

James, Harold

Article

The contribution of monetary institutions to stability

Aussenwirtschaft

Provided in Cooperation with:

University of St.Gallen, School of Economics and Political Science, Swiss Institute for International Economics and Applied Economics Research

Suggested Citation: James, Harold (2017) : The contribution of monetary institutions to stability, Aussenwirtschaft, ISSN 0004-8216, Universität St.Gallen, Schweizerisches Institut für Aussenwirtschaft und Angewandte Wirtschaftsforschung (SIAW-HSG), St.Gallen, Vol. 68, Iss. 1, pp. 1-18

This Version is available at:

<https://hdl.handle.net/10419/231243>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

The contribution of monetary institutions to stability

Harold James
Princeton University

The modern development of a policy revolution in the late twentieth century that places monetary stability at the core of central banking functions has three roots: an academic discussion of the design of monetary policy institutions; the example of successful central banking practice; and the impact of policy spillovers in a world in which increased capital mobility shaped a new sort of globalization. The article examines the relative weight of these factors in building the modern conception of central banking, and how the three factors interact with each other. The problematical consequence of a globalization-induced change in approach is that the accidental success of modern monetary policy pushed a mode of thinking that made monetary policy central and left out traditionally central elements of central banking – in particular, financial supervision.

Key words: E58, F42, N24

JEL codes: central banks, financial stability, Bank of England, Bundesbank, Swiss National Bank

In 1990, the greatest central banker of the day, and indeed possibly of all times, the commanding Federal Reserve chairman Paul Volcker, explained in a lecture at the IMF entitled “The Triumph of Central Banking?” that “there is objective reality in my impression that central banks are in exceptionally good repute these days” (VOLCKER, 1990). This was the beginning of an era when central bankers became godlike figures, or rock stars, or masters of the universe, or alchemists who turned everything into gold. That period lasted until the 2008 financial crisis, when the reputation of central bankers everywhere took a dive, and commentators started to write instead about the “Futility of Central Banking” (SELGIN, 2010). The hallmark of the 1990-2008 era lay in independence – or perhaps more accurately, in the policy autonomy of central banks. The modern notion of best practice involves the setting of monetary policy within a mandate (specifying price stability) set by a legislature; sometimes a specific inflation target is set by a political authority, with implementation left to the central bank. Judging how successful it has been requires an analysis of what gave rise both to the phenomenon and to the good results that were often attributed to the new approach. It also sets the framework for a debate on the limits of the high degree of emphasis on central bank independence. In particular, in an older tradition, the independence of central banks not just from governments, but also from the banking system, was heavily emphasized. In the modern debate, this aspect disappeared almost completely, with dangerous consequences.

Three European central banks – those of Germany, the Netherlands, and Switzerland – as well as the Federal Reserve System after 1979 were frequently held up as models of good policy-making. Their constitutional framing occurred in a quite different era, and monetary stability does not appear in the original framing of the Fed or the SNB. But these countries had central banks which grew or evolved institutionally into independence, with clearly defined mandates and competences. Initially, the major emphasis of both the Fed and the German Reichsbank, the predecessor to the Bundesbank, was on financial stabilization. This is hardly surprisingly, since they were created in the aftermath of major financial crises in 1907 and 1873, respectively. In addition, in the modern period, Germany and Switzerland had the first central banks to adopt a clear monetary target. They had significantly lower inflation levels than central banks with lower degrees of political autonomy.

The modern development had three roots: an academic discussion of the design of monetary policy institutions; the example of successful central banking practice; and the impact of policy spillovers in a world in which increased capital mobility shaped a new sort of globalization. What is the relative weight of these factors in building the modern concept, and how do the factors interact with each other?

The UK offers an interesting test case of the general move to better central bank performance in the Great Convergence. From the worst inflation performance of an industrial country in the 1970s, the UK moved to a much better regime, which antedated the formal move to central bank independence with the 1998 Bank of England Act. Thinking about the specific outcome raises general questions about the environment in which policy was made, and in particular the impact of a globalized financial and commercial system.

1 The academic contribution

In the course of the 1980s, a substantial academic literature also developed concerning the inflation performance as well as macroeconomic stability and growth. The new consensus suggested that in industrial countries, but also more generally, central bank independence was closely correlated with lowered rates of inflation but also with better economic performance (ALESINA and SUMMERS, 1993). It was already well known that monetary authorities were frequently subject to political pressures that produced higher levels of monetary growth (BUCHANAN and WAGNER, 1997). The newer literature initially developed on the basis of an appreciation that establishing firm commitment mechanisms was

an essential element in the establishment of time consistent policy credibility.¹ A “conservative central banker” would block the tendency of the political system to exploit the Phillips curve trade-off of inflation and growth (ROGOFF, 1985). The approach emphasized the contractual element of the position of central banks, and consequently focused on the explicitly defined terms of contracts or laws establishing central banks.

A central feature of this argument is a rather restricted view of what central bank policy involved. It reduced central bank activity to monetary policy, and was sometimes labelled by critics as creating monetary policy institutes or even universities (there were sometimes references to the “University of Threadneedle Street”). Other objectives (financial stability) were marginalized, or simply assumed to follow from monetary stability, even though financial stability objectives had been the central function of the central banks established in the early 20th century, such as the Federal Reserve System.

The literature on central bank independence became so vast because of what may appear in retrospect to be a red herring: the problem of defining precisely what is meant by central bank independence. One deceptively simple approach took the statutes of the central banks as a guide, and then measured legal independence. It tried to quantify variables concerning the appointment, dismissal and term of office of the governor or chief executive; variables on conflicts between the executive branch and the central bank and the degree of participation of the central bank in the formulation of monetary policy and in the budgetary process; the objectives as stated in the charter of the central bank; and legal restrictions on the ability of the public sector to borrow from the central bank. But laws do not cover every eventuality, and there is often substantial room available in which power politics can intrude.

Second, another strain in the literature simply investigated the rate of turnover of governors/chief executives. A high turnover and brief tenures are characteristic of many unstable political and monetary regimes in the second half of the 20th century, especially outside Europe (though France in the 1930s had a very rapid rotation of central bank governors).

Third, the use of questionnaires may give some sense of perceptions of central bank independence in practice.² This approach rests on the notion that central bank independence is actually not easily measured by formal legal criteria, and that the actual practice of central bank operations is what is decisive.

1 See especially KYDLAND and PRESCOTT (1977) and BARRO and GORDON (1983).

2 See CUKIERMAN (1992); also CUKIERMAN, WEBB and NEYAPTI (1992).

All of these approaches raise conceptual problems. The codings that are applied to establish legal independence are sometimes rather arbitrary, and scholars have for instance disagreed on the importance of whether a given central bank has a government representative on its board. Surprisingly often, academics discover that in the country that they know best, the laws do not fully describe the realities of central bank appointments and discussions within the central bank, while for more remote countries, they are prepared to accept the letter of the banking laws. Thus, the French economist Malinvaud found that GRILLI, MASCIANDARO and TABELLINI (1991) overstated the degree of French independence; the Italian economist Alesina criticized the approach of BADE and PARKIN (1988) to the position of the Italian bank (ALESINA, 1988, 1989; ALESINA and GRILLI, 1992); and the Dutch Eijffiger and de Haan thought that the De Nederlandsche Bank was more independent than was represented in Cukierman's survey (EIJFFINGER and SCHALING, 1993; EIJFFIGER and DE HAAN 1996). An apparently rigorous scientific exercise in this way becomes very quickly and evidently random and arbitrary. The eminent Italian central banker Carlo Ciampi, in a letter to the *Financial Times* protesting against a league table produced by the journalist David Marsh which showed the Italian institution as the least independent European central bank, wrote that "a meaningful appraisal of central bank independence requires a thorough evaluation of the institutional setting and of the bank's *modus operandi* as developed over time and consolidated in practice."³

Turnover of central bankers need not necessarily be a measure of political interference; it could indeed be – as it was in the case of the 19th century Bank of England, whose governorship rotated every two years – a way of combating influence and clientilism. Finally, the survey approach is also problematical, in that the perception of independence often follows from observing the demonstrated effects of independence (such as low inflation), and the approach thus generates a circularity when used to determine the nature of the link between central bank independence or autonomy and particular outcomes such as price stability or economic growth.

In the light of the problems of defining political influence precisely, different analyses may be required that are not so simply quantifiable. A more subtle approach involves examining the political and social setting within which the central banks work. They reflect a particular culture; thus, it is often persuasively argued that the German outcome in terms of the policy of the Bundesbank is a response to a high preference of German people, voters, and politicians for monetary stability as the result of the experience of two severe inflations associated with the world wars, which led to the practical expropriation of middle-class

3 *Financial Times*, 13 March 1992, Letters.

Germans. The Bundesbank's directors often used the word "*Stabilitätskultur*," and they did their best to foster that culture by linking it to deep strains in German history, going back beyond the 20th century to such cultural monuments such as Goethe's *Faust* (Part II). Stability is thus not a simple chance feature of an arbitrary approach to central bank design, but rather the product of a deep social and political consensus. Such analysis raises the question of whether the design features can be simply and successfully appropriated or imitated when the consensus is absent.

Another approach to the problem views central banks also as exposed to interests, and sees the existence of a powerful financial community as pressing for a stability-oriented policy. This account seems to offer some insights into the behavior of the Bank of England, particularly before 1945, when the central bank served as a transmission mechanism for the interests of the City of London, and the same argument was also applied, more precariously, to the case of the modern history of the Bundesbank (POSEN, 1998).

Some observers have noted what is sometimes called the Thomas Becket effect – that with strong central banks, even political appointments turn out quickly to adopt to the prevailing ethos of the central bank. King Henry II of England had appointed his good friend and reliable official, Thomas à Becket, as Archbishop of Canterbury at a time when the Crown was locked in a bitter conflict with the church, but then found that Becket was as loyal to his new office as to the old. In the end, Becket pushed Henry to such rage that he ordered the archbishop's assassination (or martyrdom). As applied to central banks, the effect could obviously be explained in institutional terms. NEUMANN (1991), for instance, argues that "the conditions of contract and of office would have to be set such that the appointee free him- or herself from all former political ties or dependencies and accepts the central bank's objective of safeguarding the value of the currency as his or her professional leitmotif." But this does not seem the best or most plausible type of explanation, in that it was not the fact that kings cannot sack archbishops that led Becket to change his stance, but rather a deep commitment to a set of values as embodied in a particular institution. To take a well-known recent central banking example, Helmut Schmidt hoped to tame a Bundesbank that he felt was obstructing his government's aims by appointing State Secretary Karl Otto Pöhl to the board of the Bundesbank, but Pöhl quickly identified with the Bundesbank view even before he was appointed president (which required the government's nomination, and thus might have been thought of as an incentive for Pöhl to toe a more politically compliant line). Another powerful example of the influence of unwritten rules and conventions is that of the postwar De Nederlandsche Bank, whose governor might be dismissed by the government according to the banking law. In practice, this never happened, and

an ethos developed in which such a dismissal became unthinkable. The political environment and the climate of expectations mattered more than the formal text of the law.

The conclusion of the debate, in a vast academic literature but also in politics, was that central banks should be given instrument independence, as distinct from goal independence (DEBELLE and FISCHER, 1994). The political process was the appropriate setting for the formulation of an overall goal – low inflation or monetary stability – and the instrument independence might guarantee that politicians could not cheat on their pledge. This meant that the respective functions of the political authority and the central bank needed a clearer and more transparent formulation, so that modern central banking can be described as a “long march toward greater transparency” (BLINDER, 2009).

The modern debate emphasized the independence of central banks from governments, because that appeared to be the major issue in eras of fiscal dominance, and in the aftermath of the Second World War. The issue of the dangers of central banks monetizing banking claims out of concern over vulnerability or instability of the financial system. The classical instance of this is the post-World War One German inflation and hyperinflation, which was not just a result of government deficits, but also of very low interest rate leading to the banking system. A more recent instance was the Russian monetization of inter-company credit in the early 1990s. As a result of the experience of the 1920s, German thinking moved to reduce the interconnections between central bank and financial system. In the 1990s, very strikingly, the Bundesbank successfully resisted initiatives to charge the new European Central Bank (ECB) with financial supervision.⁴

With all its weaknesses, there is no doubt that the new academic literature had some effect on the climate of opinion. By the 1990s, central bank independence was often thought to be a prerequisite for sound policy, although it was not listed as one of the ten commandments for a good institutional governance and policy framework as portrayed in the original formulation by John Williamson of the so-called Washington Consensus (WILLIAMSON, 1989). The ideas were then often translated into practice by a new generation of academic economists who turned to central banking – notably Mervyn King, Ben Bernanke, Axel Weber, and then Janet Yellen.

4 See JAMES (2012).

2 The power of example

The redrawing of central bank mandates often requires a political as well as an academic or intellectual impulse. Central banks – at least after the establishment of the Bank of England – have often been shaped on the basis of practical lessons and experiences drawn from other central banks. Indeed, even the Bank of England may have in part been based on the Genoese Casa di San Giorgio. The design of the first German central bank, the Deutsche Reichsbank (Imperial Bank), was heavily influenced by the Bank of England after the reform of the 1844 Peel Act. In turn, the Reichsbank served as a model for the Bank of Japan, and then after 1908 in the discussions of the US National Monetary Commission as a prototype for a US central bank. After severe German policy failures in the interwar period, lessons from the Federal Reserve System were applied when it came to a redesign of German central banking after 1945. The new institution eventually became the Deutsche Bundesbank, which was widely celebrated (along with the Swiss National Bank) as a successful model of resistance to inflation, and as a strong argument for central bank independence. In particular, many features were transferred from the Bundesbank to the ECB.

Figure 1: Inflation and central bank independence, 1950s-1980s



Source: ALESINA and SUMMERS (1993).

How were examples transferred? The foreign example became most attractive in the case of an obvious domestic failure. The National Monetary Commission was a response to the financial panic of 1907; the redrawing of the constitution of German central banking was needed after the catastrophe of National Socialism (which involved inflationary finance). BORDO and SIKLOS (2017) have recently suggested that the more powerful models come from policy experiments in small open economies.

Margaret Thatcher correctly sensed a failure of what was sometimes termed the British economic directorate – the nexus of the Treasury and the Bank of England – and believed that British monetary policy-making was inadequate. She had met the Swiss monetarist economist Karl Brunner while staying at Schloss Freudenberg on Lake Zug, at the house of a wealthy retired former Conservative backbench MP, Douglas Glover. Brunner argued that the Bank of England could control money in the UK by adopting Swiss techniques. Switzerland had had a brief but unsatisfactory period in 1978 when a foreign exchange anchor – an informal peg to the Deutsche mark – produced high inflation, and since then the country had adopted a monetary target. But at present, Brunner thought, in the UK, bank reserve requirements frustrated any attempt at control, and the Bank should abandon its discount window operations:

The Bank should abandon its lender of first resort attitude and concentrate on controlling the monetary base. I had the opportunity to ask this summer an official of the Bank of England about their attitudes and procedure. I inquired in particular why the Green Book (a document laying out the consensus view of the Bank of England and the Treasury on monetary policy) essentially attempted to sell the traditional procedures and customs under the pretense of a monetary control policy. The answer I obtained emphasized that the announcement of a monetary control policy was really sufficient and any adjustments of external institutions or internal procedures would have ‘confused’ the financial markets. This is in my judgment just a camouflage justifying an essentially rhetorical attention to monetary control. It is noteworthy in this context that the Green Book on Monetary Control thoroughly failed to address the central issues and crucial requirements for an effective monetary control. I find this particularly distressing as some members of the Bank’s staff, at the request of the Governor, engaged in regular discussions with the Swiss National Bank bearing on these issues. Whatever observations I may have on the behaviour of Central Bank suggest that we cannot expect a change in attitudes or procedures developed by an entrenched bureaucracy without a substantial outside pressure. I find it difficult to believe that the Bank of England will on its own initiative attend to the two recommendations made above.

Brunner went on to suggest a new sort of academic seminar in which monetarist economists – he mentioned specifically Alan Walters, Michael Parkin and David Laidler – should instruct and correct the Bank’s staff.⁵

Later in the 1980s, the Bundesbank appeared as a model for emulation. Thatcher sometimes told Bundesbank President Karl Otto Pöhl how much she admired his institution, but when he replied that she should make the Bank of England independent, she replied that that was a different model.

Finally, the Bank of England and the Treasury realized the power of the foreign example and of foreign persuasion and used that example in a bureaucratic power bid. As the success of Paul Volcker’s anti-inflationary strategy became clear, the US looked like the best model. Volcker’s successor, Alan Greenspan, played a critical role. In June 1990, when the Treasury and the Bank were trying to persuade Thatcher of the benefits of membership of the European Monetary System (EMS), the rule-bound discipline of EMS looked like the gold standard and was hence desirable. When Greenspan met Thatcher in June 1990, he devoted “a good deal of the meeting” to “restructuring” the Prime Minister’s view of the virtue of floating exchange rates. She had thought that arrangement was the only one compatible with free markets, while Greenspan countered that “this was not right because the gold standard had been a viable alternative.” Thatcher “jumped on this, saying that a gold standard might provide just the sort of set of rules that were needed as a sound foundation for a market-place.” She then called it a “spine,” and Greenspan, in recounting the episode to Bank of England Governor Robin Leigh-Pemberton, explained “that the most important element of the discussion had been the PM’s spine theory.”⁶

The process of foreign emulation in British monetary policy making did not stop with Thatcher. After the collapse of British membership of EMS, the UK turned quickly to inflation-targeting – an approach that looked especially attractive as it had been used to bring down very high levels of inflation in New Zealand.

Greenspan spent a considerable amount of time in 1996 and 1997 advising Gordon Brown on the economic benefits of central bank independence. It was American monetary policy and American economists, rather than European central bankers, who seemed to represent to Labour Party policy-makers the most congenial vision of the future of UK policy-making. A critical role was played by Ed Balls, who had done postgraduate work at Harvard, where he had been taught by

5 “Monetary Policy: Karl Brunner letter to PM (monetary control)”, UK National Archive (TNA) PREM 19/178 f. 53, 10 September 1980.

6 “Leigh-Pemberton: Telephone conversation with Alan Greenspan”, Bank of England archive, 7A148/6, 12 June 1990; see also WALL (2008: 92-3).

Martin Feldstein and had been deeply influenced by Larry Summers and Alberto Alesina (in particular, by their adherence to the new view of the time-consistency arguments for central bank independence). In a final round of the talks with Greenspan, on 20 February 1997, shortly before the British election that would bring a Labour victory and an immediate move to central bank independence, Greenspan told Balls and Brown that it was “‘unfair’ to expect elected politicians to make unpopular decisions on interest rates” (KEEGAN, 2003: 157). When matters are bad, foreign advisers are more trusted than domestic academic opinion (an extreme example is the discussion of German monetary reform between 1945 and 1948, when the US military advisers clearly had an additional muscle). The question of foreign advice is part of a more general globalization story.

3 Spillovers in a globalized world

There are two ways in which globalization changes the parameters of monetary policy: one related to a financial channel, and the other to trade.

First, the capital channel. In the 1980s, many advanced industrial economies opened their capital accounts. The background to Margaret Thatcher’s policy experiments – and a fundamental challenge to monetary policy-making – was the lifting of exchange controls in 1979. Large-scale capital flows can undermine monetary policy. The classical case is when a central bank is worried about inflation, tightens policy by increasing interest rates, and attracts foreign capital. In a flexible exchange rate setting, the flows continue in the expectation of appreciation gains; and in a fixed exchange rate setting, they may anticipate a revaluation. This problem was endemic for Germany and Switzerland in the 1970s, and they applied a variety of measures to limit capital inflows. The dilemma also affected the UK in the early 1980s, and in consequence managing the exchange rate became an increasingly important topic of British policy attention, despite a profound intellectual aversion for fixing rates. The reverse situation is also thinkable: faced by recession, monetary authorities may loosen, making it easier for individuals and companies to borrow in order to buy foreign exchange, accelerating capital outflow and depreciation and further damaging economic output. There are thus pro-cyclical spirals that follow from credit developments.

This old intuition has recently entered the academic literature. FORBES and WARNOCK (2012) and BRUNO and SHIN (2015) put a measure of risk (VIX) in the core economy at the center of their analysis and then analyzed the surge in capital flows associated with the lowering of the VIX. Credit flows correspond to a global financial cycle (SHIN, 2012; BRUNNERMEIER and DE GREGORIO et al., 2012;

TUCKER, 2015). The policy constraint following from free capital movements has recently been elucidated by HÉLÈNE REY (2013), who shows that in a globalized world of free capital movements, monetary policy is limited even with flexible or floating exchange rates. Monetary policy in the center country shaped the leverage of global banks, which then determine credit flows and credit growth in the international financial system. Rey concludes: “This channel invalidates the ‘trilemma,’ which postulates that in a world of free capital mobility, independent monetary policies are feasible if and only if exchange rates are floating. Instead, while it is certainly true that countries with fixed exchange rates cannot have independent monetary policies in a world of free capital mobility, my analysis suggests that cross-border flows and leverage of global institutions transmit monetary conditions globally, even under floating exchange-rate regimes.” Even (and especially) the core country at the center of global monetary policy-making will be affected by that. In the early 2000s, Ben Bernanke explained a constraint on US policy as being posed by a global savings glut, stemming from high rates of savings in emerging market economies (BERNANKE, 2005).

The second channel concerns trade. As more markets opened, the spread of production to lower-cost producers put downward pressure on many goods. By the beginning of the 2000s, it was this channel that was increasingly held to be responsible for low-inflation outcomes in the industrial world and in popular analyses of the “death of inflation” (BOOTLE, 1996). Rogoff made the same case at Jackson Hole in 2003, but encountered substantial pushback from the Fed (ROGOFF, 2003). The effects of trade on US inflation were described as “modest” by JANET YELLEN (2006), and as “gradual and limited” by DON KOHN (2006).⁷

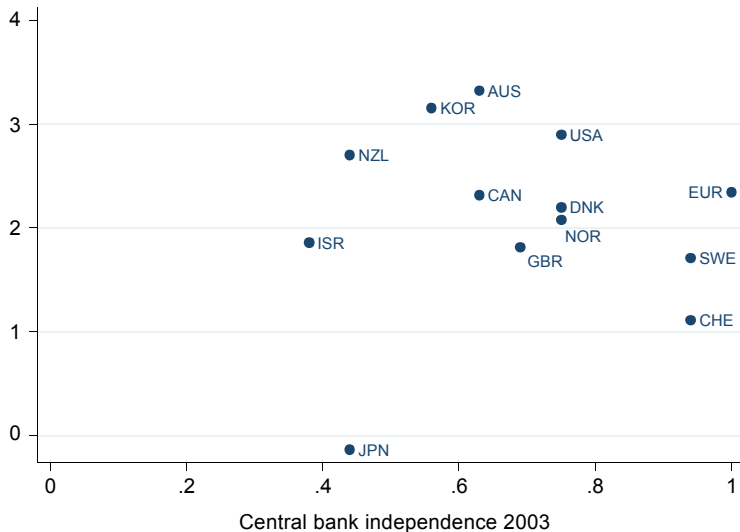
4 The outcome

Both the financial and the trade channels contributed to a substantial inflation convergence in the last decades of the 20th century. The consequence is that as a global financial cycle developed, it became harder to see correlations between the constitutional and institutional features of central bank design and inflation performance. There was also much less divergence in monetary policy views in this constrained setting, and thus unsurprisingly monetary policy committees looked as if they were functioning well and they congratulated themselves on superior performances. Plots of central bank independence against inflation outcomes in the 21st century show a compressed range of inflations, and the result has been an interpretation that makes it harder to assess the effects of central bank independence. As BALLS and STANSBURY (2017) put it, “with so little variation

⁷ See also BALL (2006).

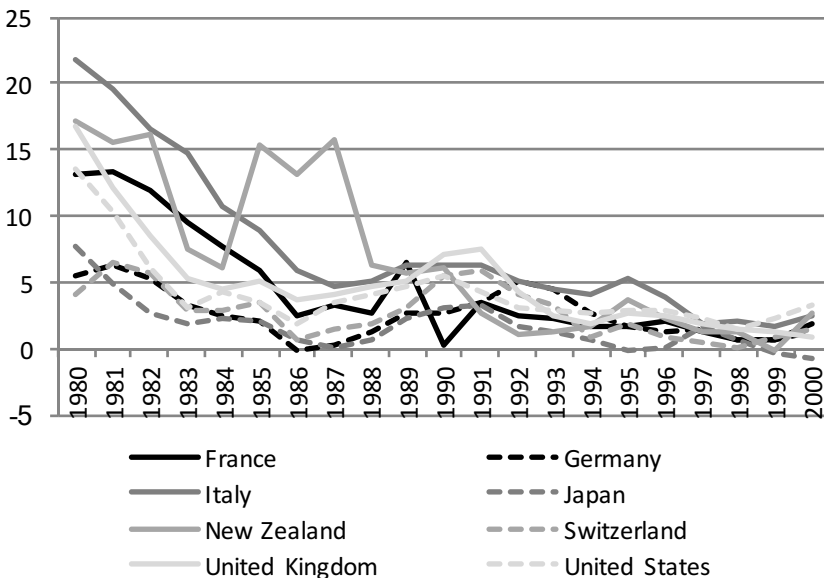
in either measure, the claim that the inflation–independence relationship has disappeared cannot be decided empirically”.

Figure 2: Inflation and central bank independence, 2000-2008

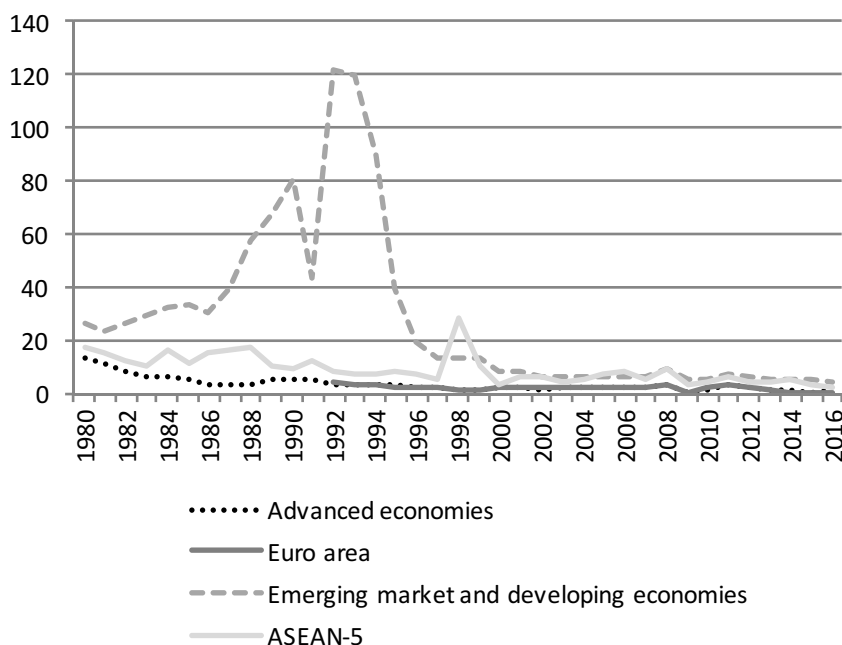


Source: BALLS and STANSBURY (2017).

Figure 3: CPI inflation in industrialized countries



Source: IMF World Economic Outlook data.

Figure 4 CPI inflation convergence globally

Source: IMF *World Economic Outlook* data.

It is correct that there are limits on the inflation convergence. Looking at the 1980s and 1990s, Busetti, Forni, Harvey and Venditti (2006) show two separate clusters, or convergence clubs: a lower inflation group that comprises Germany, France, Belgium, Austria, Finland; and a higher inflation one with Spain, Netherlands, Greece, Portugal and Ireland. Italy appears to form a cluster of its own, standing in between the other two. Such limits are also observable on a global level, although the best explanation is of a Balassa–Samuelson effect (i.e. the costs for non-traded goods and services increasing more rapidly in a converging economy). That, rather than bad policy design, may explain a great deal of the observation that there are two inflation “clubs” in Europe.

We may draw three conclusions from this survey. First, the interaction between good design and globalization is complex. Good design in central banking may have been important to the creation of an effective financial system, which makes opening up capital accounts less dangerous, and the output outcome more beneficial. But globalization also tends to produce a policy convergence, in which design elements become increasingly unimportant.

Second, design and institutional effectiveness matter greatly in the first “model” countries, such as the US and Switzerland, which built up their reputation in a non-globalized world when policy approaches were critical in defining policy outcomes. They mattered less afterwards, and good performance became rather more accidental. That is perhaps not that serious.

Third, and most devastatingly, the more problematical consequence of a globalization-induced model is that the accidental success pushed a mode of thinking that made monetary policy central and left out traditionally central elements of central banking – in particular, financial supervision. Before 2007-2008, few considered the enormous danger that followed from the political leverage that very large, systemically important financial institutions threatened by failure could apply both to governments and central banks.⁸ A retrospective critique developed later, and was also expressed by stressed central bankers, that the central bank models that had worked well in normal times could not deal with “radical uncertainty” (KING, 2016: 171). In his 1990 lecture, Paul Volcker gave a strict warning on this point: “I insist that neither monetary policy nor the financial system will be well-served if a central bank loses interest in, or influence over, the financial system.”⁹

References

- ALESINA, ALBERTO (1988), Macroeconomics and politics, in: FISCHER, STANLEY (editor), *NBER Macroeconomics Annual*, MIT Press, Cambridge, MA, pp. 17-52.
- ALESINA, ALBERTO (1989), Politics and business cycles in industrial democracies, *Economic Policy* 8, pp. 58-98.
- ALESINA, ALBERTO and VITTORIO GRILLI (1992), The European Central Bank: Reshaping monetary policy in Europe, in: Matthew Canzoneri, Vittorio Grilli, and Paul Masson (editors), *Establishing a Central Bank: Issues in Europe and Lessons from the United States*, Cambridge University Press and CEPR, Cambridge, UK, pp. 49-77;
- ALESINA, ALBERTO and LARRY SUMMERS (1993), Central bank independence and macroeconomic performance: Some comparative evidence, *Journal of Money, Credit and Banking* 25 (2), pp. 151-162.
- BADE, ROBIN and MICHAEL PARKIN (1988), Central bank laws and monetary policy, mimeo, Department of Economics, University of Western Ontario.

⁸ This is now the theme of a vast literature; pioneered by JOHNSON and KWAK (2010).

⁹ This remark is central to the argument of Paul Tucker in his retrospective survey of what went wrong (TUCKER, 2015).

- BALL, LAURENCE M. (2006), Has globalization changed inflation?, NBER Working Paper No. 12687, Cambridge, MA.
- BALLS, ED and ANNA STANSBURY (2017), Twenty years on: Is there still a case for Bank of England independence? VoxEU.org, May.
- BARRO, ROBERT J. and DAVID B. GORDON (1983), Rules, discretion and reputation in a model of monetary policy, *Journal of Monetary Economics* 12, pp. 101-121.
- BERNANKE, BEN S. (2005), The global saving glut and the U.S. current account deficit, remarks at the Sandridge Lecture, Virginia Association of Economists, Richmond, VA, 10 March 10.
- BLINDER, ALAN (2009), Talking about monetary policy: the virtues (and vices?) of central bank communication, BIS Papers No. 274, Bank for International Settlements, Basel.
- BORDO, MICHAEL D. and PIERRE L. SIKLOS (2017), Central banks: Evolution and innovation in historical perspective, NBER Working Paper No. 23847, Cambridge, MA.
- BOOTLE, ROGER P. (1996), *The Death of Inflation: Surviving and Thriving in the Zero Era*, Nicholas Brealey, London
- BRUNNERMEIER, MARKUS, JOSÉ DE GREGORIO et al. (2012), *Banks and Cross-Border Capital Flows: Policy Challenges and Regulatory Responses*, Committee on International Economic Policy and Reform, Brookings, Cambridge, MA.
- BRUNO, VALENTINA and HYUN SONG SHIN (2015), The operation of the risk-taking channel through the banking sector, *Journal of Monetary Economics* 71, pp. 119–132.
- BUCHANAN JAMES and ROBERT WAGNER (1977), *Democracy in deficit*, Academic Press, Amsterdam.
- BUSETTI, FABIO, LORENZO FORNI, ANDREW HARVEY and FABRIZIO VENDITTI (2006), Inflation convergence and divergence within the European Monetary Union, ECB Working Paper Series No. 574, Frankfurt.
- CUKIERMAN, ALAN (1992), *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*, MIT Press, Cambridge MA.
- CUKIERMAN, ALAN, STEVEN B. WEBB and BILIN NEYAPTI (1992), Measuring the independence on central banks and its effect on policy outcomes, *World Bank Economic Review* 6 (3), pp. 353-398.
- DEBELLE, GUY and STANLEY FISCHER (1994), How independent should a central bank be?, Working Papers in Applied Economic Theory 94-05, Federal Reserve Bank of San Francisco.
- EIJFFINGER, SYLVESTER C.W. and JAKOB DE HAAN (1996), *The political economy of central-bank independence*, *Princeton Studies in International Economics* 19, Princeton University, Princeton, NJ.

- EIJFFINGER, SYLVESTER C.W. and ERIC SCHALING (1993), Central bank independence in twelve industrial countries, *Banca Nazionale del Lavoro Quarterly Review* 184, pp. 49-89.
- FORBES, KRISTIN and FRANCIS E. WARNOCK (2012), Capital flow waves: surges, stops, flight and retrenchment, *Journal of International Economics* 88 (2), pp. 235-251.
- GRILLI, VITTORIO, DONATO MASCIANDARO and GUIDO TABELLINI (1991), Political and monetary institutions and public finance policies in the industrial countries, *Economic Policy* 13, pp. 341-92.
- JAMES, HAROLD (2012), *Making the European Monetary Union*, Harvard University Press, Cambridge, MA.
- JOHNSON, SIMON and JAMES KWAK (2010), *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*, Pantheon, New York.
- KEEGAN, WILLIAM (2003), *The Prudence of Gordon Brown*, John Wiley, Chichester, UK.
- KING, MERVYN (2016), *The End of Alchemy*, Norton, New York.
- KOHN, DONALD L. (2006), Remarks at the Federal Reserve Bank of Boston's 51st Economic Conference, 16 June.
- KYDLAND, FINN E. and EDWARD C. PRESCOTT (1977), Rules rather than discretion: the inconsistency of optimal plans, *Journal of Political Economy* 85 (3), pp. 473-491.
- NEUMANN, MANFRED J.M. (1991), Precommitment by central bank independence, *Open Economies Review* 2, p. 103.
- POSEN, ADAM (1998), Central bank independence and disinflationary credibility: A missing link?, *Oxford Economic Papers* 50, pp. 335-359.
- REY, HÉLÈNE (2013), Dilemma not trilemma: The global financial cycle and monetary policy independence, Jackson Hole Presentation, August.
- ROGOFF, KENNETH (1985), The optimal degree of commitment to an intermediate monetary target, *Quarterly Journal of Economics* 100 (4), pp. 1169-1189.
- ROGOFF, KENNETH (2003), Globalization and global disinflation, *Federal Reserve Bank of Kansas City Economic Review*, Fourth Quarter, pp. 45-78.
- SELGIN, GEORGE A. (2010), The futility of central banking, *Cato Journal* 30 (3), pp. 465-473.
- SHIN, HYUN SONG (2012), Global Banking Glut and Loan Risk Premium, Mundell-Fleming Lecture, *IMF Economic Review* 60 (2), pp. 155-192.
- PAUL, TUCKER (2015), hHw can central banks deliver credible commitment and be "emergency institutions"?, Presentation at the Hoover Institution Conference, Stanford University, 21 May.
- VOLCKER, PAUL (1990), The triumph of central banking, The 1990 Per Jacobsson Lecture, International Monetary Fund, Washington, DC, 23 September.
- WALL, STEPHEN (2008), *A stranger in Europe: Britain and the EU from Thatcher to Blair*, OUP, Oxford.

- WILLIAMSON, JOHN (1989), What Washington means by policy reform, in:
WILLIAMSON, JOHN (Editor), *Latin American Readjustment: How Much has Happened*, Institute for International Economics, Washington, DC.
- YELLEN, JANET L. (2006), Monetary policy in a global environment, speech at the Euro and the Dollar in a Globalized Economy Conference, Federal Reserve Bank of San Francisco, 27 May.

