Securities Markets Programme

Ariel A. Smith[1]

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Abstract

The Eurozone struggled during the escalation of the Sovereign Debt Crisis in 2010. In order to aid malfunctioning securities markets, restore liquidity, and enable proper functioning of the monetary policy transmission mechanism, the European Central Bank instituted the Securities Markets Programme on May 10, 2010. This program enabled Eurosystem central banks to purchase securities from entities in Greece, Ireland, Portugal, Italy, and Spain. The program ended on September 6, 2012, and evaluations of its effectiveness are mixed.

Keywords: market liquidity, monetary policy transmission mechanism, securities, price stability, sterilization

[1] Research Associate, New Bagehot Project. Yale Program on Financial Stability (ariel.smith@yale.edu)

Securities Markets Programme

At a Glance

The European Union was adversely impacted by the escalation of the Sovereign Debt Crisis, and the Eurozone struggled with malfunctioning securities markets and a lack of market liquidity.

As part of its suite of responses to the financial crisis, the European Central Bank launched the Securities Markets Programme (SMP) on May 10, 2010, to address the lack of demand for sovereign debt issued by certain countries.

SMP purchases were conducted by Eurosystem central banks and proceeded in two main waves. The first dealt with government bonds from the secondary markets of Greece, Ireland, and Portugal, and the second (which began on August 7, 2011 after a period of inactivity) expanded the program's jurisdiction to deal with government bonds from Italy and Spain. During the second wave, central banks continued to purchase securities from Ireland and Portugal, but Greece was not included in this new wave of transactions.

Summary of Key Terms	
Purpose: Aid malfunctioning securities markets, restore liquidity, and enable proper functioning of the monetary policy transmission mechanism.	
Announcement Date	May 9, 2010
Operational Date	May 10, 2010[2]
End of Issuance Window	September 6, 2012
Legal Authority	Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks and the European Central Bank.
Peak Utilization	€219.5 billion
Participants	Eurosystem central banks, eligible counterparties
Administrators	European Central Bank

The program ended on September 6, 2012, and was replaced by the Outright Monetary Transactions (OMT) program. At that time, purchases made under the SMP totaled €218 billion. All bonds purchased under the SMP were held until maturity; as of October 26, 2018, the SMP portfolio held €72.9 billion at amortized cost.

Summary Evaluation

A comprehensive evaluation of the SMP is difficult to conduct because, while the program is similar to asset purchase programs, it differs from them in several significant ways, and as such cannot be evaluated fully by existing frameworks. As such, reviews of the SMP's effectiveness are mixed and dependent upon the model used by the author(s). All evaluations find that the SMP did have some impact on government bond yields, but it is important to note that as the purchases were conducted

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[2] The exact start date of the program is unclear. The program was announced on the 10th but the official legal decision signed on the 14th details that the program came into effect the day after its publication on the ECB website.

at the height of the sovereign debt crisis, it is difficult to isolate whether yields rose despite the program or due to other interfering factors. Additionally, the SMP was a politically controversial program.

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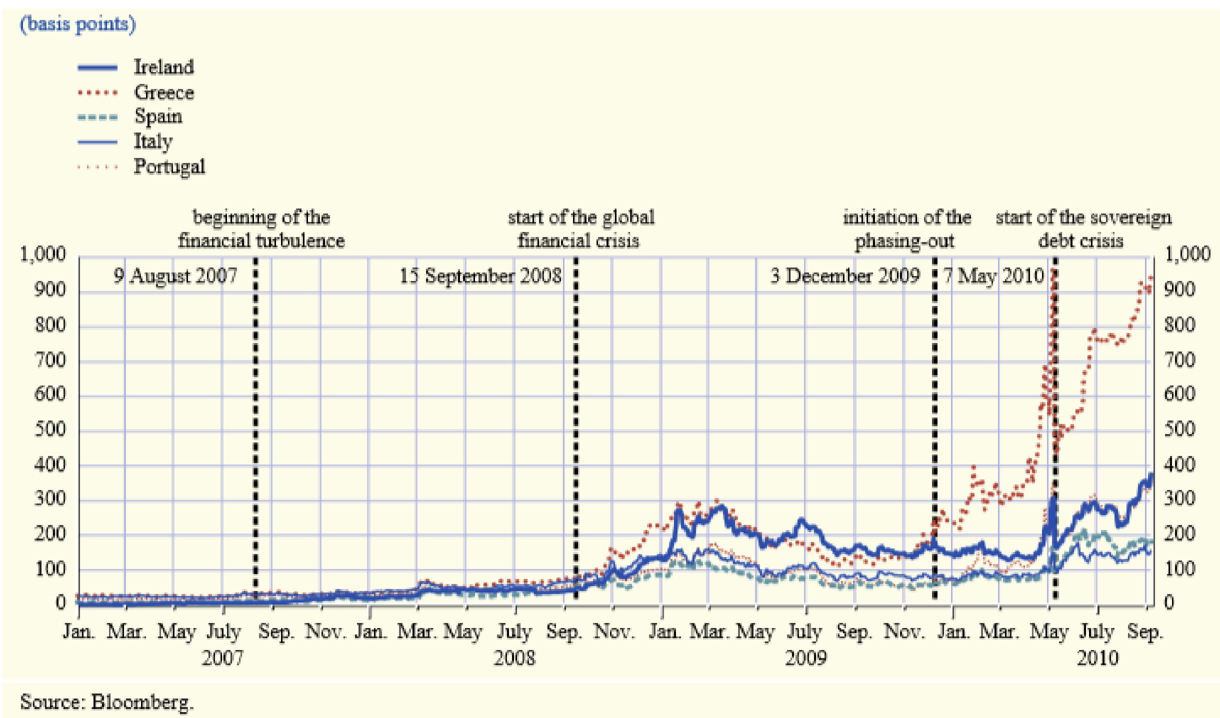
I. Overview

Background

The entire European Union found itself adversely impacted by the Sovereign Debt Crisis. On Thursday, May 6, the Greek Parliament passed austerity measures as a condition for its €110 billion rescue package – a day after three people were killed in violent protests against the measures. Meanwhile, bond spreads soared across the Eurozone (Skrekas et al, 2010). In response, government leaders and central bank governors met over the weekend to establish a comprehensive package of measures.

As part of its suite of responses to the crisis, the European Central Bank launched the Securities Markets Programme (SMP) on May 10, 2010, in order to address problems in certain segments of the market that inhibited the functioning of the monetary policy transmission mechanism and thus price stability in the medium term (ECB6, ECB5).

Figure 1: Ten-year government bond spreads for selected euro area countries vis-à-vis the German Bund



Source: ***ECB Monthly Bulletin October 2010.***

Cour-Thimann and Winkler[3] (2013) identify three main channels through which the malfunctioning bond markets disrupted the proper transmission of monetary policy: the price channel, the liquidity channel, and the balance sheet channel. The *price channel* means that funding costs for banks rise; the *liquidity channel* means that when the government bond market experiences disruptions, so do other market segments, thus impairing liquidity; and the *balance sheet channel* identifies the shrinking of banks' balance sheets as they attempt to deal with price-implied changes in the value of government bonds, thus impacting their ability to make loans to the private sector (Cour-Thimann and Winkler 2013).

Program Description

The ECB managed SMP purchases, while the Eurosystem central banks conducted them; central banks' purchases were allocated according to their share of the ECB's capital (ECB5). The purchases proceeded in two main waves, which will be referred to as SMP-1 and SMP-2. The purchases made in SMP-1 dealt with government bonds from the secondary markets of Greece, Ireland, and Portugal. SMP-2 began when the program was re-launched on August 7, 2011 after a brief period of inactivity; this second wave of purchases expanded the program's jurisdiction to Italy and Spain, while discontinuing purchases from Greece[4] (Ghysels et al. 2017). Overall, the program ran for a total of two years.

The program's goal was "to ensure [market] depth and liquidity and restore an appropriate monetary policy transmission" (Ghysels et al. 2017).

The legal authority for the SMP came from the Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks and the European Central Bank. The ECB's official announcement of the decision specifically cited the first indent of Article 127(2) of the Treaty on the Functioning of the European Union and the second subparagraph of Article 12.1, Article 3.1, and Article 18.1 of the Statute of the European System of Central Banks and of the European Central Bank (ECB5).

The ECB's official legal decision specified what was eligible for purchase under the SMP. Central banks could buy "eligible marketable debt instruments issued by the central governments or public entities of the Member States whose currency is in the euro" on the secondary market; and on both the primary and secondary markets, banks could buy "eligible marketable debt instruments issued by private entities incorporated in the euro area" (ECB5). The program targeted bonds with maturities from two to ten years (Eser and Schwaab 2013).

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[3] Both of these authors are affiliated with the ECB.

[4] During SMP-2, central banks continued to purchase securities from Ireland and Portugal, but (as noted above) Greece was not included in this new wave of transactions (Ghysels et al. 2016).

Eurosystem central banks conducted purchases of various sizes[5] over multiple-week periods; these periods were often consecutive, and occurred for a duration of almost two years (De Pooter et al. 2015).

On September 6, 2012, the ECB Governing Council ended the SMP and implemented the Outright Monetary Transactions program, which is a separate yet similar program (ECB6, Eser and Schwaab 2015). All securities purchased under the SMP were to be held until maturity (ECB6).

Outcomes

Purchases made under the SMP totaled €218 billion (ECB1). A breakdown of the purchases by country and by average remaining maturity can be seen below in Figure 2. As seen below, it is notable that approximately half of the securities purchased by Eurosystem central banks under the program were Italian government bonds.

Figure 2: Purchases made under the SMP

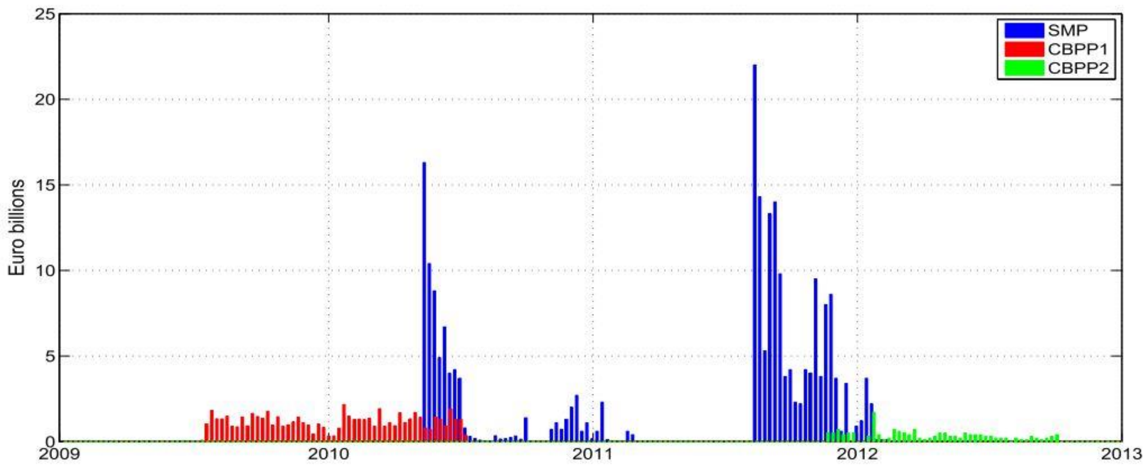
Issuer country	Outstanding amounts		Average remaining maturity (in years)
	Nominal amount (EUR billion)	Book value [1] (EUR billion)	
Ireland	14.2	13.6	4.6
Greece	33.9	30.8	3.6
Spain	44.3	43.7	4.1
Italy	102.8	99.0	4.5
Portugal	22.8	21.6	3.9
Total	**218.0**	**208.7**	**4.3**

***Source:* *Press release February 21 2013*.**

For perspective, Figure 3 below shows the amount of securities purchased under the SMP as compared to the amounts purchased under the ECB's Covered Bond Purchase Programs 1 and 2. Further information on the CBPP programs can be found in their individual cases (see Smith 2018A, Smith 2018B).

[5] INTERVIEW QUESTION: Were there any limits or guidelines on the size of purchases allowed under the program?

Figure 3: Comparative purchases made under the SMP



***Source:* *Falagiarda and Reitz 2015*.**

The ECB maintained that the SMP should not impact liquidity, and Eurosystem central banks were required to re-absorb the liquidity provided through the program through continuous weekly sterilizing operations. These operations progressed until the ECB discontinued them on June 5, 2014; the last sterilizing operation took place on June 10, 2014 (ECB6).

As of October 26, 2018, the SMP portfolio still held €72.981 billion[6] of the purchased bonds (ECB6).

II. Key Design Decisions

1. The SMP's primary goal was to restore financial market liquidity.

Specifically, it aimed to restore liquidity in government debt, which investors were not buying; it was "active in government bond markets whose depth and liquidity [was] impaired. This lack of depth and liquidity, in turn, [was] related to concerns about the sustainability of public finances and the associated default risk premia" (Eser and Schwaab 2016).

[6] At amortized cost.

2. **The legal authority for the SMP came from the Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks and the European Central Bank.**

The decision cited the first indent of Article 127(2) of the Treaty on the Functioning of the European Union and the second subparagraph of Article 12.1, Article 3.1, and Article 18.1 of the Statute of the European System of Central Banks and of the European Central Bank (ECB5).

3. **The SMP was part of a broader effort to restore market functioning at the height of the Sovereign Debt Crisis.**

On Friday, May 7, European government bond spreads reached record highs. In response, government leaders and central bank governors met over the weekend to establish a comprehensive package of measures. The measures included the European Financial Stability Facility – a safety net including €500 billion supplied by the ECB and another €250 billion supplied by the International Monetary Fund. They also included the reintroduction of non-standard measures that had been withdrawn earlier, such as the auction of three-month longer-term refinancing operations (LTROs) and resumption (on May 11, 2010) of temporary liquidity swap lines with the U.S. Federal Reserve. There was also a six-month LTRO on May 12, 2010 (ECB2). The ECB tied the SMP to Euro-area governments' commitment to fiscal responsibility.

In announcing the SMP program, the ECB noted that euro-area governments, particularly in countries under stress, had committed over the May 8-9 weekend to accelerating fiscal consolidation.

"We have taken note of the statement of the euro area governments that they 'will take all measures needed to meet [their] fiscal targets this year and the years ahead in line with excessive deficit procedures,'" the ECB stated (ECB2).

ECB President Jean-Claude Trichet said later that the ECB wanted to make clear that its actions "should absolutely not be used by the governments concerned as an excuse not to adjust their macropolicies," and to make sure that government were "on board" for regional efforts to follow responsible fiscal policies (Trichet, 2014).

4. **The ECB did not announce any key features of the SMP during its announcements – such as which securities it targeted, the amount of securities that would be purchased, and how long the program would last.**

This meant that the program represented something of a surprise to market participants, and they "learned about the program as purchases were implemented in a non-anonymous dealer market" (De Pooter et al. 2015, Eser and Schwaab 2015).

The program only released two announcements related to the program in total. These were the first announcement on May 10, 2010, that informed the markets of the new program; and the second was the announcement on August 7, 2011, that detailed the program's re-activation (Eser and Schwaab 2015).

5. **The ECB targeted bonds of a certain maturity.**

The SMP targeted bonds with maturities of two to ten years (Eser and Schwaab 2013).

6. **The ECB's official legal decision specified what was eligible for purchase under the SMP.**

Central banks could buy "eligible marketable debt instruments issued by the central governments or public entities of the Member States whose currency is in the euro" on the secondary market; and on both the primary and secondary markets, central banks could buy "eligible marketable debt instruments issued by private entities incorporated in the euro area" (ECB5).

7. **Any debt security purchased through the SMP was sterilized, which kept the program from impacting banks' holdings of central bank liquidity.**

Banks that received cash from a central bank in exchange for securities were required to engage in weekly liquidity-absorbing operations and keep the cash in fixed-term deposits, so as to "keep banks' holdings of central bank liquidity unchanged at the aggregate level" (ECB3, Eser and Schwaab 2015).

8. **The SMP was designed to have no impact on the Governing Council's monetary policy position.**

Thus, it would not impact inflation dynamics (ECB3). It remained neutral to the money supply, and did not impact M3 (the broad money aggregate of the euro area) (ECB3).

III. Evaluation

A comprehensive evaluation of the SMP is somewhat difficult because, while it is similar to asset purchase programs, it differs in several significant ways, and as such cannot be evaluated fully by existing frameworks. Reviews of the SMP's effectiveness are mixed.

The SMP was a politically controversial program, and its proposal was met with mixed reviews within the ECB's Governing Council. Axel Weber, then the president of the Bundesbank, publicly criticized it.[7] When the program was expanded for its second iteration in August 2011, Jürgen Stark (a German member of the ECB's Executive Board), publicly stated his opposition to the program, and subsequently announced his resignation

[7] Mr. Weber's public criticism of the SMP was surprising, as at the time he was considered the "default favorite" to succeed Jean-Claude Trichet as president of the ECB. However, he spoke out against the SMP on multiple occasions, including at a speech in New York, where he stated, "As the risks associated with the SMP outweigh its benefits, these securities purchases should now be phased out permanently" (Ewing 2010).

from the Executive Board in September 2011.[8] Gibson et al. (2015) proposed that "such opposition to the program, especially since it came from members of the Governing Council who were from the euro-area's largest economy, may have affected its effectiveness," and note the existence of press reports issued at the time that questioned the SMP's future.

Notably, and unlike other central bank asset purchase programs, SMP purchases were conducted during a sovereign debt crisis – in fact, during the most acute points of the debt crisis and in the markets most impacted by the crisis, which sets the program apart from other asset purchase programs such as the Federal Reserve's Large Scale Asset Purchases and the Bank of England's quantitative easing (Eser and Schwaab 2015). The fact that the interventions were carried out in periods of such stress must be considered in the program's evaluation (Manganelli 2012).

Additionally, the SMP program was fully sterilized, as the ECB did not want the program to interfere with its monetary policy goals; at the time, the ECB was focused on controlling inflation. This sets the program apart from the Fed's and Bank of England's asset purchase programs, which sought to promote accommodative monetary policies under the guise of quantitative easing.

Eser and Schwaab, two ECB economists, found that "the SMP had a significant average [yield] impact per €1 billion of bond purchases in all the stressed euro area countries." They used time series panel data regression to examine the yield impact of SMP purchases and dispute the idea that the SMP was ineffective because yields rose as the purchases were being conducted. Rather, they argue, simple and common regression-based techniques that examine yield changes "neglect the presence of common factors, such as the escalating sovereign debt crisis [which] partly explain…the rising yields" (Falagiarda and Reitz 2015).

Their framework examines whether, after controlling for other variables, yields in markets subject to the SMP rose less than yields in market where purchases were not undertaken. While noting that additional factors need to be taken into account for more specific calculations in the future, they determine that "yield changes and SMP purchase amounts at a daily frequency are positively correlated for most SMP countries when interventions took place," and that Greece and Portugal particularly benefitted from the program (Eser and Schwaab 2015).

[8] Mr. Stark opposed the bond-buying program since its inception; while the official ECB statement on his resignation cited "personal reasons," "those familiar with his thinking cited his wide-ranging worries about steps being taken by the ECB and other central banks globally" (Atkins et al. 2011).

Ghysels et al.[9] found that "SMP interventions succeeded in reducing yields and volatility of government bond segments of the countries under the program" (Falagiarda and Reitz 2015).

Ghysels et al. used high frequency data on SMP purchases and sovereign bond quotes and found that the SMP was, in fact, effective at reducing yields on government bonds in the countries under the program. They write that "the mere announcement of the central bank intervening in the secondary market had an immediate and obvious impact on government bond yields and spreads," noting that spreads on 10-year Greek government bonds fell by over 400 basis points on May 10, 2010 (the day the program was announced), while spreads on Italian and Spanish bonds fell by almost 100 basis points on August 8, 2011, after the ECB released an announcement detailing the second wave of purchases.

Ghysels et al. 2016 used a VAR model to calculate their own evaluation of the SMP intervention. Their estimates show that the SMP interventions effectively dampened the upward pressure on yields of government bonds for all countries under the program except Greece, and that this dampening impact persisted in a notable way for another day in many countries. They also found that SMP purchases had a statistically significant dampening impact on yield volatility for most of the countries and various maturities under the program (Ghysels et al 2016).

De Pooter et al. found "statistically significant stock and flow effects on sovereign bonds liquidity premia in response to official purchases" (Falagiarda and Reitz 2015).

De Pooter, Martin, and Pruitt developed an asset-pricing model to examine the SMP's impact on peripheral European bond yields, particularly on the liquidity premium component of yields. They concluded that "some market commentary claimed that the SMP was a failure because a large number of consecutive purchases were deemed necessary, yet peripheral bond spreads often rose soon after the ECB stepped out of the market."

De Pooter, Martin, and Pruitt further address criticisms over the ECB's repeated entry into sovereign bond markets, noting that official government purchases can crowd out private sector investment, necessitating a brief wait until market participants look to sell more bonds and government re-entry is viable. Overall, they conclude that this implies "the ECB's repeated entry into sovereign bond markets was a necessary feature of their targeting liquidity premia, not an indication of the SMP's failure" (De Pooter et al 2015).

[9] Three out of four of this paper's authors were affiliated with the European Central Bank at the time of publication.

IV. References

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V. Key Program Documents

Summary of Program

- Decision of the European Central Bank of 14 May 2010 establishing a securities markets programme – technical summary of the program
  https://www.ecb.europa.eu/ecb/legal/pdf/en_dec_2010_5__f_sign.pdf?d69f741524fa86e19f437bc9177292d3
- Asset purchase programmes – broad summary of the suite of ECB asset purchase programs, including the SMP
  https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html

Legal/Regulatory Guidance

- Statute of the ESCB and of the ECB – legal regulations for the program
  https://www.ecb.europa.eu/ecb/legal/1341/1343/html/index.en.html

Press Releases/Announcements

- Statement by the President of the ECB, Press Release August 7 2011 – announcement of the SMP
  https://www.ecb.europa.eu/press/pr/date/2011/html/pr110807.en.html
- Details on securities holdings acquired under the Securities Markets Programme – press release by the ECB
  https://www.ecb.europa.eu/press/pr/date/2013/html/pr130221_1.en.html
- ECB decides on measures to address severe tensions in financial markets – announcement of the SMP
  https://www.ecb.europa.eu/press/pr/date/2010/html/pr100510.en.html

Media Stories

- ECB resignation hits global markets (Atkins et al. 2011) – discusses the sovereign debt crisis and tensions surrounding the implementation of the SMP
  https://www.ft.com/content/790ba3ba-daec-11e0-a58b-00144feabdc0
- Central banker takes a chance by speaking out (Ewing 2010) – article discussing the politics of the SMP
  https://www.nytimes.com/2010/11/02/business/global/02weber.html?login=smartlock&auth=login-smartlock

Reports/Assessments

- A high-frequency assessment of the ECB Securities Markets Programme (Ghysels et al. 2017) – a more quantitative analysis of the SMP; several of the authors are ECB affiliates https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1642.pdf?1bdb15cbcae0548d98610f8e020f7b5c