Unfinished business? The ECB reform ahead of euro area enlargement[1]

Helge Berger*

Central banks like to be known as institutions with steady hands, but this does not mean that they do not change – quite to the contrary. The US Federal Reserve System (Fed) re-shaped the way in which it had reached decisions until the 1930s, the Bundesbank reorganized in the late 1950s and again in the 1990s, as did the Swedish Riksbank, the Bank of England, as well as numerous other central banks during this period. The ECB reform of 2003 is only the latest addition to that list.

These changes were aimed at the efficiency of the decision-making framework for monetary policy. For instance, the Bundesbank reform of 1992 prevented a significant increase in the number of voting state governors in its Central Bank Council due to German unification. Before the reform, each state had a representative in the committee, and without reform, membership would have exceeded 22 – a number that, according to the Bundesbank, "would have greatly complicated that body's decision-making processes" (Bundesbank 1992, p.50). In addition, the reform aimed at strengthening the position of the Directorate within the council to ensure a federal perspective. And the asymmetric rotation system within the Federal Open Market Committee (FOMC) is a direct result of an attempt to secure fair representation of the economic weight of regional Fed districts in US monetary policy (Meltzer 2003).

With an eye on euro area enlargement, the ECB reform of 2003 moved into similar directions. The reform limited the number of national central bank governors voting in the Governing Council to 15, irrespective of the number of euro area members and introduced an asymmetric rotation scheme organizing the way governors will exercise these voting rights once membership exceeds the number of votes.[2] As euro area membership increases, governors will be divided into two and then three groups out of which they rotate into a limited number of voting seats. Country representatives will be allocated to groups by economic size, and groups encompassing larger countries hold more voting rights in the Governing Council. The open question is whether this will be enough.

Searching for benchmarks to evaluate the ECB's state of preparedness for euro area enlargement, three basic issues stand out: First, how many people should be responsible for monetary policy decisions? Second, how much weight should be given to central or regional representation in decision-making? And, lastly, should regions be represented according to their economic weight?

Three principles of optimal central bank design

Size

Euro area enlargement necessitates ECB reform according to size, centralization and representation

Size matters, when it comes to the efficiency of monetary policy making, and to some extent bigger may be better. A larger monetary policy committee (MPC) may be better able to form a view on the state of the economy than relying on a single individual (Gerlach-Kristen 2006). Faced with an uncertain environment, MPC members pool individual information, cooperate on information processing, and will, as a rule, form better decisions with a smaller tendency to go to extremes (Blinder 1998, Riboni and Ruge-Murcia 2006). Blinder and Morgan (2005) and Lombardelli et al. (2005) second this argument based on empirical results from experiments.

But larger MPCs also come at a cost. One argument is that the information processing advantages of

* Freie Universitaet Berlin & CESifo.

[1] The paper draws heavily on Berger (2006). See Sibert (2006), Fujiki (2005), and Gerling et al. (2003) for relevant surveys.

[2] ECB (2003). See, inter alia, Hefeker (2002), Berger (2002), Dvorsky and Lindner (2003), Meade (2003), Berger et al. (2004), de Haan et al. (2004).

larger MPCs are likely to be diminishing because members may have an incentive to "free-ride" on the efforts of others. In addition, decision-making costs are likely to increase exponentially with MPC membership (Berger 2006). Larger MPCs will spend considerable more time just taking note of positions and "sounding each other out" bilaterally before or during meetings. This is a particularly relevant scenario in consensus-based MPCs such as the Fed and the ECB. And while effective leadership by the board or directorate will surely be a limiting factor, there is no denying that larger MPCs will have to spend more time and effort on decision making than smaller MPCs.

Too big a monetary policy committee is counterproductive

Weighing costs and benefits, the optimal size of a monetary policy committee is likely to be a moderately large number. To provide perspective, Table 1 (upper panel) shows the distribution of central bank governing bodies that are concerned with setting policy goals as well as the distribution of bodies implementing and/or deciding monetary policy. The median in both categories falls into the 7 to 9 and 10 to 12 member range, respectively. The median MPC surveyed by Fry et al. (2000) has 5 to 10 members. The lower panel suggests that the ECB's Governing Council, with 18 voting members in 2006, is among the larger MPCs, comparable only to the Fed's FOMC or the pre-1999 Central Bank Council of the German Bundesbank. If, however, euro area membership were to increase to 24 members – a likely scenario assuming entrance of the ten new EU member countries as well as Rumania and Bulgaria – the Council would comprise 30 members. And while the 2003 ECB reform limits the number of voting members to 21, actual meeting participation is likely to be higher. Remarkably, even the ECB (2003, p.83) seems to consider this problematic: "[Th]e participation of *all* [emphasis in original] governors at the meetings of the Governing Council will not necessarily make deliberations easier …"

Centralization

The ratio of centrally appointed to regionally appointed MPC members is a matter of concern if regions differ in economic terms and regional MPC representatives display "home bias", focusing less on the area aggregate than on developments at home. It is probably safe to assume that some of the differences in economic developments within the euro area will continue to persist (de Haan et al. 2004, Giannone and Reichlin 2005). Moreover, there is empirical evidence of regional influences along these lines in federal central bank systems such as the Fed and the Bundesbank (Meade and Sheets 2005, Berger and de Haan 2002).

Against this background, one direct benefit of a higher degree of MPC centralization is a reduction in the regional bias in decision making of regionally appointed committee members. Centrally appointed members are more likely to focus on area-wide targets such as Eurostat's weighted HCPI index (e.g., von Hagen and Süppel 1994).

On the other hand, Moser (1999) and Hallerberg (2002) point out that regional representation can foster the institution's independence by adding further veto players on the political side. The Bundesbank seemed to support this view, when it called the presence of regional governors in the Central Bank Council an "important element in the Bundesbank's … independence" (Bundesbank 1992, p.49–50). In addition, Goodfriend (2000), Berger (2002), and Maier et al. (2003) argue that having regional representatives within the Council

Table 1

Number of members in governing bodies 2003

(a) Distribution

	Distribution of Members (in percent)					*Obs.*
	1–3	*4–6*	*7–9*	*10–12*	*≥ 13*	
Policy Committees	4	28	47	11	10	50
Implementation Committees	4	10	10	40	40	95

(b) Selected Examples

Bank (Federal)	*Number*	*Bank (Central)*	*Number*
Bundesbank pre-1957	10	Australia	9
Bundesbank 1998	17	Canada	7
Fed	12 (19)#	New Zealand	1
ECB (2006)	18	Sweden	6
ECB (EMU24)	21 (30)#	UK	9

#: The FOMC has 12 voting members, but 19 regular members participate in FOMC meetings. Taking into account the 2003 ECB reform, the ECB Governing Council would have 21 voting members and 30 members overall if euro area membership increased to a hypothetical 24 ("EMU24"), comprising the current 12 members, the ten recent EU entries, and Bulgaria and Rumania.

Source: Berger (2006).

Table 2

Structure of governing bodies 2003

(a) Distribution

	Distribution (in percent)				Obs.
	Sectoral representation		Regional representation		
	Yes	No	Yes	No	
Policy Committees	8	92	8	92	50
Implementation Committees	7	93	7	93	94

(b) Selected Examples

	Board	Regional Central Bank governors	Overall council members	Political weight ofgGovernors
	Federal central bank models			
Bundesbank 1998	8	9	17	52.9
Fed	7	5 (12)	12 (19)	41.7 (62.2)
ECB (2006)	6	12	18	66.7
ECB (EMU24)	6	15 (24)	21 (30)	71.4 (80.0)
	Centralistic central bank models			
Australia	9	0	9	0
Canada	7	0	7	0
New Zealand	1	0	1	0
Sweden	6	0	6	0
United Kingdom	9	0	9	0

Notes: Numbers without (with) parentheses indicate voting (non-voting) membership.

Source: Berger (2006).

could enhance the precision with which regional economic data is perceived and analyzed.

The implication is that there are advantages in an intermediate degree of centralization. And, indeed, while Table 2 shows that a majority of central bank governing bodies is fully centralized, larger federal central bank systems tend to have regional MPC representation.[3] Germany, the United States, and the euro area all fall into this category – another one would be Switzerland (Lybeck and Morris 2004). Note, however, that the ECB shows the smallest degree of centralization: the voting rights attached to regional representatives in the Bundesbank's Central Bank Council and the Fed's FOMC are much lower, and the gap is bound to increase as EMU membership increases. Similar conclusions hold for total MPC membership including non-voting governors.

Representation

Taking the degree of centralization of MPCs as given, the question is whether the voting rights of regional governors (or their otherwise defined political clout within the committee) should be in line with the economic weight of the region they represent. In other words, should the committee be organized along the "one region, one vote principle"?

Regional representation should reflect the countries' economic weight

There are arguments pointing in both directions. If regions differ in economic as well as preference terms and their representatives show signs of a "home bias", misrepresentation of economic size could lead to MPC decisions deviating from policies chosen by a social planner looking at the weighted area average. For instance, a majority of over-represented smaller member states burdened with inflation above the weighted inflation average might favor too contractionary a policy stance. To avoid regional bias in monetary policy, voting weights should match regional economic weight.[4] On the other hand, the "one region, one vote" principle could foster political stability. Assume that regional policy preferences are subject to shocks of similar volatility with the potential to distort MPC decisions. Then a more equal distribution of voting rights can help to moderate the

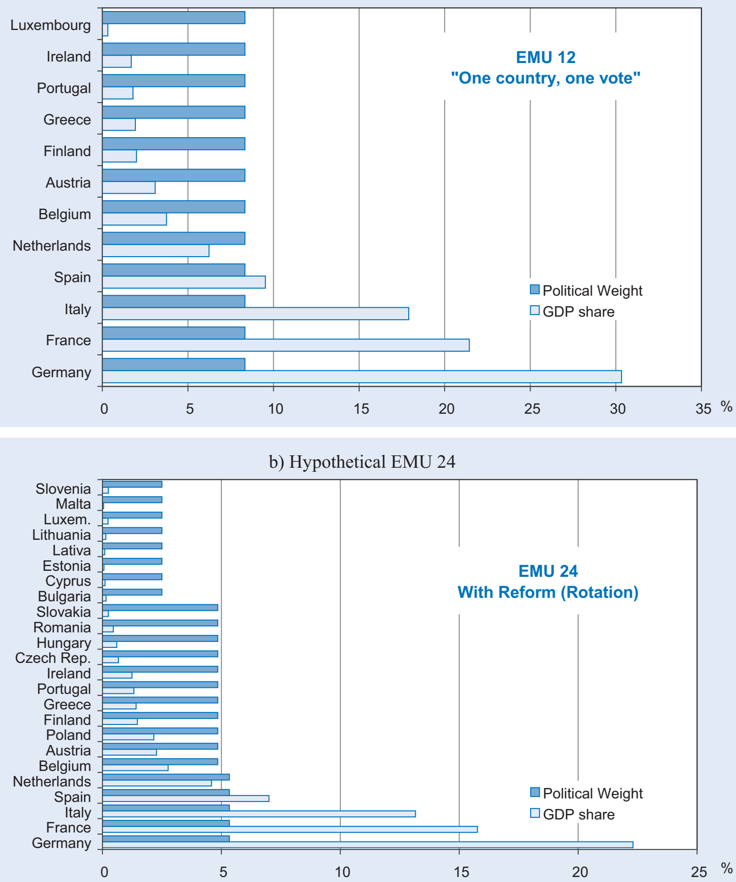
[3] The same holds for sectoral representation, which could be argued for along similar lines as regional representation.

[4] Broadly speaking, this is also true if monetary policy decisions are based on a bargaining approach as long as voting rights influence fall-back positions (Berger 2002). See Bindseil (2001), Baldwin et al. (2001) and Fahrenholz and Mohl (2004), among others, for a related discussion that takes into account coalition building.

Figure 1

DISTRIBUTION OF VOTING RIGHTS AND ECONOMIC SIZE IN EMU

a) Current Situation, 2006



Note: Relative size based on GDP.

Source: Berger (2006).

impact of these shocks on MPC decisions by allowing shocks to compensate each other (Berger 2002).

Regional misrepresentation may be reduced by asymmetric rotation schemes and by redrawing regional districts

As a rule, "one region, one vote" will not be optimal, but neither will be a perfect alignment of voting rights and relative economic size. Berger and Müller (2005) show that optimal regional representation will reflect both economic size and the stochastic properties of economic and preference shocks. Under plausible conditions, this suggests an intermediate solution, with some limited over-representation of relatively smaller countries.

By this standard, the misrepresentation of economic weight within the ECB's Governing Council may be extreme. Figure 1 compares the relative economic size of current euro area members with the voting power allocated to the governors representing these members (upper panel). Under current "one region, one vote" rules, seven out of 12 member countries are over-represented compared to their economic weight. This ratio could increase to 20 out of 24 in the EMU24 scenario despite ECB reform. As a consequence, an economic minority may, on occasion, decide monetary policy for the whole area.

Figure 2 adds to this picture by comparing time series for the sum of the squared difference between regional MPC vote shares and relative economic size in a given year for the US, Germany, and the euro area.

Some important stylized facts emerge. First, misrepresentation is not constant but changes over time, with institutional reform being the driving factor.[5] Second, both the Fed and the Bundesbank significantly reduced misrepresentation through the introduction of asymmetric rotation schemes to reflect relative economic size (Fed), the redrawing of regional districts to eliminate separate representation of smaller regions (Bundesbank), and the strengthening of the Board (both). This was no coincidence. For instance, the Bundesbank (1992) stressed that the 1992 redistricting ended a period of strong misrepresentation of regional economic size within the MPC, and Eichengreen (1992, p. 14) interprets the "early history of the Federal Reserve System" as a "cautionary tale" pointing "to the advisability of reducing existing European central banks to mere branch offices of the ECB or of eliminating them entirely." Finally, Figure 2 clearly identifies the ECB as an extreme case, with the misrepresentation indicator for the ECB's Governing Council reaching values about seven times higher than for the Fed or the Bundesbank. Despite the 2003 reform, this gap is likely to increase in the EMU24 scenario.

Unfinished business? Implications for ECB reform

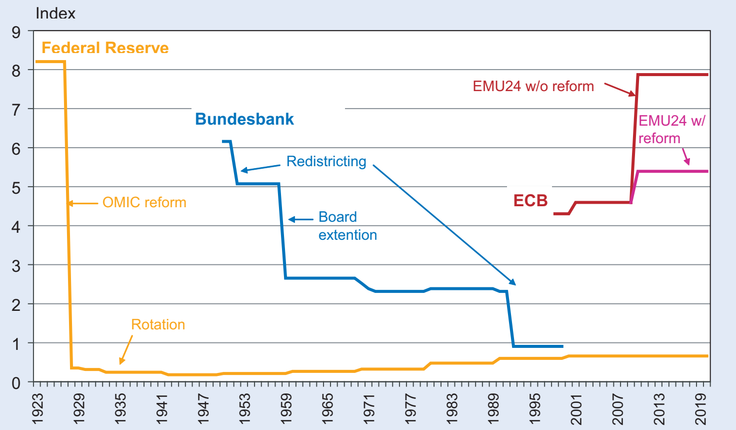
Status quo

The discussion in Section 2 establishes certain benchmarks (however crude) that help us to broad-

[5] See, e.g., Thygesen (1989) and Berger (1997).

Figure 2

MISREPRESENTATION OF ECONOMC SIZE



Source: Berger (2006).

Notes: The misrepresentation index measures the sum of the squared difference between regional vote shares in the monetary policy committee and relative economic size in a given year. It is assumed that Board members weigh regional developments according to a region's relative economic size – see Berger (2006) for a detailed discussion. Absent institutional reform, the data is updated in 10-year intervals. The likely entry of Slovenia into the euro area in 2007 is not taken into account.

ly characterize efficient central bank design – and, as of 2006, the ECB looks broadly in line with two out of three benchmarks. With a *size* of 18 members, the ECB's Governing Council is about on par with the pre-1999 Central Bank Council and the number of participating (if not voting) FOMC members. Looking at *centralization*, the ECB stands out somewhat more. At about 66 percent, the vote share commanded by regional representatives in the Governing Council clearly exceeds the ones in the Bundesbank and Federal Reserve. The most striking difference between these three banks occurs regarding the *representation*-benchmark, however. As just discussed, the "one country, one vote" principle causes a degree of misrepresentation of regional economic size that is stunningly larger than in the Fed or Bundesbank, and euro area enlargement is set to further increase the distance to the benchmark.

The 2003 reform of the ECB statute will moderate but not reverse the impact of enlargement. First, the reform will limit the number of voting members to 15 (out of 24) national central bank representatives and six Board members, but all 30 will participate in Governing Board meetings. Second, the reform will curb the decline in the degree of centralization, with regional representatives holding about 70 percent of voting rights (but about 80 percent of seats) in the Governing Council. Finally, the introduction of the asymmetric rotation system will check the increase in misrepresentation in the EMU24 scenario. Clearly, however, while the 2003 reform works in the right direction, it will only partially compensate the effects of enlargement, leaving the ECB farther away from the benchmark along all three dimensions than already today. There is, in short, room for improvement.

Alternatives for further reform

There are a number of reasons to expect the book on ECB reform to be opened again. First, the particularities of the asymmetric rotation scheme imply an unintended discontinuity in the difference between the voting frequencies of large and medium-sized countries in the Governing Council when EMU membership increases from 18 to 19 – which may require further discussion. Second, more generally, the introduction of new members to the euro area might lead to additional debates regarding, among other things, the way member countries are size-ranked and allocated rotation frequencies. Finally, looking back at the dynamics of central bank design in the United States and Germany, there is little reason to expect any central bank statute to be cast in stone – especially when potential inefficiencies are looming.

More reforms will be necessary as enlargement proceeds

In this case, what are options for (further) ECB reform and how do they compare with the benchmarks discussed above? Table 3 gives a brief overview some of the possibilities.

One principal option would be to substitute the planned rotation scheme by alternative setups to better reduce the mismatch between political and economic weights of regional governors in the Governing Council. Their shared disadvantage is that, despite a reduction in the de jure-size of the MPC, they would not necessarily reduce decision making costs. With *IMF-style representation,* regional governors are likely to indirectly participate in the decision-making process at the group level. The same applies to *Bundesbank-style redistricting* of national central bank regions, if representatives of countries forced into one district would continue to influence the behavior of the district's MPC representative. *EU-style weighted voting* under the consensus approach falls into the same fold.

Table 3

Alternative ECB reform scenarios

Alternative scenarios	*Size*	*Centralization*	*Representation*	*Plausible?*
(1) Substitute rotation:				
(a) IMF-style representation: Equal-sized groups of CBs with restricted mandate	Very large (de facto)	Low	Close(r) to proportional	Unlikely, at least de jure
(b) Buba-style redistricting: Redistricted regional CBs of similar economic size	Possibly optimal	Low	Close(r) to proportional	Unlikely, at least de jure, in the short-run
(c) EU-style weighted voting: Size-weighted governor votes, all participate	Very large (de facto)	Low	Proportional	Unlikely
(2) Move to full centralization: Decision power rests with Board alone	Small	Very high	Proportional via Board	Unlikely
(3) Fine-tune reform: More asymmetric rotation; larger Board, fewer governors	Very large (de facto)	Optimal	Close(r) to proportional	Perhaps

A second principal option remains *full centralization.* Bringing the ECB into the main stream of central bank design would require giving up the existing federal structure, which would constitute an even more radical departure from the status quo than substituting the envisaged rotation scheme. The advantages of a fully centralized solution include the likely absence of a regional bias in decision-making and low decision-making costs. A possible disadvantage could be a reduction in factual independence due to the absence of checks and balances.

A reduction in the number of Council seats and a changed allocation of regional voting rights might improve centralization and representation

Perhaps the greatest problem with the reform scenarios discussed so far is that their chances of being implemented are, at best, modest. This is particularly true of the centralization option, which runs against the organizational principle underlying most other European institutions and would require EMU member countries giving up even the last iota of influence on ECB policy after having given up monetary sovereignty for a seat in the Governing Council (Berger et al. 2004). Differentiating between schemes to substitute rotation, weighted voting is perhaps the least plausible option because it does achieve little more than the envisaged rotation system, and rotation is seen as more compatible (at least in formal terms) with the idea that each member casts "one vote" (ECB 2003). In comparison, redistricting and representation seem somewhat more likely to be implemented – if not formally, than perhaps on a factual basis. Redistricting could be a natural longer-run solution to the strains of the ever increasing demands of full-scale membership in the Eurosystem put on smaller member countries. Similar forces could lead to the factual introduction of elements of representation within the envisaged rotation scheme (for instance, by smaller countries collectively organizing meeting-preparation or even voting).

The most likely further reform effort, however, is probably a *fine-tuning of the rotation scheme* setup – and this might not be a bad thing. Such a reform could take the form of a reduction of the regional component through an increase in the Board's vote share and a more asymmetric allocation of voting rights among regional representatives (by changing the vote allocation of country groups or increasing the number of groups) to reduce misrepresentation. A further reduction in the number of Governing Council seats in an attempt to limit decision-making costs would also be conceivable, but, as with representation and weighted voting, the impact on actual decision-making costs would depend on the Governing Council's willingness to enforce decision-making by vote and forgo consensus-based practices involving all members. Nevertheless, such fine-tuning may have the potential of bringing the ECB closer to the benchmark at least in two out of three areas (i.e., centralization and representation). In that sense, the most likely approach to further ECB reform might very well be among the more promising ones in efficiency terms.

References

Baldwin, Richard, Erik Berglöf, Francesco Giavazzi, and Mika Widgren (2001), "Preparing the ECB for Enlargement," *CEPR Policy Paper,* 6, CEPR: London.

Berger, Helge (1997), "The Bundesbank's Path to Independence. Evidence from the 1950's", *Public Choice,* 93, 427–53.

Berger, Helge (2002), "The ECB and Euro-Area Enlargement," *IMF Working Paper,* 02/175.

Berger, Helge (2006), "Optimal Central Bank Design: Benchmarks for the ECB", *The Review of International Organizations,* 1(3), pp. 207–235.

Berger, Helge and Jakob de Haan (2002), "Are Small Countries too Powerful Within the ECB?" *Atlantic Economic Journal,* 30 (3), 1–20.

Berger, Helge, Jakob de Haan, and Robert Inklaar (2004), "Restructuring the ECB," in: Helge Berger and Thomas Moutos (eds.), *Managing EU Enlargement,* Cambridge: The MIT Press, 29–66.

Berger, Helge and Till Müller (2004). "How Should Large and Small Countries Be Represented in a Currency Union?" *CESifo Working Paper,* 1344.

Bindseil, Ulrich (2001), "A Coalition-Form Analysis of the "One Country-One Vote" Rule in the Governing Council of the European Central Bank," *International Economic Journal,* 15(1), 141–64.

Blinder, Alan (1998), *Central Banking in Theory and Practice.* The MIT Press: Cambridge, MA.

Blinder, Alan and John Morgan (2005), "Are Two Heads Better Than One? Monetary Policy by Committee," *Journal of Money, Credit and Banking,* 37(5), 798–811.

Deutsche Bundesbank (1992), "Restructuring the Bundesbank," *Monthly Report,* August, 48–53.

Dvorsky, Sandra and Isabella Lindner (2003), "Institutionelle Entwicklungen im ESZB. Anpassung der Stimmrechtsmodalitäten im EZB-Rat," *Österreichische Nationalbank, Berichte und Studien,* 2, 144–59.

Eichengreen, Barry (1992), "Designing a Central bank for Europe: A Cautionary Tale from the Early Years of the Federal Reserve System", in: Matthew Canzoneri, Vittorio Grilli, and Paul Masson (eds.), *Establishing a Central Bank: Issues in Europe and Lessons from the US,* Cambridge University Press, Cambridge, 13–40.

European Central Bank (ECB) (2003), "The Adjustment of Voting Modalities in the Governing Council," *Monthly Bulletin,* May, 73–83.

Fahrholz, Christian and Philipp Mohl (2004), "EMU-enlargement and the Reshaping of Decision-making within the ECB Governing Council: A Voting-Power Analysis," *Ezoneplus Working Paper,* 23.

Fry, Maxwell, Deanne Julius, Lavan Mahadewa, Sandra Roger, and Gabriel Sterne (2000), "Key Issues in the Choice of Monetary Policy Framework," in: Lavan Mahadeva and Gabriel Sterne (eds), *Monetary Frameworks in a Global Context,* Routledge: London, 1–216.

Fujiki, Hiroshi (2005), "The Monetary Policy Committee and the Incentive Problem: A Selective Survey," *Monetary and Economic Studies,* October), 37–82.

Gerlach-Kristen, Petra (2006), "Monetary Policy Committees and Interest-Rate Setting," *European Economic Review,* 50(2), 487–507.

Gerling, Kerstin, Hans Peter Grüner, Alexandra Kiel, and Elisabeth Schulte (2003), "Information Acquisition and Decision Making in Committees: A Survey," *ECB Working Paper,* 256.

Giannone, Domenico and Lucrezia Reichlin (2005), "Trends and Cycles in the Euro Area: How Much Heterogeneity and Should We Worry About It?" *Mimeo,* Universite' Libre de Bruxelles.

Goodfriend, Marvin (2000), "The Role of a Regional Bank in a System of Central Banks," *Federal Reserve Bank of Richmond Economic Quarterly,* Winter, 7–25.

Haan, Jakob de, Helge Berger, and Robert Inklaar (2004), "Is the ECB Too Decentralized?", in: Hans-Werner Sinn, Mika Widgren, and Marko Köthenburger (eds.), *European Monetary Integration,* Cambridge: The MIT Press, 71–97.

Hagen, Jürgen von and Ralph Süppel (1994), "Central Bank Constitutions for Federal Monetary Unions," *European Economic Review,* 38, 774–82.

Hallerberg, Mark (2002), "Veto Players and Monetary Commitment Technologies," *International Organization,* 56 (4), 775–802.

Hefeker, Carsten (2002), "Monetary Policy in a Union of 27: Enlargement and Reform Options," *Intereconomics*, November/December, 315–20.

Lombardelli, Clare, James Proudman, and James Talbot (2005), "Committees Versus Individuals: An Experimental Analysis of Monetary Policy Decision Making," *International Journal of Central Banking,* 1(1), 181–205.

Lybeck, Tonny and JoAnne Morris (2004), "Central bank Governance: A Survey of Boards and Arrangements," *IMF Working Paper,* 04/226.

Maier, Philipp, Beata Bierut, and Robert-Paul Berben (2003), "The Role of Regional Information in the Optimal Composition of a Committee," *MEB Discussion Paper (De Nederlandsche Bank),* 2003–08.

Meade, Ellen (2003), "A (Critical) Appraisal of the ECB's Voting Reform," *Intereconomics*, 38(3) 129–131.

Meade Ellen and Nathan Sheets (2005), "Regional Influences on FOMC Voting Patterns," *Journal of Money, Credit and Banking,* 37(4), 661–677.

Meltzer, Allan (2003), *A History of the Federal Reserve,* Volume I: 1913 to 1951, The University of Chicago Press: Chicago, Il.

Moser, Peter (1999), "Checks and Balances, and the Supply of Central Bank Independence," *European Economic Review,* 43, 1569–93.

Riboni, Alessandro and Francisco Ruge-Murcia (2006), "The Dynamic (In)efficiency of Monetary Policy by Committee," Typescript, University of Montreal.

Sibert, Anne (2006), "Central Banking by Committee," *DNB Working Paper,* 91.

Thygesen, Niels (1989), "Decentralization and Accountability within the Central Bank: Any Lessons from the US Experience for the Potential organization of a European Central Banking Institution?" in: Paul de Grauwe and Theo Peeters (eds.), *The ECU and European Monetary Integration,* MacMillan: London, 91–114.