk associated with the potential collateral loss given that these funds are built on the basis of swaps.

The deleveraging process is on-going...

Domestic macroeconomic developments were broadly discussed in Section II, where the major features negatively impacting the securities markets from a risk outlook perspective

⁵⁴ From an overall market perspective the amount of outstanding securitization assets should include both fund data (chartered) and outstanding issues of incorporated vehicles. However, given that reporting requirements applicable to funds and incorporated vehicles differ (funds report more frequently), little overall timely intra-annual data can be compiled for the market as a whole.

⁵⁵ No audited data was available for private equity assets as of September 2011. According to non-audited figures the amount of investments under management (at cost portfolio) in June 2011 were 2.56€bn.

⁵⁶ Refer to CMVM's Private Equity Annual Report (2010).

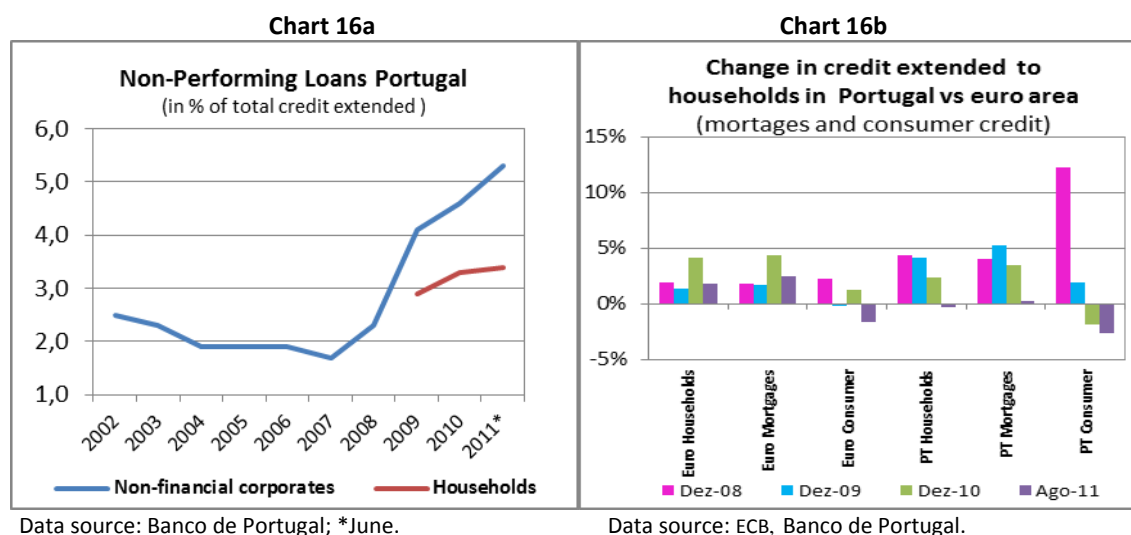
were identified. By adopting a more micro-focussed stance, the following analysis unveils how the deleveraging process is taking place.

... in the corporate sector...

Looking at the corporate sector in general and not just at companies listed in the major stock exchanges, the following indebtedness picture in Portugal emerges: despite the 2009 economic slowdown, credit extended to non-financial companies only started to contract in 2011. In July the change was negative by 0.4% (yearly basis) (see also Chart 20).⁵⁷

The evolution of Non-Performing Loans (NPL) generally understood as a good indicator of financial distress in the economy is shown in Chart 16a, which includes both corporate sector and households NPLs. According to *Banco de Portugal* data, the level of NPLs in relation to total credit extended is still increasing. NPLs of the (non-financial) corporate sector more than tripled between December 2007 and June 2011, rising from 1.7% to 5.6%, its highest mark since 2002.⁵⁸ In the first 6 months of 2011 alone, corporate NPLs advanced 0.7 p.p., more than the increase recorded throughout the full year of 2010. Companies to which the lowest amounts of credit were extended, i.e. credit amounts below €20m are those with the highest rate of loans overdue, or 25.6%, as it was the case one year ago.

However, it was in the group of companies which received credit amounts in excess of €5 billion - understood as corresponding to the largest companies - that the rate of overdue loans grew more markedly (from 19.3% in June 2010 to 21.9% in June 2011). These data suggest that all types of companies, regardless of their size, still face increasing liquidity and funding constraints.



⁵⁷ Banco de Portugal data.

⁵⁸ Last publicly available data.

... and in the household sector...

Chart 16b shows the annual change in the amounts of credit extended to households in Portugal compared to the euro area split between the two major household sub-classes: mortgage credit and consumer credit, between 2008 and 2011 (August). The analysis of the selected period shows that Portugal credit activity for these segments is shrinking while in the euro area it is still expanding. There is a time lag between the Portuguese credit market and the euro area's. In 2011 credit to households contracted -0.3% in Portugal while in the euro area it grew 1.8% (August data). The figures suggest that the Portuguese credit market reacted more slowly to the economic recession. The ratio of household indebtedness to disposable income is 126.3%, a very high level for euro area standards, having declined on 3 p.p. from its peak in 2009. Households' NPLs, currently at 3.4%, are increasing.⁵⁹ Portuguese household savings are however in an increasing trend,⁶⁰ which could possibly be a sign that the household deleveraging process is gaining track.

In aggregate terms, overall bank credit to EU residents recorded a positive change in the euro area (+2.2%), but was negative in Portugal (-0.8%), denoting that the Portuguese banking sector business activity is decelerating.

The previous data analysis appears to leave no doubt about the financing and re-financing challenges companies and households are facing at the moment as anticipated. The combination of variable-rate mortgages, which account for almost all domestic mortgage credit outstanding, ever mounting credit spreads, and a non-performing real-estate market are expected to keep endangering households' finances. Restrictive economic policy measures such as tax burden increases and civil service salary cuts aiming at internal labour cost devaluation are expected to lead to shrinking income levels thus putting households at further risk. Although the beginning of deleveraging process is noticeable, attention should be directed at asset quality. At the international level, commercial banks' measures aiming at easing individual loan terms may act as a mitigating factor for further asset quality deterioration.⁶¹

... while bank assets ...

Portuguese financial institutions, too reliant on ECB standard and non-standard monetary policy instruments to obtain funding resources, are increasingly at risk. Taking the CDS market and the ratings as indicators of funding cost, banks funding cost increased over the last year and will possibly face further increases in the future. The performance of Portuguese listed banks in the stock markets is a consequence (but also a cause) of the deteriorating economic and financial situation of Portuguese banks. Taking these developments into account, the international financial rescue programme envisaged a €12bn lifeline fund to re-capitalise Portuguese banks in case of need.⁶² The increase

⁵⁹ According to *Banco de Portugal* rules, the computation of NPLs only takes into account the amount in arrears, whereas most international data take into account the whole loan.

⁶⁰ European Commission Spring forecast, APFIPP/UCP Saving Indicator, November 2011.

⁶¹ In order to combat NPL and avoid further asset deterioration some North-American banks have been promoting, since 2008, loan contract changes aiming at reducing borrowers' debt load with the scope of assuring at least part of the debt service hence reducing the risk of default. Such measures include e.g. the introduction of grace periods and the reduction of principal amounts due. They were seen as being favourable for both clients and banks.

⁶² PAEF, MoF, 2011.

observed in the domestic deposit base (+6.4% yearly change in July 2011) contributes to change the structure of banks funding mix, partly reliant on international wholesale funding. The ongoing “savings war” (not only in Portugal but also in other southern European countries) may raise questions on whether banks commercial effort to increase their deposit base is not detrimental to the investment fund sector, overwhelmingly controlled by banking groups via their asset-management arms. Still, Portugal has the lowest loan-to-deposit ratio of the euro area. A more detailed analysis of the securities markets for listed banks and impending risks is presented in Section IV.

Lessons may be drawn from these developments, as many risks are outstanding.

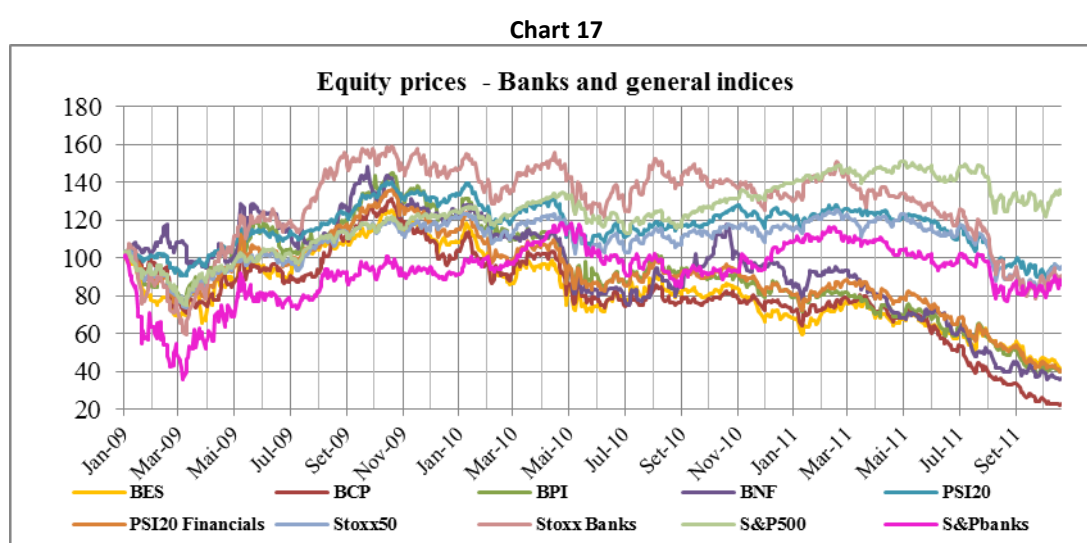
The data analysis does not provide off-the-shelf answers for the major risks outstanding. Market concerns are two-fold. On one hand government finance and bank sector data suggests long-term solvency risk was a legitimate concern, on the other hand short-term liquidity risk increased substantially for Portugal-based issuer banks and other banks in the euro system. The global economy is recouping though uneasily. Confidence in the financial system weakened and similarities exist between the on-going financial crisis hitting the euro area and the confidence crisis that featured the global markets turmoil in 2008 and the Greek crisis in 2010. The fear factor is very present as illustrated by the EURIBOR-OIS spread curve (Section IV) and chances are that market nervousness may continue until markets become assured by the political solutions to solve or mitigate the effects of the EMU members’ budgetary and sovereign debt crises. As long as economic and political uncertainty persists, the unwinding of positions in assets perceived as less safe should continue in a risk-off mode.

The Portuguese economy’s lack of creditworthiness was such as to justify asking for external financial help on grounds linked to the lack of sustainability of the government finances, the macroeconomic underperformance and the weaknesses of the banking sector. Between January and October the Portuguese Republic was downgraded 6 times by the 3 major global rating agencies. The sovereign downgrades drag several other institutions, including lenders and corporates. “Portuguese assets” are viewed by investors as increasingly risky, in a risk-averse high volatility setting. Market confidence and risk of contagion are intimately intertwined. As long as market confidence – most prominently banking system confidence – is not redressed, contagion risk remains.

IV. Topical Issues – Portuguese banks securities and a closer look at covered bonds

Declining share prices, below Lehman-bankruptcy low levels...

The comparison between the performance of the European and US banking sector and the rest of the economy between January 2010 and today provides an illustration of how the banking sector has underperformed (Chart 17).

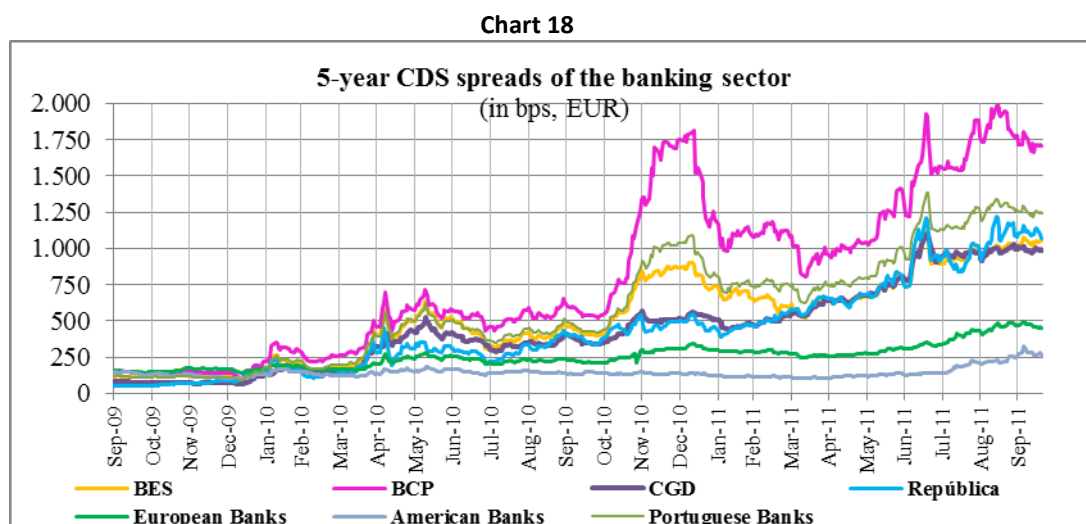


More recently, listed banks market prices declined 22% in the US and 31% in Europe (January-October). In Portugal the decline was sharper. PSI20 Financials index (almost fully composed of banks) lost 50% of their price value in months from January to date, against a 21% drop in the overall market index. Banco Comercial Português (BCP) shares, those hardest hit, currently trade at 66% less their price in the beginning of the year, or 7% of their 2007 average price. Banco Espírito Santo (BES), Banco Português de Investimento (BPI) and Banco Banif (BNF) fared only slightly better, with shares prices at between roughly a tenth and a fifth of 2007 levels.

... and mounting risk spreads to historic highs.

CDS prices of the banking industry have recorded substantial increases. European banks (October) average CDS price is currently 470 bps, 46% more its level in January. In North America the picture is slightly better though current CDS prices are still below those of their European counterparts, at 283 bps, or 2 times more their January level. Credit risk indicators are dire for Portuguese banks. Perceived risk of Portuguese banks has increased markedly for two years to date, but the pace of increase appears to have accelerated over the last 12 months. An average CDS price index encompassing the

three largest Portuguese banks is currently at 1255 bps, is now 2.8 times higher than one year ago (October 2010 average level), and 20% more than in January 2011. From November 2010 onwards, banks' CDS prices departed from sovereign debt CDS, and were consistently higher than these later (Chart 18). Volatility in bank securities has consistently been above average general market volatility (Chart 19).



Source: Bloomberg, CMVM Calculations.

... while bank credit extension contracts, counter to the recovery trend observed in the euro area...

From an operational point of view, banks face increased challenges associated with the sluggish economic environment. Portuguese banks asset quality continues to deteriorate, in both the private and public segments. As referred in Section III, NPL of non-financial corporations to which credit was extended by Portuguese banks keep their upward trend (Chart 16a). On the other hand, as the economy contracts, banking credit extension activity follows suit hence reducing profit opportunities. Exposures to programme countries entities lost market value. Portuguese banks combined exposure of direct claims on Irish and Greek entities amount to €32.8bn, 11.3% more than the year before.⁶³

Credit extended to the corporate sector eventually started to decrease in the third quarter of 2010 up to June 2011. In the household space an activity deceleration was also witnessed. It recorded a negative yearly change (-0.4 p.p.), for the second consecutive month – mortgages stagnated and consumer credit posted a -3 p.p. change (Chart 20). Portuguese banks have the highest loan-to-deposit ratio among the euro area (the IMF/EU programme envisages a 120% target ratio by end 2014).

⁶³ BIS data, as of June 2011.

Chart 19

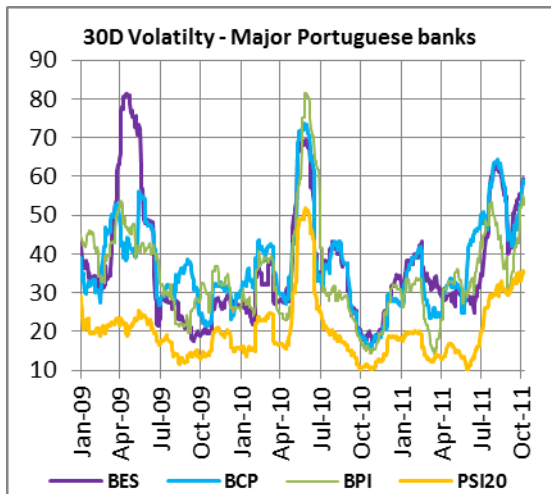
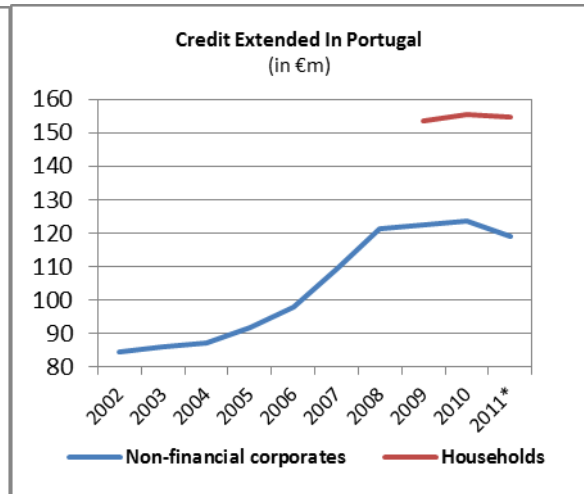


Chart 20



Source: Bloomberg, Banco de Portugal; *June.

Portuguese banks’ funding needs peak in the coming year...

Information on the funding needs for the Portuguese banking sector could be taken from the estimation of the amount of loans and bonds (principal only) maturing over the next, say, 10 years. On the basis of Bloomberg data it is possible to establish an overall value for these components of banks liabilities. According to such estimation, the peak of funding needs for the Portuguese banking sector is expected to take place in 2012 when €17.8bn of long term principal is due. Although there has been a decrease in the amount of debt maturing in 2011 (as expected) and in 2012 between April and September, an important chunk of banks’ funding needs will have to be addressed in the short to medium-term (Charts 21a and 21b).

In parallel, sovereign states need to fund their overstretched budget deficits and government debts. 2012 will be a very challenging year, notably but not exclusively, for Portugal.

Chart 21a

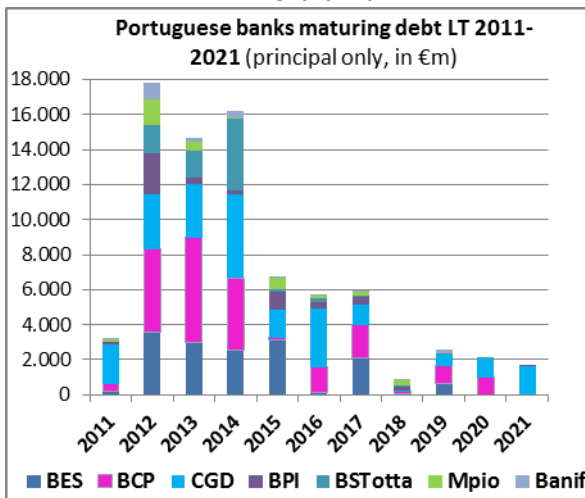
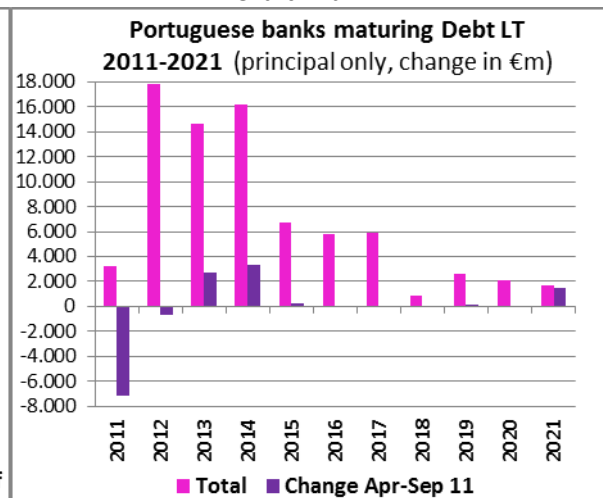


Chart 21b



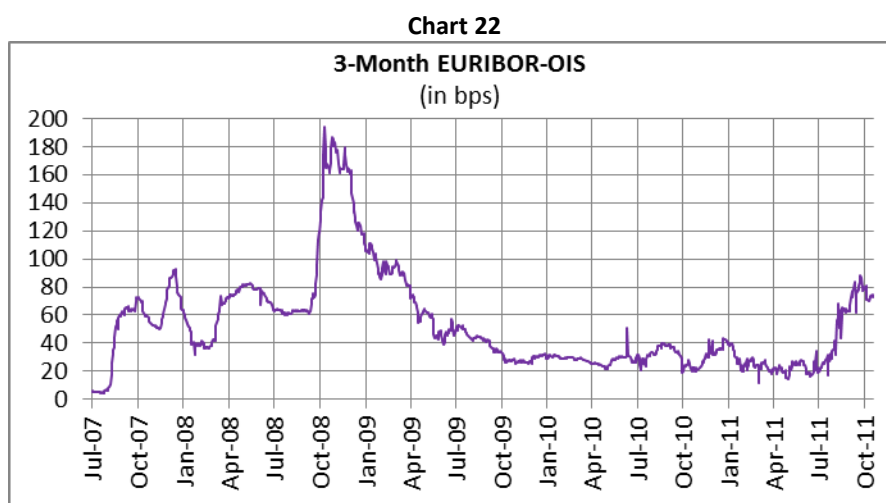
Source: Bloomberg, CMVM calculations.

On an individual basis, CGD is the institution with the largest amount of debt maturing between 2011 and 2021, €22.8bn, followed by BCP with €20.7bn and by BES with €15.5bn.

Among the largest banks, between April and September, only BES and BPI recorded a decrease in the amount of debt maturing in the period 2011-2021, i.e. -13,2% and -26,4%, respectively. The remaining institutions saw an increase in the amount of maturing debt.

... and widening OIS-Euribor spread denotes deteriorating confidence among institutions.

The 3-month EURIBOR-OIS⁶⁴ spread has been widening since the beginning of the year. Currently at 74 bps (October average) it increased 54 bps since its June average level, the highest value in more than two years. The indicator is usually perceived by the market as a credit market stress gauge. Wider spreads reflect banking institutions unwillingness to lend unsecured funds to each other, suggesting that the inter-bank confidence is deteriorating and that the money market is not functioning properly. The abnormal increase of the EURIBOR-OIS rate in 2007 preceded the financial system turmoil (Chart 22).



Data source: Bloomberg.

According to CEPS, a Brussels-based political think-tank, by mid-2010 the European Commission had been notified of 20 state debt guarantee and 15 recapitalisation schemes, and 44 specific bank state aid cases. Thirteen of the old member states (except Belgium and Luxembourg) had a national scheme as well as seven new member states (Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia and Cyprus). Five EU member states had neither bank support schemes nor individual bank support cases, all of these new member states (Bulgaria, Czech Republic, Estonia, Malta and Romania).⁶⁵

Citing a recent example of the changing profile of financial institutions riskiness, on October, 7th, Moody's downgraded 9 Portuguese banks and 12 UK lenders, in the latter case, as a result of the «*review of systemic support assumptions from the UK government for these institutions initiated on 24 May 2011*». ⁶⁶ Dexia, a troubled Franco-Belgian lender, became a candidate for government support.

⁶⁴ Overnight Indexed Swap (OIS).

⁶⁵ European Commission Directorate-General for Competition data.

⁶⁶ Moody's Investors Services, Global Credit Research - 07 Oct 2011.

The banking industry vulnerability is thus a combination of several factors.

The market devaluation of Portuguese bank shares and CDS market performance reflect a number of issues, which include, but are not limited to the following: i) the deterioration of banks economic and financial fundamentals; ii) a high counterparty risk influenced by the loss of credibility of the Portuguese Republic in the international financial markets; iii) widely accepted view that these banks are dependent on the ECB credit window to operate on a regular basis (according to the IMF, recourse to ECB financing increased in the months until April to €48 billion, or 9% of banking sector assets); iv) the exposures to sovereign debt of programme countries, which recently lost considerable market value, and v) a slowing economic activity entailing a contraction of activity and a deterioration of asset quality. The combination of these factors should have contributed to (and also be a consequence of) decreasing market values, above market average volatility levels signalling increasing market risk, on top of mounting credit and counterparty risk.

Reflecting these developments, Portuguese banks were continuously downgraded by the major rating agencies over the last two years (See Section III). All these issues have a bearing on Portuguese banks' ability to weather the financial and economic crisis, making them also more vulnerable to hostile takeovers. Though banks have been losing weight in the Portuguese stock market, they still account for 11.6% of the PSI20 market capitalization. Therefore the market performance of this securities' group impacts the performance of the Portuguese securities market overall.

Increased use of covered bonds as a means to fill in the funding gap in Europe...

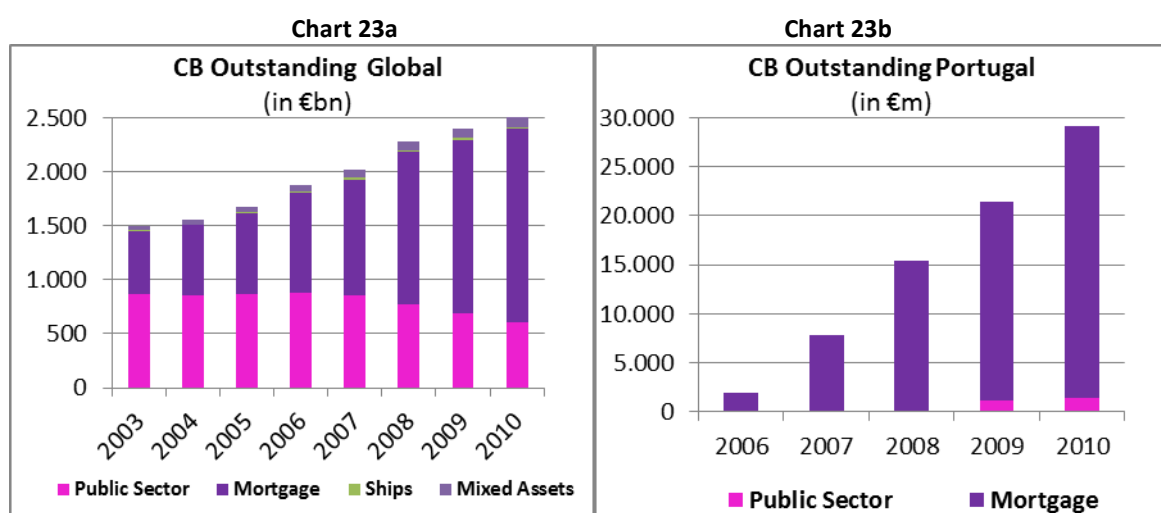
From a global (mostly European) perspective, the issuance of covered bonds (CB) by banks expanded substantially between 2003 and 2010 (Chart 23a).⁶⁷ Covered bonds are a form of secured bonds, collateralised by the assets of the issuer bank. These securities offer investors an enhanced degree of protection in the event of default thanks to their specific regulatory frameworks, which exist in a large number of European jurisdictions. Also, some of their legal design features enhance the attractiveness of their (relatively lower) risk profile: i) the collateral asset pool is «ring-fenced» from the financial institution's assets; ii) overcollateralization; and iii) special prudential supervision by public supervisors. Originally used in Germany in the XIX century, this form of financing spread to other European countries, notably France and Southern European countries and to non-European countries. It is thus a relatively «new» asset class, and in some countries there isn't even an appropriate legal framework for the market to thrive, such as in US. In Portugal the first covered bond issue dates from 2006⁶⁸ following the adoption of the specific domestic covered bond legal framework.⁶⁹ The global (understood as mostly European) market is worth €2.500,9bn (2010) having grown roughly 5% per annum in 2009 and in 2010. Issuance in 2010 was €613.1bn, 15% more than the year before. 2010 was a record year for this asset class in

⁶⁷ The global and European statistics used in this section are sourced from the European Covered Bond Council (ECBC). Global data refer to European data plus the US and Canada. European data refer to EU countries plus Switzerland and Norway.

⁶⁸ According to Bloomberg data the first record for a Portuguese CB issue was CGD €2.150bn floating rate expiring in June 2016.

⁶⁹ Specific national covered bond legislation: «Decreto-Lei n.º 59/2006, de 20 de Março, que estabelece o regime jurídico aplicável às obrigações hipotecárias e às obrigações sobre o sector público, bem como às instituições de crédito hipotecário.»

Europe in terms of amounts outstanding, while issuance levels were at historical highs in H2 2010 and Q1 2011. Amid the financial crisis and the funding problems of several European banks, covered bonds have played a role in contributing to close bank funding gaps. Aside from the fact that CBs are considered by many investors as the top-quality credit exposure to banks, in Europe CBs have benefited from a privileged treatment from a legal and monetary policy stances such as the fact that CBs are eligible marketable debt instruments for the purpose of ECB credit operations, positively impacting the liquidity of the CB market. Also, the ECB intervenes directly in the CB market via ECB liquidity-providing covered bond purchase programmes (CBPP). The first CBPP came to an end in June last year⁷⁰ and a new one was announced in September. With the coming ECB round of CB purchases (CBPP 2) – a €40bn programme due to start in November lasting until December 2012 – increased issuance activity appears likely.⁷¹



Data source: ECBC.

... as well as in Portugal...

As in other financial systems, CB were an important funding resource for Portuguese banks as CB are usually rated higher than the banks themselves as issuers, and higher than the Portuguese Republic (similarly to the ABS market in the past).

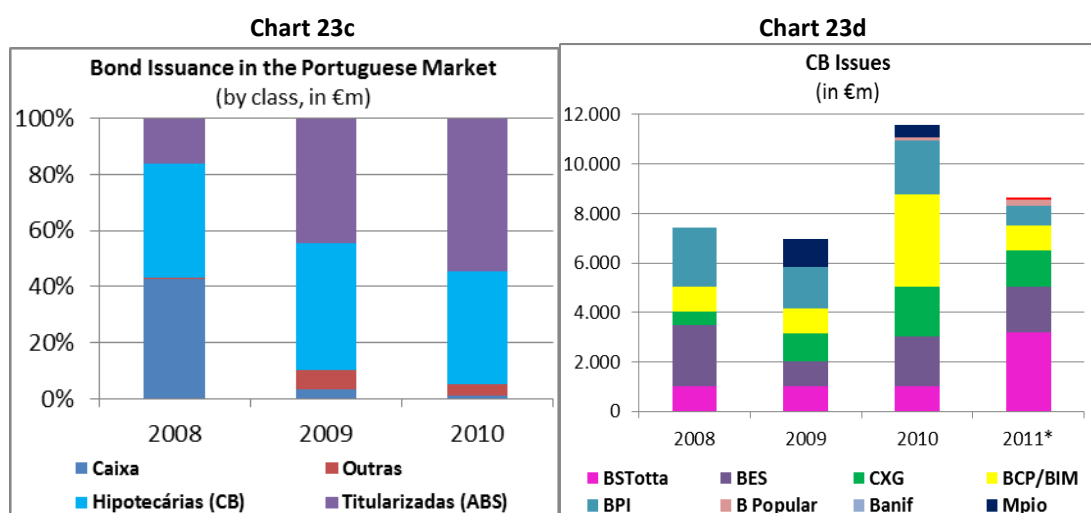
Valued at €29.1bn (2010), the Portuguese covered bond market is made up of public sector covered bonds and covered bonds backed by mortgages (*Obrigações Hipotecárias*) (Chart 23b). These latter though, account for the overwhelming majority of the outstanding amounts. Eight Portuguese banking groups issued mortgage-backed covered bonds during the period 2008-2011, including the four largest institutions. Up to August 2011, CB issuance accounted for €8.6bn, a relatively high figure (Chart 23d).

⁷⁰ Through the covered bond purchase programme (CBPP) the ECB carried out CB purchases worth €60.1 billion between the start of the programme in July 2009 and its end in 30 June 2010.

⁷¹ In its meeting of 6.10.2011 the Governing Council of the ECB decided to launch a 40 billion-strong CBPP2. The purchases may be conducted both in the primary and secondary markets by means of direct purchases. The programme should expire by the end of October 2012.

In Portugal the most representative chunk of mortgage CB is channelled to institutional investors. However, in many other European countries CBs are subject to ways of placement which make them accessible to retail clients. The European System of Central Banks (ESCB) is a major buyer of these securities. As of today, the domestic legal framework foresees no specific mandatory disclosure requirements to the public in relation to covered bonds.⁷²

CBs were and continue to be a key funding source for banks at a time when the international wholesale funding window was (and still is) temporarily shut to Portuguese banks.



Data source: CMVM, Banco de Portugal. *August.

The IMF-EU Programme includes a €12bn package under the so-called Bank Solvency Support Facility (BSSF), directed at reinforcing the capital of domestic financial institutions in the event that they cannot reach the new capital requirements on time. However banks appear to be reluctant to take advantage of this latter as entering into such agreements entails the acceptance of conditions which imply to a certain extent a loss of control over the institution's guidance. As long as there will be a market for CBs, these will undoubtedly be a preferred option.⁷³ In order to maintain the liquidity in the banking sector, under the IMF-EU Programme national authorities will facilitate the issuance of government guaranteed bank bonds for an amount of up to €35bn.

... but is not exempt of risks.

The use of covered bonds is not exempt of risks to the system as a whole and to investors in particular. Questions should be made on the extent to which the guarantees tied to covered bonds are not detrimental to other bank stakeholders. As noted before that fact that extensive pools of assets are allocated to covered-bond issues means that these are outside the scope of the asset recovery pool in the event of bankruptcy, hence reducing the amount of assets from which other less senior investors may claim upon. In the Portuguese market the proportion

⁷² ECBC.

⁷³ According to the IMF First Review of the financial support programme implementation, the BdP does not foresee any use of the BSSF in 2011.

of outstanding covered bonds (2010) relative to the total banking system consolidated liabilities is still a small fraction (6% in 2010), however the figure increased 30% from the year before. Relative to the banking system consolidated assets the proportion is only slightly less (5% in 2010). Given the specific domestic legal framework that applies to the amount of collateral backing covered bonds, the proportion of assets used as collateral for covered bonds and the total banking assets is a bit higher than the previously stated 5%. Indeed, regulatory prudential limits applicable to covered bonds require that the total amount of covered bonds issued shall not exceed 95% of the total asset pool used as collateral. The higher the amount of a bank outstanding amount of covered banks as a proportion of total outstanding debt, the higher the credit risk for non-covered bond investors (including holders of other debt securities).

CoCos are also a possible source of capital but not risk-exempt either.

Though not as popular as covered bonds, contingent capital (aka CoCo) is a newer source of capital for banks. A few northern-European banks have issued this type of hybrid instrument. Though CoCos have specific features of their own not shared with other financial instruments, they could be described as a sort of debt obligation that is convertible into equity upon the verification of a certain trigger event denoting that the company is in financial distress. Reaching a capital ratio threshold could be an example of a trigger event that would lead to the automatic conversion of a debt obligation into common equity. Investors are thus exposed to the credit and counterparty risk typically linked to credit instruments as they are subject to market risk. So far these instruments have not been designed envisaging the retail investor directly; however, they do pose systemic risk, to the extent that the losses that an issuer bank may generate are transferred to other investors in the financial system.

It would be reasonable to question whether institutional investors – most notably insurance companies – are prepared to absorb the shocks caused by exposure to CoCos when banks face pressure or fail. In spite of CoCos advantages, their use actually operates a transfer of risk from the banking sector balance sheet to the insurance/pension sectors balance sheets, which may adversely impact insurance policy holders and pension plan subscribers. The IMF alerts to other issues to be taken into consideration when using CoCos, notably the importance of an appropriate instrument design and the need to use it within certain quantitative limits.⁷⁴ So far this type of instrument was not issued in Portugal.

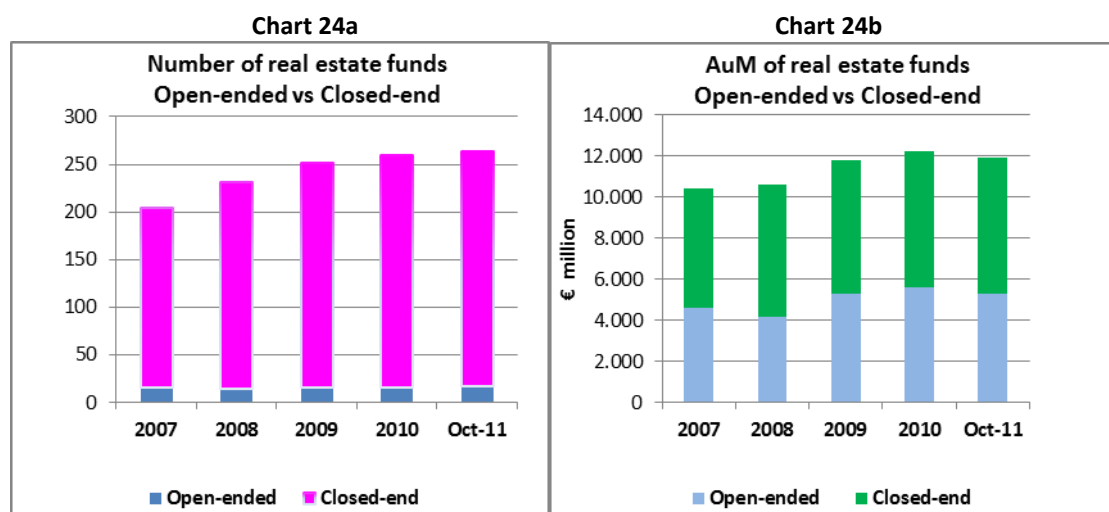
⁷⁴ IMF Staff Discussion Note Contingent Capital: Economic Rationale and Design Features, January 2011.

V. Topical Issues – a closer look at the real estate fund market

There are 263 real estate funds domiciled in Portugal worth €11.887m. The overall universe encompasses 17 open-ended funds and 246 closed-end funds.⁷⁵ It includes conventional real estate funds (open-ended and closed-end) as well as special real estate funds (*Fundos Especiais de Investimento Imobiliário*). These latter are closed-end funds characterized by a relatively more flexible investment mandate and have grown in importance over time: while in 2007 they accounted for 7% of the total real estate fund assets only, they now do account for 16% of the total.⁷⁶

In spite of the fact that open-ended funds only account for 7% of the total universe fund number, they account for 45% of the total assets under management (AuM) in real estate investment funds in Portugal. Put another way, open-ended real estate funds are on average much larger in size than closed-end funds. This market feature did not change significantly during the period surveyed. Our interest in the present analysis is mainly directed at open-ended real estate funds because of their retail-oriented market focus. However, for the sake of completeness, information on the overall real estate fund universe or on closed-end funds is also presented throughout the text, where providing a wider market perspective becomes appropriate. The analysis ranges from 2007 to 2011, although in some instances longer (quarterly) data series are analysed.

As illustrated by charts 24a and 24b the amounts under management of real estate funds remained relatively stable over the last 4 years, albeit recording a slight upward trend.



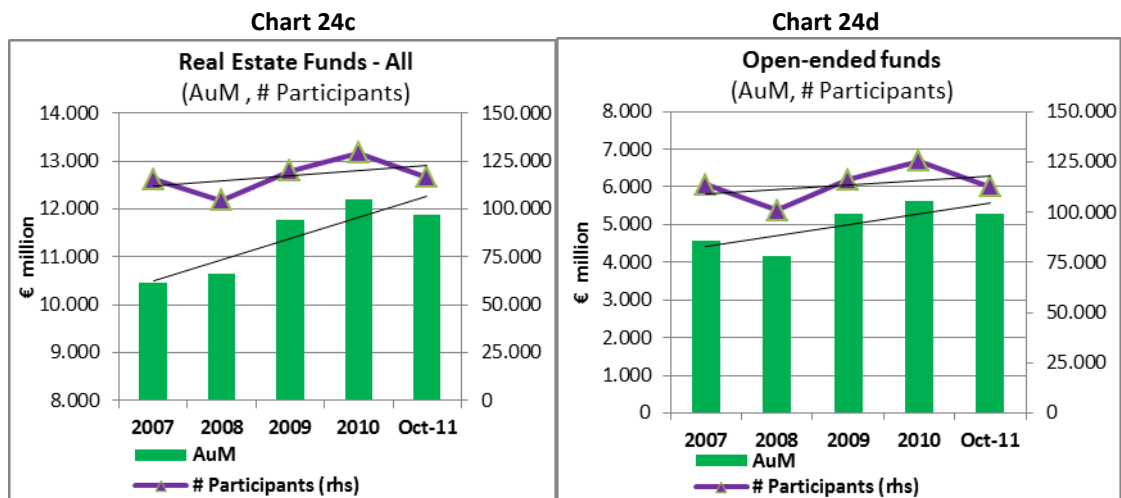
Source: CMVM.

⁷⁵ By default figures quoted in this section are as of October, unless quarterly data is presented, in the case of which September figures are given. Real estate fund data analysed in this section encompass two real estate funds which operate in the market but are not usually included in CMVM statistics disclosed to the public on a regular basis due to specific classification criteria.

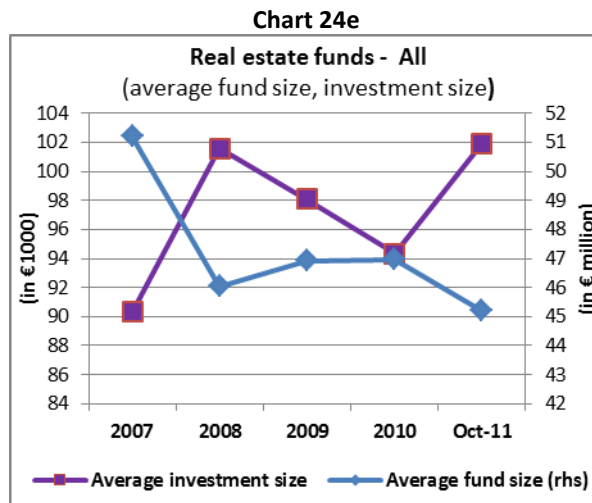
⁷⁶ *Fundos de Gestão de Património Imobiliário* (FGPI), a minor instrumental real estate fund vehicle category designed for corporate real estate optimization, is also encompassed in the overall real estate fund universe.

Open-ended real estate funds' AuM are €5.29bn, 15.5% higher than their 2007 value, although 5.7% less than in 2010. Such trend is actually opposite to the trend observed in other mainstream investment fund classes, most notably, collective investment schemes in transferable securities as already noted in Section III.

The same trend was observed in the number of investors (or participants) in real estate funds over the same period (Chart 24c). However since the AuM increase trend is steeper than the number of investors increasing trend, the result is a mounting average investment amount per participant in real estate funds irrespective of their type between 2007 and Oct-2011 (Charts 24c, 24d and 24e).



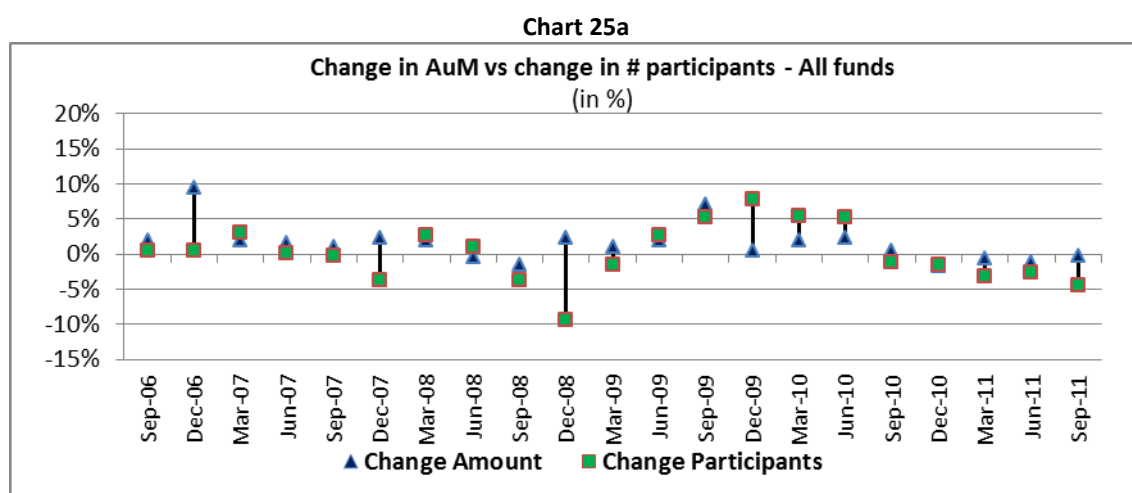
Source: CMVM.



Source: CMVM.

Understandably the average amount of investment per participant may vary over time on the basis of the profile of incoming investors and exiting investors, notably as far as the commitment amounts per participant are concerned, when investing in or divesting a fund (Chart 24e).

However, a longer term analysis shows that the average investment size per investor may change substantially over time, not following a straightforward trend, denoting a changing relationship between changes in the number of fund investors and changes in the total assets under management. Chart 25a presents the pair AuM change/number of fund investors change in yearly terms over the period June 2006-September 2011 referring to the overall amount of real estate funds, all types combined.



Source: CMVM.

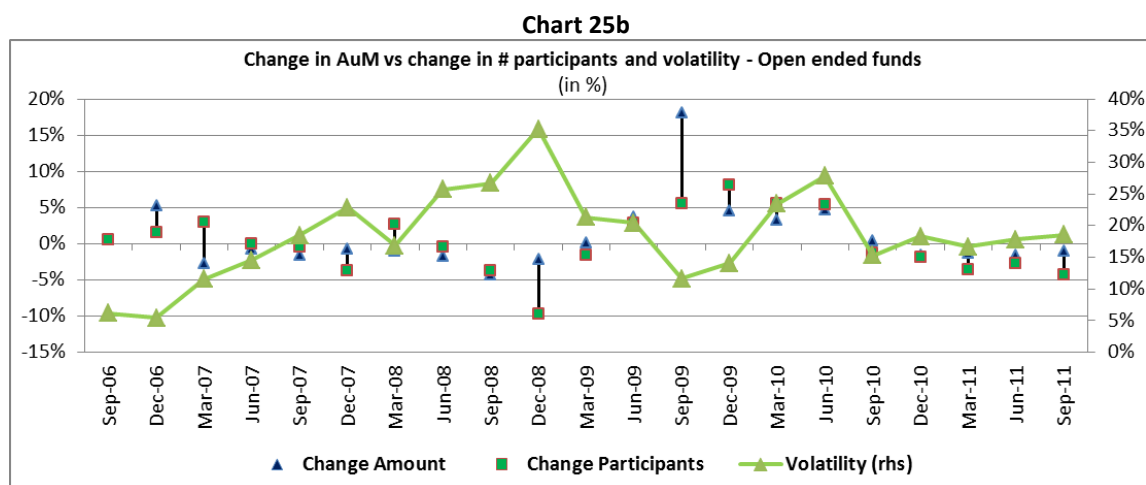
What appears as the usual pattern is a situation where increases in the AuM are associated with increases in the number of investors and vice-versa. Or, in any stance, even if both changes do not share the same direction, the difference between both in absolute terms is fairly small, say less than 2.8% percentage points (twice the standard deviation from the average difference).⁷⁷ For the 21 data points plotted in the series this was not the case only in 7 situations. However what could be considered as a strikingly “unusual” pattern would be the case where not only the difference between both changes exceeds 2.8%, as the changes directions do not match. This was observed twice, in the quarter ending in December 2007 and in the quarter ending in December 2008, this latter corresponding to the Lehman Brothers collapse-related financial turmoil. In both cases, despite a sharp decrease in the number of investors, AuM rose. More recently, between the quarters ending in June and September 2011 this “unusual” pattern appears to be gaining shape again, though less abruptly. In particular, in the quarter ending in September where the number of investors declined 4.4% while the amounts managed remained virtually unchanged. This decline in number of investors was the second largest for the whole data series, only exceeded by the 9.4% decline in 2008 during the Lehman crisis, which was accompanied by 2.3% increase in the amount of AuM. The present situation appears to be a milder version of what happened in 2007-2008. Furthermore, it is noted that between June 2010 and September 2011 real estate funds lost investors for 5 quarters in a row, something not seen since 2006.⁷⁸

⁷⁷ E.g. if the number of participants decreases 2% and the AuM increase 1%, the difference would be 3%, thus an observation considered within the usual pattern.

⁷⁸ According to CMVM database, the same entity that participates simultaneously in an open-ended fund and in a closed-end fund is counted twice, making two participants. More accurately, where the expression «number of participants» is used, it should be interpreted as «number of participations».

Before the data on all funds (Chart 25a), a question that comes to mind is why the investor profile would vary within such a relatively short-time period. Market stress could perhaps provide a possible clue for such changes (Chart 26).

Similarly to Chart 25a, Chart 25b also presents the pair AuM change/number of fund investors change in yearly terms over the period June 2006-September 2011 but referring to open-ended real estate funds only. Chart 25b also shows the monthly average 30-day daily volatility of the PSI20 expressed as a percentage.



Source: CMVM.

Between June 2010 and September 2011 open-ended real estate funds also lost investors for 5 quarters uninterruptedly. The quarterly change on the number of investors in open-ended funds is quite similar to the change observed in real estate funds overall, reflecting the fact that 99% of real estate fund investors are investors in open-ended funds (see Charts 29a and 29b).

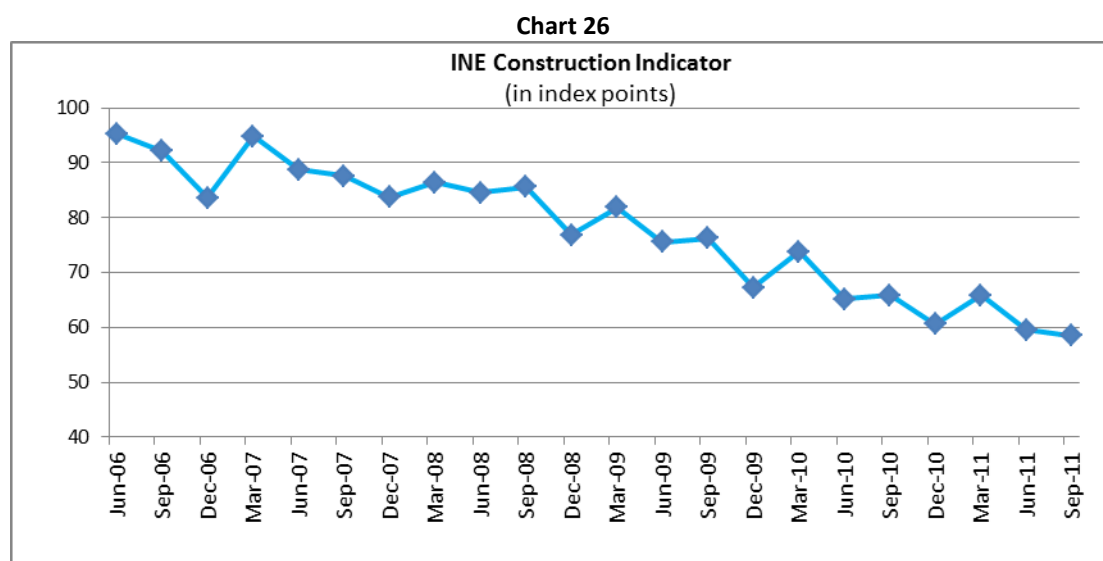
In line with the previous observations (Chart 25a), the quarter ending in December 2008 featured the highest market turbulence as measured by volatility (35.2%). The quarter ending in December 2007 also displayed a relatively high volatility (22.9%). In 2011 volatility levels are increasing since the beginning of the year as far as September. It appears the investor profile pattern shifts are somehow linked to the overall market conditions rather than to factors solely related to the domestic real estate market and the domestic real estate investment fund market.

Although market turbulence may play a role in investors’ attitudes towards real estate fund investing, factors specific to the real estate sector may also explain why small investors are shying away from open-ended real estate funds. The decrease in the yield provided by such funds (especially rent value decreasing) and the need for liquidity from investors due to a significant decrease in their disposable income, are two other possible explanations.

The construction industry is in steady contraction since 2006 as denoted by the domestic INE construction indicator.⁷⁹ The sector production index was 58.5 in September 2011

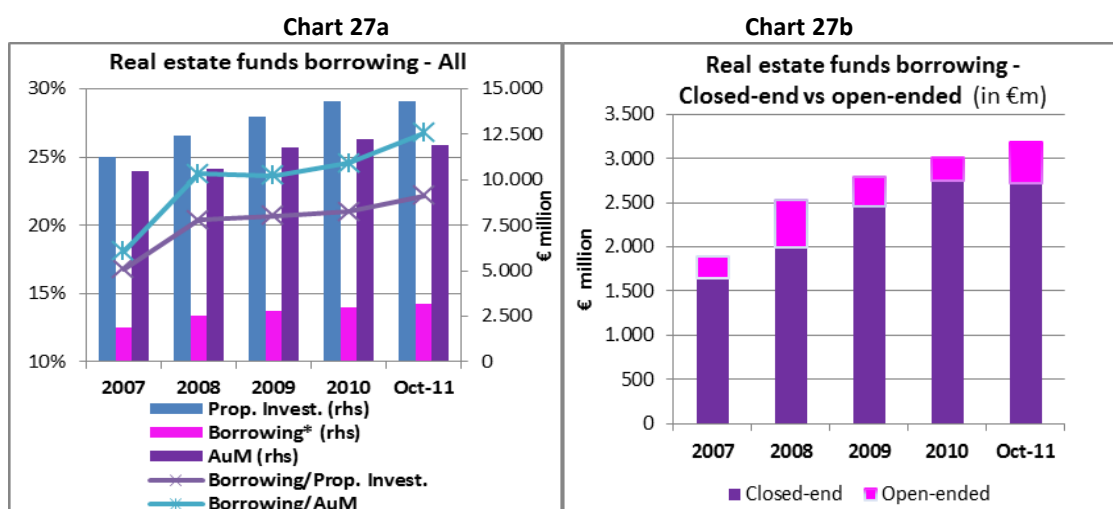
⁷⁹ INE – Instituto Nacional de Estatística, Índices de Produção na Construção e Obras Públicas - Edifícios.

down from 95.3 in June 2006 (Chart 26). This would translate into scarcer market opportunities for real estate developers, and, consequently to real estate funds alike.



Source: CMVM, INE.

CMVM data also suggests increasing leverage levels in the real estate investment fund market (Charts 27a, 27b and 27c).

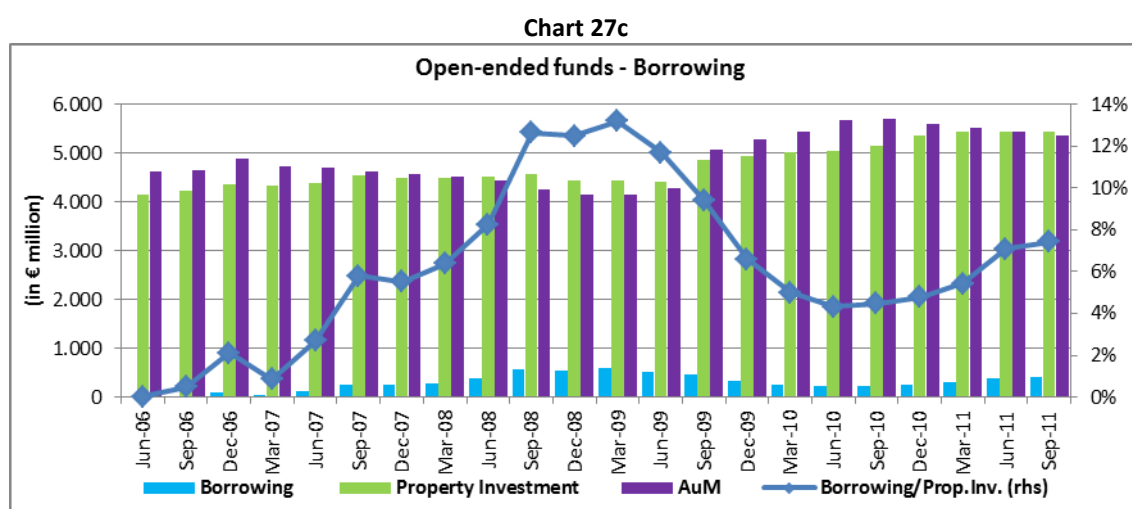


Source: CMVM.

Indeed, between 2007 and 2011 the overall real estate fund industry borrowing increased both in relative terms (Chart 27a) – in proportion of the total property investment and in proportion of total AuM – and in absolute terms (Chart 27b). The ratio of total borrowing to overall property investment could be viewed as a specific liquidity risk indicator for the real estate funds’ sector, to the extent that it provides a measure of the relationship between the funds’ liabilities and the long-term direct investments in property, the major single investment asset class. It disregards investments in financial instruments and securities such as liquidity investments and

real estate-related securities,⁸⁰ these latter, more liquid investments than direct property holdings, at least theoretically. The relationship between total borrowing and overall funds' investments, including non-direct property holding is captured by the ratio of total borrowing to overall assets under management.

Importantly, Chart 27b data shows that the real estate fund industry borrowing increase between 2007 and today was largely due to closed-end funds. However from January 2011 onwards it was fully explained by open-ended funds. Actually in 2009 and 2010 the net contribution of open-ended funds to the overall funds' leverage levels was even negative, i.e., there had been a reduction in the leverage of open-ended funds.



Source: CMVM.

Still using the same liquidity metric, open-ended funds recorded successive increases in borrowing (relative to overall property investment) between June-2010 and September-2011 (Chart 27c). Borrowing almost doubled in the first ten months of 2011, from 4.8% December 2009 to 8.5% in October.⁸¹ Furthermore, the typical real estate fund investments in money market instruments, which are also a measure of liquidity, also recorded a decrease. Despite the growth in borrowing observed, the current leverage levels are not yet as elevated as those reached during the liquidity squeeze that stormed the fund industry in 2008/2009.

From the perspective of the real estate fund manager, deteriorating market conditions may call for the need to increase borrowing to offset the outflows pressure linked to investors' withdrawals from the funds, which could not be matched by property assets sale in a reasonable timeframe. Liquidizing this asset type at a relatively attractive price may prove a challenging task amid a lethargic real estate market and an economic downturn. These two conditions combined are in place in 2011. Furthermore, the typical real estate fund investments in money market instruments also recorded a decrease. Against this background, the performance of open-ended real estate funds is being closely monitored.

⁸⁰ Holdings in property companies or in real estate funds.

⁸¹ The month of October is not chartered in the graph because the graph only presents full quarter data.

VI. Concluding remarks

From the previous analysis it emerges that key trends and risks to the proper functioning of the securities market include, but are not limited to: i) sovereign risk in the euro area associated with the contagion from Greece, Ireland and Portugal, as well as, more recently, from Italy and Spain; ii) funding risk in the European banking sector, and more intensely in some countries such as Portugal; iii) the downside risks to real economy originated from a deceleration of economic growth. The economic deceleration could stem from restrictive monetary policies around the globe to combat inflationist pressure and mounting prices in the commodities market but also from sovereign debt crisis market turbulence and the weakened role of the financial system in the economy.

In a relatively high volatility environment and risk aversion mode the attraction of capital to safe harbours like the German sovereign debt market, the Swiss foreign exchange and sovereign debt market and gold investing, may generate financial and economic imbalances. A recent illustration of this type of risk was given by the events in Switzerland.

While crisis means distress for many investors, it is also amid a financial crisis that market opportunities flourish. The emergence of alternative financing sources for companies such as crowd funding may prove to be economically useful but also merit attention from supervisors. The expansion of the covered bond market has played and is expected to continue playing a role in fulfilling the banking sector funding needs (in Europe) but these instruments are not exempt from risks. The same could be said about contingent capital. The decreasing confidence in the financial system is signalled by the unusual functioning of the money market.

The Portuguese banking sector is facing a delicate period due to the combination of funding shortage, necessity for higher solvency ratios, asset quality deterioration and activity contraction associated with the economic cycle and the on-going deleveraging process. These in turn originate increasing credit risk, market risk and contagion risk, while those risks exacerbate the former problems in a vicious circle.

The leverage levels observed in the real estate domestic fund industry have increased considerable over the first 10 months of 2011. They are not yet as elevated as those reached during the liquidity squeeze that stormed the fund industry in 2008/2009, but still deserve close attention. The decrease in the number of investors and amounts invested in open-ended real estate funds also signal increased liquidity risk.

From the securities supervisors' perspective, the manufacturing and distribution of Exchange Traded Products (ETPs), including synthetic ETFs also deserves scrutiny. These instruments should be considered within the wider universe of retail-oriented structured financial products.⁸²



⁸² Understood as “*produtos financeiros complexos*”.

REFERENCES

AMECO data base, maintained by the Directorate-General for Economic and Financial Affairs of the European Commission, 2011

Bank of International Settlements, BIS preliminary report of 20.10.2011 (statistics).

Campbell, J.Y. and Shiller, R.J., Stock Prices, Earnings, and Expected Dividends. *Journal of Finance*, 43(3): 661-76, 1988.

Council of European Union, Statement by the Heads of state or Government of the Euro-area and EU institutions, Brussels, 21 July 2011

CMVM Preliminary Risk Outlook 1st Issue, November 2010 (internal document).

CommerzBank, Cross Asset Monitor, 24 October 2011

Deutsche Bank Research, Public Debt in 2020: Monitoring fiscal risks in developed markets by Sebastian Becker and Wolf von Rotberg, July 2011

European Central Bank, The impact of the eurosystem's covered bond purchase Programme on the primary and secondary Markets by John Beirne, Lars Dalitz, Jacob Ejsing, Magdalena Grothe, Simone Manganelli, Fernando Monar, Benjamin Sahel, Matjaž Sušec, Jens Tapking and Tana Vong, Occasional Paper series No 122, January 2011

European Commission, European Economic Forecast Spring 2011, Commission Staff Working Document, European Economy 1/2011, Directorate-General for Economic and Financial Affairs, May 2011

European Commission, Interim Economic Forecast September 2011, Commission Staff Working Document, Directorate-General for Economic and Financial Affairs, September 2011

European Covered Bond Factbook 2011, European Covered Bond Council

Ministério das Finanças e da Administração Pública, *Sistematização das medidas do Programa de Apoio Económico e Financeiro a Portugal até ao final de 2011*, Setembro 2011

IMF Country Info, Portugal, website access in 19.10.2011

IMF Country Report No. 11/279, Portugal: First Review Under the Extended Arrangement, September 2011

IMF World Economic Outlook, September 2011

IMF Staff Discussion Note Contingent Capital: Economic Rationale and Design Features, January 2011

Morgan Stanley, Morgan Stanley Research global, Commodity strategy – Benefiting from normalcy by Hussein Allidina and Jeremy R. Friesen, July 2009

JPMorgan Global PMI Output Index, Markit Economic Research, September 2011

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