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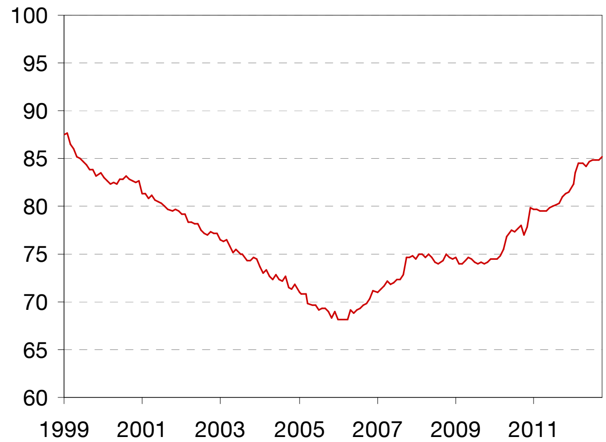
FINANCING GOVERNMENTS DEBT: A VEHICLE FOR THE (DIS)INTEGRATION OF THE EUROZONE?

— The creation of the euro was an important step in the financial integration of the countries within the monetary union. Financing Governments debt was a very good example of this until 2007-2008: it had largely become cross-border and spreads in the cost of financing between different Member States had even almost disappeared - and this was the crux of the problem. The crisis that is currently rocking the euro zone has brutally called into question this process.

— The banks had supported the trend toward greater integration of governments financing but have been back-pedalling since the crisis. However, they have always kept a preference for public debt from their own country, linking their own funding conditions to those of their country.

— Since the fall of 2012, the movement to renationalise public debt holdings has come to a halt, with foreign investors beginning to return to peripheral markets. Nevertheless, things are not likely to return to pre-crisis levels, and a certain amount of fragmentation in the public debt markets should therefore remain.

Euzone banks - Share of domestic sovereign debt holdings in their total Eurozone sovereign holdings[1]



Sources : IMF, SG

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[1]*This chart is based on IMF data that categorise banks according to their country of residence and not the nationality of their country of residence.*

SOCIETE GENERALE

This paper will discuss how government debt holdings in the euro zone have evolved from the creation of the single currency to today's crisis. The first section will examine the way in which the euro was an important catalyst in the integration of government financing. However, since the economic crisis of 2008, government debt has been renationalised at a fast pace. The succession of events underpinning this trend is laid out in the second section. The third part will describe the key role played by the banks both in terms of integration prior to the crisis and the move to renationalise debt thereafter. Finally, the last section discusses recent measures taken - particularly by the ECB - and the medium-term outlook for the integration of government debt in the euro zone.

THE CREATION OF THE SINGLE CURRENCY STRENGTHENED INTEGRATION OF STATE FINANCING

BEFORE THE EURO, SOVEREIGN DEBT WAS PRIMARILY HELD BY RESIDENTS

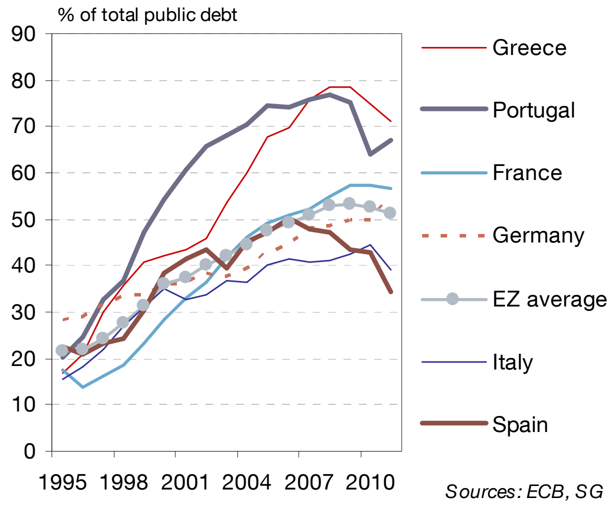
In the mid-1990s, the public debt of euro zone countries was, on average, 80% held by residents (chart 1). Investors preferred holding national debt denominated in their local currency as doing so meant they were not exposed to currency risk. Regarding the banking sector, holding national assets also met the need to match the exposure of their assets to their liabilities, which were not very diversified beyond their borders at the time.

Financial integration at the global level, particularly within European countries, strengthened during the years leading up to the implementation of the euro. As reflected in this trend, foreigners gradually increased their holdings of government debt in core euro zone countries to reach an average of just above 30% in 1999.

THE EURO ENCOURAGED GREATER CROSS-BORDER FINANCING OF GOVERNMENT DEBT

The creation of the single currency ramped up this trend toward greater integration between countries of the euro zone. On average, the share of euro zone government debt held by foreigners reached over 50% in 2007. By comparison, this same percentage stood at 32% in the United Kingdom and 6% in Japan[2]. Only the United States have a rate (45%) close to the European average, reflecting the dollar's role as a safe haven currency.

Ch1. Share of public debt held by non residents



Sources: ECB, SG

The main factor of this trend was of course the fact that currency risk had disappeared within the euro zone. For bond investors obliged to hold securities in their domestic currencies, the investment horizon had suddenly expanded from the individual countries' borders to the entire euro zone, which allowed them to diversify issuer risk. The result was a tide change in portfolio allocation: before, the percentage of national debt in their benchmark was 100%; since the creation of the euro, this has fallen to 20-25% for the biggest issuers (Italy, Germany and France) and less than 5% for the smallest one (Greece, Ireland and Portugal).

This explains two major characteristics of this trend towards the internationalisation of euro zone government debt holdings. First, this trend was stronger for the smallest countries (Greece, Portugal) than for the biggest countries. Second, internationalisation occurred inside the euro zone. In 2007, only 20% of aggregate euro zone debt was held by investors outside of the zone. In other words, if we consider the euro zone as a single block, foreigners held less sovereign debt than in the US or even in the UK.

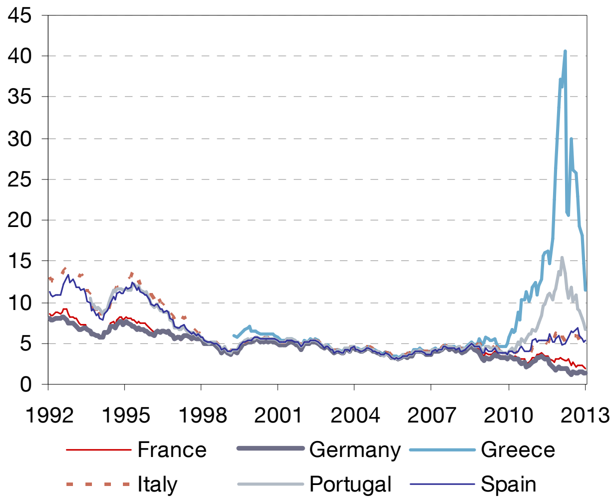
Although we only have fragmented and occasional data distinguishing holdings within and outside of the euro zone, there are differences from country to country. Thus, foreigners tend to hold sovereign debt from Germany and France rather than so-called "peripheral" countries in the euro zone. For instance, in 2005, over 60% of "foreign" holders of Spanish debt were from other euro zone countries versus barely 40% for the French debt.

Until 2007-2008, tight integration of the public debt markets coincided with tightening spreads - to the point of nearly disappearing - between the interest

[2] *For more information on public debt holdings within the G4, please refer to EcoNote "Developed countries : who holds public debt?", to be published shortly.*

rates at which countries in the euro zone financed their debt (chart 2). However, converging bond yields went well beyond what the argument of no currency risk could justify: investors got it wrong when they implicitly made the bet that all credit risk had become the same within the euro zone - and this despite the "no bailout" rule (Article 125 of the Treaty of Lisbon).

Ch2. Ten-Year sovereign bond yields



Sources: Datastream, SG

THE CRISIS BROUGHT THE IDEA OF "COUNTRIES" BACK TO THE FOREFRONT

Since 2009, the trend towards greater integration of government debts has reversed (chart 1). This is particularly true in Spain, where foreign debt holders went from 43% to 35% between 2009 and 2011 with, at the same time, domestic banks taking up the slack. In Italy, as well, the renationalisation of sovereign debt has been strong (44% to 39% over the same period). If stripped of the Eurosystem's holdings, this trend seems more pronounced. In fact, the ECB's purchases of sovereign debt in peripheral countries (see SMP in inset) are considered as "foreign" holdings.

In core countries, foreign holdings did not suffer from this type of exit. Of course, foreign holdings in French sovereign debt have dropped slightly but this has more to do with domestic investors getting out of peripheral debt markets than foreign investors shying away from the French market. Foreigners even slightly increased their holdings in German sovereign debt as German bonds are considered as "safe heaven" assets.

At the same time, the crisis has been accompanied by a spike in spreads between euro zone countries (chart 2): Different factors are behind these widening spreads.

THE RETURN OF SOLVENCY RISK...

The economic and financial crisis of 2008-2009 has increased the public debt levels of developed countries, which has stirred fears of how sustainable their debts are. In the euro zone, fears have honed in on peripheral countries, coming to a head in the case of Greece, with the restructuring of its public debt in March 2012.

...PLUS DEFAULT RISK...

Private sector involvement in this restructuring encouraged domestic investors to reduce - or sell-off - their holdings in other peripheral sovereign debt markets.

The EBA's October 2011 report[3] speed up this trend in the case of banks. In fact, the EBA asked banks to mark-to-market their sovereign debt holdings, including their investments to be held to maturity. This decision provided extra incentive for European banks to get out of sovereign debt seen as risky or whose market price was too volatile.

...AND A CONVERTIBILITY PREMIUM

Beyond default and liquidity risk, investors also included "convertibility risk" in their calculations, as outlined by Mario Draghi, president of the ECB. In fact, with the intensification of the crisis, the risk of one or more countries exiting the euro zone, which had seemed unthinkable, was taken under consideration by some investors. The only way for them to protect themselves against this risk was to pull back into their national market, which accelerated the trend towards greater fragmentation.

THE ROLE OF BANKS IN THE RENATIONALISATION OF SOVEREIGN DEBT HOLDINGS

As the largest holders of sovereign debt, banks have played a major role in the integration of public debt and after in the renationalisation movement.

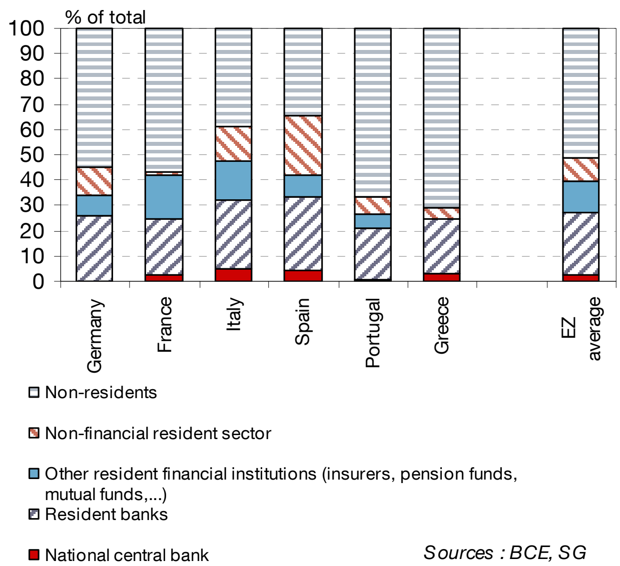
BANKS HAVE REMAINED MAJOR HOLDERS OF SOVEREIGN DEBT IN THEIR OWN COUNTRY....

Excluding non-residents, home banks are the biggest holders of sovereign debt in their country (chart 3). Banks play a major role in how euro zone countries finance their activities, which explains their predominant role in the sovereign debt market. However, pension funds are the main holders of domestic public debt in the Anglo-Saxon countries.

Up until the crisis, government bonds were considered as the benchmark in risk-free assets, and banks held them in their portfolios both as a response to regulatory needs and for collateral in various types of operations.

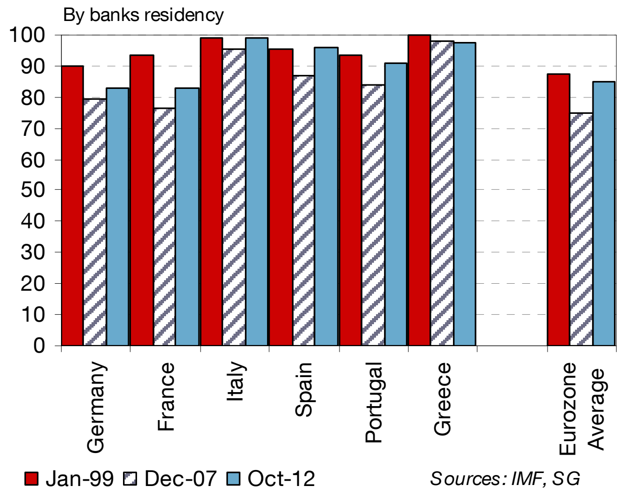
[3] *European Banking Authority, the regulatory authority of European banks.*

Ch3. Public debt holdings (2011)



Sources : BCE, SG

Ch4. Banks: Share of domestic sovereign debt holdings in their total Eurozone sovereign holdings



Sources: IMF, SG

Within the euro zone itself, different domestic non-bank sectors have different public debt holdings. For example, the "other financial institutions" sector in France holds a significant portion of sovereign debt. This is due to the importance of life insurance as a savings vehicle for French households. French insurance companies allocate over 13% of their portfolio to sovereign debt[4], which accounts for nearly 14% of all French sovereign debt.

...WITH MODERATE DIVERSIFICATION VIS-À-VIS OTHER COUNTRIES IN THE EURO ZONE

A more detailed analysis of banks' balance sheets reveals two important factors. Since the creation of the euro zone, banks have participated in the financial integration by increasing their sovereign debt holdings in other euro zone countries. However, even if they have increased, their cross-border holding remains moderate. Banks have indeed always kept a clear preference for debt from their own country.

Two explanations exist: First, IMF data (which are an aggregate of each country's central bank data) categorise banks based on their country of residence and not the nationality of their parent company[5] (chart 4). According to this database, it appears that the percentage of domestic debt in the total holding of sovereign debt by banks has remained dominant: on average in the euro zone, it only fell to around 75% in 2007 vs. a little less than 90% at the creation of the euro (and 85% in the summer of 2012).

However, determining the nationality of banks is obviously a major factor in evaluating the diversification of their balance sheet. Categorising banks' subsidiaries based on their country of residence rather than the nationality of their parent company inflates the percentage of domestic debt to total sovereign debt holdings. In 2011, the EBA published data that categorised banks based on their parent company's nationality and not their place of residency[6] (chart 6). These data provide a significantly different snapshot: not only are holdings of domestic public debt lower (less than 40% for the euro zone average) but different from one country to the next. For example, this percentage is around 80% in Greece and 60% in Italy and Spain (vs. 20% in France and the Netherlands - Germany being in an intermediary position with a bit over 40%).

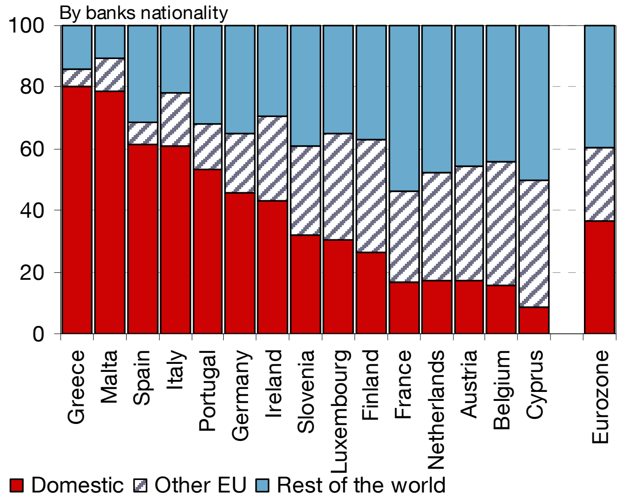
The greater diversification reflected in these data is however, largely due to banks' holdings in public debt issued by countries beyond the euro zone (which for the entire euro zone accounted for 40% of all holdings vs. barely 20% for debts of other euro area governments). This phenomenon is particularly true in the case of French banks and translates greater internationalisation of their businesses, notably in terms of investment banking.

[4] *2010 data, Banque de France.*

[5] *e.g. the Italian subsidiary of a German bank is considered an Italian bank.*

[6] *In this case, referring to the previous example, the Italian subsidiary of a German bank is considered German.*

Ch5. Banks: sovereign risk decomposition in 2011

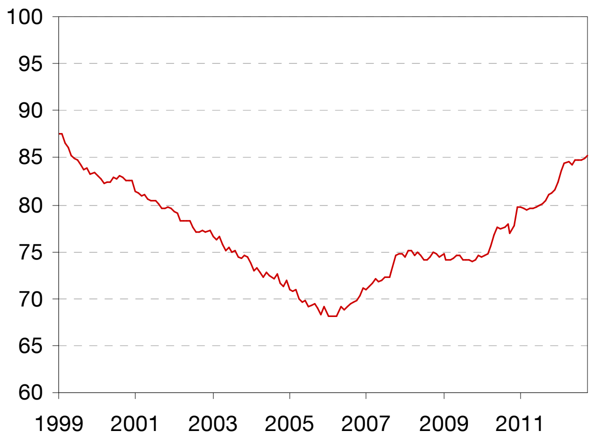


Sources: EBA, SG

BANKS HAVE RETURNED TO THEIR DOMESTIC MARKETS

With the crisis, the trend towards the international diversification of banks' portfolios has come to a halt and even been thrown in reverse. Chart 6 below shows that since 2007, and especially since 2011, the share of national debt in total sovereign debt holdings has returned to levels preceding the creation of the euro (on the basis of IMF data where the foreign subsidiaries are categorised based on their country of residence).

Ch6. Euzone banks - Share of domestic sovereign debt holdings in their total Eurozone sovereign holdings1

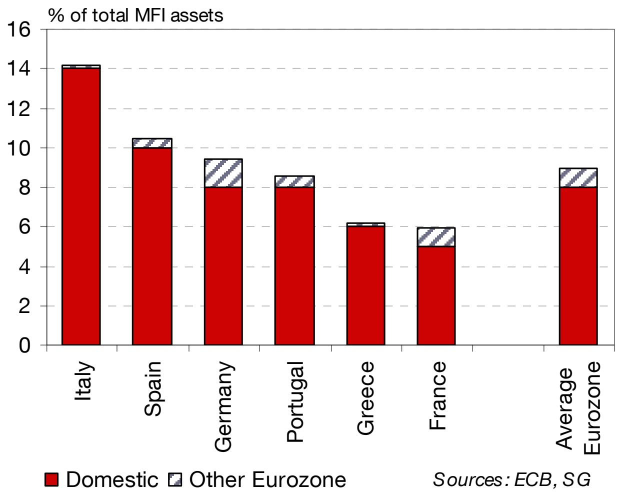


Sources: IMF, SG

The banks have both reduced their holdings in bonds of peripheral countries and made a return to holding domestic public debt. The ECB's LTROs (see inset) have contributed to this momentum. Providing banks with massive amounts of liquidity, the LTROs were followed by substantial purchases of domestic debt, particularly by Spanish and Italian banks. The latter increased their domestic sovereign debt holdings by around €85bn and €100bn, respectively, during the two LTROs.

The banks increased the weight of domestic public debt in their balance sheets as a consequence of these massive asset purchases. This was notably the case of Italy, where exposure to national sovereign risk surpassed 14% of the total balance sheet of banks in June 2012 (chart 7), while it was under 9% in 2007. However, it should be pointed out that this percentage remains lower than levels observed at the time of the euro's creation: in 1999, Italian public debt accounted for nearly 16% of Italian banks' balance sheets.

Ch7. Exposition towards sovereign risk (stocks of bonds and credits, June 2012)



Sources: ECB, SG

Furthermore, banks are making increasing use of their country's securities in refinancing operations with the ECB (70% of collateral pledged at end-2011 vs. barely 50% in early 2009).[7]

WHAT ABOUT THE SHORT- AND MEDIUM-TERM OUTLOOK?

Since the fall of 2012, repatriation of euro zone sovereign debt holdings seems to have come to a stop. The announcement of the OMT programme by the ECB in September (see inset) contributed to easing investor fears of the outcome of the euro zone crisis. As tension has eased, lower "convertibility premium" has translated into a fall in spreads between euro zone countries. In terms of capital flow, non-resident investor outflows from peripheral countries have stopped and foreigners have even begun to return to short-dated maturities since the end of 2012. For example, in Spain (chart 8) between Q2 and Q3 2012 foreigners began to move back into Spanish

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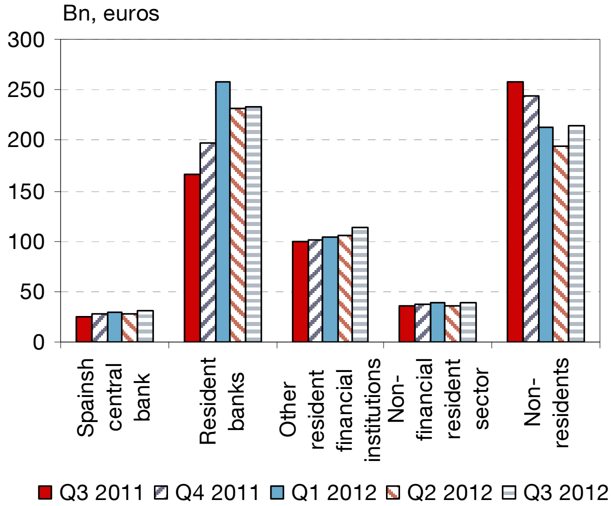
[7] *http://www.ecb.int/pub/pdf/other/financialintegrationineurope201204en.pdf*

government debt (approximately +€20bn vs. a drop of around €17bn between Q1 and Q2).

Ch8. Spain: Sovereing bonds holdings



Sources: Bank of Spain, SG

However, it would be too soon to make too much of this recent return of foreigners to peripheral sovereign debt. In any case, two opposing scenarios seem like they should be ruled out: on the one hand, we shouldn't expect foreign holdings to return to their pre-crisis levels. But on the other hand, it seems neither possible nor favourable for each country in the euro zone to attempt to transform themselves into "little Japan" by completely renationalising its public debt. In fact, with net external positions that are showing a deficit, peripheral countries in the euro zone do not have enough national savings to meet their financing needs (unlike Japan). Italy is perhaps the only country to be able to finance its public debt via domestic resources with ease, but could not totally live "self-sufficiently" as its banks would continue to need external financing. Besides, a complete "renationalisation" of public debt holdings would not be desirable as it would strengthen the link between sovereigns and banks in each country and would contradict the goals of the banking union.

The most likely scenario is therefore to be somewhere in the middle, with foreign debt holdings between its 2007 highs and its low point in H1 2012. The euro zone's public debt markets should remain partially fragmented and spreads and credit ratings between countries should remain significant. Certain side effects could result from this: a lack of risk-free assets in the euro zone, lack of benchmark assets with no risk on a national level in countries with the worst credit ratings. To overcome these downsides, Christian Hellwig and Thomas Philippon have offered up a solution[8] (which received support from the IMF): the creation of "Eurobills", i.e. treasury bills that are jointly-issued by all countries of the euro zone.

The goal would no longer be to pool sovereign risk but to create a risk-free benchmark asset at the euro zone level. The advantage of this type of asset would be to combine fiscal discipline and financial integration. In fact, by only providing a mutual guarantee on short-dated debt (with a cap on issuance as a percentage of the GDP of each country), governments would still be required to clean up their public finances if they want to finance their long-term debt. In addition, banks could invest in this new safe and liquid asset, which would help break the vicious circle between sovereign risk and bank risk.

[8] *http://idei.fr/doc/by/hellwig/eurobills.pdf*

INSET - DETAILS ON CERTAIN ECONO-POLITICAL TOOLS

— The **EFSF** (European Financial Stability Fund), created on 9 March 2010, provides financial assistance to struggling States in the euro zone, by raising funds needed to finance loans to those States.

— The **ESM** (European Stability Mechanism) went into effect on 27 September 2012 and supports struggling euro zone countries by raising funds on the capital markets in order to help, in exchange for certain concessions, the financing of States and participate in the bailout of private banks in the euro zone.

LTROs, SMPs and OMTs are all unconventional measures enacted by the ECB.

— **LTROs** (Long-Term Refinancing Operations) are long-term refinancing operations for banks that are carried out by the central bank. In December 2011, the ECB unveiled that it was proceeding with two unlimited (in exchange for collateral) refinancing operations with a maturity of 36 months scheduled for 20 December 2011 and 28 February 2012. With these moves, the ECB put up nearly €490bn as part of the December LTRO and nearly €530bn for the February transaction. In net terms, i.e. after deducting redemptions from the previous intervention, the amount of these two LTROs totalled nearly €500bn.

— The **SMP** (Securities Market Programme) was implemented in May 2010, to attempt to reduce tensions on peripheral countries' bond yields. The ECB purchased the bonds (across all maturities) of peripheral countries that were coming under fire. These purchases were sterilised and their amounts were low compared with the asset grabs of other central banks (Fed, BoE, BoJ). The ECB's message was voluntarily vague: the overall amount of the purchases was revealed on a weekly basis, but no information on the issuer country was communicated. This programme wound down as the OMTs were ramped up and the ECB will hold securities in its portfolio until maturity.

— The **OMT** programme (Outright Monetary Transactions) was announced on 6 September 2012. It took over for the SMP but it works in a different way, i.e. the ECB buys up unlimited quantities, for an unlimited duration, of government bonds on the secondary market. The bond buys are sterilised. Acquisitions are concentrated on bonds with maturities of 1-3 years. The intervention of the ECB is subject to strict conditions (the country will have needed to ask for an EFSF/ESM bailout and accepted an adjustment programme set out by the European institutions). This doesn't necessarily need to be a complete adjustment plan but strict conditionality will be applied.

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