A Work Project presented as part of the requirements for the Award of a Master's Degree in Finance from the Nova School of Business and Economics

PORTUGUESE PUBLIC DEBT MANAGEMENT DURING THE EUROPEAN SOVEREIGN DEBT CRISIS – A CASE STUDY

CATARINA DE MIRANDA DE MATOS LOURENÇO

Work Project carried out under the supervision of:

Professor João Pedro Pereira

January 2nd, 2020

The present case study analyses the Portuguese public debt management during the European Sovereign debt crisis, namely the decisions undertook by the Government and by the Portuguese Debt Management Agency. On April 6th, 2011, Portugal requested official financial assistance, beginning a three-year period in which market access was severely constrained. This case study focus on the behaviour of relevant parameters, such as the evolution of yields and spreads for Government bonds, the share of public debt held by domestic and non-domestic investors through time, the progression of Portuguese debt ratings and the composition of the stock of public debt.

Keywords: European Sovereign Debt Crisis, Portuguese Public Debt Management, Portuguese Government Bonds, Treasury Bills.

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Late March 2014. On a Lisbon's early sunny morning, the view from the Ministry of Finance towards Terreiro do Paço's square was just as any other day: people heading to work in a country that is fighting to stand back on its feet, after almost 3 years of a harsh economic adjustment program. At the window, Maria Luís Albuquerque, the Finance Minister, is on the phone with the Prime Minister, Pedro Passos Coelho, discussing how Portugal should exit the adjustment program. The answer to this question was in accessing Portugal's capacity to finance itself in the global financial markets and in what conditions, especially at which interest rate. By this time, Portugal had successfully completed several milestones that brought investors' confidence back to the market and allowed for some room of maneuver in the decision-making process. Official creditors, the "Troika", wanted the country to remain committed to structural reforms, while Portugal aimed to prove it had succeeded in the adjustment program and was now ready to stand on its own going forward. The country had done a huge effort since 2011, having suffered from a severe recession, high unemployment, high interest rates, credit rating downgrades, budget constraints, among others, and needed to end the adjustment process with a victory that could launch the country to a new era of prosperity.

1. **Deterioration of financial conditions**

It all started with the U.S. Subprime Crisis, in 2008, which quickly spilled into global financial markets, culminating in a financial crisis that spread throughout the world. With global financial markets almost collapsing, investors started considering the possibility of Euro Sovereign debt being subject to default risk, effectively no longer being considered risk-free, but having a credit risk component. In this scenario, markets started watching out for the countries with high indebtedness levels and/or pronounced budget deficits, which was mainly the case of five peripheral countries – Greece, Ireland, Italy, Spain and Portugal (**Exhibits 1**

and 2). As a result, the Sovereign bonds spreads[1] of these countries started to rise (**Exhibit 3**).

On November 5th, 2009, the Greek Prime Minister George Papandreou announced that Greece's budget deficit was significantly higher than the original estimates[2], which caused investors to demand higher interest rates, with Greece having increasing difficulty in accessing the market. This situation ended up having a contagion effect on the other peripheral countries, as the market anticipated that similar problems could take place. Finally, on May 2nd, 2010, the International Monetary Fund (IMF) and the Eurozone countries agreed on a financing package of €110 billion to rescue Greece. Five months later, Ireland succumbed to market pressure, entering a €85 billion bailout program on November 29th, 2010. The last country requesting financial assistance was Portugal, on April 6th, 2011. Initially, the program was planned to include € 80 billion, although it ended up as a € 78 billion program[3], since the last of the twelve disbursements was not executed[4]. Regarding Italy and Spain, despite an increase in spreads due to the overall market environment, their spreads remained relatively under control (below 300 bps) until then (**Exhibit 3)**.

Focusing in the case of Portugal, the country was already experiencing macroeconomic and financial imbalances since the beginning of the decade. Particularly, after joining the Euro in 2002, Portugal's economic growth was weak, having experienced two years of recession (2003 and 2009), as shown in **Exhibit 4**. Portugal was facing macroeconomic imbalances, namely measured by several years of a highly negative current account balance, reaching a peak of -12.1% of GDP in 2008 (**Exhibit 5**), thus reflecting a lack of competitiveness relatively to other Eurozone members. Nevertheless, public debt profile was perfectly normal, particularly with

[1] In Sovereign bond markets, the spread corresponds to the difference between the 10-year Government bond yield of a given country and Germany, the benchmark.
[2] More specifically, it corresponded to 12.7% of the GDP anticipated for 2009, which was roughly the double of the previous estimate and more than four times the maximum deficit allowed by EU rules – 3% of GDP.
[3] From the €78 billion, €26 billion were provided by the European Financial Stabilisation Mechanism (EFSM), €26 billion by the European Financial Stability Facility (EFSF) and €26 billion by the IMF.
[4] The last €2 billion were exempt especially because the amount of medium and long-term debt that was issued by Portugal in the market was larger than initially predicted.

relatively low Government bond spreads (**Exhibit 6**) and most of the debt being held by foreign investors (**Exhibits 7 and 8**). However, after the severity of the 2008 financial crisis, investors started to demand higher premiums on more fragile economies.

In an attempt to restore confidence in the Portuguese Government bond market, the Government started to implement a different set of measures, so as to reduce expenditures and increase Government revenues. In January 2010, the State Budget for the year was approved by the Council of Ministers, with the aim to decrease the budget deficit to the 3% mark by 2013. For this purpose, the Government created, in March, a program called "*Programa de Estabilidade e Crescimento*" or PEC. Contrary to the first three versions, the fourth version of this program was not approved in the Parliament, being the primary trigger for the resignation of the country's Prime-Minister, José Sócrates, on March 23rd. A few days later, on April 6th, 2011, Portugal formally requested financial assistance to the IMF and the European Institutions, soon establishing the beginning of a period of tight budget control, economic reform measures and loss of market access.

In what regards the rating agencies' classification of Portugal[5], in the beginning of 2010, Portugal was classified as AA by Fitch, A+ by S&P and Aa2 by Moody's, but quickly dropped several notches to BBB- by Fitch, BBB- by S&P and Baa1 by Moody's just prior to the official request for financial assistance (**Exhibit 9**). Portuguese ratings were cut due to the deterioration of public finances, the lack of competitiveness of the country and especially given the sharp increase on the spread of Portuguese Government Bonds (PGB) due to lack of investors' confidence in the country. However, although the Republic was still able to maintain the investment grade status at this point, it would soon be lost, changing completely the nature of the PGB market. Until the beginning of 2009, most of Portuguese debt was held by foreign

[5] Although the most recognized credit rating agencies in financial markets are Standard & Poor's (S&P), Moody's and Fitch Group, DBRS also played an important role in the case of Portugal, particularly in 2015, with regards to the Quantitative Easing program conducted by the European Central Bank (ECB).

investors, particularly near 90% of PGB (long-term debt) and 80% of Treasury Bills (short-term debt), as shown in **Exhibits 7 and 8**. With the deterioration of the country's financial situation, the increase in spread to Germany and 2010 rating downgrades, foreign investors started to sell Portuguese holdings and were essentially replaced by Portuguese banks.

The Government entity responsible for the execution of the funding program for Portugal is called "*Agência de Gestão da Tesouraria e da Dívida Pública*" or IGCP, E.P.E[6]. Every year, the IGCP needs to borrow an amount equal to the State's deficit plus all debt that matures on that same year. Based on those borrowing needs, the Treasury will determine the amount of PGB and T-Bills to be issued. A normal execution of the funding plan would be characterized as a combination of both syndications[7] and debt auctions[8] for the long-term debt (ranging from 2 up to 30 years maturities), through the issuance of PGB, and regular auctions for the short-term debt (from 3 to 12 months), through the issuance of T-Bills. During the years of 2009 and 2010, the execution of the funding plan was still performed with reasonable normality, although interest rates were already on a rising trend, especially in 2010 (**Exhibit 10**). Apart from the market instruments, the IGCP also has an old relationship with retail customers, through the Saving Certificates, which allow retail investors to lend to the State in the form of short-term lending. However, these became unattractive when compared to the interest rates offered by bank deposits, especially in the years of 2010, 2011 and 2012 as banks fought for liquidity by rising interest rates on term deposits, which ultimately led to continuous withdrawals from the Saving Certificates (**Exhibit 11**). In July 2010, in an attempt to counter this trend, the IGCP created a new instrument that would allow retail investors to lend to the State on a long-term

[6] For simplification purposes, IGCP, E.P.E. is hereby called as IGCP.
[7] A syndication is a procedure to issue debt in which the issuer hires investment banks to find demand for the new debt, in return of a fee. Usually, syndications are used to issue new securities and in large sizes. In the case of Portugal, it was normally used once per year and would typically mean the issuance of € 2-3 billion.
[8] A debt auction is the main procedure to issue debt used by Sovereigns. It is performed regularly throughout the year and in smaller sizes when compared to syndications. In the case of Portugal, it was common to have an auction at least once per month and the size would normally be between € 1-1.5 billion.

basis, the Treasury Certificates[9], which benefitted from more attractive interest rates.

In 2011, as previously explained, the situation of the peripheral countries had significantly deteriorated, with a sharp increase in Government bonds spreads (**Exhibit 3)**. At the beginning of 2011, Portugal's spread to Germany was 370bps, an increase of 300bps since the beginning of the previous year. In absolute terms, the 10-year rate was now at 6.6% and approaching "unsustainable" levels (**Exhibit 10**). In this scenario, on January 12th, the IGCP issued, through a debt auction, € 650 million of 4-year debt at 5.44% and € 600 million of 10-year debt at 6.76% (**Exhibit 12**). It is important to note that Portugal would not issue 10-year debt for another 2 years and 4 months since that date. On February 7th, Portugal returned to the market to issue a new 5-year bond through a syndication. In March and April, Portugal issued its last two auctions prior to the request of the official assistance, with maturities of 3 and 2 years, paying 6.05% and 6.25%, respectively. Regarding T-Bills (**Exhibit 13**), there were eight auctions in the first three months of the year, with maturities of either 6 or 12 months. At this point, the cash reserves were very low and the country was desperate for new funding to sustain its large budget deficit. However, financing costs were rising every week and it was becoming unsustainable to keep the current situation, as the country risked being unable to finance itself and collapse. Finally, the April 6th arrived and the IGCP started the day with an auction where two T-bills series were issued. The interest rates obtained were as high as 5.12% for the 6-month and 5.90% for the 12-months, while the 10-year PGB was trading at 8.43%, with the Government opting to request official financial assistance later that day.

2. Loss of market access

The Economic Adjustment Program[10] was negotiated between the Portuguese authorities and the Troika, constituted by the European Commission, the IMF and the ECB, with the goal

[9] The Treasury Certificates were a savings product directed at the retail market with maturity up to 10 years and an adjustable rate of return that would follow the interest rate of PGB for the chosen maturity.
[10] The Economic Adjustment Program was abbreviated as PAEF, in Portuguese, which stands for "*Programa de Assistência Económica e Financeira*".

of regaining investors' confidence and promoting competitiveness, based on fiscal consolidation and sustainable economic growth. After this demanding program was initiated, on May 17th, Pedro Passos Coelho was elected as the new prime minister, on June 5th. Since the elections resulted in an absolute majority, the necessity of negotiating with the other parties was reduced, becoming easier to implement the program. Nevertheless, although this new Government would eventually calm down the markets, foreign investors continued to withdraw money from the Portuguese economy (**Exhibits 7 and 8**), hence contributing to aggravate its situation. Moreover, with the peripheral countries in distressed situation, investors were closing their positions in the periphery and buying "core" countries' debt, in a move known as "flight to quality", further exacerbating the spread widening in these countries.

Combining the deteriorating situation of the Eurozone with the aforementioned reasons, Portugal saw its rating being downgraded to non-investment grade by the major credit rating agencies. Moody's downgraded to Ba2 on July 5th, 2011, followed by Fitch decreasing a notch to BB+ on November 21st and, lastly, S&P downgraded the country to BB on January 13th, 2012 (**Exhibit 9**). The fact that Portugal started being classified as speculative grade had a huge negative impact on the PGB market. Global indexes of Sovereign bonds[11], followed by a large proportion of investors, allocate their investments based on the relative size of the debt of that country compared to the others. However, only investment grade countries' debt is allowed to join these indexes. By falling into speculative grade territory, Portugal was removed from these and, consequently, all the investors that followed those indexes had to sell their exposure to Portugal, in a situation that became known as "forced sellers". As a result, while the percentage of PGB held by foreign investors kept decreasing at a slower pace (**Exhibit 7)**, the percentage of T-Bills held by foreign investors completely collapsed, coming from 80% in the beginning

[11] Among these indexes, the most relevant ones are Barclays Euro Government Bond Index, Citi World Government Bond Index and J.P. Morgan Government Bond Index.

of 2010 to about 5% in the beginning of 2012[12] (**Exhibit 8).**

During this phase, the activity of IGCP suffered a significant change, particularly, medium and long-term debt stopped being issued, with a total suspension of PGBs auctions or syndications (**Exhibit 12**). However, in order to meet short-term obligations, the country still managed to continue issuing T-Bills, this time with maturities only up to 7 months (**Exhibit 13**), in order to contain interest costs. In this environment, the debt structure suffered a significant change during the year, with a smaller contribution of all the rubrics to compensate for the PAEF financing (**Exhibit 14**).

When the program started, one of the measures that were imposed by the Troika was to build a cash buffer with a size that would allow the Republic to continue facing its financing needs for a period of 6 months to 1 year in times of market volatility where financing in the market was not available, thus increasing confidence in the Portuguese bond market. The IGCP continuously used the cash buffer throughout the adjustment period to buyback short-term debt, smoothening the redemption profile, hence reducing the burden for the future. Moreover, as the interest rate on Portuguese debt was high, these buyback operations allowed the country to reduce the cost of the cash buffer.

Following a substantial upward trend throughout the past months, the 10-year Portuguese Government yield reached its maximum value, equal to 16.61%, on January 30th, 2012 **(Exhibit 10).** This was mainly driven by the unstable environment felt in Europe and the aggressive credit ratings downgrades on the Portuguese debt.

3. **A change in trend – regaining investors' confidence**

Fortunately, the situation started to revert through time, with Government bond yields decreasing from February 2012 onwards, as evidenced in **Exhibit 10**. Also, credit default swaps

[12] The percentage of PGB held by foreigners decreased at a slower pace compared to T-Bills because the majority of investors that did not follow indexes (were not forced sellers) kept their positions until maturity and did not reinvest back in Portugal. As T-Bills have maximum a maturity of 12 months, in 1 year time, the holders of T-Bills can drastically change, while PGB take much more time to do so.

were on a declining trajectory (**Exhibit 15**), again confirming that investors' confidence in Portugal was returning. Several measures contributed to this positive outcome, where one can highlight the recent favourable economic data, the continuous compliance with the plan proposed by Troika, the ECB's announcement of Outright Monetary Transactions (OMT) and the several roadshows conducted by the IGCP. Regarding the OMT announcement on August 2nd, 2012, it made possible for the ECB to buy, in the secondary market, Sovereign bonds issued by Eurozone countries when certain conditions were fulfilled. Although this program was never used, it positively impacted the market by decreasing the spreads of peripheral countries, simply due to investors' expectations. With regards to IGCP's marketing strategy, by regularly meeting with investors, it was possible to update them on the steps being taken to overcome the situation of the country and, ultimately, to convince them that Portugal was a good bet.

Although the situation of the country was improving, broader market volatility was very high, mainly because Spain and Italy were on the verge of losing market access. From November 2011 to July 2012, Spain and Italy's 10-year Government Bonds were already trading between 5% and 7,6% (**Exhibit 16**). At this point, the Eurozone was on its most delicate moment since inception, as the market believed that it would not be possible to financially rescue Italy, given the large size of its debt. Still, the Eurozone was saved due to Mario Draghi's renowned speech in July 2012 at Jackson's Hole- "*within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough*". Indeed, this was a turning point to restore investors' confidence in the Eurozone, avoiding the collapse of the euro as the single currency. Consequently, Government bond yields and spreads for peripheral countries started to decline (**Exhibits 3 and 16**).

Regarding the management of public debt, the average maturity of issued T-Bills started to increase, with several auctions with maturities of 6 and 12 months, issued with yields much lower than the ones in the previous year (**Exhibits 17 and 18**). Furthermore, on April 4th, 2012, the country sold € 1 billion of 18-month T-bills at a yield of 4.54%, which corresponded to the longest maturity sold for a long period of time, thus reducing the roll-over risk. Following the same trend, as the country started recovering, foreign investors (particularly the US and the UK) started presenting net buying flows from September onwards. The majority were hedge funds and some more flexible fund managers, which were the first non-domestic investors to perceive value in Portuguese debt, allowing to diversify the investor base. Nevertheless, these investors were characterized as "Fast Money", as they searched for quick profit opportunities and would exit their positions in periods of market volatility. Thus, it was imperative to bring the "Real Money"[13] community of investors back to the PGB market soon to assure a more stable market going forward. Nevertheless, by being classified as non-investment grade, Portugal was automatically excluded from many buy&hold investors, such as European asset managers, insurance companies or pension funds, demanding a harder work in terms of marketing from the IGCP, traveling around Europe to convince investors that Portugal was on the right track and would soon be back to investment grade status. To take advantage of the interest in Portuguese debt, the IGCP conducted a debt exchange operation on October 3rd, 2012, which allowed to convert €3.76 billion of bonds maturing in September 2013 into bonds with maturity in October 2015, with a yield of 5.12% (**Exhibit 12**). This extension in maturity proved that investors started regaining confidence in the Portuguese debt market, thus establishing the return to the financial markets.

4. Normalization of Portuguese funding

During this phase, the Treasury enjoyed a relevant cash buffer, arising particularly from an increase in short-term debt and from the centralisation of public entities' cash under the single control of the IGCP. This allowed for a more efficient management of resources due to

[13] Real money investors (also called as buy&hold) is the name given to investors who, contrary to fast money ones, keep their positions in their balance sheet for at least a few months, contributing to the stability of the market.

economies of scale, obtaining higher returns on cash reserves. The Portuguese debt market was improving significantly, with larger turnover and liquidity in the secondary market, a higher number of real-money investors interested in Portuguese debt and yields continuously getting lower. Notably, the 10-year Government bond spread fell to levels prior to the PAEF for the first time, reaching a value of 4.85% on January 3rd, 2013 (**Exhibit 6**), and CDS observing a significant fall, from a maximum of 1,527 basis points (bps) on January 30th, 2012 (the day in which the 10-year Portuguese Government yield reached its maximum value) to less than 400 bp in the first days of 2013 (**Exhibit 15**).

Since the Republic was predicting heavier redemptions in the years of 2016 and 2021, the Portuguese authorities asked for an extension of the official loans of the EFSF and EFSM, which was granted on April 12th, 2013, given the steady strong compliance with the adjustment program. The maturity of the EFSF and EFSM loans was extended by 7 years[14], increasing the average maturity to 19.5 and 22 years, respectively, thus smoothing the debt redemption profile.

The Treasury continued to enjoy strong demand for short-term debt, issuing T-Bills with long maturities at decreasing interest rates (**Exhibits 17 and 18**). As evidenced in **Exhibit 8**, the percentage of non-domestic holders of T-Bills began to increase in the beginning of 2013, evidencing a stronger confidence in the Portuguese market. On January 23rd, 2013, the Republic executed the first OT syndication since February 2011 (**Exhibit 12**), establishing the return to the medium-term bond market, issuing at the 5 years maturity. This operation consisted on a € 2.5 billion tap[15] of OT 4.35% October 2017 and attracted a large order book of € 12 billion, with more than 300 investors participating, particularly non-domestic ones. As evidenced in **Exhibits 19 and 20**, most of the new bonds were allocated to buy&hold investors (with 60% to asset managers followed by hedge funds with 24%), whereas in geographical terms, the US and

[14] This 7-years extension in maturities was granted not only to Portugal, but also to Ireland.
[15] Tap means the reopening of an existing bond. In this case, it was a syndicated tap, *i.e.* a bond reopening through a syndicated transaction.

the UK were the countries with higher shares (33% and 29%, respectively). A few months later, on May 7th, a very important milestone was accomplished, with the Treasury returning to the long-term bond market, issuing a € 3 billion syndicated 10-year bond at a yield of 5.67%. This transaction was very well timed, with the 10-year Portuguese Government yields enjoying the lowest values since August 2010 (**Exhibit 10**). The trade was backed by an overall orderbook of more than € 10 billion, which translated into a bid to cover ratio of 3.48. There was a significant improvement in investor quality compared to the previous transaction, namely through a larger participation from insurance companies and pension funds (12%) and lower participation from hedge funds (7%), while asset managers kept the largest share (51%). In geographic terms, traditional buy&hold regions like France, Germany, Italy and Scandinavia increased their participation, while a decline was felt in fast money related regions, such as the US.

Notwithstanding, the path through the crisis was not a smooth ride. During the summer 2013, the Fed tapering[16] announcement induced an increase in the yields of the Sovereigns (**Exhibit 16**). Additionally, to worsen the situation, the political stability in Portugal, which was seen as a major advantage by investors, got compromised, with Vítor Gaspar, Finance Minister between 2011 and 2013, resigning on July 1st, 2013, due to the lack of cohesion inside the Government. On the following day, Paulo Portas, Minister of Foreign Affairs, also resigned over the appointment of Maria Luís Albuquerque as the new Minister of Finance. As a consequence, volatility in the Portuguese debt market rose sharply, especially due to the fear of a coalition breach with subsequent elections, with investors reducing their exposure to the PGB market. However, Paulo Portas opted to preserve its position and Maria Luís Albuquerque, considered a market-friendly minister, substituted Vítor Gaspar. Thereby, the country returned to its recovery path, with yields going back to a descending trajectory (**Exhibit 10).**

[16] Fed tapering consists on the gradual reversal of quantitative easing policy.

In October, aiming to diversify the funding sources, the IGCP launched a new retail instrument, the Treasury Certificates Savings Plus[17], and increased the return on the current 3-month Savings Certificates. These changes allowed to attract the savings of many small investors, in a period where the stock of Treasury and Saving Certificates was near its minimum (**Exhibit 11**), turning retail products into an important source of revenue on the overall funding strategy (**Exhibit 14**). For the first time since 2008, the year of 2013 had a larger amount of both Treasury and Savings Certificates issued comparatively to the amount withdrawn.

In order to decrease the financing burden for the next two years, a debt exchange operation with two lines was conducted on December 3rd (**Exhibit 12**). The Treasury managed to exchange € 2.5 billion maturing in 2014 and € 4.2 billion maturing in 2015 into € 2.7 billion maturing in October 2017 and € 4 billion in June 2018. One month later, on January 9th, the Treasury reopened the OT 4,75% Jun 2019 for a 5-year issuance, being more than three times oversubscribed. There was a significant participation from investors from Scandinavia, Germany, Austria, France and Italy, with UK investors still holding 38% of the debt issued, although on a decreasing trend. Regarding the distribution in sectorial terms, the majority of the percentage was assigned to buy&hold investors, namely with 61.5% to asset managers and 15.5% to pensions funds. On the following month, on February 11th, a new tap was performed, this time with a maturity of 10 years. € 3 billion were raised at a yield of 5.11% percent by reopening the February 2024 bond. Once again, most of the amount was allocated to the UK, but this time with only 26%, as the share of other European countries increased. Concerning short-term debt, regular T-Bills auctions were held throughout this period, with most maturities ranging from 3 to 12 months (**Exhibit 17**). As expected, yields had been decreasing through time (**Exhibit 18**), reflecting the improvement in the country's financing conditions.

---

[17] A Treasury Certificates Savings Plus or *Certificado do Tesouro Poupança Mais* (CTPM) was an instrument with a maturity of five years and interest rates of 1.25% in the first year, 1.75% in the second, 2.25% in the third, 2.75% + premium in the fourth and 3.25% + premium in the fifth. The premium depended on the average real GDP growth.

A very important achievement was made on April 23rd, 2014- the reintroduction of PGB auctions. On this day, a 10-year tap was issued at a yield of 3.59% and a bid to cover ratio of 3.47. This represented a very relevant step on the normalization of market access because PGB auctions are not punctual/ opportunistic operations like syndications, but instead regular transactions from the Treasury, being the main financing tool used by debt management offices across Europe.

By then, it was only a few months before exiting the program and Portugal faced different alternatives on how to exit, it could either be through a second program, a precautionary credit line or a "clean" exit. A second program would consist in another loan from the Troika and, in return, the acceptance of another austerity program, for a period of 2/3 years. The precautionary credit line, as the name suggests, would be a source of funds made available to Portugal by the official institutions in case it was needed, for example in periods of high market volatility when market access would be restrained, in exchange for austerity measures and structural reforms. Finally, the "clean" exit would consist in the absence of any support from the Troika going forward, with Portugal having to finance itself in the capital markets and being subject to market volatility that could pressure its ability to do so, without any "safety net".

On May 4th, 2014, Pedro Passos Coelho announced that Portugal was going to make a "clean" exit on May 17th. At the moment of the prime-minister's announcement, the 10-year bond yield was trading at 3.59%, which was in line with the lowest levels in several years (**Exhibit 10**). Although the outlook was positive, it was still crucial that the consolidation of public finances as well as significant structural reforms were attained, in order to ensure the sustainability of Portuguese debt.

5. **Portugal by itself**

With the end of the adjustment program, Portugal was now on its own in international financial markets, without any type of support from official institutions. As such, it was of major importance to execute the funding program in the smoothest and safest possible way, in order to give confidence to the market. The Treasury continued to focus on roadshows and meetings with investors, so as to increase the investor base and mitigate refinancing risk. After exiting the PAEF, the IGCP executed another three PGB auctions in 2014, focusing on the 5-year and 10-year maturities (**Exhibit 12**). Investors' participation in the auctions was large, with a growing appetite for Portuguese debt by foreign investors. On September 3rd, 2014, the Treasury took the opportunity to issue a new 15-year bond, proving that Portugal could access the longer part of the curve in capital markets. Moreover, in order to diversify the investor base, the Republic issued a 10-year bond of USD 4.5 billion, targeting US investors. This new benchmark, the USD Out 2024 was issued under the EMTN program[18], with an amount equivalent to €3.3 billion and 86% of demand allocated to American real money investors. The last PGB transaction of the year occurred on November 26th and consisted on a debt exchange operation with two lines. The Treasury exchanged bonds maturing in 2015 and 2016 into bonds maturing in 2021 and 2023, allowing to reduce the financial burden over the next two years. Regarding short-term debt, in an environment of lower interest rates, the IGCP favored longer maturities in its T-Bills auctions (**Exhibit 17**), hence increasing the average debt duration.

After three years of negative economic growth, the country was finally on a positive growth trend, with GDP growing 0.79% in 2014 (**Exhibit 4**). Nevertheless, it was also the year in which Government debt reached its maximum level of 132.9% of GDP (**Exhibit 21**), much impacted by the resolution of BES[19].

At the same time, in the second semester of 2014, expectations about the implementation of quantitative easing (QE) in the Eurozone started to emerge, with the purpose of stimulating

---

[18] An EMTN or Euro Medium Term Note consists on an instrument issued outside the US or Canada, but requiring a fixed-dollar payment.

[19] *Banco Espírito Santo* (BES) was the second largest listed Portuguese bank, which was bailed out by the Portuguese Resolution Fund in August 2014, having received a €3.9 billion loan from the State, thus impacting the country's deficit and debt figures.

the economy. Particularly, in January 2015, the ECB announced it would buy €60bn of Sovereign bonds each month until, at least, September 2016. This unconventional monetary policy started being enforced in March 2015, while the US QE programs took place between 2008 and 2014. In the first months of 2015, the market positively reacted to the QE announcement, with bond yields and spreads decreasing aggressively across the Eurozone (**Exhibits 3 and 16**), even with T-Bills reaching negative values in May (**Exhibit 22**). The rating agency DRBS played a crucial role in this figure, since QE rules required that the ECB could only buy bonds from Sovereigns rated as investment-grade by either S&P, Fitch, Moody's or DBRS. At the time, DRBS was the only agency that classified Portugal as such, thus allowing the Portuguese debt to be bought under the Program (**Exhibit 9)**. Considering this favourable low yield environment, the Treasury was very active in issuing medium and long-term debt, executing several syndications, auctions and debt exchange operations throughout 2015.

One can say that full market access was completely recovered in January 2015, with the Treasury executing a dual-tranche syndicated transaction (**Exhibit 12**), in which the longest tranche had a maturity of 30 years, being the first transaction at this maturity since March 2006. This meant that Portugal was now able to fund itself on any maturity, even on the very long part of the curve, thus being fully re-established in the debt capital markets.

References:

Agência de Gestão da Tesouraria e da Dívida Pública. 2011. Relatório Anual de Gestão da Tesouraria e da Dívida Pública – 2010. Lisbon.

Agência de Gestão da Tesouraria e da Dívida Pública. 2012. Relatório Anual de Gestão da Tesouraria e da Dívida Pública – 2011. Lisbon.

Agência de Gestão da Tesouraria e da Dívida Pública. 2013. Relatório Anual de Gestão da Tesouraria e da Dívida Pública – 2012. Lisbon.

Agência de Gestão da Tesouraria e da Dívida Pública. 2014. Relatório Anual de Gestão da Tesouraria e da Dívida Pública – 2013. Lisbon.

Agência de Gestão da Tesouraria e da Dívida Pública. 2015. Relatório Anual de Gestão da Tesouraria e da Dívida Pública – 2014. Lisbon.

Centro de Estudos Sociais: Universidade de Coimbra. Observatório sobre Crises e Alternativas. "Cronologia da Crise". Accessed November 2019.
https://www.ces.uc.pt/observatorios/crisalt/cronologia.

CNBC. 2013. "Ireland, Portugal Get 7-Year Bailout Loan Extension". Accessed November 2019. https://www.cnbc.com/id/100636376.

European Central Bank. 2015. "ECB announces expanded asset purchase programme". Frankfurt am Main. Accessed November 2019.
https://www.ecb.europa.eu/press/pr/date/2015/html/pr150122_1.en.html.

European Commission. 2011. The Economic Adjustment Programme for Portugal – First review - Summer 2011. Brussels.

European Commission. 2011. The Economic Adjustment Programme for Portugal – Second review – Autumn 2011. Brussels.

European Commission. 2012. The Economic Adjustment Programme for Portugal – Third review – Winter 2011/2012. Brussels.

European Commission. 2012. The Economic Adjustment Programme for Portugal – Fourth review – Spring 2012. Brussels.

European Commission. 2012. The Economic Adjustment Programme for Portugal – Fifth review – Summer 2012. Brussels.

European Commission. 2012. The Economic Adjustment Programme for Portugal – Sixth review – Autumn 2012. Brussels.

European Commission. 2013. The Economic Adjustment Programme for Portugal – Seventh review – Winter 2012/2013. Brussels.

European Commission. 2013. The Economic Adjustment Programme for Portugal – Eighth and Ninth review. Brussels.

European Commission. 2014. The Economic Adjustment Programme for Portugal – Tenth review. Brussels.

European Commission. 2014. The Economic Adjustment Programme for Portugal – Eleventh review. Brussels.

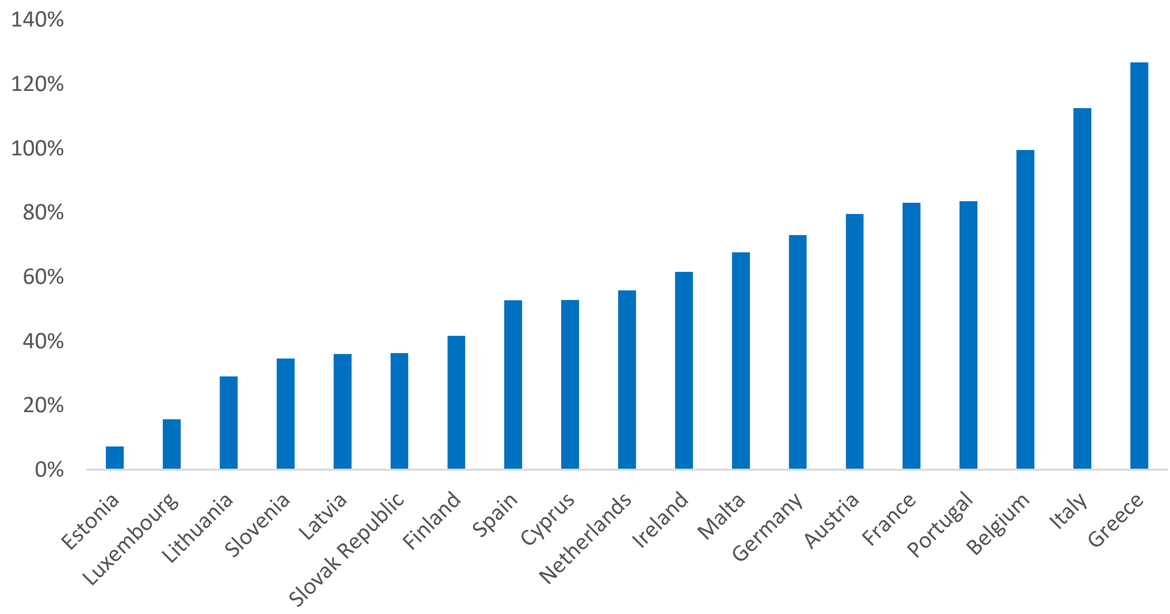
European Commission. 2014. The Economic Adjustment Programme for Portugal 2011-2014. Brussels.

Ministério das Finanças e da Administração Pública. 2010. Programa de Estabilidade e Crescimento 2010-2013. Lisbon.

Público. 2013. "Portas demite-se do Governo descontente com solução para as Finanças". Accessed November 2019. https://www.publico.pt/2013/07/02/politica/noticia/portas-demitese-do-governo-1599014.

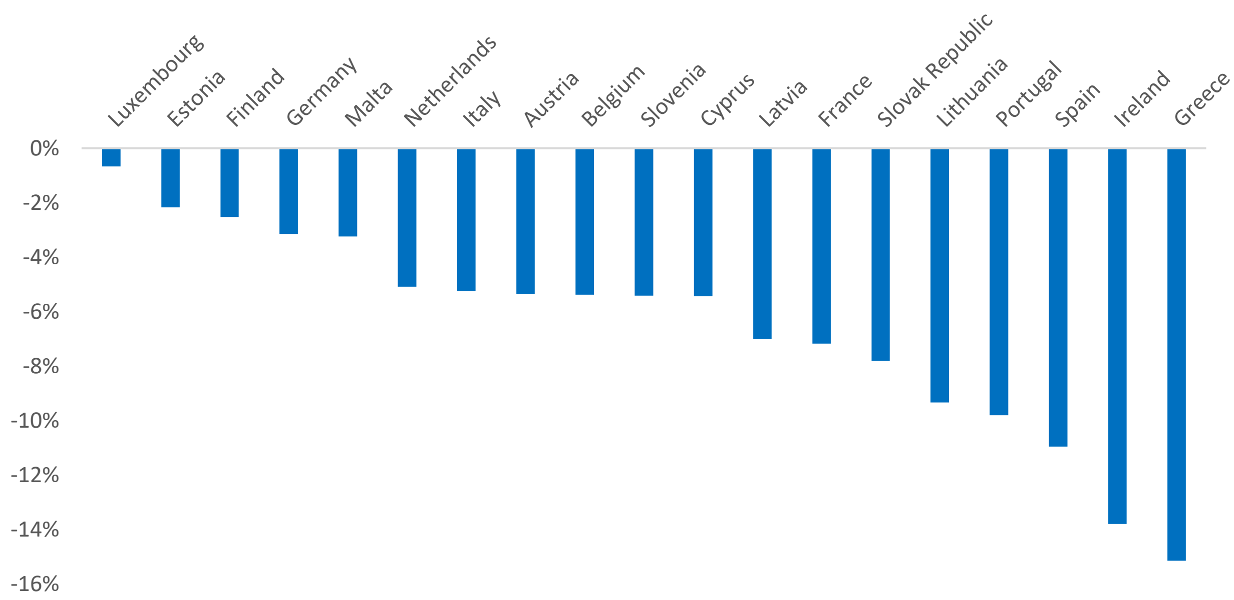
Reuters. 2010. "Timeline: Greece's economic crisis". Accessed November 2019. https://www.reuters.com/article/us-eurozone-greece-economy-timeline/timeline-greeces-economic-crisis-idUSTRE62A1KY20100311.

Exhibit 1: Euro Area general Government gross debt, % of GDP, 2009.



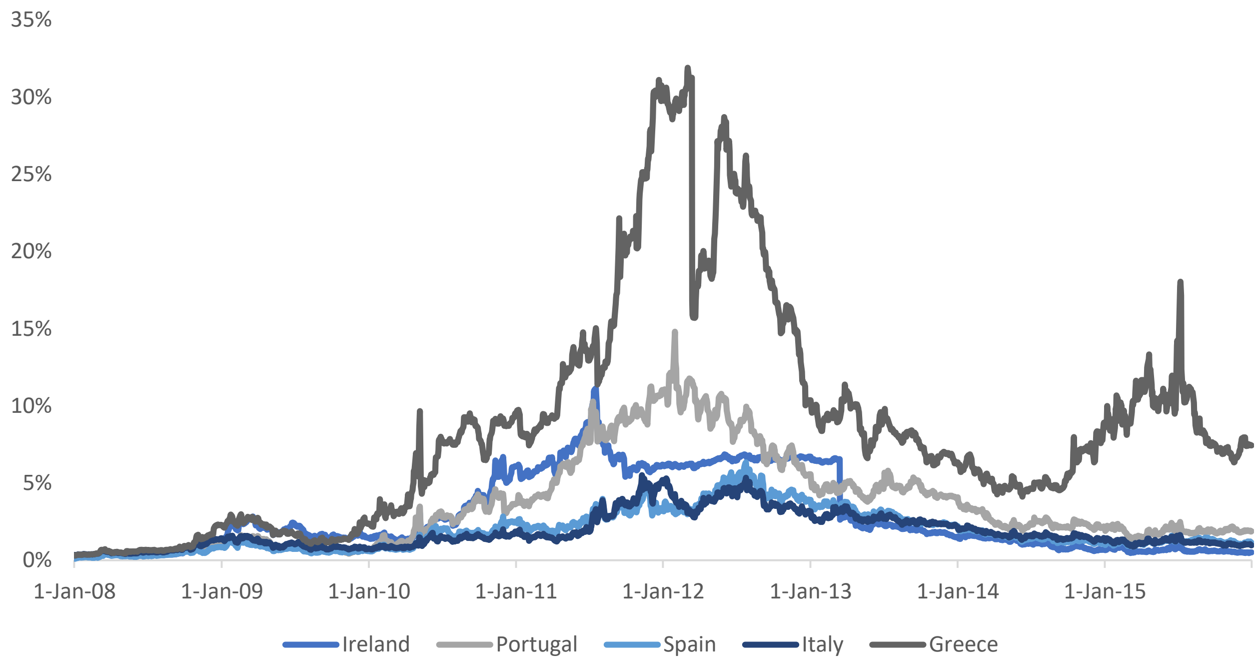
Source: IMF

Exhibit 2: Euro Area general Government net lending/borrowing, % of GDP, 2009.



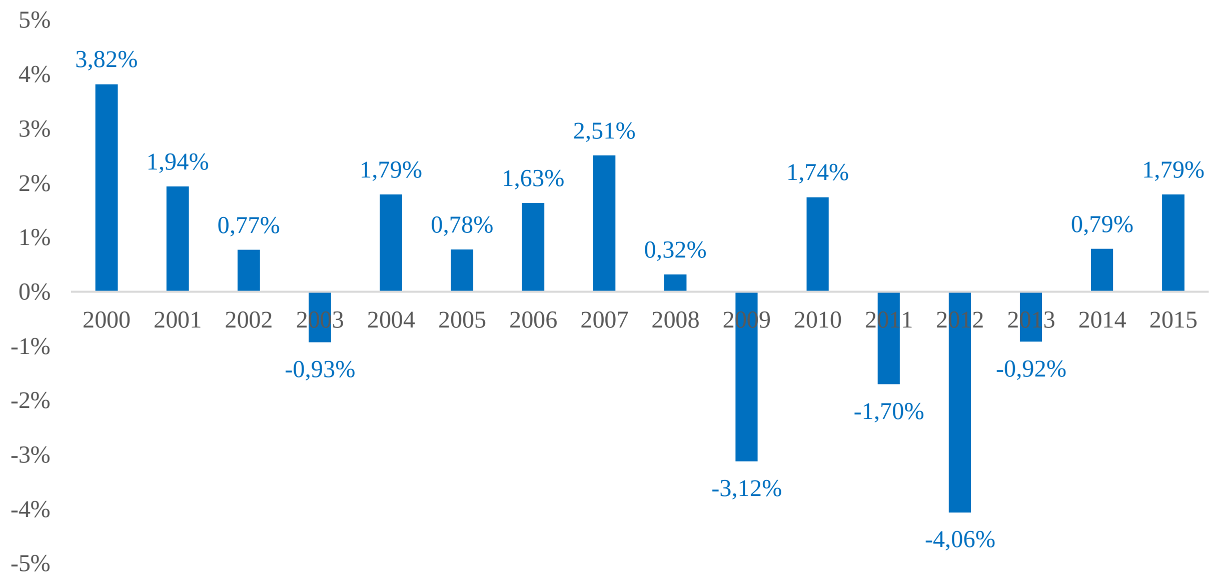
Source: IMF

Exhibit 3: 10-year Government bond spreads versus Germany (%), 2008-2015.



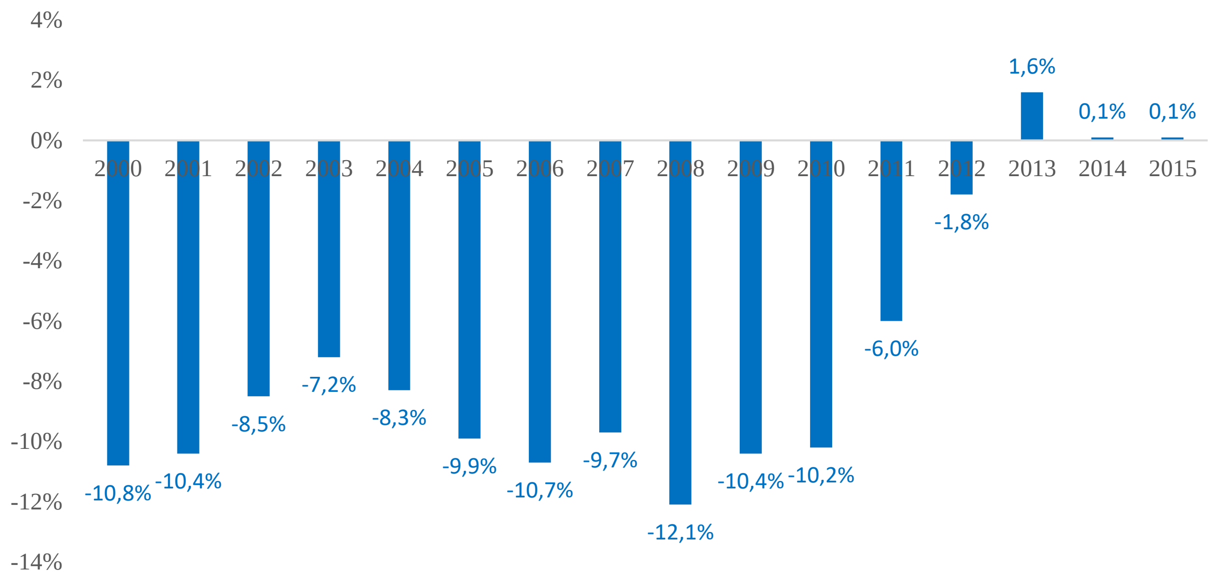
Source: Bloomberg

Exhibit 4: Portugal Real GDP Growth Rate (%), 2000-2015.



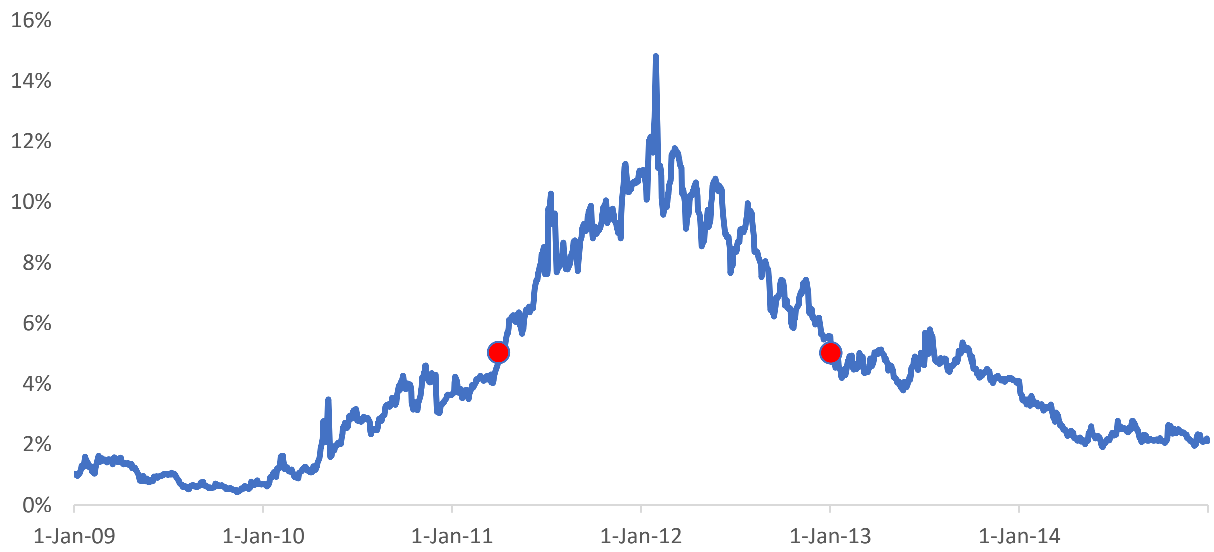
Source: Pordata

Exhibit 5: Portugal Current Account, % of GDP, 2000-2015.



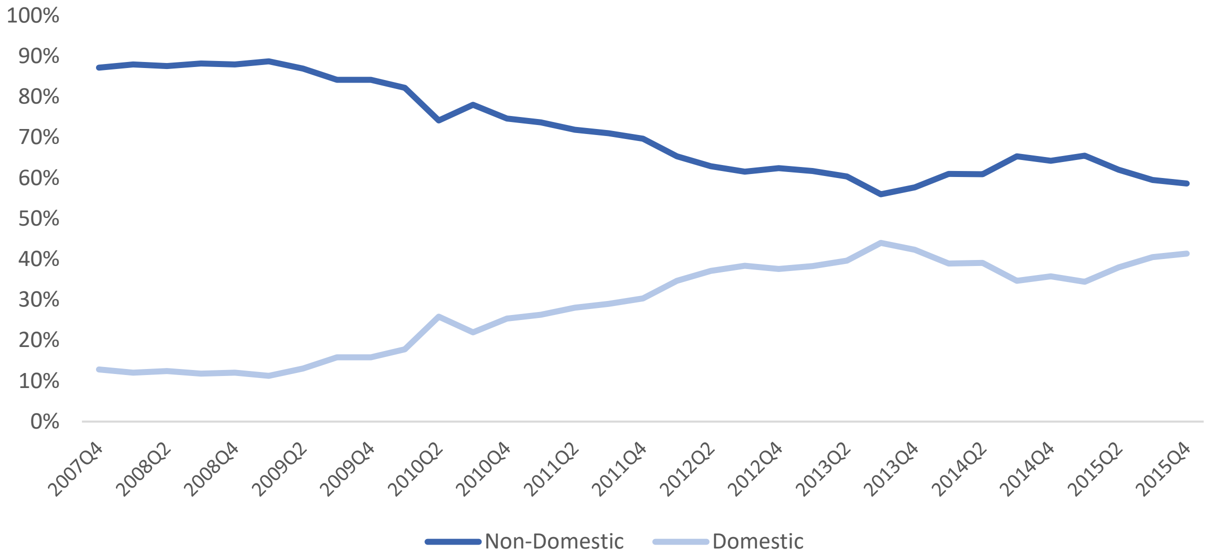
Source: Pordata

Exhibit 6: Portuguese 10-year Government bond spreads versus Germany (%), 2009-2014. The first red dot corresponds to the day of the financial assistance request (April 6th, 2011), whereas the last dot respects the day in which Portuguese spread went back to pre-Program levels (January 3rd, 2013).



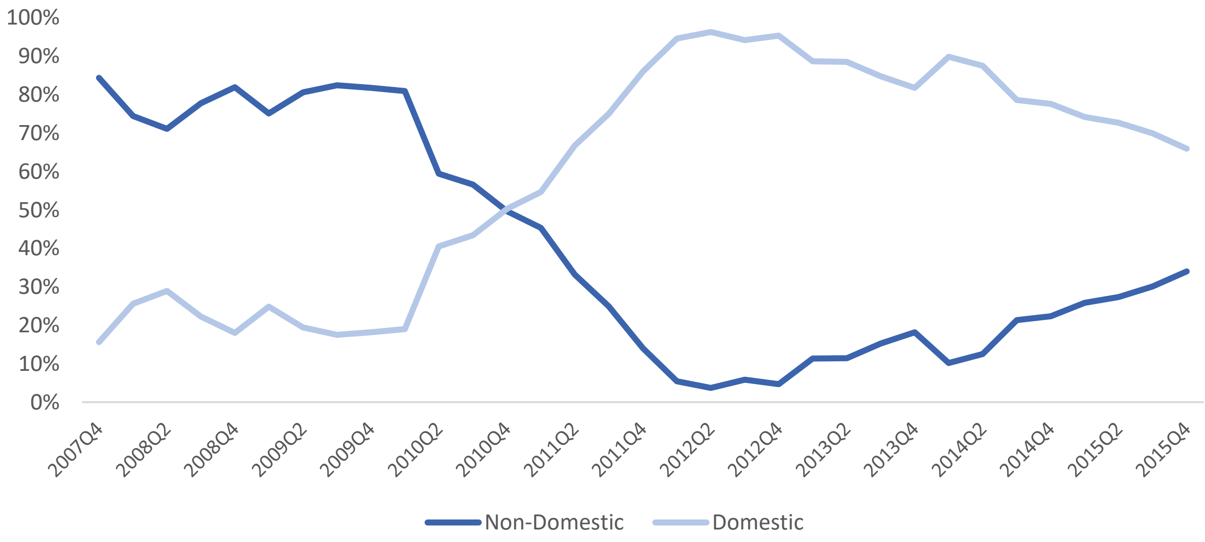
Source: Bloomberg

Exhibit 7: Long Term Public Debt, % hold by domestic vs non-domestic investors, 2007-2015.



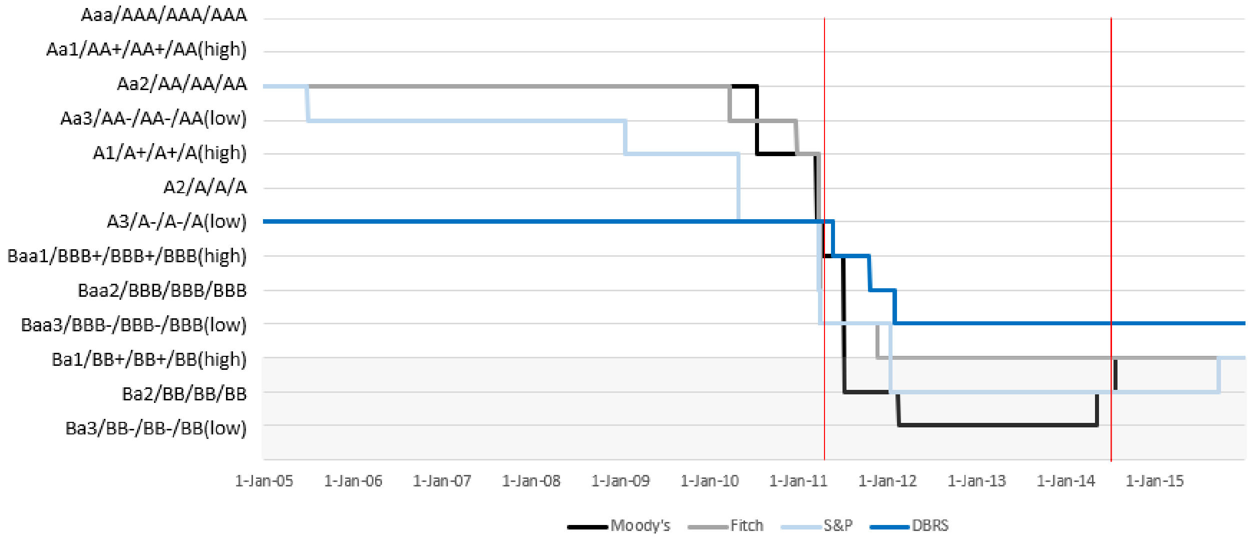
Source: Banco de Portugal

Exhibit 8: Short Term Public Debt, % hold by domestic vs non-domestic investors, 2007-2015.



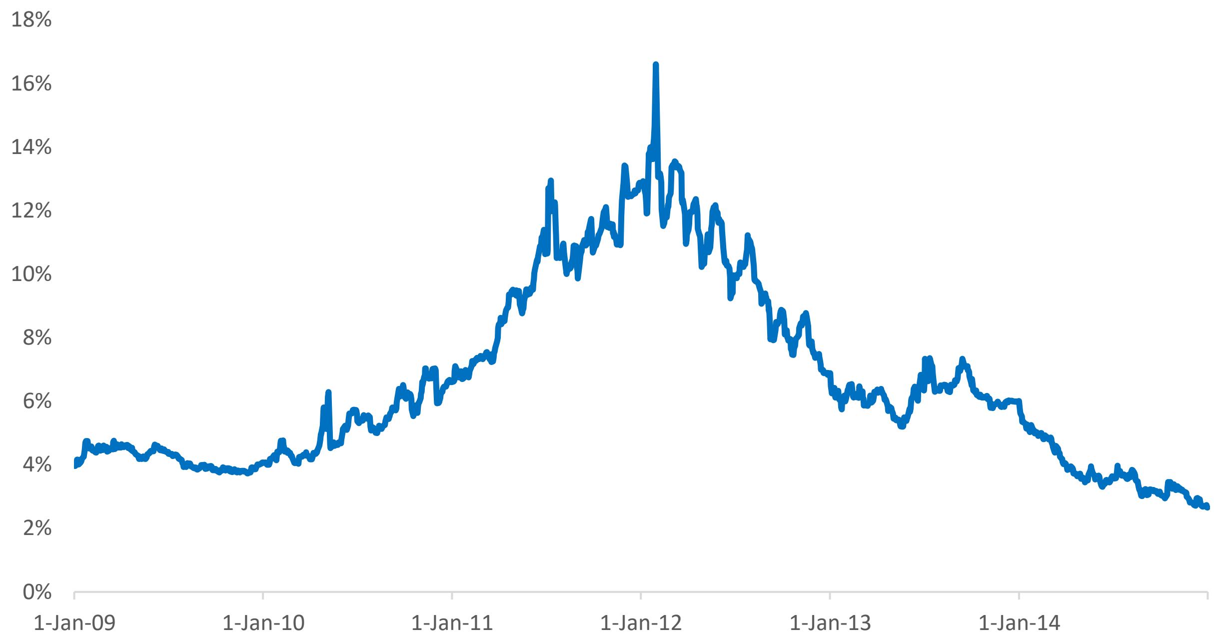
Source: Banco de Portugal

Exhibit 9: Evolution of Portuguese debt ratings by the major rating agencies (Moody's, Fitch, S&P and DBRS), 2005-2015. The first red line corresponds to the day of the financial assistance request (April 6th, 2011), whereas the last respects the day in which Pedro Passos Coelho announced that Portugal was going to exit the PAEF (May 4th, 2014).



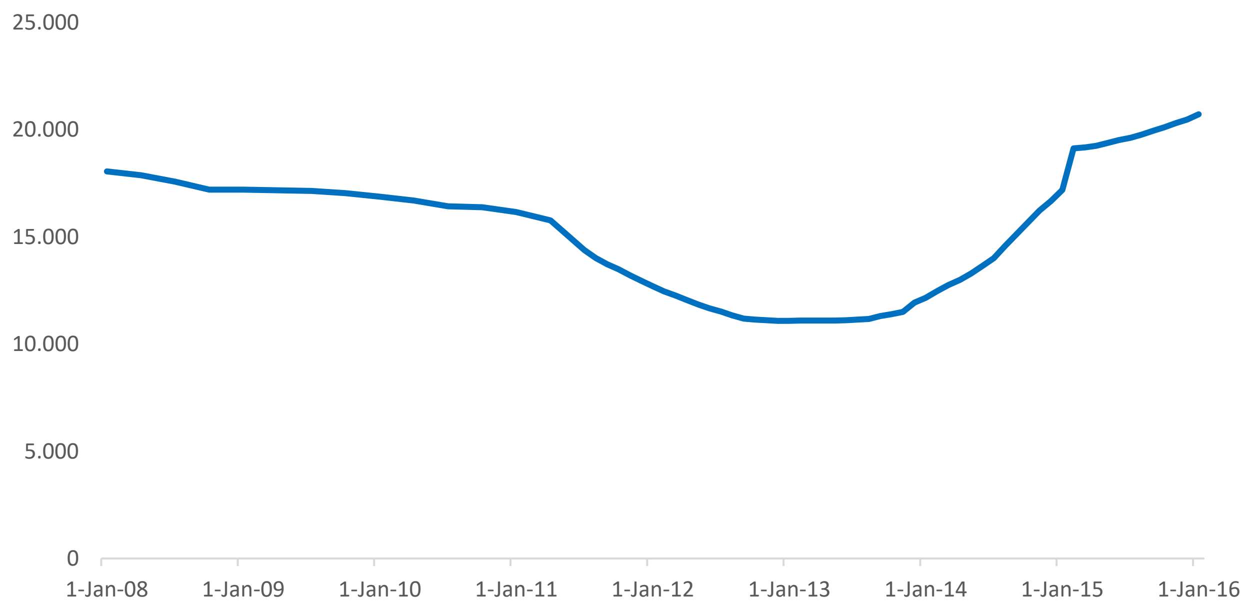
Source: Moody's, Fitch, S&P and DBRS

Exhibit 10: Portuguese 10-year Government bond yields (%), 2009-2014.



Source: Bloomberg

Exhibit 11: Stock of Treasury and Saving Certificates, € million, 2008-2015.



Source: Banco de Portugal

Exhibit 12: Portuguese Government Bond issues, 2010-2015.

Issuance Format	Issue	Issue date	Maturity Date	Maturity	Amount (competitive phase), € million	Yield	*Bid to Cover* ratio
Auction	PGB 4.95 10/25/23	1/13/2010	10/25/2023	15 Years	1,000	4.43%	2.00
Syndication	PGB 4.8 06/15/20	2/10/2010	6/15/2020	10 Years	3,000	4.82%	4.00
Auction	PGB 3.35 10/15/15	2/24/2010	10/15/2015	5 Years	1,000	3.51%	1.80
Auction	PGB 3.85 04/15/21	3/10/2010	4/15/2021	10 Years	990	4.19%	1.60
Auction	PGB 5 06/15/12	4/14/2010	6/15/2012	2 Years	805	1.73%	2.50
Auction	PGB 4.8 06/15/20	4/14/2010	6/15/2020	10 Years	1,195	4.35%	1.60
Auction	PGB 4.8 06/15/20	5/12/2010	6/15/2020	10 Years	1,000	4.58%	1.80
Auction	PGB 3.35 10/15/15	5/26/2010	10/15/2015	5 Years	1,000	3.75%	1.80
Auction	PGB 5.45 09/23/13	6/9/2010	9/23/2013	3 Years	701	3.63%	2.40
Auction	PGB 4.8 06/15/20	6/9/2010	6/15/2020	10 Years	816	5.25%	1.80
Auction	PGB 3.35 10/15/15	6/23/2010	10/15/2015	5 Years	943	4.72%	1.80
Auction	PGB 5 06/15/12	7/14/2010	6/15/2012	2 Years	877	3.21%	2.32
Auction	PGB 4 3/4 06/14/19	7/14/2010	6/14/2019	9 Years	803	5.33%	1.55
Auction	PGB 4.95 10/25/23	7/28/2010	10/25/2023	15 Years	681	5.41%	1.60
Auction	PGB 3.6 10/15/14	7/28/2010	10/15/2014	4 Years	600	3.65%	3.13
Auction	PGB 4.2 10/15/16	8/25/2010	10/15/2016	6 Years	629	4.41%	2.10
Auction	PGB 4.8 06/15/20	8/25/2010	6/15/2020	10 Years	672	5.33%	1.80
Auction	PGB 5.45 09/23/13	9/8/2010	9/23/2013	3 Years	661	4.12%	1.90
Auction	PGB 3.85 04/15/21	9/8/2010	4/15/2021	10 Years	378	5.99%	2.60
Auction	PGB 3.6 10/15/14	9/22/2010	10/15/2014	4 Years	450	4.72%	3.50
Auction	PGB 4.8 06/15/20	9/22/2010	6/15/2020	10 Years	300	6.25%	4.90
Auction	PGB 4.45 06/15/18	10/27/2010	6/15/2018	8 Years	614	5.16%	1.70
Auction	PGB 3.6 10/15/14	10/27/2010	10/15/2014	4 Years	611	4.05%	2.80
Auction	PGB 4.8 06/15/20	11/10/2010	6/15/2020	10 Years	686	6.85%	2.10
Auction	PGB 4.2 10/15/16	11/10/2010	10/15/2016	6 Years	556	6.19%	2.30
Auction	PGB 4.8 06/15/20	1/12/2011	6/15/2020	10 Years	599	6.76%	3.20
Auction	PGB 3.6 10/15/14	1/12/2011	10/15/2014	4 Years	650	5.44%	2.60
Syndication	PGB 6.4 02/15/16	2/7/2011	2/15/2016	5 Years	3,500	6.46%	1.86
Auction	PGB 5.45 09/23/13	3/9/2011	9/23/2013	3 Years	1,000	6.05%	1.60
Auction	PGB 5.45 09/23/13	4/1/2011	9/23/2013	2 Years	1,645	6.25%	1.40
Debt Exchange	PGB 3.35 10/15/15	10/3/2012	10/15/2015	3 Years	3,757	5.12%	
Syndication	PGB 4.35 10/16/17	1/23/2013	10/16/2017	5 Years	2,500	4.89%	4.91
Syndication	PGB 5.65 02/15/24	5/7/2013	2/15/2024	10 Years	3,000	5.67%	3.48
Debt Exchange	PGB 4.45 06/15/18	12/3/2013	6/15/2018	5 Years	3,966	4.96%	
Debt Exchange	PGB 4.35 10/16/17	12/3/2013	10/16/2017	4 Years	2,676	4.68%	
Syndication	PGB 4 3/4 06/14/19	1/9/2014	6/14/2019	5 Years	3,250	4.66%	3.47
Syndication	PGB 5.65 02/15/24	2/11/2014	2/15/2024	10 Years	3,000	5.11%	3.26
Auction	PGB 5.65 02/15/24	4/23/2014	2/15/2024	10 Years	750	3.59%	3.47
Auction	PGB 5.65 02/15/24	6/11/2014	2/15/2024	10 Years	975	3.28%	2.43
Syndication	PGB 3 7/8 02/15/30	9/3/2014	2/15/2030	15 Years	3,500	3.92%	2.55
Auction	PGB 4.8 06/15/20	10/8/2014	6/15/2020	5 Years	1,000	1.86%	1.80
Auction	PGB 5.65 02/15/24	11/12/2014	2/15/2024	10 Years	1,200	3.18%	2.07
Debt Exchange	PGB 3.85 04/15/21	11/26/2014	4/15/2021	6 Years	943	2.16%	
Debt Exchange	PGB 4.95 10/25/23	11/26/2014	10/25/2023	9 Years	805	2.84%	
Syndication	PGB 4.1 02/15/45	1/13/2015	2/15/2045	30 Years	2,000	4.13%	3.00
Syndication	PGB 2 7/8 10/15/25	1/13/2015	10/15/2025	10 Years	3,500	2.92%	2.28
Auction	PGB 2 7/8 10/15/25	2/11/2015	10/15/2025	10 Years	1,250	2.51%	1.88
Auction	PGB 2 7/8 10/15/25	2/25/2015	10/15/2025	10 Years	1,499	2.04%	1.82
Debt Exchange	PGB 5.65 02/15/24	4/23/2015	2/15/2024	9 Years	3,151	1.79%	
Debt Exchange	PGB 3 7/8 02/15/30	4/23/2015	2/15/2030	15 Years	876	2.47%	
Syndication	PGB 4.1 02/15/45	4/24/2015	2/15/2045	30 Years	500	3.31%	1.28
Syndication	PGB 2 7/8 10/15/25	4/24/2015	10/15/2025	10 Years	2,000	2.18%	2.37
Auction	PGB 3.85 04/15/21	5/27/2015	4/15/2021	6 Years	1,000	1.55%	1.72
Auction	PGB 4.8 06/15/20	7/22/2015	6/15/2020	5 Years	900	1.42%	1.89
Auction	PGB 4.1 04/15/37	7/22/2015	4/15/2037	20 Years	600	3.53%	1.70
Syndication	PGB 2.2 10/17/22	9/2/2015	10/17/2022	7 Years	3,000	2.24%	1.86
Auction	PGB 4.1 04/15/37	10/14/2015	4/15/2037	20 Years	350	3.23%	1.85
Auction	PGB 2 7/8 10/15/25	10/14/2015	10/15/2025	10 Years	950	2.40%	1.62
Auction	PGB 2 7/8 10/15/25	11/25/2015	10/15/2025	10 Years	995	2.43%	1.85

Source: IGCP

Exhibit 13: Treasury Bills issues, 2010-2015.

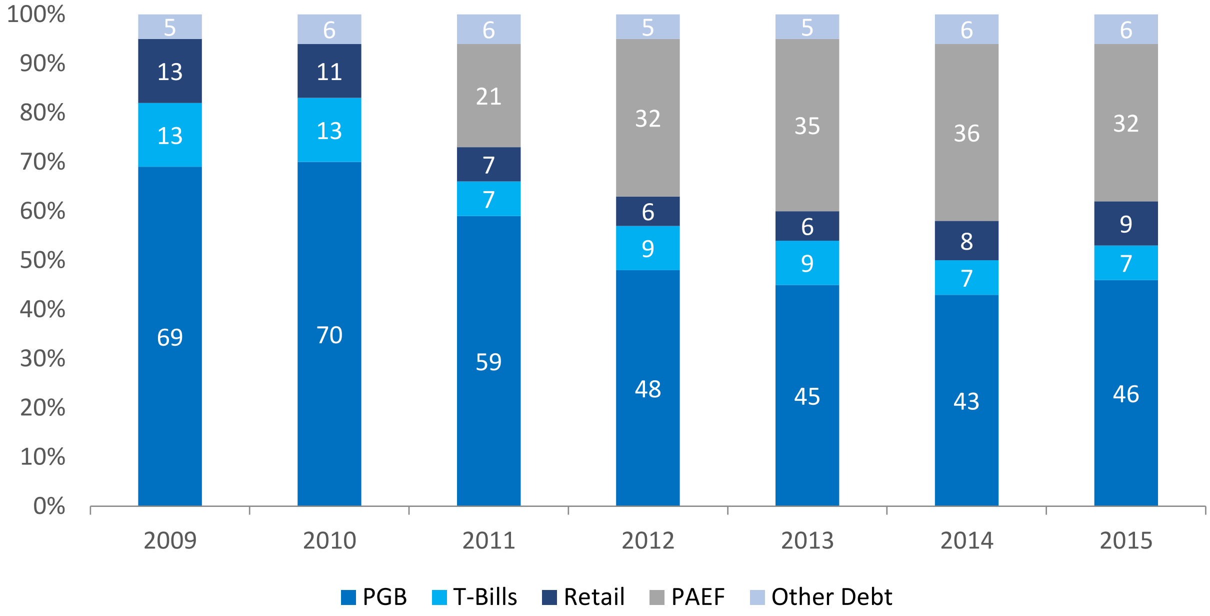
Issue	Issue date	Maturity Date	Maturity	Amount (competitive phase), € million	Yield	*Bid to Cover* ratio
PORTB 0 07/23/10	1/6/2010	1/8/2010	6 Months	600	0.59%	4.75
PORTB 0 01/21/11	1/20/2010	1/22/2010	12 Months	1,250	0.93%	2.24
PORTB 0 01/21/11	2/3/2010	2/5/2010	12 Months	300	1.38%	4.00
PORTB 0 02/18/11	2/17/2010	2/19/2010	12 Months	1,000	1.17%	2.20
PORTB 0 09/17/10	3/3/2010	3/5/2010	6 Months	544	0.74%	3.00
PORTB 0 02/18/11	3/3/2010	3/5/2010	12 Months	630	1.10%	3.10
PORTB 0 03/18/11	3/17/2010	3/19/2010	12 Months	1,250	1.04%	3.20
PORTB 0 03/18/11	4/7/2010	4/9/2010	11 Months	500	1.05%	2.80
PORTB 0 07/23/10	4/21/2010	4/23/2010	3 Months	575	0.48%	2.40
PORTB 0 01/21/11	4/21/2010	4/23/2010	9 Months	500	1.08%	1.80
PORTB 0 11/19/10	5/5/2010	5/7/2010	6 Months	500	2.96%	1.90
PORTB 0 02/18/11	5/19/2010	5/21/2010	9 Months	500	2.44%	2.30
PORTB 0 09/17/10	6/2/2010	6/4/2010	4 Months	560	1.86%	3.50
PORTB 0 03/18/11	6/16/2010	6/18/2010	9 Months	718	2.69%	1.80
PORTB 0 01/21/11	7/7/2010	7/9/2010	6 Months	762	1.95%	1.80
PORTB 0 07/22/11	7/21/2010	7/23/2010	12 Months	1,253	2.45%	1.30
PORTB 0 02/18/11	8/4/2010	8/6/2010	6 Months	660	1.96%	2.37
PORTB 0 07/22/11	8/4/2010	8/6/2010	12 Months	505	2.39%	2.17
PORTB 0 11/19/10	8/18/2010	8/20/2010	3 Months	775	0.99%	2.50
PORTB 0 08/19/11	8/18/2010	8/20/2010	12 Months	750	2.73%	1.80
PORTB 0 03/18/11	9/1/2010	9/3/2010	6 Months	500	2.05%	2.40
PORTB 0 08/19/11	9/1/2010	9/3/2010	12 Months	512	2.76%	2.10
PORTB 0 09/23/11	9/15/2010	9/17/2010	12 Months	750	3.37%	1.60
PORTB 0 09/23/11	10/6/2010	10/8/2010	12 Months	500	3.33%	2.80
PORTB 0 10/21/11	10/6/2010	10/8/2010	12 Months	500	1.60%	3.00
PORTB 0 10/21/11	10/20/2010	10/22/2010	12 Months	760	2.89%	2.40
PORTB 0 02/18/11	11/3/2010	11/5/2010	4 Months	500	1.82%	2.20
PORTB 0 10/21/11	11/3/2010	11/5/2010	12 Months	531	3.26%	2.20
PORTB 0 11/18/11	11/17/2010	11/19/2010	12 Months	750	4.81%	1.80
PORTB 0 11/18/11	12/1/2010	12/3/2010	12 Months	500	5.28%	2.51
PORTB 0 03/18/11	12/15/2010	12/17/2010	3 Months	500	3.40%	1.90
PORTB 0 07/22/11	1/5/2011	1/7/2011	6 Months	500	3.69%	2.62
PORTB 0 01/20/12	1/19/2011	1/21/2011	12 Months	750	4.03%	3.10
PORTB 0 08/19/11	2/2/2011	2/4/2011	6 Months	455	2.98%	4.80
PORTB 0 01/20/12	2/2/2011	2/4/2011	12 Months	800	3.71%	2.60
PORTB 0 02/17/12	2/16/2011	2/18/2011	12 Months	1,000	3.99%	1.90
PORTB 0 09/23/11	3/2/2011	3/4/2011	6 Months	550	2.98%	2.60
PORTB 0 02/17/12	3/2/2011	3/4/2011	12 Months	450	4.06%	3.10
PORTB 0 03/23/12	3/16/2011	3/18/2011	12 Months	1,000	4.33%	2.20
PORTB 0 10/21/11	4/6/2011	4/8/2011	6 Months	550	5.12%	2.30
PORTB 0 03/23/12	4/6/2011	4/8/2011	12 Months	455	5.90%	2.60
PORTB 0 07/22/11	4/20/2011	4/26/2011	3 Months	680	4.05%	2.00
PORTB 0 11/18/11	4/20/2011	4/26/2011	7 Months	320	5.53%	3.70
PORTB 0 08/19/11	5/4/2011	5/6/2011	4 Months	1,117	4.65%	1.90
PORTB 0 07/22/11	5/18/2011	5/20/2011	2 Months	1,000	4.66%	2.05
PORTB 0 09/23/11	6/1/2011	6/3/2011	4 Months	850	4.97%	2.70
PORTB 0 09/23/11	6/15/2011	6/17/2011	3 Months	388	4.95%	3.81
PORTB 0 12/23/11	6/15/2011	6/17/2011	6 Months	612	4.86%	2.40
PORTB 0 10/21/11	7/6/2011	7/8/2011	4 Months	848	4.93%	2.00
PORTB 0 10/21/11	7/20/2011	7/22/2011	3 Months	450	4.98%	2.40
PORTB 0 01/20/12	7/20/2011	7/22/2011	6 Months	300	4.96%	3.70
PORTB 0 02/17/12	8/3/2011	8/5/2011	6 Months	750	4.97%	2.56
PORTB 0 11/18/11	8/17/2011	8/19/2011	3 Months	985	4.85%	1.80
PORTB 0 02/17/12	8/17/2011	8/19/2011	6 Months	172	4.99%	7.20
PORTB 0 12/23/11	9/7/2011	9/9/2011	4 Months	854	4.96%	2.19
PORTB 0 12/23/11	9/21/2011	9/23/2011	3 Months	1,000	4.93%	1.70
PORTB 0 03/23/12	9/21/2011	9/23/2011	6 Months	250	5.25%	4.50
PORTB 0 01/20/12	10/5/2011	10/7/2011	4 Months	722	4.97%	2.25
PORTB 0 01/20/12	10/19/2011	10/21/2011	3 Months	432	5.25%	3.68
PORTB 0 04/20/12	10/19/2011	10/21/2011	6 Months	1,071	4.97%	2.03
PORTB 0 02/17/12	11/2/2011	11/4/2011	4 Months	1,244	5.00%	2.00
PORTB 0 02/17/12	11/16/2011	11/18/2011	3 Months	773	4.90%	2.40
PORTB 0 05/18/12	11/16/2011	11/18/2011	6 Months	350	5.25%	4.10
PORTB 0 03/23/12	12/7/2011	12/9/2011	4 Months	1,000	4.87%	1.99

PORTB 0 04/20/12	1/4/2012	1/6/2012	3 Months	1,000	4.35%	2.39
PORTB 0 07/20/12	1/18/2012	1/20/2012	6 Months	754	4.74%	2.97
PORTB 0 12/21/12	1/18/2012	1/20/2012	11 Months	1,250	4.99%	2.14
PORTB 0 05/18/12	2/1/2012	2/3/2012	4 Months	750	4.07%	2.81
PORTB 0 07/20/12	2/1/2012	2/3/2012	6 Months	750	4.46%	2.65
PORTB 0 05/18/12	2/15/2012	2/17/2012	3 Months	300	3.85%	10.30
PORTB 0 08/17/12	2/15/2012	2/17/2012	6 Months	1,200	4.33%	2.53
PORTB 0 02/22/13	2/15/2012	2/17/2012	12 Months	1,500	4.94%	2.02
PORTB 0 07/20/12	3/21/2012	3/23/2012	4 Months	382	2.17%	6.70
PORTB 0 03/22/13	3/21/2012	3/23/2012	12 Months	1,610	3.65%	2.50
PORTB 0 10/19/12	4/4/2012	4/10/2012	6 Months	500	2.90%	5.00
PORTB 0 10/18/13	4/4/2012	4/10/2012	18 Months	1,000	4.54%	2.60
PORTB 0 11/23/12	5/2/2012	5/4/2012	7 Months	500	2.94%	4.14
PORTB 0 05/17/13	5/2/2012	5/4/2012	12 Months	1,000	3.91%	2.74
PORTB 0 12/21/12	6/6/2012	6/8/2012	6 Months	500	2.65%	4.31
PORTB 0 06/21/13	6/6/2012	6/8/2012	12 Months	1,000	3.83%	2.71
PORTB 0 01/18/13	7/18/2012	7/20/2012	6 Months	750	2.29%	3.82
PORTB 0 07/19/13	7/18/2012	7/20/2012	12 Months	1,250	3.50%	2.36
PORTB 0 03/22/13	9/19/2012	9/21/2012	6 Months	709	1.70%	3.10
PORTB 0 03/21/14	9/19/2012	9/21/2012	18 Months	1,291	2.97%	2.40
PORTB 0 01/18/13	10/17/2012	10/19/2012	3 Months	250	1.37%	8.11
PORTB 0 04/19/13	10/17/2012	10/19/2012	6 Months	830	1.84%	2.81
PORTB 0 10/18/13	10/17/2012	10/19/2012	12 Months	770	2.10%	2.49
PORTB 0 02/22/13	11/21/2012	11/23/2012	3 Months	300	1.94%	5.09
PORTB 0 05/17/13	11/21/2012	11/23/2012	6 Months	500	2.17%	4.49
PORTB 0 05/23/14	11/21/2012	11/23/2012	18 Months	1,200	2.99%	1.91
PORTB 0 04/19/13	1/16/2013	1/18/2013	3 Months	300	0.67%	3.80
PORTB 0 01/17/14	1/16/2013	1/18/2013	12 Months	1,200	1.61%	2.30
PORTB 0 07/18/14	1/16/2013	1/18/2013	18 Months	1,000	1.96%	2.70
PORTB 0 05/17/13	2/20/2013	2/22/2013	3 Months	345	0.74%	2.40
PORTB 0 02/21/14	2/20/2013	2/22/2013	12 Months	1,155	1.28%	2.30
PORTB 0 06/21/13	3/20/2013	3/22/2013	3 Months	300	0.76%	3.90
PORTB 0 09/19/14	3/20/2013	3/22/2013	18 Months	1,200	1.51%	2.10
PORTB 0 07/19/13	4/17/2013	4/19/2013	3 Months	250	0.74%	4.80
PORTB 0 04/18/14	4/17/2013	4/19/2013	12 Months	1,500	1.39%	2.10
PORTB 0 11/22/13	5/15/2013	5/17/2013	6 Months	500	0.81%	1.80
PORTB 0 05/23/14	5/15/2013	5/17/2013	12 Months	1,250	1.23%	2.20
PORTB 0 12/20/13	6/19/2013	6/21/2013	6 Months	450	1.04%	2.50
PORTB 0 12/19/14	6/19/2013	6/21/2013	18 Months	1,050	1.60%	2.10
PORTB 0 12/20/13	7/17/2013	7/19/2013	5 Months	300	1.05%	4.40
PORTB 0 07/18/14	7/17/2013	7/19/2013	12 Months	1,200	1.72%	1.80
PORTB 0 11/22/13	8/21/2013	8/23/2013	3 Months	300	1.62%	3.40
PORTB 0 08/22/14	8/21/2013	8/23/2013	12 Months	700	0.77%	2.20
PORTB 0 12/20/13	9/18/2013	9/20/2013	3 Months	500	1.08%	1.80
PORTB 0 03/20/15	9/18/2013	9/20/2013	18 Months	750	2.29%	2.00
PORTB 0 01/17/14	10/16/2013	10/18/2013	3 Months	450	1.71%	1.80
PORTB 0 07/18/14	10/16/2013	10/18/2013	9 Months	1,050	1.16%	1.50
PORTB 0 02/21/14	11/20/2013	11/22/2013	3 Months	300	1.08%	3.00
PORTB 0 11/21/14	11/20/2013	11/22/2013	12 Months	700	1.49%	2.00

PORTB 0 04/18/14	1/15/2014	1/17/2014	3 Months	240	0.49%	4.71
PORTB 0 01/23/15	1/15/2014	1/17/2014	12 Months	1,010	0.87%	2.23
PORTB 0 05/23/14	2/19/2014	2/21/2014	3 Months	250	0.46%	6.26
PORTB 0 02/20/15	2/19/2014	2/21/2014	12 Months	1,000	0.75%	2.12
PORTB 0 09/19/14	3/19/2014	3/21/2014	6 Months	320	0.44%	4.63
PORTB 0 03/20/15	3/19/2014	3/21/2014	12 Months	930	0.60%	1.70
PORTB 0 01/23/15	4/16/2014	4/18/2014	9 Months	325	0.49%	4.08
PORTB 0 04/17/15	4/16/2014	4/18/2014	12 Months	925	0.60%	1.57
PORTB 0 08/22/14	5/21/2014	5/23/2014	3 Months	250	0.43%	5.66
PORTB 0 05/22/15	5/21/2014	5/23/2014	12 Months	1,000	0.62%	1.75
PORTB 0 09/19/14	6/18/2014	6/20/2014	3 Months	500	0.18%	1.64
PORTB 0 06/19/15	6/18/2014	6/20/2014	12 Months	1,000	0.36%	1.32
PORTB 0 01/23/15	7/16/2014	7/18/2014	6 Months	400	0.24%	2.46
PORTB 0 07/17/15	7/16/2014	7/18/2014	12 Months	850	0.45%	2.05
PORTB 0 11/21/14	8/20/2014	8/22/2014	3 Months	200	0.10%	3.36
PORTB 0 08/21/15	8/20/2014	8/22/2014	12 Months	800	0.22%	1.79
PORTB 0 12/19/14	9/17/2014	9/19/2014	3 Months	250	0.05%	2.98
PORTB 0 09/18/15	9/17/2014	9/19/2014	12 Months	750	0.23%	1.92
PORTB 0 01/23/15	10/15/2014	10/17/2014	3 Months	250	0.11%	3.72
PORTB 0 07/17/15	10/15/2014	10/17/2014	9 Months	750	0.20%	1.47
PORTB 0 02/20/15	11/19/2014	11/21/2014	3 Months	200	0.16%	3.33
PORTB 0 11/20/15	11/19/2014	11/21/2014	12 Months	800	0.32%	1.59
PORTB 0 12/18/15	12/3/2014	12/5/2014	12 Months	850	0.28%	1.80
PORTB 0 07/17/15	1/21/2015	1/23/2015	6 Months	300	0.11%	2.60
PORTB 0 01/22/16	1/21/2015	1/23/2015	12 Months	940	0.22%	1.99
PORTB 0 05/22/15	2/18/2015	2/20/2015	3 Months	250	0.06%	4.26
PORTB 0 01/22/16	2/18/2015	2/20/2015	11 Months	1,000	0.14%	1.99
PORTB 0 09/18/15	3/18/2015	3/20/2015	6 Months	300	0.05%	2.78
PORTB 0 03/18/16	3/18/2015	3/20/2015	12 Months	950	0.09%	1.99
PORTB 0 07/17/15	4/15/2015	4/17/2015	3 Months	300	0.01%	4.62
PORTB 0 03/18/16	4/15/2015	4/17/2015	11 Months	950	0.02%	1.68
PORTB 0 11/20/15	5/20/2015	5/22/2015	6 Months	300	0.00%	4.61
PORTB 0 05/20/16	5/20/2015	5/22/2015	12 Months	1,200	0.02%	1.97
PORTB 0 09/18/15	6/17/2015	6/19/2015	3 Months	200	0.04%	5.10
PORTB 0 05/20/16	6/17/2015	6/19/2015	11 Months	550	0.16%	3.13
PORTB 0 01/22/16	7/15/2015	7/17/2015	6 Months	650	0.01%	2.05
PORTB 0 07/22/16	7/15/2015	7/17/2015	12 Months	1,135	0.09%	2.07
PORTB 0 11/20/15	8/19/2015	8/21/2015	3 Months	400	-0.01%	3.14
PORTB 0 07/22/16	8/19/2015	8/21/2015	11 Months	750	0.02%	2.01
PORTB 0 03/18/16	9/16/2015	9/18/2015	6 Months	300	0.01%	4.07
PORTB 0 09/23/16	9/16/2015	9/18/2015	12 Months	1,000	0.05%	2.06
PORTB 0 01/22/16	10/21/2015	10/23/2015	3 Months	300	-0.02%	3.37
PORTB 0 09/23/16	10/21/2015	10/23/2015	11 Months	1,100	0.01%	1.84
PORTB 0 05/20/16	11/18/2015	11/20/2015	6 Months	400	-0.02%	2.72
PORTB 0 11/18/16	11/18/2015	11/20/2015	12 Months	1,100	-0.01%	2.18
PORTB 0 03/18/16	12/16/2015	12/18/2015	3 Months	248	-0.02%	3.38
PORTB 0 11/18/16	12/16/2015	12/18/2015	11 Months	750	0.03%	1.87

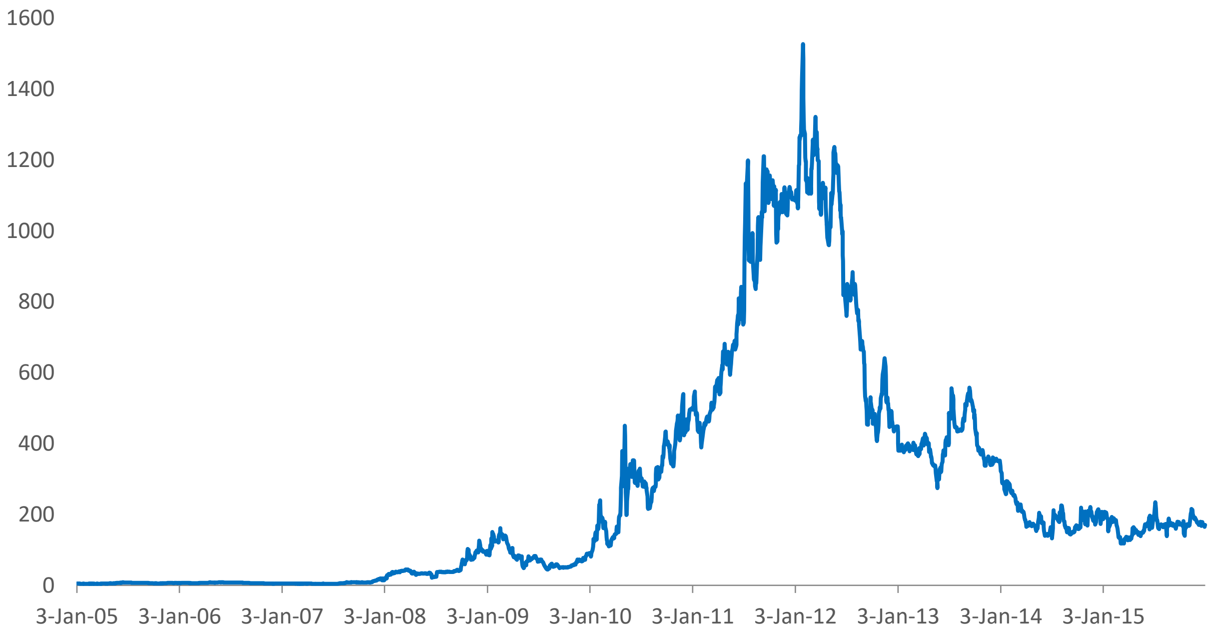
Source: IGCP

Exhibit 14: Composition of stock of debt structure by type of instrument (%), 2009-2015.



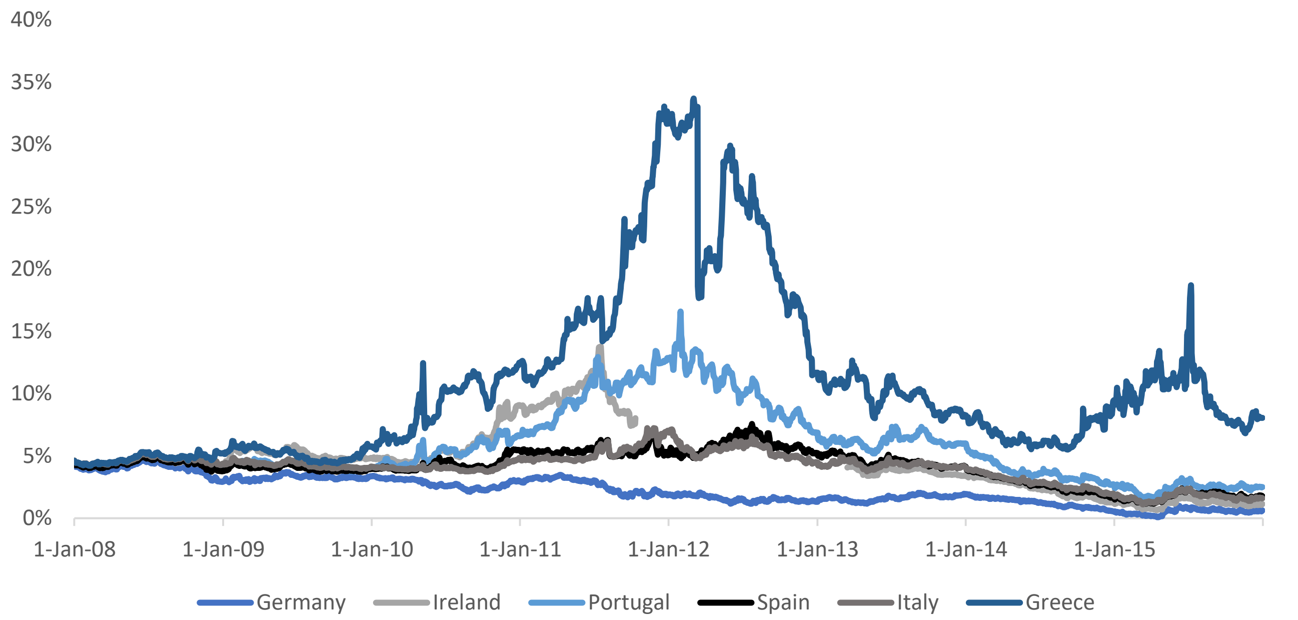
Source: IGCP's annual reports

Exhibit 15: 5-year Portuguese Credit Default Swap, basis points (bps), 2005-2015.



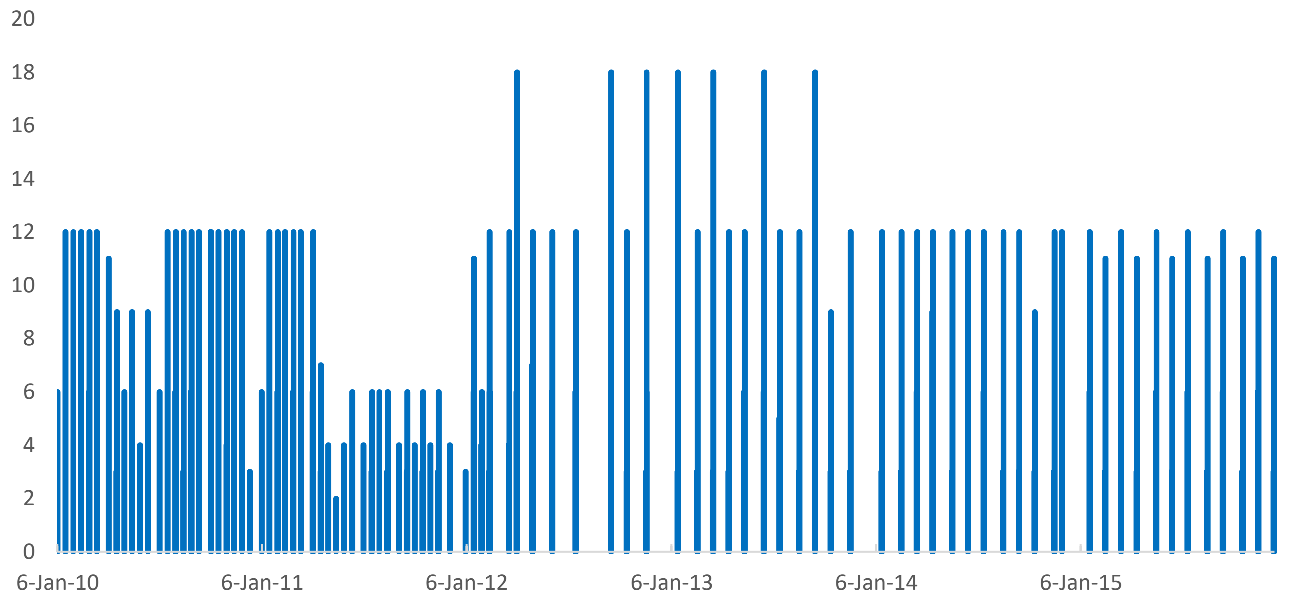
Source: Bloomberg

Exhibit 16: 10-year Government bond yields (%), 2008-2015.



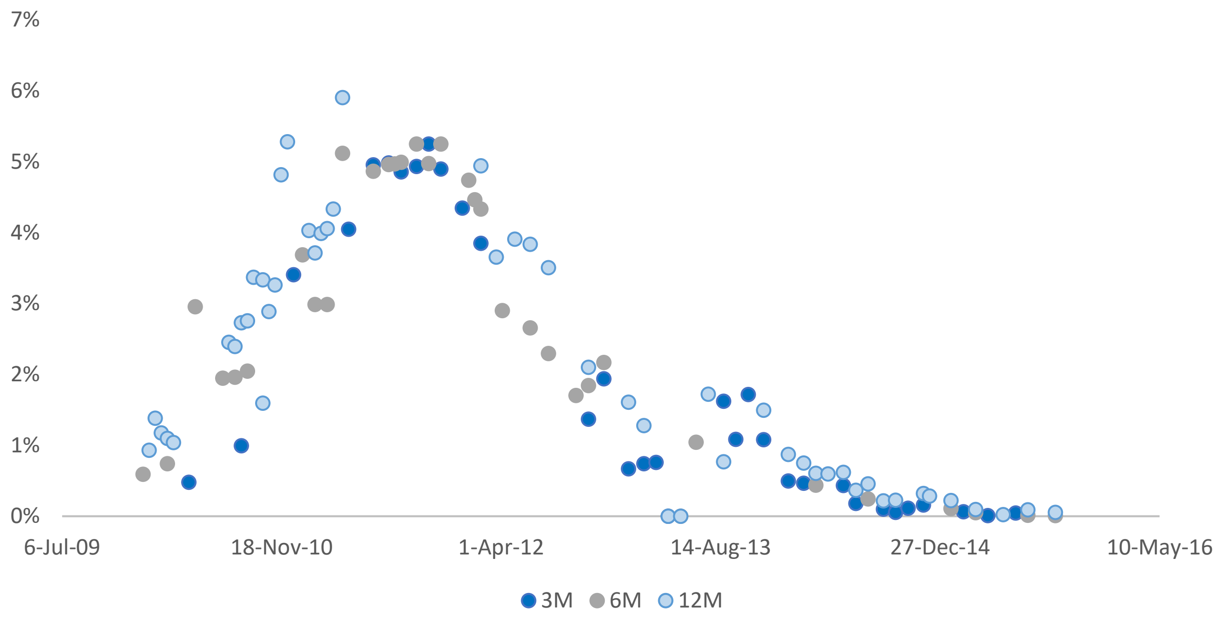
Source: Bloomberg

Exhibit 17: Maturities of issued T-Bills, months, 2010-2015.



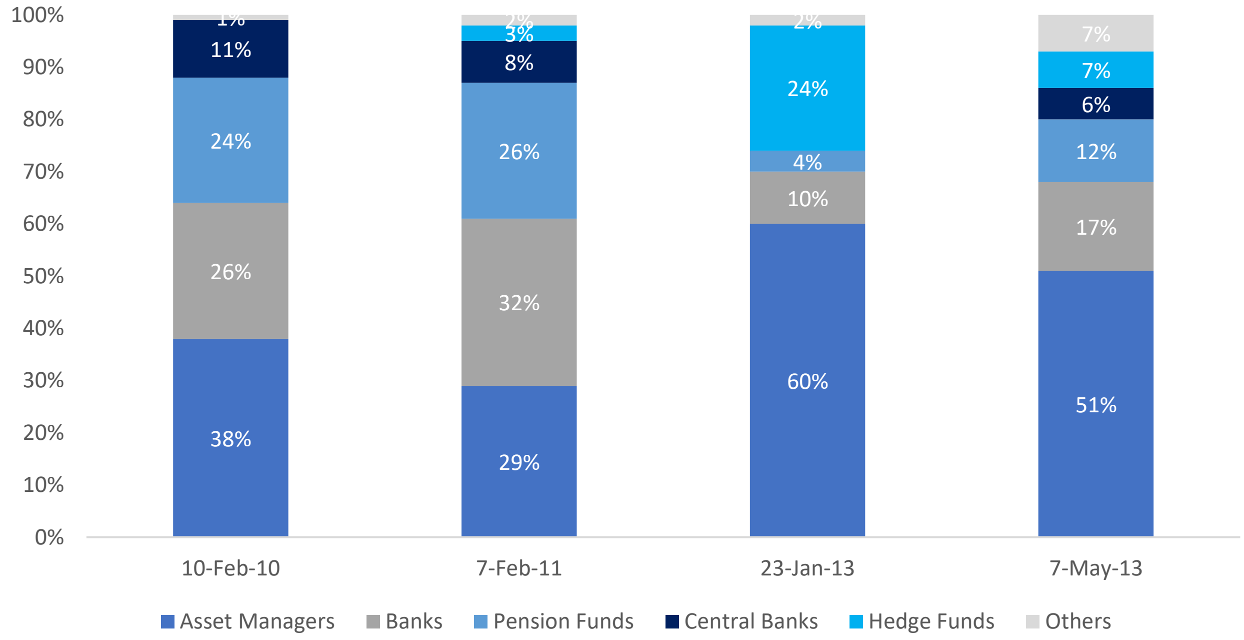
Source: IGCP

Exhibit 18: Yields of issued T-Bills (%), 2010-2015.



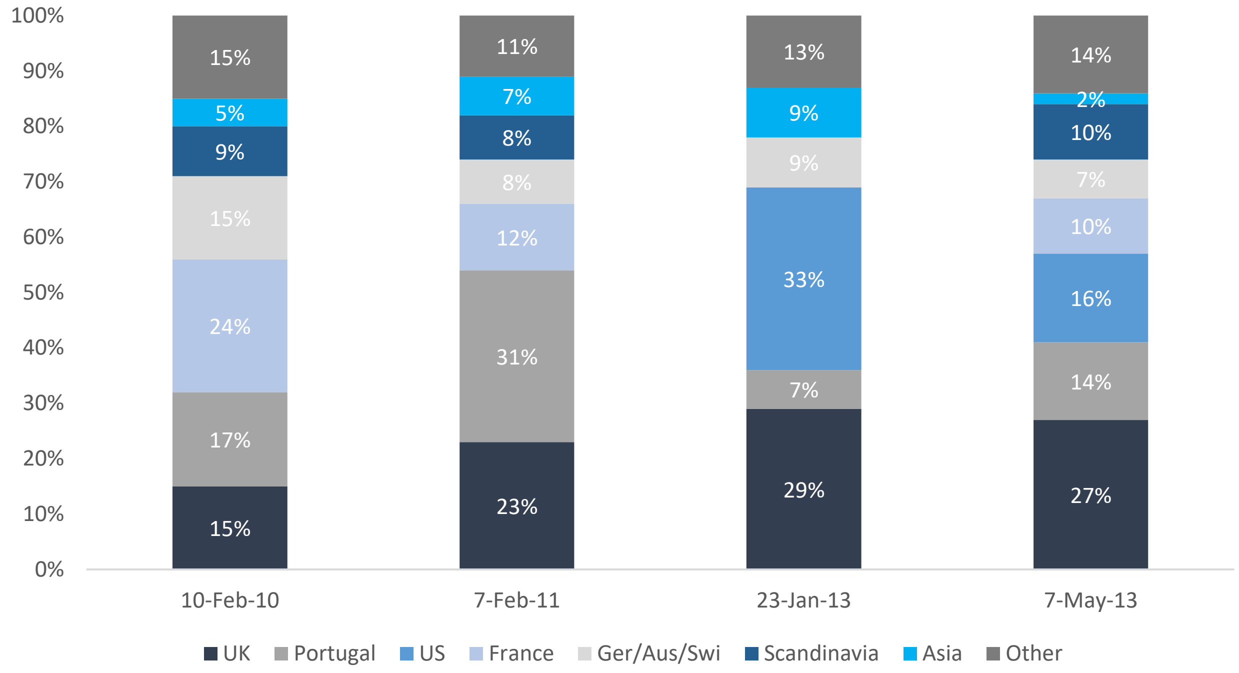
Source: IGCP

Exhibit 19: Distribution by investor type (%) for the syndications of February 10th, 2010, February 7th, 2011, January 23rd, 2013 and May 7th, 2013.



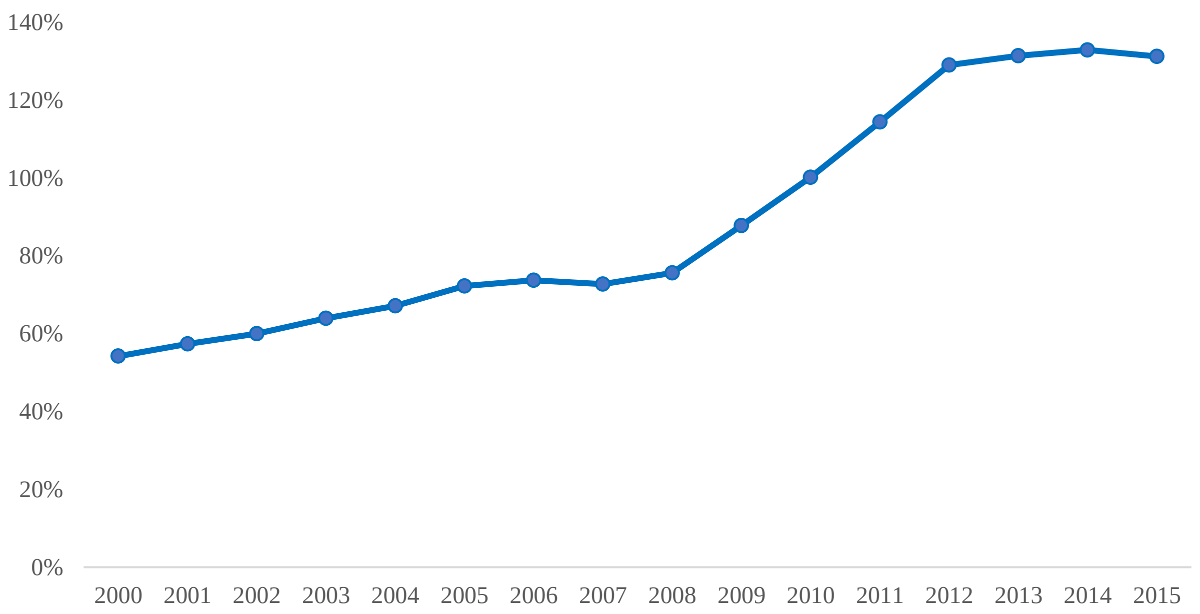
Source: IGCP's press releases

Exhibit 20: Distribution by geography (%) for the syndications of February 10th, 2010, February 7th, 2011, January 23rd, 2013 and May 7th, 2013.



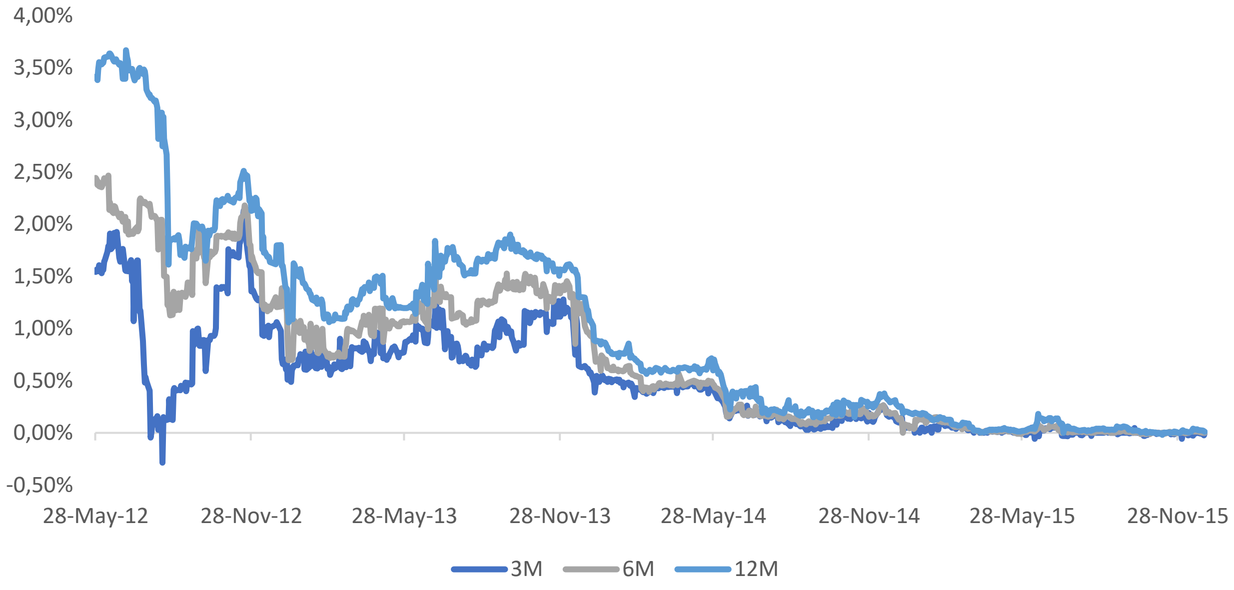
Source: IGCP's press release

Exhibit 21: Portugal total general Government debt, % of GDP, 2000-2015.



Source: Pordata

Exhibit 22: Yields of Portuguese T-Bills for the maturities of 3, 6 and 12 months (%), 2012-2015.



Source: IGCP