## CENTRAL BANK INDEPENDENCE AND FINANCIAL STABILITY

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#### Central bank independence and financial stability

"A page of history is worth a volume of logic" Justice Oliver Wendell Holmes Jr. (1921)

#### 1 Introduction

Central bank independence became a fundamental issue in economic policy debate twenty years ago. Back then, the main question arising in the academic and policy debate was the independence of central bank in the pursuit of monetary stability, an objective which had become of paramount importance, given the inflationary excesses of demand-driven economic policies in the 1970s and 1980s. Governments needed a brake to avoid taking destructive actions when the siren of inflationary temptation appeared, and like Ulysses at the mast, central banks around the world were granted independence to achieve inflation control. One goal: price stability, one instrument: monetary policy was the recipe adopted almost universally. It was a relatively easy paradigm to enact legally. Hence, central bank laws were changed to make price stability the primary mandate and to grant independence to the central bank in the pursuit of this objective. The Maastricht Treaty made it a condition sine qua non for entry into European Monetary Union, and the International Monetary Fund made it often a "condition" attached to the programs of reform that countries submitted in order to get access to Fund financing. And it seemed to work remarkably well in the fight against inflation. But, as with any economic theory, it had some fault lines. The first one refers to the primacy of the goal in all circumstances; inflation is surely a concern in an inflationary environment but not in a deflationary one. And in the context of the financial crisis 2007-2009, central banks main concern shifted from price stability to the need to restore financial stability. The second fault line refers to the measurement of inflation. Following Goodhart's law, any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes<sup>1</sup>, the measurement of inflation largely ignored asset prices, in particular house prices, thus being unable to identify and combat the "elephant in the room", that is a large asset price bubble that eventually burst in August 2007.

This paper revisits the issues surrounding central bank independence in the pursuit of financial stability. The paper is divided into seven sections. Section 1 provides a brief review of central banking history and functions in the light of the twin objectives of monetary and financial stability. Sections 2 and 3 revisit respectively the notions of central bank independence and corresponding accountability. Section 4 assesses the legal framework of central bank independence. Section 5 presents a reflection on the differences between ordinary times and extraordinary times, drawing on the historical example of the pre-1999 German Bundesbank. Section 6 examines the concept of financial stability. Section 7 considers the lender of last resort role of the central bank in the light of the recent financial crisis. The paper finishes with some concluding observations.

## 2 Central Bank Rationale and Functions

Central banking has evolved throughout its relatively short history, from the time in which the Swedish Riksbank (the first central bank in the world, created in 1668) and the Bank of England (set up in 1694) started operations to central banks in contemporary times, with the Federal Reserve System established in 1913 and the European Central Bank in 1999. While the original raison d'être for the establishment of the first central banks was note issue and government finance, this rationale has changed over time. The Fed was founded following the

**<sup>1.</sup>** See Charles Goodhart, *Monetary Theory and Practice: The UK Experience*, MacMillan, London, 1984, p. 96. **2.** See generally Charles Goodhart (1988), *The Evolution of Central Banks*, MIT Press, Cambridge.

banking crisis of 1907: "To provide for the establishment of Federal Reserve Banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes" (Introduction to the Federal Reserve Act of 1913). The main rationale for the creation of the Bundesbank in 1957, a country that had suffered from hyperinflation during the inter-war period, was price stability; this rationale was "inherited" by the European System of Central Banks.

Vera Lutz Smith (a student of Hayek) explained in her excellent 1936 book, *The Rationale of Central Banking* that the twin mandate of central banks was stable money and sound banking, The emphasis on stable money as the primary objective of monetary policy in the late 1980s and in the 1990s was often accompanied from a move away from the supervisory tasks that are an integral instrument to achieve sound banking and finance. Indeed, some countries (such as the UK and Australia) have moved prudential supervision outside of the central bank. But a crucial aspect of current reform proposals in response to the financial crisis 2007-2009 involves having the monetary authorities more closely involved in financial supervision, a return to the financial stability mandate.

The list of central bank functions is open-ended and dynamic, comprising note issue, government finance, monetary policy, banking supervision and regulation, banker's bank and lender of last resort, smooth operations of the payment systems, management of gold and foreign reserves, conduct of foreign exchange operations, debt management, exchange controls, development and promotional tasks and others.<sup>3</sup> The scope of powers and the relative importance of the functions of a central bank have changed over time and across countries.

There has always been a strong connection between the central bank and the government. They have built a special relationship: the central bank has been consciously awarded privileges by the government, and in exchange it has been expected to provide certain services and functions for the government. However, this special relationship has not always been easy; indeed, at times it has been rather confrontational. The nickname given to the Bank of England, the Old Lady of Threadneedle Street, is a reminder of this special relationship.<sup>4</sup>

## 3 Central Bank Independence

The phenomenon of independence is not unique to central banking. It is a feature inherent in the administrative law tradition in some countries where functional decentralization is considered an effective way of dividing power, often in combination with geographic decentralization, as is the case in the United States. The rise and rise of agencies or independent regulatory commissions can be explained because of the increasing intricacy of the functioning of the modern state. It is an effective way of dealing with the regulation of complex realities: money, securities, energy, transport, telecommunications, the environment and others. The skills, expertise and superior qualifications of technocrats (central bankers, energy regulators, etc.) compared to politicians reinforce the case for independence.

In many European jurisdictions, the advent of central bank independence on the one hand and the establishment of agencies to regulate privatized utilities on the other hand have signified a change in their administrative law tradition, which used to rely on executive departments head-

<sup>3.</sup> For an analysis of central banking functions see Lastra (1996), Central Banking and Banking Regulation, pp. 249-286. See also P. Pollard, A Look Inside Two Central Banks: The ECB and the Federal Reserve, Federal Reserve Bank of St. Louis, Jan.-Feb. 2003, p.18. 4. The nickname comes from a Thomas Gillray cartoon published in May 1797, following a speech that a Member of Parliament, Richard Brinsley, had made in the House of Commons alluding to the Bank as an "elderly lady in the City of great credit and long standing, who had unfortunately, fallen into bad company". That bad company being the company of Prime Minister Pitt, who had required the Bank to make large loans to the Government to finance a war against France.

ed by a cabinet officer. Since important elements of that tradition remain deeply embedded in the legal framework of many European countries, this background is important to understand the debate about the legitimacy and accountability of independent central banks.

The argument for "monetary independence" (i.e., central bank independence in the pursuit of a price-stability oriented monetary policy) is relatively straightforward. Experience has shown that political institutions often do not maintain stable prices. They have several powerful incentives to expand the money supply beyond the rate of real growth in the economy. In non-democratic societies, the control of the money supply is an important instrument of economic policy that can address various political needs, most notoriously the financing of government needs. In a democracy, political parties try to appeal to various constituencies and in their eagerness to increase economic activity, the incumbent party may engage in inflationary policy in the period immediately before an election in order to raise employment, and create a strong, if temporary, sense of euphoria among voters that translates into votes for the politicians then in office. It is against this background that independent central banks find their contemporary justification: central bank independence is conceived as a means to achieve the goal of price stability.

Making a central bank independent interferes – to some extent – with the sovereign's right concerning the creation and regulation of money (lex monetae). Article I, section 8, clause 5 of the U.S. Constitution gives Congress the power "to coin money, regulate the value thereof, and of foreign coin". Congress delegated some powers to the Federal Reserve System when it enacted the Federal Reserve Act in 1913. It is this first "democratic act" (passage of legislation by Congress) that gives legitimacy to the functions and operations of the Federal Reserve System. The nature of delegated powers is fundamental to frame independence within the existing system of checks and balances, and to understand its constitutional scope and the nature of its limitations. Central bank independence is not absolute, but relative. Central bank independence has an instrumental nature, as a means to achieve a goal, namely price stability, a goal which is desirable for the economic running of the state and for the welfare of society.

Central bank independence gives central bankers a degree of discretion (room for manoeuvre) in the pursuit of their delegated mandate, subject to a framework of rules. In 1942, in the context the proposals that eventually led to the establishments of the International Monetary Fund, John Maynard Keynes famously noted: "Perhaps the most difficult question is how much to decide by rule and how much to leave to discretion". This is an issue that is ever present in administrative law, as it is in monetary policy. Central banking is as much an art as a science.

#### 4 Accountability

How can giving freedom (i.e., independence) to unelected officials be reconciled with a society remaining democratic? The answer is: through accountability. To begin, it is important to point out that authority is not given away, but "delegated". Democratic legitimacy is a prerequisite for the establishment of an independent central bank. The creation of such an entity must be the fruit of a democratic act (an act of the legislator, a constitutional decision or a treaty provision). It is then in the continuing life of that entity that accountability becomes necessary: the process of bringing back (by giving account, explaining, justifying or taking measures of amendment or redress) that independent entity to the procedures and processes of a

 <sup>[</sup>US] Congress' right to regulate interstate commerce (Article 1, Section 8, Clause 3) encompasses banking and other financial services as the courts have come to define and interpret this clause. Congress also has the right to make any law that is "necessary and proper" for the execution of its enumerated powers (Article I, Section 8, Clause 18).
 G. John Maynard Keynes, "Proposals for an International Currency (Clearing) Union", 1942.

democratic society. A clearly specified mandate is given by parliament, and the agency to whom the mandate is given, be it the central bank or another agency, is then left to get on with carrying it out.

Agencies have been described as "miniature governments", typically endowed with executive powers, quasi-legislative (rule-making) and quasi-judicial powers (adjudication). Since agencies are by definition technocracies (a "headless fourth branch of government", according to some commentators), a basic problem of political legitimacy arises: how to reconcile their powers with the demands of a democracy? In the United States, independent regulatory commissions have been the subject of extensive debate and criticism. For instance, the 1971 Ash Council Report (the Report of the President's Advisory Council on Executive Organization) on Selected Independent Regulatory Agencies, recommended that functions of six agencies, including the Securities and Exchange Commission (SEC), should be transferred to single administrators under the President. In particular the agencies were criticized for their alleged lack of accountability and their excess of independence. Agencies have also been criticized for being susceptible to regulatory capture. This is rooted in the commonality of expertise and interests that exist between regulators and those regulated. But capture is also a temptation in other branches of government. For instance lobbies pressure Congress for or against legislative change; the case of healthcare reform being one that illustrates this point.

Central banks are not majoritarian, democratic institutions. Central banks are, instead, technocratic bureaucracies, staffed by career government employees and, typically, a few leaders who have been appointed by the political authorities. It might be said that any bureaucratic agency is not-majoritarian, since decisions are made by appointed officials rather than elected ones. But the problem is exacerbated in the case of central banks as compared with typical bureaucracies. Central banks do not simply administer a technical regulatory scheme affecting discrete industries or interests. They regulate price levels, which is one of the most fundamental powers of government, and one of the most important practical concerns of the public at large. Though they are accountable for their actions, central banks tend to be more insulated from political control than other independent agencies. This political insulation raises a basic issue in democratic legitimacy.

The case for central bank independence can be reconciled, in general, with the theory of democratic self-determination. An analogy to the independent judiciary may be useful in this respect. Like central banks, the judiciary administers an institution (a nation's laws) that goes to the core of a nation's political identity. And like central bankers, judges, in general, are not popularly elected in liberal democracies. Constitutional theorists tend to focus on the unique features of a court to explain the institution of judicial review. The court has a special expertise and legitimacy in interpreting the law that other bodies of government do not have. Moreover, courts are "less dangerous" than other political institutions. They are less dangerous both

<sup>7.</sup> See Robert Litan and William Nordhaus, *Reforming Federal Regulation* (New Haven: Yale University Press, 1983), p. 50: "[Independent Commissions] are in reality miniature independent governments set up to deal with the railroad problem, the banking problem or the radio problem. They constitute a headless 'fourth branch' of the government, a haphazard deposit of irresponsible agencies and uncoordinated powers. They do violence to the basic theory of the American Constitution that there should be three branches of government and only three."

8. There are two kinds of "independent" agencies in the USA: those whose independence is ostensibly created by statutes which protect officials against dismissal by the President (such as the Fed, the SEC and others) and those which are given separate status within the government, but which are subject to ostensibly plenary control by the President (such as the Environmental Protection Agency, EPA). Theoretically, this distinction is important, because while there is Supreme Court precedent upholding dome independent agencies in the first sense, there is still a constitutional cloud over them because the US Constitution nowhere provides for a "fourth" branch of government. See Geoffrey Miller (1986), "Independent Agencies", *Supreme Court Review* 41, pp. 50-58.

9. The Report is quoted in Kenneth Culp Davis, *Administrative Law and Government* (2<sup>nd</sup> Edn, St. Paul MN: West Publishing Co., 1975) pp. 20-22.

because they are largely immunised from the influence of special interests, and because they lack the powers that other governmental agencies enjoy, such as the spending power or the power to exert compulsory force. With regard to central banks, it is possible to devise a similar set of justifications for the conduct of monetary policy by unelected officials who enjoy explicit protections against political influence. First, as already noted, the problems of legitimacy for central banks are less than for a court exercising judicial review because the central bank's powers are explicitly conferred by legislation adopted in the political process. A legislative charter can always be revised by subsequent legislation; and even if the charter is embodied in a national constitution or Treaty, the constitution or Treaty can always be amended or ignored. The possibility of a government override - if allowed by the legislation - actually nullifies independence. Second, the central bank, as a bank, can claim a special expertise in the things that banks do, just as a court, as a court, can claim expertise and legitimacy in interpreting the law. Central banks are specialized at managing the money supply and price levels. Third, central banks, like courts, are weak in most respects. They do not enjoy wide ranging authority to bring the coercive power of the state against private citizens. Like the courts, their powers in the area of their activity can be justified by their weakness in other areas.

The notion of accountability is often an elusive one. Accountability – from a legal perspective – should be diversified to include parliamentary accountability as well as judicial review of the agency's acts and decisions, and a degree of co-operation with the executive to ensure consistent overall policy making. In a national context, parliament remains sovereign in its legislative decisions, and one statute proclaiming the independence of an agency can always be removed by another one revoking it. Parliamentary accountability should be exercised through a variety of procedures and mechanisms, including annual reports and appearances in front of parliament of public officials on a regular basis, and also in the case of an emergency situation. Judicial review of the agency's actions and decisions (conducted by an independent and depolitisised judiciary) is essential to prevent and control the arbitrary and unreasonable exercise of discretionary powers. This is a fundamental element of the rule of law. The discretion of public officials should never be unfettered but subject to legal control.

Economists, while accepting this "institutional" articulation of accountability, in particular parliamentary accountability, tend to put the emphasis on performance accountability on the one hand and on disclosure on the other. Performance control (the question of how accountability is to be achieved) is concerned with the efficiency of an independent institution and is conditional upon the objectives and targets imposed upon the central bank. Performance accountability has a "technical" rather than a "political" character. Disclosure can be viewed as a "market-based" form of accountability. Performance accountability requires that there are objectives or standards (criteria of assessment) according to which an action or decision might be assessed. Performance accountability is easier to achieve when there is one objective (e.g., price stability), rather than several objectives, and when the objective is narrowly defined (e.g., inflation targeting). Because performance of outputs on the supervisory activity is hard to measure and because the supervisory task requires long horizons, process accountability should be preferred with regard to the conduct of financial supervision. 10

5 The Legal Articulation of Central Bank Independence

Independence is a matter of degree; some independent central banks are more independent than others. The measurement of independence has often been constructed using a legal in-

<sup>10.</sup> See Luis Garicano and Rosa Lastra, "Towards a new Architecture for Financial Stability", Forthcoming in the *Journal of International Economic Law* (2010).

dex. The following elements should be included in a law that truly safeguards independence: (1) declaration of independence; (2) organic guarantees and professional independence; (3) functional or operational guarantees; (4) financial autonomy; and (5) regulatory powers.

Legal guarantees concerning the organization and functions of central banks on the one hand and the integrity and professionalism of central bankers on the other hand are an important measurement of legal central bank independence. The incentive structure of independent central bankers is different from that of elected politicians. Political economy and political science have contributed to the understanding of this "incentive structure". However, these incentives need to be enshrined in the law in order to be effective and enforceable. The "organic" or institutional independence is evidenced by a number of safeguards or guarantees such as the appointment and removal procedures of the members of its governing bodies. In particular, a law on central bank independence should guarantee security of tenure (typically for period of time longer than that held by legislators) and well defined appointment and removal procedures for central bank board members. Another recommendation is for "professional independence", which is enhanced by the appointment of qualified candidates, well versed in monetary economics and central banking theory and practice. Professional independence<sup>11</sup> - which contributes to the reputation and prestige of the institution - is also safeguarded by the establishment of a list of incompatible or disqualifying activities so as to prevent conflicts of interest. For instance, while in office central bankers should be precluded from simultaneously holding private-sector jobs.

The central bank law should also include "functional" or "operational guarantees" of independence, that is provisions that grant the central bank "room for manoeuvre" with regard to the carrying out of its functions and operations, without government interference, within the limits of the powers expressly conferred upon it by the enabling legislation. The key economic test of independence is the central bank's ability to withstand government pressure to finance government deficits via central bank credit. In this respect, the central bank law should include a provision prohibiting or severely limiting the central bank's lending to the public sector. The power to issue rules and regulations is a measure of the autonomy (ability to give rules to itself) of an agency.

The financial independence refers to the ability to adopt its internal budget, in accordance with criteria defined in the law so as to ensure that the central bank's expenditures are reasonable.

Having briefly discussed the "legal guarantees" of independence, it is important to reflect on the following two questions: independence from whom and independence in what?

Independence from whom? It is typically from the political direction of the elected government, though in the case of central banks with supervisory responsibilities (and with regard to their role as bankers' bank) it is also independence from the financial institutions to avoid regulatory capture. Article 108 of the EC Treaty (which has become Article 130 of the Treaty for the Functioning of the European Union following the entry into force of the Lisbon Treaty) has a very broad declaration of the scope of the independence of the European Central Bank from both

<sup>11.</sup> Professional independence can be considered an element of *de iure* independence, but it is also an element of *de facto* independence, which, in my opinion, is determined by: the personalities of the governor and the minister of finance (and in some countries of other high officials); the political and economic circumstances (e.g., economic expansion or recession); the history and national priorities of the country concerned; the depth and quality of monetary analysis; the rate of turnover of central bank governors and other factors. See Lastra (1996), *Central Banking and Banking Regulation*, p. 12.

national authorities and Community institutions. 12 Independence though is only one side of the coin, the other being accountability. In this respect, independence from political instruction must be accompanied by adequate mechanisms of accountability, in particular parliamentary accountability.

Independence in what? It is typically independence in the conduct of monetary policy for the pursuit of price stability. The scope of independence can also be extended to other central bank functions, either because their functioning is intimately linked to the conduct of a pricestability oriented monetary policy or because the law says so (i.e., the law specifies that the central bank is independent in the conduct of all of its functions). However, there are several limits that affect the scope of independence.

To begin, the central bank is necessarily "dependent" in some functions, for instance when it acts as an agent of the Treasury in the carrying out of foreign exchange operations or when it acts as fiscal agent. Secondly, with regard to the pursuit of monetary stability, central bank independence is limited to its internal dimension, i.e., price stability. The external dimension of monetary stability (concerning the exchange rate and the formulation of exchange rate policy), generally rests with the government, even though its implementation is often entrusted to the central bank. 13 Thirdly, the goal constraint effectively provides a delimitation of the contours of independence. Central bank independence - in line with the theory of delegated powers - has to be understood within the context of the goals that the institution is required to pursue, which are important public goals needed for the proper economic functioning of the state. While maintaining price stability is a fundamental goal, it is rarely - if ever - the sole objective. 14 Financial stability is also a key goal for central banks and other agencies. And if public funds are at stake, central bank independence in the pursuit of financial stability is limited by the government's necessary involvement in the destiny of the financial institutions that have received government assistance.

The goal of complete insulation from politics cannot be realised. In an imperfect world, some compromise with the "ideal" of central bank independence is a practical necessity.

### 6 Ordinary Times Versus Extraordinary Times<sup>15</sup>

In ordinary times, countries do not face profound threats to, or alterations of, their basic identity. Ordinary times are structured around more limited disputes that do not go to the identity of the nation or to its basic security. In extraordinary times, when a country's basic identity or survival is at stake, the government may need to raise revenues very quickly and efficiently or to depart from other basic tenets of central bank independence.

When the fundamental identity, security, or values of a nation are an issue, the matter is no longer one of technical expertise (which is a compelling argument only within a framework of

<sup>12.</sup> Article 108 of the EC Treaty reads as follows: "When exercising the powers and carrying out the tasks and duties conferred upon them by this Treaty and the Statute of the ESCB, neither the ECB. nor a national central bank. nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB or of the national central banks in the performance of their tasks". 13. Former German Chancellor H. Schmidt wrote in his memoirs that he regarded exchange rate policies as "important elements of general foreign and strategic policy". See Lastra (1996), p. 276. 14. See Lastra, Legal Foundations of International Monetary Stability (2006), p. 36: "Monetary stability is an important economic goal. However, there are other important economic goals that the government needs to take into account in the design of its economic policies: growth, employment, etc. The question then arises: what is the best way of achieving several goals? In recent years, the solution adopted by the political authorities in many countries is to pursue growth and employment directly through fiscal policy and other instruments of economic policy - typically under political instruction - and to delegate the mandate of price stability and the conduct of monetary policy to an independent central bank". 15. See Rosa Lastra and Geoffrey Miller, "Central Bank Independence in Ordinary and Extraordinary Times", in Jan Kleineman (ed.), Central Bank Independence. The Economic Foundations, the Constitutional Implications and Democratic Accountability (The Hague: Kluwer Law International, 2001) pp. 31-50.

accepted values and institution) but instead concerns basic democratic choices. Central banks should not be making these kinds of fundamental decisions. Similarly, the fact that a central bank is a bank may justify its conduct of a nation's banking business in ordinary times, but in extraordinary times, the national interest becomes paramount to arguments for legitimacy based on functional role. And the fact that a central bank is relatively powerless over many governmental functions becomes irrelevant when the bank, by virtue of the powers it does have, prevents or impedes much broader and more fundamental processes. If the public as a whole made a resolute and considered judgment that price level stability was not a central value for the conduct of economic policy, it hardly seems sensible to deny the public the right to self-determination, even if such a decision is, in the view of contemporary economic theory, not a wise one.

The insulation of the central bank from politics does not pose a serious difficulty for democratic functioning in ordinary times; but in extraordinary times, the autonomy of the central bank can, and should, legitimately yield to other concerns. *The problem of institutional design is how to distinguish the ordinary times from the extraordinary ones.* For instance, can the financial crisis that commenced in 2007 and reached its zenith in September 2008 be considered such an extraordinary time, one that justifies departure from regular principles of central bank operations? I tend to side with those that contend that in 2008 we were living in extraordinary times, with a real danger that the whole financial system would implode. Hence, central bank actions during that period ought to be examined under this prism, as I further consider in section 7 below when I examine the lender of last resort role of the central bank.

Politicians and interest groups will always have the incentive to characterise issues as extraordinary in order to wrest power away from the central bank. It would not be advisable for a nation to allow too-easy a recourse to this argument, because of the danger that the value of central bank independence will be lost for very little gain. Usually, the central bank is established, and given its autonomy, by legislation. If the central bank has performed well and enjoys a high degree of public confidence (though confidence is hard to build up and easy to destroy), the authorising legislation will become deeply embedded in the political fabric of the nation. In some countries, the central bank's autonomy is even more deeply embedded, at least from a legal point of view, by being contained in the political constitution of the country or in a Treaty (as in the case of the EU).

6.1 THE HISTORICAL EXAMPLE
OF THE BUNDESBANK

Some features of central bank institutional design can be understood as attempting to deal with this problem. For example, many central bank laws contain strict prohibitions against central bank lending to the government (the economic test of independence). These prohibitions are intended to prevent the government from inflating the economy during ordinary times. In extraordinary times, however, these restrictions need to be eased, as the history of the Bundesbank over the years proved. Indeed the German visceral hate for inflation and their unwavering support for monetary stability dates back to the disastrous experience of hyperinflation in the inter-war period. The provisions in the 1957 Bundesbank Law that encapsulate the idea of independence for the sake of monetary stability are Articles 3 and 12. According to Article 3: "The Deutsche Bundesbank regulates the amount of money in circulation and of credit supplied to the economy, using the monetary powers conferred on it by this Act, with the aim of safequarding the currency, and sees to the execution of domestic and external payments". According to Article 12: "Without prejudice to the performance of its functions, the Deutsche Bundesbank is required to support the general economic policy of the Federal Cabinet. In exercising the powers conferred on it by this Act, the Bank is independent of instruction from the Federal Cabinet".

Though the Bundesbank Law entrusted the Bundesbank with "monetary powers" with the "aim of safeguarding the currency", those monetary powers were in fact restricted to one instrument: the ability to raise and lower interest rates. The room for manoeuvre for many independent central banks is monetary policy. Exchange rate policy typically remains in the hands of government. The Bundesbank's room for manoeuvre (independence) was seriously curtailed in the last decade through two major historical developments: German unification and European Monetary Union. In the case of German unification, the interest at stake was national identity, not price stability. The ERM (the Exchange Rate Mechanism of the European Monetary System) was sacrificed in order to achieve a greater national objective: the unity of the German people. In the case of European Monetary Union, supranational integration was considered to be more important for the future of the German nation than the maintenance of an independent central bank.

The independence of the Bundesbank was seldom sacrificed with regard to price stability, since the inflation-averse German public was ready to accept the anti-inflationary policies proposed by the central bank. It is when it came to other goals that compromised the very identity or security of the nation, that independence and price stability were sacrificed.

### 7 The Definition of Financial Stability

Financial stability is a goal difficult to define (more identifiable in its negative definition of what instability is than in its positive definition), and yet it is a most important policy objective, one that transcends institutional boundaries and geographic borders. Financial stability is a national, regional and international goal. There are a variety of instruments that can help achieve that goal. At the national level, the main instruments are supervision and regulation, lender of last resort and liquidity assistance, crisis management procedures and fiscal support in case of bank public recapitalization or nationalization. Financial stability, systemic risk/contagion control and sound banking and finance are "close cousins".

Acknowledging the lack of a clearly established analytical and operational framework for the understanding of financial stability, Tommaso Padoa-Schioppa has referred to it as a "land in between" monetary policy and supervision. <sup>16</sup> While in the past monetary policy, prudential supervision and financial stability typically formed a single composite, these functions have often become "unbundled", due the advent of EMU in the euro-zone countries (with a centralized monetary policy and decentralized prudential supervision) and due to the transfer of supervision away from the central bank to a separate agency in some countries such as the UK.

The central bank because of its unique position as banker to the Government and bankers' bank, is best placed to undertake a leading role in the pursuit of both monetary stability and financial stability. Though the twin mandate of central banking is stable money and sound banking and finance, the latter has often been neglected in recent years.

Monetary policy, the quintessential central banking function, has been increasingly focused in recent years on the pursuit of one goal: monetary stability, understood as price stability. The consistency between one instrument (monetary policy) and one goal (price stability) that is present in the pursuit of monetary stability contrasts with the multiplicity of instruments and goals that exist with regard to the pursuit of financial stability. This makes the pursuit of financial stability a difficult endeavor, and this difficulty is further compounded by the problems of

<sup>16.</sup> See Tommasso Padoa-Schioppa, "Central Banks and Financial Stability. Exploring a Land in Between" (Speech delivered in the European Central Bank's Second Central Banking Conference, *The Transformation of the European Financial System*, 24-25 October 2002), available at http://www.ecb.int/home/conf/cbc2/tps.pdf. This speech has been published as Chapter 8 in his book, *Regulating Finance* (Oxford: Oxford University Press, 2004).

jurisdictional domain, since financial stability is a goal that transcends national boundaries. Like a tsunami that does not respect national boundaries, episodes of financial instability have a trans-national dimension, thus requiring a trans-national solution. Financial stability is also a goal that transcends institutional mandates (for instance in the UK, the Financial Services Authority, the Bank of England and the Treasury all have a shared interest in its pursuit). The idea of a "council for financial stability" - as proposed in the US, UK and EU 17 - is a sensible response in this regard. However, the chair of this Council should be in my opinion the central bank. One institution needs to be in charge, as the MOU (tripartite arrangement) painfully demonstrated in the Northern Rock affair in the UK. The central bank is the institution best placed (equidistant from the government and from the financial system) to assume the chairmanship. Any national council for financial stability should work together with other such councils in other jurisdictions, notably in Europe with the proposed creation of the European Systemic Risk Board. As well, it should work closely with the Financial Stability Board and IMF to identify macro-economic trends that can have a negative impact on financial markets.

A distinction is now made between macro-prudential supervision and micro-prudential supervision. According to the House of Lords Report on the Future or EU Supervision and Regulation, 18 "macro-prudential supervision is the analysis of trends and imbalances in the financial system and the detection of systemic risks that these trends may pose to financial institutions and the economy. The focus of macro-prudential supervision is the safety of the financial and economic system as a whole, the prevention of systemic risk. Micro-prudential supervision is the day-to-day supervision of individual financial institutions. The focus of micro-prudential supervision is the safety and soundness of individual institutions as well as consumer protection. The same or a separate supervisor can carry out these two functions. If different supervisors carry out these functions they must work together to provide mechanisms to counteract macro-prudential risks at a micro-prudential level". 19 A common trend in response to the crisis is to give the central bank responsibility for macro-prudential supervision.20

As I discuss in a forthcoming paper with Luis Garicano<sup>21</sup>, central banks with or without direct micro-supervisory responsibilities should have macro-supervisory powers to identify negative trends, drawing on the statistical information that it already gathers for monetary policy purposes, on financial stability reviews, on the information gathered by other supervisory agencies and on additional powers to request information from institutions or markets previously unregulated but that can cause systemic risk. The central banks should have a view of the "forest" even though other supervisory agencies continue to supervise the health of each individual "tree".

<sup>17.</sup> See UK Treasury, "Reforming Financial Markets", July 2009, <a href="http://www.hm">http://www.hm</a> treasury.gov.uk/d/reforming\_financial\_ markets080709.pdf> and Financial Services Bill, <a href="http://www.hm-treasury.gov.uk/press\_108\_09.htm">http://www.hm-treasury.gov.uk/press\_108\_09.htm</a>, US Treasury White Paper, US Treasury, "Financial Regulatory Reform, a New Foundation", June 2009, <a href="http://www.financialstability.">http://www.financialstability.</a> gov/docs/regs/FinalReport\_web.pdf>, Commission Recommendation of 27 May 2009 endorsing the De Larosière Report, http://ec.europa.eu/internal\_market/consultations/2009/fin\_supervision\_may\_en.htm and <a href="http://europa.eu/rapid/">http://europa.eu/rapid/</a> pressReleasesAction.do?reference=IP/09/1347&type=HTML>. Commission adopts legislative proposals to strengthen financial supervision in Europe (see MEMO/09/404 and MEMO/09/405), 23 September 2009. The Ecofin Council on 2 December 2009 approved the creation of the new three European Supervisory Authorities, which together with the European System Risk Board (for which broad political agreement was reached on 20 October 2009) form the new EU supervisory structure. See <a href="http://www.consilium.europa.eu/uedocs/cms">http://www.consilium.europa.eu/uedocs/cms</a> Data/docs/pressdata/en/ecofin/111706. pdf>. 18. See <a href="http://www.publications.parliament.uk/pa/ld200809/ldselect/ldeucom/106/106i.pdf">http://www.publications.parliament.uk/pa/ld200809/ldselect/ldeucom/106/106i.pdf</a>. 19. The central bank can rightly claim: "if I am going to assist you in a rainy day (LOLR), I need to know what you do on a sunny day". This axiom is complicated if the central bank is not in charge of supervision. For instance in the UK, given that supervision is a task performed by the FSA, the Bank of England and the FSA need to have close cooperation and coordination in this regard. 20. For a review of these arguments see Garicano and Lastra, supra note 10, forthcoming 2010. **21.** lbid.

Some people oppose granting more powers to the central bank because of distrust in the institution or because of concerns about excessive concentration of powers. Distrust towards government intervention has always been and will always been a feature of laissez-faire proponents of various sorts. Against that, it has been argued that had central banks not effectively provided ample liquidity to the markets in 2008-2009, the financial crisis 2007-2009 could probably have become the Great Depression of 2010. The argument about excessive concentration of power has more weight in my opinion. In a democracy, any increase in power for a non-elected agency (effectively a technocratic institution) needs to be accompanied by adequate mechanisms of accountability and needs to be justified on the basis of public interest considerations. In this regard, financial stability - like monetary stability - is a value that should be embraced by different political parties, thus becoming part of the constitutional economic order and not subject to electoral divisions or partisan agendas.

The major problem lying ahead for central banks in their pursuit of financial stability is the socalled boundary problem or perimeter issue.<sup>22</sup> Like with territorial waters in fishing disputes amongst countries, where you draw the line of regulation, protection and government assistance is likely to lead to disagreements. This is an unresolved issue of paramount importance, because the crisis has shown the profound systemic risk implications of some non-banks, such as AIG. The definition of a systemically significant financial institution is not an easy task: size, structure, interconnectedness are all factors to consider. Furthermore, it is a dynamic definition; any published list (as the one published by the Financial Stability Board<sup>23</sup>) is - in my opinion - likely to lead to moral hazard incentives, unless there is a proper pricing of the implicit government guarantee. I would add that almost all systemically significant financial institutions have a cross border dimension, thus calling for across-border solution, supra-nationally and/or internationally. A set of internationally agreed rules on cross border insolvency of banks and systemically significant financial institutions is very much needed. Cross border crisis resolution is the number one unresolved issue in the aftermath of the most severe financial crisis since the Great Depression in the 1930s.

8 The Lender of Last Resort Role of the Central Bank during the Crisis<sup>24</sup>

The first line of defense against a banking crisis is liquidity support. Central banks provide liquidity when no other sources of liquidity are readily available (or at least are not available at "reasonable market prices"), hence the name lender of last resort. When the final historical account of the 2007-2009 gets written, emergency liquidity assistance will surely emerge as one of the defining policy responses throughout the period.

Central banks often entered unchartered territory with regard to their liquidity support operations. For instance, the Federal Reserve Board considerably expanded its lending facilities to banks, other financial market participants and even corporations during the crisis. The legislative authority invoked in many cases since March 2008 is Section 13.3 of the Federal Reserve Act, which allows the Fed to lend to financial institutions other than a regulated depository institution because of "unusual and exigent circumstances". 25To the traditional discount window

<sup>22.</sup> See e.g. the so-called "Geneva Report" by Brunnermeier, Marcus Andrew Crocket, Charles Goodhart, Avinaush Persaud and Hyun Shin, "The Fundamental Principles of Financial Regulation", Geneva Report on the World Economy, February 2009. 23. See Financial Times, 29 November 2010 at <a href="http://www.ft.com/cms/s/0/df7c3f24-dd19-11de-">http://www.ft.com/cms/s/0/df7c3f24-dd19-11de-</a> ad60-00144feabdc0.html>. See also <a href="http://www.financialstabilityboard.org/publications/r">http://www.financialstabilityboard.org/publications/r</a> 091107c.pdf>. 24. See generally Rosa Lastra and Andrew Campbell, "Revisiting the Lender of Last Resort", Banking and Finance Law Review, Vol. 24, No. 3, June 2009, pp. 453-497. 25. Section 13. 3 ("Discounts for Individuals, Partnerships, and Corporations") reads as follows: In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, "to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank: Provided. That before

lending (DWL) for depository institutions and open market operations (OMOs), a number of facilities and programs were added.<sup>26</sup> This expanding list of facilities has been characterized by the widening range of acceptable collateral, the lengthening of the term of the loan and the ability to reach non depository financial institutions.

In the United Kingdom, as part of the package of measures adopted to combat the crisis, the Special Liquidity Scheme was introduced in April 2008,<sup>27</sup> almost eight months after the Northern Rock debacle.<sup>28</sup> The aim of the SLS was to improve the liquidity position of the banking system by allowing banks to swap their high quality mortgage-backed and other securities for UK Treasury Bills for up to three years. The Scheme was designed to finance part of the overhang of illiquid assets on banks' balance sheets by exchanging them temporarily for more easily tradable assets. Securities formed from loans existing before 31 December 2007 were eligible for use in the SLS. Though the draw-down period for the SLS closed on 30 January 2009 (the use of the Scheme was considerable, totalling £185 billion of Treasury Bills), the authorities announced that the Scheme would remain in place for three years, thereby providing participating institutions with continuing liquidity support and certainty. In addition to extending the maturity date, in January 2009 the UK Government announced<sup>29</sup> additional measures to combat the crisis, including the Government's Credit Guarantee Scheme (CGS), designed to reduce the risks on lending between bank, establishing a new facility for asset backed securities and a new Bank of England facility for purchasing high quality assets, offering capital and asset protection scheme for banks, and clarifying the regulatory approach to capital requirements.

In order to reach a proper understanding of the lender of last resort role of the central bank during the crisis, it is important to revisit its theoretical basis, to re-examine the four "pillars" or conditions, that are traditionally applied when providing lender of last resort assistance. These are not legal principles, but rather principles attributed to LOLR since the doctrinal elaboration by Thornton and Bagehot. First, financial assistance should be made available to banks which are illiquid but solvent. Second, the central bank should lend "freely", that is it should lend as much as is needed, but the rate of interest charged should be high. The third pillar is that the central bank should accommodate anyone who can provide "good" collateral which is valued at lower than pre-panic prices but higher than it would have been valued had the central bank not entered the market. Fourth, while the central bank should let it be known in advance that it will be ready to lend it will also exercise discretion in whether or not to provide assistance. The central bank will assess whether what the bank faces is a situation of illiquidity or insolvency and will also consider whether the failure of the institution involved is likely to trigger

discounting any such note, draft, or bill of exchange for an individual, partnership, or corporation the Federal reserve bank shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions. All such discounts for individuals, partnerships, or corporations shall be subject to such limitations, restrictions, and regulations as the Board of Governors of the Federal Reserve System may prescribe". Christian Johnson has conducted an analysis of the extensive use of this provision during the crisis, in a paper entitled "Exigent and Unusual Circumstances" presented at the Hart Conference in London (2009), submitted to European Business Organization Law Review. 26. See <a href="http://www.newyorkfed.org/markets/Forms\_of\_Fed\_Lending.pdf">http://www.newyorkfed.org/markets/Forms\_of\_Fed\_Lending.pdf</a>. 27. Bank of England News Release 21/4/08, available at <a href="http://www.bankofengland.co.uk/publications/news/2008/029.htm">http://www.bankofengland.co.uk/publications/news/2008/029.htm</a>>. Though in this paper I do not deal with the quantitative easing (non-conventional monetary policy) adopted by the Bank of England, it is important to understand that the liquidity support polices did not come in isolation, but rather as a package of central bank, regulatory and government policy responses to the crisis. In October 2008 the Government announced the credit guarantee scheme. See <a href="http://www.dmo.gov.uk/index.aspx?page=CGS/CGS\_about">http://www.dmo.gov.uk/index.aspx?page=CGS/CGS\_about</a>>. **28.** For an analysis of Northern Rock and the banking legislative reform in the UK see Lastra, "Northern Rock, UK Bank Insolvency and Cross-Border Insolvency", Journal of Banking Regulation, Vol. 9, No. 3, May 2008, pp. 165-186. See also Contributions to Parliamentary Brief (available at www.parliamentarybrief.com) of July 2008 ("Banking Reform in the UK"), October 2008 ("With the Horses Back in the Stable, Lock the Door"), December 2008 ("Take Great Care not to Stifle the Markets"), December 2009 ("For this Bill [Financial Services Bill 2009] to Succeed, it Needs to Think Global"). 29. http:// www.hm-treasury.gov.uk/press 05 09.htm.

contagion within the marketplace bringing with it the danger of the failure of other institutions.

The discretionary aspect is intended to assist in preventing the increase in moral hazard which would exist should the central bank be obliged to lend in all cases. The risk to contagion posed by a refusal to assist an insolvent bank must be weighed against the effect on moral hazard that a bailout would create. The central bank, before exercising its discretion to act or not to act as LOLR, should conduct a cost-benefit analysis of the results of its intervention (this is, of course, a difficult exercise, since it is done under pressure and with the need to reach a decision as promptly as possible). The costs are typically the risk of loss to the central bank and the creation of moral hazard incentives. The benefits accrue from the speed, flexibility and decisiveness with which the central bank can cope with an emergency crisis. In this costbenefit analysis due consideration should be given to the interests of depositors, other creditors, shareholders and taxpayers.

A generalized banking crisis is different from an individual banking crisis in a healthy economy, an important element that the central bank will also consider, which brings back the distinction between ordinary times and extraordinary times. In any case, the central bank should be held accountable for the use of its discretionary LOLR powers.

Lending to insolvent institutions is a departure from the classical LOLR principles. The risk of loss to the central bank is ultimately a risk of loss to the public (taxpayers). However, in practice, and this is particularly acute in times of crises, it is often hard to distinguish between illiquidity and insolvency. A situation of bank illiquidity (i.e., lack of liquid funds) can be an indication of technical insolvency (i.e., value of liabilities exceeds market value of assets) or can quickly turn into insolvency if assets are sold at a loss value or "fire-sale" price. And an insolvent institution, if allowed to continue operations, will almost certainly run into liquidity problems. The immediacy of the need for assistance often makes it difficult to assess at the moment whether the institution is illiquid or insolvent. If central banks provide inadequately collateralised support to insolvent rather than illiquid institutions, the traditional short-term nature of the LOLR assistance is likely to be insufficient to solve the troubles of such institutions. Therefore, in practice, the LOLR will be the first step in a chain or process that could culminate in a bank insolvency proceeding.

Another spin-off regarding the differentiation between illiquidity and insolvency refers to the multiple problems and difficulties experienced in the valuation of various assets (a feature of the financial crisis 2007-2009), which presented a very serious information problem. Concerns about liquidity can be uncertainty about insolvency. Lending over an extended period of time (which is often an indication that the problems are not of mere illiquidity) increases the risk of loss to the central bank, risk of loss to the public. Any extended lending - committing taxpayers' money - should ideally be done by the fiscal authority.

To minimise the risk of moral hazard, it is important to demarcate clearly what the central bank can do and what the central bank cannot do - or should not do - through its LOLR. The central bank can provide emergency liquidity - quick cash upfront - over a short period of time, when no other sources of funding are readily available. What the central bank should not do is to lend over an extended period of time, committing taxpayers' money, without the explicit approval of the fiscal authority.30 The central bank can provide liquidity not capital. Any ex-

<sup>30.</sup> In the EU the prohibition of monetization of government debt, also known as "monetary financing" in accordance with the provisions of Article 123 TFEU (formerly Article 101 EC Treaty) applies.

tended lending becomes the responsibility of the fiscal authority. Neither should the central bank use its LOLR to bail out bank owners; the LOLR's ultimate responsibility remains to the market, to the entire financial sector and not to any particular institution, as Bagehot and Thornton contended.

A punitive rate or a high rate of interest has often been considered a tenet of classic LOLR operations. However, several authors have suggested a rate lower than the market rate.<sup>31</sup> Goodhart argues that the cost of the initial [borrowing] tranche should be kept very low to avoid the stigma problem associated with borrowing from the central bank.<sup>32</sup> The expansion of central bank liquidity operations have turned what ought to be extraordinary into "ordinary", ordinary in the sense that with the crisis the central bank often became the lender of primary or only resort. The central bank's commitment to fight the crisis has signified a departure from this otherwise typically applied principle. Rather than discourage its use, the central bank has been keen to encourage various types of lending operations, whatever qualification one wishes to attribute to them: ordinary or extraordinary. The fourth pillar of traditional lender of last resort practice, that the institution receiving assistance should provide "good" collateral, has been the subject of much debate and criticism during the crisis due to the widening range of acceptable collateral.

I have referred in this section to the lender of last resort role of the Bank of England and to the Federal Reserve System. What about the European Central Bank? The response to this question is that the ECB is sui generis because of the "fiscal constraint" and the EU Treaty provisions. While the Bank of England is ultimately backed by the fiscal resources of the UK Treasury (though it must comply with the EU rules on state aid and the prohibition of monetary financing) and the Federal Reserve System is ultimately backed by the fiscal resources of the US Treasury, the ECB does not have a European fiscal counterpart. Though the M (the monetary pillar) of EMU is strong, the E (the economic pillar) of EMU is weak.<sup>33</sup> The ECB has competence to provide market liquidity according to Article 18 of the ESCB Statute and Article 105.2 EC Treaty, which has become 127 (2) in the Treaty for the Functioning of the European Union, TFEU. The ECB did indeed provide hugely expanded liquidity operations during the crisis34 and made ample use of the considerable set of operational tools at its disposal to handle a liquidity crisis.35 What constitutes "ordinary" liquidity assistance as opposed to "emergency"/LOLR liquidity assistance becomes blurred during a crisis, since the drying of the inter-bank market gives the central bank a primary role in the provision of liquidity. Though the ECB is competent to provide liquidity assistance to "financially sound" banks, 36 the classic LOLR assistance (collateralized loans to troubled illiquid but solvent banks) re-

<sup>31.</sup> See C. Goodhart, The Regulatory response to the financial crisis, Edward Elgar, Cheltenham UK, 2009, p. 71; J. C. Rochet, Why there are so many banking crises?, Princeton University Press, Princeton, 2008, p. 89; R. Repullo, "Who Should act as a Lender of Last Resort? An Incomplete. Contract model", Journal of Money, Credit and Banking (2000) Vol. 32, Issue 3, August 2000, pp. 580-605 and ftp://ftp.cemfi.es/pdf/papers/repullo/Liquidity%202005.pdf. Under EU rules financing with a rate lower than the market rate is considered "state aid" and thus needs to be authorised by the Commission. I thank Antonio Sainz de Vicuña for observations on this point. 32. Goodhart, ibid. 33. Alexandre Lamfalussy remarked in an interview with The Guardian on 16 August 2003: "The great weakness of EMU is the E. The M part is institutionally well organized. We have a solid framework. We don't have that for economic policy". I further elaborate on these issues in a book chapter with Jean-Victor Louis, entitled "European Monetary Union" forthcoming in a EU commentary to be edited by Takis Tridimas (to be published by Oxford University Press in 2011). 34. For a summary of the very significant liquidity provision measures adopted during the crisis, see http://www.ecb.int/press/key/date/2009/html/ sp090220.en.html. 35. ECB open market operations are described in chapter 3 of "The Implementation of Monetary Policy in the Euro-area", European Central Bank, November 2008, available at http://www.ecb.europa.eu/pub/pdf/other/ gendoc2008en.pdf>. During the crisis, the ECB adopted "enhanced credit support" instead of "quantitative easing". J. C. Trichet in a keynote address at the University of Munich on 13 July 2009 defined this policy as follows: "Enhanced credit support constitutes the special and primarily bank-based measures that are being taken to enhance the flow of credit above and beyond what could be achieved through policy interest rate reductions alone". See <a href="http://www.ecb.">http://www.ecb.</a> int/press/key/date/2009/html/sp090713.en.html>. 36. See ECB, 2008, <a href="http://www.ecb.europa.eu/pub/pdf/other/">http://www.ecb.europa.eu/pub/pdf/other/</a> gendoc2008en.pdf>, p. 11.

mains a national competence (unless the problems originate in the payment system<sup>37</sup>). The ESCB adopted in 1998 a restrictive reading of the ECB competences, concluding that the provision of lender of last resort assistance to specific illiquid individual institutions was a national task of the National Central Banks (NCBs) in line with Article 14.4 of the ESCB Statute (a provision which allows NCBs to perform non-ESCB tasks on their own responsibility and liability).<sup>38</sup>

It is easy to criticise central banks and their actions as lender of last resort ex post, but in the midst of the crisis, and given the unpredictability of events, the inability of legislators (e.g., in the USA) to approve emergency legislation in a timely fashion, and the lack of accurate information about valuations and the soundness of financial institutions, central banks acted with the flexibility that was required to stop the fire from spreading. They were no ordinary times. Under huge pressure, central banks attempted through their liquidity policies to re-establish confidence when market conditions were extremely fragile; the criticism in this regard of whether the Fed was independent or not in the pursuit of financial stability during the crisis somewhat misses the point. The priority then was to stop the fire. Legislators should now rewrite the fire regulations.

Before concluding this section it is important to remember the two features that make central bank emergency liquidity assistance such a valuable tool in the prevention and containment of banking and financial crises. The first is the immediacy of the availability of central bank assistance (the central bank being the ultimate supplier of high-powered money). This "immediacy" contrasts with the "time framework" of other crisis management instruments. Neither deposit insurance nor bank insolvency proceedings can achieve this. By their very nature they are lengthy and complicated processes which take into account the interests of many stakeholders and are subject to greater legal constraints. The second important feature is the unlimited capacity of the central bank to provide liquidity, either to the market in general or to individual banks as needed.

# 9 Concluding Observations

The financial crisis 2007-2009 will be remembered as a seismic event in the history of financial markets. Previous assumptions, economic theories and models have been tested and the consensus that surrounded the way financial markets operate has been shaken. Central bank responses to the crisis, whether via monetary policy (quantitative easing), liquidity assistance or, in some cases, bank support operations, have been extraordinary and unprecedented. This paper has presented a revisionist account of the status and functions of central banks in the light of the renewed emphasis on financial stability and the concept of accountable independence.

<sup>37.</sup> According to Article 105.2 EC, now Article 127.2 TFEU. 38. Article 14.4 reads as follows: "National central banks may perform functions other than those specified in this Statute unless the Governing Council finds, by a majority of two thirds of the votes cast, that these interfere with the objectives and tasks of the ESCB. Such functions shall be performed on the responsibility and liability of national central banks and shall not be regarded as being part of the functions of the ESCB". The ECB can assess whether a given LOLR operation by a National Central Bank (NCB) interferes with monetary policy and, if so, either prohibit it or subject it to conditions. To this effect, the ECB has some internal rules (MoU) requiring ex ante notification to the Governing Council of such LOLR operation (Article 14.4). I thank Antonio Sainz de Vicuña for observations on this point. The following is an excerpt from the ECB Annual Report 1999 (p. 98): "The institutional framework for financial stability in the EU and in the euro area is based on national competence and international cooperation... Co-ordination mechanisms are primarily called for within the Eurosystem. This is the case for emergency liquidity assistance (ELA), which embraces the support given by central banks in exceptional circumstances and on a caseby-case basis to temporarily illiquid institutions and markets... If and when appropriate, the necessary mechanisms to tackle a financial crisis are in place. The main guiding principle is that the competent NCB takes the decision concerning the provision of ELA to an institution operating in its jurisdiction. This would take place under the responsibility and at the cost of the NCB in question. [...] The agreement on ELA is internal to the Eurosystem and does not affect the existing arrangements between central banks and supervisors at the national level or bilateral or multilateral co-operation among supervisors and between the latter and the Eurosystem".

Financial stability is a goal that transcends institutional mandates and geographic boundaries. The relative simplicity of one goal (price stability) – one instrument (monetary policy) that characterizes the monetary responsibilities of central banks contrasts with the multiplicity of instruments (supervision, regulation, crisis management, lender of last resort and others) that characterizes the pursuit of financial stability. Since supervision and regulation are also aimed at other goals (e.g., consumer protection), the design of central bank independence in the pursuit of financial stability is more complex than the design of monetary independence.

Central bank independence is never absolute, it is relative. It is independence within government, and it is accountable independence. And if public funds are at stake, it is limited by the government's necessary involvement in the destiny of the financial institutions that have received government assistance. The evolving role of central banks is a key element to understand the notion of central bank independence.

The crisis has also signified a more profound change of attitude towards the functioning of the market, and the boundaries between the market and the state, which have been redrawn again. The lack of confidence in several financial institutions contrasted with the confidence in the government's ability to save them. (Though in some countries, such as in Iceland the crisis of confidence also extended to the government's ability to rescue the banking system). This confidence though may ebb in future.

A page of history is indeed worth a volume of logic.