

# Trends in Monetary Policy Transparency: Further Updates

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We update our earlier index of monetary policy transparency, providing new estimates of political, economic, procedural, policy, and operational transparency for 112 central banks from 1998 through 2019. Central banks continue to move in the direction of greater transparency in their conduct of monetary policy. This is true for countries of different income levels. It is true regardless of monetary policy strategy, be this inflation targeting, monetary aggregate targeting, or exchange rate targeting, although the trend is least evident for the last of the three. This movement is also evident, to an extent, across all five of the dimensions of monetary policy transparency that we consider when constructing our aggregate index.

JEL Codes: E5, E52, E58.

## 1. Introduction

The last two decades—roughly speaking, the period since the Asian financial crisis—have seen a transparency revolution in central banking. The days when an official could say that the basis for a change in the central bank’s policy rate was no more the business of the government and the public than “the color which the Bank painted its front door” are long past.<sup>1</sup> In earlier work (Dincer, Eichengreen, and Geraats 2019) we documented trends in monetary policy transparency, overall and along different dimensions (political, economic, procedural, policy, and operational) for 112 central banks in nearly

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<sup>1</sup>The quotation is from Otto Niemeyer, advisor to the governor of the Bank of England, in 1929 (cited in Eichengreen, Watson, and Grossman 1985).

150 countries from 1998 to 2015. In this report, we revise and update these series through 2019.<sup>2</sup>

Throughout, we refer to monetary policy transparency as opposed to the more familiar terminology of central bank transparency. Many central banks have other functions in addition to the conduct of monetary policy, such as microprudential regulation and supervision, and increasingly, macroprudential policy. The criteria that are relevant for measuring the transparency of these other policies may well differ from those that are relevant for the transparency of monetary policy.<sup>3</sup> The feasibility, effects, and desirability of transparency may be different as well.<sup>4</sup>

We document further increases in monetary policy transparency in high-income countries, upper-middle-income countries, lower-middle-income countries, and low-income countries. We show that the years 2015–19 saw net increases in transparency by 41 central banks in our sample and net declines in just 6. We continue to see

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<sup>2</sup>In the online appendix at <https://eml.berkeley.edu/%7Eeichengr/data.shtml> we also provide the complete set of individual central bank scores.

<sup>3</sup>Some pioneering work has been done on transparency in the domains of macroprudential and microprudential policies. Thus, Horváth and Vaško (2016) construct an index of the transparency of financial stability for 110 central banks between 2000 and 2011. Many of the patterns they uncover over time and across countries do, however, parallel those we report here. Arnone, Darbar, and Gambini (2007) and Liedorp et al. (2013) focus on the transparency of banking supervisors as opposed to the transparency of those responsible for the broader financial system, and cover not just financial stability but also other issues with which banking supervisors are concerned (such as consumer protection). Arnone, Darbar, and Gambini (2007) analyze the findings of the latest IMF–World Bank Financial Sector Assessment Program as of the end of 2004 for as many as 116 countries, finding that the transparency of banking supervision, as measured relative to the Basel Core Principles and the IMF Code on Transparency of Financial Policies, is positively associated with the effectiveness of bank supervision. Liedorp et al. (2013), inspired by the work of Eijffinger and Geraats (2006), code scores based on survey responses from 24 banking supervisors in the second half of 2010, but find it hard to identify factors accounting for differences in supervisory transparency across countries.

<sup>4</sup>Arguments regarding transparency of financial stability policy must factor in the danger that too much information about financial institutions may trigger destabilizing runs on individual financial institutions or even destabilize the system (Cecchetti and Disyatat 2010). Arguments for constructive ambiguity to limit moral hazard may be even more important in the context of financial supervision. Supervisors may also be subject to legal restrictions on their ability to release proprietary information.

marked increases in transparency for central banks that target inflation and monetary aggregates, but barely any increase for central banks that target the exchange rate. Between the two most recent years, 2018 and 2019, however, average transparency indices stayed almost the same except for monetary aggregate targeters and low-income countries, whose central banks have traditionally displayed lower levels of transparency and where there was a strong further rise.

## 2. Why Transparency Matters

It is worth recalling why central bank transparency matters. First, transparency is a mechanism for enhancing central bank accountability, which is a foundation stone of central bank independence. Extensive literatures concerned with the time inconsistency of optimal monetary policy (Kydland and Prescott 1977, Calvo 1978), special interest politics (Gabillon and Martimort 2004), and the political business cycle (Nordhaus 1975, Alesina 1988) have pointed to the advantages of central bank independence. These literatures emphasize the advantages of allowing those responsible for the formulation of monetary policy to make decisions autonomously (without undue influence from the executive or legislature, from financial institutions, and from other external stakeholders), while being guided by a socially and politically determined mandate. Transparency about the basis and justification for their decisions is a way for central bankers to explain how their actions are consistent with that mandate. Transparency is in this sense integral to their autonomy.<sup>5</sup>

Transparency in the service of accountability and autonomy is particularly important in an environment where central banks are making unprecedented interventions and resorting to unconventional policy tools, such as quantitative easing and negative interest rates.

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<sup>5</sup>De Haan, Eijffinger, and Waller (2005) and De Haan et al. (2018) distinguish three aspects of central bank accountability: the central bank is accountable for faithfully pursuing its mandate; the central bank must disclose its monetary actions and how they relate to the mandate; and the central bank must accept final responsibility for monetary policy. The link between central bank transparency and accountability operates most directly through the second of these three channels. De Haan, Amtenbrink, and Eijffinger (1999) construct an index of central bank accountability, whereas we focus on the transparency aspects.

When the central bank has not done such things before, it may not be obvious to the executive, legislature, and public that these actions are consistent with the institution's mandate. Explaining and justifying policy actions may be especially important when those actions are novel and observers have limited prior experience to help with their interpretation.

Relatedly, transparency is integral to communication, which is an increasingly important policy tool in an environment where central banks attempt to steer inflation and the economy by shaping expectations about future policy. Examples include the announcement of quantified policy objectives (e.g., inflation or exchange rate targets) and providing forward guidance, which allows central banks to go beyond explaining just current policy decisions by providing an indication of likely future policy decisions. This may be especially important in a low interest rate environment where there is little space for the use of conventional monetary policy tools—that is to say, in the current policy environment. These and related issues are the focus of Blinder et al. (2017).

Finally, the forward guidance made possible by transparent communication may help central banks deal with the time-inconsistency problem that bedevils even conventional monetary policy. More generally, transparency and clear communication about the basis for policy decisions and objectives is a way of tightening the link between the central bank's immediate policy levers and the market interest rates and asset prices that affect the economic conditions that feature in the central bank's mandate (Ehrmann and Fratzscher 2009).

These arguments for central bank transparency find broad support in the scholarly literature and the central banking community.<sup>6</sup> They are the arguments that led the International Monetary Fund (2020b) to publish a new Central Bank Transparency Code, which

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<sup>6</sup>There are exceptions and reservations, to be sure. For example, providing too much information may complicate communication and overload the public, weakening both the policy process and popular support for an independent central bank (Mishkin 2004). Collecting, collating, editing, and disseminating information, much less tailoring it to multiple audiences, can be costly for central banks, especially less well-resourced central banks in low-income countries (Filardo and Guinigundo 2008).

defines best practice and promulgates international standards in this area.<sup>7</sup>

### *2.1 How We Constructed Our Updates*

We constructed our indices of monetary policy transparency utilizing the framework pioneered by Eijffinger and Geraats (2006) as extended by Dincer and Eichengreen (2014) and Dincer, Eichengreen, and Geraats (2019). These measures distinguish five aspects of central bank transparency.

- Political transparency refers to openness about policy objectives. Typically this involves a formal statement of objectives, including an explicit prioritization in case of multiple goals, quantification of the primary objective(s), and explicit institutional arrangements.
- Economic transparency refers to the economic information used in the formulation of monetary policy. This encompasses the economic data to which policymakers refer, the model(s) of the economy that they use to construct forecasts and evaluate the impact of their decisions, and the internal forecasts on which they rely.
- Procedural transparency refers to the manner in which monetary policy decisions are reached. This is coded on the basis of whether or not the central bank provides an explicit monetary policy rule or strategy that describes the monetary policy framework, and an account of monetary policy deliberations and how the policy decision was reached.
- Policy transparency captures whether or not the central bank promptly discloses its policy decisions and provides the associated explanation and rationale, and whether or not it provides forward guidance.
- Finally, operational transparency refers to the information the central bank provides about problems of policy implementation and execution. Typically, this takes the form of

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<sup>7</sup>The Central Bank Transparency Code updates and supersedes the earlier Monetary and Financial Policies Transparency Code promulgated in 1999 in the immediate aftermath of the Asian financial crisis, that crisis being attributed by some to a lack of policy transparency in the region, as alluded to in the first sentence in our introduction.

a discussion of control errors in achieving operating targets, unanticipated macroeconomic disturbances that affect the transmission of monetary policy, and evaluation of the results of previous policy initiatives.

Each dimension of transparency is captured by a sub-index that consists of three separate items, each of which receives a score of 0, 1/2, or 1. The overall index equals the sum of the scores across all items, ranging from 0 to a maximum of 15, and is based on information publicly available in English, the language of international financial markets.<sup>8</sup>

Compared to our earlier work on central bank transparency, here we adopt the same modifications that were proposed and implemented by Dincer, Eichengreen, and Geraats (2019). First, the transparency index explicitly focuses on monetary policy, as distinct from other central bank functions. This refinement, which mostly affects the political dimension, is more important now than in the past insofar as a growing number of central banks that once confined themselves to the formulation and execution of monetary policy have also started to implement macroprudential policies in pursuit of financial stability objectives.

Second, we use the more detailed coding of procedural and policy transparency introduced by Dincer, Eichengreen, and Geraats (2019). Thus, the 15 items of the index again distinguish 27 separate information disclosure practices.

The Dincer-Eichengreen-Geraats (2019) index adopted tighter criteria for procedural transparency relative to earlier work, because the financial crisis demonstrated the importance of timely information, especially in periods of heightened uncertainty. For instance, it is often important, for informational purposes, to know the rationale for a policy decision without undue delay. If circumstances are changing rapidly, minutes that are only released after the subsequent policy meeting are less useful and even potentially confusing. Consequently, full marks for this item require that comprehensive minutes (or explanations of the policy decision if there is a single central banker) are published within three weeks. The index gives

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<sup>8</sup>All of the central banks in our sample other than that of the Central African Economic and Monetary Community have a website in English.

partial credit for summary minutes published within three weeks, or more comprehensive minutes published with a delay of more than three but less than eight weeks.

Likewise, the publication of individual voting records on the day of the policy announcement (or the policy decision made by a single central banker, which is equivalent) is required to get full credit for another procedural item. The index gives partial credit for the release of individual voting records within eight weeks or non-attributed voting records within three weeks.

Regarding policy transparency, the Dincer-Eichengreen-Geraats (2019) index adopted more demanding criteria with respect to forward guidance about the likely timing, direction, size, or pace of future monetary policy actions. A policy inclination or qualitative forward policy guidance gets only partial credit, whereas quantitative forward guidance about future policy actions is required for full marks. Examples of the latter include calendar-based guidance, state-contingent guidance based on numerical thresholds (both of which indicate the likely timing of the next change in the policy instrument but not necessarily the amount), or publication of the projected policy path, which is a more comprehensive form of time-dependent forward guidance.<sup>9</sup> Note that we focus on explicit forward guidance with respect to conventional monetary policy (although

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<sup>9</sup>Readers may worry that forward guidance is a practice limited to inflation-targeting central banks, and that our index will therefore be biased against giving credit to central banks that target, *inter alia*, the exchange rate. Note, however, that the IMF categorization of “exchange rate targeters” includes not just central banks operating fixed exchange rate pegs but also those with target zones, crawling pegs, and other stabilized or managed exchange rate arrangements. In addition, nothing prevents a central bank targeting the exchange rate from communicating that it is likely to change its policy rate or intervene in the foreign exchange market in the future in order to maintain the currency peg. For example, the Monetary Authority of Singapore, which pegs its currency to an undisclosed basket, has published statements that resemble forward guidance. The National Bank of Denmark, which keeps the krone within a narrow band against the euro, communicated information about the future path of its foreign reserves (and therefore implicitly about intervention) when the Swiss National Bank abandoned its exchange rate ceiling in January 2015. These statements have the appearance of policy inclinations. To be given credit for providing an explicit policy inclination in our coding, however, central banks are required to communicate this regularly, which does not appear to be the case of exchange-rate-targeting central banks.

such guidance may in some cases be explicitly tied to a specific horizon for unconventional measures).<sup>10</sup> Again, all this follows Dincer, Eichengreen, and Geraats (2019). The main difference is that we have extended the sample period of our index by four years so that it now ends in 2019. Details on the coding are available in the online appendix (see footnote 2 for location of online appendix).

### 3. Findings

Figure 1 shows the levels and trends in our monetary policy transparency index from 1998 until 2019 for high-income, upper-middle-income, lower-middle-income, and low-income countries, based on the World Bank classification for fiscal year 2019.<sup>11</sup> It is evident that transparency tends to be increasing in the level of economic development and has been trending upward for all four groups. The gap between low-income countries and middle-income countries has increased, with the latter moving closer to the higher levels of transparency characteristic of high-income countries. For the lower-middle-income group, the convergence toward high-income levels of transparency is most pronounced in the first decade of the 21st century, while the upper-middle-income group experienced convergence during the second decade but not the first.

Figure 2 shows the levels and trends of our transparency index by monetary policy framework, distinguishing inflation targeters, exchange rate targeters, monetary aggregate targeters, and central banks with another or unspecified policy framework. We follow the IMF's (2020a) categorization of countries according to their de facto monetary policy framework. Inflation-targeting central banks have by far the highest level of monetary policy transparency on average, consistent with the idea that transparency and communication

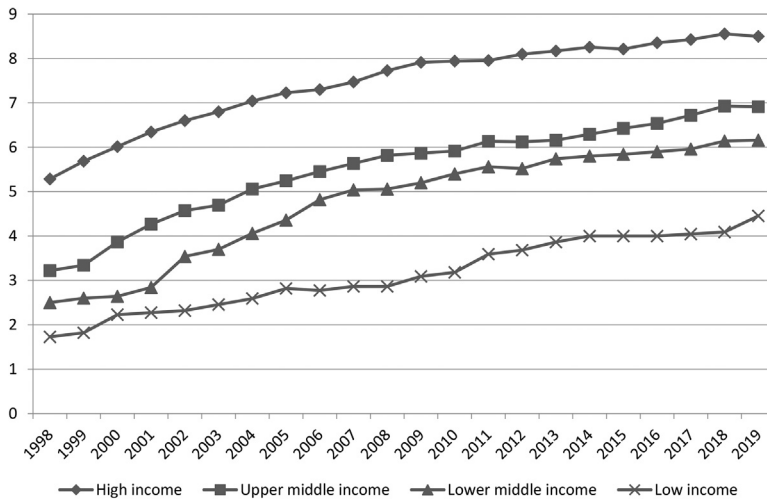
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<sup>10</sup>For instance, from July 2016 until April 2018 the European Central Bank stated that it expected its key interest rates to remain at current (or lower) levels "for an extended period of time, and well past the horizon of the net asset purchases," where it explicitly specified the intended minimum horizon of the latter under its asset purchase program.

<sup>11</sup>Using a single classification is important, since it means that the trends within groups we document are not caused by changes in group composition.



**Figure 1. Transparency in Monetary Policy by Level of Economic Development (unweighted average)**



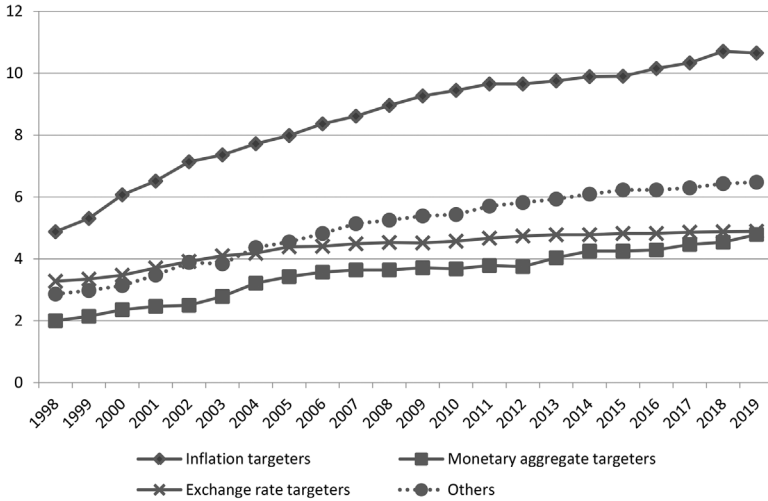
**Source:** Authors’ calculations.

**Note:** Unweighted average monetary policy transparency index across central banks grouped by World Bank income classification (for fiscal year 2019). ECCU (Eastern Caribbean Currency Union), CEMAC (Central African Economic and Monetary Community), and WAEMU (West African Economic and Monetary Union) were classified by using GNI in U.S. dollars and population data of each country to compute GNI per capita for the region.

are integral to the framework; they also show the largest absolute increase in transparency, as measured by our index, over the two decades.

Central banks in the other three policy framework groups show smaller but substantial increases in transparency over the same period, although the exact timing differs across groups. The exchange rate targeters display the smallest increase overall. Apparently, exchange rate targeters feel less urgency about improving their information disclosure, perhaps because their monetary policy is automatically adjusted to maintain the exchange rate target, the achievement of which is easily observable. The increase in average levels of transparency for monetary aggregate targeters since 2013 has nearly erased the gap with exchange rate targeters, although the gap with the group of other/unspecified monetary rule central

**Figure 2. Transparency by Monetary Policy Framework (unweighted average)**



**Source:** Authors’ calculations.

**Note:** Average monetary policy transparency index by IMF de facto monetary policy framework (IMF 2020a). Bermuda, Cayman Islands, Cuba, and Macao, which are not included in IMF classification, are excluded.

banks remains. Recall that the group with other (eclectic or undefined) monetary policy frameworks actually overtook the group of exchange rate targeters in terms of transparency during the first half of our sample period.

The period 2015–19 saw increases in transparency in fully 41 countries, as noted earlier.<sup>12</sup> The most transparent central banks circa 2019 are listed in Table 1. For some of these banks—those of Sweden, Norway, the Czech Republic, the euro area, the United

<sup>12</sup>The countries in question are Albania, Argentina, Azerbaijan, Belarus, Brazil, Chile, Columbia, Curaçao, Egypt, European Monetary Union, Georgia, Hong Kong, India, Indonesia, Israel, Jamaica, Japan, Kazakhstan, Korea, Macao, Malawi, Mauritius, Mexico, Moldova, Mongolia, Namibia, Norway, Pakistan, Peru, Romania, Russia, Rwanda, Saudi Arabia, Seychelles, Sierra Leone, South Africa, Sri Lanka, Trinidad Tobago, Ukraine, the United Arab Emirates, and the United Kingdom.

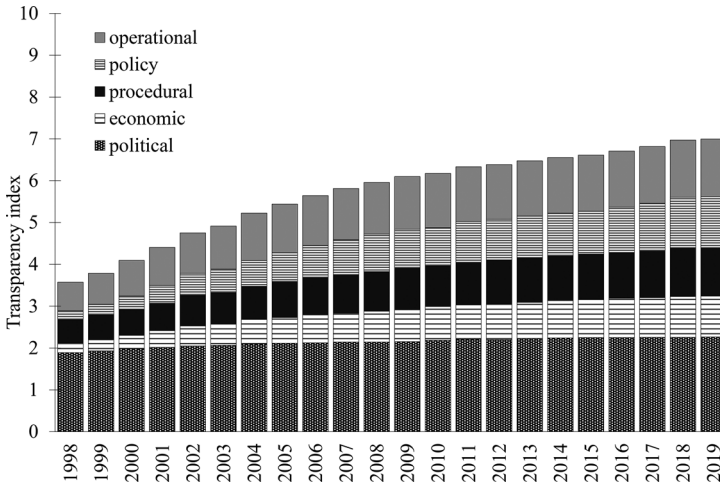
**Table 1. Monetary Policy Transparency Index and Its Components in 2019 for the Top 12 Countries**

	Transparency Index	1(a)	1(b)	1(c)	2(a)	2(b)	2(c)	3(a)	3(b)	3(c)	4(a)	4(b)	4(c)	5(a)	5(b)	5(c)
Sweden	14.5	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1
Czech Republic	14	1	1	1	0.5	1	1	1	1	0.5	1	1	1	1	1	1
United Kingdom	13.5	1	1	1	0.5	1	1	1	1	1	1	1	0.5	1	1	0.5
Chile	13	1	1	1	0.5	1	1	1	1	1	1	1	0.5	1	0.5	0.5
Norway	13	1	1	1	0.5	1	1	1	0	0.5	1	1	1	1	1	1
Hungary	12.5	1	1	1	0.5	1	1	1	1	0.5	1	1	0.5	1	0.5	0.5
United States	12.5	0.5	1	0.5	1	1	1	1	1	1	1	1	1	1	0	0.5
European Monetary Union	12	1	1	1	0.5	1	1	1	0.5	0	1	1	1	1	0.5	0.5
Iceland	12	1	1	1	0.5	1	1	1	1	0.5	1	1	0	1	0.5	0.5
Japan	12	0.5	0.5	1	1	1	1	1	0.5	1	1	1	0.5	1	0.5	0.5
Korea	12	1	1	1	0.5	1	1	1	0.5	0.5	1	1	0.5	1	0.5	0.5
South Africa	12	1	1	1	0.5	1	1	1	0	0.5	1	1	1	1	0.5	0.5

**Source:** See text.

**Note:** Each of the five components of the transparency index is divided into three subcomponents denoted a, b, and c. For additional details, see Dincer, Eichengreen, and Geraats (2019).

**Figure 3. Average Transparency Trends, Separate Dimensions (unweighted average)**



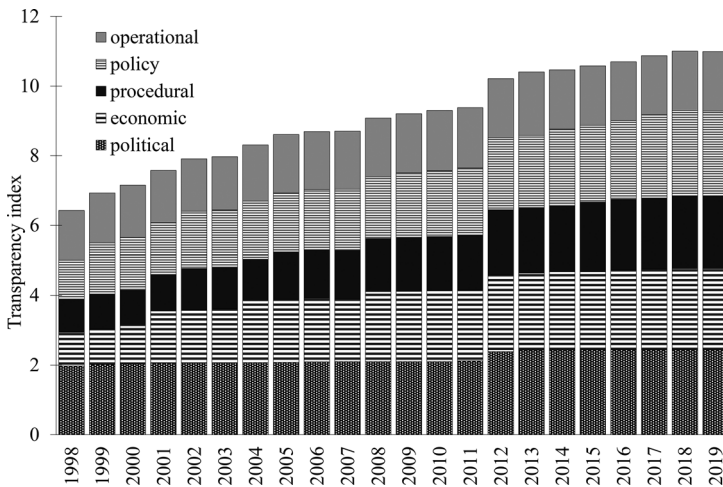
**Source:** See text.

**Note:** Unweighted average transparency index for all 112 central banks in the sample.

Kingdom, and the United States—high levels of monetary policy transparency are long standing. Other cases such as Hungary are more recent. The Sveriges Riksbank is currently the most transparent monetary policymaker in our sample of 112 central banks.

Figure 3 decomposes monetary policy transparency in our 112 central banks into its five functional components. We show there the unweighted average across central banks. For the entire period starting in 1998, there are increases in all five components, although the change is most dramatic for economic transparency (provision of information about data, models, and forecasts) and policy transparency (explanation of how policy strategies and instruments map into monetary policy goals). There is some sign of the extent of economic transparency leveling off in recent years. The increase over the entire period is least for political transparency (statements of what precisely those policy goals are), in part reflecting the fact that policy transparency was the one dimension on which central banks scored high at the beginning of the period.

**Figure 4. Average Transparency Trends, Separate Dimensions (weighted average)**



**Source:** See text.

**Note:** The transparency index for the world economy is constructed as the weighted average of the index across all central banks, using as weights their 2006 GDP shares in aggregate GDP in our sample, where GDP is in U.S. dollars and taken from the World Development Indicators of the World Bank. Due to unavailability of GDP for Curaçao, it is excluded from the sample.

Figure 4 instead weights the indices for individual countries by their purchasing-power-parity (PPP) GDP, giving heavier weights to larger and richer countries. The comparison with Figure 3 suggests that increases in transparency have slowed in recent years, as if much of the movement since 2015 has been in smaller, lower-income economies with relatively low transparency ratings previously.

Table 2 provides a breakdown of the number of central banks by type of information disclosure for each of the five dimensions of transparency in our index. The largest number of central banks, 89 in all, satisfy the criterion for procedural transparency that requires that they articulate an explicit monetary policy strategy. Many fewer are procedurally transparent in other respects (in releasing minutes, policy board voting totals, and individual member votes), although there was some additional movement in this direction between 2015 and 2019. Policy transparency also increased between

**Table 2. Information Disclosure by Central Banks over Time**

<b>Number of Central Banks Disclosing Information on:</b>	<b>1998</b>	<b>2006</b>	<b>2015</b>	<b>2019</b>
<i>Political Transparency</i>				
Formal Primary Objective(s with Prioritization)	60	66	71	72
Quantified Main Monetary Policy Objective(s)	37	52	61	61
Explicit Instrument Independence	41	54	60	62
<i>Economic Transparency</i>				
Macroeconomic Policy Model(s)	4	21	28	32
Numeric Macroeconomic Forecasts	9	49	68	70
Quarterly Medium-Term Inflation and Output Forecasts	4	15	29	32
<i>Procedural Transparency</i>				
Explicit Monetary Policy Strategy	51	79	89	89
Minutes (within Eight Weeks)	6	14	24	28
Comprehensive, Timely Minutes	2	10	17	20
Voting Balance/Records (within Three/Eight Weeks)	8	11	17	23
Prompt Individual Voting Records	4	6	6	8
<i>Policy Transparency</i>				
Prompt Announcement of Policy Adjustments	16	52	57	66
Explanation of Policy Adjustments	13	44	57	66
Always Explanation of Policy Decision	3	20	40	53
Qualitative Forward Guidance	0	4	9	11
Quantitative Forward Guidance	0	1	5	7
<i>Operational Transparency</i>				
Monetary Transmission Disturbances	14	46	56	59
Evaluation Monetary Policy Outcomes	32	61	69	69
<b>Source:</b> See text.				
<b>Note:</b> Based on scores for individual components of transparency index for full sample of 112 central banks.				

2015 and 2019, reflecting mainly the increased number of central banks promptly announcing policy adjustments, providing attendant explanations, and (most especially) doing so consistently. Least pronounced were increases in operational transparency (central banks explaining how problems with the transmission mechanism affect

the implementation of monetary policy), political transparency (central banks releasing statements about objectives and instrument independence), and economic transparency (central banks releasing numerical forecasts of the variables of interest and describing the model used to generate those forecasts). But these aggregates all show at least modest movement in the direction of greater transparency.

Just six countries moved in the direction of less transparency. China continues to publish quarterly monetary policy reports (as it has since 2004), but since 2016 with a delay. Cuba continues to provide policy explanations on the central bank's webpage, but no longer in English. Denmark switched from publishing quarterly forecasts starting in 2008 to publishing semiannual forecasts starting in 2017, from which point it no longer published a quarterly report. Iceland, so far as we can tell, discontinued providing qualitative forward guidance in May 2019.<sup>13</sup> Kyrgyzstan and Macedonia did not always publish monetary policy reports and forecasts in a timely fashion. Most of these changes are slight. Some may reflect technical difficulties rather than conscious changes in policy transparency. They do not, in our view, represent a significant countercurrent against the general movement toward increased transparency.

Finally, it is worth commenting on developments in 2019, the most recent year covered in our analysis. This year saw a noticeable increase in monetary policy transparency in low-income countries, suggesting ongoing convergence toward the best practices of middle- and high-income countries. There was little change in high- and high-middle-income countries, but the balance of that change, somewhat surprisingly, was in the direction of less transparency. The small handful of negative changes observed related to the removal of explicit forward guidance, omitted forecasts, and failure to provide explanations for monetary policy actions.<sup>14</sup>

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<sup>13</sup>Earlier forward guidance was replaced by less specific language stating that "near-term monetary policy decisions will depend on the interaction between developments in economic activity, on the one hand, and inflation and inflation expectations, on the other."

<sup>14</sup>Among high-income countries, the Central Bank of Israel did not publish a Research Department Forecast in October 2019, while Canada referred to various risks without continuing to provide explicit qualitative forward guidance. Iceland

#### 4. Conclusion

In this report we have updated measures of monetary policy transparency, providing new estimates of political, economic, procedural, policy, and operational transparency for 112 central banks for the period 1998–2019. Central banks continue to move in the direction of greater monetary policy transparency. This is true for central banks in high-income, middle-income, and low-income countries alike. It is true regardless of stated monetary policy strategy, be this inflation targeting, monetary aggregate targeting, or exchange rate targeting, although the upward trend is least evident for central banks that peg the currency. This recent movement in the direction of greater transparency is evident, to some extent, across all five of the dimensions of monetary policy transparency that we consider when constructing our aggregate index. That said, additional transparency in recent years seems to reflect mainly further movement in this direction along the procedural dimension, as more central banks release minutes, increase the comprehensiveness and timeliness of those minutes, and provide additional information on monetary policy committee voting outcomes. It reflects mainly additional movement along the policy dimension, as more central banks promptly and regularly announce policy rate adjustments and promptly and consistently explain the underlying rationale.

Comparing practice over time when an unweighted average is taken across central banks and when national scores are weighted by PPP GDP indicates that the movement toward greater monetary policy transparency since 2015 has been concentrated disproportionately in smaller, lower-income countries that previously lagged in this dimension, while the smallest increases in this period were, understandably, in high-income countries that had already approached the transparency frontier. Evidently, the transparency revolution pioneered by the central banks of relatively high-income countries is continuing to diffuse to the rest of the world.

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replaced previous forward guidance with statements to the effect that future policy developments will depend on events. Among upper-middle-income countries, the central bank of Azerbaijan did not include a macroeconomic forecast in 2019, while Cuba did not provide an English-language monetary policy explanation on its webpage.



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