

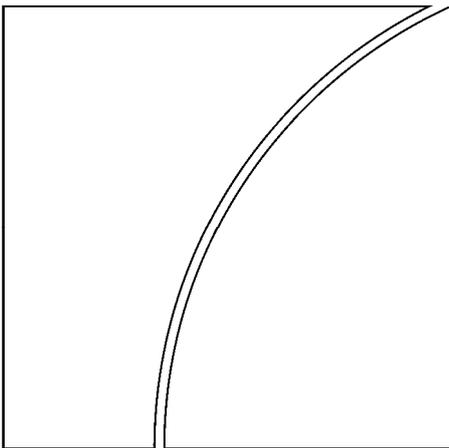


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Communication of monetary  
policy decisions by central banks:  
what is revealed and why



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# Communication of monetary policy decisions by central banks: what is revealed and why<sup>1</sup>

Serge Jeanneau

## 1. Introduction and summary

Central banks around the world have done much in recent years to refine the way they communicate their assessments of economic conditions and their decisions relating to the stance of monetary policy. This has reflected two main factors. First, a global trend towards greater central bank autonomy has been accompanied by a corresponding demand for greater democratic accountability and transparency (Mishkin (2007)).<sup>2</sup> Second, there has been a growing consensus among monetary economists that better communication about central bank actions is essential in reducing the uncertainty facing economic agents. As argued by Woodford (2003), successful monetary policy is not so much a matter of effective control over overnight interest rates as it is of shaping market expectations of the future evolution of key economic and financial variables. Indeed, during periods of stress in financial markets, particularly when policy rates decline to the zero bound, central bank guidance may become the main tool through which monetary policy affects expectations (Bernanke et al (2004)).

Improved accountability and better expectation management are both facilitated by a more transparent decision-making process (Eijffinger and Hoeberichts (2000)). How to achieve such transparency has been the subject of a lively debate in recent years. This paper reports on a survey conducted in 2007 on the communication practices of 32 members of the Central Bank Governance Network (CBGN).<sup>3</sup> It will help central banks to compare their arrangements with those of their peers and should be a useful tool to those institutions that are in the process of reviewing their communications strategies. It should also enable the wider public to gain a better understanding of the various communications strategies adopted by central banks.

The questionnaire sent to CBGN members was divided into two main parts. The first part was mainly factual and focused on the information that central banks disclose about their assessments of economic conditions and their decisions relating to the stance of monetary policy. The topics discussed in this paper under that broad heading include: the process by which policy settings are announced; the channels of communication; the length and content of statements; the release of voting records; the publication of supporting background information; and the release of minutes.

The second part of the questionnaire centred on the strategies underlying central bank communications. The discussion in this paper examines the reasons cited by central banks for increasing or limiting disclosure and the process by which expectations are guided. It also looks at how central banks perceive the success of their communication efforts.

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<sup>1</sup> This paper builds on earlier work by Filardo and Guinigundo (2008) and Nelson (2008). The author thanks David Archer, Andrew Filardo, Richhild Moessner, Paul Moser-Boehm and William Nelson for extensive comments, Magdalena Erdem for technical assistance, and Cynthia Lloyd and Anne Mackenzie for editing and formatting.

<sup>2</sup> Mishkin noted that basic democratic principles require that the central bank be accountable for its actions, which means that the public must understand its practices.

<sup>3</sup> Participating countries that agreed to be identified are listed in the Table at the end of this paper.

The key findings of the survey are as follows:

- Central banks have made determined efforts in recent years to improve the way they communicate with the public. They now provide more and better focused information on monetary policy and do so on a timelier basis.
- The main reasons cited by central banks for improving communications are, in order: to ensure better accountability; to enhance the public's understanding of the objectives of policy and the decision-making process; and to guide market expectations. Considering the complexity of communicating monetary policy, the strategies adopted by central banks in recent years are perceived to be bearing fruit. The direction and magnitude of policy decisions are seen by central banks as largely anticipated by market participants; this should help to reduce the overall economic costs of adjusting to changes in policy settings.
- The survey also shows that, while all central banks now provide short statements explaining the reasons for policy actions, this is by no means the sum total of their communication efforts. In several cases, those statements are coupled with more comprehensive background documents containing a forecast. Central banks also make significant additional efforts to provide regular information outside the policy announcement window concerning the evolution of the economy, either through official publications or through public appearances by senior officials.
- Underlying these encouraging results is a great deal of diversity in the quantity and quality of the information disclosed. Responses indicate that central banks operating under inflation targeting frameworks tend to provide more information than entities operating under other frameworks, although there is wide variation within the central banks belonging to each broad framework. Monetary institutions in countries that are at the higher end of the economic development scale also tend to disclose more information than those from less affluent regions.
- Many central banks continue to place limits on the amount of information they reveal about internal policy deliberations and, especially, about internal differences of opinion. These limits reflect concerns that revealing such details could stifle the exchange of views at policy meetings. It also demonstrates a preference for limiting noisy signals by broadcasting a consensus view.
- Interestingly, an earlier internal BIS survey on the public image of central banks revealed that central bank opinion surveys showed little improvement in the public's confidence and understanding of their functions. This suggests that, despite the progress made in communicating to markets, greater attention to educating the general public about monetary matters could be considered.

## **2. Main characteristics of responding central banks**

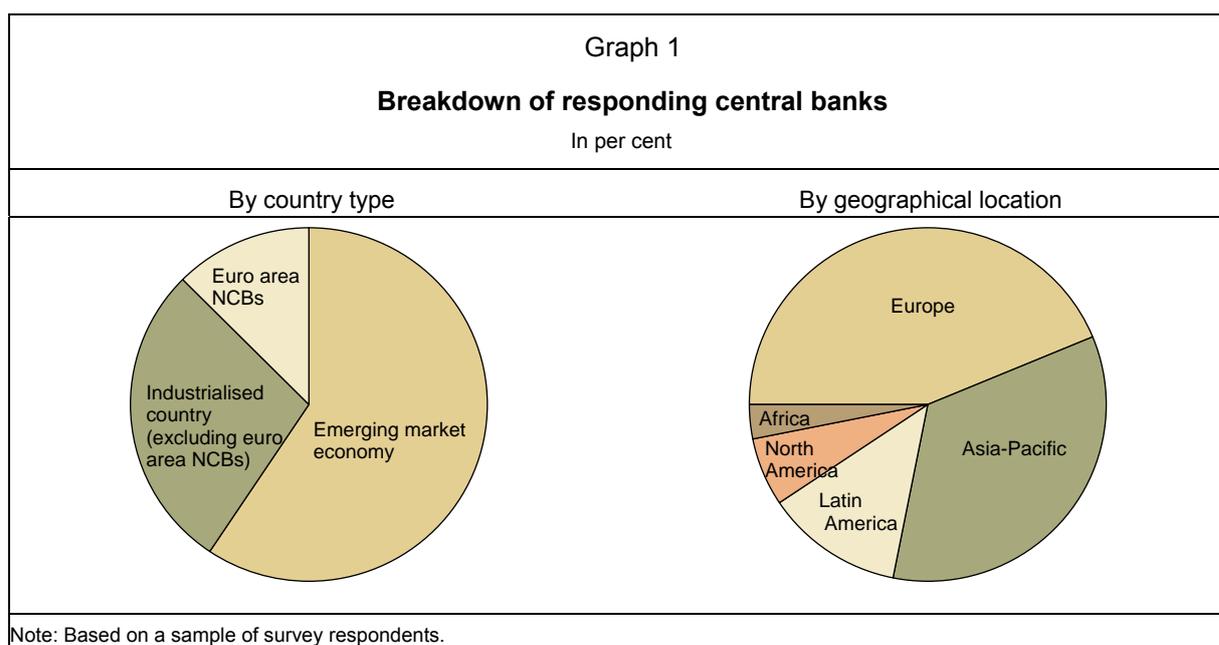
### **Economic and geographical breakdown**

The level of economic development of a country, its economic size or its geographical location can play a role in the monetary framework it will adopt. This choice will, in turn, contribute to determining the broad outlines of the communications strategy of the central bank. Dincer and Eichengreen (2007) conducted an empirical analysis of the economic determinants of transparency. Using a sample of 100 central banks, they found that, inter alia, transparency was greater in countries with a higher level of economic development and deeper financial markets. In a related study, Krause and Rioja (2006) showed how a higher level of financial development could help to improve the efficiency of monetary policy. The relationship between the degree of development of markets, transparency and the efficiency

of monetary policy can be broadly presumed to work along the following lines. In less developed financial systems, central banks tend to exert the greatest influence over monetary conditions by directly regulating the deposit-taking and lending activities of commercial banks (IMF (2005)). Conversely, in more advanced financial systems, where money and capital markets compete with commercial banks in the intermediation process, central banks tend to use indirect (ie market-based) methods to influence liquidity conditions. The deeper and more efficient financial markets are, the easier it is to use indirect instruments to transmit monetary policy decisions. However, the use of market-based instruments will tend to have a more insidious effect on monetary conditions than the use of direct instruments and will often require a more proactive communications strategy than is the case with direct instruments.

As another example, larger and well diversified economies may be less constrained in their policymaking frameworks than small and open economies. Geographical location can also be relevant to the extent that countries are exposed to common economic or financial shocks, or belong to regional monetary groupings.

The countries that responded to the survey are reasonably dispersed from an economic and geographical point of view (Graph 1). About 60% are located in the emerging market and developing world, and around 40% are from the industrialised world. However, a particularity of the sample is that there are relatively few low-income countries; only two of them have a per capita income of less than \$5,000 per annum.



Looking at the geographical breakdown, respondents from Europe accounted for 44% of the total number of respondents, followed by respondents from Asia and the Pacific at 34%, those from Latin America at 13% and those from North America at 6%. There was only one respondent from Africa. Another notable characteristic of the sample is that five institutions are from the euro area: central banks belonging to the Eurosystem follow common practices in the field of monetary policy implementation and communications. For certain issues, this has influenced the overall outcome of the survey, as discussed in the relevant parts of this paper.

To summarise, the level of economic development, economic size and geographical location can have an influence over the monetary framework adopted by a country and, consequently, over the distribution of answers contained in the survey responses.

## Monetary policy frameworks

The survey results show that almost all central banks are now transparent about their monetary policy frameworks: all but one of the 32 central banks publicly disclose information about their frameworks. Inflation is the main intermediate target for around three fifths of central banks.<sup>4</sup> Only one unidentified emerging market central bank in the sample targets a monetary aggregate as a single intermediate objective. Three institutions, namely the People's Bank of China, the Hong Kong Monetary Authority and the Monetary Authority of Singapore, target an exchange rate or band, although in the first and last cases the precise details of that objective are not revealed to the public.

There is a relationship in our sample between a country's historical record of monetary stability and the type of monetary regime it adopts (not shown). Countries with high historical levels of inflation have tended to favour the adoption of clear rules for monetary control, either of the inflation targeting, exchange rate or money supply variety. A sizeable number of those countries are represented in the slightly more than 60% of central banks that publish a numerical intermediate target. Conversely, countries that have enjoyed monetary stability and credibility in the past have perhaps not felt under as much pressure to introduce a numeric rule. Almost 40% of respondents operate either under non-numerical objectives or under more complex arrangements that can be partly numeric and partly qualified by other considerations (Graph 2).

## Monetary policy objectives

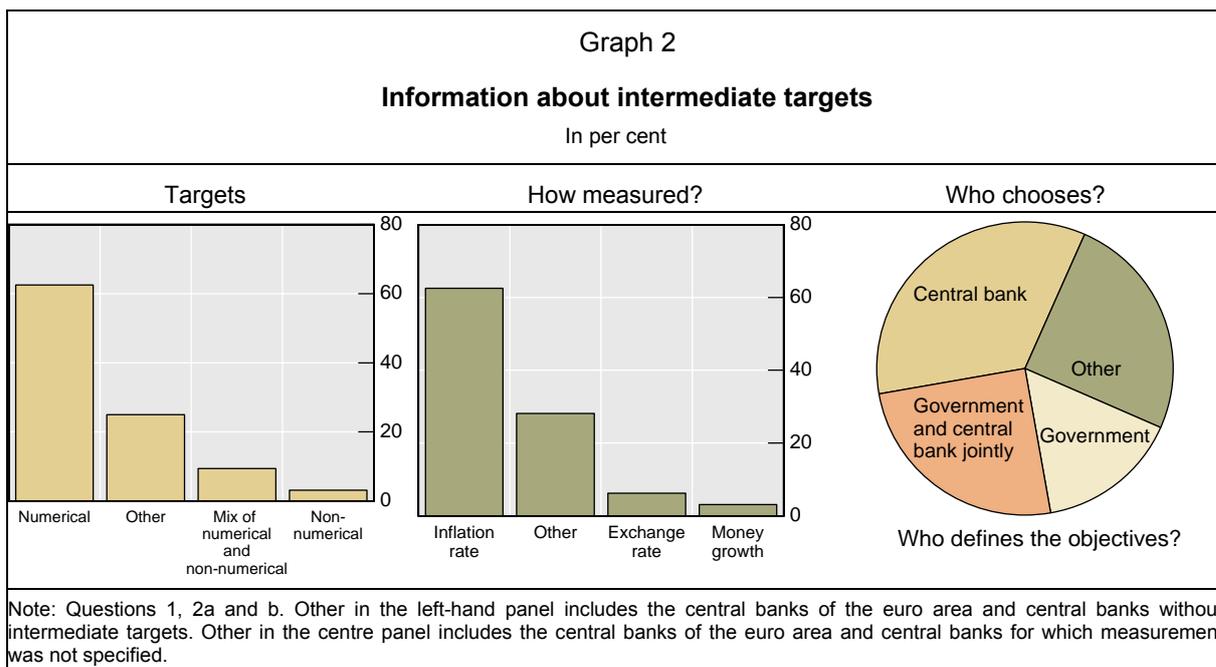
Having a clearly specified and singular central bank objective facilitates the task of communicating with the public. However, a single-minded focus on the achievement of that objective is by no means sufficient to guarantee a central bank's credibility and legitimacy. Central banks that move to a single target framework as a means of bringing inflation under control must undertake a major marketing effort to educate the public about their new strategy. That effort is likely to be protracted given the time required for monetary policy to work its way through market expectations and the real economy.

Central banks operating under complex (or hybrid) arrangements probably face an even more significant challenge in communicating their thinking, particularly when their legally mandated objectives would require divergent monetary actions. This could be the case when the existence of a real and nominal economic objective calls for a conflicting response in the event of a real or monetary shock (for example, when inflation and output evolve in opposite directions). A well known example is the central bank law of the United States, which contains elements of both a real objective (employment) and a nominal one (price stability), in a manner that seems to make both objectives of potentially equal ranking. A conflict could also emerge if the central bank was compelled to operate under more than one nominal anchor, such as maintaining a relatively tight control over an exchange rate while pursuing an inflation or monetary target.<sup>5</sup> Under a floating exchange rate regime, domestic price and exchange rate stability could call for interest rate adjustments in opposite directions.

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<sup>4</sup> The analysis of policymaking under uncertainty distinguishes among: objectives; instruments; and intermediate targets (Romer (2001)). The objectives are the ultimate goals of policy, such as inflation and unemployment, the instruments are tools that are under the direct control of policymakers, such as open market operations and reserve requirements, and the intermediate targets are variables that policymakers choose to focus on to achieve their ultimate objectives, such as an inflation rate, the exchange rate or a monetary aggregate.

<sup>5</sup> This has often been the case in countries engaged in a transition from one monetary regime to another. Slovakia is one of the countries in our sample where the central bank law used to specify two nominal anchors. This is no longer the case since its entry into the euro area.



The need to avoid such potential conflicts has been a factor leading governments in several countries to narrow the objectives of monetary policy towards a single or dominant target in clear priority to others.<sup>6</sup> Tightly specified objectives can help to insulate the central bank's policy decisions from political influences at the same time that they concentrate the focus of policymakers and facilitate the external evaluation of their policies. More singular or clearly ranked objectives also reduce the room for uncertainty over what will take priority in the central bank's decision-making process.

In countries where cultural, constitutional or other legal constraints have prevented an amendment of central bank legislation to a narrower set of objectives, central banks have found various ways of dealing with potential conflicts. One of the most common methods is the publication of formal extra-statutory statements of policy strategy to increase the specificity of statutory objectives but in a manner that allows for some flexibility. Such statements may be agreed between the central bank and the government, or represent a central bank's unilateral interpretation of its monetary policy task, consistent with the law and the current state of knowledge of what can be achieved with the instruments available. In many cases, extra-statutory statements contain a specification of inflation targeting that goes well beyond the legal texts relating to the central bank. Potential conflicts can also be resolved through an open recognition that lower levels of law may serve to interpret and clarify higher levels of legislation.<sup>7</sup> Another solution is to emphasise the need for a consideration of the technical feasibility of each target within a multiple set of objectives.<sup>8</sup>

However, it should be noted that the difference between single- and multiple-objective central banks may actually be more apparent than real. Central banks operating under a single

<sup>6</sup> The choices faced by governments in specifying the objectives of central banks are discussed extensively in BIS (2009).

<sup>7</sup> References to the central bank or monetary policy in a country's constitution are typically brief and at a high level of abstraction. The statutes governing the central bank, on the other hand, are often more detailed.

<sup>8</sup> For example, given that it is not technically feasible for monetary policy to permanently accelerate growth beyond a rate consistent with approximate price stability (and then at a cost to performance against other objectives), it is reasonable to infer a dominance of the price stability objective.

objective face some of the same challenges as entities contending with multiple objectives because, in practice, single-objective central banks are also required to consider a broad set of factors in their decision-making process, such as variations in output or financial stability. Even the most “hawkish” of central banks are not immune to developments affecting the real economy or the financial system.

It is also worth highlighting that the approaches to the setting of objectives followed by central banks may have a bearing on their communications strategies and overall transparency; there is a mix of approaches in our sample. Such objectives are defined by the central banks themselves in one third of cases, jointly by central banks and governments in one quarter of cases and by governments alone in slightly less than one fifth of cases. Changes to objectives are almost always announced according to this sharing of responsibilities.

It would be possible to think of several ways in which arrangements for the setting of objectives could have an influence over communications and transparency (see the discussion in the box on page 25). It could be argued that arrangements allowing central banks to set their own objectives would be accompanied by greater communication efforts by central banks in order to buttress the legitimacy of their choices. Joint arrangements could also be associated with a relatively high degree of transparency. These arrangements tend to specify a target, which is inherently transparent, and require the central bank to account formally and publicly for its performance relative to that target. In addition, joint arrangements usually provide for a public disclosure of any change to the target or disagreements about it. By contrast, the setting of objective(s) by governments alone could possibly shift some of the burden of communications to the cabinet or the ministry of finance, thus reducing the profile of the central bank in communicating decisions.

This variety of practices reflects the way in which the institutional and political traditions of each country shape the relationship between central bank independence and accountability (Filardo and Guinigundo (2008)). In theory, a fully independent central bank should be able to stand up to political and social pressure in setting policy rates. However, being completely removed from the control of the electorate or its representatives raises issues of accountability. Countries have found various arrangements to deal with this trade-off.

### **3. Evolution of central banks’ approach to communications**

In written comments submitted in the survey, a majority of central banks (about three fifths) reported that there had been major adjustments over the past three years in the channels of communication or the frequency with which communications were made. In many cases, those changes were aimed at providing greater or more focused disclosure.<sup>9</sup> Mostly, those changes resulted from internal central bank decisions rather than government-mandated amendments to the central bank law. This provides some support to the idea that central banks have been promoters of increased accountability and transparency rather than reluctant parties to a discipline imposed by their principals.

This willingness to communicate more openly may have been encouraged by a shift in the way academic economists and policymakers understand the role of monetary policy and, in

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<sup>9</sup> This includes: the publication of endogenous interest rate forecasts, votes or minutes; a reduction in the release time of minutes; a higher frequency of publications; and more frequent appearances to legislative bodies. There was also, in some instances, a reduction in the number of policy meetings in order to make them coincide more closely with the release of key economic data, and the phasing-out of “forward guidance” in favour of more direct means of communication.

particular, by a general realisation of the economic benefits of transparency, including a more rapid anchoring of expectations and a corresponding reduction in the sacrifice required to bring inflation down (Chortareas et al (2002)). Geraats (2006) and Walsh (2006), among others, have also argued that the adoption of formal inflation targeting has been a crucial determinant of increased transparency. Inflation targeting frameworks involve enhanced disclosure of policy-related information, such as meticulous descriptions of how the inflation objective will be achieved and over what time horizon, what policy instruments will be used and how the assessment of economic variables, especially the inflation process, could influence decisions and risks. Another, more prosaic, explanation is that transparency may beget more transparency. The release of forecasts of inflation and output may have created an appetite for the release of additional variables. It may also have created a demand for higher frequency forecasts.<sup>10</sup>

Central banks now provide a considerable amount of information that is relevant to the evaluation of monetary policy, including explanations of their policy actions and the reasoning behind those actions. This represents a considerable change from the practice that existed well into the late 1980s, when secrecy about their intentions was commonplace and was even considered to be useful for maintaining their independence. Conventional wisdom used to be that, in order to be effective on the real economy, policy decisions had to surprise economic agents. The collective understanding of monetary policy has changed radically since then. From the point of view of macroeconomic stabilisation, the common belief nowadays is that there is more to be gained from managing market expectations through an open dialogue with market participants than by surprising them (Filardo and Guinigundo (2008)).

With central banks now finding it valuable to provide information about the considerations underlying their policy decisions, the public now receives various “bundles” of information about such decisions. The type of information that is released comprises five main items, namely: the interpretation of current economic conditions; the outlook for the economy and the associated risks; the reasons for policy decisions; the strategy that guides those decisions; and the outlook for future policy, given the objectives of the central bank and the economic outlook. As discussed below, there is little disagreement within the central bank community about the first three items, which are discussed openly by most institutions. However, there is less agreement about the fourth item,<sup>11</sup> and even less agreement about the fifth.

## **4. Channels of communication during the announcement window**

### **Determining what information to release when policy settings are changed**

One of the biggest challenges faced by central banks is determining what information to release about the policymaking process and the resulting decision about policy settings.

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<sup>10</sup> Other institutional factors could have had an influence on the communications framework. For example, the intensity of central banks' communications could be related to the breadth of responsibilities devolved to them. An internal survey on the public image of central banks conducted by the BIS in 2007 showed that central banks with supervisory responsibilities collected more information about the public's understanding of their monetary policy and financial stability mandates than central banks without such responsibilities. If this is the case, such central banks may communicate more intensively about monetary policy and financial stability matters.

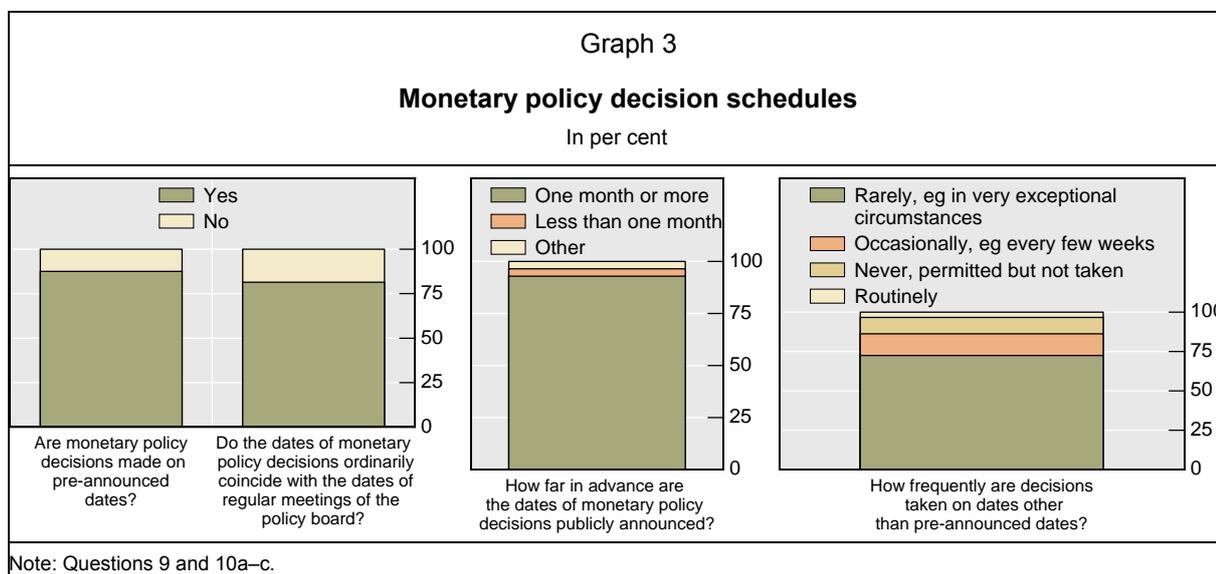
<sup>11</sup> Some of the largest central banks, such as the Federal Reserve Board (FRB), do not publish detailed information about their strategy.

What do central banks consider the relevant information to be and how should it be announced? The answer to this question depends, inter alia, on the particular aspect of the policymaking process about which the central bank wants to inform the public and the specific information needs of the people at the receiving end.

One of the difficulties has been in calibrating the amount and type of information that should be disclosed. Collecting and disseminating information is a costly process, both in terms of time and resources. Interpreting the information at the receiving end is also costly. This means that maximising the effectiveness of communications is a crucial issue for central banks. A more effective communications policy would do much to reduce information asymmetries between central banks and the public.

### The announcement of changes in policy settings

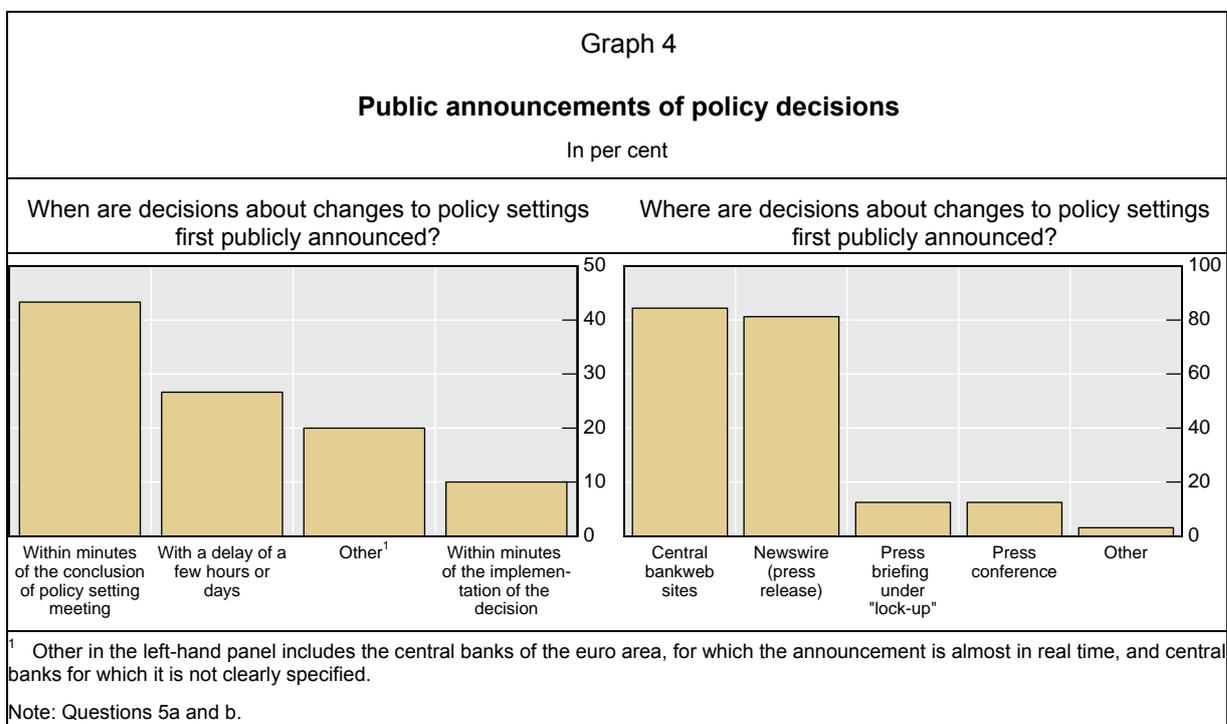
A notable change regarding disclosure has been the emphasis on greater transparency at the time of policy decisions. Central banks now provide significantly more information about the decision itself and the reasons behind it. They are also making efforts to be clearer by issuing better articulated statements and providing accompanying background material.



In general, the process by which policy settings are announced is a highly structured mechanism. Not all central banks are officially committed to a definite time frame for making their decisions but, in practice, decisions are made at regular intervals (Graph 3). About 90% of central banks take their decisions on dates that are announced far in advance; more often than not, as much as one year in advance. Nowadays, decisions tend to coincide with regular policy board meetings (four fifths of respondents). This is a relatively recent change. For example, the Federal Open Markets Committee (FOMC) only began to take most of its policy decisions at regularly scheduled meetings in 1994. The publication of a regular timetable of monetary policy announcements is thought to help focus the market's attention on the few days surrounding the announcements. Some have argued that this has allowed the FRB to become more predictable even before it moved towards greater formal transparency (Sellon (2008)). On the other hand, the answers received indicate that, before the financial crisis of 2007–08 emerged, exceptional circumstances did not seem to play a major role in the decision-making process since decisions were rarely taken outside the regular decision-making cycle.

Changes to policy settings tend to be announced fairly quickly (Graph 4). In about two fifths of cases, the decision is announced within minutes of the conclusion of the meeting. In

another quarter, the decision is announced on the same day but a few hours after the meeting, allowing more time to prepare the material to be communicated and providing breathing space for the arrangement of policy implementation. A few central banks, such as the Bank of Canada and the Central Bank of Iceland, announce their decisions on the next business day. In a few cases, the lag is less easy to ascertain. That is the case in New Zealand, where the policy decision is announced in two different cycles.<sup>12</sup>

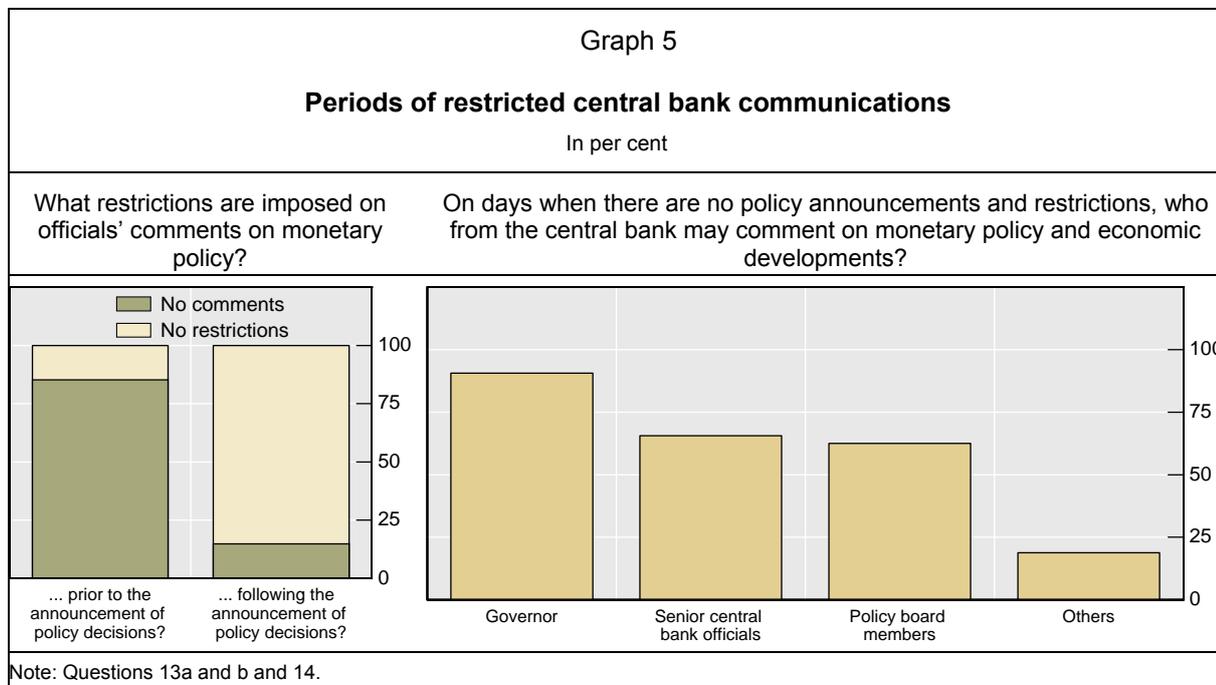


Most central banks manage the announcement process carefully so as to minimise the expression of discordant voices and thus avoid potential confusion among economic agents. Having the decision-making body speak with one voice ensures that the public will not have divergent interpretations of policymakers' intentions. It also ensures that economic agents will not have access to "insider" information and will therefore be treated equally. Such management of communications holds for both consensus-based and individualistic decision-making structures, although in the latter case committee members are freer to communicate outside the announcement window.

At around 70% of reporting entities, the policy is to limit comments by senior officials for an average period of eight days prior to the announcement (Graph 5). At another tenth, there is no formal restriction, but senior officials nevertheless exercise some form of self-censorship and refrain from making comments. There can be some exceptions, however: hints or leaks can sometimes emanate from the senior ranks of the central bank when it is trying to prepare markets ahead of a policy move. Such occurrences are, however, typically less frequent and are well controlled.

<sup>12</sup> A first cycle corresponds to the release of the *Quarterly Monetary Policy Statement*, which provides a detailed discussion of the economy, inflation, the thinking behind monetary policy decision and the outlook. A second cycle comprises four interim interest rate adjustments announced by press statement.

Things change considerably after the announcement, with two thirds of central banks reporting no restrictions on comments by senior officials.<sup>13</sup> For the remainder of central banks, restrictions do not necessarily reflect a willingness to stifle dissent. Rather, they may be related to practical considerations. For example, central banks that publish minutes containing the views of individual committee members often restrict public comments by such members until the minutes have been published.



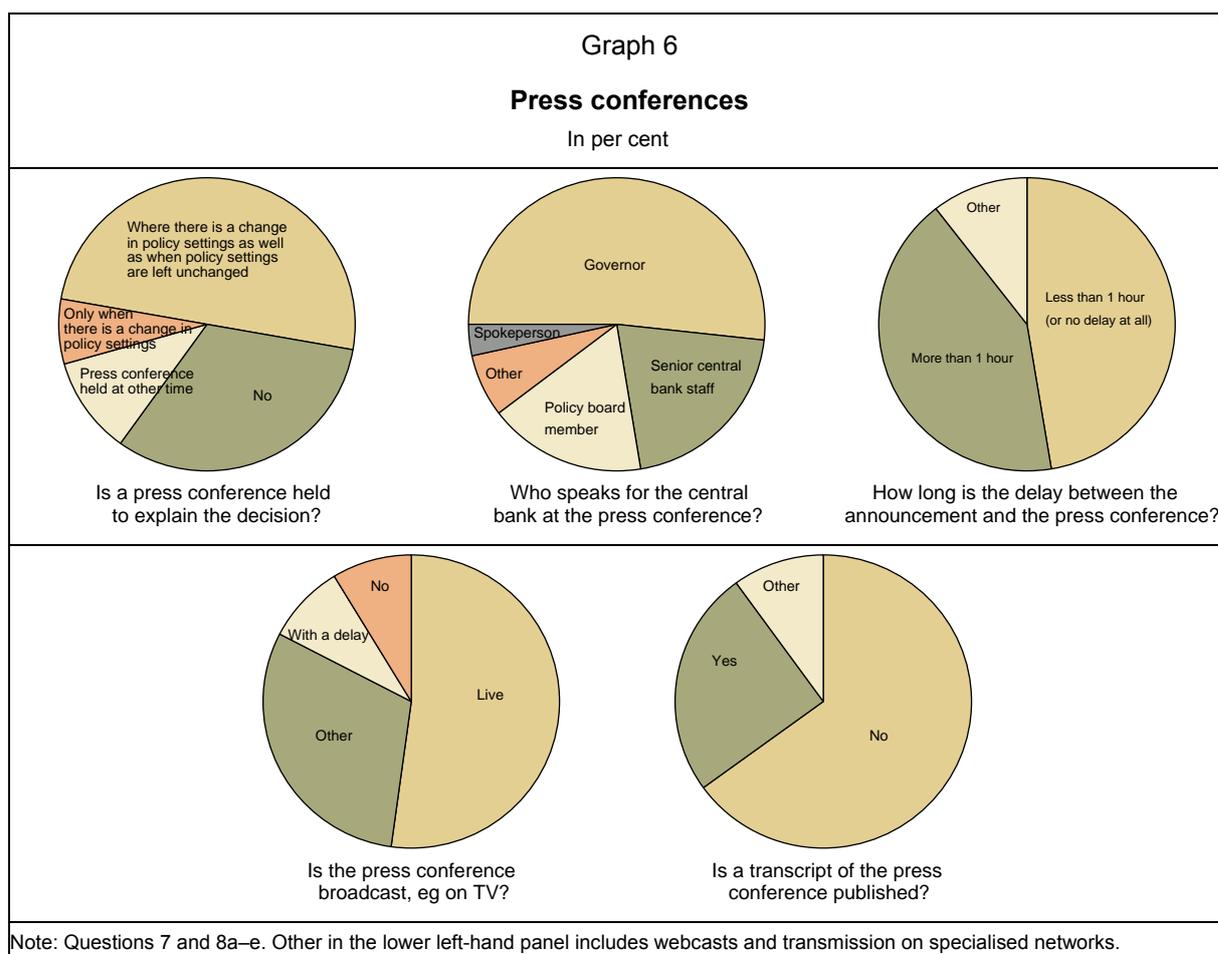
## Communication channels

Changes in policy settings tend to be announced first on central bank websites and newswires (in four fifths of cases for both mediums, see Graph 4). Such a procedure, which provides for a nearly instantaneous transmission of decisions, aims at ensuring a level playing field for market participants. Central banks also organise press conferences, which are a more flexible medium of communications, through which finer lines of reasoning can be provided (Graph 6). However, the organisation of such conferences as a first means of disseminating the decision is less frequent, being used by only 10% of central banks. At the central banks where press conferences are not the immediate means of communication (about half of the total sample) such conferences are, nevertheless, often organised shortly after the announcement. At the press conference, the Governor speaks for the central bank at four fifths of institutions and there is always a question and answer session. There is live media coverage at two thirds of institutions but an exhaustive transcript of the conference is only made available by a quarter of them.

Empirical work carried out on the European Central Bank's (ECB) communications framework has shown that press conferences have a stronger impact on the level of financial

<sup>13</sup> The main spokesperson is the Governor in 90% of cases but board members or other senior officials are allowed to talk in about two thirds of cases.

variables than policy announcements, indicating that they are an efficient means of transmitting new information (Ehrmann and Fratzscher (2007)). Such results also suggest that the question and answer sessions chaired by the President of the ECB are particularly helpful in clarifying the issues mentioned in the ECB's press statements, and also seem to compensate for the lack of minutes at the ECB, a criticism which is sometimes levelled at the institution by academics (Buiters (1999) and de Haan and Eijffinger (2000)) and politicians (minutes are discussed below). However, given the importance that the media attaches to the ECB's use of particular verbal formulations, the question and answer sessions are usually well choreographed and closely synchronised with other means of communications.

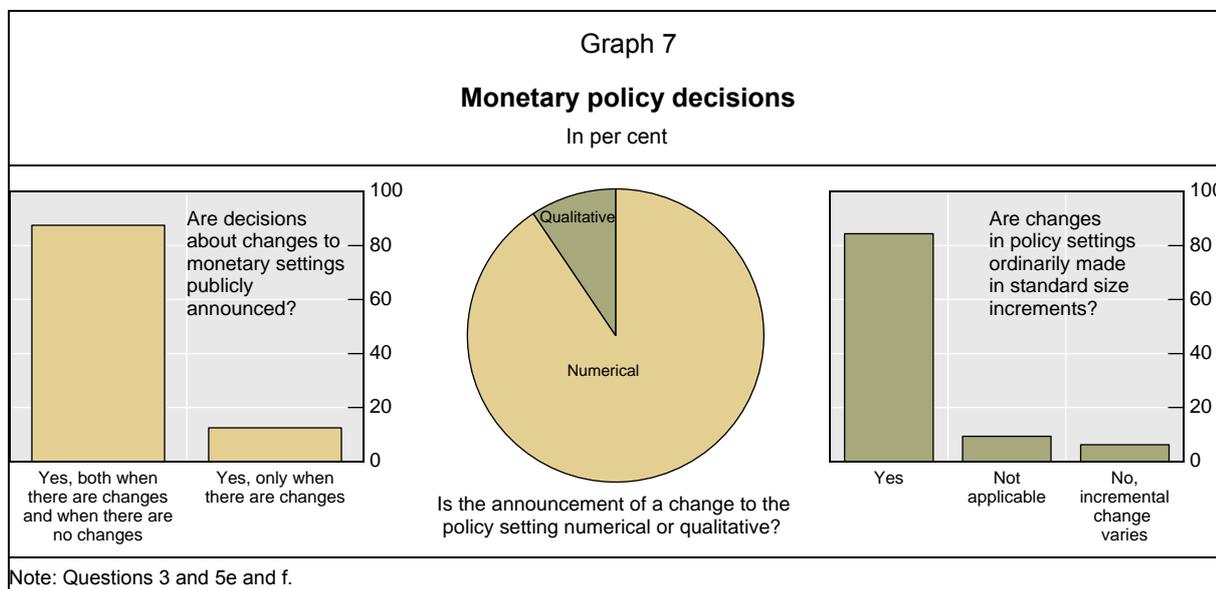


### Actions versus words

At the risk of over-simplifying, one can say that central banks communicate in two primary ways: actions and words (Blinder et al (2001) and Fracasso et al (2003)). In the past, actions counted substantially more than words, given that central banks tended to speak only in extreme circumstances. Changes in the policy rate provided information to the public but the information was indirect and partial. In recent years, words have gained in importance. Some central banks put greater emphasis on one or the other but, in general, actions and words now tend to be used in a mutually reinforcing way that helps to buttress the clarity and credibility of the central bank's message. This means that policy actions can now have a more direct effect.

With regard to words, the survey reveals that almost 90% of central banks now publish a statement following the policy-related meeting, whether the policy setting is changed or not

(Graph 7). The remainder tend to publish a statement only when there is a change in the setting. In other words, decisions about changes in monetary policy settings are almost always publicly announced. This is a far cry from the practice that prevailed a couple of decades ago when market watchers had to infer changes in settings from movements in the rates attached to indirect instruments (or even to direct ones).



Not only are policy changes almost always announced but, in about 90% of cases, announcements of changes to policy settings are expressed in a numerical rather than a qualitative form. This is close to the proportion of respondents using numerical targets. Moreover, in more than four fifths of cases, changes in policy settings are made in standard increments. In several cases, however, the change can at times vary and be a multiple of the standard increment (notably at the Swiss National Bank and three unidentified industrial country central banks).<sup>14</sup>

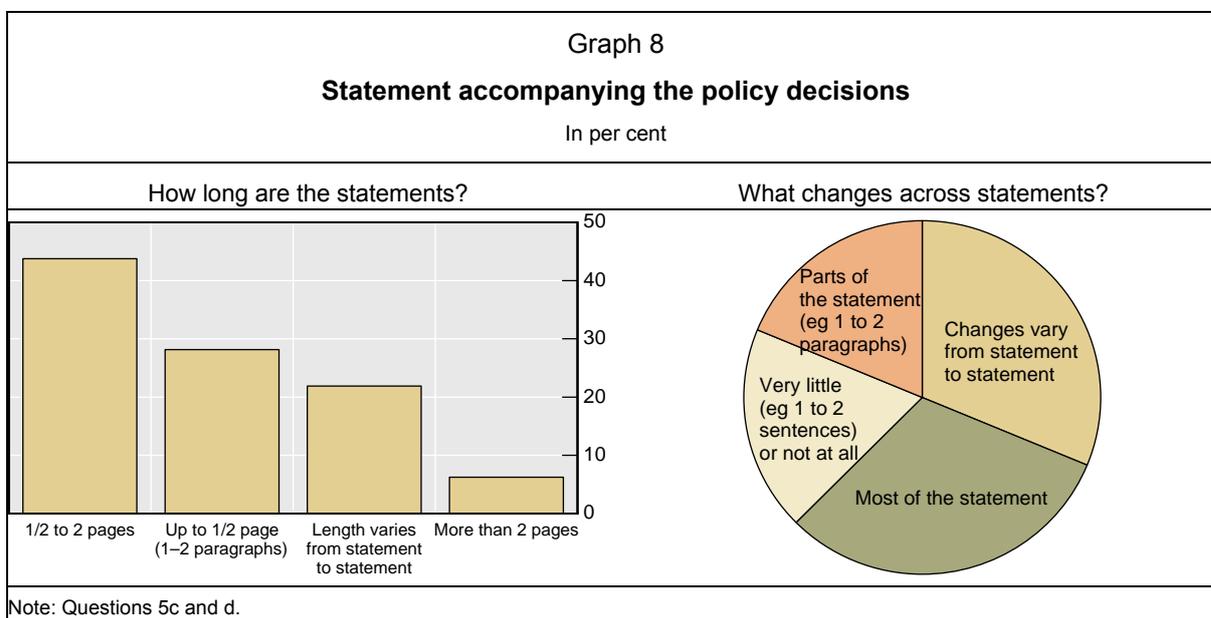
The style that actions can take also varies. García-Herrero and Remolona (2008) argue that central banks can communicate through a “body language” of policy rate moves, which can be as enlightening as formal statements.<sup>15</sup> Under normal circumstances, such increments tend to be small but can move in a gradual pattern that conveys information to the market about the future path of policy rates. Small but gradual and persistent changes in policy rates may well be more effective in transmitting the central bank’s intentions through the yield curve than large and sudden but temporary changes, and would be less unsettling to financial markets. This issue was not specifically addressed in the survey, but it is common knowledge that many central banks, if not most, communicate through some form of body language.

<sup>14</sup> It should be noted that the survey was conducted before the most recent global financial crisis escalated. In 2008, some central banks moved policy rates by as much as 200 basis points in a single day.

<sup>15</sup> For those that are not familiar with this terminology, body language stands for the use of body movements or gestures to communicate instead of sounds or verbal language.

## Length and structure of statements

The statement announcing the change in policy settings is usually short. In about one fifth of cases, it usually contains one or two paragraphs and in two fifths of cases it ranges from half a page to a maximum of two pages (Graph 8).



Inflation targeters tend to congregate in the latter grouping. Only two central banks publish statements that are longer than two pages (the South African Reserve Bank and the Swiss National Bank). It should be noted, however, that statements issued at press conferences can be substantially longer (typically around four to five pages at an unidentified industrial country central bank).

Various considerations are involved in determining the length of the statement. A particularly important one is the trade-off between the amount of detail contained in the statement and the delay in releasing it. There has been a trend over the past decade to reduce the gap between the decision and its disclosure. The wish to publish the correct information as quickly as possible has entailed a great deal of soul searching about the amount of detail to be provided. Seen in this light, the tendency to publish short statements reflects two main considerations, namely, the usually limited amount of time that is available between the policy decision and its announcement, and the need to keep the message clear and simple by focusing on a narrow set of issues. García-Herrero and Remolona (2008) have found evidence from a sample of Asian central banks that long statements are not as effective as short and forward-looking ones in guiding market expectations.

Of course, publishing a short statement is not a foolproof recipe for clarity and consistency. Given that just a few words can have such a significant impact on markets, central banks take great care in crafting their statements. They also try to make the message easier to extract by publishing statements that have a similar structure from one meeting to another. Some have strived to entrench their messages by repeating them as often as can be permitted by the economic and financial circumstances. However, this technique has not gained general acceptance. In fact, statements are rarely carbon copies of each other. Apart from a mandatory description of changes to the policy settings, almost all central banks make quite extensive amendments to the other parts of their announcements, which can perhaps explain why the length of statements often varies. This suggests that the jury is still out between those who favour the repetition of simple and well-structured messages about their actions and those who prefer more tailored ones.

Other considerations could influence the length or the type of statement issued. Blinder and Wyplosz (2004) have argued that the nature of the monetary policy committee determines the volume and methods of communications used. An important structural feature of such committees is whether the decision-making process is vested in the Governor, is consensus-driven or is highly individualistic. It seems clear that decisions made by one individual would be easier and quicker to communicate than decisions reached by consensus or by vote, particularly if accountability rests on individual decision-makers. This would argue for shorter statements. On the other hand, Governor-focused central banks could be inclined to publish longer statements to offset what may be perceived as a democratic deficit. In addition, the size or the composition of the decision-making body could have an influence over the length of statements. A large committee may be required to publish longer statements to express various nuances of opinion, and a committee that formally takes account of specific regions or social sectors could be compelled to discuss certain aspects of policy in greater detail.

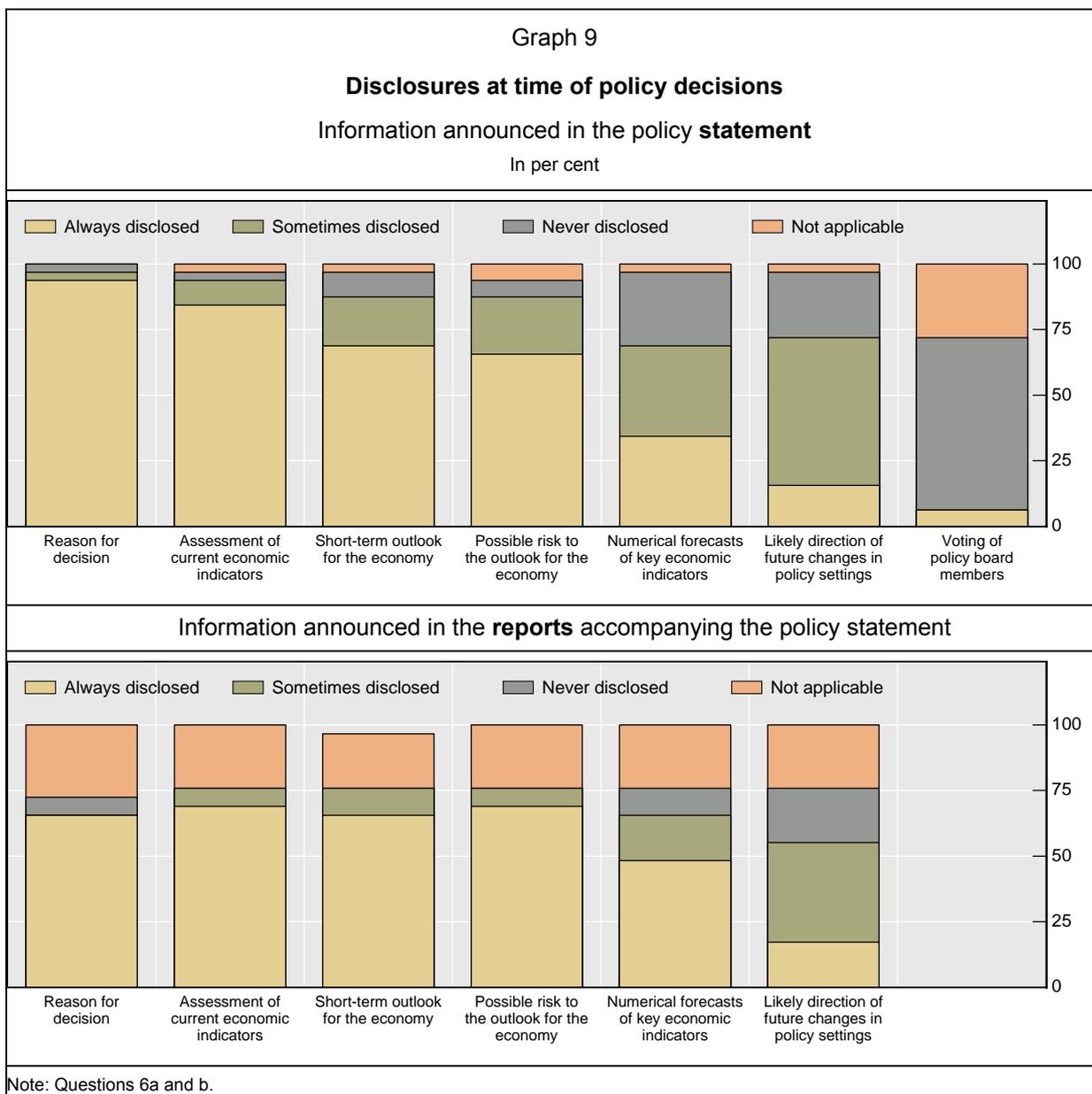
A priori, it is not easy to tell which of those considerations will dominate. Based on our sample, it was not possible to clearly identify any of the relationships discussed above. Governor- or consensus-based committee structures are not associated with either shorter or longer statements, while individualistic or socially representative ones do not tend to publish longer communiqués.

### **Content of policy statements**

Choosing what to discuss in the policy statement and what to reserve for a more complete discussion in a full economic or policy report is usually at the heart of the central bank's communications strategy. Considering the attention that the public gives to the policy announcement, the package comprising the statement and any supporting document must be structured in such a way as to present a clear and complementary message of the central bank's view. For the great majority of central banks, the statement will try to explain the essential reasoning behind the policy decision and offer a sense of the probabilities or factors that might or might not lead to further action in the forthcoming periods (Graph 9). This is a relatively recent change; for example, the FOMC only began providing a brief rationale for policy changes in 1994.

Given that a major consideration underlying the crafting of the statement is that it has to be short and timely, there is a constraint on what can be discussed in it. As Graph 9 shows, the statement almost always contains the reason for the decision (94%) and very often an assessment of current economic indicators (84%). A short-term outlook for the economy and an assessment of the risks to the outlook are somewhat less frequently included, being provided by about two thirds of monetary authorities. The release of numerical values for forward-looking economic variables is much less prevalent, being always released by only one third of respondents: such material is usually left to longer supporting documents. The likely direction of future changes in policy settings is always or sometimes provided in the statement by about half of institutions but numerical directional guidance is rare.

The content and the length of policy statements are relatively homogeneous, demonstrating no obvious relationship in our sample between what is discussed in the statement and its length, although just over half of central banks that provide a forward-looking discussion publish a slightly longer statement (of more than half a page).



The questionnaire did not dwell on the issue of the indirect means of suggesting changes in policy settings during the inter-meeting period, such as code words, signals or the verbal disclosure of a policy bias. Such “forward guidance” has been practised more or less regularly by a number of central banks over the past decade – the Bank of Canada, the ECB and the FRB to name a few – particularly during periods of unusual economic activity or market stress. It came in two strands: the baseline variant, notoriously practised by the FRB since 1999, involved the use of language providing some indication of likely policy actions over the near term, such as “considerable period” or “measured pace” in the policy statement itself; and the second variant, used repeatedly by the ECB under the close control of its President, consisted in sending verbal signals indicating the likelihood of an increase in the policy rate (such as “vigilance” or “strong vigilance”) during the week preceding the policy meeting. The regular use of a limited repertoire of words, which came in addition to either published statements or press conferences, was thought to be useful as a way of more clearly transmitting the central bank’s intentions. Most notably, the advanced type of verbal guidance was seen as helping to minimise potential overreactions to the dry and stylised language contained in policy statements.

Although forward guidance attempted to get extra mileage from the announcement process and the published statement, some central banks now seem to think that it has outlived its usefulness. Woodford (2008) has argued that code words were frequently understood as early announcements of policy intentions and had to be kept intentionally ambiguous in order to minimise the extent to which policymakers' hands would be tied. This, according to him, acted to generate noisy signals rather than a clear message. At present, central banks are apparently favouring more explicit means of communication.<sup>16</sup> As discussed below, the publication of confidence intervals around projected variables or scenario analysis may be considered sufficient by some central banks to convey the uncertainty embedded in forecasts, thus making the recourse to forward guidance less necessary.

## Supplementary reports

Several central banks publish more elaborate supplementary reports that accompany the policy statement (often a regular monthly report or a semiannual or annual monetary policy statement). Not surprisingly, such reports do not dwell as often on the reasons for the central bank's decision (only three fifths of respondents, Graph 9). But they frequently provide a complementary assessment of current economic conditions as well as an outlook and an evaluation of risks to that outlook. Space is less of a constraint, which means that numerical forecasts are slightly more frequent in such reports (almost half of respondents) than is the case with policy statements (around one third of institutions). The likely direction of future changes in the policy rate path, which is considered by some to be the new frontier in central bank communications (Kahn (2007)), is provided with less frequency; only Iceland, New Zealand, Sweden, Switzerland and one anonymous industrial country central bank answered that they always provide such guidance (although about another third of institutions provide it "sometimes").<sup>17</sup>

## Voting records

Information about the voting pattern or the balance of votes of policy board members is an additional device that could help the public to infer the likelihood of future changes in policy settings, an objective of communications strategy cited by a number of central banks (Nelson (2008)). So far, very few central banks have decided to make individual votes public in the policy statement. Only two central banks in our sample disclose such a record (the National Bank of Slovakia and an unidentified industrial country central bank). Why is such disclosure limited? A possible reason could be that some central banks feel that the content of the policy statement itself is sufficient to provide a sense of the direction that policy will take in the forthcoming periods. Some may also reason that, to be truly effective in providing forward guidance, a vote count would have to be associated with more elaborate information on the policymaking committee's discussions. Such information is generally not provided immediately after the policy meeting but usually a few weeks later in the form of minutes.

Various other considerations could make central banks unable or reluctant to publish a detailed record of voting, including the consensus-based nature of the decision-making process at some institutions, a concentration of responsibility for the decision on the Governor at others, or concerns that information about dissenting voices could unsettle

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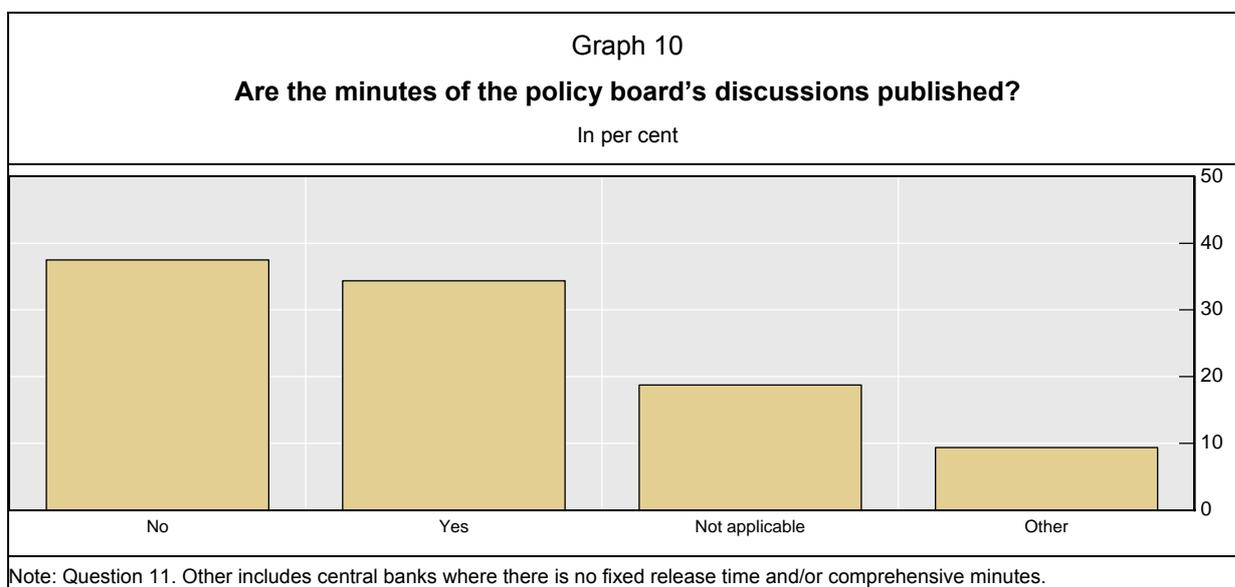
<sup>16</sup> Alternatively, central banks may have found it more difficult or less desirable to provide guidance on future decisions as uncertainty about the outlook increased. Nevertheless, qualitative guidance continues to be used by a number of central banks, including the Bank of Mexico and an anonymous emerging market central bank.

<sup>17</sup> The policy rate path is a sequence of current and expected future policy rate settings that monetary policymakers consider to be consistent with their goals.

markets or impede a frank exchange of views at the policy meeting. Moreover, in the case of central banks with regional or currency area mandates, voting opacity has been claimed to be a desirable feature in that it reportedly shields committee members from being pressured by their constituents. Lastly, a simple disclosure of the voting record would not reveal much about the policy inclination of committee members, particularly when key economic variables follow a divergent path and create a “conundrum” for decision-making (for example, when output declines and inflation rises).

## Minutes

Although central banks are increasingly forthcoming with respect to their policy discussions, judging by what they release in their policy statements, this does not necessarily extend to the publication of minutes. Anecdotal evidence suggests that most central banks take minutes but only one third of respondents actually publish them (Graph 10). Minutes can vary significantly in the amount of information they contain; some are more akin to an extended policy statement while others contain deeper insights into economic conditions and the discussions that preceded policy decisions. Even in the best of cases, they tend to be limited to a highly edited version of discussions rather than a verbatim transcription.<sup>18</sup>



The central banks that publish minutes see them as a means of complementing the information provided in the policy statement and related background documents. In particular, minutes offer a check on the completeness of the policy statement and, when they contain attributed votes, they allow market participants to track shifts in voting patterns and evaluate the effect that such shifts will have on the probability of future central bank actions. They can also be a useful tool in ensuring the accountability of individual policy board members, which could incite them to engage in higher quality discussions and better decision-making (Geraats (2006)). Certain central banks appear to see minutes as an integral part of the announcement process. For example, the Czech National Bank, the Central Bank of the Republic of Turkey and another unidentified emerging market central bank release the minutes of their monetary policy committee meetings within eight days of

<sup>18</sup> The few central banks that release fully fledged transcripts do so after a lag of several years.

the meeting. All (but one) central banks that release minutes publish them within one month of their policy meeting.

Minutes provide an interesting example of the limits to which central bank transparency is typically allowed to go. Although more central banks attribute specific votes to individual decision-makers in their minutes than in policy statements – presumably because such minutes are released with a lag that is sufficiently long to avoid a major impact on the markets – central banks remain reluctant to publish extensive minutes (in our sample, only the Sveriges Riksbank and another unidentified industrial country central bank do so).<sup>19</sup> This probably reflects the same set of factors as is the case for the choice of whether or not to publish voting records in policy statements. In particular, central banks may be concerned that too much openness would stifle the exchange of views, leading to the use of pre-written formal statements at meetings and private off-the-record exchanges outside the meetings (Filardo and Guinigundo (2008) and Nelson (2008)). The publication of minutes could also be considered to be unfair to external committee members to the extent that they may have less information at their disposal than internal members. Nevertheless, by providing a public record of the central bank's thinking, minutes would allow market observers to compare the "average" view represented by the official policy statement and the "standard deviation" of that view contained in the individual positions of committee members. This could facilitate the market's assessment of the policy process and its outcome, thus helping to better guide expectations.

## **5. Channels of communication outside the announcement window**

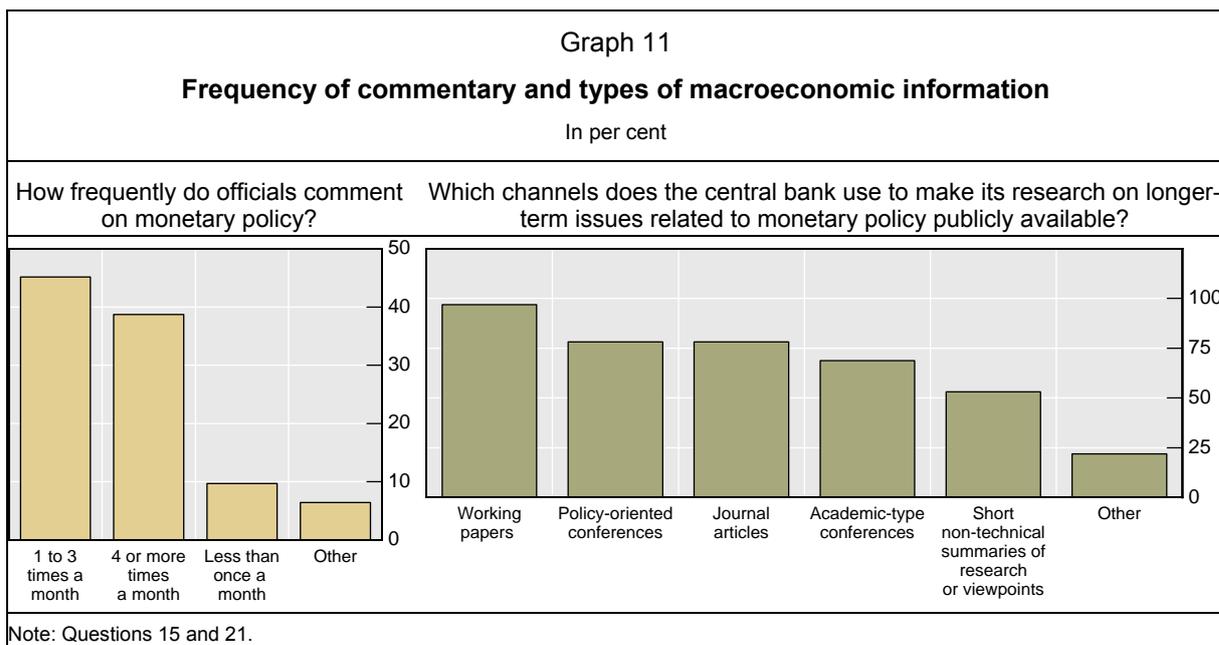
Central banks are no longer content with maintaining a low profile outside the window within which policy changes are announced. They now contribute actively to the flow of economic and financial information in the inter-meeting period through verbal or written statements or through economic reports.

### **Verbal communication**

Outside the policy window, central bank officials, principally the Governor (91% of respondents), policy board members (slightly less than two thirds) and other senior figures (two thirds), talk frequently in speeches about the economy and policy-related matters (Graph 11). Speeches have traditionally played an important role for central banks as a means of providing partial information about their thinking. Officials comment from one to three times a month at two fifths of institutions, and four times or more a month at another two fifths. Only around one tenth of central banks restrict themselves to less than one public comment per month by their officials.

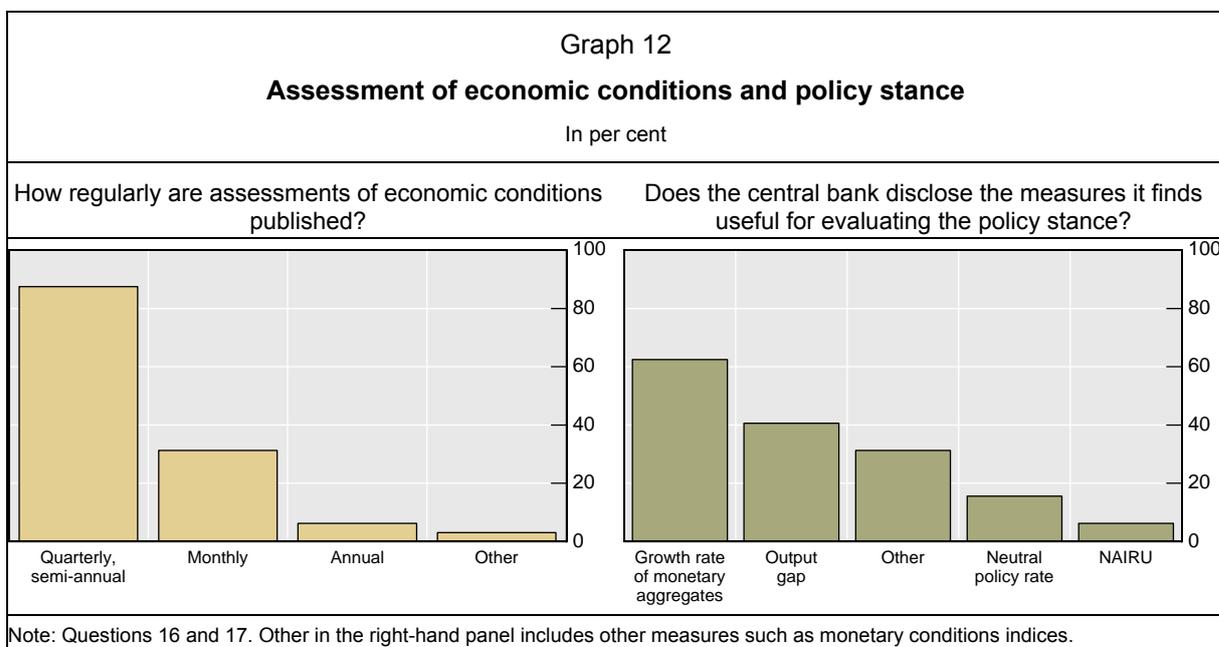
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<sup>19</sup> The Central Bank of Chile, the Czech National Bank, the Bank of Korea, the National Bank of Slovakia, the Sveriges Riksbank and an unidentified industrial country central bank publish attributed votes in their minutes. The National Bank of Poland publishes a voting record in the *Court and Commercial Gazette* rather than in its minutes.



### Publication of regular economic assessments

Verbal interventions are complemented by the publication of regular assessments of economic conditions and the policy stance that is not directly linked to policy announcements. All countries in the sample regularly publish documents of economic analysis that underpin their decisions about monetary policy. Excluding annual reports, which almost always contain coverage of economic developments, 90% of central banks publish a quarterly or semiannual document and one third publish a monthly document (Graph 12).



Such documents discuss economic and financial developments (obviously with a particular focus of inflation targeters on the evolution of inflation) and sometimes monetary policy

considerations. A number of central banks publish regular reports on financial stability, which also typically contain information on current macroeconomic conditions.

The documents mentioned above can often be a good source of information on the central bank's own estimates of complex measures that are notably useful in evaluating the stance of policy. Metrics of economic activity that are not readily available to the general public, such as the output gap, the neutral policy rate and the NAIRU, are provided respectively by 40%, 16% and 6% of central banks. Deriving robust estimates of such variables is a difficult task – this may explain why their disclosure continues to lag that of monetary aggregates, which are released by some two thirds of monetary institutions. Although monetary aggregates are easier to derive and understand, few central banks are willing to describe in detail how they are factored into the policymaking process. In written comments, 13% of central banks also specified that they published other indicators, including various types of monetary conditions indices (ie a linear combination of a real short-term interest rate and the real exchange rate).

### **Release of economic forecasts**

A large majority of central banks (84%) release an economic forecast, typically in one of their regular publications (Graph 13). This has met with broad support among academics as a cornerstone of forward-looking monetary policy frameworks. Geraats (2005), among others, noted that the publication of forecasts provides more accurate signals of central banks' intentions, quickly exposing any bias towards inflationary policies and thus exerting a disciplining influence on central banks.

At a practical level, the publication of forecasts helps to make the decision-making process more understandable and contributes to educating the public about the complex issues faced by policymakers in achieving given policy objectives. This is thought to be a means by which central banks can build their credibility (Nelson (2008)), and can also act as an incentive for central bank staff and senior policymakers to tighten up the assumptions and views underlying the forecast. Inflation targeters are particularly active publishers of forecasts.

Most of the forecasts represent an official view agreed by the Governor or the policy board. Staff forecasts, which are a means of distancing the views of the policymakers from the assumptions and uncertainty embedded in the projected outlook, are less frequent (about one quarter of cases). In most cases, central banks that publish an official view do not produce a separate staff forecast (the Central Bank of Chile and an unidentified industrial country central bank are the exceptions to this rule in our sample). An interesting side issue is whether staff forecasts are taken as seriously by the public as official forecasts and truly add to transparency about policy decisions. Czogala et al (2005) suggest that they do not in the case of Poland; staff forecasts constitute one of the inputs into the monetary policy decision-making process but they do not necessarily reflect the views of the committee. Their research suggests that staff forecasts have only had a limited effect on central bank transparency in Poland.

About 90% of central bank forecasts contain projections for economic growth and inflation, which are probably the variables that attract the most attention among the broader public. Forecasts of other variables that are also important in understanding the evolution of monetary policy are less frequent. For example, projections of the unemployment rate are provided by about 40% of institutions.

Some monetary economists, such as Svensson (2002), have argued that full transparency would require a projection of the policy rate path (in addition to a projection of inflation and the output gap) and a release of the so-called "objective function" of the central bank (which includes, primarily, the relative weights attached to the stabilisation of inflation versus output fluctuations).

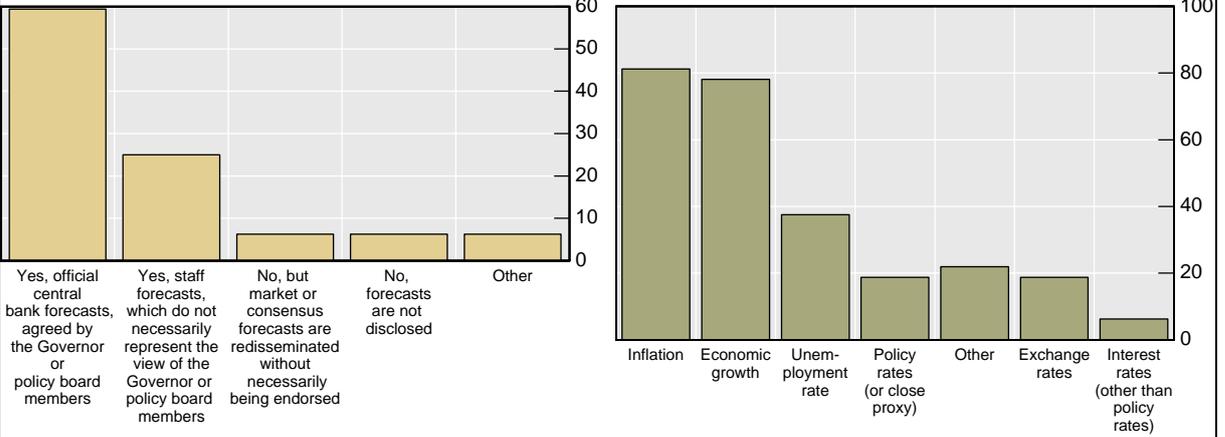
Graph 13

**Disclosures about central bank forecasts**

In per cent

Does the central bank regularly disclose its forecasts of key economic variables?

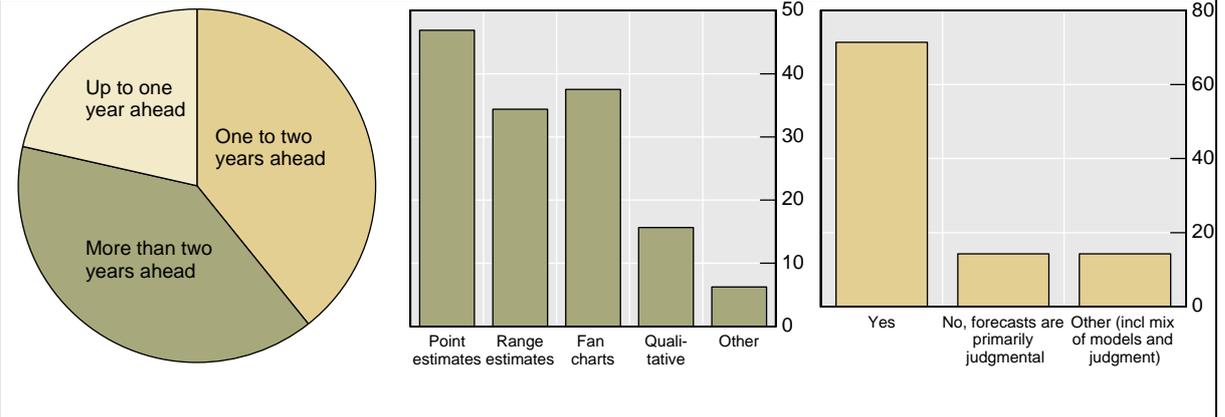
... for which variables?



... for what time horizon?

... numerical or qualitative?

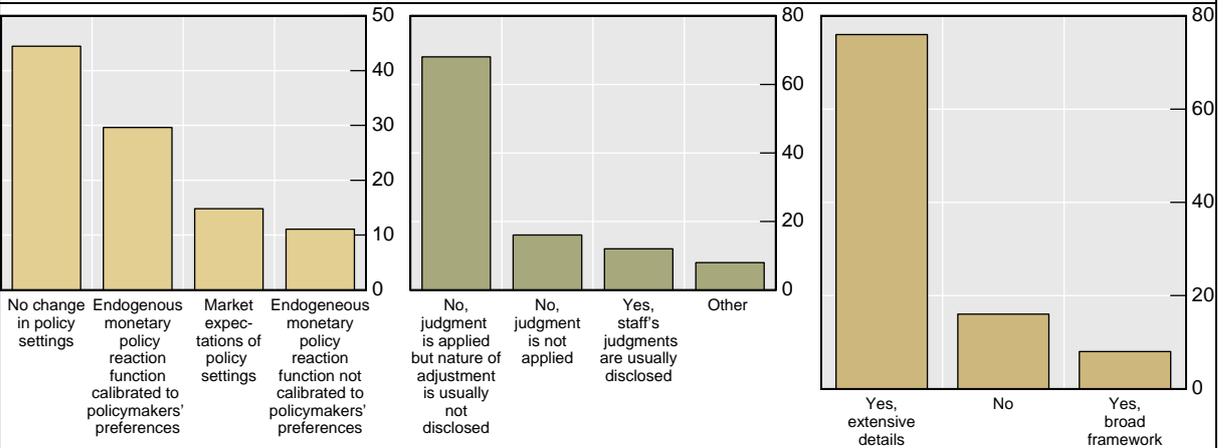
... primarily model-based?



What monetary policy settings underlie the disclosed forecasts?

Are judgmental and ad hoc factors to the forecasts disclosed?

Is information about the model made publicly available?



Note: Questions 18, 19a–d and 20a–c.

Others, such as Woodford (2008), see a projection of the path as a prerequisite for consistency once forecasts of the inflation rate and the output gap are published. Some, however, have argued that such exhaustive forecasts may complicate the task of communicating with the public and may, therefore, not necessarily improve transparency (Mishkin (2007)).

So far, the central bank community has preferred to err on the side of caution, with only around one fifth of respondents providing numbers for an endogenously determined policy rate path or for a close substitute (the Czech National Bank, the Central Bank of Iceland, the Reserve Bank of New Zealand, the Sveriges Riksbank and an unidentified industrial country central bank).<sup>20</sup>

One of the alleged benefits of publishing a forecast of the policy rate path is that it could improve the central bank's leverage over the yield curve. Such a quantitative indicator of policy provides an easy-to-understand reference to policymakers' preferences and strategy. There is evidence for the United States that more explicit guidance about the future path of the federal funds rate has led to an improvement in private sector forecasts of monetary policy (Sellon (2008)). It can also help central bank staff and policymakers in streamlining their views about the future evolution of the economy and policy settings (Nelson (2008) and Qvigstad (2008)). In particular, publishing a forward-looking indicator of policy rates can serve as a device for discussing the divergent views of policymakers, which could help them to better understand the source of their differences and perhaps even reach a collective judgment on a specific course of action. At the Sveriges Riksbank, for example, the decision to publish a forecast of the policy rate path has led to a deeper involvement of the Executive Board in the forecasting process (Rosenberg (2008)). However, some worry that it would be both difficult and excessively time-consuming relative to the benefits for a group, especially a large one, to try to reach agreement on a future policy rate path (rather than the next policy rate decision, see Goodhart (2001)). In this context, the experience of the Sveriges Riksbank may not be universally applicable.

There is also clearly fear among many central banks that offering a forecast of the policy rate could be viewed as a promise to maintain a certain path for the rate rather than a conditional indication of how policy could be expected to behave in a given scenario. The use of market forecasts could be a possible avenue for central banks that want to remain non-committal about the future evolution of the policy rate. But it would have problems of its own, the main one being the risk of inconsistency with the thinking of policymakers. So far, only central banks from smaller countries have decided to publish their forecasts of the policy rate; this could possibly be explained by their greater exposure to external conditions, which makes it easier for the public to understand the conditional nature of the projections.

On the other hand, some have argued that publishing an interest rate forecast may not even be sufficient to communicate the central bank's policy intentions (Svensson (2002)). According to this line of reasoning, a specific forecast does not convey much information about how the central bank will respond to the economy's development or to shocks affecting it; the additional publication of an objective function would therefore be useful. The main counterargument is that it is difficult to condense all the complexities of policymaking into a simple and easily communicable function (assuming that one could be agreed upon). Judging from survey responses, central banks continue to have strong reservations about suggestions to make their objective functions explicit. Even policy rules, which are far more primitive than objective functions, are only published by the Reserve Bank of New Zealand and an unidentified industrial country central bank. But even so, the material published by the

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<sup>20</sup> The exchange rate is published by less than a handful of central banks, mainly in small and open economies.

Reserve Bank of New Zealand is of a somewhat technical nature while the information released by the other central bank is couched in highly general terms.

All in all, many central banks probably see the benefits of providing an explicit numerical policy path or a policy rule to the markets as being somewhat marginal given the other steps taken to increase transparency, including verbal guidance and numerical values for growth, the output gap and inflation (Kahn (2007)). In particular, some central banks seem to think that they provide enough information for financial markets to infer their interest rate paths. If central banks are relatively systematic in their policymaking, exhibit rule-like behaviour over time, and provide values for potential output and the inflation target, along with forecasts of output and inflation, they may indeed offer sufficient information for financial markets to construct likely paths for their policy rates (Sellon (2008)).

Around one fifth of forecasts are published with a horizon of up to one year, nearly two fifths are published with a one- to two-year range and another two fifths push out beyond two years, with inflation targeters more strongly represented in the latter grouping. Most inflation targeting schemes focus on reaching a stated target over the medium term, which requires a somewhat longer time horizon. For all central banks, the transmission lag from the policy rate to output and inflation is a factor that has a bearing on the adopted time horizon. Indeed, longer-term forecasts are not the preserve of inflation targeters, as illustrated by the Federal Reserve's announcement in November 2007 that the projection horizon of FOMC members would be extended from two to three years.

With the majority of central bank forecasts now being quantitative, forecasters and policymakers are paying greater attention to conveying the sense of conditionality and uncertainty inherent in such exercises. Altogether, two fifths of central banks publish a range of numbers and another two fifths make public fan charts.<sup>21</sup> Ranges and fan charts are more intensively used by inflation targeters in emerging market economies, perhaps reflecting the larger variance of output observed in such economies. Forecasts that are purely qualitative are now very much in the minority, with only about one fifth in that group and, again, mostly in emerging market economies. This shows the existence of two camps within the emerging market country group with respect to forecast disclosure, with a first group favouring the release of numeric objectives and a second one preferring a qualitative discussion.

The few central banks that do not publish official forecasts did not explain the reason(s) for their choice. A possible reason could be that the central bank could face public criticism should the forecast turn out to be widely off the mark, a real possibility given the many short-term drivers of growth and inflation that are outside the central bank's control (Nelson (2008)). Another reason is that market participants may focus too narrowly on relatively small changes in the projected variables and tend to lose sight of the overall picture. It could also be that central banks want to make it clear that policy decisions are not premised uniquely on forecasts.

### **Information about forecasting models and assumptions**

For 70% of respondents that disclose a forecast, such a forecast is based primarily on explicit econometric models (Graph 13). Only four central banks publish forecasts that are mainly based on judgmental criteria and those criteria are rarely made public. However, several central banks also answered that their forecasts reflected a combination of model estimates and judgmental adjustments. Moreover, some central banks, notably central banks responsible for large economic areas, use more than one econometric model to generate staff projections (see Nelson (2008)).

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<sup>21</sup> Of the 15 central banks that provide point estimates, six also provide a range of numbers or fan charts.

It also worth noting that published forecasts tend to comprise a narrower set of assumptions than those considered by monetary policy committees as part of their deliberations, as revealed by an internal BIS survey on staff inputs into the monetary policy decision-making process. Projections that are made on the basis of alternative scenarios are commonly used as a means of exploring various hypotheses and issues. The discussions surrounding such scenarios tend to be less structured but are nevertheless useful in moving towards a common viewpoint. Not publishing this background material is consistent with the view that it would confuse the public, as is the case with the publication of verbatim-type minutes.

Of the central banks disclosing forecasts that are the product of econometric models, three fifths release estimates based on an assumption of unchanged policy settings (see the earlier discussion about projections of the policy rate path). But three quarters also answered that their estimates were based on an assumption of some kind of policy rate adjustment, either derived from market expectations of policy rates or endogenous monetary policy reaction functions. This suggests that some central banks publish the results of more than one type of forecast.

In addition to the output of forecasts, a majority of central banks (about 60%) also publish in-depth information (eg on the underlying data, the equations and the parameters) on the forecasting models they use. Two central banks limit themselves to publishing only broad information about their modelling framework (6%). Information about models can be very useful to market analysts since it allows them to better understand the reaction of the central bank and to calibrate their own models with the published model of the central bank. However, it is worth noting that fewer Asian and Latin American central banks (that publish forecasts) also publish detailed information about their models. This could reflect a host of factors, including the relatively limited use of models for policymaking purposes in some countries, particularly when economic data are less reliable or the economy is difficult to model (owing to the lack of diversification or the predominance of volatile sectors). It could also reflect the cost in time and resources of designing models that are sufficiently robust to stand up to public scrutiny. In fact, concerns about public scrutiny seem to be a broader issue given that, so far, only a fifth of all institutions surveyed have revealed the results of external reviews of the features and performance of their models.

## **Research and other means of communication**

Graph 11 shows that all the central banks surveyed publish research on longer-term issues related to monetary policy, either in the form of working papers (97%), journal articles (78%) or short non-technical summaries of research or viewpoints (53%). Research on monetary policy is also presented at policy-oriented conferences (78%) and academic-type conferences (69%). Central banks are somewhat less proactive in communicating monetary policy matters to people with limited access to the internet and other electronic communications media; only about two fifths of respondents do so. The communication tools used include interviews in print media, lectures at schools and universities, the production and mail delivery of educational material, public education campaigns and speeches.

## **6. Strategy behind communication**

### **Elements motivating the choices made**

Central banks devote considerable resources and time to sending the right signals at the right time to their various constituencies, including legislators and other policymakers,

## Using transparency indices to obtain a cross-country perspective on central bank communications

The above discussion provides a comprehensive picture of the various elements of the communications frameworks of central banks. It may be of interest to look at how those elements could be aggregated into an overall transparency score that would allow for comparisons across monetary policy frameworks and regions. As noted in the background part of this paper, there is a presumption that, for accountability and efficiency reasons, certain monetary policy frameworks may be more “communications intensive” than others. There is also a presumption that economic development or geographical location matters.

Owing to its multi-dimensional and qualitative nature, transparency is not a concept that can be captured by a single number in a non-controversial way. Nevertheless, Geraats (2005 and 2006) and Eijffinger and Geraats (2006), and JP Morgan (2007), among others, designed measures that were used to compare transparency across frameworks and countries (this box should not be seen as endorsing either their construction or conclusions). The Eijffinger/Geraats index is a detailed metric that focuses on information provided at each stage of the policymaking process. It is based on five main components that are themselves broken down into three subcomponents.

More specifically, the components cover:

- *Political transparency, which refers to openness about policy objectives*
  - Formal statement of the objectives with an explicit prioritisation if there is more than one objective; quantification of the primary objective; and explicit institutional arrangements between the central bank and the government;
- *Economic transparency, which centres on the economic information used for monetary policy*
  - Public availability of basic economic data relevant to the conduct of monetary policy; disclosure of formal macroeconomic model; and publication of macroeconomic forecast;
- *Procedural transparency, which concerns the way monetary policy decisions are taken*
  - Provision of explicit policy rule or strategy describing the monetary policy framework; comprehensive account of policy deliberations or explanations in case of single decision-maker; and disclosure of how each decision regarding the main operating instrument or target is reached;
- *Policy transparency, which focuses on the prompt announcement and explanation of policy decisions*
  - Prompt announcement of adjustments to the main operating instrument or target; provision of explanation when policy decision is announced; and disclosure of an explicit policy inclination after every policy meeting or an explicit indication of likely future policy actions;
- *Operational transparency, which concerns the implementation of the central bank's policy actions*
  - Regular evaluation of the extent to which the main policy operating targets have been achieved; regular provision of information on macroeconomic disturbances affecting the transmission process; and regular provision of an evaluation of the policy outcome in light of macroeconomic objectives.

The index created by JP Morgan is a simpler, practitioner-oriented tool based on an initial set of nine variables:

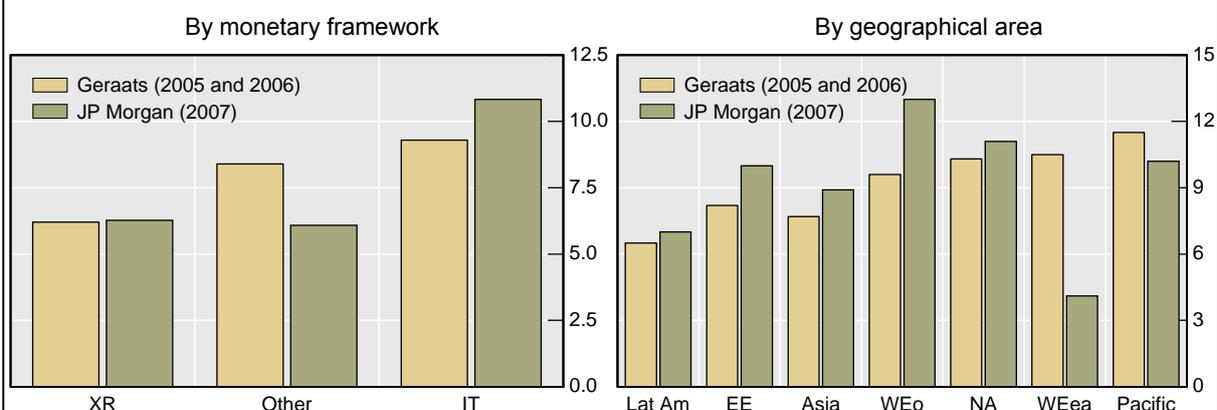
- Post-meeting statement after every meeting; publication of minutes; publication of votes; forecasting the policy rate; forecasting growth; forecasting inflation; forecasting resource utilisation; ownership of forecast by policymakers; and Q&A session.

Both indices were applied to the sample of 32 responding central banks and the total score for each index was used to generate Graph 14.<sup>‡</sup> The result suggests that the type of monetary framework used has an influence on the intensity of central bank communications. In particular, inflation targeting countries tend to have a higher transparency score than countries operating under other monetary regimes. This is in agreement with the view of Bernanke et al (2001) that inflation targeting is not only a policy rule but also a decision-making framework that relies heavily on a well-structured communications strategy. However, this is not a hard and fast rule. There are notable variations in overall transparency among inflation targeters: several are at the top of the indices' ranges but others are not particularly forthcoming with regard to disclosure.

<sup>‡</sup> To be more precise, the scores for the Eijffinger and Geraats (2006) index were taken from Dincer and Eichengreen (2007), who extended the initial sample of nine countries to 100 countries.

Graph 14  
**Central bank transparency indices**

Normalised index



Note: Lat Am = Latin America; EE = Eastern Europe; WEo = western Europe (other); NA = North America; WEea = western Europe (euro area).

Moreover, some countries that base their monetary policy decisions on other frameworks can also publish relatively thorough information. This is in line with Eijffinger and Geraats' view that, in principle, other frameworks, such as the ECB's two-pillar strategy, could obtain the maximum score for any aspect of transparency. But it is also clear that central banks that base their monetary policies on mechanistic rules involving, for example, the exchange rate, do not need to provide as much information to communicate whether their objectives are being met.<sup>^</sup>

It is worth noting that the two sets of indices showed less consistency across regions. The Eijffinger and Geraats index indicates that central banks in Australasia (Pacific on the graph), part of western Europe (broken down into the euro area and other western European countries) and North America tend to disclose more information than those from other regions.

However, the JP Morgan index shows a significantly lower ranking for central banks belonging to the Eurosystem. One of the reasons for this discrepancy is that the two indices put different emphasis on the various aspects of transparency. The JP Morgan index is somewhat biased towards central banks that have adopted an individualistic decision-making structure. Because they do not provide minutes or a voting record, the central banks of the Eurosystem are penalised by the JP Morgan index. However, the inclusion of other elements of the Eurosystem's framework in the JP Morgan index would help to increase its score. For example, it could be argued that the provision of finer nuances of policy thinking in the Q&A sessions of the ECB would warrant a larger weight than a voting record or the (delayed) release of minutes. The inclusion of Eijffinger/Geraats' political transparency variables would also increase the score of the ECB.

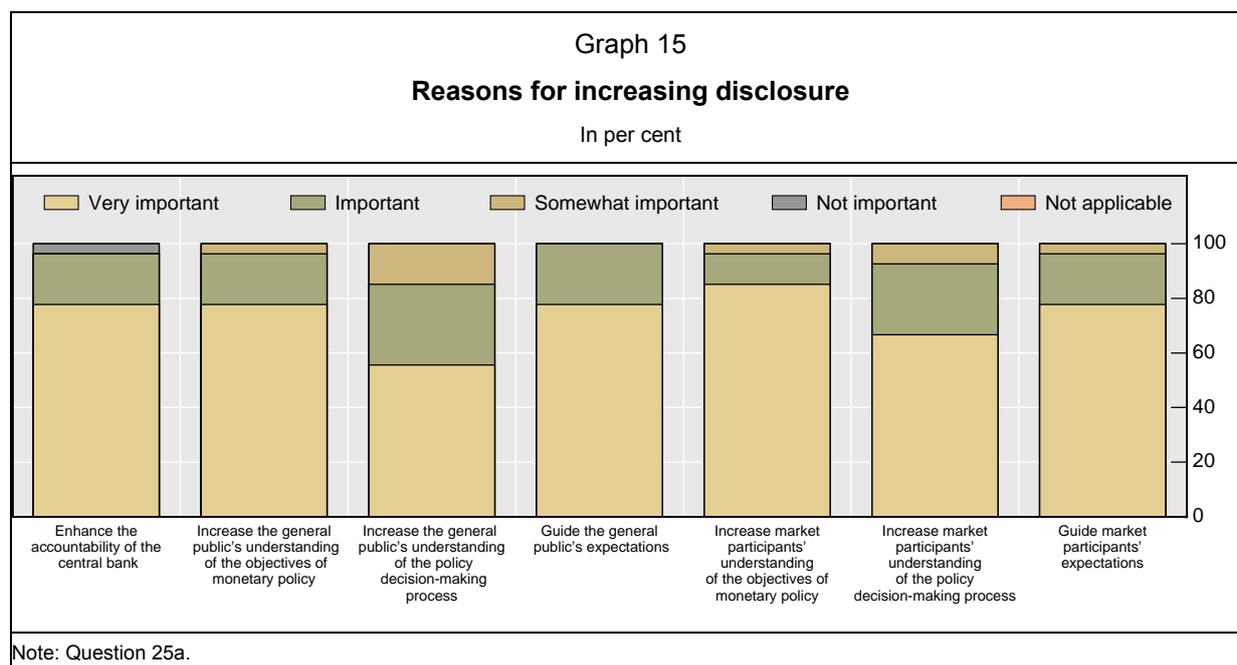
Another difference revealed by the transparency scores is that central banks that have full responsibility for the setting of their monetary policy objectives tend to be more transparent than others: this could be explained by the need to buttress the legitimacy of their choices.

<sup>^</sup> That being said, even if not required, exchange rate targeters may choose to publish more detailed information to facilitate the adjustment of expectations. For example, they often publish information on their anchor country's rate of inflation and how that rate will relate to domestic inflation and the real exchange rate.

financial market participants and the general public. In order to get some insight into communications strategies, survey respondents were asked to select from a list of items that might motivate increased disclosure and a list of items that might limit disclosure. Two sets of questions were asked: one focusing on market participants and another on the general public.

### Reasons for increasing disclosure

With regard to the reasons for increasing disclosure to market participants, more than two thirds of central banks responded that enhancing accountability was very important (Graph 15). Three quarters also answered that increasing market participants' understanding of the objectives of monetary policy and guiding their expectations were very important.



There was little difference in the responses of central banks to the set of questions centring on the general public. Very similar scores were obtained across questions (although with a somewhat lower response to the question on increasing the public's understanding of the decision-making process – only about half of the respondents rated this question as very important and one quarter as important). The previously mentioned internal BIS survey on the public image of central banks revealed that central bank opinion surveys showed little change in the confidence that the public had in them. In addition, the public's understanding of the functions of central banks remained quite low. This suggests that most of the progress in communicating monetary policy has focused on market participants. Whether it may be worth investing more in educating the general public is an open question. Once the credentials of the central bank as a guardian of price stability have been well established, the public is less likely to pay attention to monthly fluctuations in the rate of inflation. Central banks may therefore consider that this is less of a priority area, particularly if moving down the line to the retail sector involves significant costs in time and resources.

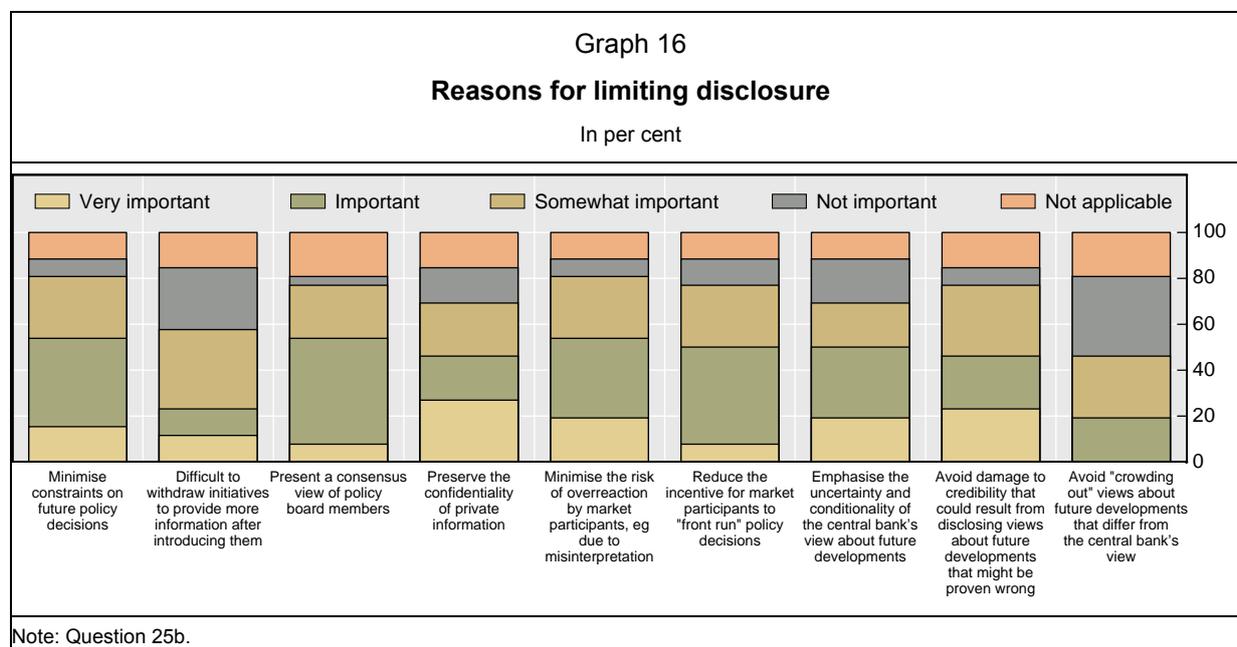
### What is deterring central banks from disclosing more information?

There are various practical reasons for limiting the disclosure of information. According to Cukierman (2007), full transparency may not always be optimal because it may not be

desirable to reveal information about individual financial institutions or about disagreements within the policymaking committee. The disclosure of “private” central bank information about liquidity or solvency problems in parts of the financial system could easily trigger a bank run. Revealing open dissent within the policymaking board could generate additional noise, to the detriment of financial market stability. Similar risks to stability could arise from revealing information about problems concerning a fixed or a highly managed exchange rate arrangement. Another practical reason is that there is a limit to how much information the public can effectively digest (Kahneman (2003)). Given that this creates constraints on the quantity of information that can be released, some have argued that central banks should be careful in communicating information about economic variables that are particularly noisy and should focus instead on issues that are more closely under their control (Blinder et al (2008)).

There could also be theoretical grounds for limiting transparency. The publication of the central bank’s objective function could lead to political attacks against the central bank. Goodhart (2001), among others, has said that the central bank should not presume the relative weight that society attaches to stabilising output versus inflation. Yet, in the end, the central bank is always forced to presume such weight because it has to make policy choices. From another angle, Morris and Shin (2002) have argued that people may come to rely too much on information from the central bank rather than on their own.

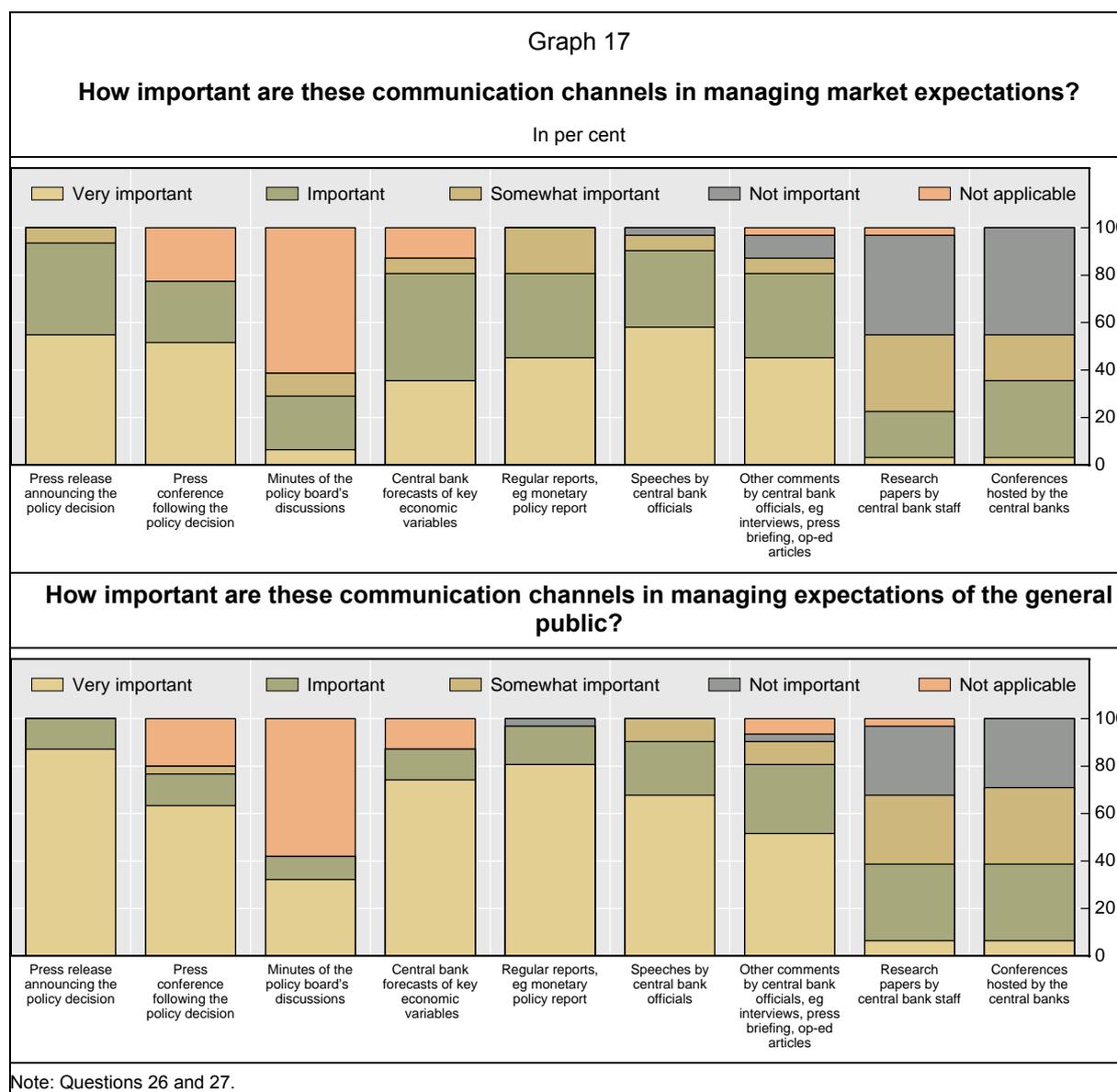
In the survey, the reasons for limiting disclosure were not as clear-cut as those justifying increased disclosure (Graph 16). Four elements stood out as being important: (i) presenting a consensus view of policy board members (more than two fifths of respondents); (ii) reducing the incentive for market participants to “front run” policy decisions (more than a third); (iii) minimising constraints on future policy decisions (one third); and (iv) minimising the risk of overreaction by market participants (slightly less than a third). A fifth element, avoiding damage to credibility resulting from the disclosure of views about future developments that could prove to be wrong, was seen as somewhat important by a quarter of respondents.



For those specifically interested in the concerns formulated by Morris and Shin (2002) that increased transparency from an influential public sector body might not be desirable because it would lead private sector agents to overreact to such information and suppress their own information, thus resulting in a kind of nationwide “groupthink”, central banks did not seem to rate this as a big reason for holding back. Concerns about avoiding a “crowding out” of views

that differed from those of the central bank were rated as not important by at least one third of institutions and as somewhat important by less than one fifth. This lack of concern is consistent with Svensson’s criticism of Morris and Shin that public information could only be welfare-reducing if private information contained a multiple of the precision of public information (Svensson (2006)).

Countries operating within an inflation targeting framework routinely stood out as placing greater emphasis on factors that motivated additional disclosure than factors that motivated limits on disclosure. As discussed earlier, one possibility is that inflation targeters tend to put more weight on their communications strategy than others, which is consistent with the notion that inflation targeting is a framework within which communications play an enhanced role.



### Importance of channels of communication in guiding expectations

Respondents were also asked to rate each of the communication channels guiding the expectations of market participants and the general public (Graph 17). With respect to the

channels used to guide market participants, the most important one was the press release that announces the policy decision, which almost 90% of central banks rated as very important. Other items rated as very important included: regular reports on monetary policy (81%), central bank forecasts (74%) and speeches by officials (68%). However, the press conference that follows the policy decision seems to be somewhat less important for a majority of respondents (61%), despite the evidence cited earlier in the European context that the press conference was a useful tool in guiding market expectations.

Research papers by central bank staff were not seen as being important to market participants by a significant minority (slightly more than 40%), as were conferences hosted by the central bank (45%). This may come as a somewhat disappointing outcome given the efforts made by central bank researchers to make their work more accessible to financial market participants.

There was less of a consensus concerning the channels used to guide the expectations of the general public: regular reports on monetary policy, central bank forecasts, speeches by officials and the press conference following the policy decision all tended to rank lower than for market participants (at between 50% and 60%).

Research papers by central bank staff were seen as somewhat more important to the general public (42%) than to market participants. This could reflect the intensive use of such material by academics and students but the relationship is still at odds with what one would expect.

### **Surprising the market**

The survey also provided information about central banks' views on the old debate concerning whether they should surprise market participants (Graph 18). As discussed earlier, most central banks are now highly predictable in their monetary policy announcements. Indeed, the survey results show that, nowadays, few central banks actively seek to surprise markets. In fact, most institutions work fairly hard to avoid surprises, for the reasons listed in Graph 18. A majority of respondents think that it is important or very important to minimise market uncertainty. Indeed, almost three quarters of central banks consider that minimising interest rate volatility and market overreaction is important or very important. Almost half of them also think that minimising exchange rate volatility and uncertainty over asset prices is important or very important.

However, central banks do not seem to be too worried about the possibility of changes in monetary policy settings that would surprise market participants. While about half of the respondents answered that avoiding unexpected monetary policy decisions was important (as opposed to very important) and another third answered that it was somewhat important (Graph 18), only one tenth thought that it was a very important issue. Similarly, there was no overwhelmingly clear reason for avoiding changes in policy settings that would surprise market participants. Minimising the risk of overreaction by market participants was only seen as being very important for two fifths of respondents.

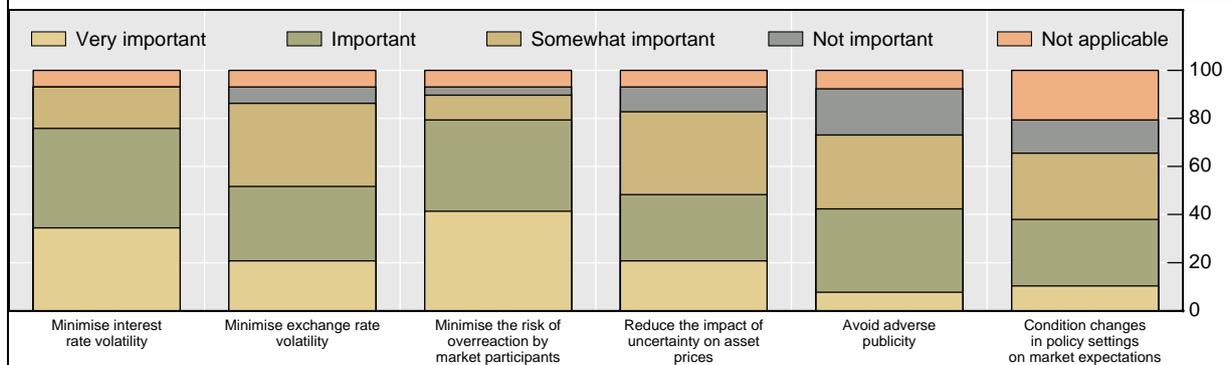
The reasons for such an outcome were summarised by the Bank of Canada, which said that it would not be constrained in its decisions by the fact that it could surprise markets if the decisions were the necessary ones based on all available information. Moreover, it noted that, given the relatively slow evolution of economic variables, it was rare for the environment relevant to monetary policy to change so rapidly between decisions that a major surprise would occur (presumably with some exceptions, such as the Russia/LTCM crisis of 1998 or the more recent "credit crunch"). Another central bank provided a textual reply that went along the same lines, indicating that there was no pre-commitment with respect to the magnitude, timing or frequency of interest rate decisions. Interest rate decisions could be taken at any time, as the pursuit of its primary objective dictated. Other central banks noted that the general public shared the same basic set of information as the central bank.

Graph 18

**Markets and policy surprises**

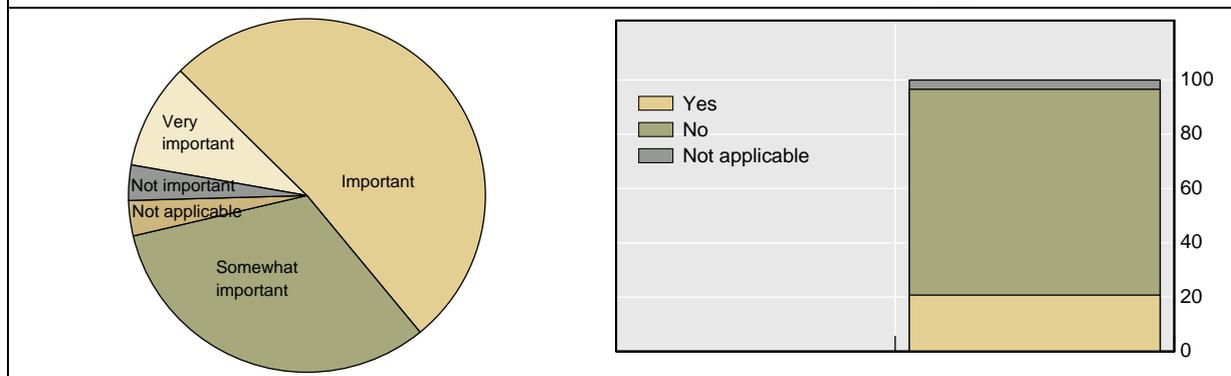
What are important reasons for avoiding changes in monetary policy settings that surprise markets?

In per cent



Indicate the importance of avoiding market surprises

Has the central bank deliberately sought to surprise markets?



Note: Questions 28, 29 and 31.

This apparent lack of concern about surprising markets is perhaps itself surprising given the new orthodoxy that the authorities should guide markets rather than surprise them. Although more than 70% of respondents provided a negative answer to a question concerning any deliberate attempt(s) to surprise markets, around one fifth of central banks still answered yes, with a frequent reason being that they wanted to put an end to episodes of speculative activity. Most of those answering yes to this question were from emerging market economies. Some of those countries may have been more frequently affected by speculative attacks given the relatively small size or limited liquidity of their financial markets.

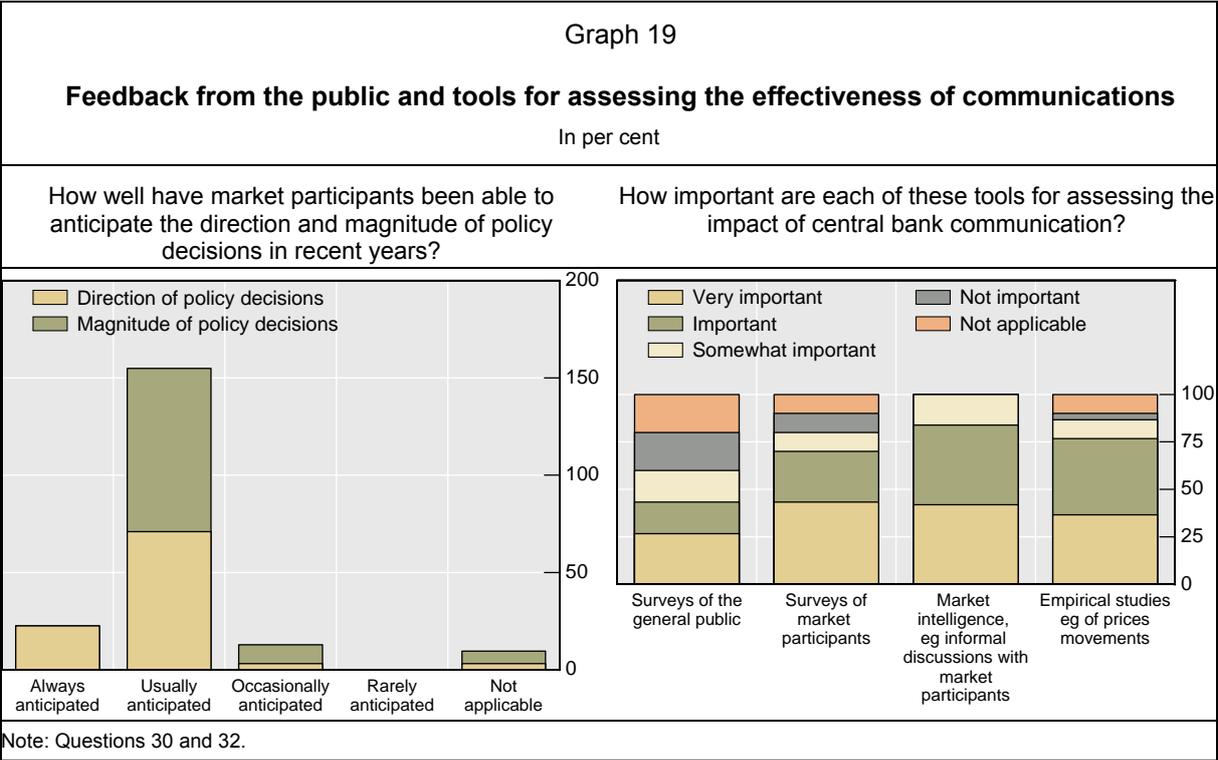
## 7. Effectiveness of communications strategy

### Overall effectiveness of communications strategy in guiding expectations

The survey also provided details about the ability of central banks to communicate and manage expectations without having recourse to surprise moves. The results contained in the survey could be interpreted as being consistent with a view that central banks see themselves as reasonably predictable. One measure of overall success in communications is whether markets understand central banks well enough to be able to anticipate policy

actions. From the information revealed by central banks in this survey, it seems that they think that markets do understand them well (Graph 19).

Central banks believe that the direction of policy decisions is anticipated in a large majority of cases (almost one quarter always and close to three quarters usually). An equally high reading applies to the magnitude of decisions (more than four fifths answering that it was usually the case). In both instances, inflation targeting central banks rated themselves as more predictable than central banks operating under other frameworks (similar results were obtained empirically by Gerlach-Kristen (2004)).



One interpretation of these results is that an efficient communications framework helps to create truly new information or reduces ambient noise, making it easier for market participants to read policy signals (Poole (2001)). The higher scores given by inflation targeting central banks may stem from the fact that such institutions operate under a policy framework that focuses on an overriding goal of price stability and greater coherence and transparency about the plans of policymakers (Bernanke and Mishkin (2007)). Additionally, countries with more developed financial markets may find that market participants react more efficiently to their communications and policy signals than countries where financial markets are less sophisticated.

In view of this discussion, it is worth bearing in mind that these results are based on a mix of answers that includes empirical findings at some institutions and somewhat impressionistic views at others. More consistent results would require common tests that would enable researchers to verify the extent to which policy actions and statements tend to have more of an impact on market reactions than other economic news (see García-Herrero and Remolona (2008)). Such tests would, of course, call for the existence of liquid financial markets to generate meaningful results.

Another caveat is whether the improvement in policy predictability is due to greater predictability and transparency in monetary policy or to other factors. Over the past two decades, there has been a decline in the volatility of a number of economic variables, including GDP growth and inflation. It could well be that the improved ability of economic

agents to predict policy actions has resulted from a greater ease with which the evolution of the economy can be projected rather than an improved transparency of monetary policy. *Ceteris paribus*, the relatively low volatility of financial markets until the first half of 2007 may have made it easier for market participants to detect changes in policy settings. Since then, communicating to markets has become considerably more difficult.

### **Monitoring the success of communications strategy**

The results discussed above suggest that central banks are now much more efficient at transmitting their policy intentions or, at least, consider themselves to be more efficient. But knowing how to communicate to markets is an evolving process that requires a regular monitoring of communications efforts.

Central banks have recourse to a number of tools to assess the impact of their communications on their main target groups (Graph 19). Market intelligence (eg informal discussions with market participants) appears to be the most popular means of doing so, with two fifths of institutions ranking it as very important and another two fifths as important. This is followed by more formal surveys of market participants, which are considered to be very important in two fifths of cases and important in a quarter of them. Empirical studies are considered important by another two fifths of respondents. Surveys focusing on the general public are considered to be much less useful, with only two fifths of central banks considering such surveys to be either very important or important.

The press can act as an ally in the transmission of information since it has a comparative advantage in translating the arcane world of monetary policy to a broader audience (Filardo and Guinigundo (2008)). In addition, it can also act as a sounding board for the central bank given that it may be easier for the central bank to receive feedback from the press than from the general public. But the press can also be counterproductive at times when it seeks to grab attention through the use of provocative headlines. Although there was no specific question in the survey concerning central banks' monitoring of the media, the earlier internal BIS survey on the public image of central banks showed that, although most central banks conducted a general scan of the media's response to their communications, much less effort was devoted to a quantitative analysis of the media.

## **8. Concluding comments**

The old paradigm of central banking secrecy has been largely replaced by one of openness. Connected to that is the progress that central banks have made in developing their communications frameworks. Survey results show that several central banks now use a wide range of communications tools and strategies. This is thought to be bearing fruit in that central banks generally believe that markets find them very predictable. Greater predictability can be of great help in shaping market expectations of the future evolution of monetary policy. It could also improve the quality of decision-making. Both would work to improve its effectiveness of monetary policy.

However, there has been admittedly less progress in communicating with the general public, with the survey on the public image of central banks showing that the public's overall confidence in central banks and its understanding of their functions remains limited. A better understanding of how communications with the public could be improved would be a challenging undertaking given the paucity of relevant data and information. Nevertheless, such a line of research might be warranted since the general public is the ultimate judge of democratic legitimacy.

The answers provided in the survey, as reported in this paper, also showed that communications frameworks vary widely, illustrating that no consensus has yet emerged on

what constitutes an optimal communications strategy (Blinder et al (2008)). In this area, one size certainly does not fit all. The economic and institutional environment within which central banks operate exerts a determining influence on the communications process. Although there are better and worse ways to communicate, it is conceivable that widely different frameworks could be equally effective in transmitting policy intentions (Ehrmann and Fratzscher (2007)). But measuring objectively the overall effectiveness of central bank communications is not an easy task. More conclusive evidence than that offered by the survey would require the further development of analytical frameworks to study transparency and, following that, the conduct of empirical work on the relative importance of reactions to various policy announcements and macroeconomic news.

In addition, questions remain concerning the relationship between the quantity and quality of the information that is released. Starting from a point where a minimal amount of information is released, a greater flow of information is likely to improve the quality of private sector projections. However, beyond a certain optimum, the public could get confused by overly detailed information, particularly if not properly coordinated and structured. If agents became less certain about economic outcomes and policy reactions, they could then even return to backward-looking price-setting mechanisms (Van der Cruysen et al (2008)), which would force the central bank to retreat to terser statements. This suggests that transparency is not simply linearly related to the quantity of information – there is also a crucially important qualitative dimension.

And even if the information were perfectly well presented, one could legitimately ask whether there could be diminishing returns to communication once an optimal point had been reached. As discussed above, various authors have argued that there could be a number of practical and theoretical grounds for maintaining some opacity about the economic information available to policymakers and their preferences.

Moreover, there may be a “paradox of information” that relates to how successful a central bank is in becoming more transparent and achieving price stability. Some have argued that the more successful a central bank becomes in achieving price stability, the less economic agents would have to devote resources to monitor its actions (Filardo and Guinigundo (2008)). In such an environment, the dissemination of a fully transparent monetary policy reaction function would mean that news would lie in economic developments and not in the announcements of decisions by the central bank. Transparency would therefore lead to policy being highly predictable. Hence, a successful central bank should be boring, as Mervyn King famously said in a speech given in 2000.

All of this, of course, presumes that central banks know everything there is to know about the economy and what constitutes an appropriate policy strategy, and that their learning process is progressive and approximately linear. However, recent events have reminded us that this is probably not the case.

The survey illustrated that many issues remain under discussion in the area of central bank communications. The evolving nature of the economy and further advancement in the collective understanding of monetary policy will no doubt lead to new practices in this area. In the meantime, it is hoped that the survey will be useful in guiding and refining the practices of those central banks that are searching for a more effective *modus operandi*.

Monetary policy frameworks, decision-making structures and published forecasts of identified central banks																
Country	Monetary policy framework and dynamics			Publication of		Published forecasts										
						Key real variables			CB reaction function	Key nominal variables						
	Frame-work	MPC size	Decision style	Votes	Mins	Type	Fre-quency	Horizon		$\Delta G$	Gap	U	$\Delta P$	R*	R	X
AU	IT	9	Con (vote)	N	Y	Official	4	1–2	Y	N	N	-	Y	N	N	N
CA	IT	6	Consensus	n/a	N	Official	4	2+	Y	Y	N	-	Y	Direction	N	N
CL	IT	5	Vote	Y (m)	Y	Official	3	1–2	Y	N	N	-	Y	N	N	N
CN	XR	1 (13)	Governor	n/a	N	Staff	4	1	Y	N	N	-	Y	N	N	N
CZ	IT	7	Vote	Y (m)	Y	Staff	4	1–2	Y	Y	Y	-	Y	Y	N	N
HK SAR	XR	1 (13)	Fin. Sec.	n/a	N	Market cons	n/a	n/a	N	Y	N	-	N	N	N	N
HU	IT	5–7	Vote	Y (m)	Y	Staff	4	1–2	Y	N	N	-	Y	N	N	Y
IS	IT	3	Vote	N	N	Off/Staff	3–4	2+	Y	Y	Y	-	Y	Y	N	Y
IN	Other	1 (20)	Governor	n/a	N	Official	1–2	1	Y	N	N	-	Y	N	N	N
IL	IT	1 (9)	Governor	n/a	Y	Official	2	1–2	Y	N	N	-	Y	N	N	N
KR	IT	7	Vote	Y (m)	Y	Official	2	1	Y	N	Y	-	Y	N	N	N
MX	IT	5	Con (vote)	N	N	Official	4	1	Y	N	Emp	-	Y	N	N	N
NE	Other	21 (ESCB)	Con (vote)	N	N	Staff	4	1–2	Y	N	N	-	Y	N	N	N
NZ	IT	1 (6)	Governor	n/a	N	Official	4	2+	Y	Y	Y	Y	Y	Y	Y	Y
PH	IT	7	Con (vote)	N	N	Official	4	1–2	N	Y	N	-	Y	N	N	N
PL	IT	10	Vote	Y (o)	Y	Official	4	2+	Y	N	N	-	Y	N	N	N
SG	Other	5–10	Vote	N	N	Official	2	1	Y	Y	Y	-	Y	N	N	N
SK	IT	11	Con (vote)	Y (s)	N	Official	4	2+	Y	Y	Y	-	Y	N	N	N
SA	IT	7	Con (vote)	N	N	Staff	2	2+	N	Y	N	-	Y	N	N	N
SE	IT	6	Vote	Y (m)	Y	Official	3	2+	Y	Y	Y	-	Y	Y	Y	Y
CH	Other	3	Con (vote)	N	N	Official	4	3 $\Delta P$ /1 $\Delta G$	Y	Y	N	-	Y	N	N	N
TH	IT	7	Consensus	n/a	N	Official	4	1–2	Y	N	N	-	Y	N	N	N
TR	IT	7	Vote	N	Y	Official	4	1–2	N	Y	N	-	Y	N	N	N

Note: largely based on information provided by central banks that responded to the survey, central bank laws and websites. The table only contains publicly available information. Only two Eurosystem central banks (NE and SK) are identified in the sample. Information for HK was updated as per the website. IT and XR stand for inflation target and exchange rate respectively; m, o and s stand for minutes, other and statement respectively.  $\Delta G$  stands for growth; Gap for the output gap; U for unemployment;  $\Delta P$  for inflation; R\* for the real rate of interest; R for the policy rate; and X for the exchange rate.

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