



**THE IMPACT OF THE GLOBAL FINANCIAL
CRISIS ON CENTRAL BANKS'
INDEPENDENCE AND MANDATE**

CASES OF THE US FED, THE ECB AND THE BOE

By

Jakub Gren

LL.M. SHORT THESIS

COURSE: EU Human Rights Law and Policy

PROFESSOR: Marie-Pierre Granger

Central European University

1051 Budapest, Nador utca 9.

Hungary

TABLE OF CONTENTS

INTRODUCTION.....	1
1. THE CONCEPT OF CENTRAL BANK INDEPENDENCE	9
Opening remarks	9
1.1 The road to central bank independence.....	9
1.2 Stable money as a rationale for central bank independence.....	11
1.3 The nature of delegated monetary powers	13
1.4 The dimensions of central bank independence	15
1.5 The pre-crisis articulation of central banks' independence and mandate	17
2. THE ANTI-CRISIS MEASURES OF CENTRAL BANKS AND THEIR INDEPENDENCE.....	20
Opening remarks	20
2.1 Central banks' standard measures.....	21
2.2 Central banks' non-standard measures	22
2.3 Implications of "non-standard measures" on central banks' instrument independence.....	30
3. THE NEW, POST-CRISIS FINANCIAL STABILITY OBJECTIVES OF CENTRAL BANKS AND THEIR MANDATE.....	32
Opening remarks	32
3.1 The notion of financial stability	33
3.2 The articulation of financial stability mandate in macro prudential sphere	34
3.3 The articulation of financial stability mandate in micro prudential sphere.....	37
3.4 New financial stability responsibilities and their implications to central banks' mandate ...	38
CONCLUSION	40
BIBLIOGRAPHY	43

ABSTRACT

The recent global financial crisis has shaken the celebrated paradigm of an independent central bank with monetary policy mandate focused on the paramount objective of price stability. During the crisis, central banks, particularly the Fed, the ECB and the BoE; in order to restore financial stability adopted many “non-standard measures” which successfully prevented greater financial turmoil. By providing emergency funding to unstable financial sectors, central banks’ balance sheets have expanded considerably which may pose certain risks to central banks’ independence in the conduct of its traditional monetary policy objectives. Furthermore, seeing the successes of central banks in fighting the crisis, the US, the British and the EU lawmakers decided to enhance their financial stability mandate, which in turn raised many questions as to its “clear and limited” scope and its compatibility with democratic principles. This thesis will explore the post-crisis challenges for central banks, raised by expansion of their balance sheets and broadened scope of their policy objectives, with regard to their independence and mandate.

INTRODUCTION

“Democratic principles demand that(...) central bank must be accountable in the pursuit of its mandated goals, responsive to the public (...) and transparent in its policies”
(Bernanke)¹

Nowadays, it is well-established that decision-making in the area of monetary policy, which requires a long time horizon, should be delegated to independent monetary authority, usually to a central bank, and insulated from day-to-day politics.² Academic scholarship and practical experience, especially from the last twenty years, clearly demonstrate that the more independent central bank is, the more efficiently it can pursue its monetary policy mandate.³ Therefore, the special nature of monetary policy, which is like a long-time horizon investment,⁴ constitutes the basis for the concept of central bank independence (CBI).

While CBI may be relatively easily justified on economic policy grounds, it may be somehow challenging from the democratic perspective. An independent central bank infringes in certain ways the traditional *lex monetae* which is the sovereign's ultimate competence.⁵ This raises the question how to accommodate a fundamental conflict between the CBI and democratic principles, that is between the policymaker independence and majority rule.

¹ See speech given by B. Bernanke on “Central Bank Independence Transparency and Accountability”. Tokyo, 26 May 2010. <http://www.federalreserve.gov/newsevents/speech/bernanke20100525a.htm> (28 March 2013). Since 2006 Ben Bernanke is the Chairman of US Federal Reserve. He has been criticized for not foreseeing the eruption of the global financial crisis.

² See A. Blinder (1998) *Central banking in theory and practice*. MIT Press 1998, p. 55-56.

³ For further argument, for example, see D. Ricardo (1824) *Plan for the establishment of national bank*. The Works of David Ricardo (McCulloch ed.). London 1846; F. A. von Hayek (1971) *Constitution of Liberty*. University of Chicago Press, 1978, p. 440–41; R. Barro, D. Gordon (1983) A Positive Theory of Monetary Policy in a Natural Rate Model. *Journal of Political Economy*, 91 (August), p. 589–610; A. Cukierman, S. Webb (1992) Measuring the Independence of Central Banks and Its Effect on Policy Outcomes. *World Bank Economic Review*, 6 p. 353–398; A. Alesina, L. Summers (1993) Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence. *Journal of Money, Credit and Banking*, 25 (May), p. 151–162.

⁴ See A. Drazen (2002) Central Bank Independence, Democracy and Dollarization. *Journal of Applied Economics*, Vol. V, No. 1 (May), p. 5. <http://ageconsearch.umn.edu/bitstream/44297/2/drazen.pdf> (28 March 2013).

⁵ See R.M. Lastra (2012) Central bank independence and financial stability. *Revista de Estabilidad Financiera* vol. 18, Madrid 2012, p. 53. <http://www.bde.es/f/webbde/Secciones/Publicaciones/InformesBoletinesRevistas/RevistaEstabilidadFinanciera/10/May/Fic/ef0318.pdf> (28 March 2013).

The answer is: through the nature of delegated powers and constitutionalism. Monetary policy-making is a delegated power, not a given one. The CBI is neither unconditional nor absolute, but a mean designed for better fulfillment of monetary policy goals. Independent monetary policy-making is not inconsistent with democratic principles when we realize that removing some decisions from “*the hurly-burly of politics*”⁶ and making them difficult to change is the very substance of constitutionalism, a central concept to the functioning of western liberal democracies.⁷

Thus, in modern democratic and constitutional systems, the CBI has to be framed within the system of proper checks and balances, where the openness to full scrutiny and accountability of a central bank are the two core requirements. The best way to meet them is to give a central bank a “*clear and limited mandate*”.⁸ In the same way as popular elections legitimize democracy, a “*clear and limited mandate*” legitimizes CBI. The most superior form of a central bank’s mandate legitimization is its legal articulation.

Furthermore, putting constraints on monetary policy decision-making (delegating it to an independent central bank) was also justified by widespread agreement, unlike fiscal policy, as to what a good monetary policy meant.⁹ Its primary objective was to preserve stable money. In the course of the 90s, both the Monetarists and the Keynesians¹⁰ reached consensus (so

⁶ See Drazen (2002), *Central Bank Independence...*, p. 5

⁷ See A. Sajó (1999) *Limiting government : an introduction to constitutionalism*. Central European University Press. Budapest 1999.

⁸ See O. Issing (2002) *Should we have faith in central banks? Institute of Economic Affairs 2002*, p. 28. <http://www.iea.org.uk/sites/default/files/publications/files/upldbook141pdf.pdf> (28 March 2013). The term “mandate” refers to a combination of the responsibility and authority which are exercised by a state agent in order to enforce certain goals of public policy. The mandate is the clearest when law explicitly introduces the agent’s responsibility for executing a policy function, establishes the objectives and provides the certain competences and powers that may be necessary in order to pursue it.

⁹ See Drazen (2002), *Central Bank Independence...*, p. 1.

¹⁰ Monetarism and Keynesism are in modern times two main schools of economic thought. At the risk of oversimplification, with regard to central banking, the first one (leading supporter Milton Friedman) is of the opinion that monetary authorities should focus solely on maintaining stable purchasing power of money, while the latter (founder J.M. Keynes) one sees monetary policy also as an instrument to stimulate economic growth.

called “Jackson Hole consensus”¹¹), which became almost the universal paradigm of monetary policy, that the mandate of central bank should be based on the paramount objective of maintaining price stability in the form of low inflation targeting.¹² Such a paradigm was relatively easy to enact legally. The price stability objective, as a single-dimensional one, requiring to concentrate only on one quantifiable indicator – the inflation forecast, was perfectly suitable as the central bank’s “*clear and limited mandate*”. The mandate was to be implemented by a single instrument – monetary policy.¹³ This assumption did not imply that central banks could not have supported other objectives within the delegated monetary policymaking. They could do it, however only to the limits their price stability mandate allowed. The central bank’s role as the Lender of Last Resort (LoLR) is a standard example of their contribution to financial stability.

The most visible reflection of this consensus is the status of the European Central Bank (the ECB), whose superiority of the price stability mandate is explicitly and legally expressed by the TFEU.¹⁴ However, it may be worth noting that the dispute on the question of single v. dual or even more-dimensional mandate for central banks still continues.¹⁵ The dual mandate of the US Federal Reserve (the Fed) is the best example of it.¹⁶

¹¹ Jackson Hole is a city in Wyoming, US where the US Federal Reserve has traditional annual conferences about monetary policy.

¹² See O. Issing (2012) Central Banks – Paradise Lost. *CFS Working Paper No. 2012/06*. Goethe- Universität Frankfurt 2012, p. 7. https://www.ifk-cfs.de/fileadmin/downloads/publications/wp/2012/12_06.pdf (28 March 2013)

¹³ See R.M. Lastra (2012), Central bank independence ...p. 51.

¹⁴ See art. 127.1 TFEU: “The primary objective of the European System of Central Banks (hereinafter referred to as “the ESCB”) shall be to maintain price stability.”

¹⁵ For further reference, see B.M. Friedman (2008) Why a Dual Mandate is Right for Monetary Policy, *International Finance 11:2, 2008*, p. 153-165. http://scholar.harvard.edu/files/bfriedman/files/why_a_dual_mandate_is_right_for_monetary_policy.pdf (28 March 2013)

¹⁶ The dual mandate of US Federal Reserve is price stability and full employment. See Section 2a (Monetary Policy Objectives) of the 1977 Federal Reserve Act.

The recent global financial crisis¹⁷ has shaken this comfortable paradigm of the central bank's monetary policy mandate focused on the paramount objective of price stability. It has raised multiple questions concerning more active role of central banks in preserving financial stability and its specific responsibilities and competences to pursue this objective.

Thus, if we assume that a “*clear and limited*” mandate of an independent central bank is the best way to achieve the requirements of its openness to scrutiny and accountability, either making it less clear or expanding its original limit may undermine any of these two checks and balances' thresholds of constitutional design for the CBI.

The purpose of this paper is to examine how the crisis has influenced central bank independence and mandate. It will be argued that central banks actions to the crisis have affected the central bank independence by testing the boundaries of central bank mandate. The law-makers responses, in turn, have raised doubts as its explicitness of central bank's mandate. Both developments may affect the central bank's openness to scrutiny and accountability – the key checks and balances which contribute to the compatibility of CBI with constitutional democracy. As the anti-crisis actions of the US Federal Reserve, the European Central Bank and the Bank of England have shown parallels with regard to the extension of the range of traditional monetary tools and the anti-crisis responses of lawmakers in US, UK and EU similarly concentrated on enhancing the central banks' financial stability objectives; these three jurisdictions will be the basis of my comparative study.

¹⁷ Under the notion of the recent global financial crisis I understand the global economic decline which has started in 2008 and goes on. At the risk of oversimplification, its two most important stages may be extracted: 2008-2009 subprime mortgage crisis (US and UK); and ongoing EU sovereign default crisis (2010-).

Seeing that the crisis brought the global financial system “*to the verge of systemic collapse*”¹⁸ and raised the possibility of economic depression and deflation, in such unordinary times the central banks could not stay passive and had to act. In order to face the unprecedented economic challenges, the US Federal Reserve (Fed), the Bank of England (BoE) and the European Central Bank (ECB), adopted so-called “*non-conventional (or non-standard) measures*”. They have actually put them into an entirely new role of financial stability guardians and crisis managers. As El-Arian grasped it:

*“In the last three plus years, central banks have had little choice but to do the unsustainable in order to sustain the unsustainable until others do the sustainable to restore sustainability.”*¹⁹

To put into other words this purposely cramped sentence, to restore financial stability – which is a condition for conduct of an efficient monetary policy - central banks had to innovate and expand their traditional monetary policy tools. They not only cut interest rates effectively to zero bound,²⁰ but also undertook various actions – including providing liquidity to insolvent institutions - which expanded enormously their balance sheets²¹ and changed their risk profile.²² Those were the effects of the introduction of ultra-easy monetary policy – the “*one of the greatest economic experiments of all time*”.²³

¹⁸ See J. Vinals (2010) *Central Banking Lessons from the Crisis*. Monetary and Capital Markets Department, IMF May 2010, p. 3. <http://www.imf.org/external/np/pp/eng/2010/052710.pdf> (28 March 2013)

¹⁹ Mohammed A. El-Erian is the CEO of Pacific Investment Management Company (PIMCO) which is one of the largest investment firms in the world (ca. USD 2 trillion according to the 2012 annual report, 31 December 2012). See speech given by Mohammed A. El-Erian on “*Evolution, Impact and Limitations of Unusual Central Bank Policy Activism*” at Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, April 2012. <http://www.pimco.com/en/insights/pages/evolution-impact-and-limitations-of-unusual-central-bank-policy-activism.aspx> (28 March 2013)

²⁰ By lowering interest rates (easing or accommodating monetary policy), a central bank makes money less expensive to borrow and expands the monetary base. The aim is to support credit actions and stimulate economic growth. However, it increases inflationary risks and may affect price stability.

²¹ Central bank’s balance sheet is a summary of their financial balances – assets and liabilities.

²² Risk profile is an aggregated value of the risks to which an organization may be exposed.

²³ See W. R. White (2012) *Ultra Easy Monetary Policy and the Law of Unintended Consequences*. Globalization and Monetary Policy Institute, Federal Reserve Bank of Dallas, Working Paper No. 126 August 2012, p. 1. <http://dallasfed.org/assets/documents/institute/wpapers/2012/0126.pdf> (28 March 2013)

The very first impact of these actions is that central banks once “*clear and limited*” mandates have been taken into completely unknown territory. Providing liquidity to institutions at risk of insolvency was the very extension of their traditional LoLR function. By funding those illiquid but solvent ones they entered into the realm of the fiscal policy, which is not covered by their delegated monetary policy mandate. The fiscal policy decision-making is a sphere reserved to sovereign acting via elected constituencies with popular mandate, not to unelected technocrats. Furthermore, increasingly expanding balance sheets of central banks have raised questions about their commitment to the price stability objective. In fact, prolonging ultra-easy monetary conditions and postponing “exit scenarios” may undermine their credibility and ultimately threaten their operational and instrumental independence.²⁴

Only after the central banks had fired their “*non-standard measures*”, the anti-crisis responses of the governments came. The lawmakers, having realized that “*a good crisis can be never wasted*”²⁵ and addressing popular demand for regulation, proposed a set of regulatory responses. This resulted in new legislation which assigned a set of enhanced financial stability responsibilities, particularly in the area of supervision, to central banks. However, it has raised doubts whether the extension of the central bank’s financial stability objectives do not equip them with overextended powers and whether they can still be compatible with its originally “*clear and limited*” mandate.

Another problem is the notion of financial stability. While there is a vast literature on the definition of “*price stability*” as central bank’s objective, “*financial stability*” remains rather

²⁴ See speech given by J. Caruana on “Central banking in a balance sheet recession” at the Board of Governors of the Federal Reserve System 2012 conference on “Central banking: before, during and after the crisis”, Washington, 23-24 March 2012. J. Caruana is the General Manager of the BIS (Bank of International Settlements). <http://www.ijcb.org/journal/ijcb13q0a17.pdf> (28 March 2013)

²⁵ This is a paraphrase of “*Never let a good crisis go to waste*” coined by Rahm Emanuel, the former chief of staff of US President Barack Obama.

a vague concept.²⁶ It is much easier to identify what financial instability is than to point out the features of a system's financial stability. This leaves space for a margin of appreciation for a central bank as to interpreting its “*financial stability*” objective. It may lead to the expansion of its discretionary power and weakening of its openness to scrutiny and accountability. If the “*clear and limited*” mandate is to be maintained, any expansion of a non-elected agency's competences need to be accompanied by the adequate mechanisms of checks and balances.²⁷

Finally, in the case a central bank is obliged to pursue more than one objective, it may be faced with possible “trade-offs” between them and forced to make “*value judgments*”.²⁸ In case price stability along with low inflation targeting ceases to be the paramount objective of central banks, their credibility – which is the one of the most important factors for successful monetary policy²⁹ - and their reputation may be put at risk.

This thesis will be structured as follows. At the very beginning the concept of central bank independence will be briefly presented, including the evolution of central banking towards independence, the rationale for monetary policy delegation, the nature of delegated monetary powers. I will also clarify the meaning of central bank independence, by presenting the two main dimensions of the CBI – the “*goal*”, the “*instrument*” one³⁰ and how the central bank independence was articulated before the crisis.

²⁶ See Lastra (2012) Central bank independence..., p. 59. For more comprehensive study on the dimensions of financial stability, see W.H. Buiter (2012) The role of central banks in financial stability: how has it changed? *International Macroeconomics Discussion Paper No. 8780*, Centre for Economic Policy Research LSE January 2012. <http://www.cepr.org/DP8780> (28 March 2013)

²⁷ See Lastra (2012) Central bank independence..., p. 61.

²⁸ See Issing (2002) Should we have faith..., p. 18.

²⁹ See A. Blinder (1998) *Central banking*..., p. 56.

³⁰ According to Debelle and Fisher's distinction. See G. Debelle, S. Fischer (1995) *How Independent Should a Central Bank Be?* Federal Reserve Bank of San Francisco. Working Papers I Applies Economic Theory 94-05. <http://www.bostonfed.org/economic/conf/conf38/conf38f.pdf> (28 March 2013)

The main part will concentrate on the challenges which the crisis has created to central bank independence and mandate. To examine the challenges for the central bank's independence, especially in its "*instrument*" dimension, an analysis of the impact of selected anti-crisis "*non-standard measures*" introduced by the Fed, the ECB and the BoE will be offered. To examine the challenges for the once "*clear and limited*" central bank's mandate, the recent legislative developments in US, Eurozone (EU) and UK, which aimed at enhancing central banks' financial stability mandates, will be presented. The issue whether traditional central bank governance arrangements need to be altered to fit a new situation will be also tackled. Concluding observations will finish this thesis.

1. THE CONCEPT OF CENTRAL BANK INDEPENDENCE

Opening remarks

This chapter will offer a conceptual framework for pre-crisis understanding of central bank independence. Firstly, the foundations of central banking and the evolution towards the concept of central bank independence will be presented. Afterwards, the nature of delegated monetary powers will be explained. The meaning of central bank independence will be presented in its two main dimensions– the “*goal*” and “*instrument*”. The pre-crisis arrangements of CBI independence and mandate will conclude this chapter.

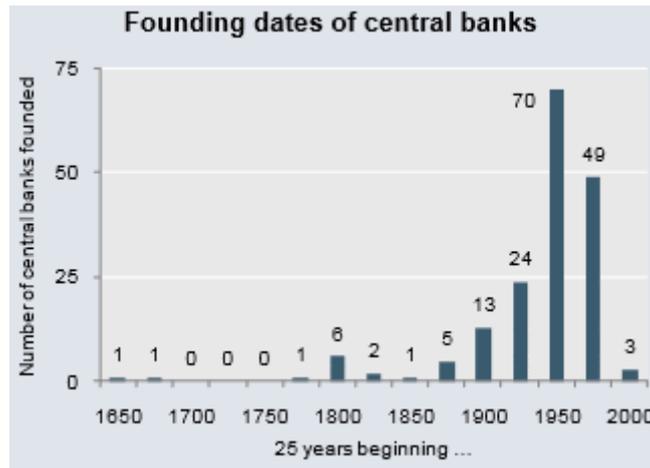
1.1 The road to central bank independence

“The central bank is an institution of the most deadly hostility existing against the Principles and form of our Constitution” (Jefferson)³¹

The history of central banking is a relatively short chapter. Traditionally the Swedish Riksbank (founded in 1668) is considered as a first *de facto* central bank created even before the concept of central banking was formulated. As to central banks, which are being covered in this paper, the Bank of England was the earliest (founded in 1694 for the purposes of financing the war with France). Two centuries later, in 1913, the US Congress in the Federal Reserve Act delegated its monetary power (“to coin money, regulate the value thereof, and of foreign coin”)³² to the Federal Reserve System (“Fed”), a new central monetary authority of the United States. The third of the central banks covered by this paper, the European Central Bank, was established in 1998 and is one of the youngest central banks in the world.

³¹ Thomas Jefferson – one of the American Founding Fathers and the 3rd President of the US.

³² See Article I, section 8, clause 5 of the US Constitution.



Source: BIS, 2008³³

Originally, a central bank was designed to function as a note issuer's and a banker for the government. It may be said that its objectives followed its functions. Over time, central banks become also the bankers to the banking system, acquiring the function of Lenders of Last Resort (LoLR). However, in the beginning of the 20th century these original central banks functions became more directly related to the public policy objectives and central bank's rationale evolved.³⁴ The interwar economic crises and the breakdown of the gold standard changed the nature of monetary policy. With the decline of the gold standard³⁵ and popularization of fiat money (paper standard system), the central banks become primarily those responsible for preservation of stable currency. It was settled that the best monetary policy arrangements to achieve this goal would go through central bank independence, where the "*clear and limited mandate*" of price stability would be the best nominal anchor in a paper standard system.³⁶

³³ See D. Archer (2008) *Roles and objectives of modern central banks [in:] Issues of governance in central banks*. Central Banks Governance Group, BIS 2008, p. 19. http://www.bis.org/publ/othp04_2.pdf (28 March 2013)

³⁴ See C. Goodhart (1998) *The Evolution of Central Banks*. MIT Press, Cambridge 1998.

³⁵ The gold standard is a monetary system where a currency unit is based on the fixed weight of gold. After the First World War it was gradually withdrawn. Some of economists, like Eichengreen, blame the gold standard which still was used during the 1920s for exceeding the negative effects of Great Depression (1929-1933).

³⁶ See Issing (2012) *Should we have faith...*, p. 13.

1.2 Stable money as a rationale for central bank independence

“The most effective way to destroy civil society is to destroy its money” (Lenin)³⁷

On July 10, 1940 the German Luftwaffe attacked the coast of England and Scotland from the air, which was to be the first step to the military conquest of Great Britain.³⁸ After four months, it was clear that the Battle of England was lost for the Nazis. Shortly after that defeat, the Germans started to produce a new weapon as destructive as bombs which was to destroy Britain. That weapon was to counterfeit the British Pound.³⁹ The objective was simple and intended to be disastrous: to weaken public confidence in the British currency and, by doing so, to give a powerful strike to the British economy. Ultimately the plan failed, because of the diversion of some German military officers who had opposed it as an unacceptable attack on the civilian population.⁴⁰ Counterfeiting as warfare may not be the best example of the value of stable money for a well-functioning market economy, but for sure it is the most striking one.

When the purchasing power of money is unstable, its quality and its usefulness as a medium of exchange starts to be questioned.⁴¹ This happens because economic agents trust that the currency unit will largely maintain its worth overtime. As a consequence, financial institutions become less sound and payment systems efficiency decays.

³⁷ The quote is attributed to W. I. Lenin, see W. Eucken. (1955) *Grundsätze der Wirtschaftspolitik*, Mohr, Tübingen 1955, p. 255. Alternatively, it is also claimed that originally Lenin said that “the best way to destroy the capitalist system was to debauch the currency”, see M. White, K. Schuler (2009) Who Said “Debauch the Currency”: Keynes or Lenin? *Journal of Economic Perspectives* Vol. 23, No. 2—Spring 2009, p. 213–222. <http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.23.2.213> (28 March 2013). W. I. Lenin was a politician and political theorist, the leader of the 1918 Bolshevik Revolution.

³⁸ It was known as “Operation Sea Lion”.

³⁹ It was known as “Operation Bernhard.”

⁴⁰ It is worth noticing that „Operation Bernhard” was not the first cases of use of counterfeiting as weaponry. One of the earliest known attempts took place in early Renaissance Italy. In 1470 Milanese Duke Galeazzo Sforza used counterfeiting against Venetian Republic in order to damage its economy. Later counterfeiting was practiced, for example, by Britain in American Independence War, France during Napoleonic Wars, the Confederation during the US Civil War and Bolsheviks during the 1917 Revolution.

⁴¹ See J. L. Jordan (2006) *Money and Monetary Policy for the Twenty-First Century*. Federal Reserve Bank of St. Louis, November/December 2006, 88 (6), p. 486. <http://research.stlouisfed.org/publications/review/06/11/Jordan.pdf> (28 March 2013)

This indicates that the very nature of money is built on public trust and its issuer promise that its value will preserve over time.⁴² Each market participant will only accept a money transaction if he can have confidence that other participants will accept it in future contracts. Trust is essential for money to operate as a medium of exchange, as a measure of value and solid unit of account. In particular, public confidence in money is of utmost importance in fiat money systems,⁴³ where printed money as a legal tender has no intrinsic value.⁴⁴ A stable value of currency, particularly of fiat currency, cannot be maintained without trust.⁴⁵

However, trust in a stable value of currency has to be built on solid foundations. The sole promise of its issuer is not a sufficient condition. In modern times, to enforce the credibility of this promise is primarily the responsibility of central bankers. One would be wrong in thinking that stable money has a purely economic dimension. It has also a clear social one. The reliability on stable money is also the basis for free society in which the people can make their own economically rational decisions and confidently plan their future.

Therefore, stable purchasing power of money is a common good which should be achieved for the well-being of all.⁴⁶ When the purchasing power of money is decreasing rapidly, as in the 1923 Germany and the 2009 Zimbabwe hyperinflation indicate, both human dignity and fundamental rights can be affected. In Issing's slightly exaggerated opinion, inflation has the same effect as a war: it annihilates the fruits of decent work, devalues savings and causes the

⁴² This promise is in fact of a legal nature.

⁴³ The fiat money system is a system where money derives its value from legal guaranteed of its issuer (government, central bank).

⁴⁴ See Issing (2002) Should we have faith..., p. 20-21.

⁴⁵ See Jordan (2006) Money and..., p. 485-487; Issing (2002) Should we have faith..., p. 38.

⁴⁶ See Issing (2002) Should we have faith..., p. 26.

erosion of the “*social fabric of society*.”⁴⁷ Ultimately, the very existence of civil society and democracy is in danger.⁴⁸

Thus, if one assumes that stable money is a common good which benefits all and a requirement for a long-term prosperity and social justice,⁴⁹ then it seems to be reasonable for society to delegate the monetary policy competence to an independent institution, like a central bank, which would be free of day-to-day political pressures and could pursue the objective of stable money with as little distraction as possible.⁵⁰

1.3 The nature of delegated monetary powers

“Give me control of a nation's money and I care not who makes it's laws” (Mayer A.B. Rothschild)⁵¹

The phenomenon of delegation of power and independence is not limited only to monetary decision-making. In fact, it is a part of larger trend in administrative and constitutional law, intensified especially in 80s and 90s, which was the response to the challenges raised by the functioning of the modern, welfare state.

Creating independent expert authorities (or independent regulatory agencies) and delegating them decision-making competences in explicitly specified areas of public policy (with “*clear and limited*” mandate) such as financial services, telecommunications, energy, transport etc., was the way to secure the its effectiveness in complex reality of policy-making in globalizing world.⁵² The argument for monetary policy delegation was particularly straightforward –

⁴⁷ *Ibid.*, p. 23.

⁴⁸ *Ibid.*, p. 24.

⁴⁹ *Ibid.*, p. 27

⁵⁰ For further explanations about the special nature of monetary policy, see Drazen (2002), p. 5-13.

⁵¹ Mayer Amschel Rothschild – a German banker and the founder of Rotschild family.

⁵² See Lastra (2012) Central bank independence..., p. 52.

maintenance of stable money.⁵³ It has been explained by many theories on the CBI, just to mention *Public choice theory*.⁵⁴

By delegating monetary decision-making to independent central banks, the issues of accountability and openness to the public scrutiny become of utmost importance. They are two core requirements which bring back an independent central bank to the procedures of democratic society.⁵⁵ The more independent the central bank becomes, the more accountable for achieving its objectives it has to be.⁵⁶ The accountability of the central bank is however easier to achieve when there is a single, explicit and narrowly defined objective than in the case when there are many of them. A “*clear and limited mandate*” to central bank, preferably legally articulated, is therefore in order.

The independence of an agency endowed with delegated power is neither unlimited nor unconditional. It is a mean to better fulfillment of its mandate. Central bank independence incorporates “*freedom of monetary policymakers from direct political or governmental influence in the conduct of policy*.”⁵⁷ However, the interaction between central bank and government is not a simple, but rather a multi-dimensional one. It is discussed usually in two dimensions: of political autonomy (“goal independence”) and of economic autonomy (“instrument independence”).⁵⁸

⁵³ See Issing (2002) *Should we have faith...*, p. 29-31.

⁵⁴ See Blinder (1998) *Central banking...*, as well as, for example, G. B. Eggertsson, E. Le Borgne (2003) *A Political Agency Theory of Central Bank Independence*. IMF Working Paper No. 03/144, July 2003.

⁵⁵ See Lastra (2012) *Central bank independence...*, p. 54.

⁵⁶ See B. W. Fraser (2004) *Central Bank Independence: what does it mean?* Reserve Bank of Australia Bulletin, December 2004. <http://www.rba.gov.au/publications/bulletin/1994/dec/pdf/bu-1294-1.pdf> (28 March 2013)

⁵⁷ See R. Bandura, R. Mendoza, B. Sidikou-Sow (2006) *Central Bank Independence and Accountability: A Literature Review*. Office of Development Studies United Nations Development Programme New York, November 2006, p. 2. http://web.undp.org/developmentstudies/docs/central_bank_review_2006.pdf (28 March 2013)

⁵⁸ For further reference, see G. Debelle, S. Fischer (1995) *How Independent ...*; V. Grilli, D. Masciandaro, G. Tabellini (1991) *Political and Monetary Institutions and Public Financial Policies in the Industrial Countries*. *Economic Policy* 13, 341.

1.4 The dimensions of central bank independence

“Central Bank Independence is unnecessary and impossible” (Stiglitz)⁵⁹

It is well-established to perceive the CBI as a phenomenon, which involves many different aspects. These encompass the role of the government in appointing/dismissing procedures, the governmental influence on monetary policy decision-making, central bank’s financial autonomy and finally whether its monetary policy objectives are clearly defined in its mandate.⁶⁰

Most authors discuss the CBI in two basic dimensions, which are the indices of the legal (*de iure*) CBI. The first is the “*political independence*”⁶¹ or “*goal independence*”.⁶² It answers the question how independent from the government the central bank is in selecting its monetary policy objectives. It encompasses such criteria as whether the central bank has defined its primary policy objective, the institutional structure of the central bank and its accountability. There is an inverse interaction between the “goal independence” and the central bank’s mandate design. The less “goal independent” a central bank is, the clearer its mandate is.

The second is “*economic independence*”⁶³ or “*instrument/operational independence*”,⁶⁴ which measures the ability of the central bank to select the monetary policy instruments for the best fulfillment of its mandate goals. In this case, the less central bank’s is involved in other than monetary policies, the more instrumentally independent it is. Such criteria as financial independence, “room for manoeuvre” in carrying its functions and operations and prohibition of governmental financing are measures for ensuring this dimension of CBI.

⁵⁹ Joseph Stiglitz – an American celebrated economist and a recipient of the Nobel Prize.

⁶⁰ *Ibid.*, p. 3.

⁶¹ According to the terminology adopted by Grilli, Masciandaro, Tabellini (1991).

⁶² According to the terminology adopted by Debelle and Fisher (1994).

⁶³ *Supra*, n. 58.

⁶⁴ According to the terminology adopted by Debelle and Fisher (1994).

However, the central bank independence is neither absolute nor unconditional. It is only a mean to better fulfillment of central bank's mandate.⁶⁵ One central bank may be more independent than another, therefore the CBI is always a matter of degree.⁶⁶ According to Cukierman, these are economic and political factors which influence the degree of legal independence given to central banks.⁶⁷ But still legal degree of CBI may not be an accurate indicator of the relationship between the central bank and other actors. It was Blinder who made a distinction between *de iure* and *de facto* independence of the central bank and argued that it was the central bank's credibility, not its independence, which is a condition for successful monetary policy.⁶⁸ In countries where rule of law is not enough strongly established, there may be a gap between the central bank's legal arrangements and their practical impact.

To conclude and put in order this theoretical matrix in the concept of CBI, it would be prudent to refer to Issing. He claims that core governance requirements for central bank should encompass its independence in the conduct of monetary policy ("instrument independence"), a "*clear and limited mandate*" (accountability and openness to public scrutiny) and prohibition of monetary financing (the core of "goal independence").⁶⁹

⁶⁵ See speech given by P. Hildebrand on „*The independence of the Swiss National Bank*”. Avenir Suisse, Zurich, 21 June 2011. P. Hildebrand is the former Chairman of the Governing Board of the Swiss National Bank. <http://www.bis.org/review/r110623c.pdf> (28 March 2013)

⁶⁶ See Lastra (2012) *Central bank independence...*, p. 55.

⁶⁷ See A. Cukierman (1995) *Political Influence on the Central Bank: International Evidence*. *The World Bank Economic Review* 9 (3), p. 397-423. <http://research.chicagobooth.edu/economy/research/articles/114.pdf> (28 March 2013)

⁶⁸ See Blinder (1998) *Central banking...*

⁶⁹ See O. Issing (2012) *Central Banks...*, p. 5-6.

1.5 The pre-crisis articulation of central banks' independence and mandate

“Central banks protect their independence best by interpreting their task narrowly” (Weidmann)⁷⁰

The debate on good central bank governance is a relatively recent one. It only became an issue in economic policy debate about twenty years ago. It is somehow striking that the academic scholarship of the 70s and 80s rarely tackled this topic and that the fundamental aspect of the CBI – its optimal institutional design of its mandate was generally ignored.⁷¹ In this section, for the purposes of present thesis, the analysis will be simplified and focused on analyzing the mandate of the Fed, the ECB and the BoE from the perspective of the “goal” and the “instrument” independence.⁷²

In the United States, it was the 1977 Federal Reserve Act that legally established monetary policy arrangements. The Fed was given a formal monetary policy mandate which consisted of three equal objectives: price stability, maximum employment and moderate long-term interest rates.⁷³ The first two goals of the Fed's monetary policy are traditionally referred to as its “dual mandate”. The “dual mandate” of the Fed makes it independent both in “goal” and “instrumental” dimension. However, the Fed's independence in selecting of current monetary policy goals may raise controversies whether “*making value judgments when trading off different objectives and balancing conflicting interests*” should lie in the hands of appointed technocrats instead of elected constituencies with popular mandate.⁷⁴

⁷⁰ Jens Weidmann - a German economist, since 2011 the president of the Deutsche Bundesbank.

⁷¹ *Ibid.*, p. 6.

⁷² There are a lot of perspective how to grasp the comparative analysis of CBI. For brief specification of institutional aspects of the Fed, the ECB and the BoE independence, see, for example, F. Richter, P. Wahl (2011) *The Role of the European Central Bank in the Financial Crash and the Crisis of the Euro-Zone*. Report based on a WEED Expert Meeting. Berlin 2011. http://www.globalmarshallplan.org/sites/default/files/media/ecb_report_by_weed.pdf (28 March 2013)

⁷³ See Section 2a (Monetary Policy Objectives) of the 1977 Federal Reserve Act.

⁷⁴ See Issing (2012) *Central banks...*, p. 6.

The European Central Bank, by the virtue of art. 282.1 TFEU, along with national central banks of EU Member States whose currency is the Euro, is responsible for the monetary policy of the Union. The scope of the ECB's monetary policy mandate is explicitly delineated by art. 127.1 TFEU which makes the price stability its primary objective. Within its mandate, the ECB is obliged also to pursue other objectives like "*supporting the general economic policies in the Union*" (art. 127.1 TFEU) and "*contributing to the financial stability*" (art. 127.5 TFEU). These latter ones are however ancillary to the primary objective of price stability. Thus, the ECB, contrary to the Fed, is a "goal dependent" central bank. On the other hand, its "instrumental independence" is legally protected by the art. 130 TFEU, which prohibits the ECB from taking any instructions with regard to the way of performing its tasks. Financing the government is expressly forbidden by the Treaty.

The Bank of England obtained its independence relatively late, because only in 1997, when the incoming Labor government decided to "*reform the Bank of England to ensure that decision making on monetary policy is more effective, open, accountable and free from short-term political manipulation*".⁷⁵ The 1998 Bank of England Act gave to the BoE the "instrument independence", but not the "goal". In light of art. 11 of the 1998 Act, price stability is the objective of BoE's monetary policy and "*only then and subject to that*" to pursue other goals like maximizing employment and supporting the real economic activity.⁷⁶

The prerogative to draw the inflation targets has stayed within the competences of the government and happens usually in the form of a letter exchange between the Chancellor of Exchequer and the Governor of BoE.

The analysis shows, that the pre-crisis monetary policy arrangements fulfilled only some of the core governance requirements for central bank. In all three discussed cases, the central

⁷⁵ See the statement of Chancellor of Exchequer, Gordon Brown in Parliament, 20 May 1997., Column 303. <http://www.publications.parliament.uk/pa/ld199798/ldhansrd/vo970520/text/70520-04.htm> (24 March 2013)

⁷⁶ See B. M. Friedman (2008) Why a Dual Mandate ..., p. 158.

bank were given the “instrument independence” and, with notable exception of the Fed, they operated under the single-dimensional and “*clear and limited*” mandate with a formal hierarchy of objectives. However, both the Fed and the BoE were not legally prohibited from financing the government.

2. THE ANTI-CRISIS MEASURES OF CENTRAL BANKS AND THEIR INDEPENDENCE

“By this means government may secretly and unobserved, confiscate the wealth of the people and not one man in a million will detect the theft” (Keynes)⁷⁷

Opening remarks

This chapter will discuss the impact of “*non-standard measures*” undertaken by central banks on their instrument independence. During the recent financial crisis, central banks have introduced “*standard*” and “*non-standard measures*” in order to restore financial stability. The “*standard measures*” generally refer to monetary policy instruments, like interest rates decisions, discount window lending (DWL) or open market operations (OMOs) as well as to central bank’s Lender as Last Resort function (liquidity provider).

The “*non-standard measures*” can be understood as “*enhanced liquidity/credit support*”⁷⁸ in the form of credit policy changes, fiscal bailouts of non-bank financial institutions and quantitative easing⁷⁹ and they go beyond the traditional role of central banks in providing liquidity (LoLR). The traditional LoLR function is ruled by two principles, known as Bagehot principles.⁸⁰ Firstly, borrowing from central bank should be based on a very high rate of interest. Secondly, good and sound assets should be taken as collaterals. These principles

⁷⁷ J.M. Keynes – a one of the most influential economist in 20th century. The founder of the Keynesian economic school of thought.

⁷⁸ See D. Giannone, M. Lenza, L. Reichlin (2011) *Non-standard monetary policy measures and monetary developments*. European Central Bank Working Paper Series N 1290/ January 2011, p. 1. <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1290.pdf> (28 March 2013)

⁷⁹ See E. Pichet (2013) *Building the foundations for a new central bank doctrine: redefining central banks’ missions in the 21st century*. BEM Bordeaux Management School, March 2013, p. 8. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226831 (28 March 2013)

⁸⁰ See C. Goodhart (1999) Some Myths About the Lender of Last Resort, *International Finance* 2:3, 1999, p. 339-360 <https://notendur.hi.is/~ajonsson/kennsla2006/Myth-lender.pdf> (28 March 2013) [after] W. Bagehot (1873) *Lombard Street: A Description of the Money Market*. Henry S. King and Co. London 1873, par. 57-58.

were broken during the global financial crisis by all central banks, which are being analyzed in this paper.

In turn, central banks became the “saviors of last resort”⁸¹, the providers of fiscal bailouts which were absorbed directly into central banks’ balance sheets rather than to national or federal budgets. They took much more risky assets as collaterals which went beyond central banks’ LoLR function, thus beyond its monetary policy mandate. These actions have taken the once “*clear and limited*” mandate into new areas, which are the traditional realm of fiscal policy - the competence of the sovereign. Such actions may trigger political pressure on the instruments used by central bank to conduct monetary policy and limit its “room for maneuver” as to its price stability mandate, ultimately affecting its “*operational independence*”.

2.1 Central banks’ standard measures

The pre-crisis paradigm of monetary policy was built on the assumption maintaining price stability should be paramount objective of modern central bank’s mandate.⁸² The other objectives, like pursuing the objective of financial stability, stayed lower in the central’s bank hierarchy. The standard instrument of monetary policy designed to pursue central bank’s price stability objective is managing the level of interest rates.⁸³ The central bank’s role as Lender of Last Resort, especially by discount window lending (DWL) and open market operations (OMOs) was perceived as its sole contribution to maintaining financial stability.⁸⁴

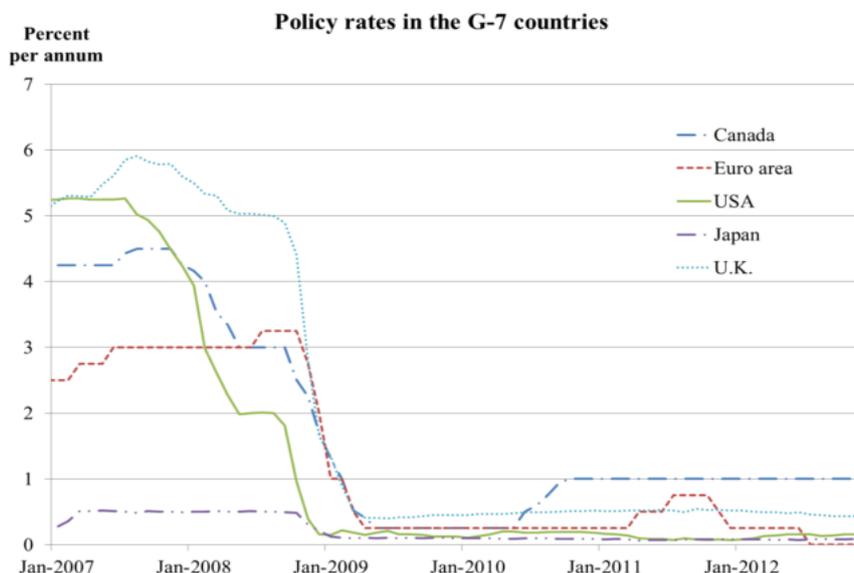
⁸¹ See Issing (2012) *Central banks...*, p. 18.

⁸² See *supra*, n. 13.

⁸³ See S. Collignon et. alt. (2012) Unconventional Monetary Policy Measures: A Comparison of the ECB, FED and BoE. Directorate General for Internal Policies Policy Department A: Economic and Scientific Policies. European Parliament. June 2012, p.10. www.europarl.europa.eu/document/activities/cont/201207/20120705ATT48393/20120705ATT48393EN.pdf (28 March 2013)

⁸⁴ See Lastra (2012) *Central banks...*, p. 62.

In the early stages of the crisis (2007-2008), central banks reacted conventionally using their primary competence to target interest rates. The Fed, the BoE and the ECB gradually loosened monetary policy by lowering interest rates effectively to zero bound.



Source: Haver Analytics. Last observation: November 2012⁸⁵

However, it quickly occurred that this financial crisis has had deeper and more complex foundations. Bringing interest rates near and acting as a traditional LoLR was not enough to overcome low economic growth and recession. This was the reason why central bank decided to deploy “*non-standard measures*” of monetary policy.

2.2 Central banks’ non-standard measures

The overwhelming part of monetary policy responses of the FED, the ECB and the BoE to the global financial crisis has taken the form of “*non-conventional*” or “*non-standard measures*.”

⁸⁵ See presentation made by J. Bullard on “*The Global Battle Over Central Bank Independence*.” NABE Panel Discussion: “Federal Reserve Independence in the Aftermath of the Financial Crisis: Should We Be Worried?” AEA/ASSA Annual Meeting San Diego, California, 4 January 2013. <http://research.stlouisfed.org/econ/bullard/pdf/BullardAEA2013CBIndependencePanelDiscussion4Jan2013Final.pdf> (28 Marcj 2013)

These mainly were developed as credit policy changes, fiscal bailouts of non-bank financial institutions and quantitative easing.⁸⁶

In the case of the Fed, its role of the Lender of Last Resort was considerably expanded. Relying on the Section 13.3 of the Federal Reserve Act, which allows the Fed to lend to financial institutions other than these regulated ones because of “unusual and exigent circumstances”, a number of facilities and programs were created.⁸⁷ Their common feature was the acceptance of lending to non-regulated financial institutions against more risky and questionable collateral, which has put the Fed far beyond its role of Lender of Last Resort. Furthermore, bailing-out insolvent institutions like in the case of Bear Stearns⁸⁸ or AIG,⁸⁹ was also a departure from the classical LoLR Bagehot’s principles, and possibly actions outside of the Fed’s legal mandate.

To understand such a great expansion of Fed’s LoLR role, one has to take into account the uniqueness of the pre-crisis US financial system. In the years before the eruption of the crisis, the credit function was progressively moved to an unregulated shadow banking system where the leverage of assets⁹⁰ went far beyond the limits permitted by prudential regulations. The fundamental weakness of this system was that it operated out of deposit guarantees and

⁸⁶ See E. Pichet (2013) *Builing the foundations...*, p. 8.

⁸⁷ Including: Term Auction Facility (TAF), Primary Dealer Credit Facility (PDCF), Term Securities Lending Facility (TSLF), Term Asset-Backed Securities Loan Facility (TALF), Commercial Paper Funding Facility (CPFF), Asset-Backed Commercial Paper Money Mutual Fund Liquidity Facility (AMLF) and Money Market Investor Finding Facility (MMIFF).

⁸⁸ On March 14, 2008, the Fed agreed to provide a controversial \$25 billion loan to Bear Stearns taking very risky assets (incl. mortgage debts) as collateral in order to secure its liquidity they could not acquire on the markets. According to Emerson, Fed’s bailout for Bear Stearns is one of the clearest examples where the Fed acted outside the scope of its mandate. For further analysis, see C. Emerson (2010) *The Illegal Actions of the Federal Reserve: An Analysis of How the Nation's Central Bank Has Acted Outside the Law in Responding to the Current Financial Crisis. William & Mary Business Law Review 109 (2010), Issue ,I Volume 1, Article 5.* <http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1004&context=wmbllr> (28 March 2013)

⁸⁹ On September 16, 2008 made available an \$85 billion credit facility to AIG in order to secure its liquidity. However, in 2009 the bailout was extended in 3 tranches, raising up to total amount of \$182.5 billion. Emerson claims that Fed actions in the case of AIG are another example of its extra-legal conduct. See, Emerson (2010), p. 127.

⁹⁰ Like those of asset-backed commercial papers (ABCP), asset-backed securities (ABS), collateralized debt obligations (CDO). “Leverage is a measure of the degree to which someone is exposed to the risk of an asset or instrument (price risk, default risk, counterparty risk etc.) without owning the instrument”.

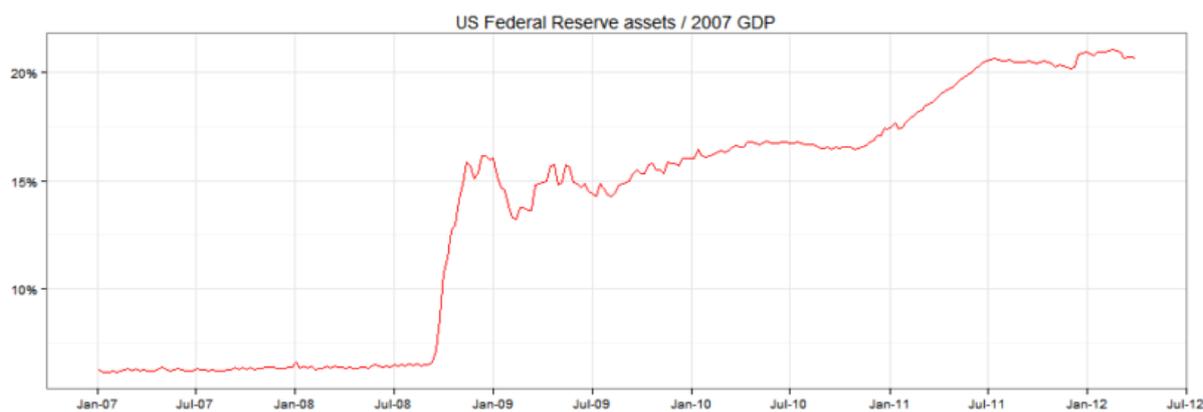
without a direct access to central bank liquidity.⁹¹ In 2008, the high level of interactions among different segments of shadow banking system accelerated the spread of crisis over whole system. As traditional banking institutions became more reluctant when it came to lending, the shadow banking system was also exposed to a strong liquidity shortage.⁹² As a consequence, the entire US financial system came very close to a systemic collapse.

Furthermore, to remedy bad conditions on private credit markets, in November 2008 the Fed announced QE1 (“Quantitative Easing One”) Program aimed at purchasing up to USD 300 billion of long term Treasury securities. The QE1 output was however unsatisfying and thus, in November 2010 the Fed decided to expand its balance sheet by promising to acquire further USD 600 billion of long term Treasury securities. It was known as QE2 (“Quantitative Easing Two”). To boost QE2, in September 2011 the Fed announced Operation TWIST, which targeted at exchanging short-term Treasury securities worth USD 400 billion to long-term ones. Finally, in September 2012 the Fed declared that it would continue to buy Treasury securities until mid-2015 and would spend on it up to USD 40 billion a month. As a consequence, the Fed’s balance sheet has expanded enormously since the beginning of the global financial crisis.⁹³

⁹¹ See S. Collignon et. al. (2012) *Unconventional monetary policy...*, p. 16.

⁹² *Ibid.*, p. 17.

⁹³ The aforementioned Fed anti-crisis measures are only representative, but important examples of all which have been deployed until now. It is not to say that Fed’s balance sheet increase which is demonstrated by the Figure below was caused only by these discussed in this paper. For the extensive presentation of Fed’s anti-crisis actions, see P. Dwyer et al. (2012) A comparative study of global central bank independence and transparency: lessons learned from the crisis. FRBNY Capstone Group Columbia University | SIPA 2012, p. 51-58.
http://sipa.columbia.edu/academics/workshops/documents/FORPUBLICATION_FRBNY_Report.pdf (28 March 2013)



Source: A comparative study of global central bank independence and transparency: lessons learned from the crisis (2012)⁹⁴

The non-conventional measures undertaken by the ECB were intended to preserve the efficiency and effectiveness of monetary policy. They had two main goals: to maintain credit lines to the private sector by securing banks' liquidity and to avoid contagion in the financial markets.⁹⁵ The ECB, unlike the Fed, was however able to counteract the crisis at this early stage by providing the structural liquidity to the banking system. The ECB's non-conventional measures were designed as temporary and complementary to the traditional monetary policy instruments.

Among many of non-conventional ECB's instruments, I will further explore the effects of the fixed-rated & full-allotted liquidity provisions (FRFA), longer-term refinancing operations (LTROs), Security Market Programme (SMP) and Outright Monetary Transactions programs (OMT).

After the Lehman Brothers Collapse in September 2008, the ECB determined that all its refinancing operations would be conducted with fixed rate tenders and full allotment (FRFA).⁹⁶ The rationale of FRFA was to secure funding to the financial sector, which has

⁹⁴ *Ibid.*, p. 50.

⁹⁵ See P. S. Collignon et al. (2012) *Unconventional monetary...*, p. 13; P. Dwyer et al. (2012) *A comparative...*, p.37.

⁹⁶ For further analysis of this non-standard measure, see S. Collignon et. al. (2012) *Unconventional monetary...*, p. 21; D. Giannone, M. Lenza, L. Reichlin (2011) *Non-standard monetary...*, p.15; as well as R. Roomeldi (2011) *Alternative Monetary Policy Tools of the ECB: Impact of Financial Markets*. Copenhagen Business School, November 2011, p. 35.

started to experience first liquidity deficiencies causing problems as to the refinancing of short-term liabilities. The FRFA made the provision of liquidity by the ECB to the banks unlimited. The only constraint was the availability of the collateral. To remedy it, the ECB decided to enlarge the range of accepted assets as collaterals in its balance sheet positions.

When the EU sovereign debt crisis started to undermine particular sections of Eurozone's bond market, in parallel to the new EFSM architecture,⁹⁷ the ECB launched in May 2010 the Securities Markets Programme (SMP)⁹⁸ of EUR 157 billion aimed at acquiring the Eurozone's public and private securities. Its main goal was to improve efficiency of traditional monetary policy instruments in disturbed markets. Initially the volume of the SMP was limited comparing to total central banks assets, and only since August 2011 more serious interventions were performed, however still they did not have a big impact on the ECB's monetary stance as all the operations within the SMP were sterilized by ECB's weekly fixed term deposit operations. The SMP has been widely criticized as a potential source of instability, as it allowed the ECB to purchase risky bonds of countries like Greece, Portugal, Ireland or Spain. The Program terminated in September 2012, on the same day the new instrument – Outright Monetary Transactions (OMT) was presented. Until then, as a consequence of non-standard anti-crisis measures the balance of the ECB has been greatly widened.⁹⁹

⁹⁷ The European Financial Stabilization Mechanism (EFSM) is EU emergency funding programme dedicated to EU Member States in financial difficulties. It has been founded in May 2010. Since then, it has supported Ireland by providing funding up to €22.5 billion and to Portugal respectively up to €26 billion. Since October 2012, it has been operating in the parallel to European Stability Mechanism, a new permanent EU financial assistance for economically troubled Eurozone's Member States.

⁹⁸ See the Decision of The European Central Bank of 14 May 2010 establishing a securities markets programme (ECB/2010/5) (2010/281/EU). For further analysis of this non-standard measure, see, for example, P. Dwyer, R. Clarida et al. (2012), p.36-37.

⁹⁹ For an instructive, but rather economic, analysis of the impact of the SMP interventions as regards to the Greek case, see C. Trebesch, J. Zettelmeyer (2012) Deciphering the ECB Securities Markets Programme: The Case of Greek Bonds. University of Munich and CESifo / European Bank for Reconstruction and Development; CEPR. September 2012.

As the credit conditions worsened in the Eurozone countries, in December 2011, the ECB announced another non-standard measure.¹⁰⁰ In order to offer banks a long term liquidity, the ECB extended the maturity of longer-term refinancing operations (LTROs) to three years. The variety of assets the banks may post to the ECB as collateral was again expanded. Two auctions of tranches have been conducted so far. The latest auction of LTROs which took place in February 2012 raised the collateral of the ECB to EUR 1.2 trillion.¹⁰¹

The Outright Monetary Transactions (OMT) program assumes that the ECB shall undertake outright transactions in secondary, sovereign bond markets aimed at “*safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy*” in Eurozone.¹⁰² It has been interpreted as a promise to buy bonds issued by the Eurozone’s Member States. The key assumption is that the purchasing will be considered under the condition that a Member State would agree to meet certain fiscal conditions. The element of “conditionality”, and full discretion of ECB as regards to start, suspension and termination of the OMT make this program a quasi-fiscal tool.¹⁰³ Monetary policy has become an element of negotiation over fiscal package and the states’ obligations of public finance are transferred into a monetary phenomenon¹⁰⁴ As a consequence, the monetary policy in Eurozone is being “fiscalized”.¹⁰⁵ So far the OMT has not been launched.¹⁰⁶

¹⁰⁰ See ECB’s press release from 8 December 2011 “ECB announces measures to support bank lending and money market activity”

¹⁰¹ For further analysis of this non-standard measure, see, for example, P. Dwyer et al. (2012) A comparative..., p.36-37; as well as R.M. Lastra (2012) The Evolution of the European Central Bank. *Queen Mary University of London, School of Law Legal Studies Research Paper No. 99/2012*, p.10.

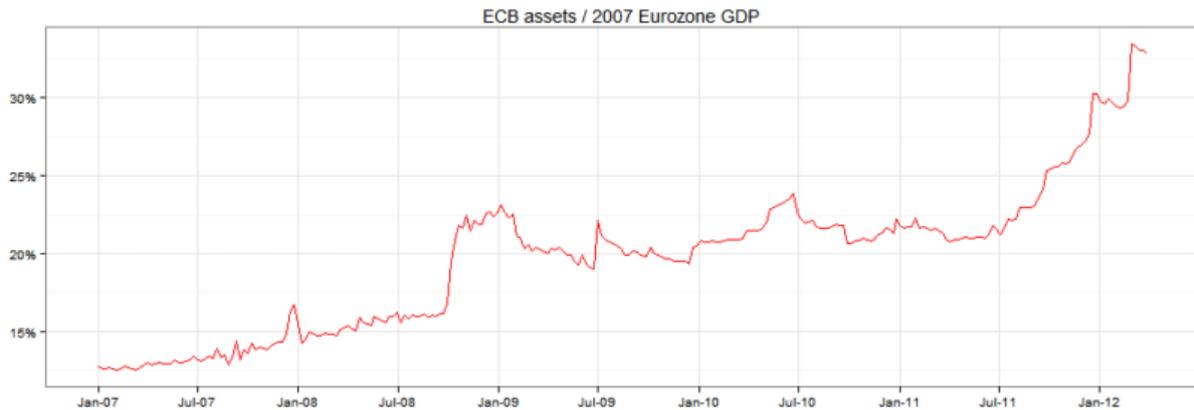
¹⁰² See ECB’s press release from 6 September 2012 “Technical features of Outright Monetary Transactions”

¹⁰³ For further analysis of this non-standard measure, see S. Collington et. al. (2012) ECB Interventions, OMT and the Bankruptcy of the No-Bailout Principle. Directorate General For Internal Policies Policy Department A: Economic And Scientific Policy. European Parliament. September 2008.

¹⁰⁴ See Issing (2012) *Central banks...*, p. 18.

¹⁰⁵ See Bullard (2013) *The Global Battle...*

¹⁰⁶ The aforementioned ECB anti-crisis measures are only representative, but important examples, of all which have been deployed until now. It is not to say that ECB’s balance sheet increase which is demonstrated by the Figure below was caused only by these discussed in this paper. For the extensive presentation of ECB’s anti-crisis actions, see P. Dwyer et al. (2012) A comparative..., p. 68-78.



Source: A comparative study of global central bank independence and transparency: lessons learned from the crisis (2012)¹⁰⁷

The Bank of England was the very first bank which had to face possible negative effects of the crisis. A year before the collapse of Lehman Brothers, in September 2007, the BoE was forced to bailout Northern Rock which had been unable to acquire liquidity through the markets.¹⁰⁸ Subsequently, several liquidity programs have been developed. In April 2008, the BoE launched Special Liquidity Scheme (SLS) which aimed at improving UK banking system liquidity.¹⁰⁹ It allowed to decrease asset riskiness by the possibility of swapping mortgage-backed securities for Treasury bills. The BoE broadened the range of accepted collateral, which however was subject to fairly strict haircuts. The Scheme was launched in coordination with the Government, the Treasury bills were being created by Debt Management Office in order not to undermine the BoE's ability to implement the goals of monetary policy. The SLS emergency funding expanded the BoE's balance sheet up to GBP 185 billion, however the borrowing institutions were not disclosed. The Scheme was officially closed in January 2012.¹¹⁰

¹⁰⁷ *Ibid.*, p. 67.

¹⁰⁸ For the further analysis of the Northern Rock case, see D. T. Llewellyn (2008) The Northern Rock Crisis: A Multi-Dimensional Problem Waiting to Happen. *Journal of Financial Regulation and Compliance*, Vol. 16 Iss: 1, p. 35 – 58.

¹⁰⁹ For further analysis of this non-standard measure, see Lastra (2012) Evolution of..., p. 62.

¹¹⁰ See P. Dwyer et al. (2012) A comparative..., p. 25

In October 2008, the BoE announced another of its non-standard measures – the new Discount Window Facility (DWF). It was designed as improved Special Liquidity Scheme with the aim of facilitating bilateral LoLR operations. According to the most recent data from March 2012, the lending capacity of BoE via DWF was estimated at around GBP 160 billion.¹¹¹

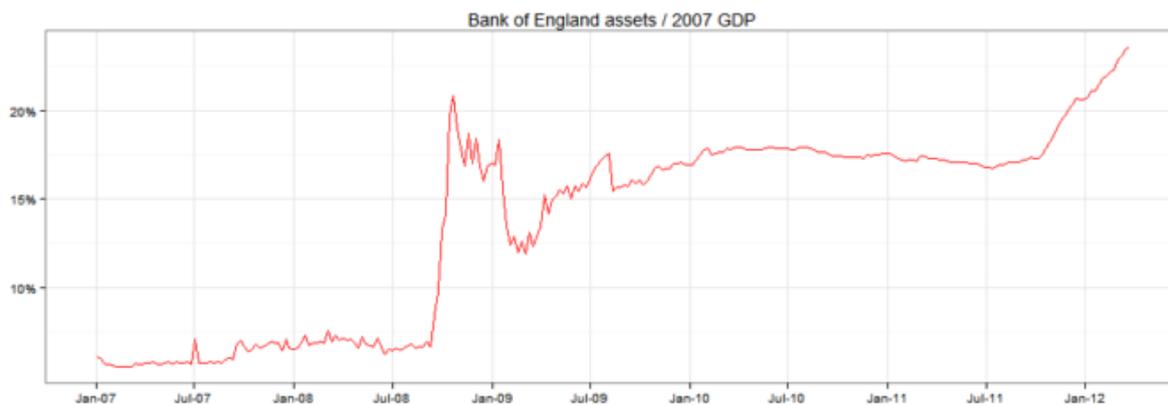
The latest of BoE's non-standard anti-crisis tools – the Asset Purchase Facility (APF) was announced in January 2009. The facility was created in cooperation and approval of the government as only the government should put public money at risk. Initially its main objective was to buy private assets in exchange of the Treasury bonds, however from March 2009 it was decided that BoE would be also able to buy assets by printing money. As a consequence, the APF became a quantitative easing instrument.¹¹² Its initial power of GBP 50 billion was subsequently extended with the consent of the Government to GBP 325 billion (as of January 2012).¹¹³ As the figure below indicates, the BoE balance sheet has started to expand as a consequence of implementing non-standard measures. A particularly sharp increase of assets can be observed when the DWL was introduced.¹¹⁴

¹¹¹ See speech given by P. Fisher on “Liquidity support from the Bank of England: the Discount Window Facility”. National Asset-Liability Management global conference, London, 29 March 2012. P. Fisher is an Executive Director in BoE.

¹¹² For further analysis of this non-standard measure, see S. Collignon et. al. (2012) *Unconventional monetary...*, p. 20.

¹¹³ See P. Dwyer, R. Clarida et al. (2012) *A comparative...*, p. 26.

¹¹⁴ However, mind that The aforementioned BoE anti-crisis measures are only representative, but important examples, of all which have been deployed until now. It is not to say that BoE's balance sheet increase which is demonstrated by the Figure below was caused only by these discussed in this paper. For the extensive presentation of BoE's anti-crisis actions, see P. Dwyer et al. (2012) *A comparative...*, p. 59-67.



Source: A comparative study of global central bank independence and transparency: lessons learned from the crisis (2012)¹¹⁵

2.3 Implications of “non-standard measures” on central banks’ instrument independence

As indicated, the balance sheets of the Fed, the ECB and the BoE have been used to manage the global financial crisis. The “*non-standard measures*” introduced by the Fed, the ECB and the BoE, example of which were discussed above, have increased size, risk profile as well as composition of their balance sheets.¹¹⁶

These non-standard measures were largely motivated by the concerns about financial stability, so it is no more possible to argue that monetary instruments of Fed, the ECB and the BoE are predominantly focuses on pursuing the price stability. As the central banks purchased and accepted as a collateral wider range of assets, often of a lower quality, they have exposed themselves to the eventuality of higher losses. The possibly toxic assets has been transferred from private sector balance sheets to public ones. This means that exposure of central banks’ balance sheets to market developments has been increasing.¹¹⁷ It may directly undermine the

¹¹⁵ *Ibid*, p. 59.

¹¹⁶ See Panel remarks by J. Caruana at the Board of Governors of the Federal Reserve System 2012 conference on “Central banking: before, during and after the crisis”, Washington, 23-24 March 2012. J. Caruana is the General Manager of the BIS (Bank of International Settlements). <http://www.ijcb.org/journal/ijcb13q0a17.pdf> (28 March 2013)

¹¹⁷ See speech given by J. Caruana on “Why central bank balance sheets matter” at the Bank of Thailand-BIS conference on 12 December 2012. J. Caruana is the general manager of the Bank for International Settlements. www.bis.org/speeches/sp111216.htm (28 March 2013).

central bank's instrument independence, because any change in monetary policy (especially raising interest rates) may reduce the value of its assets.

Furthermore, central banks' balance sheets of current size may create credibility challenges. The possibility that public money may get wasted raise their reputational risks, which as a consequence may lead to lowering of the political consensus over its independence and may have a detrimental effect on the legitimacy of their mandate. Particularly difficult to their operational independence may be the tolerance of higher inflation – which would facilitate the service on public debt and maintain. The acceptance of higher inflation by the central bank in the case its mandate is based on the paramount objective of price stability, would be a great significant attack on their reputation.

Finally, central bank's quasi-fiscal role may be difficult to reconcile with the democratic principles. The central bankers, as unelected officials and accountable only as regards to monetary policy mandate, are not competent to make decisions concerning fiscal issues, like putting taxpayers money at risk.

3. THE NEW, POST-CRISIS FINANCIAL STABILITY OBJECTIVES OF CENTRAL BANKS AND THEIR MANDATE

“Crack-brained meddling by the authorities [can] aggravate an existing crisis” (Marx)¹¹⁸

Opening remarks

This chapter aims to discuss whether assigning to central banks new financial stability responsibilities can be still compatible with their “*clear and limited*” mandate, which legitimizes their independence and ensures their accountability and openness to public scrutiny.

As a consequence of the global financial crisis, financial systems were brought “*to the verge of systemic collapse.*”¹¹⁹ Central banks, which have implemented various non-standard measures, helped to overcome that great threat. The lesson, which lawmakers underwent is that the institutional and legal framework for maintenance of financial stability has to be changed. It has been decided that the role of central banks in preserving financial stability should be emphasized. Under the 2012 UK Financial Stability Act and the 2010 US Dodd-Frank Wall Street Reform and Consumer Protection, financial stability has become a formal objective of the BoE and the Fed. The reason why such new governance arrangements have been introduced was the conviction that modern globalized and highly innovative financial markets will.

In the subsequent sections, I will offer an insight into how the financial stability objective of the central bank was enhanced by the US, Eurozone and British lawmakers and what kind of

¹¹⁸ Karl Marx – a German philosopher and revolutionary, the spiritual father of communism.

¹¹⁹ *Supra*, n. 18.

implications this has for central bank governance. However before going there, the difficulties as regards to the meaning of financial stability will be highlighted.

3.1 The notion of financial stability

Generally, it is challenging to define what financial stability means. Financial stability objectives are often vaguer than these of monetary policy. While price stability can be expressed in the form of a quantitative index, financial stability cannot be approached in the same way.¹²⁰ Furthermore, financial stability is a policy objective which transcends the institutional and geographic boundaries.¹²¹ It is the area between “*monetary policy and supervision*”¹²² and encompasses “*regulation, supervision, providing liquidity and financial support in case of recapitalization or nationalization and crisis prevention.*”¹²³

As a result of the global financial crisis, the financial stability objective has been reflected, especially, in giving to central bank responsibilities in the area of financial supervision. There is, however, a distinction between macro prudential and micro prudential supervision. While, macro prudential responsibilities focus mainly on supervision, identifying financial imbalances and financial risks, preventing the emergence of the financial crisis and participating in anti-crisis management in case prevention fails;¹²⁴ micro prudential responsibilities include day-to-day oversight of individual financial institutions.¹²⁵ To put it in

¹²⁰ See S. Ingves et al. (2011) Central bank governance and financial stability. Central Bank Governance Group BIS May 2011, p. 28 <http://www.bis.org/publ/othp14.pdf> (28 March 2013)

¹²¹ See Lastra (2012) Central bank independence..., p. 59

¹²² *Ibid.*

¹²³ See Lastra (2012) The central bank independence..., p.

¹²⁴ See keynote speech given by A. Lamfalussy at the BIS held its Ninth Annual Conference on “The future of central banking under post-crisis mandates”, Lucerne, Switzerland 24-25 June 2010. BIS Papers No. 55, p. 8 http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1959849_code456443.pdf?abstractid=1959849&mirid=1 (28 March 2013)

¹²⁵ See Lastra (2012), Evolution of..., p. 12

other words, macro prudential supervision is like looking on the forest when its micro prudential equivalent aims at a concrete tree.¹²⁶

3.2 The articulation of financial stability mandate in macro prudential sphere

Significant reforms aiming at strengthening central banks' role in macro prudential supervision were implemented in the US, Eurozone and UK. In these jurisdictions, new high-level coordinating and decision-making bodies have been established with focus on systemic risks identification and crisis prevention.

In the Eurozone, the concept of macro prudential centralized supervision on *supranational* level was completely new. The basis for new governance arrangements for financial stability was prepared by Larosière Group.¹²⁷ They were adopted by European Parliament in September 2010. In December 2010, the European Systemic Risk Board (ESRB), responsible for macro prudential oversight of the financial system within the EU, was created.¹²⁸ The ESRB should contribute to prevention or mitigation of systemic risks which may threaten to macroeconomic stability and financial system. It is hosted by the European Central Bank and consists of representatives of national banks and supervisors.

The ESRB is, however, not equipped with any binding policy instruments. Instead, it may issue recommendations and risk warnings concerning systemic risks and address them to institutions which have a competence to use appropriate policy instruments. The ESRB's positions on macro prudential issues are formulated by its General Board (i.a. the NCB, the ECB, the European Commission, the European Supervisory Authorities) whose

¹²⁶ It is the metaphor used by Lastra. See *supra*, n. 116.

¹²⁷ See J. Larosière [et alt.] (2009) Report on the high-level group on financial supervision. Brussels, 25 February 2009, available at: http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf (28 March 2013)

¹²⁸ See Council Regulation (EU) No 1096/2010 of 17 November 2010 conferring specific tasks upon the European Central Bank concerning the functioning of the European Systemic Risk Board, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:331:0162:0164:EN:PDF> (28 March 2013)

implementation is left to micro prudential supervisors. The way in which national micro prudential authorities will implement the ESRB's positions is still to be seen.

With regard to the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("the Dodd-Frank Act"), signed by the US President in July 2010, created the Financial Services Oversight Council (FSOC). The FSOC a multi-agential body in charge of the macro prudential supervision. It consists of 10 members, including the Chairman of the US Federal Reserve. Its main task encompasses i.a. identifying and monitoring excessive risks to US financial system. Similarly like in the case of the ESRB, the FSOC does not have any enforcement authority. Its role is to issue recommendations. However, it can set aside certain financial regulations which constitute a threat to financial stability. Unlike in the Eurozone, the US Federal Reserve has a less prominent role. The FSOC is placed outside of the Fed's institutional framework, in US Department of Treasury. Moreover, the US Secretary of Treasury is a chair of the FSOC who has equal voting right.

In the UK, the reforms were most prominent. They have begun with the 2009 Banking Act ("the Act") explicitly added financial stability objective to BoE's mandate. As BoE had acted as financial stabilizer before, incorporation of financial stability objective into legal framework was to bring its mandate up to date. The "Act" has also established a Special Resolution Regime,¹²⁹ supervised together by the Bank of England and the Financial Stability Authority (FSA), which is dedicated to oversee troubled banking institutions and building societies. Moreover, it transferred to BoE the responsibility for maintaining sound interbank payment system.

¹²⁹ See R. M. Lastra (2012) *Legal and regulatory responses to the financial crisis*. Queen Mary University of London, School of Law Legal Studies Research Paper No. 100/2012, p. 5. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2020553 (28 March 2013)

In May 2010, new Tory government decided to strengthen further the role of Bank of England in maintenance of financial stability. In December 2012 the Financial Stability Bill obtained the royal consent and will be effective from April 2013. Under new proposed legislative framework, the BoE is to be at the heart of financial sector supervision. It provides that the current integrated financial services regulator – the FSA – which is responsible for maintaining financial stability will cease to operate. Its former mandate will be split into two parts. The first – macro prudential supervision is transferred to Financial Policy Committee (FPC).¹³⁰ Primarily, it is charged with identifying, supervision and reacting to any systemic risks to the stability of financial system. Supporting the economic policy of the government is one of its other objectives. It operates under the institutional framework of the Bank of England, but will be directly accountable to Parliament. The second part of FSA mandate – micro prudential supervision will be assigned to Prudential Regulatory Authority (PRA) which will be supervised by the FPC.¹³¹ As a result, the coordination of macro and micro prudential responsibilities will be realized in the FPC.

The 2012 Financial Stability Act created also Financial Conduct Authority (FCA), also called the City's watchdog, which would be responsible for regulation of financial institutions providing services to consumers and maintain the integrity of financial market. The powers of the FPC for use of specific macro prudential tools are to be determined by the Parliament in secondary legislation.

¹³⁰ For further explanations, see the BoE website, <http://www.bankofengland.co.uk/financialstability/Pages/fpc/default.aspx> (28 March 2013)

¹³¹ An insight at new BoE's mandate arrangements concerning micro prudential supervision will be offered in the subsequent section.

3.3 The articulation of financial stability mandate in micro prudential sphere

As to another area of financial stability policy -micro prudential supervision, the changes in central banks' governance arrangements were not as remarkable as in the sphere of its macro prudential equivalent. However it is still worth to offer a quick glimpse at them.

In Eurozone, micro prudential supervision retains its national base and remains outside of the scope of central bank's responsibilities. The ECB's governance arrangements were not affected with this regard. In January 2011, the European System of Financial Supervisors (ESFS) – a new and independent body within the EU framework, was found. Its main task is to coordinate national regulatory and supervising approaches.¹³² Together with the European Systemic Risk Board it forms the core of EU anti-crisis new institutional architecture. In this context, it is worth noticing that very recently the EU lawmakers have made another step towards full banking union in the EU,¹³³ which gives the ECB a role of “*overarching bank supervisor*” over European banking system, making the ECB more similar to the Fed in its micro prudential responsibilities.¹³⁴

However, it may be argued that, even now, there is an indirect link between ECB and micro prudential supervision. The European Systemic Risk Board – an ECB's agency responsible for macro prudential supervision - may issue recommendations addressed to micro prudential

¹³² The ESFS integrates national financial supervisors and three new independent European Supervisory Authorities (ESA) operating on supranational level. The first is European Banking Authority (EBA), based in London, which is responsible for micro prudential supervision of banking sector. The second is the European Insurance and Occupational Pensions Authority (EIOPA), based in Frankfurt, which is responsible for supervision of credit institutions, financial conglomerates, investment firms, payment institutions and e-money institutions. The third one is the European Securities and Markets Authority (ESMA), based in Paris, which operates in field of securities regulation and financial markets oversight.

¹³³ For further details about the key concepts of the EU Banking union, see <http://www.brookings.edu/~media/research/files/papers/2012/11/european%20banking%20union%20elliott/11%20european%20banking%20union%20elliott.pdf> (28 March 2013)

¹³⁴ See Financial Times “EU agrees on ECB bank regulatory role” 19 March 2013 <http://www.ft.com/intl/cms/s/0/076a3880-90a2-11e2-862b-00144feabdc0.html?ftcamp=crm/email/2013320/nbe/BrusselsBrief/product#axzz2O4SsAFn4> (28 March 2013)

supervisors, but still the way how they will be implemented (instrument selection, calibration and pan-European consistency) is an open issue.¹³⁵

In the United States, as regards to micro prudential supervision there were no substantial changes as regards to Fed's governance arrangements. The Dodd-Frank Act has strengthened the Federal Reserve's traditional micro prudential responsibilities. As a consequence, the Fed, unlike the ECB, is now the micro prudential supervisor for all systemically important financial institutions (banks and non-banks), with the explicit competence to set prudential standards.

In the United Kingdom, as it has been already signaled in the previous section, – the Prudential Regulatory Authority (PRA) will inherit micro prudential mandate from the FSA, which will be formally abolished since April 2013. The PRA, a body within the BoE, in charge of supervising of the soundness and safety of all prudentially important financial institutions (i.a. banks, insurers). Coordination of macro and micro prudential policy will be executed by the BoE via the FPC.

3.4 New financial stability responsibilities and their implications to central banks' mandate

New responsibilities of central banks have led to the enhancement of their role in maintaining financial stability. As it has been indicated, the new financial stability responsibilities have been addressed primarily using macro prudential policies.

The implications of new financial stability responsibilities for central banks' mandate have not yet been completely conceived.¹³⁶ Before the crisis, when the monetary policy with one

¹³⁵ See S. Ingves et al. (2011) Central bank governance..., p. 13

and paramount objective of price stability was, the main governance issues were straightforward. The “clear and limited” mandate was the basis for central bank independence.

These post-crisis legislative developments raised many concerns whether assigning new macro prudential responsibilities to central bank does not have a negative effect on its independence in monetary policy. It was argued that new role of central banks can cause conflicts of interest, reputational risk, giving excessive power to an unelected institution and central bank going outside its traditional area of expertise.¹³⁷

This is so, because the adoption of financial stability as a co-equal responsibility of central bank complicates its governance design for various reasons.¹³⁸ Firstly, financial stability is a relatively vague concept and encompasses many objectives. As a consequence, central bank’s accountability can be lowered. Secondly, new financial responsibilities are multifaceted. As the analysis of a new legislative framework in UK, Eurozone and US indicated, they can incorporate both macro prudential and micro prudential tasks. The question which arises here is whether a central bank, which is a single governance architecture, can operate equally efficient for both spheres of tasks. Lastly, financial stability policy is much more politically sensitive than monetary decision-making. Therefore, it constitutes a challenge to maintain a balance between central bank independence and political accountability.

¹³⁶ See speech given by A. Crockett on “Central bank governance under new mandates” at the BIS held its Ninth Annual Conference on “The future of central banking under post-crisis mandates”, Lucerne, Switzerland 24-25 June 2010. BIS Papers No. 55, p. 19. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1959849 (28 March 2013)

¹³⁷ See C.A.E. Goodhart (2012) Central banks function to maintain financial stability: an uncompleted task. Financial Markets Group, London School of Economics 2012. http://graduateinstitute.ch/webdav/site/international_economics/shared/international_economics/events/Swoboda/Goodhart.pdf (28 March 2013)

¹³⁸ *Supra*, n. 126.

CONCLUSION

“The complex the system, the greater the room for error”
(Soros)¹³⁹

The purpose of the present thesis was to examine how the global financial crisis has influenced the central bank independence and mandate. Before the crisis, the idea of central bank was that it was an independent entity with a “clear and limited” monetary policy mandate, which guaranteed its accountability and openness to the public. Price stability was considered as the paramount objective of a central bank’s mandate, because of the utmost importance of stable money for a well-functioning market economy and the self-development of individuals.

The recent global financial crisis has shaken this comfortable paradigm of monetary policy focused on price stability. After the Great Depression, in 1936 V. Lutz Smith wrote that central banks’ mandate was not only to preserve stable money (price stability), but also sound banking (financial stability).¹⁴⁰ More than seventy years later, after another disastrous financial crisis, it seems that central banks have rediscovered again the forgotten twin part of the central bank’s mandate. The character and scope of anti-crisis actions of the Fed, the ECB and the BoE may even suggest that in cases of conflict between price stability and financial stability, the latter overrules.¹⁴¹ It is a striking revelation when we recall the pre-crisis central bank’s celebrated monetary policy paradigm of price stability. Perhaps, it has been taken too seriously. As Bernanke said, *“specifying a complete and explicit policy rule, from which central bank would never deviate under any circumstances, is impractical”*.

¹³⁹ George Soros – a American-Hungarian billionaire, investor and philosopher.

¹⁴⁰ See V. C. Smith (1936) *The rationale of central banking and the free banking alternative*. Westminster, England : P.S. King & Sons Ltd., 1936.

¹⁴¹ See W. H. Buiter (2012) *The role of central banks...*, p. 1.

Both “non-standard” measures of central banks and enhanced financial stability responsibilities, which this thesis analyzed, of central banks are evidence of central banks’ changing mandates and roles. The economic world is different than it was even 10 years ago, not to mention the 90s when the pre-crisis monetary policy paradigm was forged. Modern financial markets are complex, innovative, global and leveraged which makes it easier to produce financial disturbances of the large scale. These, in turn, may spread like a tsunami, without respect to geographical or political borders.¹⁴² Therefore, financial stability depends also upon the action of other economic actors, including governments and financial market participants. Its preservation is ultimately a “shared responsibility”,¹⁴³ neither the government nor a central bank alone may successfully face this task. But, if financial stability policy is to be effective, central banks have to be engaged in its formulation and execution.¹⁴⁴

The primary challenge, which arises from the analysis conducted in this thesis, is how to accommodate central banks’ financial stability mandate with their monetary policy objectives. It is not only a question of its compatibility with democratic principles, but also the question of its credibility. New responsibilities of central banks need new powers, instruments as well as appropriate safeguards and checks and balances. Moreover, if financial stability is to be a “*shared responsibility*”, a clear division of roles and responsibilities of all actors involved in the formulation of financial stability policy, including central banks, supervisory agencies, treasuries and supranational bodies, are in order.

Another challenge for post-crisis central bank arises from their expanded balance sheets. As this thesis indicated, central banks used their balance sheets to manage the crisis. However,

¹⁴² See Lastra (2012) Central bank independence....p. 60.

¹⁴³ See speech given by L. Papademos on “Central mandates and governance arrangements” at the BIS held its Ninth Annual Conference on “The future of central banking under post-crisis mandates”, Lucerne, Switzerland 24-25 June 2010. Excerpt available in Central bank governance and financial stability, BIS Papers No. 55, p. 25-28. http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1959849_code456443.pdf?abstractid=1959849&mirid=1 (28 March 2013)

¹⁴⁴ See S. Ingves et al. (2011) Central bank governance..., p. 1.

they acted far beyond their traditional role of LoLR. In fact, they became the “saviors of last resort”, who undertook multiple “fiscal vacuum” actions out of the monetary policy framework. “Non-standard” measures widened the range and decreased the quality of assets the central banks were ready to accept as collateral. It also changed the allocation of the resources between financial markets actors, individuals and whole nations.¹⁴⁵ As a consequence, central bank have now in their portfolio many risky, not to say toxic assets, which makes them more exposed to financial disturbances. This is a direct threat to central banks’ independence in conducting monetary policy. Therefore, the greater participation of central banks in emergency funding, the greater risk-bearing capacity they acquire.¹⁴⁶ The extent to which other actors, for example the treasury, are responsible for financial risk should be clearly articulated.

To conclude, this thesis demonstrates that enhanced financial stability mandates of central banks are a fact. In comparison to monetary policy decision-making, financial stability is much more politically sensitive. The most important result of this thesis is the finding that maintaining central bank independence will come under greater challenge. In this new situation, the question how to articulate new central banks’ mandates will not be easy to answer. The notions of central banks’ “*independence*”, “*accountability*” and “*mandate*” need indeed an upgrade and we, on the other hand, need to rethink central banking.

¹⁴⁵ See W. H. Buiter (2012) *The role of central banks...*, p. 14.

¹⁴⁶ See S. Ingves et al. (2011) *Central bank governance...*, p. 2.

BIBLIOGRAPHY

Alesina, A.; Summers, L. (1993) Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence. *Journal of Money, Credit and Banking* , 25 (May)

Archer, D. (2008) *Roles and objectives of modern central banks [in:] Issues of governance in central banks*. Central Banks Governance Group, BIS 2008

Bandura, R.; Mendoza, R.; Sidikou-Sow, B. (2006) *Central Bank Independence and Accountability: A Literature Review*. Office of Development Studies United Nations Development Programme New York, November 2006

Blinder, A. (1998) *Central banking in theory and practice*. MIT Press 1998

Buiter, W. H. (2012) The role of central banks in financial stability: how has it changed? *International Macroeconomics Discussion Paper No. 8780*, Centre for Economic Policy Research LSE January 2012

Collington, S. et. al. (2012) ECB Interventions, OMT and the Bankruptcy of the No-Bailout Principle. Directorate General For Internal Policies Policy Department A: Economic And Scientific Policy. European Parliament. September 2008

Collignon, S. et. alt. (2012) Unconventional Monetary Policy Measures: A Comparison of the ECB, FED and BoE. Directorate General for Internal Policies Policy Department A: Economic and Scientific Policies. European Parliament. June 2012

Cukierman, A.; Webb, S. (1992) Measuring the Independence of Central Banks and Its Effect on Policy Outcomes. *World Bank Economic Review*, 6

Cukierman, A. (1995) Political Influence on the Central Bank: International Evidence. *The World Bank Economic Review* 9 (3)

Debelle, G.; Fischer, S. (1995) *How Independent Should a Central Bank Be?* Federal Reserve Bank of San Francisco. Working Papers I Applies Economic Theory 94-05

Drazen, A. (2002) Central Bank Independence, Democracy and Dollarization. *Journal of Applied Economics*, Vol. V, No. 1 (May)

Dwyer, P. et al. (2012) A comparative study of global central bank independence and transparency: lessons learned from the crisis. FRBNY Capstone Group Columbia University | SIPA 2012

Eggertsson, G. B.; Le Borgne, E. (2003) *A Political Agency Theory of Central Bank Independence*. IMF Working Paper No. 03/144, July 2003

Emerson, C. (2010) The Illegal Actions of the Federal Reserve: An Analysis of How the Nation's Central Bank Has Acted Outside the Law in Responding to the Current Financial Crisis. *William & Mary Business Law Review* 109 (2010), Issue ,I Volume 1, Article 5.

Eucken, W. (1955) *Grundsätze der Wirtschaftspolitik*, Mohr, Tübingen 1955

Fraser, B. W. (2004) *Central Bank Independence: what does it mean?* Reserve Bank of Australia Bulletin, December 2004

Friedman, B.M. (2008) Why a Dual Mandate is Right for Monetary Policy, *International Finance* 11:2, 2008

Giannone, D.; Lenza, M.; Reichlin, L. (2011) *Non-standard monetary policy measures and monetary developments*. European Central Bank Working Paper Series N 1290/ January 2011

Goodhart, C. (1998) *The Evolution of Central Banks*. MIT Press, Cambridge 1998

Goodhart, C. (1999) Some Myths About the Lender of Last Resort, *International Finance* 2-3, (November)

Goodhart, C. (2012) Central banks function to maintain financial stability: an uncompleted task. Financial Markets Group, London School of Economics

Gordon, D. (1983) A Positive Theory of Monetary Policy in a Natural Rate Model. *Journal of Political Economy*, 91 (August)

Grilli, V.; Masciandaro, D.; Tabellini, G. (1991) Political and Monetary Institutions and Public Financial Policies in the Industrial Countries. *Economic Policy* 13, 341.

Hayek, F. A. von (1971) *Constitution of Liberty*. University of Chicago Press, 1978

Ingves, S. et al. (2011) Central bank governance and financial stability. Central Bank Governance Group BIS May 2011

Issing, O. (2002) Should we have faith in central banks? *Institute of Economic Affairs* 2002

Issing, O. (2012) Central Banks – Paradise Lost. *CFS Working Paper No. 2012/06*. Goethe-Universität Frankfurt 2012

Larosière, J. et al. (2009) Report on the high-level group on financial supervision. Brussels, 25 February 2009

Lastra, R. M^a. (2012) Central bank independence and financial stability. *Revista de Estabilidad Financiera vol. 18*, Madrid 2012

Lastra, R. M^a. (2012) The Evolution of the European Central Bank. *Queen Mary University of London, School of Law Legal Studies Research Paper No. 99/2012*

Llewellyn, D. T. (2008) The Northern Rock Crisis: A Multi-Dimensional Problem Waiting to Happen. *Journal of Financial Regulation and Compliance*, Vol. 16 Iss: 1

Jordan, J. L. (2006) *Money and Monetary Policy for the Twenty-First Century*. Federal Reserve Bank of St. Louis, November/December 2006, 88 (6),

Pichet, E. (2013) *Building the foundations for a new central bank doctrine: redefining central banks' missions in the 21st century*. BEM Bordeaux Management School, March 2013

Ricardo, D. (1824) *Plan for the establishment of national bank*. The Works of David Ricardo (McCulloch ed.). London 1846

Richter, F.; Wahl, P. (2011) The Role of the European Central Bank in the Financial Crash and the Crisis of the Euro-Zone. Report based on a WEED Expert Meeting. Berlin 2011.

Roomeldi, R. (2011) *Alternative Monetary Policy Tools of the ECB: Impact of Financial Markets*. Copenhagen Business School, November 2011

Sajó, A. (1999) *Limiting government : an introduction to constitutionalism*. Central European University Press. Budapest 1999

Smith, V. C. (1936) *The rationale of central banking and the free banking alternative*. Westminster, England : P.S. King & Sons Ltd., 1936

Trebesch, C.; Zettelmeyer, J. (2012) *Deciphering the ECB Securities Markets Programme: The Case of Greek Bonds*. University of Munich and CESifo / European Bank for Reconstruction and Development; CEPR. September 2012

Vinals, J. (2010) *Central Banking Lessons from the Crisis*. Monetary and Capital Markets Department, IMF May 2010

White, K.; Schuler, A. (2009) Who Said “Debauch the Currency”: Keynes or Lenin? *Journal of Economic Perspectives* Vol. 23, No. 2—Spring 2009

White, W. R. (2012) *Ultra Easy Monetary Policy and the Law of Unintended Consequences*. Globalization and Monetary Policy Institute, Federal Reserve Bank of Dallas, Working Paper No. 126 August 2012