The European Central Bank

Canon

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1. Introduction

The power of the European Central Bank (ECB), like that of other supranational authorities, stretches far and wide; the combination of influence, authority and monetary tools at its disposal allow it to drastically affect economic conditions throughout Europe. This is something that has never been more accurate given the rise of globalisation that has resulted in highly interdependent economies across the continent. Therefore, it is essential to understand the objectives and challenges of the ECB in order to critically reflect on Europe's current economic climate and contribute sound arguments to ongoing political debates. This is highlighted by high-profile cases such as the continuing debt crisis in Greece that prompted the ECB to impose strict austerity measures on the country in an attempt to stabilize the region back in 2010.[1] More recently, the result of the June 2016 referendum in the UK – that has the country exiting the European Union by the spring of 2017[2] – has raised concern within the ECB about banking sector vulnerability and could spark a response to maintain stability in Europe.[3] These examples make it clear that any well-rounded opinions on major issues require a strong foundational knowledge of the ECB and its potential responses to price stability risks.

2. The purpose of the ECB

2.1 Primary objective

The main goal of the ECB and the Eurosystem is to maintain price stability, which is defined by the Governing Council as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%."[4] One of the main reasons for this objective is that price stability allows consumers to make better-informed decisions on consumption and investment due to the ability to recognize relative price changes. This is due to a fundamental difference between inflation and relative price changes.[5] Namely, relative price changes imply pressure on individual prices as a result of changes in the supply and demand of various goods, whereas inflation, strictly speaking, affects overall price levels in an economy. For example, a rising relative price indicates that there is higher demand than supply for a particular good, which incites consumers to look for substitute goods and producers to increase supply due to increasing profit opportunities. Theoretically, the decrease in demand and increase in supply decreases the relative price of the good to or close to its original level. In this way, relative price changes allow consumers and producers to efficiently allocate their resources. This is in contrast to inflation -- referring to a drop in purchasing power as a result of too much money being

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[1] "Does austerity work? Or does it make things worse?" Knowledge@Warton, University of Pennsylvania. August 19, 2015
<http://knowledge.wharton.upenn.edu/article/does-austerity-work-or-does-it-make-things-worse/>

[2] "PM Theresa May finally sets a date for starting Brexit" CBSNews. October 2, 2016.
http://www.cbsnews.com/news/british-pm-theresa-may-brexit-european-union-date-march/

[3] "Brexit: What is the ECB Reaction?" KPMG. July 29, 2016.
https://home.kpmg.com/xx/en/home/insights/2016/07/brexit-ecb-reaction.html

[4] "Benefits of price stability." European Central Bank. October 27, 2016,
https://www.ecb.europa.eu/mopo/intro/benefits/html/index.en.html

[5] Humpage, Owen. "Rising Relative Prices or Inflation: Why Knowing the Difference Matters." Federal Reserve Bank of Cleveland. June 1, 2008.
https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/economic-commentary-archives/2008-economic-commentaries/ec-20080601-rising-relative-prices-or-inflation-why-knowing-the-difference-matters.aspx

printed and putting upward pressure on prices of all goods and services -- which can distort important relative price signals. Essentially, it becomes harder to identify which part of a good's price increase is a result of relative price increases, thus making it more difficult for resources to be allocated efficiently.

Another advantage of price stability is that it reduces the investment risk for investors, given that, for example, bond yields consist of the real interest rate, investors' expected inflation and a risk premium that compensates for inflation uncertainty. With price instability or unstable inflation, the investment risk increases as evidenced through higher risk premiums due to more inflation uncertainty. The latter point holds true as the uncertainty stems from an inability to depend on past 5- or 10-year historical trends in predicting inflation. For this reason, as trends become less stable and dependable, the risk premium will rise. Price stability, however, creates a more predictable and certain environment that reduces or minimizes risk premiums, which increases the incentive to invest and has been well established to lead to economic growth.[6] Furthermore, avoiding significant price inflation or deflation minimizes distortions and promotes social cohesion by limiting an arbitrary redistribution of wealth and income. It has also been recognized that price stability contributes to financial stability. In extreme cases, such as hyperinflation in the Weimar Republic in the early 20th century and hyperdeflation during the more recent Argentinean crisis at the start of 21st century, this is made abundantly clear.[7] These reasons make price stability the ECB's most significant priority as it promotes higher employment, balanced economic growth and financial stability.

2.2 Influence in the Eurozone

In order to ensure price stability within the Eurozone, the ECB[8] first engages in economic and monetary analyses to better understand the risks associated with this primary objective. The single monetary policy strategy based on these analyses is then applied through a set of monetary policy instruments and procedures available to the central bank. This set forms the operational framework under which the ECB functions and aims to reach and maintain its price stability.

First and foremost, the monetary policy strategy revolves around the fact that the ECB (strictly speaking the Eurosystem) is the monopoly supplier of money within the Eurozone. This simply means that only the ECB has the ability to print money and increase the supply of money circulating throughout the economy. Controlling the supply of money ultimately allows it to manage liquidity and influence interest rates. Similar to other central banks such as the US Federal Reserve, the ECB's ability to print money (either physically or electronically) creates sufficient funds for it to buy assets from banks such as long-term securities and in doing so increase liquidity. Although this form of direct purchasing is less conventional in Europe compared to the US, the ongoing bond buying program, which will be elaborated on in section 2.3, highlights its increasing importance as a monetary policy tool. Furthermore, increasing the money supply theoretically decreases interest rates or the price of money in the short-run, similar to any other commodity. Importantly, lower

[6] "The Monetary Policy of The ECB." The European Central Bank. 2011 https://www.ecb.europa.eu/pub/pdf/other/monetarypolicy2011en.pdf

[7] Alevi, Joseph. "The Argentine Crisis." Monthly Review. 2014. Web. 27 Oct. 2016. http://monthlyreview.org/2002/04/01/the-argentine-crisis/

[8] For simplicity, we use the ECB although we recognize that the official entity in its entirety is the Eurosystem.

interest rates induce people to borrow more, which puts upward pressure on inflation all other things being equal. For this reason, in the long run the ECB will look to decrease the three key interest rates under its control to curb increasing inflation. The latter point highlights the ECB's ability to not only affect interest rates through the money supply but also directly by managing the rate on the main refinancing operations (MRO), deposit facility, and marginal lending facility.

Historically, the primary tool used by the ECB to manage liquidity has been repurchase (repo) contracts. In a repo contract, the borrower -- i.e. a bank -- provides the lender -- the ECB -- with collateral in exchange for short-term financing. In doing so, a bank transforms its long-term assets into short-term financing, allowing it to settle short-term obligations. On the contrary, the ECB holds more illiquid assets as a result. Ultimately, it is agreed upon that the bank buys back, or repurchases, the long-term securities offered as collateral. The stringent application process to qualify for membership in the EU – i.e. countries need to be in good financial health – is supposed to ensure that debt offered to the ECB by the countries it governs as collateral for repo contracts are, in theory, protected from the risk of inflation. Furthermore, the collateral offered is usually of high grade, protecting the ECB in case of default. However, this is highly dependent on a correct valuation of the securities, something the Financial Crisis of 2006-2007 has cast doubt upon. With the minimum bid rate, the ECB affects demand for repo contracts and consequently market liquidity; a higher rate will decrease demand and thus liquidity, while a lower rate increases demand and market liquidity. In this way, the ECB uses repo contracts to manage liquidity in the market.[9]

Additionally, the ECB oversees foreign exchange operations by intervening in the foreign exchange market. The ECB determines the euro foreign exchange reference rates daily at 14:15 CET by means of a teleconference between the administrator and the calculation agents; subsequently around 16:00 the exchange rates are published on the ECB website. The ECB determines these exchange reference rates by analyzing transactional data between buyers and sellers in the market where those data is available and reflect sufficient liquidity. In markets where the liquidity is limited the euro foreign exchange reference rates may be based predominantly or exclusively on available bid and offer rates or on prior transactions. This data is periodically assessed for appropriateness and 1) to ensure that the exchange reference crates are based on reliable and observable market data that reflect the economic reality of the market, and 2) to ensure that the foreign exchange reference rates themselves are reliable representation of the foreign exchange market. Additionally, in times of distress the Central Bank has the ability to use its foreign exchange reserve in order to stabilize the market. [10]

The ECB's last task is to promote smooth operations of payment systems, by establishing oversight policies that collect relevant information regarding large-value payment systems, retail payment systems and payment instruments. Subsequently, the ECB assesses this information and effectively induces change in order to maintain price stability.

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[9] "The European Central Bank and the Eurosystem" *Bertaut, Carol C. New England Economic Review (2nd quarter): 25–28. (2002).*
http://www.bos.frb.org/economic/neer/neer2002/neer202e.pdf

[10] "Framework for the euro foreign exchange reference rates" *The European Central Bank. https://www.ecb.europa.eu/stats/pdf/exchange/Frameworkfortheeuroforeignexchangereferencerates.en.pdf?3e6954e3231bfd495fe0030c2b992af8*

2.3 A real world example: the Public Sector Purchase Programme (PSPP)

The ECB is able to pursue price stability through the use of a quantitative easing (QE). QE occurs when government securities are purchased by the ECB or another central bank in order to flood financial institutions with capital and consequently induce lending and liquidity in the market. It is assumed that QE causes interest rates to decrease and the money supply to increase, theoretically stimulating economic activity. Consequently, this unconventional approach is used during times of economic distress, but is only considered effective when interest rates are not approaching zero.[11]

Although this is not one of its most conventional tools, asset purchasing is not a novel idea as the ECB has previously purchased sovereign debt from countries such as Greece, Spain and Italy from 2010-2012 under the Asset Purchase Programme (APP). The persistent economic downturn throughout the Eurozone prompted the ECB to expand on the APP by announcing the Public Sector Purchase Programme (PSPP) on January 22, 2015. The ECB had previously attempted to spurt a recovery by using its influence to decrease interest rates and thus incentivize investment in the economy. However, after applying this monetary tool to the point of cutting one of its main interest rates below zero in 2014, without the desired result, the ECB pursued this more ambitious strategy. Under the PSPP, the ECB committed to an increase in sovereign bond purchases, which started in March of the same year with the hope of stabilizing the region.

The response to this policy is ambiguous given its potential effects on household and company investment. Namely, basic economic theory tells us that negative interest rates reduce borrowing costs for households and companies, driving demand for loans up. However, in extreme cases, negative interest rates imply that depositors need to pay the bank to hold its money, potentially limiting funding for banks as depositors look for better places to put their funds. On the other hand, negative interest rates squeeze the profit margin for banks as lending becomes cheaper. This could induce banks to scale back their lending operations and thus contradict the fundamental purpose of QE. Namely, the increased capital of banks would not continue to flow into the real economy through household and company investment. The positive and desired effect of the monetary policy would thus be undermined.

3. Challenges and concerns

3.1 The ECB's relationship with national central banks (NCBs)

Given its supranational status, the ECB presides over countries that often have different interests, which complicates the monetary policy strategy which is aimed at price stability in the region. This is highlighted by the relationship between the ECB and the national central banks of those countries; the ECB, which coordinates the operations, has a primary objective of price stability in the Eurozone, while the national central banks, which execute the policies, care mostly for the welfare of the countries they represent.[12] This decentralised implementation of monetary policy is thus difficult to navigate, as interests are not always aligned. For example, the optimal result is not always attained when the ECB uses its ability to manage liquidity in order to influence interest rates. For example,

[11] "Quantitative Easing." Investopedia. http://www.investopedia.com/terms/q/quantitative-easing.asp
[12] "Monetary Policy Instruments" European Central Bank Official Website <https://www.ecb.europa.eu/mopo/intro/operational/html/index.en.html>

when interest rates are set at an optimal level based on Germany's credit rating or economic health; this means that countries such as Spain and Italy with lower credit ratings are able to borrow at a rate which is too low and that subsequently does not fully capture the risks associated with those countries. Ultimately, problems arise when the collateral, provided in return for this ability to borrow, is not of high enough quality (this can be masked using accounting techniques). In the Netherlands, it is believed by some national bank representatives that low interest rates threaten the stability of the country.[13] However, the national central bank has no influence to change this rate with only one seat on the Governing Council. The Nederlandsche Bank then needs to enhance the resiliency of their banks through a number of methods to prevent major damage in case of crises. The combination of these two examples highlights the difficult nature of the relationship between the ECB and the national central banks.

A recent hopeful example epitomizing this relationship is the Single Supervisory Mechanism (SSM), which is a new system of banking supervision for the Eurozone.[14] In this system, the ECB and NCBs coordinate the supervision of the banking systems to ensure that there is a sufficient safety net able to withstand shocks in the system.[15]

3.2 The exit of Eurozone member countries

Another noteworthy challenge to stability within the Eurozone is the possible exit of one of its member states. The common monetary union for these different types of economies (Central Europe, Southern Europe and Eastern Europe) makes the convergence of their interest difficult. While Northern Europe and Eastern Europe are focused in price stability and banking sector solvency, Southern Europe is interested in the ECB's work in sovereign-debt help and reduction of unemployment. As there is no legal path to the exit of one member, the possible withdrawal remains uncertain.

The possibility of an exit of a country or the breakup of the Euro surfaced during the European sovereign-debt crisis in 2010. This exit could occur in two different ways. First, the cost competitiveness of a low-income country such as Greece (in 2010 and again in 2015) would increase, likely resulting in a boost in exports. This could significantly inconvenience countries with high levels of debt, as depreciation would increase their debt amount in real terms.

The other option would be the exit of a high-income country such as Germany or the Netherlands, which would raise concerns over an expensive ECB policy that could lead to high inflation. The main trouble for these countries would be losing their leading role in a monetary union in which they are the most competitive countries. Especially their surplus in the trade of goods would be threatened.[16]

Another important issue that arises with the withdrawal of one country is the domino effect, which will eventually lead to the total breakup of the monetary union. Naturally, for a domino effect to occur, the size and influence of the member state leaving the European

[13] Presentation by Dr. Rob Nijskens, Economist and Policy Officer at the ECB, Tilburg University, 25 Oct. 2016.
[14] "Single Supervisory Mechanism". European Central Bank Official Website https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html
[15] For a more detailed explanation: https://www.youtube.com/watch?v=n2t0Wt9hGUc
[16] Eichengreen, B., 2007. The Breakup of the Euro Area. *NBER Working Paper*, (w13393).

Monetary Union (EMU) is important. Although not a member of the EMU, the recent UK decision to leave the EU could potentially spark this effect.

3.3 Value of the Euro

During some phases of the previous financial crisis, the monetary policies of the Federal Reserve were quick and aggressive, through a quick reduction of overnight interest rate, purchasing mortgage-backed securities of sponsored government enterprises and bespoke assistance to big financial institutions such as JP Morgan Chase, in this case to digest the acquisition of Bearn Stearns, or AIG the insurance company closely related to Lehman Brothers[17].

These actions caused the American dollar to drop in value in relation to the Euro. This relative increase in strength of the Euro made goods and services produced in the Eurozone more expensive. Eventually this hurt the least competitive economies as their goods are more sensitive to changes in price.[18]

Ultimately, the optimal value of the Euro has no definite answer. Once again, not all interests align: while less competitive countries would prefer a weaker Euro as it would increase exports, other countries such as Germany or the Netherlands prefer a stronger currency to avoid a loss of purchasing power. This makes the ECB's policy stance in regards to its currency a tricky one.

Adding the goal of reducing unemployment as a statutory goal in the ECB statutes, comparable to that of the Federal Reserve, could satisfy the southern countries while maintaining the inflation objective of under 2%, which it currently is. This balance between controlling inflation and aiming at a reduction of unemployment can be achieved using this legal framework.[19]

4. Conclusion

This canon highlighted some of the key foundational aspects of the European Central Bank, while concurrently elaborating on its influence in the Eurozone and the challenges that arise given its position as a supranational authority. From having to navigate its relationship with the national central banks to the possible exit of Eurozone member, the ECB clearly has a difficult task when it comes to maintaining price stability in the Eurozone. Lastly, it is worth noting that the ECB is by no means an old institution and is therefore still adapting. This is highlighted by hopeful new policies such as the SSM that hopes to better regulate the banking industry in the future.

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[18] Bénassy-Quéréa, A., Gourinchasb, P.O., Martinc, P. and Plantind, G., 2014. The Euro in the 'Currency War'. French Council of Economic Analysis.

[19] Federal Reserve Act, 2013. Section 2A. https://www.federalreserve.gov/aboutthefed/section2a.htm

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