



Central Bank Minutes

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Abstract

This Letter compiles information on central bank minutes from a number of sources. First, we look at the academic literature which suggests that central bank minutes can provide additional information above other forms of communication. Second, we make use of a comprehensive set of information on 120 central banks assembled by Dincer and Eichengreen (2014) to examine which central banks publish accounts and how this has evolved over time. Finally, we collate material on the minutes of 24 central banks, summarising their format and main features across four dimensions: length, timeliness, attribution (subdivided into general discussion and voting) and dissent. We find that although only a relatively small proportion of central banks publish minutes, there is a wide diversity in the economies that these banks operate in, and in the characteristics of the minutes that they publish.

1 Introduction

The Governing Council of the European Central Bank recently announced that it will start to publish accounts of its interest-rate-setting meetings in the beginning of 2015.² While a number of central banks publish minutes of their monetary policy meetings - for instance, the Federal Reserve and the Bank of England - the majority do not.

In this Letter, we provide an overview of central bank minutes by compiling information on them from a number of sources. First, we examine the academic literature on minutes. We then reference a set of information on 120 central banks assembled by Dincer and Eichengreen (2014) to gain insight into the evolution of minute-publishing and its link with overall central bank transparency.

Finally, we collate material on the minutes of 24 central banks, summarising their format and main features across four dimensions: length, timeliness, attribution (subdivided into general discussion and voting) and dissent.

2 Why publish minutes?

There is a broad literature which assesses the value of overall central bank transparency, but a more limited literature dedicated to minutes of monetary policy discussions. One strand of this literature focuses on whether or not minutes provide useful information to market participants and the public: empirical studies generally find that they do. Boukas and Rosenberg (2006) show that themes in Federal Open Market Committee (FOMC) meet-

¹The views expressed in this paper are those of the authors and do not necessarily reflect those of the Central Bank of Ireland or the ESCB. We thank Nergiz Dincer for providing the data from Dincer and Eichengreen (2014) and Daniel Felcser, Stefan Gerlach, Gillian Phelan, Gerard O'Reilly and Neil Whoriskey for helpful comments.

²Announced by President Mario Draghi in the opening statement at the 3 July 2014 press conference.

ing minutes are correlated with current and future economic conditions, and find an increase in Treasury volatility on days when minutes are released. Rosa (2013) finds that FOMC minutes have an economically and statistically significant effect on asset prices. Interestingly, however, Rosa (2013) notes a decline in asset price sensitivity to minutes since 2008, possibly reflecting enhancements in overall communication by the FOMC from that time, which may have reduced the novelty of the information in these minutes.³ Similarly, Apel and Blix Grimaldi (2012) find that information in meeting minutes of the Sveriges Riksbank's monetary policy committee is useful in predicting future policy changes.

An interesting question is whether the publication of minutes changes the content of interactions in monetary policy committee meetings. Meade and Stasavage (2008) find that the decision to publish transcripts of FOMC meetings may have resulted in a reluctance among members to offer dissenting opinions. Issing (2005) and Gersbach and Hahn (2013) note that in a currency union, the publication of individual votes could create pressure on members to adopt a more national view. On the other hand, Gersbach and Hahn (2008) argue that the publication of minutes with attributed comments or votes increases accountability and thus strengthens members' incentives to prepare for meetings. Furthermore, a survey of Riksbank monetary policy committee members conducted by Apel *et al.* (2010) indicates that members did not agree that publishing minutes had inhibited the discussion at meetings.

Another strand of the literature discusses the benefits of making public whether there was disagreement about the policy stance within the monetary policy committee. Bernanke (2004) points out that minutes can convey useful information about the diversity of views and the balance of opinion within a committee. Indeed, Gerlach-Kristen (2004) shows that the voting record of

the Bank of England's Monetary Policy Committee helps predict future policy changes. However, as Blinder (2007, p. 114) states: "A central bank that speaks with a cacophony of voices may, in effect, have no voice at all." Apel *et al.* (2013) provide an interesting contrast between the collegial committee structure of the Norges Bank, and the individualistic committee structure of the Sveriges Riksbank.⁴ They survey policymakers from both central banks and find that Norges Bank monetary policy committee members see Blinder's "cacophony problem" as a relevant concern while those from the Riksbank see the publication of differing views as a way of improving the public's understanding of the economic situation. The authors conclude that there may be a *status quo* bias: policymakers support arguments that favour the set-up of their own systems.

3 Central bank transparency and minutes

Quantitative cross-country information on minutes is available from the wider literature on central bank transparency.⁵ Dincer and Eichengreen (2014) collect data on 120 central banks from 1998 to 2010⁶ to update the transparency index developed in Geraats (2000) and Eijffinger and Geraats (2006). One component of the index reflects whether or not the central bank gives a "comprehensive account of policy deliberation" ... "within a reasonable period of time" (*i.e.*, within 8 weeks). We deem such banks to be largely equivalent to the set of central banks that publish minutes, although there are some exceptions.⁷ Figure 1 shows the economies with central banks that publish "comprehensive accounts", at least up to 2010,⁸ as reported in Dincer and Eichengreen (2014). In general, more advanced economies have been publishing accounts the longest, and no bank which published them during the period 1998 to 2010 has

³See Kedan and Stuart (2014) for a summary of changes in communication by the Federal Reserve over recent years.

⁴In this setting, an individualistic committee is one in which members are individually accountable for their voting, and decisions are made by majority voting. In contrast, a collegial committee is one which tries to reach unanimity and in the event of conflicting opinions, publicly stands unified behind the decision.

⁵See, for example, Dincer and Eichengreen (2008, 2010), Geraats (2002, 2006, 2014), Crowe and Meade (2008), Eijffinger and Geraats (2006) and Siklos (2011).

⁶Five central banks drop out of the sample over time.

⁷For instance, the Reserve Bank of New Zealand (RBNZ) does not publish minutes since the Governor is solely responsible for monetary policy. However, the RBNZ publishes a Monetary Policy Statement including an assessment by the Governor on the day the interest rate decision is announced, thus providing an explanation of policy decisions. Since our focus is on minutes, we do not include the RBNZ in the group of central banks in Section 4.

⁸Some central banks have begun publishing minutes since 2010.

ceased doing so.⁹

It is well-documented that throughout this time, overall central bank transparency was increasing. This is illustrated in Figure 2, which shows the average value of the transparency index constructed by Dincer and Eichengreen (2014) in each year of the sample. As transparency has increased, so too has the share of central banks publishing accounts, which rose from five per cent of the sample (six banks) in 1998 to 16.5 per cent (19 banks) in 2010. Is there a link between overall transparency and the publication of accounts? Figure 3 shows the transparency index for each central bank in 2010; those which publish accounts are highlighted in red.¹⁰ Seven of the 10 most-transparent central banks publish accounts. Indeed, nearly 80 per cent of all account-publishing banks are in the top 20 per cent of most-transparent central banks, and only one has below-median transparency. The advent of inflation-targeting has often been linked to increased transparency in central banking. Of the 28 inflation-targeting central banks identified in Jahan (2012), 14 were listed by Dincer and Eichengreen (2014) as publishing accounts in 2010.¹¹

4 Compilation of information on minutes

In this section, we summarise the main features of the minutes of 24 central banks for policy meetings over a calendar year running from October 2013 to September 2014. This sample includes all of the central banks from Dincer and Eichengreen (2014) that published minutes on their websites over the sample period.¹² In particular, we as-

sess these banks' minutes across four quantifiable dimensions: length, timeliness, attribution (subdivided into general discussion and voting) and explanation of dissent. We believe these dimensions give a sense of the similarities, as well as the diversity, of minutes across central banks. Table 1 presents our compiled data; below we discuss briefly the importance of each dimension before comparing the features of minutes across central banks. Before proceeding, however, we note that this exercise does not assess the quality of minutes, which is a more subjective issue.

4.1 Length

The length of minutes is a quantifiable characteristic which may reflect the level of detail provided. However, adding length may not enhance the information content of minutes and could in fact act to hide the most important issues raised in a meeting. Minutes are typically split between a discussion of the general economic environment and of the policy stance. Since information on the economic environment is often readily available elsewhere,¹³ we measure not only the total length of minutes, but also the length of the policy discussion section, which is likely the most value-adding component.¹⁴

The length of minutes varies widely across central banks, ranging from 600 to 13,000 words on average over the sample period. The mean and median word count across the 24 central banks is around 3,850 and 2,500, respectively. The proportion of the minutes dedicated to policy discussion ranges from around 5 to 70 per cent, and averages 30 per cent across all the banks.¹⁵

⁹No accounts are available on the Bank of Namibia's website for 2010, however, there are accounts for subsequent years.

¹⁰The publication of accounts adds one point to a central bank's transparency score. We therefore re-calculate the index to exclude accounts before making comparisons across banks.

¹¹As of September 2014, 17 of these 28 inflation-targeting central banks publish accounts on their websites.

¹²In addition to the central banks indicated as publishing accounts in Figure 1, we include those from Chile, Korea, Mauritius, Mexico, Nigeria and Thailand. We do not include the East Caribbean Central Bank or the Hong Kong Monetary Authority because the policy communiqués released by the former are more similar to policy announcements than minutes, while the latter is unique in that its key function is exchange rate stability. We summarise the English language version of minutes, with the exception of Mexico and Guatemala, for which minutes appear to be available only in Spanish. A caveat of our summary is that versions of minutes published in other languages may have different features. For example, the Korean version of the Bank of Korea's minutes is longer than the English version and is published with a shorter lag of two weeks.

¹³E.g. post-policy meeting press releases and monthly/quarterly bulletins or reports.

¹⁴In compiling these summary statistics on the length of minutes, executive summaries, appendices (e.g. the quarterly FOMC projections and the monthly attachment of the already-released Bank of Japan statement), cover pages and lists of names in attendance are excluded. Although these attachments can add substantial value, as is the case with the FOMC projections, we focus solely on the portion of the minutes published after every meeting.

¹⁵Some central banks have no specific section in which the policy discussion is summarised: in these cases, the discussion is reflected throughout the minutes. These banks are reported as n/a in Table 1.

4.2 Timeliness

The length of the publication lag can affect the amount of market-relevant information in the minutes: if the lag is too long, the information may be out of date.¹⁶ All 24 of the central banks we assess publish minutes within approximately eight weeks of the policy meeting. However, most do so in a much shorter timeframe: 17 publish them within two weeks.

Whether minutes are published for one meeting before the next is another way to evaluate their timeliness. In particular, if minutes provide information on future policy decisions, delaying their release until after the next meeting may lessen their usefulness to market participants. Only two central banks in our study consistently publish minutes after the subsequent meeting.

4.3 Attribution

As noted in Section 2, it has been argued that attribution of comments may affect the policy discussion both negatively and positively, while the attribution of voting has been shown to provide information that can help market participants anticipate future policy decisions. How the discussion is attributed varies across banks. We see three broad categories: two central banks assign names to comments within the discussion, 13 give different positions, but make them anonymous and nine simply relate a generic commentary of the discussion, with no specific “views”.

The attribution of names to voting is much more common. Eleven central banks report the voting record of individual members. It is also possible to report the voting record quantitatively without attributing names; four central banks do this. Two central banks provide qualitative information on voting (e.g. “unanimous”, “majority”) while the remaining seven give no information about voting.

4.4 Dissent

Dissent is somewhat related to the issue of attribution. Like publishing voting records, explaining dissenting opinions can provide information on the likelihood of future policy decisions, whether these opinions are attributed to individuals or not. Of

the central banks on which we collect information, 14 provide an explicit explanation of the reasons for dissent.

5 Conclusion

As attention has focussed on the publication of central bank minutes in the euro area, it has become clear that there is little information available on which central banks publish minutes, and what information they provide. In this Letter, we collate information on central bank minutes from a number of sources. First, we looked at the academic literature, which suggests that central bank minutes can provide additional information beyond other forms of communication. Second, we used information from a study on 120 central banks by Dincer and Eichengreen (2014) to identify which central banks produce timely accounts of policy deliberations and how this has evolved over time. Finally, we collected details on the minutes of 24 central banks, summarising their format and main features across four dimensions: length, timeliness, attribution and dissent.

We find that although only a relatively small proportion of central banks publish minutes, there is a wide diversity in the economies that these banks operate in, and in the characteristics of the minutes that they publish. In particular, they are generally among the most transparent central banks and are located in both advanced and developing countries. There is a good deal of variety in the length of these banks’ minutes, though most are “timely” in the sense that they are published prior to the subsequent policy meeting. Finally, the approach to acknowledging different opinions within the policy discussion - whether attributing comments or votes, or explaining dissenting opinions - varies significantly across central banks.

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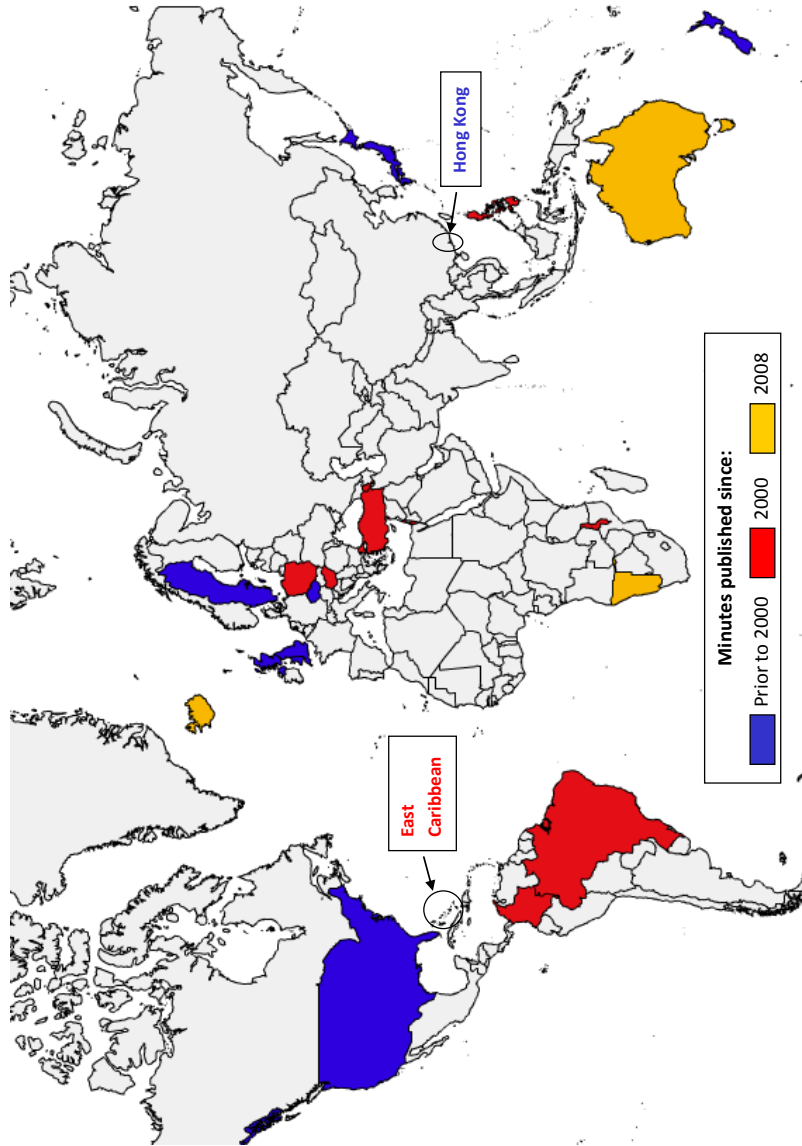
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¹⁶For instance, by their current rules, the European Central Bank and Norges Bank only allow the publication of minutes after 30 years and 12 years, respectively, with the result that they are usually not considered minute-publishing central banks.

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Figures & Tables

Figure 1: Central banks that publish a comprehensive account of policy deliberations within eight weeks



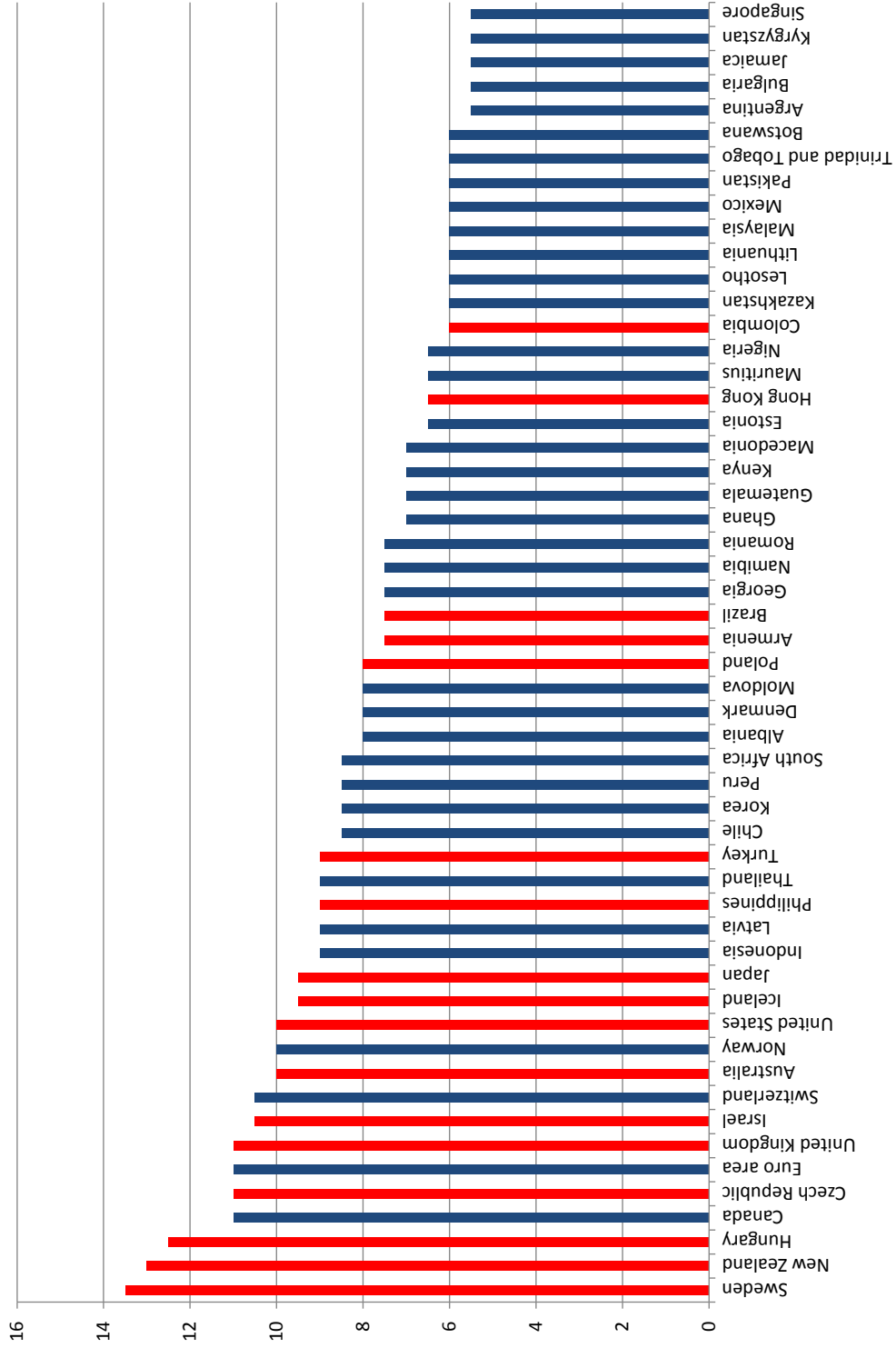
Source: Dincer and Eichengreen (2014); chart generated using OpenHeatMap.

Figure 2: Evolution of central bank transparency and account publication



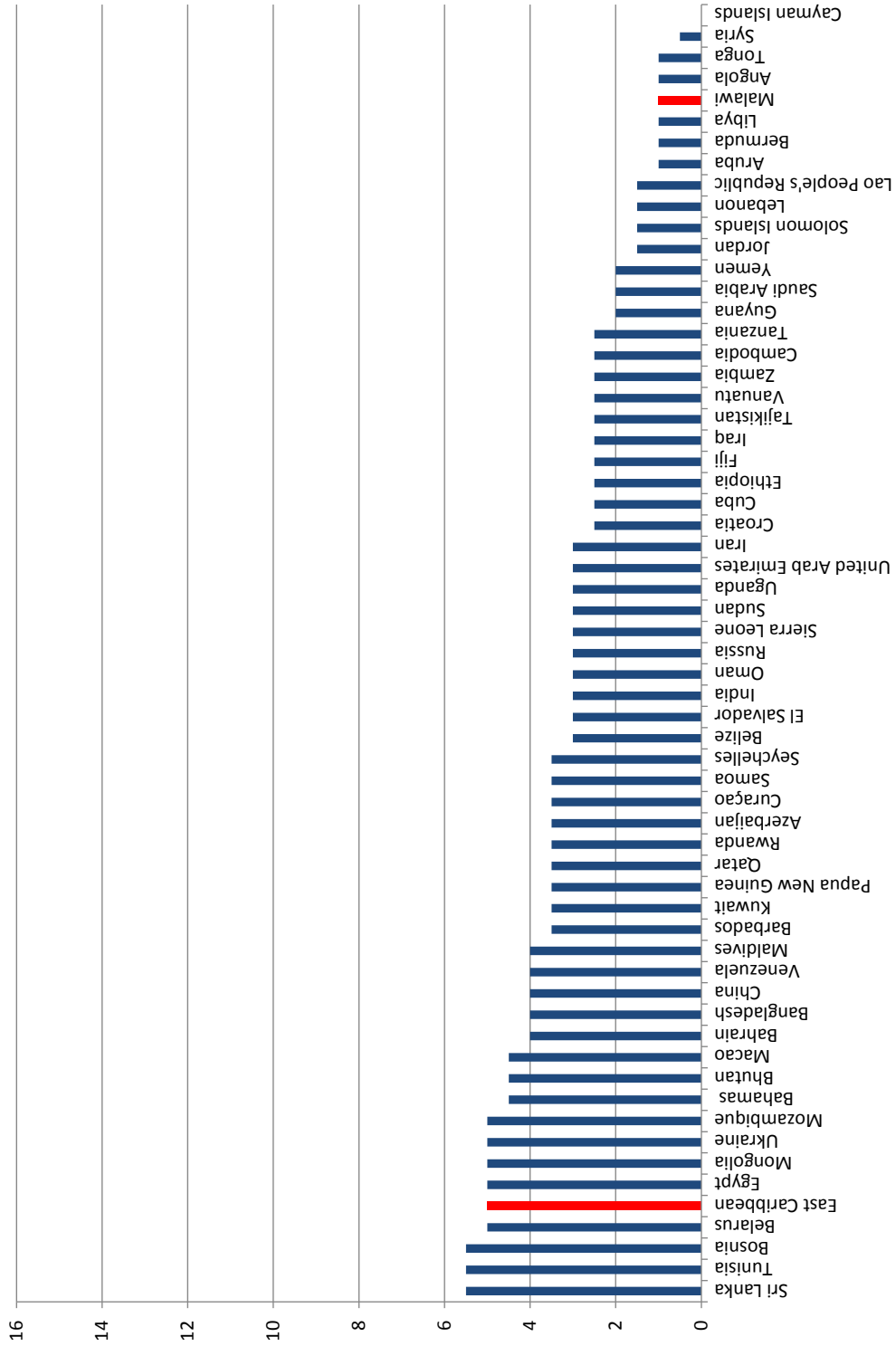
Source: Dincer and Eichengreen (2014)

Figure 3: Comparison of central bank transparency and account publication in 2010



Source: Dincer and Eichengreen (2014)
 Notes: Bars indicate the overall transparency index score (less one point if the bank publishes accounts). Red bars indicate account-publishing banks.

Figure 3 (cont.): Comparison of central bank transparency and account publication in 2010



Source: Dincer and Eichengreen (2014)
 Notes: Bars indicate the overall transparency index score (less one point if the bank publishes accounts). Red bars indicate account-publishing banks.

Table 1: Comparison of central bank minutes for policy meetings between October 2013 and September 2014

	Sweden	Hungary	Czech R.	UK	Israel	Australia	US	Iceland	Japan	Philippines	Thailand	Turkey
Length (average over sample)												
Total # pages (excluding cover/end /exec. summary)	24	2	3	11	7	4	11	6	18	4	3	4
Total word count	11,434	1,321	1,516	4,261	3,522	2,286	8,204	3,040	6,902	1,907	1,333	1,397
Separate section on policy discussion?	✓	x	x	✓	✓	✓	x	✓	✓	✓	✓	✓
Policy discussion section word count	3,599	n/a	n/a	1,362	996	400	n/a	889	3,415	237	303	646
% minutes focused on discussion	31%	n/a	n/a	32%	28%	18%	n/a	29%	49%	12%	23%	46%
Timeliness (average over sample)												
Publication delay	2 wks	2 wks	1 wk	2 wks	2 wks	2 wks	3 wks	2 wks	4 wks	4 wks	2 wks	1 wk
Published before next meeting?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Discussion												
Names to comments?	✓	x	x	x	x	x	x	x	x	x	x	x
Different positions but anonymous?	x	✓	✓	✓	x	x	✓	x	✓	x	✓	x
Generic commentary, no specific "views"	x	x	x	x	✓	✓	x	✓	x	✓	x	✓
Votes												
Quantitative with names?	✓	✓	✓	✓	x	x	✓	x	✓	x	x	x
Quantitative anonymous?	x	x	x	x	✓	x	x	✓	x	x	✓	x
Qualitative (e.g. majority, unanimous, etc.)?	x	x	x	x	x	x	x	x	x	x	x	x
Dissent												
Explanation (explicit)?	✓	✓	x	✓	✓	x	✓	✓	x	x	✓	x
Minutes in sample (#)	6	11	8	12	12	11	8	8	13	8	8	12

✓ indicates "yes", x indicates "no"

Source: Central bank websites
Notes: In summarising the length of minutes, cover and end pages, appendices, lists of members in attendance and executive summaries are not included. 'N/A' indicates that the minutes contain no separate section dedicated to the policy discussion; this does not mean that discussion is not reflected in the minutes. Minutes from Banco de Guatemala and Banco de México are only available in Spanish. For all other central banks, our summary is based on the English version of minutes; versions in other languages may have different features. Minutes published by the Central Bank of Nigeria include personal statements from monetary policy committee members; these account for 80 per cent of the length of the minutes and are incorporated in our summary. We exclude the section entitled "Summary of Data Analyzed by the COPOM" from our summary of minutes published by Banco Central do Brasil as this section is absent from February 2014 onwards. We identify two instances out of eight in which minutes of Banco de Guatemala were published after the subsequent policy meeting: we count them as publishing minutes prior to the next meeting.

Table 1 (cont.): Comparison of central bank minutes for policy meetings between October 2013 and September 2014

	Chile	Korea	Poland	Armenia	Brazil	Namibia	Guatemala	Mauritius	Nigeria	Colombia	Mexico	Malawi
Length (average over sample)												
Total # pages (excluding cover/end /exec. summary)	5	6	3	3	5	2	13	8	38	7	22	2
Total word count	2,034	1,558	1,304	998	3,719	756	5,038	3,769	9,651	2,705	12,923	593
Separate section on policy discussion?	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗
<i>Policy discussion section word count</i>	1,393	566	n/a	263	1,518	105	1,080	1,397	555	544	4,424	n/a
<i>% minutes focused on discussion</i>	69%	36%	n/a	26%	41%	14%	21%	37%	6%	20%	34%	n/a
Timeliness (average over sample)												
Publication delay	2 wks	6½ wks	2½ wks	2 wks	2 wks	8½ wks	4 wks	2 wks	≤ 1 day	2 wks	2 wks	≤ 1 day
Published before next meeting?	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
Discussion												
Names to comments?	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
Different positions but anonymous?	✓	✓	✓	✗	✗	✗	✓	✓	✗	✓	✓	✗
Generic commentary, no specific "views"	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓
Votes												
Quantitative with names?	✓	✓	✗	✗	✓	✗	✗	✓	✓	✗	✗	✗
Quantitative anonymous?	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗
Qualitative (e.g. majority, unanimous, etc.)?	✗	✗	✗	✗	✗	✗	✓	✗	✗	✓	✗	✗
Dissent												
Explanation (explicit)?	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✗
Minutes in sample (#)	12	12	11	3	8	4	8	3	4	12	8	5

✓ indicates "yes", ✗ indicates "no"

Source: Central bank websites
Notes: In summarising the length of minutes, cover and end pages, appendices, lists of members in attendance and executive summaries are not included. 'N/A' indicates that the minutes contain no separate section dedicated to the policy discussion; this does not mean that discussion is not reflected in the minutes. Minutes from Banco de Guatemala and Banco de México are only available in Spanish. For all other central banks, our summary is based on the English version of minutes; versions in other languages may have different features. Minutes published by the Central Bank of Nigeria include personal statements from monetary policy committee members; these account for 80 per cent of the length of the minutes and are incorporated in our summary. We exclude the section entitled "Summary of Data Analyzed by the COPOM" from our summary of minutes published by Banco Central do Brasil as this section is absent from February 2014 onwards. We identify two instances out of eight in which minutes of Banco de Guatemala were published after the subsequent policy meeting: we count them as publishing minutes prior to the next meeting.