The European Central Bank's Securities Markets Programme (ECB GFC)

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Securities Markets Programme\textsuperscript{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 (ECB) instituted the Securities Markets Programme (SMP) on May 9, 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

\textsuperscript{1} This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering the responses to the global financial crisis that pertain to market liquidity programs.

Cases are available from the \textit{Journal of Financial Crises} at https://elis scholar.library.yale.edu/journal-of-financial-crises/.

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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 (ECB) 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.

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 to be held until maturity; as of October 26, 2018, the SMP portfolio held nearly €73 billion at amortized cost.

Summary Evaluation

A comprehensive evaluation of the SMP is difficult to conduct because although 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 at the height of the sovereign debt crisis, it is

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3 The exact start date of the program is unclear. The program itself was announced May 9 and the details of program was announced on May 10, but the official legal decision signed on May 14 details that the program came into effect the day after its publication on the European Central Bank (ECB) website.
difficult to isolate whether yields rose despite the program or due to other interfering factors. Additionally, the SMP was a politically controversial program.
I. Overview

Background

The entire European Union found itself adversely impacted by the sovereign debt crisis. On Thursday, May 6, 2010, 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 (See Figure 1) (Skrekas, Granitsas, and Davis 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 (ECB) 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 (ECB5; ECB6).

Figure 1: Ten-Year Government Bond Spreads for Selected Euro Area Countries vis-à-vis the German Bund

Source: ECB7

Cour-Thimann and Winkler4 (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

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4 Both of these authors are affiliated with the ECB.
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, referred to here 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 relaunched 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\(^5\) (Ghysels et al. 2017). Overall, the program ran for a nearly two years.

The program’s goal was “to ensure [market] depth and liquidity and restore an appropriate monetary policy transmission” (Ghysels et al. 2017; ECB4).

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 of the European Central Bank. The ECB’s official announcement of its decision to launch the program 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 which securities were 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 10 years (Eser and Schwaab 2013).

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

On September 6, 2012, the ECB Governing Council ended the SMP and implemented the Outright Monetary Transactions (OMT) program, which is a separate yet similar program (ECB6; Eser and Schwaab 2016). All securities purchased under the SMP were to be held until maturity (ECB6).

**Outcomes**

Purchases made under the SMP totaled €218 billion (ECB1) at the time of the program’s expiration. A breakdown of the purchases by country and by average remaining maturity is

\(^5\) 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).
presented below in Figure 2. As can be seen, 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

<table>
<thead>
<tr>
<th>Issuer country</th>
<th>Outstanding amounts</th>
<th>Average remaining maturity (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal amount (EUR billion)</td>
<td>Book value (EUR billion)</td>
</tr>
<tr>
<td>Ireland</td>
<td>14.2</td>
<td>13.6</td>
</tr>
<tr>
<td>Greece</td>
<td>33.9</td>
<td>30.8</td>
</tr>
<tr>
<td>Spain</td>
<td>44.3</td>
<td>43.7</td>
</tr>
<tr>
<td>Italy</td>
<td>102.8</td>
<td>99.0</td>
</tr>
<tr>
<td>Portugal</td>
<td>22.8</td>
<td>21.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>218.0</strong></td>
<td><strong>208.7</strong></td>
</tr>
</tbody>
</table>

*Source: ECB1*

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 (CBPP1, CBPP2). Further information on the CBPP programs can be found in their individual cases (see CBPP 2020).

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 reabsorb 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; the program 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).

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 of the European Central Bank.**

The authorizing 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, 2010, 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 an additional €250 billion supplied by the International Monetary Fund. They also included the reintroduction of nonstandard 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 US Federal Reserve (the Fed). 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

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\(^6\) At amortized cost.
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, Martin, and Pruitt 2015; Eser and Schwaab 2016).

The program released only two formal announcements related to the program in total. The first (formal) announcement on May 10, 2010 informed the markets of the new program, which came a day after the ECB mentioned the need for such policy (ECB5; Trebesch and Zettelmeyer 2018). The second was the announcement on August 7, 2011, that detailed the program’s reactivation as of that date (Eser and Schwaab 2016).

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

The SMP targeted bonds with maturities of two to 10 years (Eser and Schwaab 2013).

6. **The ECB’s official legal decision specified which securities would be 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 2016).

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. 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 from the Executive Board in September 2011. Gibson, Hall, and Taylas (2016) 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 Fed’s large-scale asset purchases and the Bank of England’s quantitative easing (Eser and Schwaab 2016). 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).

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7 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).

8 Stark had 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).
Their framework examines whether, after controlling for other variables, yields in markets subject to the SMP rose less than yields in markets 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 benefited from the program (Eser and Schwaab 2016).

Ghysels et al. (2017)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). They 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 more than 400 basis points on May 9, 2010 (the day the program was formally 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. used a vector autoregression model to calculate their 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. 2017).

De Pooter, Martin, and Pruitt 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 (2015) 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.” They further addressed 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 reentry is viable. Overall, they concluded 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, Martin, and Pruitt 2015).

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9 Three out of four of this paper’s authors were affiliated with the European Central Bank at the time of publication.
IV. References


V. Key Program Documents

Summary of Program


Legal/Regulatory Guidance


Press Releases/Announcements


Media Stories


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.