The ECB's securities markets programme
An analysis of economics, law and central bank independence

Leon Helm
The ECB's securities markets programme
An analysis of economics, law and central bank independence

Leon Helm

Supervisor: Benedicta MARZINOTTO

Thesis presented by Leon HELM for the Degree of Master of Arts in European Interdisciplinary Studies

Academic year 2011/2012
ABOUT THE AUTHOR

Leon Helm, born 1982, is a lawyer currently training for the bar exam at the regional court of Frankfurt, Germany. He studied law in Mainz and Cologne and holds the first state exam in law (2010), as well as a Master’s degree in European Interdisciplinary Studies from College of Europe, Natolin (2012). He participated in the Erasmus student exchange program at Université Paris XII, France (2005).

Leon is specialized in banking and capital markets law. Parts of his training are confirmed to take place at the European Central Bank, the German Bundesbank and at Linklaters LLP.

COLLEGE OF EUROPE NATOLIN CAMPUS

SCIENTIFIC COMMITTEE

Hannes Adomeit, Kerry Longhurst, Georges Mink

Views expressed in the College of Europe publications are solely those of the author and do not necessarily reflect positions of the College of Europe.
STATUTORY DECLARATION

I hereby declare that this thesis has been written by myself without any external unauthorised help, that it has been neither submitted to any institution for evaluation nor previously published in its entirety or in parts. Any parts, words or ideas, of the thesis, however limited, and including tables, graphs, maps etc., which are quoted from or based on other sources, have been acknowledged as such without exception.

Moreover, I have also taken note and accepted the College rules with regard to plagiarism (Section 4.2 of the College study regulations).

DÉCLARATION SUR L'HONNEUR

Je déclare sur l'honneur que ce mémoire a été écrit de ma main, sans aide extérieure non autorisée, qu’il n'a été déposé auparavant dans aucune autre institution pour évaluation, et qu’il n'a jamais été publié, dans sa totalité ou en partie. Toutes parties, mots ou idées, aussi limités soient-ils, y compris des tableaux, graphiques, cartes, etc. qui sont empruntés ou qui font référence à d'autres sources bibliographiques sont présentés comme tels, sans exception aucune.

Je déclare également avoir pris note et accepté les règles relatives au plagiat (section 4.2 du règlement d'études du Collège).
Key words

European Central Bank · Securities Markets Programme · Central Bank Independence
# The ECB's securities markets programme – An analysis of economics, law and central bank independence

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>VIII</td>
</tr>
<tr>
<td>Introduction: The Natolin Best Master Thesis</td>
<td>XII</td>
</tr>
<tr>
<td>Preface of the Master Thesis Supervisor</td>
<td>XV</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2. Monetary Policy Transmission and the SMP</td>
<td>3</td>
</tr>
<tr>
<td>2.1. Overview: Instruments of ECB monetary policy</td>
<td>3</td>
</tr>
<tr>
<td>2.2. Monetary Policy Transmission Mechanism</td>
<td>5</td>
</tr>
<tr>
<td>2.2.1. Introduction</td>
<td>5</td>
</tr>
<tr>
<td>2.2.2. The channels of transmission</td>
<td>6</td>
</tr>
<tr>
<td>2.2.2.1. Interest Rate Channels</td>
<td>7</td>
</tr>
<tr>
<td>2.2.2.1.1. Short term interest rates (money market)</td>
<td>8</td>
</tr>
<tr>
<td>2.2.2.1.2. Retail rates</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2.1.3. Time lag and disturbances</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2.1.4. Long term interest rates</td>
<td>10</td>
</tr>
<tr>
<td>2.2.2.1.5. LTI and liquidity effect</td>
<td>12</td>
</tr>
<tr>
<td>2.2.2.1.6. Link between short-term and long-term interest rates</td>
<td>12</td>
</tr>
<tr>
<td>2.2.2.2. Bank Lending Channel</td>
<td>13</td>
</tr>
<tr>
<td>2.2.2.3. Asset Price Channel</td>
<td>15</td>
</tr>
<tr>
<td>2.2.2.4. Government bonds as collateral</td>
<td>16</td>
</tr>
<tr>
<td>2.2.2.5. Exchange Rate Channel</td>
<td>16</td>
</tr>
<tr>
<td>2.2.2.6. Expectations</td>
<td>17</td>
</tr>
<tr>
<td>2.3. The Securities Markets Programme (SMP)</td>
<td>19</td>
</tr>
<tr>
<td>2.3.1. Introduction</td>
<td>19</td>
</tr>
</tbody>
</table>
2.3.2. Purpose and affected channels according to the ECB
  2.3.2.1. Interest rate channel 21
  2.3.2.2. Asset price channel 21
  2.3.2.3. Bank lending channel 22
2.3.3. Malfunctioning markets? 22
2.3.4. Functioning of the SMP
  2.3.4.1. Interest rate channel 27
  2.3.4.2. Asset price channel 27
  2.3.4.3. Bank lending channel 28
2.3.5. Public perception and criticism 28
2.3.6. Legal basis, decision-making and implementation 32
  2.3.7. Size and trend 32
  2.3.8. Sterilization 33
2.3.9. Concluding statement 35

3. A legal perspective on the SMP 37

3.1. Introduction 37

3.2. Applicability of Article 125 TFEU 38

3.3. ECB competence for bond purchases 40
  3.3.1. Opinion one: No competence 40
  3.3.2. Opinion two: Within competence 40
  3.3.3. Concluding statement 41

3.4. Breach of the ECB’s no bailout clause Article 123 paragraph 1 TFEU? 42
  3.4.1. Opinion one: Breach 42
  3.4.2. Opinion two: Compliance 42
  3.4.3. Concluding statement 43

3.5. Marketable instruments 45
  3.5.1. Opinion one: Purchased bonds are not marketable 45
  3.5.2. Opinion two: Purchased bonds are marketable 45
  3.5.3. Concluding statement 46

3.6. Conclusion 47
Summary

This thesis analyzes the ECB’s Securities Markets Programme (SMP) from a point of view of economics, law and central bank independence. To this end, the questions raised are if monetary policy transmission is disturbed; if this represents a market malfunction; through which channels the SMP works; and if liquidity sterilization is successful. The SMP’s compliance with EU law and its impact on central bank independence are equally examined.

In the economic literature dealing with the transmission of monetary policy, Angeloni, Kashyap and Mojon (2003) provide an analysis dealing with the specialties of this process in the Eurozone. They identify the impact of different traditions of customer/bank relationships in the Member States. In the legal debate, Ruffert (2011) is the most outspoken critic of the ECB’s role in containing the financial crisis and considers the SMP a breach of EU law, especially of the ECB no bailout clause. Louis (2010) and Herrmann (2010) contest this view, based on the notion that the SMP purchases are open market operations, for which there is an explicit derogation in said clause of the Treaty. With regard to central bank independence, Woolley (1984) distinguishes between political and functional independence. Cukierman (1992) adds personal and financial independence. Debelle and Fischer (1994) established the concept of goal- and instrument independence, which fits in the broad category of political independence, but focuses on the degree of freedom a central bank has in setting and pursuing monetary policy. Stella (2005) and Belke (2010) point out the risks to independence that arise from possible default-induced losses on bonds held by a central bank.

The first chapter of the present thesis concerns the economic functioning of monetary policy transmission and whether or not this process is disturbed. To this end, the concepts of disturbance and malfunctioning will be distinguished. Different interpretations of the assumed disturbance will then be discussed to see if it constitutes a market malfunction. The chapter will then try to identify the channels through which the SMP works. Finally, it will be assessed if liquidity sterilization has been successful. The second chapter deals with several legal issues of the SMP, mainly its compliance with the ECB no bailout clause. The third and last chapter then analyzes the SMP’s impact on central bank independence.

While a disturbance of monetary policy transmission can be confirmed, there is no evidence for or against the assumption of malfunctioning markets. The SMP targets this disturbance through the interest rate-, asset price- and bank lending channels. Sterilization has been successful except for five occasions. What is more, the SMP fully
complies with EU law, this also includes the ECB no bailout clause in Art. 123 TFEU. However, the SMP does represent a potential danger to the ECB’s political, functional and financial independence, as it links monetary policy to Member State behavior, thus blending monetary and fiscal policy. Furthermore, the ECB is exposed to the risk of losses from defaulting bonds. This may make Member State financial support necessary, which in turn would undermine the ECB’s independence and credibility. The SMP gives Member States potential leverage over the ECB in the areas of political, functional and financial central bank independence. This leverage will continue to exist until all bonds purchased under the SMP have either matured or been sold.
Introduction: The Natolin Best Master Thesis

Prof. Georges Mink
Director of studies
College of Europe (EIS programme, Natolin Campus)
Directeur de Recherche au CNRS (France)

The College of Europe (CoE) was the world’s first university institute of postgraduate studies and training specialised in European affairs. Its origins date back to the 1948 Hague Congress. Founded in Bruges (Belgium) in 1949 by leading European figures such as Salvador de Madariaga, Winston Churchill, Paul-Henri Spaak and Alcide de Gasperi, the idea was to establish an institute where university graduates from many different European countries could study and live together. The Natolin campus of the College of Europe in Natolin, Warsaw (Poland) was established in 1992 in response to the revolutions of 1989 and in anticipation of the European Union's 2004 and 2007 enlargements. The College of Europe now operates as 'one College - two campuses'.

The European Interdisciplinary Studies (EIS) programme at the Natolin campus invites students to view the process of European integration beyond disciplinary boundaries and offers them a well-rounded understanding of the European Union. Students are awarded a 'Master of Arts in European Interdisciplinary Studies'. This programme takes into account the idea that European integration goes beyond the limits of one academic discipline and is designed to respond to the increasing need for experts who have a more comprehensive understanding of the European integration process and European affairs.

The EIS programme is open not only to graduates in Economics, Law or Political Science, but also to graduates of History, Communication Studies, Languages, Philosophy, or Philology who are interested in pursuing a career in European institutions or European affairs in general. This academic programme and its professional dimension prepare graduates to enter the international, European and national public sectors as well as non-governmental and private sectors. For many, it also serves as a stepping stone towards doctoral studies. Recognised for its academic excellence in European studies, the Natolin campus of the College of Europe has endeavoured to enhance its research activities. A programme aimed at producing high-quality research on EU internal and external policies in line with the specificities of the EIS academic programme was designed in 2010. This has been joined by the recent creation of two Chairs; the European Parliament Bronislaw Geremek European Civilisation Chair and the European Neighbourhood Policy Chair.

X
Beyond research and policy-oriented workshops and conferences, a new series of Publications has been created. The first issues were published in 2011, including a series on the EU and the neighbourhood as well as the inaugural “Natolin Best Master Thesis” publications. In order to get their Masters degree all students are required to write a Thesis within the framework of one of the course they follow during the academic year. The research theme chosen by the student or proposed by the Professor supervising the Thesis must be original and linked to European policies and affairs. An interdisciplinary approach is also encouraged. Masters theses are written either in French or in English, the two official languages of the College of Europe, often not the native language of the students. A scientific committee selects the Best Masters Theses among more than 100 produced on the campus every year. By publishing them, we are proud to disseminate some of the most interesting research produced by our students throughout the wider European studies academic community.
Preface of the Master Thesis Supervisor

DR. BENEDICTA MARZINOTTO
PART-TIME PROFESSOR
COLLEGE OF EUROPE, NATOLIN CAMPUS, WARSAW

The thesis of Mr Leon Helm looks at an extremely topical issue, namely so-called non-standard operations, which the European Central Bank (ECB) has been running since the outbreak of the euro area debt crisis. More precisely the thesis deals with the ECB’s purchase of high-yield government bonds on secondary markets, a programme known as Securities Market Programme (SMP). ECB President Mario Draghi justified the activation of the SMP by stating that the intervention was meant to correct the impaired monetary policy transmission in the euro area, something for which the ECB has direct responsibility. Critics of the programme suggested on the other hand that the SMP de facto consists of public debt financing, which EU Treaties in fact prohibit.

Mr Helm addresses the issue from an empirical as well as legal perspective, whilst also engaging in a more forward-looking analysis considering as to whether the behaviour of the ECB in the crisis is such that it could potentially undermine its independence. His piece of work thus assesses the extent to which there were truly disturbances in the monetary policy transmission mechanism, whether the SMP has been effective in addressing them, how the programme relates to EU law and how it would eventually impact on ECB independence.

It is the first time that the ECB activates the SMP. This explains why the literature on the topic is limited, mostly technical or presented in the form of commentary and eventually rather inconclusive considering also that it is too early for a proper assessment of how this instrument has impacted on the independence of the ECB. Thus, part of the merit of this thesis is that it provides an original analytical framework for analysing the matter. The author provides interesting analytical categories to assess the subject, for example, disturbances in the monetary transmission mechanism and uses both theory and empirical evidence to develop an answer to what is a clearly defined research question. The work is organised into three parts.

The first describes basic concepts in monetary economics, focusing on the features of the monetary policy transmission process and on the different channels though which interest rate decisions by central banks are transmitted to the real economy. To the same section belongs the description of the functioning of the SMP and an assessment of the success of liquidity sterilization. The author concludes that monetary policy transmission in the euro area is in fact impaired.
Of particular relevance here is the analytical distinction between disturbance and malfunctioning. The author defines the two concepts as follows: Disturbance and malfunction differ in that a disturbance means that the monetary policy impulse is not transmitted through the different channels to the economy and to price levels as should normally be the case. The concept of malfunction on the other hand implies that not only is there a problem with monetary policy transmission, but also that this problem is not justified. To give an example, if investors refuse to buy certain bonds because there are clinical signs of increased default risk, this may disturb monetary policy transmission. However it is not a malfunction because this reaction is justified, a reasonable reaction based on facts. Even if this distinction is not complete enough so that the author can conclude in favour of one or the other, it is still a useful analytical tool for understanding the terms of the discussion and variety of the views that animate it. This section is also enriched with a detailed description of the views of different central bankers, thereby nicely mapping perceptions of the SMP in Europe.

The second part discusses the legal argument, providing details of the different views on whether the SMP fits with the EU Treaty’s no bail out clause or not. In assessing how the SMP relates to EU law, the author distinguishes between four methods of interpreting law: the grammatical, the systematic, the historical and the teleological interpretation. This approach provides added value to the study. This section concludes that the SMP is largely in line with the legal framework in which the ECB operates, a conclusion that is consistent with the previous one about monetary policy transmission.

The third part of the thesis makes a step forward, as it assesses whether the SMP has the potential to compromise the independence of the ECB. The author distinguishes between different dimensions and/or definitions of independence: political, functional, and financial independence of central banks. He concludes that, whilst independence has not been compromised as yet, the risk is there and is mostly associated with two facts. First, the ECB is given a sort of political role that is in contrast with the spirit under which the SMP was activated, insofar as it is involved in the monitoring of the reform process made by programme countries such as Greece, Ireland and Portugal, the same countries whose government bonds the ECB purchased on secondary markets through the SMP. Second, default by the countries that have benefited from the SMP purchase would generate losses that would put the ECB in an awkward position vis-a-vis national central banks and ultimately governments in Europe.

All in all, Mr Helm's thesis tackles an extremely important issue; it provides a solid description of the relevant issues at stake and a set of well-balanced opinions. It is worth a read.
1. Introduction

On May 10, 2010 the European Central Bank initiated a groundbreaking program of monetary policy implementation, the so-called Securities Markets Programme, or SMP. The program consists of targeted purchases of Eurozone public and private bonds in the secondary markets. It was called into existence in order to ensure the proper transmission of monetary policy impulses in sectors of the bond markets that the ECB considered to be malfunctioning. This concerned mainly the bonds of Euro Member States in financial distress. These securities exhibited plummeting prices and thus increasing interest rates, in a time where the ECB had drastically lowered key interest rates. The rationale of the SMP consists of purchasing these bonds in the secondary market in order to bring up their prices. This, in turn, will reduce their interest rates, putting them more in line with the general development on interest rates in the market and the monetary policy impulses of the ECB. The program is highly controversial, as it raises fears of monetization of public debt. Many observers also consider it an infringement of EU law and detrimental to central bank independence. The debate is led not only in academia and the public square, but also on the highest level of EU Member States governments. The implications are both economic and political, with fear of inflation caused by a larger monetary base as a result of the bond purchases and worries about undue political influence on the ECB in the center of attention.

This thesis is going to analyze the SMP from an economic, legal and political point of view. The first chapter deals with economics. The main questions are whether monetary policy transmission was indeed disturbed and if this disturbance constitutes a malfunctioning of the markets. Disturbance and malfunctioning will be distinguished. Whereas a disturbance means that the monetary policy impulse is not being fully transmitted through the different channels to the economy and to price levels as should be, a malfunction implies that not only there is a problem with monetary policy transmission, but also that this problem is not justified, for example due to different country risk. In case of a disturbance, the thesis will identify the affected channels of monetary policy transmission and show how the SMP targets them. Furthermore, the
attempts by the ECB to sterilize the liquidity provided by the SMP will be assessed in order to determine if sterilization has been successful.

Concerning the compliance of the SMP with EU law, the second chapter will explore which provisions of EU law are applicable to the ECB in the first place. It is then going to assess whether the ECB has legal competence for purchasing bonds and whether these purchases violate the so-called 'no bailout clause' of Art. 123 TFEU. Next, the question whether the purchased bonds are eligible for purchase at all will be addressed.

Finally, the third chapter deals with the central bank independence (CBI) dimension of the SMP. The aim is to examine if the SMP affects the ECB’s independence. First, the thesis will recall the four categories of personal, political, functional and financial independence. It will then analyze the ECB’s level of CBI and assess if the SMP impacts it.
2. Monetary Policy Transmission and the SMP

2.1. Overview: Instruments of ECB monetary policy

The ECB disposes of three regular instruments of monetary policy: Open market operations, the standing facilities and minimum reserve requirements. All instruments serve to implement monetary policy by transmitting changes in interest rates and managing the amount of liquidity provided to the banking system. Monetary policy is mainly implemented by NCBs (national central banks).1 The following chart displays details on the instruments:

---

## Chart 1: Instruments of ECB Monetary Policy

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>Frequency</th>
<th>Maturity</th>
<th>Implementation</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open Market Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Main Refinancing Operations</strong></td>
<td>reverse transactions (repurchase agreements or collateralized loans)</td>
<td>weekly</td>
<td>one week</td>
<td>NCBs</td>
<td>standard tender</td>
</tr>
<tr>
<td><strong>Long-term Refinancing Operations</strong></td>
<td>reverse transactions</td>
<td>monthly*</td>
<td>three months†</td>
<td>NCBs</td>
<td>standard tender</td>
</tr>
<tr>
<td><strong>Fine-tuning operations</strong></td>
<td>reverse or outright transactions, forex swaps, fixed-term deposits</td>
<td>ad hoc</td>
<td>irregular</td>
<td>NCBs</td>
<td>Quick tenders, bilateral procedures</td>
</tr>
<tr>
<td><strong>Structural operations</strong></td>
<td>reverse or outright transactions, issuing debt certificates</td>
<td>ad hoc</td>
<td>irregular, regular</td>
<td>NCBs/ECB</td>
<td>standard tender/ bilateral procedures</td>
</tr>
<tr>
<td><strong>Standing Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marginal Lending F.</strong></td>
<td>liquidity against eligible collateral</td>
<td>depends on depositor</td>
<td>overnight</td>
<td>NCBs</td>
<td></td>
</tr>
<tr>
<td><strong>Deposit F.</strong></td>
<td>take in deposits</td>
<td>depends on depositor</td>
<td>overnight</td>
<td>NCBs</td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Reserve Requirement</strong></td>
<td>banks deposit of 1% of certain balance sheet positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* possible maturity (6/12 months) and frequency deviation

**Source:** Deutsche Bundesbank

2.2. Monetary Policy Transmission Mechanism

2.2.1. Introduction

The transmission of monetary policy impulses from the central bank to the real economy and to price levels is subject to diverging views in the literature. The two main schools of thought are the credit-based or interest rate oriented approach on the one hand, and the portfolio based, monetarist approach on the other hand.4

The credit-based approach focuses mainly on the interest rate as the key factor in transmitting monetary policy impulses. Monetary policy sets interest rates which decrease or increase the amount of money available to banks, which in turn affects firstly interest rates on credit and thereby the demand for credit, and secondly investment. More or less investment then leads to an impact on demand for goods, which finally affects the price levels.5

The portfolio oriented approach focuses on people's asset allocation rather than availability of credit. It assumes that for each individual, there is a portfolio balance, meaning that people hold different assets in different quantities according to the liquidity of assets. If the central bank changes the supply of money to the economy by open market operations, the percentage of money in people's portfolios rises to an undesired level. This causes people to purchase goods, services and financial assets with part of the excess liquidity, in order to restructure their portfolio. These purchases naturally increase the price; in case of bonds, their yield is reduced.6 A change in price levels has occurred.

The ECB adopts a rather pragmatic approach which combines aspects of both channels. It distinguishes two steps in the monetary policy transmission process. In the first step, a change in ECB interest rates on its open market operations and standing facilities, or a change in base money, will change money market conditions. As a result, financial market conditions change through different channels like asset prices and market interest rates as well as retail rates of the banking sector.7 In the second step, the altered conditions on the financial markets affect households' nominal spending on goods and

---

4 Gerhard Mussel, Grundlagen des Geldwesens, Sternenfels, Verlag Wissenschaft und Praxis, 2011, 8th, p.176
5 Ibid.
6 John Sloman, Economics, Harlow, Pearson, 2003, 5th, p.524
services. As retail rates change, so does the cost of capital to firms wishing to invest and households wishing to buy durable consumer goods. Also, changes in interest rates affect income of creditors and overall wealth through asset prices, though both effects are considered small. The impact on the exchange rate however is significant. These factors will eventually lead to a change in general price levels.

2.2.2. The channels of transmission

The different mechanisms through which monetary policy is transmitted to the economy are described as ‘channels’. The exact categorization of the channels varies between authors. Sometimes, one mechanism is described as a channel of its own, sometimes the same mechanism may be classified as a subcategory of another channel. However, the literature agrees on the main transmission channels.

**Chart 2: Monetary policy transmission**

The diagram illustrates the main transmission channels of monetary policy. The ECB rate change is the starting point, with short-term rates (money market) as the interest rate channel. This leads to changes in retail rates and long-term rates, which in turn affect asset prices, bank lending, exchange rates, and expectations. These factors influence the supply and demand for goods and services, and ultimately impact price levels.

**Source:** Author, inspired by ECB

---


2.2.2.1. Interest Rate Channels

The Interest Rate Channels cover both short term and long term rates, however they take effect through long-term rates. The ECB influences interest rates on the money market by two measures: Changes in ECB key interest rates of the standing facilities and open market operations, and liquidity provision through competitive tenders.11 A change in ECB interest rates affects both the money market (short term rates) and long term interest rates. Short term rates are mainly measured by the EONIA (Euro Over Night Index Average; for overnight loans)12 and EURIBOR (Euro Inter Bank Offered Rate; for term deposits of weeks or months)13 interest rates.

The term structure of interest rates is displayed in the yield curve. Yield is defined as “the return to the investor expressed as an annual percentage”14. Debt with identical risk and liquidity but different maturity has a different interest to pay precisely because of the variation in term to maturity. According to the expectations theory of interest rate term structures, interest rate demand for long term bonds consists of the expected average interest rate on short term bond interest during the term of the bond. Therefore, if investors expect the short term rates to rise, the average of rates paid during the duration of the long term bond is obviously going to be higher than the interest rate that is currently pay for short term bond. This would lead to an upward sloping, ‘normal’ yield curve.15 Thereby, the yield curve serves as an indicator of market expectations of interest rates. If the curve is downward sloping, then expectations predict falling short term rates; the yield curve is said to be ‘inverted’. A flat curve suggests the expected short term rates to stay the same on average.16 Curves often slope upwards also because investors demand an interest premium to compensate for the increased risk of inflation over longer holding periods.17

Chart 3 below visualizes a ‘normal’ and an ‘inverted’ yield curve.

11 Ibid., p.60
16 Ibid., p.135
2.2.2.1.1. Short term interest rates (money market)

Banks need money to comply with minimum reserve requirements and to react to money demand from autonomous factors. By definition, autonomous factors are “the sum of banknotes in circulation plus government deposits minus net foreign assets plus other factors”. They consist mainly of cashless payment transactions and bank customers’ demand for cash. Banks can acquire money either from the ECB or from other banks in the money market.

The minimum reserve requirements play a particularly crucial role in transmitting changes in the interest rates to the money market, since it is with this tool that the ECB creates a major part of the banks’ need for money. It then allots the money banks need at the ECB interest rates. This causes the money market rates to adapt subsequently:

Short term rates in the money market, see EONIA and EURIBOR above, depend on the ECB rates because the ECB rates for borrowing money (via open market operations and standing facilities) set the minimum point of reference for banks. Let’s assume for example that the ECB deposit facility pays an interest of \( x \) for overnight money. Commercial banks wishing to attract overnight money in the money market must at least offer the same rate plus a risk premium \( x + rp \) to compete with the ECB rate. If the

---

19 ECB Monthly Bulletin October 2010, op.cit., p.61
20 Deutsche Bundesbank, op.cit., p.135
21 Ibid.
22 ECB Monthly Bulletin October 2010, op.cit., p.61
ECB rate rises to $x+1$, banks must raise their rates as well, to $x+1+rp$, in order to stay competitive. This way, ECB key rate changes trickle down to the interbank markets.

2.2.2.1.2. Retail rates

Loan interest rates (retail rates) change because banks adapt the retail rates they charge their clients to changes in the ECB interest rates. Just like on the money market, the ECB rates serve as point of reference, as changes trickle down to consumers. The speed at which rate changes are passed through largely depends on the degree of competitive pressure in the banking sector.\(^{23}\) So when interest rates change, this affects loan interest rates and thereby the cost of capital. In turn, consumer spending is affected. This channel is called the interest rate or cost of capital channel.\(^{24}\)

2.2.2.1.3. Time lag and disturbances

Financial markets adapt to changes in key interest rates with a time lag. However, when monetary policy moves are anticipated by the financial markets, markets will adapt ahead of the actual decision. Then there is not a time lag, but on the contrary an adaption in advance.\(^{25}\)

The banking sector also responds with a time lag. In case of restrictive monetary policy for example, banks may still continue to give out credit if they have access to a large own stock of money.\(^{26}\)

Finally, consumers and firms also react with a certain delay as they realize and adapt to changes in credit conditions caused by the central bank’s decision.

Until the outbreak of the crisis in mid-2007, spreads between money market rates and the ECB’s main refinancing rate were indeed very narrow.\(^{27}\) However, this relationship holds only if there is a functioning money market. This can be impaired by lack of trust and subsequent rise in interbank credit cost. If interbank rates rise in spite of lowered ECB rates, monetary policy transmission is disturbed. When this occurred in 2007, the


\(^{26}\) Mussel, *op.cit.*, p.197

\(^{27}\) ECB Monthly Bulletin October 2010, *op.cit.*, p.61
ECB had to stabilize the money market by distributing EUR 95 bn. in overnight loans and starting additional three to six months refinancing operations to provide liquidity to the banking sector. It further propped up liquidity with fine-tuning operations.28

Fine-tuning operations are an instrument of monetary policy whereby the ECB adds or absorbs liquidity to the money market. They are conducted according to liquidity demand on the money market on an ad hoc basis. Quick tenders, outright sales and purchases, foreign exchange swaps and the taking in of temporary deposits are the ways in which these operations can be conducted. For a quick tender, the ECB buys a security from a bank, which receives money in return but is obliged to buy it back at a certain date (so-called repurchase agreement, or repo). A foreign exchange swap is kind of similar, as the ECB buys foreign currency from banks which it pays in euro, with the obligation of the bank to repurchase the currency at a certain point. During outright sales or purchases, the ECB acquires or sells securities ‘for good’. When the ECB takes in temporary deposits, banks temporarily deposit money on interest-bearing accounts with the national central banks that are part of the ESCB.29

2.2.2.1.4. Long term interest rates

When it comes to the impact on investment and consumption decisions, long term rates play the crucial role, unlike short-term rates.30 This is because significant investment requires big sums that take longer to repay, hence long term rates apply.

Long term financing takes place either though bank loans or on the capital market (stocks and bonds). This section will treat bonds, while bank loans will be treated in section 2.2.2.2. below. However, it is important to acknowledge at this stage that long term rates for government bonds are a means of orientation for long term bank loans to companies and consumers.31 Therefore, government bonds play the role of a benchmark for pricing corporate bonds as well as loans.32

Long term interest rates depend on supply and demand on the bond market. Bond supply is positively related to expected inflation and the public deficit.33 Expected

28 ECB Monthly Bulletin October 2010, op.cit., p.64
29 Mussel, op.cit., p.226
30 Deutsche Bundesbank, op.cit., p.137
31 Ibid., p.226
32 ECB Monthly Bulletin October 2010, op.cit., p.63
33 Mishkin, op.cit., p.102
inflation affects the real interest rate paid by the creditor \( r = i - \pi_e \), “Fisher parity”\). The higher the expected inflation, the lower the real interest, the better for creditors (bond issuers). As for a high public deficit, it means a high need for government borrowing, therefore bond supply increases.\)

Bond demand is positively related to wealth, bond liquidity and expected returns. This is because the more wealth, the higher the need to invest it; the more liquid a bond, the higher the possibility to sell it quickly if needed. As for expected returns, the higher they are, the more they entail an incentive to invest. Actual returns depend on the interest rate, the price at which the bond was purchased, taxes, and also inflation.\)

Bond demand is negatively related to risk. This is because the higher the risk of default of the issuer, the smaller the group of investors who dare take this risk, and the smaller the amount of money being exposed to this risk.\) At the same time, the perceived risk of a bond has an influence on its interest rate. The riskier the borrower, the higher the interest rate to compensate the lender for the risk he takes.\)

While the interest paid on a bond is usually fixed (“floaters” notwithstanding), bond prices rise and fall according to supply and demand on the market. This leads to an equilibrium price on the market. This market price influences the yield of the bond.\)

Bond interest rate and yield are related inversely to each other. The yield of a bond also indicates what interest rate the issuer will have to pay if he wishes to issue new bonds. Thereby, it also displays the market’s risk assessment of a bond and its issuer.\)

---


35 Mishkin, *op.cit.*, p.102

36 Ibid., p.92

37 Ibid.

38 Valdez, Molyneux, *op. cit.*, p.129

39 Ibid., p.150

40 Mishkin, *op.cit.*, p.80

41 The risk of the bond is equal to that of the issuer, who is obliged to repay the creditor. There are two exceptions in which the risk of a bond is independent to a certain degree: (i) if a bond is second tier, it is riskier than the issuer because in case of insolvency it will only be repayed after first-tier (higher ranking) debt; (ii) if a bond is asset-backed (covered), it is less risky than the issuer because in addition to the issuer’s ability to repay, the repayment is also secured by the collateral.
2.2.2.1.5. LTI and liquidity effect

A different approach to determining interest rates is to analyze demand and supply for money instead of for bonds. According to Friedman’s liquidity effect, increasing money supply leads to decreasing interest rates and vice versa if all other factors remain equal. This is because with equal demand, an abundant supply of money translates into a lower equilibrium interest rate. At the same time, the opportunity cost for holding money sinks because bonds yield a smaller return than before.42

Yet, this effect holds only in the short run: While the effect of higher money supply reduces interest rates instantly, over time it entails a rise in inflation.43 This is because monetary (nominal) variables are neutral, they do not affect real variables; in the long run, a rise in money supply does not change output, it only raises the amount of money.44 More money increases demand for goods (‘income effect’), but output of goods has not changed. Thus, money loses value. Inflation is created.45 Higher inflation can lead to higher inflation expectations, as people reckon rising future inflation rates. This reduces demand and raises supply of bonds, as stated above, which in turn leads to higher interest rates.46

To sum up, higher money supply temporarily reduces short term rates, but leads to higher interest rates in the long run.

2.2.2.1.6. Link between short-term and long-term interest rates

A major factor in determining long term rates are the expected interest rates over time. According to the expectations theory of the term structure of interest rates, the interest rate on long term bonds usually consists of the average short term rates investors expect until the bond matures.47

Long term rates react slower to monetary policy changes than short term rates, especially when investors are unsure whether short term rates will remain low.48

42 Mishkin op.cit., p.109, 110
43 Ibid., p.115
45 Ibid., p.614
46 Mishkin, op.cit., p.115
48 Gert Peersman, Frank Smets, The monetary transmission mechanism in the euro area: Evidence from
It is also through this mechanism that changes in short term interest rates are transmitted to long term interest rates. If short term rates go down due to monetary policy and investors expect short term rates to remain low, the average expected short term rates over a certain maturity decreases. In addition to that, investors compare short term and long term rates. If the price of money over the short term is very low, the high supply of money will lead to low interest rates also in the long term. This mechanism is crucial for understanding the Securities Markets Programme: If low short term rates do not lead to lower long term rates, the transmission process of monetary policy is impaired and additional central bank action is necessary.

2.2.2.2. Bank Lending Channel

Consumers and many small and medium-sized enterprises do not have access to capital markets for financing, so they rely on bank loans.\(^9\) In recent years, bank lending has become less important because alternative means of financing become more and more accessible even to SMEs.\(^9\) However, between 2004 and 2008, three quarters of external financing of non-banks in the Eurozone still depended on bank loans.\(^9\)

What is more, in the euro area there are significant differences between Member States. Depending on the structure of the banking sector, some countries as for example Germany and Austria, but also Italy and France, have a history of very tight-knit and long-lasting customer bank relationships. This ensures access to credit even in times of restrictive monetary policy, at least to some extent.\(^9\)

When the ECB changes interest rates, it affects both loan interest and loan supply. The following paragraphs concern loan supply and the broad credit channel (for loan interest rates see the interest rate channel above).

Loan supply is also affected by changed ECB key interest rates. Rising short term interest rates often leads to fewer overnight deposits in banks as investors move their funds in

---

\(^{49}\) Mishkin, \textit{op.cit.}, p.605

\(^{50}\) ECB Monthly Bulletin October 2010, \textit{op.cit.}, p.63

\(^{51}\) Ibid., p.62

\(^{52}\) Michael Ehrmann, Leonardo Gambacorta, Jorge Martinez-Pagés, Patrick Sevestre, Andreas Worms, \textit{Financial systems and the role of banks and monetary policy transmission in the euro area}, in Angeloni el.al.(eds.), p.242
search of higher returns. This lowers banks' deposits and thus their ability to give out loans.\(^{53}\)

The price of bank equity is another factor that may restrict bank lending because of capital adequacy ratio requirements. If bank stocks lose value as a result of tightening monetary policy, the value of their equity goes down. At the same time, risk taken by giving out loans has remained unchanged. Regulations on capital requirements may force banks to either issue new equity (which is not always an easy option) to bring up the equity side of the equation, or on the other hand, banks can reduce risk by restricting further lending.\(^{54}\) Therefore, financial markets suffer from the frictions that impair their efficiency and the transmission of monetary policy.\(^{55}\) However, the capitalization has a much stronger impact on bank lending in the US than in the Eurozone, where it hardly affects lending.\(^{56}\)

Furthermore, in what is sometimes referred to as the “balance sheet channel” or “broad credit channel”, changes in borrowers' net worth that are caused by monetary policy affect readiness of banks to lend them money. Imperfect information on the situation of a borrower makes banks depend on the balance sheet and cash flow situation for assessing the risk associated with lending money to borrowers.\(^{57}\) This is especially problematic if firms have not developed sound relationships with lenders.\(^{58}\) For example, expansionary monetary policy leads to a rise in stock prices, because credit becomes cheaper and investment alternatives like bonds become less attractive.\(^{59}\) In turn, a higher stock price means a higher net worth of the company. This affects the balance sheet of companies wishing to borrow money, and in turn, the banks' willingness to provide that money.\(^{60}\)

---

56 Ehrmann el.al., *op. cit.*, p.243, 264
58 Jean Chatelain, Andrea Generale, Ignacio Hernando, Philip Vermeulen, Ulf von Kalkreuth, *Firm investment and monetary policy transmission in the euro area*, in Angeloni el.al.(eds.), p.151
59 Mishkin, *op. cit.*, p.606
At the same time, firms with decreasing cash flows are less likely to want to invest in the first place.61

Bank lending may be impaired by moral hazard at high interest rates. The phenomenon of adverse selection means that borrowers’ liability for loans is limited by possible default. If interest rates are high, only risky borrowers will want to borrow because the investment either works out to make a profit, or it does not and they default. The information structure between borrowers and lenders is asymmetric as borrowers can better assess the risk of their enterprise than lenders. Knowing this, banks may be reluctant to give out loans. However, this problem can be solved by using collateral.62

Investment, which depends on bank loans, will rise and fall with interest rates as they are transmitted through the bank lending channel.63 The amount of credit that is handed out by banks affects investment, which affects output, which finally affects the price level.

2.2.2.3. Asset Price Channel

This mechanism is sometimes also referred to as the “wealth channel”.64 Prices for assets like stocks, bonds and real estate have an effect on consumer spending because they affect consumers’ wealth. For example, a rise in stock prices induced by expansionary monetary policy increases consumers’ wealth and spending, and in turn aggregate demand.65 This also works the other way around, as tightening monetary policy reduces the market value of assets held by households, resulting in lower spending and demand.

Also, for short term and floating rate debt, a rise in interest rates shifts income from borrowers to lenders in what is referred to as the “income and cash flow channel”. It is categorized here as part of the asset price channel due to its close relation to asset prices66

On the other hand, there is the substitution effect in consumption. It describes the fact that higher interest rates make saving relatively more attractive than spending. Consumption is delayed to benefit from the high interest rates, so aggregate demand

61 Chatelain el.al., op.cit., p.161
62 Bean el.al., op.cit., p.110
63 Mishkin, op.cit., p.606
64 Van Els el.al., op.cit., p.93
65 Mishkin, op.cit., p.605
66 Van Els el.al., op.cit., p.93
is reduced. The substitution effect partly offsets the expansionary effect of rising asset prices.\(^{67}\)

2.2.2.4. Government bonds as collateral

However, wealth and cash flows are not the only way in which asset prices transmit monetary policy into the economy. They also play a role in the banking sector. Government bonds are put to use as collateral for interbank lending in the money market. Plummeting bond prices reduce the value of the collateral, which leads banks to reduce their lending. Therefore, asset prices strongly affect liquidity and cost in the money market, which in turn affects the transmission of ECB rates into retail rates.\(^{68}\)

Also, banks’ funding conditions play a role in the transmission of ECB rates to retail rates. This proved problematic in the recent crisis as banks had become increasingly dependent on funding by selling asset-backed securities (ABS) in the money markets. ABS were also used as collateral for interbank lending. The result of this development is an increased dependence on money markets - not only of banks’ funding cost, but in consequence also of retail rates.\(^{69}\) This would prove problematic in 2009 when securities markets became very illiquid.\(^{70}\)

To sum up, the asset price channel transmits monetary policy impulses by affecting the wealth and cash flow of households and firms and thereby spending and aggregate demand. Moreover, monetary policy leads to changes in asset prices which then affect the value and suitability of government bonds as collateral for interbank lending. This, in turn, has an impact on the amount of lending that takes place.

2.2.2.5. Exchange Rate Channel

Changes in interest rates affect the domestic currency’s exchange rate vis-à-vis foreign currencies. If the interest rates decline for example, the relative return of assets denominated in the domestic currency vis-à-vis assets denominated in foreign currencies declines as well. Investors sell domestic assets, which raises the currency supply and leads to depreciation. This makes domestic goods cheaper when compared to foreign

\(^{67}\) Ibid.

\(^{68}\) ECB Monthly Bulletin October 2010, op.cit., p.63

\(^{69}\) Ibid., p.62

\(^{70}\) Ibid., p.65
goods, so foreign demand, and in turn output and exports, rises.\textsuperscript{71} Imports on the other hand decline as domestic currency buys less foreign goods; this can also lead to a rise in price levels.\textsuperscript{72}

At this point expectations about future exchange rate direction determine if the impact on exports will happen right away or with a time lag: If a continued decline is expected, buyers from inside the country will make their purchases as soon as possible before the rate falls further, whereas buyers from outside the country will wait for the exchange rate to go down even more and make purchases still cheaper for them. This kind of speculation tends to have a further depressive effect on the exchange rate.\textsuperscript{73}

The same mechanism is at work when it comes to deposits and inflow of foreign money. Both domestic and foreign depositors will shift their deposits to currencies which offer higher interest rates. The reaction of international investors can lead to substantial outflows, causing massive amounts of money to leave the currency and the country. This is made possible by the fact that financial markets today are well-integrated and open.\textsuperscript{74}

So, monetary policy is also transmitted through the exchange rate, which affects the price level through the change of purchasing power towards imported goods.

2.2.2.6. Expectations

In addition to this, expectations play a significant role in transmitting monetary policy.\textsuperscript{75} Households, firms and wage-bargainers consider future development of prices in their decisions about consumption, investment and wage demands. A credible and well-communicated, conservative monetary policy can keep expectations at low levels.\textsuperscript{76}

Low expectations about inflation can prevent a wage-price-spiral, by which wage bargainers see rising prices and demand higher wages as protection. This results higher costs of production for firms, which raise prices to make up for it. This in turn causes wage bargainers to demand even higher wages and so on.\textsuperscript{77}

\textsuperscript{71} Mishkin, \textit{op.cit.}, p.604
\textsuperscript{72} Van Els el.al., \textit{op.cit.}, p.92
\textsuperscript{73} Sloman, \textit{op.cit.}, p.523
\textsuperscript{74} \textit{Ibid.}, p.522
\textsuperscript{75} ECB Monthly Bulletin July 2000, \textit{op.cit.}, p.43
\textsuperscript{76} \textit{Ibid.}, p.46
\textsuperscript{77} Sloman, \textit{op.cit.}, p.419
Since prices adapt slowly (they are “sticky”), a change in nominal rates also changes real rates (nominal rate minus inflation). For monetary policy transmission, it is the real interest rate rather than the nominal interest rate that matters, as economic actors take inflation into account when making investment and consumption decisions.\textsuperscript{78}

To give an example of stable expectations: The ECB conducted extraordinary liquidity-providing operations in 2007, which did not affect inflation expectations as the ECB interest rates were left unchanged. The fact that eligible counterparties and assets for collateral were numerous enabled the ECB to provide liquidity whilst keeping the rates stable.\textsuperscript{79}

\textsuperscript{78} Mishkin, \textit{op.cit.}, p.601  
\textsuperscript{79} ECB Monthly Bulletin October 2010, \textit{op.cit.}, p.65
2.3. The Securities Markets Programme (SMP)

2.3.1. Introduction

The ECB argues that the financial crisis had returned to markets in 2010, against the background of rising uncertainty of further financial aid to Greece.\(^8\) Initially, the Eurozone finance ministers had agreed on April 11, 2010 to lending Greece up to € 30 bn. It was unclear if further aid was going to be granted. Eventually, the EU and the IMF finally set up a three year € 110 bn. rescue package on May 2, 2010.\(^8\) According to the ECB, by then the tensions had affected securities markets across the board, as not only the bond markets, but also the foreign exchange- and equity markets exhibited heightened volatility.\(^8\)

For equity and forex (foreign exchange) markets, this was indeed the case (the subject of bond markets will be addressed in the following section). The chart below shows European stocks as measured by the Europe Stoxx 50 stock index, and the foreign exchange rate of the euro to the US dollar over the course of 2010. Indeed, in both charts there is a low in May, as well as erratic volatility around this point in time.

**Chart 4: European stocks and euro/US dollar exchange rate in 2010**


Source: finanzen.net\(^8\)  Source: Adapted from Bloomberg\(^8\)

---


82 Trichet, op.cit.

83 http://shchart.finanzen.net/chart.gfx?chartType=1&time=var&dateStart=20100101&dateEnd=20101231&height=200&width=300&symbol=965814&exchangeId=11&countryId=840&overTime=2&subProperty=1&volumeUnit=0&lateIndex=1&valor=846480&

84 http://www.bloomberg.com/quote/EURUSD:CUR/chart
On May 9th, 2010, the ECB therefore decided to take action the following day by purchasing corporate and government bonds in certain sectors of the secondary market. Beforehand, the ECB had already reduced interest rates and facilitated the availability of loans to banks through the so-called “enhanced credit support”. These measures consisted of longer terms for refinancing operations, lending of foreign currency, a purchase programme for covered bonds, easing requirements for eligible collateral, and most importantly full allotment in all refinancing tenders at a fixed rate.85

This section is going to establish the purpose of the SMP as declared by the ECB, particularly which market segments the ECB considers dysfunctional and which channels of monetary policy transmission this affects. This reasoning of the ECB will then be discussed in the light of alternative interpretations of the data, in an attempt to understand whether there is indeed a disturbance of monetary policy transmission and if this actually constitutes a malfunction. To this end, the differences in the concepts of disturbance and malfunction will be addressed. Furthermore, we will see how the SMP impacts the affected channels. Finally, the sterilization attempts will be considered, especially with regard to their success or lack thereof.

2.3.2. Purpose and affected channels according to the ECB

The ECB states that the purpose of the Securities Markets Programme is “to conduct interventions in the euro area public and private debt securities markets (Securities Markets Programme) to ensure depth and liquidity in those market segments which are dysfunctional. The objective of this programme is to address the malfunctioning of securities markets and restore an appropriate monetary policy transmission mechanism.”86

In this context, it is crucial to understand the difference between primary and secondary bond markets. In the primary market, states sell newly-issued bonds directly to financial institutions, which then keep them or sell them on the exchange. The secondary market takes place at the exchange and consists of already issued bonds which are bought and sold between financial institutions. The discussion of malfunctioning markets concerns the secondary markets in which the ECB operates under the SMP.

According to the ECB, the malfunctioning affected several of the channels discussed above: The interest rate-, asset price- and bank lending channels.

85 Trichet, op.cit.
2.3.2.1. Interest rate channel

The ECB argues that the securities markets for bonds were malfunctioning because the risk premia on some government bonds had become so excessive that they distorted the monetary policy signal to such an extent that the transmission process failed.\textsuperscript{87} Rising spreads between ten-year government bonds of Germany vis-à-vis several other Eurozone countries had led to dried up secondary markets as investors worried increasingly about the countries’ public deficits.\textsuperscript{88} High spreads also means high (long term) interest rates. Long term interest rates on government bonds serve as a point of reference for bank loan conditions and corporate bonds and therefore have an important signal function.\textsuperscript{89} They are considered crucial since they have an impact on the cost of credit for individuals, companies and governments. Therefore, the objective of the SMP is to resuscitate the transmission of monetary policy impulses from the money market through financial markets to long term rates.

2.3.2.2. Asset price channel

The second channel is what we categorize as part of the asset price channel (the ECB dubs it “liquidity channel”\textsuperscript{90}): Interbank lending transactions, which are usually secured by government bonds as collateral.

According to the ECB, the strongly rising risk premia on certain government bonds and thus their significant loss in price had led to less interbank lending.\textsuperscript{91} The mutual mistrust of actors in the interbank market was caused by the fear that the counterparty in the lending operation would become insolvent because of high exposure to now risky government bonds. Banks lent each other less, or at higher prices than the ECB rates would indicate. This also translated into higher retail rates.\textsuperscript{92} This, in turn, threatened bank lending to the real economy.

In this situation, the impulse of decreasing ECB interest rates did not translate as it should into decreasing rates in the money market due to the mistrust between parties.

\textsuperscript{87} Trichet, \textit{op.cit.}
\textsuperscript{88} ECB Monthly Bulletin October 2010, \textit{op.cit.}, p.72
\textsuperscript{89} Trichet, \textit{op.cit.}
\textsuperscript{90} \textit{Ibid.}
\textsuperscript{91} Trichet \textit{op.cit.}
\textsuperscript{92} ECB Monthly Bulletin October 2010, \textit{op.cit.}, p.64
2.3.2.3. Bank lending channel

As for the bank lending channel, the core principle is the following: The loss in price of government bonds means a loss ‘on paper’ for bondholders in the financial- and other industries. As has been described above, this entails an overall reduction in lending, because banks’ assets loose value, which makes them more risk-averse. At the same time, borrowers’ financial situation looks less sound because the bonds they hold lost value, so as a result they receive fewer loans. This happens in spite of lower interest rates, which normally would lead to an increase in the value of both bank equity and assets held by banks, as well as borrowers. As a result, banks should be encouraged to supply the real economy with more loans. According to the ECB, the broad credit channel had dried up, blocking the transmission of monetary policy.

2.3.3. Malfunctioning markets?

In order to assess whether there has been a disturbance in the transmission of monetary policy, it is useful to take two steps. First of all, the monetary policy impulse must be determined. Then, we see if the impulse has affected bond yields and if there has been a divergence between the reactions of bonds.

Disturbance and malfunction differ in that a disturbance means that the monetary policy impulse is not transmitted through the different channels to the economy and to price levels as should normally be the case. The concept of malfunction on the other hand implies that not only there is a problem with monetary policy transmission, but also that this problem is not justified. To give an example, if investors refuse to buy certain bonds because there are clinical signs of increased default risk, this may disturb monetary policy transmission. However it is not a malfunction because this reaction is justified, a reasonable reaction based on facts.

So what has been the monetary policy impulse? As the following chart 5 illustrates, already in mid-2009, the ECB had lowered its key interest rate to 1%. This should lead to lower interest rates both on the short and long end of the yield curve.

---

93 Trichet op.cit.
However, what has been the actual impact on bond yields? More particularly, has there been a difference between the bonds of Eurozone countries in financial distress and those of more stable Eurozone countries, for instance Germany? The following graph shows the development of German, Irish, Greek and Portuguese 10 year bond yields in 2010. The German yield, in line with the low ECB key interest rates, reached a low level and mostly continued to fall. In contrast, there was a drastic rise in yields of the other three countries’ bonds. It follows from this that while the German bond market responded to the low ECB key interest rates as expected, those of other euro area countries were impacted by financial markets that had begun to consider and price in specific country risk.

Source: Data from ECB,94 graph by author

---

As the ECB refers to the spread levels in its argumentation, they should be addressed as well. Spreads are defined as “the difference between the current yields of two bonds”. European government bonds are often benchmarked against German government bonds for the sake of comparison. The spread shows the yield of these bonds when compared to that of the German ones. The yield reflects the risk premium investors demand for putting their money into these assets. If the spreads go up, it means the interest rate of these bonds increases.

Indeed, the following chart 7 shows rising spreads of 10 year bonds of Ireland, Greece and Portugal versus the German 10 year bonds, which come to peak in May 2010.

Source: Adapted from globleconomicanalysis.blogspot95


96 Levinson, op. cit., p.82
Having established these disturbances in the bond markets, the question remains whether this is actually a malfunctioning or rather a natural market reaction to risk of default. The mere existence of a disturbance of monetary policy transmission does not automatically make it a market malfunction. Monetary policy transmission can also be disturbed as a consequence of a normal market reaction. But what is a normal reaction, what is excessive? Without giving further criteria, the ECB decides that it is a case of malfunctioning. This is data interpretation rather than stating clinical facts.

The ECB argues that even if taking into account the difference in default risk between Germany and the other Member States, the spread levels appear excessive. On the other hand, one can make the case for a completely justified market reaction, the pricing-in of a risen risk of default in these bonds. In these circumstances, lowered key interest rates

---

98 Trichet, op.cit.
may not affect the interest rate on these long term bonds simply because another factor, risk, also plays a natural role in the development of long term interest rates. Therefore, whether markets were reacting rationally or malfunctioning depends on the point of view one takes.

However, regardless of which stance one takes concerning the question of malfunction, the divergence between the monetary policy impulse of low key interest rates and the high long term rates in certain bonds does represent a disturbance of monetary policy transmission. The rising interest rates on these bonds contradict the lowered ECB interest rates. If government bond interest rates do not come down in spite of lowered short term interest rates, then long term loans to the real economy stay expensive. In other words, the monetary policy impulse is not being transmitted. That means that monetary policy transmission was indeed impaired.

**Chart 8: Affected channels of monetary policy transmission**

**Source:** Author, inspired by ECB99

2.3.4. Functioning of the SMP

2.3.4.1. Interest rate channel

Through the interest rate channel, changes in ECB key rates, via money market short term rates, should translate into changes for long term loans as well. The nominal\textsuperscript{100} long term interest rates should consist of an average of expected short-term interest rates, so that a change in short term rates should also change long term rates.\textsuperscript{101} However as we have seen above, the drastic rise in yields for certain bonds in spite of low key interest rates indeed impaired the transmission of low short term rates too low long term rates through the interest rate channel. In this market segment, the interest rate channel had effectively ceased to function.

The SMP targets this by purchasing government bonds of the Member States in financial distress in the secondary market in order to bring down their yields. These purchases aim at driving up the bonds’ prices by causing additional demand. Higher bond prices lead to a reduced yield and result in a reduced interest rate. This reduced interest rate finally corresponds to the lowered interest rates that other euro area bonds exhibit after the reduction of ECB key interest rates. In the end, this intervention leads to the outcome which normally would be achieved by market forces: Changes in short term rates translate into changes in long term rates via higher bond prices.

2.3.4.2. Asset price channel

A part of the asset price channel (the “liquidity channel” according to the ECB)\textsuperscript{102} was affected, since interbank lending transactions had decreased because government bonds had lost their purpose as collateral.

The translation of low key interest rates to low money market rates needed to be reinvigorated. The SMP aims at solving this problem, again by causing demand and thus raising the prices of government bonds. This should support their role as collateral in interbank lending. Arguably, the possibility for banks to sell their risky assets and thus reduce their exposure to risk should instill confidence in the bank lending market. If banks presume that other banks have sold their risky assets, they will have more trust in them as counterparties again.

\textsuperscript{100} Russel, \textit{op.cit.}, p.46

\textsuperscript{101} Ibid., p.43

\textsuperscript{102} Trichet, \textit{op.cit.}
2. Monetary Policy Transmission and the SMP

2.3.4.3. Bank lending channel

Finally, the SMP also works through a part of the bank lending channel which has been described above as the balance sheet channel, or broad credit channel.

By bringing up bond prices, the bank lending channel is being revived twofold. Firstly, banks have the opportunity to sell their government bonds, and the losses on paper are reduced by rising prices. Secondly, their customers’ financial situation improves as the government bonds they possess rise in value again. Thereby, the SMP should lead to an increase in activity in the bank lending channel.

2.3.5. Public perception and criticism

According to the ECB, the restoration of liquidity in malfunctioning market sectors as a tool of monetary policy transmission is officially at the heart of the SMP.

However, there is a strong current in public opinion that believes the real objective to be to support prices for bonds of ailing Member States and bring down spreads in order to lower their borrowing cost for debt rollover. This, in turn, should buy time to allow political reforms in the troubled Member States and secure the stability of the Eurozone in the meantime. As an example for this current, Deutsche Bank Research writes: “Thus, the ECB has strayed far from its prime mandate to secure the purchasing power of the common currency and taken on the funding of governments and banks whose solvency is highly doubtful.” The ECB is now “propping up banks and governments that have lost access to market funding for a longer period of time”.

The SMP is even controversial among Eurozone central bankers. Not every governor has explicitly commented on his stance on the SMP, but many have.

On the sceptic side, Germany’s former Bundesbank governor Axel Weber is a known critic of the SMP, saying

---

106 Ibid.
“There is no evidence that asset purchases have had any significant impact on
average euro-area sovereign bond yields (…) But the SMP risks blurring the
different responsibilities between fiscal and monetary policy.”\textsuperscript{107}

Bundesbank governor Jens Weidmann is quoted saying he is “not a fan of the SMP.”\textsuperscript{108}

Dutch central bank Governor Klaas Knot points out risks of the anti-crisis measures, particularly the SMP:

“(…) these measures – and the SMP in particular – entailed a number of
risks. (…) to reduce pressure that markets exerted on governments to pursue
fiscal discipline (…) increasing risks of monetary financing of fiscal debt (…) financial risk for the Eurosysteem’s balance sheet, which may eventually lead to
tax transfers (…) risk that the Eurosysteem will enter political waters, which
will make the conduct of monetary policy more difficult.”\textsuperscript{109} He recently said
“I hope we never have to use it again.”\textsuperscript{110}

Christian Noyer of Banque de France soberly assesses

“(…) through (…) its non-conventional measures –including the SMP– the
Eurosysteem has fully played its expected role as a lender of last resort (LLR)
(…) Having said that, it is clear that engaging in large-scale asset purchases
of sovereign bonds is well beyond what should be expected of a central bank’s
role as a LLR. Moreover, large-scale asset purchases are not without risks.
(…) they could also affect price and financial stability in the medium-run, by
endangering the value of the central-bank money. Such risks do not necessarily
materialize, but when they do, the repercussions are dramatic.”\textsuperscript{111}


Concerning Member State demands for further purchases, Yves Mersch of Luxembourg states that the SMP purchases are “limited in volume and timespan”, insisting that “it is not the ECB’s task to conduct unlimited bond purchases.”

He further points out that “the ECB must help restore confidence in the euro zone by fighting inflation.”

In the neutral camp, Slovenia’s Marko Kranjec simply assesses

“The ECB is just enabling a transmission of the monetary policy with which it ensures the functioning of the European financial markets.”

Miguel Fernández Ordóñez of Bank of Spain recently stated that the SMP is important for proper market functioning, and with regard to fiscal policy he says the SMP

“gives those responsible for the other areas of economic policy valuable time in which to pursue the design and implementation of the measures needed in those areas.”

Italy’s Ignazio Visco points out the necessity for intervention, saying

“bond spreads for several euro-area countries widened beyond any reasonable level”

Looking back on the performance of the ECB’s anti-crisis measures, in particular the SMP, Finland’s Erkki Liikanen remarks

“The measures included, among other things, the much discussed bond purchases under the so-called Securities Market Programme. These actions should be judged by the results. The euro has remained strong, the financial meltdown has been avoided, and inflation expectations have remained


consistent with the ECB’s price stability objective.”

There are also SMP advocates. A staunch defender of the program, Irish central bank governor Patrick Honohan is quoted as being “solidly behind” the SMP, which he considers

“exactly the right kind of prompt initiative” and “(...) an important extension, a use of tools that haven’t been used before”.

Luc Coene of Belgium on purchasing Italian and Spanish government bonds:

“We already did it in the case of Greece, Portugal and Ireland, so I don’t see why there would be let’s say a sort of veto against that possibility.”

Estonian Andres Lipstok insists that

“Anyone who believes that the SMP is designed to provide lender-of-last-resort type financing to governments is completely misguided.”

Austria’s Ewald Nowotny and Jozef Makuč of Slovakia call the SMP a “success.”

Aware of the critical voices, Mr. Trichet defended the SMP and its objectives in his May 31, 2010 speech in Vienna: “The Securities Markets Programme should not be confused with quantitative easing. In simple words: We are not printing money. This confirms and underpins our commitment to price stability.” In pointing out the fact that the ECB

---


123 Trichet, op.cit.
was not “printing money”, Mr. Trichet refers to the practice of sterilization, by which the ECB aims at neutralizing the liquidity created by the bond purchases via the taking-in of fixed term deposits from banks of the same amount spent on the SMP purchases. Details of this sterilization will be discussed below.

The debate about these extraordinary measures became so controversial that two prominent German officials, ECB chief economist Jürgen Stark and president of the Bundesbank Axel Weber, stepped down.124

2.3.6. Legal basis, decision-making and implementation

The SMP’s legal basis is Art. 18.1. ECB statute, according to which the Eurosystem may conduct operations of “buying and selling marketable instruments”.125126

Decisions are made by the Governing Council. In line with the decentralized implication structure of the Eurosystem, the SMP bond purchases are then conducted by the NCBs of the Eurosystem, which make the purchases according to their share in the capital of the ECB.127

2.3.7. Size and trend

As of April 6, 2012, the SMP comprises € 214.2 billion.128 Recently, the trend has been largely neutral, with only minor purchases since the end of 2011, when the SMP comprised € 211.9 billion.

The most likely reason for this are the two exceptional long term refinancing operations (LTRO) with full allotment conducted in December 2011 and February 2012. LTROs are refinancing operations during which banks receive loans from the ECB against securities. The two LTROs were exceptional because banks could take in as much liquidity as they wanted (full allotment) instead of auctioning for a limited amount. Banks took a total of € 489.2 bn. in December and another € 529.5 bn. in February. It is suggested that with

---

125 ECB/2010/5, op.cit.
127 ECB/2010/5, op.cit.
this money, banks bought the same government bonds the ECB used to buy under the SMP, thus bringing up their prices. This would lead to the same result as the SMP, which would explain why it was less used recently.  

Chart 9 displays the purchases from May 2010 to January 2012.

**Chart 9: SMP volume May 2010 - January 2012**

Source: Bloomberg

### 2.3.8. Sterilization

The ECB aims at ensuring monetary policy neutrality by “sterilizing,” e.g. taking in, the liquidity created by the SMP. In order to do so, the ECB offers banks one-week “fixed-term deposits” in a weekly tender as part of its open market operations / fine-tuning operations. It is important to notice that these deposits are not mandatory. The ECB does not have means of ensuring that banks actually do deposit money.

The following chart displays the amount of liquidity created by the bond purchases of the SMP (“amount to be sterilized”, blue line) and the amount of liquidity the ECB collected from banks as deposits (“amount drained at tender”, gray area). We see how far

---


131 ECB/2010/5, *op.cit.*

the sterilization has worked. In case of complete sterilization, there is no gap between the blue line and the gray area, meaning that all the liquidity created by bond purchases was sterilized by a matching amount of deposits. If sterilization was incomplete, there is a gap between the blue line and the gray area. So far, sterilization has been mostly complete. As the chart shows, there have been only five events (gaps) in which sterilization was incomplete. In chart 10, this is visible as the five gaps between the blue line in the gray area. It occurs when the ECB’s tender for deposits is not met with sufficient demand to match the entire liquidity provided by the SMP.

**Chart 10: Sterilization May 2010 - November 2011**

![Chart 10: Sterilization May 2010 - November 2011](http://bilbo.economicoutlook.net/blog/wp-content/uploads/2011/12/ECB_SMP_Sterilisation.jpg)

**Source:** Graph adapted from economicoutlook.net

The following chart 11 is drawn from ECB data on SMP purchases and sterilization deposits. For each of the five occasions, it shows how wide the difference between the liquidity created by the SMP and the liquidity absorbed by deposits was. The largest one (€ 27.1 bn.) occurred on July 2, 2010, whereas the most recent one of November 29, 2011 was comparatively small (€ 9.1 bn.).

---

Since then, no sterilization failure has occurred. It follows that sterilization has been largely successful: Over an almost two year period, the ECB has been able to collect the liquidity created by the SMP completely, except for five occasions where sterilization was not complete, but which lasted only a week each time.

On a footnote, it may be remarked that the massive provision of (unsterilized) liquidity through the two LTROs makes the question of sterilizing SMP liquidity seem a bit pointless.

2.3.9. Concluding statement

The securities markets programme addresses a severe disturbance of monetary policy transmission in some parts of the government bond market. Whether this is a malfunction or a normal market reaction to risen risk of default cannot be established. There are no objective criteria according to which the two can be distinguished, it is rather a matter of interpreting the data.

Either way, the high yields of certain government bonds, in spite of low ECB key interest rates, do constitute a disturbance of monetary policy transmission. The SMP addresses this problem through the bank lending-, asset price- and interest-rate channels. The ECB’s sterilization measures have been largely successful so far, neutralizing the SMP-induced liquidity completely in all but five weeks over the nearly two-year period since the start of the programme in May 2010.

Source: ECB\textsuperscript{134}
3. A legal perspective on the SMP

3.1. Introduction

The bond purchases by the ECB in the course of its securities markets programme have come under intense legal scrutiny. In August 2011, even then-German president Christian Wulff openly voiced severe doubts about the legality of the SMP.135 The TFEU contains several provisions which concern limits on EU and Member State actions to support other Member States. Relevant among these are the general so-called “no bailout clauses” of Article 125 TFEU, and with regard to the ECB, Article 123 TFEU and Article 18 of the ECB statute.

So is the SMP an infringement of EU law? The following chapter will first of all assess if only Article 123 TFEU or also the general no-bailout clause of Article 125 TFEU apply to the ECB.

The ECB’s legal competence to act will then be examined. Furthermore, it will be assessed whether the ECB is in breach of the prohibition to directly buy government debt as provided in paragraph 1 of Article 123 TFEU, and finally whether the requirement of ‘marketability’ of securities bought by the central bank, as laid down in Art. 18 of the ECB statute, is being met by the government bonds the ECB has purchased. On each of these questions, the opposing views in the literature will be first displayed and then followed by a concluding statement that establishes which view is more convincing and why.

3.2. Applicability of Article 125 TFEU

It is questionable whether Article 125 TFEU is applicable to the ECB's bond purchases. In order to determine whether this applies to the ECB after all, the provision has to be interpreted. We generally distinguish between four methods of interpreting law. These are grammatical, systematic, historical and teleological interpretation.136

Grammatical interpretation refers to analyzing the wording, the meaning of the words used in the legal provision. In this case, the Article states that “The Union shall not be liable for or assume the commitments of (...) any Member State...”137 and goes on to establish that not only the Union, but also other Member States are not liable for Member States’ commitments. It goes without saying that the ECB is part of “the Union”, and even an organ since the 2007 Lisbon Treaty. So according to grammatical interpretation, Article 125 TFEU is applicable to the ECB.

Systematic interpretation refers to assessing how the Article relates to other Articles in the law. Here, one notices that the ECB has its very own no-bailout clause in Article 123 TFEU,138 which prohibits the direct purchase of government debt by the central bank.139 Therefore, in line with the legal principle of lex specialis derogat legi generali, Article 123 TFEU is more special than Article 125 TFEU when it comes to the ECB. Thus, Article 125 TFEU is not applicable to the ECB unless in case of actions which are not already covered by Article 123 TFEU – that is not the case here. The same follows from an interpretation of the systematic link between the two Articles. They are in the very same section of the Treaty and cover the same topic. Therefore, there is no necessity for bond purchases by the ECB to be caught by two Articles at the same time. The legislator would not have introduced Article 123 TFEU if the ECB was supposed to be already subject to Article 125 TFEU. Thus, according to grammatical interpretation, Article 125 TFEU is not applicable to the ECB.

Historical interpretation concerns the determination of the will of the legislator when drafting the law. Usually, national parliaments publish reasons for every law they make. Unfortunately, this is not the case with Article 125 TFEU, which stems from the

139 Ulrich Häde, in Christian Calliess, Matthias Ruffert (eds.), EUV/AEUV, Munich, Beck, 2011, 4th, Art. 123 AEUV Nr. 2
Maastricht Treaty. There are no reasons given for this international treaty. Historical interpretation is therefore not applicable.

Teleological interpretation consists of determining the objective and purpose of the law. While it is clear that Article 125 TFEU aims to protect Member States from liability for other Member States’ debt, this answer is not specific enough to determine if the Article also applies to the ECB. Thus, teleological interpretation does not give an answer in our case.

To sum up: The wording of Article 125 TFEU indicates applicability to ECB. On the other hand, the Treaty has a special provision of the same content for the ECB (Art. 123 TFEU) which is located in the same section of the Treaty as Article 125 TFEU. In this context, the systematic argument prevails; it becomes clear that the special provision regarding the ECB is the only one applicable. It follows that the bond purchases of the ECB are only subject to scrutiny with regard to Article 123 TFEU, whereas the general no bailout clause of Article 125 TFEU is not applicable.
3.3. ECB competence for bond purchases

Furthermore, it is questionable whether the bond purchases fall within the competence of the ECB at all.

3.3.1. Opinion one: No competence

In the literature, some say that while it is argued that the bond purchases took place to stabilize the financial system, such stabilization is a competence of the Member States, not the central bank. At this point it is important to recognize that the ECB actually does not justify its measure with financial stability, only with price stability, to which financial stability contributes. However, since the matter is being discussed in this way in the literature, the arguments for and against this view will be analyzed.

So, according to this position, the ECB is only empowered to support the Member States’ efforts for keeping the financial system stable, as stated in Article 127 TFEU. It provides in paragraph 5 that

“The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.”

These authorities still belong to Member States, while the ECB is restricted to cooperation and support. Only through a special legislative procedure according to paragraph 6 can the ECB be empowered to take care of specific supervisory tasks. These restrictions serve the purpose of safeguarding the ECB’s independence by keeping it out of reach of governmental orders, to which supervisory authorities are usually subject. According to this view, it results from these restrictions that the ECB may only play a supportive role in financial supervision and stabilization of the financial system, a role which it has clearly overstepped by purchasing bonds.

3.3.2. Opinion two: Within competence

The opposing view states that Article 127 TFEU does give competence to the European System of Central Banks to foster financial stability on its own. The first paragraph says

---

140 Martin Seidel, Der Ankauf nicht markt- und börsengängiger Staatsanleihen, namentlich Griechenlands, durch die Europäische Zentralbank und durch nationale Zentralbanken – rechtlich nur fragwürdig oder Rechtsverstoß?, EuZW, 2010, 521
141 TFEU, op.cit.
142 Seidel 2010, op.cit., p.521

40
"The primary objective of the European System of Central Banks shall be to maintain price stability."\textsuperscript{143}

The stability of the financial system is a necessary prerequisite for the effectiveness of monetary policy and therefore falls within the competence of the ECB. This is especially the case for ensuring liquidity in financial markets. Paragraph 5 only contains a restriction of the ECB to a supportive role with regard to supervisory measures.\textsuperscript{144}

### 3.3.3. Concluding statement

When applying teleological interpretation, the goal of Article 127 TFEU is revealed to be to define the role of the ECB as the sole responsible institution for monetary policy. While the first opinion may be correct with regard to certain restrictions of ECB in supervisory action, it fails to take into account what the second opinion rightly states: that a stable financial system is the \textit{conditio sine qua non} for functioning monetary policy, and thus for price stability. The competence to safeguard financial stability is not mentioned explicitly in the TFEU or the ECB statute. However, without a stable financial framework, monetary policy would not be possible. Therefore, the objective of the ECB’s mandate for price stability in Article 127 paragraph 1 TFEU requires that this mandate also comprises measures to protect financial stability. On top of this, the ECB has to contribute to measures of financial stability and supervision as stated in paragraph 5 of Article 127 TFEU. In light of the necessity to ensure financial stability to be able to conduct monetary policy that leads to price stability, paragraph 5 must be interpreted not as a restriction of the ECB to a merely supportive role in the defense of the financial system. Indeed, it follows from this context that the restriction to support only applies to matters of supervision, not of financial stability. To sum up, the second opinion is correct. Measures by the ECB to safeguard stability of the financial system are within its competence as provided by Article 127 TFEU.

\textsuperscript{143} TFEU, op.cit.

\textsuperscript{144} Christoph Herrmann, \textit{EZB-Programm für die Kapitalmärkte verstößt nicht gegen die Verträge}, EuZW, 2010, p.646
3.4. Breach of the ECB’s no bailout clause Article 123 paragraph 1 TFEU?

3.4.1. Opinion one: Breach

While there is some skepticism towards purchases in the secondary market in the literature,\textsuperscript{145} some even argue that the practice of purchasing government bonds is an infringement of EU law. This opinion is based on Article 123 paragraph 1 TFEU, which states

\textit{“Overdraft facilities or any other type of credit facility with the European Central Bank (…) in favour of Union institutions, (…) or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments. (…)”}\textsuperscript{146}

The fact that purchases are only prohibited when the central bank buys in the primary market, meaning buying newly-issued bonds directly from the state, is recognized as a method to keep the European Central Bank from financing governments. According to this view, the exception that is provided for indirect purchases, meaning buying already issued bonds from financial institutions in the secondary market, has been only created to allow the ECB open market operations for monetary policy within reason. Therefore, the bond purchases under the SMP are considered a circumvention of the prohibition of direct purchases. The SMP purchases constitute a breach of EU law because the ECB exceeds the boundaries of its competence and empowerment as set by Article 123 paragraph 1 TFEU.\textsuperscript{147}

3.4.2. Opinion two: Compliance

This view is opposed by those who consider the SMP bond purchases to be in compliance with Article 123 TFEU since the purchases only take place in the secondary market.\textsuperscript{148}

\textsuperscript{146} TFEU, \textit{op.cit.}; this Article is mirrored by art. 21.1 of the ECB statute.
\textsuperscript{147} Matthias Ruffert, \textit{The European Debt Crisis and European Union Law}, Common Market Law Review, No.48, 2011, p.1788
While a circumvention of this prohibition is of course to be avoided, the SMP does not represent such a circumvention. An indicator for this is the fact that the SMP is, according to the ECB, limited in time and does not aim at purchasing future bond issuance of the Member States. The most significant argument is that the purchases under the SMP represent fine-tuning operations of the interest rate level and market liquidity, which the ECB is allowed to conduct. Fine tuning operations in the form of targeted bond purchases traditionally are among the instruments of monetary policy and have also been used by the Bundesbank.  

Also, it is argued that the drafters of Art. 123 TFEU could not have overlooked so blatant a loophole, so it is highly likely that this practice was accepted by the drafters of the Treaty, thus the SMP practice is lawful.  

### 3.4.3. Concluding statement

When comparing the arguments, it is first of all quite obvious that there is no direct violation of Article 123 TFEU, since the bonds are being bought not in the primary but in the secondary market. This follows from grammatical interpretation, as the letter of the provision (“directly”) is not infringed. 

Yet, the argument that it is unlikely that the drafters of the Treaty would have overlooked such an obvious circumvention does not hold. Undiscussed by the literature, there is a legal provision that explicitly prohibits such circumvention. With regard to what is now Art. 123 TFEU, **Council regulation 3603/93** stipulates in its preamble that

> “(...) purchases made on the secondary market must not be used to circumvent the objective of that Article”

But do the purchases in the secondary market constitute a circumvention? First, this would be the case if the purchases concerned freshly issued government bonds which had only been passed through the private sector on their way to the ECB. However, there is no evidence for this.

---

149 Herrmann, *op.cit.*, p.646  
Second, circumvention would exist if the competence to purchase bonds for monetary policy purposes were abused for other reasons. This is not the case; the ECB has expressively referred to the SMP as an open market operation. More importantly, purchasing bonds as part of fine tuning operations is common central bank practice. It has been shown above that there has indeed been a disturbance in the transmission of monetary policy from ECB rates to long term rates which was addressed by the securities markets programme. The setting of the key ECB interest rate itself may or may not have been done with the “hidden agenda” objective to keep bond yields low in order to lower refinancing costs for distressed Member States. This is in any case irrelevant for Article 123 TFEU, as secondary market bond purchases that assure the implementation of monetary policy fall under the empowerment of Article 123 TFEU.

It follows from this that in line with the second opinion, the bond purchases under the SMP constitute an extraordinarily big, but nevertheless legal, fine-tuning operation that is in compliance with Article 123 TFEU.

152 ECB/2010/5, op.cit.
3.5. Marketable instruments

3.5.1. Opinion one: Purchased bonds are not marketable

The literature raises the question if the purchased bonds fulfill the criterion of Article 18 of the ECB statute. The Article sets a requirement concerning the ‘marketability’ of securities that the ECB is allowed to purchase in the course of its open market operations. It states that

“In order to achieve the objectives of the ESCB and to carry out its tasks, the ECB and the national central banks may: operate in the financial markets by buying and selling outright (spot and forward) or under repurchase agreement and by lending or borrowing claims and marketable instruments, (…)”.

How to define whether an instrument is marketable? In the literature, it is partly argued that securities are only marketable if there is a liquid market for them. According to this opinion, the current purchases are being made to keep the bonds marketable and in order to push down interest rates for Member States in distress to allow them better refinancing conditions. The bonds are not marketable instruments anymore, because the debtors are in a very weak condition so that there is not enough demand to keep the bonds liquid. Since the criterion of marketability is not being met by the bonds ECB purchases under the SMP, the ECB acts against Article 18 of its statute.

3.5.2. Opinion two: Purchased bonds are marketable

The opposing camp relies on a directive of the EU law to define marketability. According to this opinion, marketability does not depend on whether or not the market for a security is actually liquid. Instead, marketability depends on the guidelines on monetary instruments and procedures as laid down in the directive on markets in financial instruments (“MiFID”, directive 2004/39/EC). It follows from this that any security which is listed in a regulated market according to the directive is considered marketable.

153 ECB statute, op.cit.
154 Seidel 2010, op.cit., p.521
155 Ruffert, op.cit., p.1788
157 Herrmann, op.cit., p.646
According to Article 4, section 1.14 MiFID, a regulated market is "a multilateral system which brings together multiple third-party buying and selling interests". Eligible instruments are, among others, so-called 'transferable securities'. Bonds fall under this definition, see MiFID Annex I, Sect. C. Therefore, bonds are eligible instruments. Furthermore, they are traded in regulated markets. It follows that bonds can be considered marketable.

What is more, this rather broad interpretation of the term 'marketable' is backed by the fact that other language versions of the Treaty also indicate broad terms for the word marketable.

According to this opinion, it is irrelevant if the markets for the bonds which are being purchased is currently liquid or not. They are marketable because they fulfill the conditions of directive 2004/39/EC. Therefore, the ECB purchases comply with Article 18 of its statute.

3.5.3. Concluding statement

The argument that marketability depends on liquidity is on shaky ground. An interpretation of the term marketable with regard to the telos of the Article leads to the following conclusion: The ECB conducts monetary policy in order to assure price stability. It must be possible for the ECB to react to malfunctioning markets to ensure the transmission of monetary policy. If it were allowed to buy only liquid bonds, as the strict interpretation of the term marketable advocates, it would not be able to safeguard monetary policy transmission. Therefore, marketability cannot depend on liquidity. The broad interpretation which refers to the listing of the bond in a regulated market according to the MiFID respects the telos of Article 18 of the ECB statute. This opinion is to be followed, as it is stringent and coherent. The purchased bonds fall under the MiFID and are thus marketable. Therefore, there is no breach of EU law by purchasing them.

159 Herrmann, op.cit., p.646

46
3.6. Conclusion

As we have seen, the bond purchases are highly debated and controversial in legal circles; however they are in line with EU law. The ECB's actions remain within the framework of its competence and respect the restriction to secondary markets. The bonds themselves are eligible for purchase since it is not the liquidity of the market that matters, but the asset criteria as laid down in the MiFID.
3. A LEGAL PERSPECTIVE ON THE SMP
4. Central Bank Independence

“I hear, but I do not listen.”
Wim Duisenberg,
April 11, 2001

4.1. Introduction

This section deals with central bank independence (CBI). After a brief introduction to the importance of CBI in general, the degree of central bank independence of the ECB will be assessed. To this end, the criteria of personal independence, political-, functional- (including goals and instruments) and financial independence will be used. This chapter essentially tries to answer the question: Does the SMP have an impact on ECB independence?

4.2. The rationale of independence

Economic research suggests a negative correlation between central bank independence and inflation.\textsuperscript{161} This evidence is the foundation of the justification of central bank independence. It is founded on the often diverging goals of governments as opposed to central banks.

Firstly, governments and central banks often have different preferences when it comes to policy objectives. For governments, price stability is one objective among others such as economic growth, employment, seignorage revenue, and influencing the balance of payments.\textsuperscript{162} Also, governments are susceptible to political changes, so their stance on inflation and monetary policy on average varies more than that of central banks.\textsuperscript{163}


\textsuperscript{163} \textit{Ibid.}, p.356
The result is a sometimes opportunistic desire to stimulate the economy regardless of inflation costs. Policymakers will often try to cause more inflation than expected. This inflationary bias can be stopped if policymakers are bound by rules. Because central banks are not exposed to factors of daily politics, they can maintain a more steady inflation target. Thus, central banks tend to be more conservative than governments by giving priority to price stability. As former member of the ECB executive board Mr. Bini Smaghi puts it: "Central bank independence is a way to protect policy makers against the temptation of using monetary policy in a distortionary way."

Secondly, governments and central banks often consider different time frames in their actions. Governments are concerned with political pressure such as re-election, so they tend to act in the short term and exhibit activist behaviour. The negative effects of expansionary monetary policy occur only in the long run, while there are short term positive effects, especially on unemployment. Not being affected by these political issues, central banks tend to plan in longer rather than shorter terms and to consider the long term implications of policies. So, in a nutshell, central bank independence is a way of assuring the pursuit of price stability.

In case of the ECB, independence from national and Union level authorities is supposed to protect it against political influence; however the ECB remains a part of the European Union and is not an entity outside of institutional framework of the EU.

### 4.3. Defining central bank independence

In order to structure the assessment of central bank independence, the literature has developed several criteria. Woolley created the categories of political and functional independence. Political independence describes the fact that a central bank is able to act independently of political influences. Functional independence refers to the ability of a central bank to pursue its mandate without being constrained by other entities. These criteria provide a framework for evaluating the degree of independence in various monetary systems.
to choose its monetary policy without pressure from the public sector. Functional independence is the competence to be the only institution that makes monetary policy without being affected by other institutions’ policies.\footnote{173 John Woolley, Monetary Politics: The Federal Reserve and the Politics of Monetary Policy, Cambridge, Cambridge University Press, 1984, p.13}

Cukierman established four categories of “legal” independence:\footnote{174 Cukierman, op.cit., p.372} First, rules concerning the bank’s chief executive officer (CEO), especially appointment and dismissal. This category can be labeled ‘personal independence’. Second, rules on policy formulation: How much does the central bank take part in formulating monetary and budgetary policy? This criterion can be considered similar to the already existing concept of ‘functional independence’. Third, final objectives, as provided in the central bank statutes. This can be considered similar to the already created concept of ‘political independence’. Finally, lending to the public sector. This can be considered ‘financial independence’.

Debelle and Fischer added goal- and instrument independence with regard to the central bank’s capacity to choose the goal of its monetary policy and the instruments for its implementation.\footnote{175 Guy Debelle, Stanley Fischer, How independent should a central bank be?, Conference Series, Federal Reserve Bank of Boston, 1994, p.197, http://www.bostonfed.org/economic/conf/conf38/conf38f.pdf, (website visited on April 17, 2012)} The distinction between goal- and instrument independence can be considered a subcategory of political independence, since it concerns the actual decision-making about monetary policy by the public sector or the central bank.

Finally, financial independence is interpreted today in a broader sense than by Cukierman. According to Loedel, it is first of all composed of the prohibition of financing government debt (“internal component”), and secondly of exchange-rate commitments (“external component”).\footnote{176 Peter Loedel in Amy Verdun (ed.), The euro: European integration theory and economic and monetary Union, Rowman & Littlefield, Lanham, 2002, p.135} Furthermore, it encompasses the right of the central bank to freely use its financial means, a right which must not be conferred to the government or parliament.\footnote{177 Deutsche Bundesbank, op.cit., p.120} What is more, there should be transparent rules of how the central
bank profits are to be distributed. Financial independence is sometimes considered a subcategory of 'political independence'.

Summing up, CBI can be defined by the classification of personal, political (incl. goals and instruments), functional and financial independence.

178 Bini Smaghi, op.cit.
4.4. The independence of the ECB

4.4.1. Personal independence

Personal independence concerns the way central bank governors and members of the board are appointed and removed from their position.\(^{180}\)

4.4.1.1. Governor turnover rate

In an attempt to assert the de facto degree of personal independence, as opposed to the de jure situation, Cukierman takes into account the "actual average term of office of CB governors".\(^{181}\) A low turnover rate indicates independence, because it means a longer time in office. On the other hand, if the time spent in office is very short, the governor has a shorter term of office than the government officials, so he is more likely to be influenced by the government and to apply short term policies.\(^{182}\)

The turnover rate is established by computing the average of turnovers per year. Referring to the period between 1950-89, Cukierman computes a range from 0,03 to 0,2 for developed countries and 0,13 to 0,93 for developing countries.\(^{183}\)

The ECB was only established in June 1998, so that observations regarding the turnover rate have limited significance. For the 13 years from 1998-2012, there have been two changes (Mr. Duisenberg and Mr. Trichet),\(^{184}\) resulting in a turnover rate of 0,15. This is a low rate when compared to Cukierman’s examples, however the fact that Mr. Duisenberg did not stay in office for the full eight years of his term is worth mentioning. The circumstances of his early retirement are questionable. Some suggest an agreement between France and the other Member States in order to install a French president,\(^{185}\) whereas Mr. Duisenberg and others insist on his free decision.\(^{186}\) One way or another, this isolated incident at the very beginning of the first ECB presidency is

---


\(^{181}\) Cukierman, *op.cit.*, p.383

\(^{182}\) Ibid., p.385

\(^{183}\) Ibid., p.384

\(^{184}\) The recent appointment of Mr.Draghi in 2012 is not taken into consideration because his term in office has just begun.


rather negligible considering the stable decade that followed. So while the turnover rate is not yet meaningfully applicable to the ECB, it did have a stable past so far.

4.4.1.2. Term of office

According to Article 283 TFEU, the term of office of the executive board is eight years. Members are appointed by the European Council, which is consulted by the European Parliament and the Governing Council of the ECB. Furthermore, the ECB has a collegial board which is a good way to resist political pressure and reach a more sound and moderate conclusion on monetary policy. What is more, concerning national central banks, the ECB statute provides in Article 14 paragraph 2 that

"The statutes of the national central banks shall, in particular, provide that the term of office of a Governor of a national central bank shall be no less than five years.

A Governor may be relieved from office only if he no longer fulfils the conditions required for the performance of his duties or if he has been guilty of serious misconduct. (...)"

This is to ensure that members of the board have the same equally long term of office, so that the decision-making power of the boards is not affected. The ECB seems to be very active in the defense of this provision and frequently issues legal opinions to governments that might overstep this boundary. It is also assured that this rule is not circumvented by the law that changes the term of office. If the term is to be reorganized by law, the law must assure that it does not lead to the dismissal of the current governor. The ECB has defended this position in case of a change of law in Italy.

To conclude, long terms of office of the members of the executive board, which is longer than the term of most parliaments and heads of state, assures a high level of personal independence of the ECB. The same conclusion can be drawn when considering the low governor turnover rate.

---

187 TFEU, op.cit.
189 ECB statute, op.cit.
190 Bini Smaghi, op.cit.
4.4.2. Political independence, including goals and instruments

4.4.2.1. Political independence in the broad sense

Political independence describes the power of a central bank to act according to its own convictions without being subject to pressure from other actors.\textsuperscript{192} It is often also referred to as institutional independence.\textsuperscript{193} It is especially important that the central bank has a clearly defined mission, so that there is less room for influence by the government.\textsuperscript{194,195}

The ECB is special in that it does not face a national finance ministry like most central banks. Rather, it faces multiple diverse players: the Eurogroup and the European Commission. Then again, the Commission’s power in matters of Economic and Monetary Union is predominantly legislative and has little influence on monetary policy. Since the Eurogroup also operates under a limited mandate, the threat it poses to the ECB decisions is limited.\textsuperscript{196}

The political commitment to the respect for central bank independence may not yet be an integral part of the public and political mindset in some Member States.\textsuperscript{197} The heads of state may try to influence the bank’s decisions. To assure the institutional independence, Article 130 \textsuperscript{1} of TFEU states that

\begin{quote}
\textit{“\ldots noneither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, \ldots from any government of a Member State or from any other body.”}\textsuperscript{198}
\end{quote}

\textit{The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks.”}\textsuperscript{199}

\textsuperscript{192} Loedel, \textit{op.cit.}, p.130
\textsuperscript{193} Apel, \textit{op.cit.}, p.33.
\textsuperscript{194} Cristina Bodea, Stefan Huemer, \textit{Dancing together at arm’s length? The interaction of central banks with governments in the G7}, ECB occasional paper series, No. 120, October 2010, p.8
\textsuperscript{196} \textit{Ibid.}, p.9
\textsuperscript{197} Bini Smaghi, \textit{op.cit.}
\textsuperscript{198} TFEU, \textit{op.cit.}; ex Article 108 TEC; this Article is mirrored by Article 7 of the ECB statute
\textsuperscript{199} \textit{Ibid.}
From a legal point of view, the fact that this Article is incorporated in the TFEU offers a very high level of protection. The Treaty has qualified constitutional value and can only be changed in a long procedure that requires the consent of the Member States. This represents a high hurdle, so that change is unlikely. Therefore, the institutional independence of the ECB is very solid.  

4.4.2.2. Goal- and instrument independence

Goal independence is the ability of the central bank to determine the goals of monetary policy, including the policy target. It is questionable whether the ECB is goal independent, since Article 127 paragraph 1 TFEU states that

“*The primary objective of the European System of Central Banks (…) shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union (…)***

Thus, the overall goal, price stability, is set by the Treaty and not by the central bank. Issing argues that since the main objective has been chosen by the Member States and not by the ECB Governing Council, the ECB is not goal independent. Others disagree and argue that the Treaty has only given the overall objectives and a hierarchy according to which price stability is paramount. Yet it is the ECB Governing Council who defines price stability. The Member State governments do not give an inflation target. Therefore, the ECB has goal independence.

---

200 CBI may also be influenced by endogenous factors. It is suggested that the German experience of hyperinflation in the 1920s causes the German public to act as a particularly vigilant ‘watchdog’ over monetary policy, thus contributing to stable price levels, see Alesina, Summers, *op.cit.*, p.153

201 *Debelle, Fischer, *op.cit.*, p.197


203 TFEU, *op.cit.*, Article 2 of the ECB statute echoes this statement.


When comparing the arguments, the fact that the ECB alone has the sole power to define price stability is a very convincing point for considering it goal independent. While the ECB is not completely free in the choice of its objectives, the objective of price stability is broad and needs definition. The competence for definition lies with the ECB. Indeed, Article 127 paragraph 2 TFEU gives the ECB the right to “define and implement the monetary policy of the Union.” 207 Neither the Treaty nor the statute gives an exact definition of price stability. 208 The ECB has made use of its power to define. In 1998, the ECB Governing Council agreed upon a target of “below 2 percent” 209 of year on year increase in the Harmonized Index of Consumer Prices (HICP). This definition was amended in 2003 to a target of inflation rates “close to 2 percent”.210

Moreover, the American Federal Reserve System (‘Fed’) is also being considered goal independent because it can choose priorities between price stability and employment, and can also interpret price stability.211 Both the Fed and ECB share the possibility to interpret price stability, which is a major power. Taking account of these facts, the ECB must be considered goal-independent.

Not only goals, but also instruments of monetary policy can be left for the central bank to decide independently. Instrument independence is the power of the central bank to choose the instruments with which it pursues its goal.212 For the ECB, this right is enshrined in Art. 132 TFEU, which provides that

“(…) the European Central Bank shall (…) take decisions necessary for carrying out the tasks entrusted to the ESCB under the Treaties and the Statute of the ESCB and of the ECB” 213

Thus, the ECB is instrument independent because it can choose the ways in which it conducts monetary policy. Summing up, it can be concluded that the ECB enjoys a high degree of political independence.

207 TFEU, op.cit.
211 Crowe, op.cit., p.3
212 Debelle, Fischer, op.cit., p.197
213 TFEU, op.cit.
4.4.3. Functional independence

A central bank is functionally independent if it alone can determine the short term interest rate without interference from other institutions' policy actions.\textsuperscript{214} A precondition is that the central bank has the necessary instruments to do so at its disposal.\textsuperscript{215}

Functional independence is at risk if governments pursue unsustainably expansive fiscal policy. If the state spends too much and creates budget deficits, it may eventually force the central bank to finance its debt. Actors in the financial markets will be afraid of monetization of debt and will lose trust in stable monetary policy, so that inflation expectations rise. Thus, fiscal policy that creates large deficits can outweigh monetary policy. Therefore, fiscal discipline is required to sustain functional central bank independence.\textsuperscript{216} However, in a democratic system, government spending cannot be legally restricted by the central bank.

Furthermore, functional independence is about preventing central bank credit to the public sector (this aspect actually concerns both functional and financial independence). If the central bank becomes the creditor of the government, then its monetary policy, through its credits to the government, will have an impact on the central bank itself. Also, the government may try to influence monetary policy via the leverage it gains over the central bank through the credit. The prohibition of any form of such credit in Article 123 paragraph 1 TFEU therefore serves CBI purposes. This prohibition also concerns the direct purchase of bonds from governments (which is part of why the SMP has drawn so much criticism).

The ECB is functionally independent exactly because of Article 123 TFEU. While government spending cannot be influenced by the central bank, central bank credits to the government can. Hence, the ECB's functional independence is legally ensured as far as possible.

4.4.4. Financial independence

According to Article 123 TFEU, lending to public authorities is prohibited to the ECB. It is therefore independent with regard to the “\textit{internal component}\textsuperscript{217}”. The ECB is limited

\footnotesize{\textsuperscript{214} Bini Smaghi, \textit{op.cit.} \\
\textsuperscript{215} Bodea, Huemer, \textit{op.cit.}, p.8 \\
\textsuperscript{216} Bini Smaghi, \textit{op.cit.} \\
\textsuperscript{217} Loedel, \textit{op.cit.}, p.135}
with regard to the “external component”\textsuperscript{218} in that it cannot decide about exchange rate agreements. Rather, it is the Council, whose members are in fact instructed by their governments, that decides.\textsuperscript{219} Yet, this is de facto not a threat to CBI, because such agreements require unanimity in the Council. This unanimity, as well as a possibly needed consensus on the G7 level, is unlikely to be achieved in practice.\textsuperscript{220} Also, the Member States are bound by Art. 119 TFEU, according to which price stability is an objective of the exchange rate policy.

The central bank should have sufficient means to fulfill its mission. The capital of ECB comes not from the Member State governments, but from the national central banks.\textsuperscript{221} Finally, Article 33 of the ECB statute clearly regulates the distribution of central bank profits. From these criteria, it follows that the ECB has a high level of financial independence.

\textsuperscript{218} Ibid.

\textsuperscript{219} Martin Seidel, Legal Aspects of the European Central Bank, p.206, in Detlev Ehrig, Uwe Staroske, Otto Steiger (eds.), The Euro, the Eurosystem and the European Economic and Monetary Union, Berlin, LIT Verlag, 2011

\textsuperscript{220} David Howarth, Peter Loedel, The European Central Bank, Houndmills, Palgrave MacMillan, 2005, 2\textsuperscript{nd}, p.141

\textsuperscript{221} ECB website, Capital subscription, http://www.ecb.int/ecb/orga/capital/html/index.en.html, (website visited on April 17, 2012)
4.5. Impact of the SMP on CBI

The SMP bond purchases potentially influence three areas of CBI: Political, functional and financial independence. Personal independence is not affected.

4.5.1. Political independence

Regarding political independence, the former head of economics at the ECB Mr. Jürgen Stark argues that the SMP blends fiscal policy and monetary policy. The ECB declared that its interventions depend on political decisions of certain Member States, namely the reduction of the public deficit. According to Mr. Stark, this is an undue connection between fiscal and monetary policy. Either the interventions are decisions of monetary policy, which should not be connected to the conditional behavior of some Member States; or it is not a decision of monetary policy - which leads to political dependence.222

Indeed, there is a link between the SMP and Member State behavior. In the preamble of its decision on the SMP, the ECB explicitly connects the bond purchases to Member State behavior. Point four of the preamble states

“\textit{The Governing Council will decide on the scope of the interventions. The Governing Council has taken note of the statement of the euro area Member State 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’}”\textsuperscript{223}.

Then-President of ECB Mr. Jean-Claude Trichet further confirmed this connection:

\textit{“It is crucial that governments implement rigorously the measures needed to ensure fiscal sustainability. It is in the context of these commitments only that we have embarked on an intervention programme in the securities markets.”}\textsuperscript{224}

Of course fiscal policy is a competence of the Member State governments and not the ECB, but the link between fiscal policy commitments and the inception of the SMP as a part of monetary policy is problematic. One might argue that it is actually beneficial for the ECB to keep up the pressure on Member States to reduce their deficits. The statements show how reluctant the ECB was to take the step into the secondary market and it signals to Member States that the measures will be only temporary in nature and are not unlimited, but dependent on their efforts. Still, there is an inconsistency in the argumentation of the ECB: On the one hand it declares the SMP a measure of

\textsuperscript{222} Interview with Jürgen Stark, Handelsblatt, March 23, 2012
\textsuperscript{223} ECB/2010/5, \textit{op.cit.}
\textsuperscript{224} Trichet, \textit{op.cit.}
monetary policy necessary to restore policy transmission; on the other hand it states that the SMP has been initiated in the context of Member States' promises to reduce their deficit. However, either there is a disturbed monetary policy transmission through malfunctioning markets that needs to be fixed regardless of what the Member States commit to. Or the measure pursues other objectives, which are linked to Member States behavior. Here, the ECB argues incoherently.

Furthermore, the threat to political independence comes from the influence that such an important position in the ECB balance sheet can have on the behavior of the central bank and its relationship to the Member States. The central bank becomes an important stakeholder in the fate of the states whose bonds it owns. There is the danger of undue influence by Member States on the ECB, for example to keep up the bond purchases. The heads of state, especially of those countries whose bonds were bought, now have certain leverage over the ECB. To put it bluntly, they might threaten the ECB with going bankrupt, which would expose the ECB to tremendous losses. However, this would backfire on Member States, as ECB profits and losses are distributed to national central banks according to their share in the ECB capital. NCB profits and losses, in turn, are then distributed to the respective Member State. This adds an inter-Member State dimension to the issue, which perhaps reduces the likelihood of influence of Member States on the ECB. Anyhow, there is unfortunately no way to assess whether there has been any attempt by Member States to use this leverage. Still, the fact remains that the Member States now have means to potentially take influence. At the same time, the Member States depend on the central bank as a partner and ally during the current crisis, so that both sides are mutually dependent to a certain extent. There should be no such Member State potential to take influence.

To sum up, there are contradictions in the reasoning the ECB gives for initiating the SMP. Also, the political independence of the ECB is at risk, since Member States now have the possibility to put pressure on the ECB due to the large amount of sovereign debt it acquired under the SMP.

4.5.2. Functional independence

Does the SMP affect the ECB's functional independence? Functional independence concerns the prohibition of central bank credits to the government. As discussed above, this is ensured by Art. 123 TFEU - with which the SMP is in compliance.

However, an issue with another part of functional independence arises. This part is the central bank's ability to independently set interest rates and implement monetary policy
without being affected by other actors’ policies.\textsuperscript{225} It is argued that if the Eurosystem were hit by losses, it would be perceived to be in weak financial condition and thus dependent on Member States funding. This would lead to a loss of credibility concerning its ability to independently pursue stable monetary policy, as Member States - which are perceived to be less favorable to price stability than the ECB- would have influence on monetary policy.\textsuperscript{226}

Indeed, if economic actors lose trust in stable monetary policy, inflation expectations may rise.\textsuperscript{227} Thus, the default risk threatens the ECB’s credibility and therefore its ability to implement monetary policy. It follows that its functional independence is threatened as well.

4.5.3. Financial independence

With regard to financial independence, the large amount of sovereign debt held by the ECB raises questions. There is the risk of significant losses at the ECB, should the acquired bonds default. As of April 6, 2012, the total amount of debt purchased on the SMP is € 214.2 billion. While the ECB \textit{capital} is only € 10.76 billion,\textsuperscript{228} the Eurosystem has at its disposal reserves worth € 83 billion.\textsuperscript{229} Losses can exceed the Eurosystem capital or at least reduce it.

Losses can be covered by creating money, but this comes with the risk of inflation and is therefore a risky business.\textsuperscript{230} Another option is the recapitalization of the Eurosystem by the Member States. This solution comes with two problems. First, the Member States can delay payments and determine their size which would give them control over monetary policy.\textsuperscript{231} If the Member States themselves are in financial distress, they might not be able or willing to cover the central bank losses.\textsuperscript{232} Second, there is no joint recapitalization

\textsuperscript{225} Bodea, Huemer, \textit{op.cit.}, p.8
\textsuperscript{227} Bini Smaghi, \textit{op.cit.}
\textsuperscript{228} Currently (April 2012), the capital actually paid in is only € 6.3 billion. The remainder will be paid in a final instalment by the end of 2012, see http://www.ecb.int/ecb/orga/capital/html/index.de.html, (website visited on April 17, 2012)
\textsuperscript{231} Stella 2005, \textit{op.cit.}, p.360
\textsuperscript{232} \textit{Ibid.}
mechanism on the European level, instead each Member State supports its own NCB. This “fiscal vacuum”\textsuperscript{233} might produce a situation in which some NCBs have the support of the Member States, while others don’t.

A factor that must be taken into consideration is that in the case of the quasi-default of Greek sovereign bonds, the ECB was excluded from private sector involvement (PSI),\textsuperscript{234} meaning the forced reduced repayment of capital. If this position were upheld in possible future default cases, the ECB would not suffer losses. The Greek case set such a precedent for such exemptions, which heightens the possibility of future exemptions. However it is unclear if future exemptions will or will not take place.

All in all, the ECB is indeed exposed to default risk from the bonds purchased under the SMP. This results in the potential necessity for the ECB to resort to either ‘printing money’ or relying on Member States for capital. Both options can affect its ability to independently pursue monetary policy. Therefore, the SMP has the potential to reduce the ECB’s financial independence.

### 4.5.4. Concluding statement

While the ECB enjoys a high level of independence, the SMP has a negative impact. The areas of personal, functional and financial independence are exposed to risk which stems from the link between fiscal and monetary policy and the default risk of the acquired bonds. So far, there is no evidence for tangible effects; the risk has not materialized. Also, the SMP trend is almost neutral as there have been few purchases recently, but also no sales. Yet as long as the bonds remain in the Eurosystem balance sheet, the risk remains.

\begin{itemize}
\item \textsuperscript{234} Ralph Atkins, \textit{ECB is protected from forced losses on Greek bonds}, Irish Times, February 17, 2012, \url{http://www.irishtimes.com/newspaper/finance/2012/0217/1224311915248.html}, (website visited on April 17, 2012)
\end{itemize}
5. Conclusion

To date,\textsuperscript{235} the SMP constitutes a balance sheet position of € 214.2 billion. While the trend has been largely neutral in the current quarter, this is a sizable position which keeps the SMP a hot topic. So what is the outcome of this SMP analysis of economics, law and CBI?

With regard to the economic rationale of the programme, the main findings are as follows. There has indeed been a disturbance of monetary policy transmission due to the fact that the interest rates of certain government bonds did not respond to the monetary policy impulse of lowered key interest rates. Both the interest rates and the spread levels of these bonds vis-à-vis the benchmark German bonds were significantly elevated. It remains unclear however if this disturbance also constitutes a malfunctioning of the markets, as the ECB argues. It can just as well be a rational market reaction to fear of default. The ECB does not give criteria according to which to distinguish malfunction and rational reaction. Therefore, one must conclude that the ECB is interpreting the data.

As for the functioning of the programme, it transmits monetary policy through the interest rate-, asset price- and bank lending channels. These channels can be influenced by raising bond prices through targeted purchases. Recently, purchases show a neutral trend since November of 2011, with only minor purchases. Sterilization has been largely successful, with five short exceptions over the two-year period.

With regard to the legal questions raised, the SMP does comply with EU law. The ECB is subject to its statute, Article 123 TFEU and Council regulation 3603/93. As this thesis has shown, neither is violated. It follows from the objective of the ECB to guard price stability that it has inherent competence to take actions to safeguard the stability of the financial system. The core topic of the legal discussion certainly is the ECB’s no bailout clause in Article 123 TFEU. As a conclusion, the Article cannot be infringed by secondary market purchases which occur as monetary policy operations, as is the case with the SMP.

\textsuperscript{235} April 6, 2012
As for the impact on CBI, the main findings are that the SMP is a source of risk for the ECB’s political, functional and financial independence. The ECB has established a conditionality which links its purchases (and thus part of its monetary policy) to behavior of Member States. This constitutes a risk for political independence. Blending fiscal and monetary policy in this way is supposed to put pressure on Member States, but it also works the other way around. It is not unthinkable that Member States could influence the ECB in order to make it purchase more bonds to buy them time. What is more, the ECB contradicts itself by arguing on the one hand that the SMP is a matter of monetary policy, while on the other hand explicitly linking it to Member States behavior. Furthermore, there is a notable risk to financial independence because of potential losses from defaulting bonds, which can reduce the Eurosystem’s equity capital and make it necessary for Member States to step in. For this reason, the ECB’s credibility as a guardian of stable monetary policy will be endangered, should losses occur. This constitutes a risk to functional independence.

At the present time, it is unclear how long the SMP will remain active. Once stopped, it will continue to be a potential threat to the ECB’s independence and credibility until the bonds either mature or are sold.
6. Postscript November 2012

The securities markets program was terminated on September 6, 2012. Between the submission of the present thesis in April 2012 and the termination of the SMP in September 2012, the program's volume fell to €208.8 bn. due to the redemption of some of the securities acquired by the ECB. The ECB intends to hold all assets purchased under the SMP until maturity, e.g. until all are redeemed. Until then, the ECB is also going to keep sterilizing the liquidity injected by the SMP.

At the same time that the SMP was stopped, another program was initiated. Under the so-called Outright Monetary Transactions (OMT), the ECB can execute EU member state bond purchases in the secondary markets. Like its predecessor the SMP, the OMT has been initiated in order to preserve, and if needed restore, proper transmission of monetary policy in all member states. However, the OMT is different in one crucial area: it introduces conditionality. The ECB pledges to only purchase bonds of member states under EFSF/ESM macroeconomic adjustment programmes or precautionary programmes. Though there have been no purchases under the OMT to date, due to this new program the issue of bond purchases by the ECB will remain a controversial topic in the foreseeable future.


A. PRIMARY SOURCES


Bibliography


B. SECONDARY SOURCES

I. Books

4. Deutsche Bundesbank, “*Geld und Geldpolitik*”, 2010

II. Journal articles


3. Herrmann, Christoph, *EZB-Programm für die Kapitalmärkte verstößt nicht gegen die Verträge*, EuZW, 2010


III. Working papers


4. Bodea, Cristina, Huemer, Stefan, *Dancing together at arm’s length? The interaction of central banks with governments in the G7*, ECB occasional paper series, No. 120, October 2010


**IV. Articles published in a book**


2. Chatelain, Jean, Generale, Andrea, Hernando, Ignacio, Vermeulen, Philip, Von Kalckreuth, Ulf, *Firm investment and monetary policy transmission in the euro area*, in Angeloni el.al.(eds.)

3. Ehrmann, Michael, Gambacorta, Leonardo, Martinez-Pagés, Jorge, Sevestre, Patrick, Worms, Andreas, *Financial systems and the role of banks and monetary policy transmission in the euro area*, in Angeloni el.al.(eds.)


7. Loedel Peter; in Amy Verdun (ed.), *The €uro*, Rowman & Littlefield, Lanham, 2002,

8. Peersman, Gert, Smets, Frank, *The monetary transmission mechanism in the euro area: Evidence from VAR analysis*, in Angeloni el.al.(eds.)

10. Van Els, Peter; Locano, Alberto; Morgan, Julian; Villetelle, Jean-Pierre, *The effects of monetary policy in the euro area: Evidence from structural macroeconomic models*, in Angeloni el.al.(eds.)

V. Other publications


4. VI. Internet sources

23. Graph, http://shchart.finanzen.net/chart.gif?chartType=1&time=var&dateStart=20100101&dateEnd=20101231&height=200&width=300&symbol=965814&exchangeId=11&countryId=840&overTime=2&subProperty=1&volumeUnit=0&lateIndex=1&valor=846480, (website visited on April 17, 2012)
26. Lovelady, Alexander, Legality of the European Central Bank’s Securities Markets
Programme under attack, January 1, 2011, http://www.britishlawcentre.co.uk/events.html, (website visited on April 17, 2012)


