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Monetary Policy Committee: What Works and Where

Michael Debabrata Patra and Amaresh Samantaraya*

Since the late 1990s, the monetary policy committee (MPC) is ushering in collective decision making on monetary policy among central banks across the world. In India, a Technical Advisory Committee (TAC) on Monetary Policy has been set up to strengthen the consultative process in conduct of monetary policy. A survey of the literature and the cross-country experience shows that issues relating to the constitution of MPC, its empowerment and functions have to be assessed in the broader context of the evolving social, political and legal/institutional ethos in an economy. An Index of MPC Empowerment, taking into account several characteristics of MPC in terms of its composition, transparency and autonomy, suggests that more empowered MPCs seem to deliver better inflation results but with little improvement in growth outcomes relative to their less empowered counterparts.

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Introduction

Since the late 1990s, there has been a growing interest in what has been termed as the 'quiet revolution' (Blinder, 2004) in central banking - the monetary policy committee (MPC). The first systematic enquiry undertaken in 2000 showed that no less than 79 out of 94 sampled central banks take monetary policy decisions in a committee, with 43 committees reaching a decision by consensus and 36 by voting (Bank of England, 2000). Their numbers have increased in ensuing years and the phenomenon has been ascribed to the modernisation of central banks (Lybek and Morris, 2004). No instance of backtracking has been reported. Recently, it has been noted that decision making by committee is now the rule rather than exception in central banks

* The authors are Adviser-in-Charge and Assistant Adviser in the Monetary Policy Department, respectively. The views expressed in the paper are strictly personal. Errors and omissions if any, are the sole responsibility of the authors. The usual disclaimers apply.

(Vandenbussche, 2006). This emerging central tendency is reflected in the International Monetary Fund (IMF) recommending the establishment of a committee to set monetary policy to the Bank of Israel (IMF, 2005). Thus, collective decision making is increasingly setting in among central banks across the world. Where formal MPCs have not yet come into being and the Governor is ultimately accountable, advisory boards in a variety of forms are being established to inform the assessment of policy options.

In January 2007, the Reserve Bank of India (RBI) reconstituted its Technical Advisory Committee (TAC) on Monetary Policy (which was first set up in July 2005) with a view to obtaining continued benefit of advice on the stance of monetary policy from external experts in the areas of monetary economics, central banking, financial markets and public finance and their contribution towards enriching the inputs and processes of policy setting. The reconstituted TAC, which has a tenure up to January 31, 2009 has five external members and two members of the Central Board of the Reserve Bank. The Committee is chaired by the Governor, with the Deputy Governor in charge of monetary policy as vice-chairman and other Deputy Governors as members. The direction of institutional change appears to be indicative of a preference for strengthening the consultative process of monetary policy formulation, although the role of the TAC at the current juncture is unambiguously set out in the Governor's Annual Policy Statement for the year 2007-08: "*It may be noted that the TAC is advisory and provides guidance to the making of policy from time to time. As such, the responsibility, accountability and time paths for decision making are not formally constrained by the meetings of the TAC*" (RBI, 2007).

The monetary policy framework is no longer a technical or academic subject. There is an active public and media interest, which is particularly vociferous when the policy framework is seen as not delivering on monetary policy assignments. The proliferation of the MPC across the world could be ushering in another fundamental change in the institutional setting in which monetary policy is formulated. Yet, central banks hate to be pushed as far as the policy framework is concerned – if it isn't broke, don't fix it. For them, there are broader forces – history and tradition; structural characteristics; political economy – that are wrought into the evolution of the framework than the more transient pressures of domestic or external developments. An eclectic approach is to explore the international environment as to what works and where. This paper examines practical considerations relating to the structure and functioning of MPCs in the varied country experience.

The rest of the paper is organised as follows: The following section sifts through key contributions to the literature on the working of MPCs. Section II presents the results of a survey of country practices in the context of the issues emerging out of the review of the literature. The paper concludes with a few observations that may shed light on which way from here for the RBI's TAC or at least join the swelling debate on the subject.

Section I
Survey of the Literature

Central banks prefer stability – price stability; financial stability; exchange rate stability; stability in operating framework. Threats to credibility in ensuring the first three have usually forced changes in the fourth. In the UK, the advent of inflation targeting grew directly out of the failure of exchange rate targeting in the Exchange Rate Mechanism (ERM) in 1992. In the US, monetary targeting in 1979 was in response to inflation reaching double-digits and the US dollar depreciating sharply. In South East Asia, it was the currency crisis in 1997-98; in Argentina and Brazil, it was the failure to control inflation; in the transition economies of Europe, it was the collapse of the Soviet Union. Thus, the country experience seems to suggest that most changes in the monetary policy framework were in reaction to adverse circumstances when credibility had to be urgently restored. The integration of global capital markets and the mobility of international capital flows is yet another factor forcing change in policy regimes. In addition, the shift towards inflation targeting seems to be driven by elements of best-practice learning. The reasons for changing the monetary policy framework are diverse and frequent enough in occurrence to make it difficult to distinguish between mature or emerging economies. Generally, however, such changes appear to have been delayed, with monetary authorities preferring to ride out the storm and gamble for heightened credibility. In a few instances, as in Chile, Israel and Poland, the change in policy regime has been relatively smooth and graduated (Mahadeva and Sterne, 2000).

The literature on the MPC is young but already impressive in terms of sheer breadth. What is fascinating is the panoramic span of country responses that it has thrown up, making generalisation virtually impossible. A non-intrusive, classificatory approach would perhaps be best suited to drawing lessons from this rich array. The key issues that have attracted interest in the literature are:

- Is the monetary policy decision-making entity separated out of the central bank's supervisory and executive management structure?
- Is this entity individualistic or collegial?
- What is the design of an entity responsible for monetary policy formulation and implementation?

The ordering of issues sets up a screening procedure that may ultimately yield forms of 'ideal' MPCs. Up till that level of cognition, however, any combination or hue contributes in its own way to collective decision making in monetary policy.

The first set of issues relates to the decision-making structure – clear assignment of decision-making with respect to monetary policy; bringing appropriate knowledge and expertise to bear on policy decisions; promoting efficient and effective policy decisions; and ensuring meaningful accountability for policy decisions. Trade-offs are faced in achieving these objectives and consequently decision-making structures vary widely from one country and culture to another (Vandenbussche, 2006).

There is a view in the literature that central bank boards are vulnerable to pressures of representation, as for instance, from groups such as trade and industry or even regional considerations which could compromise the decision-making structure, especially when the representation included in the board is from sections of society affected by a monetary policy decision (Mahadeva and Sterne, 2000). In order to minimise partisan pressures as also potential conflict between different functions of management, one approach in the country experience has been to separate the monetary policy making entity from the board of governance of the central bank as in the UK. In this vein, it has been argued that the most transparent approach is to establish a formal, two-tier management structure involving a supervisory board charged with responsibility for monitoring and evaluating the central bank's performance in relation to its assigned objectives, and a separate monetary policy committee (MPC) responsible for the formulation and implementation of monetary policy.

The country experience suggests that many central bank boards are formally executive in character. In such cases, a common practice is for the board to substantially delegate policy formulation and implementation decisions to a largely internal MPC whose recommendations it would routinely approve The exact manner in which this delegation occurs varies, as does the extent to which the recommendations of the MPC to the board are regarded as decisions or advice. A board acting on the advice of an internal MPC is viewed as less transparent than a more formal separation of supervisory and operational responsibilities. A basic concern is that the degree to which the board actually delegates policy decisions to the MPC may vary over time, at the discretion of the board (Heenan *et al,* 2006).

The second set of issues addressed in the literature relates to the manner in which decision making occurs in a MPC, quite distinct from the vesting of legal power discussed earlier. Traditionally and continuing in a few countries (Canada, Israel, India, New Zealand), policy decisions are made, in principle, by the Governor alone. Having the Governor as the decision-maker promotes clear accountability and avoids dilution of responsibilities; it also risks placing excessive power and dependence – or perception thereof – in the hands of a single individual and limits decisions on the basis of a very narrow outlook (Tuladhar, 2005). In practice, however, even in these countries Governors decide on the advice of committees that usually exists at an advisory level where information, forecasts and decisions are discussed extensively. Consequently, decision making may be very similar to that in countries with more explicitly committee-based decisions (Heenan *et al*, 2006).

An alternative distinction has been drawn on the basis of whether decisions are based on a consensus-seeking or collegial approach or a more individualistic vote-based approach. Collegial committees strive for consensus and reach decisions that stem from the collective wisdom of their members. There may be a vibrant internal debate before the policy decision is taken which may or may not involve voting. Once policy is set, all members speak in unison in public in order to strengthen the authority of the group. In "individualistic" MPCs by contrast, members develop their own positions, advocate them in internal meetings and vote accordingly when policy decisions are taken. Moreover, they may feel it appropriate to explain the reasons for their votes in public. While members of collegial MPCs strive for consensus, a consensus is not necessarily expected in individualistic committees.

The wide range of country choices as regards the 'character' of the MPC has prompted a recognition of the subtle nuancing of shades. It is in this context that a four-way classification of decision making under MPC has been proposed with "individual" and "collegial" being two opposite ends of the spectrum (Blinder and Wyplosz, 2004). At one extreme is the model of the individual central bank Governor such as that of the Reserve Bank of Australia, the Bank of Canada, the Reserve Bank of India, the Bank of Israel and the Reserve Bank of New Zealand. At the other extreme lies the individualistic MPC, such as the Riksbank's or the Bank of England's MPC, where each member not only expresses his or her opinion verbally but also acts on it by voting and decisions are made by majority vote. In between these two categories, two types of consensus-based MPCs are distinguished. In the "autocratically-collegial" MPC, the chairperson more or less dictates the group "consensus." She may begin the meeting with the decision already made and simply inform other members. Or she may listen to the debate and then announce the group's consensus, expecting everyone else to fall in line (Vandenbussche, 2006). In either case, the group's decision is essentially the chairperson's decision, informed by the views of the other committee members. The Federal Open Market Committee under Chairman Alan Greenspan has often been described as such an MPC. In the "genuinely collegial" MPC, members may argue strenuously for their own points of view behind closed doors but they ultimately compromise on a group decision of which each member then assumes ownership. In any case, there is no (or negligible) public disagreement. The ECB's Governing Council appears to be such an MPC.

The choice between the collegial and individualistic approach appears related to the costs and benefits of publicising differences in views between the members of the MPC. For some central banks, the costs of public disagreement are perceived as high. There is a risk that differences in opinion between MPC members regarding purely technical matters might be misunderstood as reflecting deeper disagreement. This could reduce the credibility and legitimacy of policy, a risk that would be particularly worrisome for central banks that have not yet secured their credibility either because of recent changes in the degree of instrument independence or in the policy framework or because they were recently established. These considerations would be seen to be particularly relevant for central banks in emerging market economies that often conduct policy subject to large shocks and frequently a history of government involvement in monetary affairs. Central banks operating in monetary unions such as the ECB face an inherent risk that policy disagreements will be interpreted by the public from a nationalistic perspective. They may then be particularly concerned about the costs of revealing differences in opinion between committee members.

By contrast, central banks operating in other environments may attach greater weight to the benefits of public disclosure of the views and, if applicable, votes of individual MPC members. It has been argued that greater transparency leads to greater accountability which, in turn, may be conducive to better policy. Furthermore, making public the full range of views in the MPC, for instance, by publishing a voting record and minutes with dissenting opinions may make it easier for financial markets and the public to predict future policy changes. Indeed, there is evidence that the voting record of the Monetary Policy Committee of the Bank of England is useful in forecasting future policy changes. Releasing the voting record may therefore be helpful in conditioning expectations of future policy. Making dissenting opinions public may also foster public understanding of the difficulties in setting monetary policy.

The third set of issues which has engaged considerable interest in the literature addresses the design of the MPC – the plumbing in the architecture. Such mundane considerations, it has been succinctly noted, can have major repercussions on the ability of an effective policy board. The design details need to be considered at the outset and, if the initial set-up proves too constraining, modified later (Mahadeva and Sterne, 2000). Recent surveys of central bank laws (Lybek and Morris, 2004; Tuladhar, 2005) document many dimensions of heterogeneity of MPC governance structures. Each central bank operates differently, and different traditions may justify different set-ups (Maier, 2007). Size and composition of MPCs, appointment rules, length of terms, distribution of voting rights, publication of votes and minutes are several of the dimensions along which there is substantial cross-country variation.

There is a trade-off involved in ensuring that the committee is sufficiently large to include members with all the relevant experience and expertise, but small enough for individual members to contribute effectively with genuine debate and interchange of views. Most countries with MPCs have between 5 and 10 members on the committee. Just under 10 per cent have more than 10 members (Maier, 2007).

Turning to the composition of the MPC, it is common to have external members. The definition of internal members is constant across countries – they are policymakers in a full-time managerial position under the authority of the Governor of the central bank. While in many committees, internal members are involved in the management of the central bank more broadly, in some central banks their tasks are more geared towards the monetary policy process (Mexico, US).

The meaning of external members varies significantly from country to country. Their mode of appointment is also usually different from that of internal members. These members may be chosen both to increase the legitimacy of the central bank as an institution and to diversify its range of expertise. External representatives offer new perspectives, may be more prone than internal members to challenge conventional wisdom, help avoid groupthink and can thus promote better policy.

No clear trend emerges with respect to the balance between external and internal membership. The balance between internal *versus* external membership is considered less important when minutes and dissenting votes are publicly disclosed so that members are individually accountable. A committee comprising insiders may be more effective in retaining coherence in decision-making, communication and accountability, particularly during periods of transition and in smaller countries where competent experts may be in short supply (Tuladhar, 2005).

To avoid conflict of interest and retain independence, external members are restricted from certain activities or affiliations outside the central bank. Generally, they include restrictions on involvement in financial institutions, political activity and government service. Some countries, however, only limit affiliations with those financial institutions that are under financial difficulties. Members may not be engaged in outside activities for financial gain. Sometimes, members may not be involved with a financial institution for a certain period after the end of their tenure (Tuladhar, 2005).

As discussed in IMF (1998), Lybek and Morris (2004) and Tuladhar (2005), these considerations generally lead to recommendations that:

- Government officials be either excluded from the MPC altogether or, at least, limited to a nonvoting role;
- Restrictions be placed on other non-central-bank members to exclude persons with conflicts of interest, either owing to their professional or to their financial interests;

- Members should have a high standing in a professional field relevant to monetary policy decision making;
- Membership terms of externally appointed members should be at least as long as the bodies that appointed them;
- Members of the central bank should form a majority on the MPC;
- All members should satisfy high standards of financial disclosure (Heenan *et al*, 2006)

Meetings are typically held on the basis of a prescheduled calendar. The frequency of meetings – usually monthly, sometimes quarterly or bi-weekly – depends upon factors such as frequency of data availability and feasibility of meetings. More frequent meetings risk putting too much attention to noisy data, although members are also more alert to developments. Hence, regardless of meeting frequency, policy decisions are generally made on a quarterly basis. Financial incentives are generally not provided for meeting monetary objectives. Reappointment prospects and publication of voting records are expected to provide sufficient incentives to meet the institutional objectives (Tuladhar, 2005). The frequency of meetings also depends on the monetary policy framework as well as on the number and type of committee members. Exchange-rate targeting may require more frequent meetings – or at least the ability to hold meetings at short notice – simply because information on the target is updated frequently. Money targeting will generally have new information monthly, while updating an entire inflation forecast will rarely be justified by new data in a single month. There are also questions of feasibility. If the committee is large and includes part-time members who have other commitments, it would be quite difficult for the entire committee to meet frequently.

A further distinction concerns whether the MPCs vote or not. While most do, the voting may, in some cases, be intended more to record a consensus already agreed than as a method to take policy decisions. If so, publishing the voting record need not convey much information about the true extent of agreement in the committee.

Interestingly and perhaps for this reason, many committees that vote do not publish the outcomes.

There are concerns that excessive transparency such as publishing of voting records, may infringe upon the central bank's operational independence. Disclosure of the individual judgments behind the policy decision risks create confusion and may subject members to undue pressure, especially if the members are nominated from political parties, or, in a federal system, from different subnational governments. In fact, most countries only release the decision and explanation immediately and do not publish the minutes. The detailed discussions, if released, are done so only with a time lag of 1 ½ to 3 months. Individual positions of members are required by law to be disclosed only by a few countries (Korea, Poland, and the United Kingdom).

The timing of information disclosure is an important consideration and most decisions are released with an appropriate delay. In the UK, the lag period for releasing minutes has been shortened to two weeks which has helped the public to pay more attention to the decisions as well as members' reported policy stance.

An important input in the MPC decision process is the large set of economic indicators as well as short-term and medium-term forecasts provided by central bank staff. In fact, large MPCs often receive advice by experts and central bank staff members in a nonvoting position, including on the days when decisions are made (Vandenbussche, 2006). Improvements in data collection and the growing sophistication and timeliness of economic statistics have reduced the need for large committee structures. Therefore to a large extent, central bank staff acts as the agent of the MPC in a dual role of information provider and advisor. The degree of interaction between staff and the MPC varies from one country to another. While Coletti (2004) describes the Bank of Canada's forecast as a staff projection and Meyer (2005) presents the Federal Reserve's Greenbook as "the staff's independent judgment of economic trends," Sterne (2004) emphasises that the Bank of England's forecast is that of the MPC and is elaborated with the assistance of staff. The MPC chairman and key internal members are typically involved early in the process. At the Reserve Bank of Australia, draft versions of the briefing paper are discussed with the Governor and deputy Governor – but not the other seven external members – about a week before an MPC meeting and the finalised paper, which may include a recommendation, is sent ahead of the weekend preceding the Tuesday MPC meeting (Stevens, 2004).

Another apparent feature is that few central banks have fixed speaking orders, but at the same time, few central banks have institutional mechanisms to effectively encourage independent thinking. Moreover, most central banks have fairly strict rules on who makes the policy proposal which bears a severe risk of information cascades. Lastly, many central banks are reluctant to disclose whether the Governor has lost a vote during the last five years – among central banks that provide that information it seems that the Governor being on the losing side of a vote is clearly the exception (Maier, 2007).

Section II
Some Stylised Analysis

The survey of the literature presented in the preceding section is in many ways overwhelmed by the sheer variety of the country experience, the history, socio-cultural context and the processes whereby decision making has crystallised into a multiplicity of institutional structures. Accordingly, several interesting facets of the experience with MPCs are thrown up and merit more intensive study, depending on the objectives set up. In this section, at the cost of overly generalising, an attempt is made to evaluate some country practices against the three sets of issues identified in Section II that specifically define the role of the MPC with respect to monetary policy decision making. The choice of countries is determined by the availability of information – surveys conducted in the recent literature (Mahadeva and Sterne, 2000; Tuladhar, 2005; Heenan *et al* , 2006; Maier, 2007) – updated from the websites of central banks wherever relevant information has been posted.

As regards assignment of the responsibility for monetary policy decision making, country positions are evaluated against several characteristics – separation of MPC from governing board; decision making MPC or advisory; legal mandate for setting monetary policy; and accountability (Table 1).

The country experience seems to favour a separation of the MPC from the supervisory/governing body of the central bank. Countries

Table 1: MPC – Administrative Structure and Assignment

Country	Name of the Body/ Committee	Separate Entity	Decision Making/ Advisory	Reports to Government/ Legislature	Legal Mandate
1	2	3	4	5	6
Australia @ $	Reserve Bank Board	No	D	Yes	Yes
Brazil	MPC (known as COPOM)	No	D	Yes	Yes
Canada $	Governing Council	No	D	Yes	Yes
China @ $	MPC	Yes	A	Yes	Yes
Columbia@ $	Board of Directors	Yes	D	Yes	Yes
ECB	Governing Council	Yes	D	ECB	Yes
India	***Technical Advisory Committee***	***Yes***	***A***	***No***	***No***
Israel	Monetary Forum	Yes	A	Yes	—
Japan	Policy Board	No	D	Yes	Yes
Korea	MPC	Yes	D	Yes	Yes
Mexico	Board of Governors	No	D	Yes	Yes
New Zealand $	MPC	Yes	A	Yes	No
Norway $	Executive Board	Yes	D	Yes	Yes
Philippines@	Monetary Board	No	D	Yes	Yes
Poland #	Monetary Policy Council	No	D	Yes	Yes
South Africa$	MPC	Yes	D	Yes	No
Sweden	Executive Board	No	D	Yes	Yes
Thailand #	MPC	Yes	D	No	No
Turkey	MPC	Yes	D	No	Yes
UK # $	MPC	Yes	D	Yes	Yes
USA	FOMC	Yes	D		Yes

@ : Government participation as a voting member.
# : Government membership in non-voting capacity.
$: Government override capacity on MPC decisions.
D : Decision making. A : Advisory.
Sources : Tuladhar (2005), Heenan et al (2006), Maier (2007) and Central Bank websites.

with a separate MPC include those with target autonomy (ECB, Thailand, the USA), those without target autonomy but with instrument autonomy (Israel, Korea, New Zealand, South Africa, Turkey, and the United Kingdom) as well as those which have neither target nor instrument independence specified in legislation (China, India). In a number of countries with target autonomy (Mexico, Poland), the same board performs both supervisory and monetary policy functions. In a few countries, a separate supervisory board is responsible for general oversight functions, but their tasks exclude supervision of monetary policy performance (Tuladhar, 2005). These supervisory functions include internal audit, budget and internal working rules. In Hungary, monetary policy decisions are not subject to review by the supervisory board. In some cases, the supervisory board members are appointed by the parliament and their tenure coincides with the political election cycle (Iceland, Norway and Sweden). In a few cases, there exists only a single board which functions as the policy board, supervisory board and management (Australia, Brazil, Canada, Czech Republic, Japan, Mexico). Thus, the degree to which monetary policy decision/ implementation is separated from the supervision of the central bank seems to be based on practical considerations rather than concerns about clarity of rules and responsibilities. Decision making MPCs, in general, have legal mandates and in most cases, report to the government/legislature. On the other hand, advisory MPCs such as in India and New Zealand do not have legal mandates, while in China, the MPC is constituted under Article 12 of the Law of the People's Republic of China on the People's Bank of China.

MPCs in most central banks are autonomous of government interference. In just four out of the central banks surveyed (Table 1), ministers or representatives of the government are full time members of the MPC. In Columbia, the minister of finance is a member of the MPC in the capacity of bank president. In the People's Bank of China, the MPC includes a Deputy Secretary General of the State Council and two Vice-Ministers. In Poland and the UK, government representatives attend the MPC meetings in a non-voting capacity.

In Canada, Norway, South Africa and the UK, there are explicit restrictions on government representation in monetary policy decision making. It is important to note, however, that there is provision for government override over the central bank's decision on monetary policy in several cases.

Table 2 presents information that would help to evaluate the specific character of the MPC – whether individualistic or collegial. The attributes chosen for this purpose are: voting or consensus

Table 2: MPC – Decision Process and Communication

Country	Decision by Voting/ Consensus	External Member in MPC	Publication of Minutes	Time Lag of Minutes Publication
1	2	3	4	5
Australia	Voting *	Yes	No	—
Brazil	Voting $	No	Yes	8 days
Canada	Consensus @	No	No	—
China	—	Yes	No	—
Columbia	—	Yes	No	—
ECB	Voting	No	No	—
India	***Consensus @***	***Yes***	***No***	**—**
Israel	—	No	Yes	
Japan	Voting #	Yes	Yes	One month
Korea	Voting #	Yes	Yes	Six weeks
Mexico	Voting	No	No	—
New Zealand	Consensus @	Yes	No	—
Norway	Consensus	Yes	No	—
Philippines	Voting	No	Yes	
Poland	Voting #	Yes	Yes	8 days after the first meeting of the month
South Africa	Voting	No	No	—
Sweden	Voting #	No	Yes	Two weeks
Thailand	Consensus	Yes	No	—
Turkey	Voting	Yes	Yes	
UK	Voting #	Yes	Yes	Two weeks
USA	Voting #	No	Yes	3-weeks

* : Usually by consensus without need for formal voting.
$: Goal to reach a consensus decision.
: Publication of individual votes.
@ : Governor solely responsible.
Sources : Tuladhar (2005), Heenan *et al* (2006), Maier (2007) and Central Bank websites.

decisions; presence of external members, public dissemination or not and the time lag involved.

From the country preferences, it appears that country practices are divided over the choice between collegial and individualistic MPCs; however, there seems to be a growing preference for decision making by voting. Majority of the MPCs in the list have external members enhancing the scope of incorporating views beyond conventional thinking and adding elements of diversity in the decision making process.

There is no strongly revealed preference for disseminating decisions as well as explanations. In the sample of countries considered in this paper, central banks which do not publish minutes of MPC top the scale over those that do. In several countries, minutes of the MPC meetings are released to the public, enhancing transparency and openness of policy decisions. Moreover, several countries such as Japan, Korea, Poland, the UK and the US also make public individual votes including dissenting ones, attributing to specific members. The time lag for publishing minutes varies from eight days in case of Brazil to six weeks in case of Korea.

Table 3 presents MPC design of the countries surveyed in terms of the size, composition, frequency of meetings of MPCs as also restrictions on affiliations of the members. The size varies from 5 in Mexico and Turkey to 19 in the ECB. As many as six MPCs have a size of 9 (modal size) and five others have a size of 7. Other than ECB, countries having large MPCs are China, India and the US with a size of 12.

Twelve out of twenty-one countries surveyed have both internal and external members. In Columbia, New Zealand, Turkey and the UK, the number of internal members outweigh the external ones. MPCs differ with respect to the number of meetings held per year. The periodicity of meetings (or scheduled announcement dates) varies between twice a month in case of Japan, Korea, Mexico, Poland and South Korea (every two weeks) to every quarter in the case of China and India. Many committees such as in Brazil, Canada, New Zealand, Sweden and the US meet eight times a year.

Table 3 also enumerates restrictions on the MPC members regarding affiliations with institutions. Common restrictions pertain to political and financial positions.

Table 3: MPC – Design

Country	Size (No. of Members)	Composition (Internal/ External)	Frequency of Meetings	Restrictions on Affiliation with Institutions
1	2	3	4	5
Australia	9	2 / 7	11 times per year	Financial
Brazil	9	9 / 0	8 times per year	Other Positions
Canada	6	6 / 0	8 times per year	Government, political, financial
China	12	3 / 9	Quarterly	No specific restrictions
Columbia	7	6 / 1	—	Government, political, financial
ECB	19	19 / 0	Monthly	No other occupation
India	***12***	***5 / 7***	***Quarterly***	No specific restrictions
Israel	8	8 / 0		
Japan	9	3 / 6	Twice a month	
Korea	7	2 / 5	Twice a month	Government, political, financially gainful activity
Mexico	5	5 / 0	Twice a month	
New Zealand	9	7 / 2	8 times a year	Political, financial
Norway	7	2 / 5	Every 6 weeks	Government, political
Philippines	7	7 / 0	Every 6 weeks	Financial, "public appointment", Institution subject to BSP supervision, political, labour unions,"gainful or public activity"
Poland	10	1 / 9	Twice a month #	
South Africa	9	9 / 0	At least once every two months	Government, political, financial
Sweden	6	6 / 0	7 to 8 meetings in year	Government, political, financial
Thailand	7	3 / 4	Every 6 weeks	
Turkey	5	4 / 1		
UK	9	5 / 4	Monthly	Government; member of Court of Directors (except Governor and Deputy Governors)
USA	12	12 / 0	8 times a year	

: Second meeting of the month is decision making meeting.
Source : Tuladhar (2005), Maier (2007) and Central Bank websites.

II.1 Profiling Select MPCs

Given the wide spectrum of country experiences, it is difficult to discuss central tendencies. It is useful, therefore, to profile four contrasting MPCs, which are currently at work, drawing from Vandenbussche (2006) and central bank websites.

US Federal Reserve's Federal Open Market Committee (FOMC)

The FOMC is composed of the Board of Governors and the presidents of the district Reserve Banks. Board members (the internal members) are appointed by the President and confirmed by the Senate to serve 14-year terms. Terms on the Board are staggered, with one term expiring on January 31 of each even-numbered year. A member may serve only one full term in office; however, an individual originally appointed to fill an unexpired term may be reappointed to serve a full term. The President also designates one member of the Board of Governors to be the Chairman and another member to be the Vice Chairman, each for a four-year term and each subject to Senate confirmation. The presidents of the district Reserve Banks, however, are chosen to serve five-year renewable terms by the Board of Directors of these Banks, subject to approval by the Board of Governors.

The FOMC's decisions are formally made by majority vote among its voting members. Voting members include all seven Governors, the president of the Federal Reserve Bank of New York, and four of the presidents of the remaining 11 district Banks. Voting privileges rotate in a prescribed manner among the district Banks. The four rotation groups are: (i) Boston, Philadelphia, and Richmond; (ii) Cleveland and Chicago; (iii) Atlanta, St Louis, and Dallas; and (iv) Minneapolis, Kansas City, and San Francisco. Within each group, voting privileges rotate annually among the Banks

Governing Council of the European Central Bank (ECB)

The ECB's Governing Council comprises the Executive Board – the president, the vice-president, and four other members (the internal members) – and the governors of the national central banks of the participating countries – currently thirteen countries. Executive Board members are appointed by common agreement among the heads of state of the eurozone for nonrenewable eight-year terms. No staggering of terms is provided for. Governors of participating central banks are appointed locally for at least five years and their terms can be renewed. Until the total number of Governors exceeds 15, each member of the Governing Council has one vote. As of the date when that number exceeds 15, governors will be allocated to two or three groups, the voting rights of which will sum to 15.

The FOMC and the ECB's Governing Council are examples of large MPCs. It is likely that both committees were firmly led by its chairman (FOMC) or its Chief Economist (ECB).

Bank of England's MPC

The nine-member committee comprises the Governor, two deputy Governors, two executive directors of the central bank appointed by the Governor after consultation with the Chancellor (currently the Bank's Chief Economist, the Executive Director for Markets), and four outside experts (the external members). The Governors are appointed for fixed renewable five-year terms, while the external members are appointed for renewable three-year terms. A representative from the treasury also sits with the MPC at its meetings. The MPC has an explicit mandate; it is made up of diverse membership (academics, business representatives and central bankers) and individual contributions can be identified and evaluated. Instances of the Governor losing vote indicate a more individualistic committee than the FOMC and the ECB's Governing Council.

People's Bank of China's (advisory) MPC

The People's Bank of China's MPC comprises ten members and has an advisory role only. It is headed by the Governor and also includes two Deputy Governors, a Deputy Secretary-General of the

State Council, a Vice Minister of the State Development and Reform Commission, a Vice Finance Minister, the Administrator of the State Administration of Foreign Exchange, the Chairman of the China Banking Regulatory Commission, the Chairman of the China Securities Regulatory Commission, the Chairman of the China Insurance Regulatory Commission, the Commissioner of the National Bureau of Statistics, the President of the China Association of Banks and an expert from academia. The committee is appointed by the State Council, with two-year terms for non-government officials.

II.2 Index of MPC Empowerment

Surveys, by their very nature, generate information that is multivariate. The need for simultaneous observation of several key attributes and underlying interrelationships often warrants aggregation of some form to reduce the dimensionality of the information into a summary measure which is usually interpreted ordinally in terms of broad direction rather than absolute magnitude. Steering clear of issues relating to aggregation and seeking to capture the diversity thrown up by the country survey in one composite gauge, an attempt has been made to construct an Index of MPC Empowerment (IMPCE). Ten attributes of functioning MPCs are considered, namely, (i) separate entity, (ii) decision making role, (iii) legal mandate, (iv) absence of government override, (v) presence of external members, (vi) absence of part-time members, (vii) attribution of individual votes to specific members, (viii) absence of government voting members, (ix) decision by voting (as against consensus), and (x) publication of minutes. Each of these attributes is assigned a score of one and its absence gets a score of zero. Equal weights are given to each attribute. The index *i.e.*, IMPCE varies from 0 to 10. A higher IMPCE indicates greater empowerment in monetary policy decision making and *vice versa*. The IMPCE for each country is rated against its macro-economic performance in terms of average inflation and growth for the period 2002 to 2006 along with variability in inflation and growth measured by the coefficient of variation (Table 4).

Table 4: Index of MPC Empowerment

Country	**Index**	**Average Inflation (CPI) 2002-2006 (Per cent)**	**CV of Inflation (CPI) 2002-2006**	**Average Growth 2002-2006 (Per cent)**	**CV of Growth 2002-2006**
1	2	3	4	5	6
Australia	5	2.86	0.15	3.28	0.18
Brazil	7	8.18	0.49	3.22	0.52
Canada	4	2.20	0.15	2.72	0.21
China	3	1.52	1.10	10.06	0.06
Columbia	5	5.72	0.19	4.56	0.40
ECB	7	2.17	0.03	2.12	0.36
India *	*4*	5.00	*0.23*	*7.60*	*0.30*
Israel	5	1.88	1.24	3.14	0.87
Japan	9	-0.30	-1.49	1.70	0.54
Korea	10	2.98	0.19	4.80	0.30
Mexico	6	4.36	0.13	2.80	0.62
New Zealand	4	2.60	0.25	3.16	0.43
Norway	6	1.62	0.52	2.40	0.48
Philippines	6	5.24	0.38	5.18	0.13
Poland	9	1.86	0.58	3.96	0.44
South Africa	5	4.90	0.59	4.34	0.21
Sweden	8	1.50	0.41	3.02	0.40
Thailand	6	2.86	0.60	5.64	0.19
Turkey	8	18.60	0.85	7.10	0.20
UK	9	1.66	0.28	2.54	0.22
USA	9	2.64	0.27	2.90	0.30

* : Inflation based on WPI.
CV : Coefficient of Variation.
Note : Inflation and Growth Rates in percentage.

The entire set of countries under consideration can be loosely divided into two groups on the basis of IMPCE scores. Purely for analytical purposes, IMPCE scores from 0 to 5 are indicative of MPCs with relatively lower empowerment, while the group of countries with IMPCE scores from 6 to 10 have MPCs with a higher degree of empowerment than the first group. This analysis throws up somewhat surprising results. It turns out that less empowered MPCs are associated with lower inflation and higher growth as compared with more empowered MPCs, but at the cost of higher inflation volatility (Table 5).

Table 5: MPC Empowerment and Macroeconomic Performance

IMPCE	No. of Countries	Average Inflation (CPI) 2002-2006 (Per cent)	CV of Inflation (CPI) 2002-2006	Average Growth 2002-2006 (Per cent)	CV of Growth 2002-2006
1	2	3	4	5	6
0 to 5	8	3.34	0.49	4.86	0.33
6 to 10	13	4.11	0.25	3.64	0.36
0 to 5 excluding China & India	6	3.36	0.43	3.53	0.38
6 to 10 excluding Brazil & Turkey	11	2.42	0.17	3.37	0.36

CV : Coefficient of Variation.

Both groups consist of countries with growth and inflation records which are significantly different from the rest of the group. It is, therefore, plausible to expect that inclusion of these ‘outliers’ is affecting the group average. For instance, countries such as Brazil and Turkey have relatively more empowered MPCs but also a history of high inflation. On the other side, China and India have less empowered MPCs but have been experiencing high growth rates in the period of study. Excluding China and India does not produce any material difference in inflation performance but MPC empowerment becomes associated with a better growth performance, both in terms of (higher) level and (lower) volatility. On the other hand, by excluding Brazil and Turkey (but retaining China and India), more empowered MPCs are associated with lower inflation (level as well as variability) but also with lower growth. Excluding all potential outliers, *i.e.*, Brazil, China, India and Turkey yields a similar result. In sum, therefore, more empowered MPCs seem to deliver better inflation results but with no improvement in growth outcomes.

Section III
Concluding Observations

Recent financial developments have provoked a reassessment of the appropriate role, responsibilities and objectives of central banks for conduct of monetary policy. It has been pointed out that the focus of central banks appears to be narrowing relative to their complex responsibilities and that it is increasingly evident that central banks do have a role beyond inflation targeting and that growth and financial stability matter (Mohan, 2007). The role and functioning of the MPC in various countries may have to be reviewed in the context of these fundamental changes.

The institution of the MPC is rapidly gaining ground across central banks, reflecting a growing preference for not only collectivity in decision making but also for bringing to the table diverse perspectives, new and independent thinking, technical expertise and experience, information efficiency and pooling of analysis. On these grounds, a sufficiently empowered MPC with a clearly defined target and freedom to adjust its instruments in order to achieve that goal can offer the classic benefit of diversification: a higher mean with a lower variance. In the surveyed literature and country practice, however, there is no clear cut case for decisions by committee being better than more autocratic processes. It is argued that while the MPC may promote discussion and information sharing, it also risks free-riding. Majority voting may weaken accountability and may also reduce the informational efficiency of decision making.

In India, the approach to reform has been gradualistic including in the context of the monetary policy framework. The institution of the TAC reflects this choice of pace and sequencing. Notably, the TAC was not a response to shocks or loss of credibility but an evolutionary part of the interactive, more open approach to monetary policy making that started in the late 1990s and intensified from mid-2003. The formal setting up of the TAC is in itself noteworthy as it occurred in an institutional setting in which the RBI is invested with a multiple mandate but with centralised responsibility for decision making (Governor); with overarching government override including in the appointment and removal of the Governor and Deputy Governors, but with no representation of the Government in the TAC (in a non-voting capacity only in the Central Board); with the RBI as manager of public debt but with primary monetisation of the fiscal deficit eliminated through agreements with the government and mandated under fiscal responsibilities legislation. The reconstitution of the TAC, whereby external members currently outnumber internal members, is indicative of the qualitative enrichment that it has brought to the decision-making process. All this has come about without changing the legal/institutional framework.

The specific characteristics of the Indian economy, including the '*realpolitik*', perhaps, render unified and centralised decision making responsibility and authority for monetary policy necessary. There are notable differences between central banks and corporate entities. Central banks are public policy institutions invested with socio-economic mandates which require governance arrangements that balance autonomy and accountability. This is particularly relevant in an emerging economy setting, as borne out by the country experience, where the Governor chairing the Board has made a substantial difference to the atmosphere of discussion and has not constrained disagreement on substantive matters. As regards the UK's individualistic MPC, it has been argued, for instance, that the Governor voting with the minority shows sign of a lack of strong leadership which, in an emerging economy context, could be damaging to the entrenchment of credibility so critical for conducting monetary policy and communicating it. Even in relatively mundane aspects of meeting procedures, the Governor adds value to the MPC by initiating/enabling the institution of the MPC itself; setting the timing and agenda; approving circulated material; seating/speaking/voting arrangements; shaping of policy proposal put to the MPC; influencing the direction, pace and conclusion of discussions. It is relevant to note that even in the Bank of England's MPC, the Governor is the last one to speak. This is also true of the FOMC.

For India, at the current juncture, the choice is a separate TAC; advisory; collegial; large by international standards; more external members than internal; restrictions on public issuances by members around policy review announcements; quarterly meetings; voting without publication; continuity with change. The way forward will be assessed in the context of the more complex and varied role required of the central bank currently and as it evolves.

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