Essays on International Finance

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International Cooperation and Central Banks

Harold James

CIGI

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Foreword

The CIGI Essays on International Finance aim to promote and disseminate new scholarly and policy views about international monetary and financial issues from internationally recognized academics and experts. The essays are intended to foster multidisciplinary approaches by focussing on the interactions between international finance, global economic governance and public policy.

International finance cannot be properly understood without reference to the global governance arrangements that shape the regulatory environment in which financial actors operate. The rules and playing field of the global financial system — the organizations, regimes, principles, norms, regulations and decision-making procedures that govern everything from banking practices and accounting standards to monetary relations and official cross-border lending — have a profound impact on how that system operates. Even though international finance is commonly conceived of as a largely unregulated domain, it is generally held together by a commitment to a particular set of policy priorities on the part of key global governance actors. In other words, a lack of regulation does not imply a lack of governance.

The principles and practices that have underpinned particular global governance arrangements — such as the earlier classical gold standard, the subsequent Bretton Woods order and the current regime — reflect historically and socially contingent commitments to particular policy priorities. As power, interests and ideas evolve, the priorities that guide global governance do so as well. Changes in governance structures, in turn, result in changes to the functioning of financial markets. Understanding the social, political and historical forces that determine how global finance is governed is, thus, crucial to understanding why financial markets function as they do, and how global financial governance can be improved to become more effective.

In the setting of a highly globalized world economy, there is a temptation to view public policy as the outcome of technocratic decision making. It is important to note, however, that while technical expertise and sound analysis may inform policy, they do not supply or demand it. The supply and demand sides of policy making are essentially determined by a number of interacting social, political and economic factors: the state of ideas, interests and institutions; the distribution of information, financial resources and expertise; and major focussing events, such as crises.

As an area of study, international finance has no natural disciplinary home. Indeed, it is a social, political, historical, economic and even geographical phenomenon. Thus, there are distinct advantages to taking a multidisciplinary approach. By harnessing the comparative strengths of different disciplines — including the different conceptual tools, theoretical insights and methodological techniques on offer — such an approach provides richer, more diverse analytical troves from which to draw. Furthermore, breaking down disciplinary divides can help to establish common ground between different, sometimes competing, perspectives. The intent of the CIGI Essays on International Finance is to encourage productive dialogue and the building of common ground by providing a research-based, policy-relevant venue for high-level, cross-disciplinary contributions to the field of international finance and global financial governance.

Domenico Lombardi
Director of the Global Economy Program, CIGI

Introduction

Why do central banks attempt to cooperate with other central banks? Why should those political systems (in practice, these are democratic states in the advanced modern industrial world), to which the central banks are ultimately accountable, accept a cooperative strategy of the central banks? What overall gain do they expect to achieve as a result? The answers clearly depend on the definition of the fundamental tasks of central banks and, thus, on how cooperation might be envisaged as a tool in accomplishing those goals. The purposes and functions of central banks, however, have changed dramatically over the course of time.

Institutional interaction occurs at varying levels of intensity. The following types of engagement may be distinguished: **collaboration** — for instance, in regular meetings in international fora such as the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) Working Party Three or the Group of Ten (G10) — where the primary objective of the interaction is to exchange information and views to obtain a broader awareness of the international environment and its implications for the domestic economy, to acquire a more accurate realization of domestic policy objectives; **discursive cooperation**, in which policy objectives can be discussed and elaborated with regard to conceptually difficult issues (such as the definition of appropriate monetary policy or best practice with regard to financial regulation); **instrumental cooperation**, in which actions (such as exchange rate interventions) can be made more credible and effective because they involve more than one central bank and, thus, reflect an agreed international policy orientation; and **coordination** — a more extreme form of instrumental cooperation — in which central banks may be required to do something that they would not do under normal circumstances (again, in the case of exchange rate intervention or a change in monetary policy stance), but where the action is required in support of a broad long-term goal. This last level of interaction gives rise to the greatest policy debate: is the overall long-term goal so important that it justifies the adoption of what otherwise would be a non-optimal policy?

In general, tackling a major crisis that originates with "global imbalances" and has transmission mechanisms that are cross-national seems prima facie to demand a more substantial and institutionalized cooperation. But in the aftermath of the recent financial crisis, visions of what central banks can and should do have changed profoundly. In particular, the demand that they should play a much more vigorous and pre-emptive role in financial supervision has made them more nationally focussed and less prone to cooperate.

Explaining the paradox of an increased demand for cooperation alongside the heightened reluctance to let central banks cooperate requires an examination of the fundamental tasks of central banks. To start with a simplified chronology of the long-term development of central banks: they (or their prototypes) began historically with government debt management, and found that exchange rate stability was key to successful and credible debt management; then they moved into financial stability issues; and, finally, they became concerned with monetary and price stability. There was some overlap between each of these phases, in particular the financial stability function, which had declined in prominence over the past 20 years, but has, since 2008, become widely regarded as a major objective of twenty-first-century central banks. There are also, however, obvious tensions; from the nineteenth century on, a rich stream of literature (William Stanley Jevons, Alfred Marshall, Francis Ysidro Edgeworth, Irving Fisher, Karl Helfferich) has suggested that the metallic standard, which provided exchange rate stability, was not the ideal mechanism for maintaining price stability.

The relationship between price stability and exchange rate stability is clearly not the same in a large economy, where foreign trade plays a relatively small role, and a small open economy, where external developments have an immediate impact on the price level. It is easy to deduce that the incentives to cooperate and coordinate increase with decreasing size, and also that — other things being equal — there would be more cooperation in a world with both increased trade and an increased number of states. Given that there has been a dramatic increase in the number of states since World War II and in the aftermath of decolonization, and that there has been an intensification of global interconnectedness — at first in terms of trade and since the 1970s in terms of large-scale financial flows as well, it is not surprising that there has been an increase in cooperation.

Throughout the long historical trajectory, the major policy tool of central banks has been their ability to influence (in some phases) or set (at other times) short-term interest rates or discount rates. If different national markets are connected by financial flows, arbitrage will have an impact on the central banks' policy effectiveness: if banks are able to fund themselves more cheaply in other markets, they will not access the central bank's resources. The possibility of arbitrage undermining the effectiveness of central bank action means that central banks may have a powerful incentive to cooperate within the framework of the chosen exchange rate regime.

Influence over markets is more effective in the long run if it is generally predictable. Early central banks liked to provide unexpected shocks to market expectations — to the extent that during the nineteenth century, in some instances, they conspired with railroad companies to delay trains carrying gold in order to frustrate bullion arbitrageurs. But expectations of wild policy swings will destabilize markets, increase volatility and impose costs. Successful central banks have, consequently, usually defined themselves primarily in terms of following a rule. The two most important rules were the nineteenth-century gold standard, which imposed a convertibility requirement, and the introduction in the late twentieth century of a rule on monetary growth. This lesson has been powerfully reinforced by the economics literature on time inconsistency, which demonstrates strikingly how policy can be better (because it is more credible) when discretion is taken away from policy makers.[1] More recently, after the faltering of monetary rules (because of difficulties in defining the right monetary aggregates), attention shifted to interest-rate rules, the most prominent example being the Taylor rule, in which interest rates are set on the basis of a measure of inflation and an output gap.

In some circumstances, however, central bank managers have believed that the need to consider multiple objectives requires deviations from, or suspensions of, the rule. In these conditions, monetary management becomes an art, rather than a rule-driven exercise. Market participants have become fascinated by the personalities that practise this art, and some central bankers have attracted an almost hagiographic following. Especially during crises, personalities come to the fore. After the recent financial crisis, central bankers — as the economist and present Governor of the Reserve Bank of India Raghuram Rajan put it — "enjoyed the popularity of rock stars."[2]

Cooperation often depends on this "art" of central banking, practised by a "brotherhood" of central banks.[3] Modern central bankers, recognizing the limits of personalized politics, will often attempt to formulate rules. But rules — and hence institutionalization — are especially difficult in the case of central banks with conflicted policy goals. An inability to follow clear rules leads to a backlash against both the personalities and the cooperative strategies in which they are engaged, as soon as things appear to go wrong — as they almost inevitably do.

Pre-1914 Central Banking

There was no cooperation when banking (in the modern sense of the word) began, and central banks — where they existed — simply served the goals of states that were in conflict with each other in a more or less anarchical international system.

1 The literature starts with Kydland and Prescott, "Rules Rather than Discretion," 473–90.

2 See Rajan, "The Only Game in Town."

3 For conspiratorial interpretations, see for example, Griffin, *The Creature from Jekyll Island*; Paul, *End the Fed*; and LeBor, *Tower of Basel*.

Some central banks are very old. The Swedish Riksbank, usually held to be the most ancient, was established in 1668; however, when the Bank of England was established in 1694, the "projectors" (who designed the new bank) looked back to the Genoa Banco di San Giorgio, created in 1407. These early central banks were, above all, concerned with the management of public debt; Alexander Hamilton, who created the First Bank of the United States (1791), and Napoleon Bonaparte, who created the Banque de France (1800), both had the same end in mind. Napoleon's initiative was followed at the beginning of the nineteenth century by many governments (Denmark, Finland, the Habsburg Empire and Norway, as well as the United States with the short-lived Second Bank of the United States). There are some common institutional resemblances, but no obvious need exists for institutions primarily concerned with debt management to engage in any intense form of cooperation with other institutions.

By the middle of the nineteenth century, some central banks — in particular the Bank of England — began to see themselves as experts in debt management to such an extent that they were prepared to give advice to foreign governments on the arcana of how to access capital markets. In 1844, British Prime Minister Robert Peel advised the Russian government to deal only with the Bank of England, since, as he put it, "no one could guarantee the solvency of a private banker."[4] The most obvious part of successful debt management was an undertaking to commit to the monetary and fiscal orthodoxy that a link to the gold standard entailed.[5]

In the last third of the nineteenth century, with the integration of financial markets across national borders in an early phase of globalization, a new set of priorities shaped a new generation of central banks. The first of this second generation was the German Reichsbank, established in 1875 — in other words, not immediately after the creation of the German Empire in 1871. Germany adopted a common currency, the mark, in 1873, but there was still no sense that it required a central bank. The management of state debt was quite well managed by an older generation bank, the Prussian Seehandlung. It was the aftermath of a major financial panic in 1873 that propelled the Germans to look for a new central bank. The Reichsbank, in practice, had, as a primary task, the maintenance of the stability of an increasingly complex bank and credit system. A similar motivation, in the aftermath of a major financial crisis in 1907, underlay the debates that led to the creation of the German Federal Reserve System in 1914. The examples of the Bank of England, which was pre-eminently concerned with the stability of the City of London and had developed into the world's major financial centre, as well as the Reichsbank, were often referred to in the National Monetary Commission discussions about how to reform and redesign the US banking system. The Reichsbank was also widely discussed in Japan as a potential model for the Bank of Japan. These are early instances of discursive cooperation.

By the end of the nineteenth century, central banks were engaged in the active management of an exchange rate regime. The gold standard as such did not necessitate the actions of any central bank, and the prevailing theoretical explanations emphasized the automatic quality of the adjustment process. Since the British Bank Act of 1844, known as the Peel Act, established the principle of a fiduciary issue — a certain amount corresponding to calculations of the necessary amount for normal commercial transactions in circulation in the country — it became common to think of reserves as needed only to the extent to which some international imbalances might arise that would require financing. Central banks at the time were often thought to be playing a role in following the "rules of the game": tightening rates to ensure there was gold inflowing in the case of a trade deficit, or loosening in the event of a surplus. Commentators, however, soon noticed that the actual pattern of interest-rate movements did not correspond well to the requirements of the rules of the game.[6]

Raising large amounts of gold in order to respond to sudden movements in financial markets did require a substantial amount of cooperation or even coordination. In the aftermath of a debt crisis that had its origins in the United States, in July

4 Tatarinov, "Bank of England."

5 See Bordo and Rockoff, "The Gold Standard."

6 The classic exposition is Bloomfield, *Monetary Policy.*

1839 the Banque de France discounted bills for the Bank of England.[7] As financial flows increased through the nineteenth century, the scale of the necessary interventions increased, and the best known instances occurred in the quarter century before the outbreak of World War I. In 1890, in the aftermath of the Baring crisis, when an Argentine debt crisis brought down one of Britain's oldest and most respected merchant banks, the Bank of England worked with the Banque de France as well as with Rothschilds to bring gold to London from Russia. In 1907, the Bank of England needed to undertake a major exercise in drawing gold from India in order to be able to ship it to New York in the wake of a financial panic. Episodes of cooperation were rare, and they occurred almost always in response to major crises.

Nineteenth-century coordination reflected the urgent need to tackle an emergency in which a contagion of financial instability threatened. But no one at this time would want to draw the conclusion that a regular coordination exercise was needed in order to know what should be done in the event of an unforeseen event.[8] In normal times, coordination was simply the result of the interaction of many thousands of individual decisions by market participants, which provided a powerful equilibrating mechanism and required no regular policy-level consultation.

There was also some security dimension to the discussion of potential responses to financial crises in the pre-1914 world. As the international alliance system crystallized, international tensions mounted. Speculative attacks could be used as a weapon of grand strategy. In 1911 during the Second Moroccan Crisis, France used the panic that broke out on the Berlin stock market as a way to pressure German authorities to give way and back down — which they did.

Consequently, in the most generalized financial panic of the early twentieth century that broke out in August 1914 in response to the mobilization of the "Great Powers" for war, each country responded very much on its own with crisis measures to control panic and assert national control over financial markets. Central banks were conscripted, in the same way they had been in the late seventeenth century in progressive countries such as Sweden and England, to manage the national debt. In the United Kingdom, Prime Minister Herbert Asquith required the governor of the Bank of England to make a promise that "during the war the Bank must in all things act on the direction of the Chancellor of the Exchequer."[9] Germany's Reichsbank president, Rudolf Havenstein, was popularly styled as the *Generalfeldmarschall*, who mobilized money for war in the same way as field marshals managed their troops.[10]

7 Capie, Goodhart and Schnadt, "The Development of Central Banking," 12; see also Fetter, *The Development of British Monetary Orthodoxy*.

8 See Flandreau, "Central Bank Cooperation"; Bordo and Schwartz, "Under What Circumstances."

9 Capie, Goodhart and Schnadt, "The Development of Central Banking," 53.

10 Feldman, *The Great Disorder,* 32.

Modern Central Bank Cooperation Part One

The modern pattern of central bank cooperation had its origins, in part, in World War I. Cooperation between central banks was a logical consequence of a search for political alliances. Large-scale official borrowing necessitated a convergence of foreign policies, and a sort of community of fate, sometimes between improbable allies. An extreme solution to the question of continued financial support between military allies, which was briefly proposed and debated in 1915, involved a full fiscal and political union of France, Britain and Russia.[11] In 1916 there was a direct agreement between the Bank of England and the Banque de France on shipping gold from Paris to London to constitute a loan guarantee, and a regular telegraph line was established for central bank communications, along with agreements with the New York Federal Reserve Bank establishing accounts for the central banks.[12] Britain needed to work with American institutions in order to manage the financing of the war effort. But the main institutions in the Anglo-American negotiations were the British Treasury on the one side, and the large American private banking houses, above all J.P. Morgan, on the other.[13] The Bank of England and the Federal Reserve System (and the New York Federal Reserve Bank, which from the beginning was responsible for coordinating the Fed's international activity) were largely on the margins.

The first great era of sustained international central bank cooperation outside a crisis was thus the 1920s. This cooperation had three fundamental goals: the reversal of the wartime political control of central banks, in which international pressure could be used as a way of strengthening central bank independence; establishing a position of central banks as signallers of a stabilization that would allow the resumption of long-term capital flows; and giving central banks the policy tools to respond to undesirable short-term capital flows. The rule that was at the heart of the exercise was a restored gold standard, but it required a great deal of management. Behind the goals, there was a vision that a world held together by capital movements would also be a peaceful world. One of the earliest advocates of the idea of an international central bank that would coordinate central banking, the Italian politician and economist Luigi Luzzatti, had, before World War I, already written of the need to combat "monetary war" and promote an "international monetary peace."[14]

The phenomenon was essentially the brainchild of one man, Governor of the Bank of England Montagu Norman, a picturesque figure with an idiosyncratic appearance (a pointy beard) and dress style (a cape, a broad hat and an emerald tie pin); but he also had a personality that was neurotic and unstable. As a young man, he had been told — in a remarkable diagnosis by the famous Swiss psychologist Carl Jung — that he would kill himself in a few years' time. In 1927, in a candid letter to the banker J.P. Morgan, Jr. he set out his philosophy, and its newness, quite eloquently:

> Central Banking is young and experimental and has no tradition: it may last and may develop, or its usefulness, to fill a short post-war need and no more, may soon come to an end. On the one hand its sphere is limited by the qualification that no Central Bank can be greater than its own State — the creature greater than the creator. On the one hand a Central Bank should acquire by external help (as in some ex-enemy countries) or by internal recognition (as in France) a certain freedom or independence within, and perhaps

11 "Financial Arrangements," *The Economist,* 262–63; Siegel, *For Peace and Money.*

12 Toniolo with Clement, *Central Bank Cooperation,* 17.

13 Burk, *Britain, America and the Sinews of War.*

14 In *Neue Freie Presse* article, 1907 (quoted in Toniolo with Clement 2005).

> without, its own State. By such means alone can real co-operation be made possible.[15]

As Norman implied, one of the models for the new view of central banking was Germany, where the central bank was reconstructed in 1923-1924 after an intense consultation between Norman and the new German central bank president, Hjalmar Schacht. The key to the new vision of the central bank was tying Germany into the international exchange rate system; at first, Norman and Schacht thought about tying the new German currency to the British pound, before in the end adopting the even more solid linkage constituted by a commitment to gold convertibility.[16] As a secondary consequence, however, the extent to which the Reichsbank could commit itself to rescue operations for the German banking system would be limited. The large-scale granting of cheap central bank refinancing facilities to the banks had been — along with the more widely commented on process of monetization of government debt (or fiscal dominance in modern terminology) — the cause of the devastating German postwar inflation, which ended in a spectacular and highly destabilizing episode of hyperinflation. So the lesson was clear: banks should no longer be allowed to think of the central bank as a helper in an emergency, or a doctor, or any one of the many other descriptions contemporary Germans had produced for the lender-of-last-resort role. Central bank cooperation, in other words, depended on a conscious rejection of the idea that central banks had a national duty to maintain their credit systems: financial stability was not a part of the definition of the objectives of the cooperative system.

The exchange rate objective required international cooperation in the German case, and in the other central European and Latin American stabilizations that followed, for which the Norman-Schacht discussions provided a sort of template. The price of international cooperation was the rejection of the financial stability role, as central banks' capacity to support domestic banking systems was deliberately limited by the cooperation mechanisms established.

The 1920 League of Nations-organized Brussels International Financial Conference, which tried to lay out a road map for international economic reconstruction, explicitly saw a major role of central bank cooperation in reducing the amount of gold that needed to be held as reserves, instead substituting high-quality foreign exchange bills. Brussels — where 39 countries were represented — was just the beginning: indeed, in 1920, "the European central bankers were only just getting to speaking terms with each other."[17]

What about monetary stability? Might there be circumstances in which the domestic and international requirements conflicted? In the latter half of the 1920s, there was an almost permanent tension across the Atlantic. Europeans saw high borrowing costs that were being kept up by American monetary policy and were weakening European growth. Schacht and Norman, at a meeting at the house of Treasury Undersecretary Ogden Mills in July 1927, demanded a cut in US rates in order to stabilize European lending conditions. The meeting, which was secret, and is consequently not well documented, has attracted a great deal of subsequent attention, in large part because the American rate cuts and monetary easing of 1927 are often interpreted as a cause of the bubble that collapsed in the 1929 crash. For Charles Kindleberger, this was "a precedent for consultation among macro-economic authorities with a view to coordinating macro-economic policies after the Second World War." The policy clearly had risks, in that it would stimulate borrowing (and stock market speculation) in the United States. Milton Friedman and Anna Schwartz argue that "had the Reserve system directed its policy single-mindedly to breaking the stock market boom, it would have refrained from its easing actions in 1927." But they see the policy conflict more in terms of a divergence between worry about the stock market and a concern with promoting stable economic growth (rather than with foreign coordination).[18]

The embryo central bank cooperation of the 1920s was both novel and fragile. To the protagonists, it seemed to depend very

15 Bank of England archive, Montagu Norman to J.P. Morgan, Jr.

16 James, "Die Währungsstabilisierung," 63–79.

17 Sayers, *The Bank of England,* 154.

18 Kindleberger, *The World in Depression*, 50; and Friedman and Schwartz, *A Monetary History,* 291 ff.

much on the chance friendship of the major central bankers. In particular, the core was provided by the triangular relationship of Norman with Schacht and with Benjamin Strong, governor of the Federal Reserve Bank of New York. Between Strong and Norman an oddly intimate and affectionate relationship developed, fuelled by regular personal visits, telephone conversations (a novelty, made possible by the new technology of communications) as well as an extensive correspondence. Strong wrote encouraging notes to Norman along the lines of the following: "You are a dear queer old duck and one of my duties seems to be to lecture you now and then."[19] By the late 1920s, though, the major figures seemed to be under great strain. Schacht was depicted as sweating profusely while exclaiming that he could not concentrate on normal business and was psychologically under strain;[20] Norman had regular nervous breakdowns, especially at moments of financial tension;[21] and Strong was dying of tuberculosis. Benjamin Strong died in 1928, and later the central bankers even tried to suggest that the subsequent financial and economic catastrophe was the consequence of the absence of his clear and internationally oriented vision at the helm of US central banking. Five years after Strong's death, Schacht wrote to Norman saying that "I feel most strongly that, after the death of our American friend, you and I are the only two men who understand what had to be achieved."[22] Friedman and Schwartz, who provide the strongest argument for a rules-based approach to monetary management, write about the 1920s as an age in which "each of the great central banks seemed to be personified by a single outstanding individual." Too much, in their view, rested on these individuals, and they share with Norman the view that Strong's death was a major catastrophe for the American economy. "If Strong had been alive and head of the New York Bank in the fall of 1930, he would very likely have recognized the oncoming liquidity crisis for what it was, would have been prepared by experience and conviction to take strenuous and appropriate measures to head it off, and would have had the standing to carry the System with him."[23]

The 1920s episode of cooperation, built on the powerful personalities of the leading central bankers, has exercised a continuing fascination on our contemporary world. Popular biographies of Norman and Schacht continue to be published.[24] Liaquat Ahamed has termed them "Lords of Finance," and he claims that "when we watch Ben Bernanke or, before him, Alan Greenspan or Jean-Claude Trichet or Mervyn King describe how they are seeking to strike the right balance between economic growth and price stability, it is the ghost of Benjamin Strong who hovers above them." A recent account draws explicit analogies with the cooperation of Ben Bernanke, the European Central Bank's (ECB's) Mario Draghi and Mervyn King at the Bank of England.[25]

Faced by a world without Benjamin Strong, and possibly without Schacht too (his relations with the German government grew increasingly strained until he resigned in protest against the new reparations plan at the end of 1929), Norman came up with a way of institutionalizing the embryo central bank cooperation. For this purpose, a new institution was to be created, a central banks' central bank, with regular meetings. One of the members of the organization committee that drew up the plan for the new institution stated his hopes for the "gradual development" of a "cooperative society of Central Banks, the governors of which would regularly meet together in concert in order to exchange information, and to devise means for promoting economy in the use of gold and for preventing by a common policy undue fluctuations in its value."[26] Norman thought that the bank could control excessive credit leading to overproduction, as well as to provide some support operations in the case of crisis. "To attract short-term capital to long-term markets is another task which can only be accomplished by identifying the policies of the

19 Bank of England, Benjamin Strong to Montagu Norman.

20 Institut für Zeitgeschichte, "December 5 diary entry."

21 They are meticulously recorded in his appointment diary at the Bank of England, with entries beginning "felt queer today" or "felt poorly."

22 Bank of England, Hjalmar Schacht to Montagu Norman.

23 Friedman and Schwartz, *A Monetary History,* 411–13.

24 Boyle, *Montagu Norman*; Weitz, *Hitler's Banker*; Kopper, *Hjalmar Schacht.*

25 Ahamed, *Lords of Finance,* 171; Irwin, *The Alchemists.*

26 Bank of England, Sir Charles Addis to Frederick Leith-Ross.

Central Banks, by coordinating the movements of their discount rates, by increasing the control of each in its own market."[27]

The new institution, the Bank for International Settlements, was located in Basel, a city chosen because of Switzerland's neutrality as well as its location at the intersection of the major European railroad lines. Its statutes laid down the task "to promote the cooperation of Central Banks and to promote additional facilities for international financial operations." By the middle of the 1930s, it was setting out a systematic philosophy of cooperation. The task of central banks was to "regulate the volume of credit and currency with a view to lessening pronounced fluctuations in business activity." But domestic policies "may be rendered difficult or thwarted by the policy action of a neighboring central bank." Hence, the conclusion: "far-seeing interest demands that banks of issue endeavour to work along parallel lines in the fulfillment of their independent duties."[28]

In practice, however, the new institutionalization of central bank cooperation did not function very well. First, the resources of the new BIS were quite limited; thus, the BIS could not, on its own, hope to tackle an incipient financial crisis. Second, when the crisis broke out, the central banks in the major financial centres — London and New York — made it clear they believed that a great deal of the crisis was the result of domestic capital flight in the central European crisis countries. Therefore, they made support dependent on increased interest rates and credit tightening that would stop commercial banks lending for foreign exchange operations. They were, in consequence, unwilling to undertake lending with the goal of stabilizing banking systems in other countries, believing that would create potentially limitless liabilities. Third, some of the old security and grand strategic thinking came back. France believed that the crisis had been caused by a German-Austrian rapprochement that threatened the stability and security provided by the postwar peace treaties.

The gold economizing measure of substituting foreign exchange holdings proved to be a source of vulnerability. The Banque de France was reluctant to hold foreign exchange and held most of its reserves in gold.

After September 1931, the central banks in the financial centres themselves came under heavy political attack. The Bank of England was thought by many leaders of the Labour Party to have been a part of a "bankers's ramp," which imposed political conditions, including the reduction of unemployment benefits ("the dole") on a rescue package. The critique led to a demand that the bank should be nationalized — and the nationalization was eventually carried out after the election, in 1945, of a Labour government. The Banque de France was subject to the same sort of domestic attack. The centre and left viewed it as dominated by the "two hundred families" who controlled French business and owned the shares of the bank. They formed a "wall of money" that resisted progressive reform. Hence, the 1936 election victory of the Popular Front led to a speedy nationalization.

The central banks had placed international cooperation above domestic policy goals. In the gold standard view, internationalism was always privileged. Cooperation became a mantra, the ritual incantation of which served to camouflage the depth of policy failure. Canadian Prime Minister R. B. Bennett, for instance, at the time of the Ottawa conference as Britain and the Commonwealth moved to trade protection and imperial preference, stated that "We recognize, of course, that monetary objectives can only be fully attained by broad international action." But this was exactly the time when Canada was preparing to create its own central bank to give the country more policy manoeuvrability in a world in which exchange rates were now volatile.

The critique of central banks was not merely an affair of the political left. But economists concerned with monetary stability found it quite a long and painful process before they arrived at a view in which *domestic* monetary stability would be the fundamental basis of good policy. Pierre Siklos states that "It would take a few decades, and considerable experimentation, to recognize that 'good' monetary policy begins with a domestic solution but one that would eventually be 'exported'

27 Bank of England, Pierre Quesnay in conversation with Montagu Norman.

28 BIS, *Fifth Annual Report*, 41–42.

internationally."[29] In this new vision, the emphasis was on the discursive: cooperation amounts simply to following a good example, perhaps of a major central bank such as the Fed or the Bundesbank, but also, potentially, an innovative small central bank such as the Reserve Bank of New Zealand.

The Bretton Woods Vision

The domestic sentiment that independent central banks were politically unaccountable, financially destabilizing and economically damaging had a counterpart at the international level. When it came to rebuilding the international monetary system in the final stages of World War II, a powerful intellectual consensus emerged that future financial cooperation should be chiefly between governments (and finance ministries) rather than between central banks. The IMF was constituted deliberately as a counterweight to the financial sector. US Treasury Secretary Henry Morgenthau emphasized how the new institutions of the international order would be "instrumentalities of sovereign governments and not of private financial interests." With other government leaders, he would drive "the usurious money lenders from the temple of international finance."[30] Morgenthau and Assistant Secretary Harry Dexter White had a particular animus against the BIS, and supported vigorously a Norwegian indictment of its wartime collaboration with Nazi Germany. The 1944 Bretton Woods agreements specifically called for its liquidation. That the BIS survived is probably due to the intervention of British economist John Maynard Keynes, one of the fiercest critics of the interwar Bank of England, who ensured that there was no date specified for the winding up of the BIS. While the Norwegian proposal stated that "liquidation shall begin at the earliest possible date," the formula eventually adopted merely specified that liquidation would follow after the establishment of the IMF. Keynes at this time stated, "I don't think we want to keep the damned thing alive, do we?"[31] But as a result of his intervention, the BIS survived by default.

Central banks stepped in and cooperation was quite quickly renewed where the IMF had failed or was limited in its tasks. First, the BIS played a role as fiscal agent for the European Payments Union, in effect administering the distribution of European Recovery Program (Marshall Plan) funds. This task was a matter of chance, and came about because of the US government's suspicions of the IMF in the wake of accusations that White, the major architect of the Fund, the first US executive director and the patron of many of the Fund's initial staff, had been a Soviet agent.[32]

The BIS was also a more appropriate mechanism for preserving some sort of financial relations across the Iron Curtain than the more political IMF. The Soviet Union never joined the IMF, despite having been a participant at the Bretton Woods conference, while Poland withdrew from the Fund, attacking it as the "submissive instrument of the Government of the United States" and Czechoslovakia was expelled in 1954.[33] In contrast, the BIS was not a governmental organization, and throughout the intense phase of the Cold War it remained a place where purely technical figures from Central European central banks could participate and also learn something about Western techniques of monetary management.[34]

For Western monetary cooperation, though, a forum for communication was not enough: specific operational mechanisms were required. In 1962, in the aftermath of the move by European countries to adopt current account convertibility, and in the wake of US losses of gold reserves and fears that there might be strains on the United Kingdom and the United States to which the Fund could not adequately respond, the central banks created a swap network.[35] This established a predetermined automatic short-term credit line between central banks, in order to intervene against destabilizing market movements. At the end

29 Siklos, *The Changing Face of Central Banking,* 13.

30 Gardner, *Sterling-Dollar Diplomacy,* 76.

31 Van Dormael, *Bretton Woods,* 206; Skidelsky, *John Maynard Keynes*, 354; and Toniolo with Clement, *Central Bank Cooperation*, 270.

32 The first person to point out to me this reason for the non-involvement of the IMF in European reconstruction was I. G. Patel in an interview in 1992. See more recently Steil, *The Battle of Bretton Woods*.

33 IMF, J. Winiewicz to managing director of IMF.

34 James, "East and West."

35 Bordo, Humpage and Schwartz, "The Historical Origins of US Exchange Market Intervention Policy," 109–32.

of 1962, the volume of credit allowed in this network amounted to US$900 million, and rose to almost US$30 billion by the end of 1978.

The swap network was complemented by a borrowing facility that allowed the IMF to raise additional resources from the 10 largest industrial countries and Switzerland (a grouping which became known as the G10). Central banks meeting in the G10 framework played a major part in studying the balance-of-payments problems of the 1960s and, in particular, analyzing the growing surplus positions of Germany and Japan.

A crucial auxiliary mechanism was the Gold Pool, established by eight of the G10 members in 1961 as a way of regulating the London gold price and stabilizing a market that might constantly worry about the convertibility of the major reserve currencies — US dollars and also pounds sterling — into gold. But the mechanism broke down by March 1968, in part because one major player, France, left the arrangement and started to convert its dollars into gold, in part because of the actions of non-members and in part because it completely lacked an enforcement mechanism.[36]

Regional Monetary Integration

At the same time that governments tried to establish an international mechanism for monetary cooperation, at Bretton Woods and after, central banks also looked to regional mechanisms for cooperation. The first region to move in this direction was Latin America, where the innovative and powerful Bank of Mexico pressed for an association from the late 1940s, and in 1952 created the Centre for Latin American Monetary Studies (CEMLA), initially with Chile, Colombia, Cuba, Ecuador, Guatemala and Honduras. From 1963, there was a secretariat that administered the annual meetings of central bank governors. The major effort was on training and information, but also on reserve management. But CEMLA generated little overall consensus on policy, and a recent analyst describes it as being "an unwieldy instrument for consensus-building."[37]

36 Eichengreen, *Global Imbalances,* 35–71.

37 Coates, "The Centre for Latin American Monetary Studies," 2321.

There were similar Asian initiatives, with the establishment of the Southeast Asia New Zealand Australia Forum in 1956 and Southeast Asian Central Bankers' Forum in 1966. In addition, in 1991 came the Executives' Meetings of East Asian and Pacific Central Banks.[38] The first significant move beyond discursive cooperation came only in the aftermath of the dramatic East Asia financial crisis of 1997-1998, when the Association of Southeast Asian Nations Plus Three (known as ASEAN+3) finance ministers launched an initiative for a pooling of forex reserves to provide liquidity support in the event of a recurrence of such a speculative attack (the Chiang Mai Initiative).

The plans of the Gulf States, joined together in 1981 in the Gulf Cooperation Council, to establish a monetary union by 2010 represent a more ambitious regional plan for central bank cooperation. But despite the apparent simplicity of the exercise — the members were in a de facto union anyway because they were all pegged to the US dollar — the scheme was not realized, and the United Arab Emirates withdrew in 2009. The plan was influenced by the European experience, and the setbacks after 2009 reflect a new level of doubt about the feasibility of monetary unions.

Europe started central bank cooperation a little later than Latin America or Asia, but it took that cooperation much further. The story of European monetary integration is largely an account of the effectiveness of central bank cooperation, and its progressive development and intensification that resulted in the creation of a new central bank (the ECB) as part of a European System of Central Banks. Europe, since the 1950s, has served as a "guinea pig" for central bank cooperation; in another metaphor, it is "the canary in the coal mine" of globalization, where the death of a little caged bird signals the dangers to the humans working in the mine.

The origins of the new phase of European central bank cooperation lie with the creation of the European Economic Community (EEC) through the Treaty of Rome (1957). In a 1957 speech at the Alpbach Economic Forum in Austria, Governor of De Nederlandsche Bank Marius Holtrop asked whether a

38 Nesadurai, "Finance Ministers and Central Banks," 63–94.

common central bank policy was necessary in a unified Europe, and went on to answer the question in the affirmative.[39] On November 10, 1957, Holtrop circulated a note in which he suggested that the five central banks of the EEC countries (Luxembourg had none, as it was in a monetary union with Belgium) should send identical letters to the finance ministers proposing enhanced cooperation between central banks. The Belgian, French and German governors responded skeptically, arguing that such a move would look like a concerted effort and raise national suspicions.

One country in particular was persistently skeptical of all the cooperation talk, always finding the compromise of monetary sovereignty difficult — Germany. Here is an example of the common pattern: cooperation is more attractive as it seems to provide more benefits for smaller countries and it is the heavyweights who are likely to think that they can go it on their own. In the late 1950s, German current account surpluses started to increase, setting off a pattern of discussion that was echoed in the 1960s, the late 1970s, the late 1980s, but also in the late 2000s after the establishment of a monetary union. From the perspective of the Bundesbank, central bank cooperation might involve the demand for some German support operations and, thus, involve pressure to follow policies that might be costly or inflationary. Bundesbank President Karl Blessing consequently spoke out to German Chancellor Konrad Adenauer against any plan for a fund of EEC countries.[40]

The 1957 statement of the five EEC central banks that everything was well and that no innovation was needed seems to have been accepted until an event occurred that showed there was really not much central bank cooperation between Europeans. In March 1961, the Deutsche mark and the Netherlands guilder were revalued after a long period of tensions in the markets, and after a great deal of discussion within the IMF about the appropriate response to the buildup of German surpluses, but after no particular consultation with Germany's fellow EEC members. All of the negotiation took place in Washington.

The EEC Commission published its Action Programme for the Second Phase of EEC on October 24, 1962, referring to the desirability of a general liberalization of capital accounts, in accordance with the provisions of the Treaty of Rome. It concluded in a visionary way that made explicit the logical link between monetary union and fiscal union. That linkage, which also figured in the lead-up to the Maastricht Treaty, was actually stated with greater clarity and force than it would be in the 1990s discussions. There would be parallel councils or committees to coordinate or determine ("fix") fiscal policy as well as monetary policy, because both were seen as part of the management of demand: "The creation of a monetary union could become the objective of the third phase of the Common Market. The Finance or Economics Ministers of the Community, assembled in Council, would decide on conditions that should be fixed at an opportune time: the overall size of national budgets, and of the Community budget, and the general conditions of financing of these budgets. The Council of Central Bank Governors would become the central organ of the banking system of a federal type."[41] It would begin to resemble what was later sometimes called a "Eurofed." This passage might be thought of as prophetic, in that the latter part of this suggestion was followed fairly precisely in the 1990s; however, there was a major difference in that, by the end of the twentieth century, central banks placed a substantial premium on devising legal guarantees of their institutional and operational independence.

The Committee of Central Bank Governors was created by an EEC Council decision of May 8, 1964. It was of great significance that even though this was not an EEC (later European Community [EC], and finally European Union) institution, ultimately, the council of ministers had made the decision to establish the committee. Some German central bankers, who were particularly sensitive to the issue of the instruction of central banks by political authorities, consequently saw 1964 as "original sin" (*Sündenfall*).[42] At the outset, the committee was a European pendant to similarly functioning international committees, notably the G10 governors' meetings that began in 1962 and also took place in Basel. Of the 10 states that were

39 Holtrop, "Is a Common Central Bank Policy Necessary," 642–61; see also Vanthoor, "Een oog op Holtrop."

40 Historical Archive of Deutsche Bundesbank, Zentralbankrat.

41 Ibid.

42 James, *Making the European Monetary Union*, 53.

held to be the largest industrial countries of the world at the time, eight were European (Belgium, France, Germany, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom) and five members of the EEC.

From the early 1970s, once the policy rule imposed by the par value system disappeared, the ECB governors discussed mechanisms for the coordination of monetary policies in the member countries. Harmonization increasingly became the focus of its activity and lay at the heart of the process of intellectual convergence within the ECB governors. But that convergence was fitful and eventually very incomplete. Attempts to have a debate about the *ex ante* coordination of monetary policy — which were pushed in the early 1970s very vigorously by the EEC Commission and especially by the commission's vice-president, the French economist Raymond Barre — failed to have any real effect on the practice of policy. The obvious objection was brought up again and again, especially by the Bundesbank, that its president was simply one member of the German Central Bank Council and could not commit it in advance to any particular course. There was also, despite substantial technical work, never any agreement on which instruments or which measures of monetary policy should be used. The vast differences between national approaches to the operating conditions of monetary policy could not be effectively dealt with until a single monetary policy was actually implemented through the introduction of the single currency.

Monetary union for Europe emerged as an outcome of world-level debates about currency disorder. European monetary integration appeared urgent in the late 1960s, as the Bretton Woods regime disintegrated, and in the late 1970s, when US monetary policy was subject to big political pressures and the dollar collapsed. In the late 1960s, and again in the late 1970s, the big plans for closer European monetary integration were formulated first at the highest political level, with bilateral meetings between the president of the French Republic and the German chancellor, Georges Pompidou and Willy Brandt in 1969-1970 and Valéry Giscard d'Estaing and Helmut Schmidt in 1978. Schmidt was quite explicit about the need to keep central banks in the dark. The preparations for two bilateral meetings with Giscard d'Estaing, on February 28 and April 2, 1978, were thus kept in obscurity from the German ministries and the central bank, although just before the first of these meetings Schmidt informed the party executive committee of the Social Democratic Party that he was "preparing in foreseeable time a European response to the catastrophic consequences of the collapse of the dollar."[43] The political Franco-German approach relied on a deliberate exclusion of EEC institutions, including the ECB governors. According to a strategy paper that Schmidt drew up at this time, he was intending to operate "not on a national or autonomous level, but in the framework of the European community and the [NATO] alliance."[44] The ECB governors needed to be avoided, from Schmidt's perspective, in part because a close involvement would have meant that he would have had to channel his schemes through the deeply skeptical Bundesbank, and he preferred to present the Bundesbank with a *fait accompli*. In Schmidt's thinking, the best approach for the government was to make an end run around the technocrats.

The most decisive push for a European solution to a global problem occurred in very different circumstances. It arose out of a recognition of the limits of global coordination efforts.

The breakdown of the Bretton Woods par value system in the early 1970s was not followed by a completely free-moving exchange rate regime at the global level. The US dollar depreciation in the late 1970s, its appreciation in the first half of the 1980s and then its depreciation after 1985 all strained policy. The Europeans interpreted the dollar depreciation stage in the 1970s as "malign neglect," intended to create advantages for American exporters, while US policy makers pointed to the danger that the dollar's rise in the 1980s would lead to protectionist pressures in Congress. There was some coordinated central bank intervention to counteract market developments. In the 1980s, a substantial debate occurred over the usefulness of foreign exchange market intervention, above all among the major currencies. The Group of Seven (G7) summit at Versailles in 1982 commissioned a study (the Jurgensen report released in 1983), that resulted in findings that were ambiguous and

43 Von Karczewski, *"Weltwirtschaft ist unser Schicksal,"* 356; and Loth, "Deutsche Europapolitik," 477.

44 Von Karczewski, *Weltwirtschaft*, 425.

were interpreted differently on opposite and opposed sides of the Atlantic. The report was marked by a fundamental lack of analytical clarity, failing to carefully distinguish between sterilized intervention and unsterilized intervention or to isolate intervention from other policy actions. Perhaps the ambiguity and obscurity was politically opportune. US economists and policy makers increasingly concluded that interventions were ineffective, while European political leaders continued to think of an intervention regime. Here is another instance of the pressure to coordinate coming from the smaller, more open but less politically powerful countries.

Testing the effects of intervention on exchange rate behaviour generally reveals the very limited effectiveness of intervention at the global level. The studies by Michael Bordo, Owen Humpage and Anna Schwartz show how limited the effects of intervention were in the dollar-deutsche mark and dollar-yen cases.[45] On the other hand, for Europeans, exchange rate interventions were both necessary and effective to prevent distortions from the international system affecting European rates (every time, for instance, money flowed from dollars into the deutsche mark, it pushed the deutsche mark up, not only against the dollar but also against the French franc).

When the dollar was soaring in the mid-1980s, when American manufacturing was threatened and when there appeared to be the possibility of a protectionist backlash, the finance ministers of the major industrial countries pushed for an exchange rate agreement, and French Finance Minister Edouard Balladur suggested a central rate with a five percent movement either way be permitted. At the G7 finance ministers' meeting at the Louvre in Paris in 1987, they agreed to lock their exchange rates into a system of target zones. But that agreement was systematically undermined by the central banks, in particular by the Deutsche Bundesbank, which denied that it could be committed to any such agreement. The target zone discussion had proceeded largely without central banks, and only the powerful chairman of the Federal Reserve System, Paul Volcker, had been informed in advance of the historic 1985 Plaza Hotel meeting.[46] At the Plaza, there was no discussion of interest rate policy or of monetary policy: in fact, as Barry Eichengreen points out, there was a complete lack of "the web of interlocking agreements needed to lock in policy adjustments."[47] At the Louvre, the Bundesbank president had simply said: "Let's leave everything open and wait and see how the market responds."[48] It was also clear that the details of the intervention techniques had to be left to the central banks.

Nothing came of the global plan; indeed, its botched inception and the policy controversies generated seemed, in part, responsible for a very sharp stock market crash in October 1987, after US officials attacked the Bundesbank's uncooperative stance. Was it plausible that central banks should really make an intervention commitment that, in effect, meant that they were promising to finance the US deficit by underwriting the gap in private financing that would emerge at particular exchange rates? The influential general manager of the BIS, Alexandre Lamfalussy, concluded that: "The story of 1987, just like the more specific firefighting activities which were undertaken on several occasions within a cooperative framework, shows that we cannot count on international cooperation between central banks to preserve systemic stability."[49] Then Balladur, who had seen the Louvre proposal as very much a French plan, came up with a tighter European scheme. When German Foreign Minister Hans Dietrich Genscher appeared sympathetic, Europe's central bankers were asked by the president of the European Commission, Jacques Delors, to prepare a timetable and a plan for currency union (which became known as the Delors Report).[50] Delors's central insight was that the previous efforts at monetary integration had failed because the central

45 Bordo, Humpage and Schwartz, "U.S. Foreign Exchange-market Intervention During the Volcker-Greenspan Era"; Bordo, Humpage and Schwartz, "U.S. Foreign Exchange – Market Intervention"; and Bordo, Humpage and Schwartz, "U.S. Intervention during the Bretton Woods Era." Other studies with less negative conclusions include Catte, Galli and Rebecchini, "Concerted Interventions and the Dollar," 201–40; Dominguez and Frankel, "Does Exchange Market Intervention Matter?" 1356–69; Dominguez, "When Do Central Bank Interventions," 1051–71; and Neely, "Central Bank Authorities," 1–25.

46 Boughton, *Silent Revolution,* 206–09.

47 Eichengreen, *Globalizing Capital,* 151.

48 Funabashi, *Managing the Dollar,* 183. See also Henning, *Currencies and Policies*.

49 Lamfalussy, "Central Banking in Transition," 340.

50 Delors, *Report on Economic and Monetary Union*.

banks had been excluded: asking them to prepare the basis for a plan tied them into the process of institutional innovation.

Solving the question of the German current accounts in the European setting at first appeared to require some sophisticated and ingenious political mechanism that would force French politicians to impose more austerity than they would have liked, and the Germans less price orthodoxy than they thought they needed. A political mechanism, however, requires continual negotiation and public deliberation, which would have been painful given the policy preferences in the two countries (and in those countries that lined up with each one of these "Big Two"). The increased attraction of monetary union was that it required no such drawn-out political process. The operation of an entirely automatic device would constrain political debate, initiative and policy choice.

Monetary union was, thus, conceptualized as a way of simplifying politics. This had been a feature of European arguments from the beginning. Robert Triffin showed in 1957 how a problem could be reduced to its most basic level: "The significance of monetary unification, like that of exchange stability in a free market, is that both exclude any resort to any other corrective techniques except those of internal fiscal and credit policies."[51]

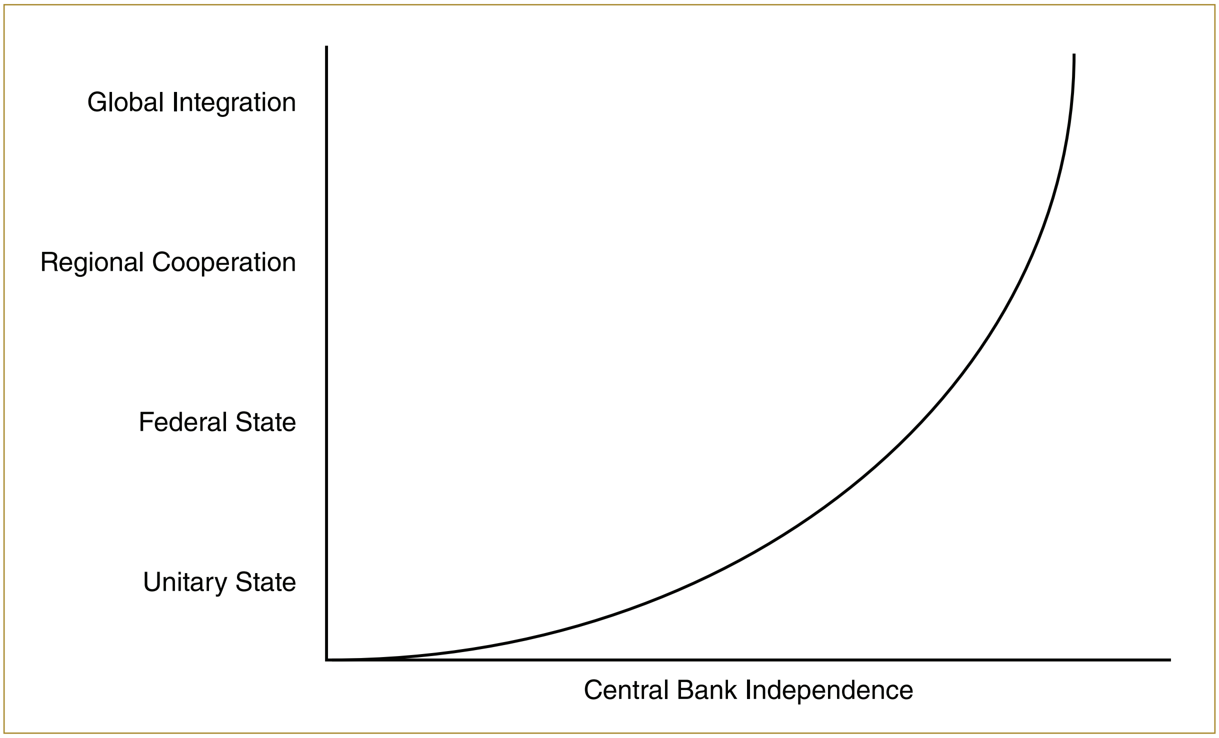
The Delors Report laid down the blueprint for the plan that was accepted at the Maastricht intergovernmental conference and embedded in a new treaty (the Maastricht Treaty). Central bank independence was a central element of the proposal, reflecting some of the hard historical lessons of monetary experiences in a federal system. Central bank autonomy becomes more important the more emphasis is given to policy coordination between different tiers of political authority. This may be in one country, in a federal system, but the same principles apply to regional integration and international cooperation and coordination. The more higher-intensity coordination is required, the more central banks need to be detached from domestic political processes that try to subordinate monetary policy to short-run domestic opportunities. Without central bank autonomy, monetary policy can rapidly become a cause of disintegration and political fragmentation.

As they prepared monetary union, the central bankers devoted considerable attention to a problem whose subsequent neglect was to prove deeply problematic. Should not a monetary union, in which capital markets were integrated and in which cross-border financial institutions would emerge, also deal with financial stability issues? The penultimate draft of the Delors Report specified in paragraph 32 that the "system would participate in the coordination of banking supervision policies of the national supervisory authorities." But in the final report, "national" was deleted, leaving the implication that the supervisory authorities would be European. In the original version of a plan for a central bank that would run a monetary union, the central bank would have overall supervisory and regulatory powers. That demand met strong resistance, above all from the German Bundesbank, which worried that a role in maintaining financial stability might undermine the future central bank's ability to focus on price stability as the primary goal of monetary policy. There was also bureaucratic resistance from existing regulators.

It would be reasonable to assume that the central bank issuing a new currency would take over the functions normally associated with existing national central banks. But assumptions about central banks' operations — and their willingness to state clearly what the objectives were — varied significantly from country to country. In particular, the Germans worried about the moral hazard implications of central bank regulation of the financial sector. Before World War I, the German Reichsbank had been widely viewed as providing the ultimate support of the financial sector. Its origins lay in a response to the severe financial crisis of 1873, and the big German banks saw the central bank as a backstop. But the experience of hyperinflation in the 1920s led to a new approach, and a feeling that unlimited support for the financial system contained a danger to monetary stability; consequently, the idea of a central bank as a lender of last resort (LLR) had much less support in late-twentieth-century Germany than in the Anglo-Saxon world, where Walter Bagehot's treatise of 1867, *Lombard Street,* was still widely regarded as the paradigm for modern central bank behaviour.

51 Triffin, *Europe and the Money Muddle*, 289.

Figure 1: Central Bank Independence and Cross-border Integration



Source: Author.

There was thus considerable uncertainty about the wording of the statute on financial sector regulation. In the initial draft of the ECB Statute produced for the Committee of Central Bank Governors by the alternate governors, the "tasks" of the ECB included "to support the stability of the financial system." But the Bundesbank wanted to avoid references to an explicit role for the ECB in supervising banks, and objected to clauses that "could be misinterpreted as a lender of last-resort function." The hesitant and ambiguous character of the German philosophy of regulation was apparent: "This did not mean…that the ECB should not support the stability of the financial system, but that it should never be written down; this would be moral hazard."[52]

In February 1990, at the European Community Monetary Policy Committee meeting in Brussels, there was complete agreement that the different national rules regarding bank regulation should be left in place.[53] Commission President Jacques Delors was unwilling to force the pace on this issue, and stated that the EC Commission approached the issue of banking supervision with an "open mind": the European System of Central Banks should simply "participate in the coordination of national policies but would not have a monopoly on those policies."[54]

The governors' draft referred to the possibility that the ECB would take over banking supervision and regulation functions, but by the time this proposal was included in the Maastricht Treaty provisions on monetary policy (Article 105, section 6), it was accompanied by so many provisos that it looked as if

52 Committee of Central Bank Governors, Committee of Alternates.

53 Historical Archive of Deutsche Bundesbank, *Report on Monetary Policy Committee.*

54 Committee of Central Bank Governors, Meeting 243.

the hurdles to effective European banking supervision could not be set higher.[55] The intrusion of politics had thus resulted in a fundamental flaw in the new European monetary order. The ECB was, therefore, never given overall supervisory and regulatory powers, and until the outbreak of the financial crisis in 2007-2008 no one thought that was a problem.

Financial Stability

Cross-border financial stability discussions — unlike the debate about exchange rate coordination — had rarely taken place in a purely European context. Slowly in the 1960s, and then with dramatic rapidity in the 1970s, a global banking system evolved. Globally active banks, transmitting substantial capital flows, raised the question of whether central banks did not need to be concerned in a coordinated way with global financial stability, and with a cooperative approach to regulation. The currency turbulence that followed the 1971 breakdown of the Bretton Woods par value system, together with the explosive growth of offshore financial markets (euro-markets), the 1974 failure of a small German bank, Herstatt, at a time when the US markets were open but continental Europe's markets had already closed, convinced European central banks that they would not be able to tackle the problems on their own. When Dutch central bank official Huib Muller, who had taken the lead in much of the early European discussion of cross-border supervision, and Albert Dondelinger, the Luxembourg bank supervisor (a great deal of Herstatt's business had run through Luxembourg) were in Washington for the 1974 annual IMF meetings, they talked to Federal Reserve officials. Since then, the G10 became the central forum for bank regulation and supervision issues.[56]

The G10 communiqué of September 10, 1974, stated that the central bank governors had "agreed to intensify the exchange of information between central banks on the activities of banks operating in international markets and, where appropriate, to tighten further the regulations governing foreign exchange positions" and had discussed "the problem of the lender of last resort in the euro-markets." In December 1974, the G10 governors created a Committee on Banking Supervision (that subsequently became known as the Basel Committee), to be chaired by George Blunden from the Bank of England. The BIS also became intensely involved in the apparently simple but in practice enormously problematical task of gathering statistics on banks' international exposure.

It was only in the aftermath of the 1982 Latin American debt crisis that a political imperative existed to impose international banking rules. As part of the package to deal with the crisis, the US Congress insisted on the negotiation of the rules that became known as the Basel Agreement or Basel I (in 1988). But the approach to risk weighting looked very crude — all OECD government debt was given a zero risk weighting — and an initiative began to impose a set of rules that would be both more effective and more capable of taking account of banks' individual circumstances. That long process of revision produced Basel II, but as it entered effect, the outbreak of a global financial crisis in 2008 required a firmer approach to international bank regulation. Basel III is not yet implemented, but is controversial in that some countries are engaging in a competitive race to add conditions and make their banks safer, while others are resisting in the hope that their banks can generate more credit flows. The fact that the third Basel Agreement could be negotiated so quickly seems to indicate that cooperation is still running very effectively, but the translation of the agreement into national legislation and its implementation may well prove problematic.

The expansion of international lending highlighted another issue. Is there a need for an international LLR? In the domestic market, the need for an LLR has been well understood since the publication of Walter Bagehot's *Lombard Street*. In some major crises — notably in Latin America after 1982 and in 1997-1998 in the Asia crisis — the IMF acted as if it were an LLR.[57] But interpretations that suggested that the IMF should take on this role foundered on two problems. First, the IMF has no capacity to create infinite resources. It is dependent on the collective resources pledged by its members. Very large private capital

55 Kenen, *Economic and Monetary Union in Europe,* 33.

56 See Goodhart, *The Basel Committee on Banking Supervision*.

57 See the discussion between Stanley Fischer, at the time the IMF's first managing director, and Forrest Capie: Capie, "Can There Be an International Lender," 311–25; and Fischer, "On the Need for an International," 85–104.

markets can, thus, potentially take a bet against the Fund, as they can calculate at what point the Fund will run out of resources. In practice, Fund programs in very large and deep crises were always accompanied by central bank actions to overcome this problem. In 1982, central banks coordinated through the BIS in order to provide bridging loans, as it would take time to assemble the consent needed for the IMF program. In 1998, as a threat emerged to financial institutions in advanced industrial countries after the Asian crisis, and especially the failure of US hedge fund management firm Long-Term Capital Management, the Fed provided large amounts of liquidity. Therefore, it was ultimately a national central bank rather than an international institution that provided the liquidity required to keep the global system from collapsing.

The other possible problem confronting the Fund is the difficulty — in a crisis situation — of distinguishing between liquidity and solvency problems. Classic LLR action refers exclusively to liquidity problems, and central banks should not undertake actions that put their solvency at risk. But they cannot be quite sure of the non-existence of a solvency threat, and effective crisis management indeed sometimes means taking precisely that risk. In the case of almost every modern central bank (with the significant exception of the ECB), undertaking that risk is possible because ultimately there is a government — backed with a fiscal capacity — that may take over the risk. Indeed, in recent bank rescues in the United Kingdom and Switzerland, the government explicitly indemnified the central bank. But even in the absence of a formal indemnity, participants assume that something of the kind exists. In contrast, the IMF is not designed to take losses on its loans to members.

This last consideration makes it difficult for central banks to really systematically engage in international LLR operations. In the domestic setting, the action is justified by the claim that it restores the normal functioning of a national economy. In the international setting, it looks like taxpayers subsidizing foreigners. That problem has become a challenge to global finance in the aftermath of the 2008 Lehman Brothers collapse.

The focus on financial stability after 2008 has intensified the push for macroprudential supervision and regulation, in other words, for an identification of systemic risks. By necessity, macroprudential supervision requires a great deal of international coordination, as there is a major cross-border element in systemic risk. But this is an approach that is still in its infancy, and suffers from the problem that financial services constitute a powerful political lobby, which presents the financial industry as a national asset and national champion, so that national supervisors and regulators will be pushed to take account of the competitive positions of their own financial services industry.

The Great Recession and the Euro Crisis

In the aftermath of the 2008 financial crisis, central bank cooperation provided an immediate and effective response. On October 8, 2008, three weeks after the collapse of Lehman Brothers, the world's major central banks all lowered their policy rates dramatically, announcing their decisions simultaneously. On the same day, the British government announced what amounted to a partial nationalization of the most vulnerable banks. The US Federal Open Market Committee unanimously voted to cut its policy rate by 50 basis points to 1.5 percent.[58] The ECB also cut its rate by 50 points to 3.75 percent. Its statement, like the Fed's, emphasized the unique degree of international consultation: "Throughout the current financial crisis, central banks have engaged in continuous close consultation and have cooperated in unprecedented joint actions such as the provision of liquidity to reduce strains in financial markets."[59] This was the first time that the Fed had ever coordinated a simultaneously announced rate reduction with other central banks; another unique feature of the event was that China also informally joined in the monetary easing, with a reduction of its interest rate. The move was widely welcomed by markets and generated a brief stock market rally in Europe, but the recovery quickly fizzled. An overall assessment of the coordinated moves suggests, though, that they reduced interest rate spreads.[60]

Why was the effect of this unique action so ineffectual on markets? Different government responses to bank distress in different countries — the British nationalization, the US announcement of an asset purchase plan (Troubled Asset Relief Program or TARP) that was later converted into a more British-style program, and an Irish blanket government guarantee of bank deposits — in practice brought not stabilization, but a further erosion of confidence. Treasury Secretary Hank Paulson quickly responded: "We must also take care to ensure that our actions are closely coordinated and communicated, so that the action of one country does not come at the expense of others or the stability of the system as a whole."[61]

Increased liquidity allocation was also carefully coordinated internationally. The chief instrument used was the swap network, which was reactivated to deal with the issue of currency mismatches in the balance sheets of very large internationally operating banks and other financial institutions. The most striking and dangerous case was that of European banks, which had relied on dollar funding, largely from US mutual funds. When one such fund "broke the buck," investor panic ensued, with many Americans withdrawing mutual fund deposits. The European banks could go to the ECB for euro liquidity, but not for dollars. The only possible supplier of dollars in the panic, the Federal Reserve Bank, consequently lent dollars through the swap lines to the ECB, along with the Bank of England, the Swiss National Bank and other central banks.

The BIS's General Manager Jaime Caruana stated that: "the extension of such swaps in unlimited amounts represents a turn in central bank cooperation that the founders of the BIS would have found unimaginable."[62]

58 Board of Governors of the Federal Reserve System, "Press Release," October 8, 2008.

59 European Central Bank, "Monetary Policy Decisions."

60 Dougherty and Andrews, "Central Banks Coordinate Global Cut"; "Central banks' rate," *Financial Times*; Aït-Sahalia et al., "Market Response to Policy Initiatives."

61 "Domestic Traumas Force Hands," *Financial Times*.

62 Caruana, "Central Bank Cooperation."

Figure 2: Foreign Currency-Swap Arrangements between Central Banks

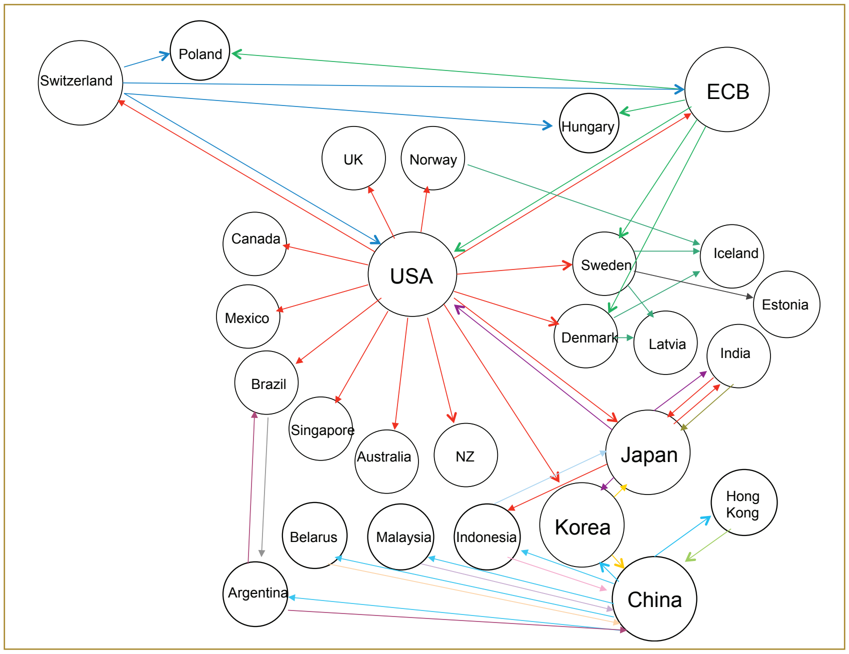


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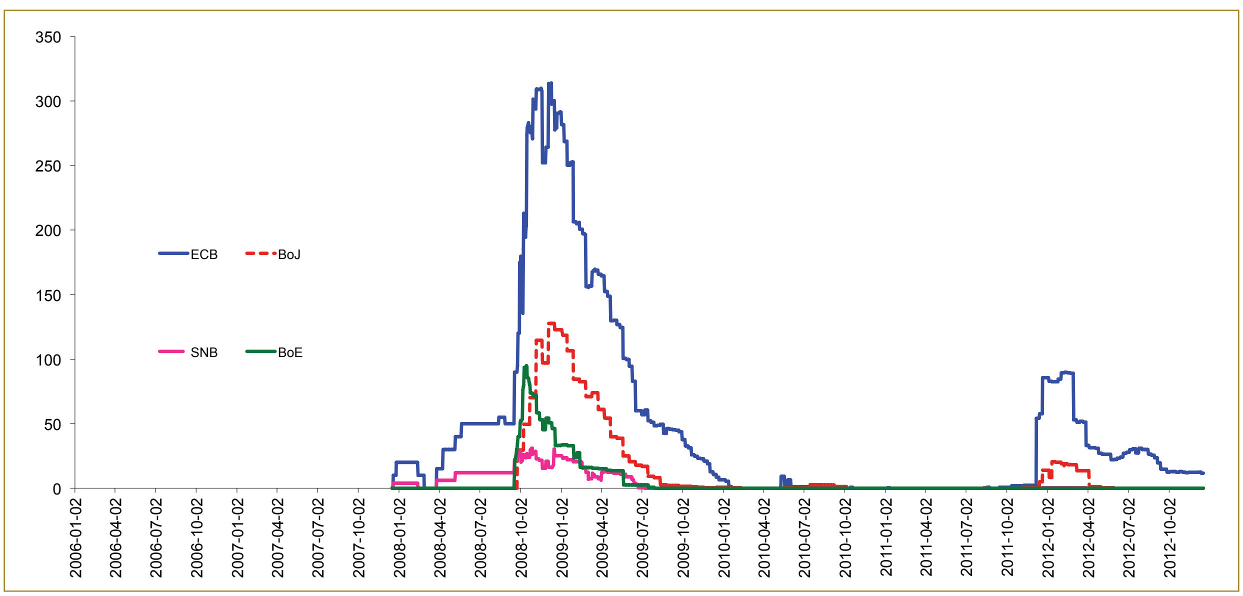
Figure 3: Central Bank Drawings on Fed Swap Lines (in billions of USD)



Reproduced by permission of the Bank for International Settlements (Allen and Moessner, 2013).

These crisis lines expired on February 1, 2010, but then a new phase developed in which the focus of market anxiety was on the asset side of European banks, and especially on their holdings of large quantities of apparently precarious southern European government debt. On May 10, 2010, "in response to the re-emergence of strains in U.S. dollar short-term funding markets in Europe" due to market concerns about sovereign debt, the Federal Reserve re-established swap lines with the central banks of Canada, the United Kingdom, the euro area, Switzerland and Japan. On September 15, 2011, in cooperation with the Federal Reserve, the ECB, the Swiss National Bank, the Bank of Japan and the Bank of England announced they would conduct additional US dollar tenders, at a term of approximately three months covering the end of the year, in addition to the weekly seven-day tenders of dollar funding announced on May 10, 2010. On November 30, 2011, six major central banks jointly announced measures to enhance the cross-border provision of liquidity via central bank swap lines.[63]

These swap lines attracted domestic controversy in the United States. Florida Democrat Alan Grayson focussed an attack on the previously rather obscure topic of central bank swaps. Exchanges of reserves on a short-term basis between central banks historically constituted one of the smoothing elements in forex markets. After the Lehman crisis, their volume expanded as part of the global effort to provide liquidity, with repurchase arrangements that avoided foreign exchange risk. On July 21, 2009, Grayson asked Fed Chairman Ben Bernanke why the swaps on the Fed's balance sheet had increased from US$24 billion at the end of 2007 to US$553 billion in 2008, and which foreign institutions were benefitting from such loans. Then Grayson picked one foreign central bank that had done a swap, choosing New Zealand, which is tiny and at the other side of the world. Why was the Fed "giving" US$9 billion (or US$3,000 to each inhabitant) to New Zealand, when the money could have been better spent on Americans suffering from the credit crunch?

The contrast between the two phases of the post-2007 crisis is remarkable: in the first (US subprime) phase, the swap networks were very extensive and had a dramatic effect in countering financial instability. In the second (euro crisis) phase, the availability of dollar credit was not enough to prevent a substantial deleveraging. Describing the first phase, Linda Goldberg concluded "the CB [central bank] dollar swap facilities are an important part of a toolbox for dealing with systemic liquidity disruptions."[64] Allen and Moessner conclude that "the swap lines in the 2010–12 crisis did not help protect against banks' deleveraging as much as they had done during the 2008–09 crisis."[65] In 2011, commercial banks financed their acquisition of dollar liquid assets mainly by deleveraging, i.e., reducing other assets.

According to the standard theory of central banking, banks give credit in response to liquidity problems, but not when there is a doubt about solvency. Solvency issues require the intervention of governments that are capable of absorbing the loss (i.e., distributing the loss to their taxpayers). It is hard to entrust the management of financial instability to international cooperation, because the distribution of costs for bailouts and resolution cannot be clear *ex ante*. Central banks succeeded in the first part of the financial crisis because they were able to define the major issue as the disappearance of liquidity and the freezing of the interbank market. Financial institutions looked as if they were protected by government guarantees. In the second part of the crisis, when some governments were no longer able to give credible guarantees because they were themselves sucked into the spiral of disappearing confidence, the question of who was to bear the ultimate losses of the banking sector became acute.

There was a further strain on international cooperation. In the wake of the financial crisis, the major central banks — in particular the Fed — engaged in a major exercise of "unconventional" monetary policy, or quantitative easing. While this looked like an appropriate policy to deal with problems in the Unites States or the United Kingdom, the spillover effects created substantial problems in emerging markets. Cheap

63 Board of Governors of the Federal Reserve System, "Press Release," November 30, 2011.

64 Goldberg, Kennedy and Miu, "Central Bank Dollar Swap Lines."

65 Moessner and Allen, "Central Bank Swap Line," 167–78; see also Moessner and Allen, "Banking Crises," 1–20.

borrowing in particular fuelled large-scale capital inflows, with inflationary effects. The possibility of an exit from expansive policy has already brought a new threat, of a "sudden stop" and a reversal of the capital flows.

The actions of the major industrial countries seemed to be eroding monetary and financial stability in the periphery. The standard reply of US officials was that the spillovers could be dealt with easily through the use of domestic policy levers such as interest rates, but also through the imposition of capital controls. However, that argument ignored the real practical difficulties of maintaining watertight controls. Some emerging-market policy makers claimed that the extraordinarily low interest rates were part of a strategy of currency depreciation by the United States ("currency wars" in the oft-quoted phrase of Brazilian Finance Minister Guido Mantega).[66] The repeated accusations that exchange rates were being manipulated in order to achieve trade advantages recall the bitter polemics of the 1930s. In addition, loose monetary policy was believed to be fuelling commodity and food price rises and, consequently, social unrest in many emerging countries, including those that are perceived to be the major competitors of the United States: that is, China.

The failure of currency coordination is not surprising. There were similar failures in the early 1970s, after the Smithsonian meeting to determine a set of new exchange rates, or in the mid-1980s, when attempts at coordination in the Plaza and Louvre finance ministers' meetings heightened rather than dampened financial instability. The only major reason to worry about such failures is that frustration about the currency regime can translate potentially into powerful demands in parliaments and other representative assemblies for trade retaliation as a response to a currency war. So far, this trade counterblast remains a topic for discussion rather than a reality.

66 Wheatley, "Brazil in 'Currency War' Alert."

Conclusion

The financial crisis has demonstrated both the enormous power of coordinated central bank action and, consequently, its importance for the political regimes to which the central banks are ultimately accountable — but also the limits to that action.

Before the crisis, there was no real awareness of how important cooperation and coordination might be: the last big international crises were simply too far away in a distant past, and the financial environment apparently changed too radically by financial innovation and by the headlong expansion of mega-banks. The Governor of the Bank of England, Mervyn King, reflected on this pre-crisis world view: "I think what's so interesting about the period running up to the crisis was how everyone thought how unimportant the international dimension was, in the sense that it might have an interesting impact on what was going on in the world, but it had no relevance to policy. Policy was set purely domestically. There was no serious impetus to doing anything in terms of international co-ordination."[67] Then, however, coordination became desperately needed, and desperately problematical.

The changing tasks, and the governance and accountability issues, of modern central banks are best thought of in the framework offered by the analysis of targets and instruments. What are the goals of a modern central bank, and to what extent do they mesh with the overall economic and political objectives of a society? The goals, as commonly understood objectives, may conflict with each other. Such conflicts strain the governance mechanism of the central banks, as they seem to demand a political resolution. In particular, central banks aim at some combination of the following four objectives:

- price stability;
- maximum employment;[68]
- exchange rate stability; and
- financial stability.

For large countries, in respect to the first two objectives, their aim is overwhelmingly national, and there is no need to cooperate. There may be conflicts between both of these goals and, in particular, a focus on the second may produce an inclination to what is sometimes called "malign neglect" or "currency wars," in which an effective devaluation is pursued for the sake of increased competitiveness and higher employment. Smaller countries will find the first goal impossible, unless they pay attention to the third goal and look, in some form, to manage the exchange rate.

The third objective (exchange rates) requires instrumental cooperation, but also coordination, and may in some circumstances endanger the desired price stability. Exchange rate action has been the major focus of twentieth-century efforts at intensified central bank cooperation. The most enduring episodes of international cooperation and coordination occurred in the period when exchange rate stability was problematical — in the interwar years and in the years of the effectively working Bretton Woods system (1962–1971) as well as beyond that in the European context, where Europeans tried to preserve some features of the Bretton Woods world view. Attempts to correct exchange rate movements through coordinated action have not been a feature of the policy response to the post-2007 crisis. Smaller countries are inevitably more interested in exchange rate stability and, thus, will want to find a framework for central

67 Wolf, "Mervyn King Has Lunch with the FT."

68 The 1977 amendment of the Federal Reserve Act states: "The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates."

banks to embark on this sort of cooperation. Large countries will only be interested in responding to this demand if their political decision makers see an overarching generalized interest in stability. That was the case with the United States during the Bretton Woods era in the global system, and with Germany from the 1990s in the European framework, as it engaged in the uniquely intense central bank cooperation involved in establishing the European monetary union.

The fourth goal, financial stability, has the greatest capacity to strain cooperative processes and coordination mechanisms. The spillover effects of one country's monetary policy (since it offers funding potential) or regulatory policy (as in the case of the 2008 Irish bank guarantee) on others can be immense. A great deal of dialogue is therefore needed in order to optimize policy. But the realization of financial stability may be hard to reconcile with conventional central bank policy and with international cooperation. Effective provision of financial stability requires the ability to provide fiscal resources to allow for the resolution of insolvent banks. Actions to restore solvency consequently give rise to distributive issues and impose costs on taxpayers that they are usually unwilling to assume for foreign institutions. The larger the financial system, the greater this challenge becomes. Since there is an aversion to dealing in this way with internationally active banks, large banks have a life cycle that was memorably described by Bank of England Governor Mervyn King as being global in life, but national in death.[69]

Crises increase the demand for central bank cooperation in order to provide a global public good — financial stability. But they also dramatically increase its cost, particularly the fiscal costs associated with interventions to ensure financial stability. That result means that crises are very often associated with setbacks to the cooperative process, and disenchantment or disillusion about the role of central banks.

Financial stability has engendered some spectacular attempts at central bank cooperation — notably in 2007-2008, in the first phase of the Great Recession. The problematical — and indeed probably ultimately insoluble — character of central bank cooperation has been highlighted in the aftermath of the 2007-2008 financial crisis, and particularly after the euro crisis. The solution of the euro crisis, with the peculiar feedback loop of financial stability and fiscal sustainability, requires a cross-border resolution mechanism as well as shared supervision and regulation. It has thus become the global test case for both the possibilities and the limits of central bank action.

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69 Schifferes, "Can Banking Regulation Go Global?"

Acronyms

BIS	Bank for International Settlements
CEMLA	Centre for Latin American Monetary Studies
EC	European Community
ECB	European Central Bank
EEC	European Economic Community
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
G10	Group of Ten (countries that participate in the General Agreement to Borrow)
G7	Group of Seven
LLR	lender of last resort

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