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CENTRAL BANK TRANSPARENCY: ANOTHER LOOK

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ABSTRACT
This paper extends the Dincer and Eichengreen (2007) index of central bank transparency. Improvements in transparency are notable in Central and Eastern Europe, while the index has shown much smaller rises in most other parts of the world. The pattern observed by Dincer and Eichengreen, consistent with a permanent increase in central bank transparency, is also evident in the updated results. The dramatic enhancements in central bank transparency reported earlier appear to be a feature of the late 1990s and early 2000s. Whether the subsequent data reflect limits to central banks transparency or, to some extent, transparency 'fatigue', is unclear.

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1. Introduction

During the 1980s and 1990s the institutional basis for evaluating the quality of monetary policy was typically based on an index of central bank independence. Cukierman (1992) pioneered such measures and many variants have been devised ever since (e.g., Crowe and Meade 2008). A variety of criticisms were levelled at such measures (e.g., Banaian, Burdekin, and Willett 1998), including that they fail to properly identify the difference between *de jure* and *de facto* types of autonomy, and their low predictive power to explain inflation or real economic growth. Yet, it is undeniable that the attention paid to these indexes contributed to the worldwide movement to provide central banks with considerable statutory autonomy. To be sure there were other explanations such as the lessons from the Bundesbank's experience with autonomy, and the impact of the Maastricht Treaty which enshrined the independence of what became the European Central Bank (e.g., see de Haan, Eijffinger, and Waller 2005). Indeed, by the 1990s, the notion of central bank autonomy became the *sine qua non* of macro reforms in the eyes of international institutions such as the International Monetary Fund (e.g., see de Haan, Eijffinger, and Waller 2005).

With the battle over autonomy seemingly won, there remained the problem that with independence comes with responsibility. Democratic accountability for unelected officials and arm's length institutions necessitates behavior that demonstrates sensitivity for the public's need to understand how policy is made. The need for accountability inevitably raises demands for transparency. Not surprisingly then, a literature emerged that not only sought to theoretically evaluate how central bank transparency can contribute to improving the delivery of monetary policy but also whether a central bank can be too transparent and end up

confusing markets and damaging expectations about whether the right decisions were made. If, indeed, there is a trade-off between transparency and good monetary policy then policy makers must have some understanding of how much transparency has been achieved and its effects on key macroeconomic aggregates, such as inflation, on which central bank performance is evaluated. This paper extends considerably an earlier attempt to measure central bank transparency over time (i.e., Dincer and Eichengreen 2007) and concludes by suggesting areas of future research.

2. **Measuring Central Bank Transparency: The Issues**

While the notion of central bank transparency is an old one (e.g., see Siklos 2002, Chapter 6) attempts to measure it were severely limited until central banks, typically on their own initiative, began to release more and more information in the public domain. Transparency also gained momentum as it became less costly to release information and make it publicly available, normally via electronic means. An early comprehensive measure of central bank transparency is developed Siklos (2002). That index attempts to measure the volume of economically and institutionally relevant information released by a central bank. Values were created for 20 OECD economies based on information available around 1999. The resulting index consisted of 11 equally weighted characteristics that included whether the central bank releases minutes of meetings, voting records, own forecasts, details of forecast modelling procedures, the type and frequency of publications about the economic outlook, and forms used by the central bank to communicate with the public. The resulting index proved to be positively related to central bank independence as was a separately constructed index of central bank accountability. At the time, the Bank of England was found to be the most

transparent central bank, followed by the U.S. Federal Reserve, the Swedish Riksbank, the Reserve Bank of New Zealand, and the Bank of Canada. The Bundesbank was ranked seventh while the fledgling European Central Bank was 12th. An important drawback of the index is that, even if one can agree on the composition of the index, it represents only a snapshot of the state of transparency that prevailed at the end of the 1990s. Moreover, limiting the evaluation of central bank transparency to a group of only 20 industrialized countries constrains broader inferences that can be drawn from the global increase in the disclosure of substantive economic information by central banks which gathered pace over the past decade.

Important progress in the direction of creating an index of transparency over time was made by Eijffinger and Geraats (2006) who published a new index for nine industrial countries covering the 1998-2002 period. While the coverage of economies is narrow Eijffinger and Geraats make useful classifications between types of transparency. They identify five forms of transparency. They are: political, economic, procedural, policy, and operational transparency (see Eijffinger and Geraats 2006, Appendix A). The distinctions marry previously proposed indicators of central bank independence and accountability (e.g., as in Cukierman 1992, and Siklos 2002) and measures intended to capture the quantity and type of information released by central banks over time. Thus, for example, the type and quantification of central bank objectives would contribute to political transparency, the release of a central bank forecast to economic transparency, while the publication of minutes would boost procedural transparency. The timeliness of central bank policy announcements is a feature of operational transparency and publicly disclosed information about shocks and other unanticipated phenomena that influence the delivery of monetary policy is incorporated in what the authors call operational

transparency. Overall, the results of their exercise reveals that important progress was made in transparency across all the central banks surveyed. Nevertheless, central banks that are required to meet a quantified inflation objective (i.e., inflation targeting central banks) generally tend to be relatively more transparent. The only caveat is that it need not be the case that an inflation targeting central bank is necessarily more transparent in all dimensions.

More progress was made with the release of the index of transparency due to Dincer and Eichengreen (2007). They construct their measure of transparency relying on the methodology developed by Eijffinger and Geraats (2006) but greatly expand the number of countries and years covered. A total of 15 sub-indices are calculated across the five categories of transparency previously listed for 100 countries for the period 1998-2005, largely relying on information available on central bank websites. While industrial countries are also ones with relatively transparent central banks (e.g., New Zealand, U.K., Canada, Sweden) the rise in central bank transparency is especially notable in some emerging markets (e.g., Czech Republic). Dincer and Eichengreen then ask whether one can isolate some key determinants of the rise in transparency as well as the effects of changing transparency on economic outcomes. Real per capita GDP growth and flexible exchange rate regimes prove to be the most reliable determinants of transparency over time while the effects of central bank transparency, for example, on inflation and output growth volatility are modest but in the direction of a reduction in both aggregates. Interestingly, as their paper was written before the onset of the global financial crisis, they conclude that, if financial globalization is a permanent feature of the economic landscape, changes in central bank transparency are here to stay with non-industrial

countries eventually catching-up to the high levels of transparency achieved in the industrial world.

3. Revised and Updated Transparency Indices

What follows is a description of the updated Dincer-Eichengreen indices for an expanded set of countries. The methodology is unchanged and the sample range is now extended to 2009.[1] Some effort was devoted to trying and replicate the Dincer-Eichengreen data since the updating relied on information available from central bank websites that were accessed through the Bank for International Settlements portal for central bank websites (available via http://www.bis.org). While there were a very few issues of interpretation for some of the sub-indices (e.g., the precise nature of the central bank-government relationship), overwhelmingly the original values arrived at by Dincer and Eichengreen are correct. Hence, I am confident that the data set which effectively adds 50% more data (from 8 to 12 observations) is faithful to the original Eijffinger-Geraats methodology.[2] Table 1 provides a general summary of the evolution of the total transparency index by region of the world. Here the index is un-weighted while the country definitions are the ones adopted by the International Monetary Fund. The data reveal that transparency appears to have reached a plateau of sorts in the G7 and, more generally, in the industrial world. Recall that the maximum value of the index is 15. In contrast, transparency has risen steadily worldwide with the most

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[1] I considered extending the data to years prior to 1998 but this was feasible for only a relatively small subset of industrial countries.
[2] The raw data and accompanying revision notes will eventually be made available on the central bank communication website www.central-bank-communication.net and http://www.wlu.ca/page.php?grp_id=758&f_id=31&p=12573. In some instances that cannot be confirmed, it seems that a very few central banks added information to their website which may have had an impact on the index originally constructed by Dincer and Eichengreen.

impressive increases taking place among the countries in Central and Eastern Europe while the increase is more modest among developing and Asian economies. Hence, the pattern first observed by Dincer and Eichengreen, and consistent with a permanent increase in central bank transparency, is also evident in the extended and updated results. Nevertheless, the rather dramatic enhancements in central bank transparency reported by Dincer and Eichengreen appear to be a feature of the late 1990s and early 2000s. Whether the subsequent data reflect limits to central banks transparency or, to some extent, transparency 'fatigue', is unclear.[3] To the extent that one is able to observe the effects of the global financial crisis that began in 2007 there is apparently no reversal yet in the progress towards greater transparency even if the rate of improvement, so to speak, has slowed. An illustration of this phenomenon is apparent from Figure 2 which plots CPI inflation (vertical axis) against the aggregate index of transparency (horizontal index) for the 1998-2008 period.[4] The improvement in transparency alongside the drop in inflation is especially evident for the group of Central and Eastern European economies.[5] The upturn in inflation in 2008 reflects the immediate impact of the commodity price shocks or that year. Clearly, these results are only suggestive and may well obscure important country-specific developments or changes that may well have taken place among other possible regional groupings of countries.

4. Conclusions and Future Research

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[3] The trade-off between transparency and clarity (see Siklos 2002, chapter 6, and references therein) also comes into play here. For example, releasing more information of some kind may improve a country's standing in the race to be transparent but if that information is then seen as reducing clarity a subsequent removal or refinement could well translate into a reduction in the transparency index.
[4] Complete CPI inflation data were not available for 2009.
[5] Transparency increases every year from 1998 with the exception of a small decrease in average total transparency in the Western Hemisphere from 2008 to 2009.

This paper has extended the Dincer and Eichengreen (2007) index of central bank transparency. Improvements in transparency are notable in certain parts of the world, such as Central and Eastern Europe, while the index has shown much smaller rises in most other parts of the world. Space limitations, however, prevent a fuller examination of the macroeconomic determinants and effects of central bank transparency, among other research questions to be addressed. Also important is an analysis of the links between central bank transparency and financial system stability, and whether countries will aim to increase transparency in light of the global financial crisis of 2007-2009. Finally, future research should also aim to explore whether there is useful information in the sub-indices as policy makers struggle to develop macro-prudential tools in delivering monetary policy.

Figure 1 Aggregate Index of Central Bank Transparency, 1998-2009
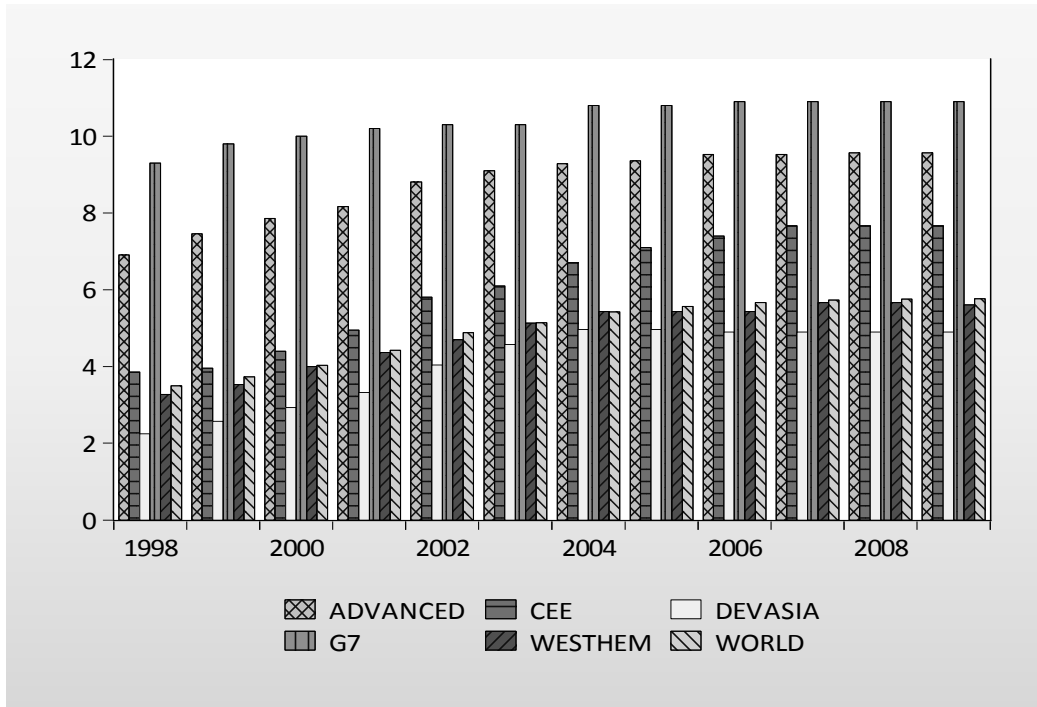
NOTE: See the appendix for country grouping definitions

Figure 2 Transparency and Inflation in Select Regions of the World, 1998-2008
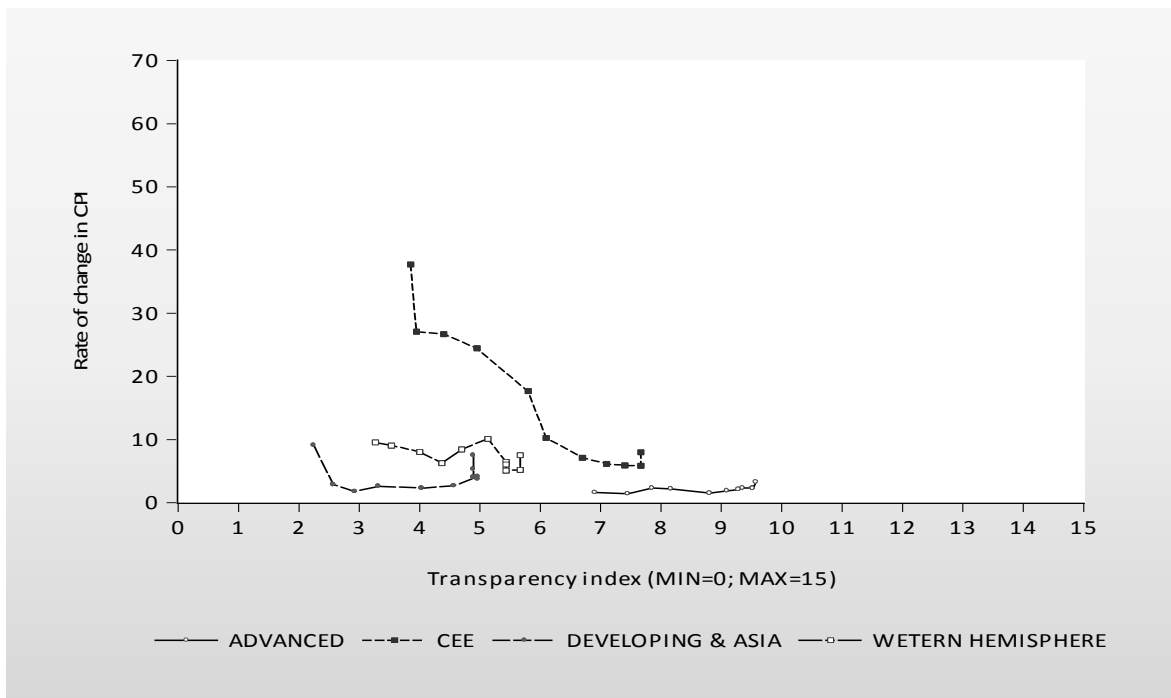
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Advanced economies (33): *Country* also in Euro area group **[ADVANCED]**

Australia,
Austria,
Belgium,
Canada,
Cyprus,
Czech Republic,
Denmark,
Finland,
France,
Germany,
Greece,
Hong Kong SAR,
Iceland,
Ireland,
Israel,
Italy,
Japan,
Korea,
Luxembourg,
Malta,
Netherlands,
New Zealand,
Norway,
Portugal,
Singapore,
Slovak Republic,
Slovenia,
Spain,
Sweden,
Switzerland,
<u>Taiwan Province of China</u>, NOT IN DINCER-EICHENGREEN DATABASE
United Kingdom,
United States

Euro area (16)

Austria,
Belgium,
Cyprus,
Finland,
France,
Germany,
Greece,
Ireland,
Italy,
Luxembourg,
Malta,
Netherlands,
Portugal,
Slovak Republic,
Slovenia,
Spain.

Major advanced economies [G7]

Canada,
France,
Germany,
Italy,
Japan,
United Kingdom,
United States.

Emerging and developing economies (149)

Afghanistan, Republic of, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahamas, The, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Democratic Republic of, Congo, Republic of, Costa Rica, Côte d'Ivoire, Croatia, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Gabon, Gambia, The, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran, Islamic Republic of, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyz Republic, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia, Former Yugoslav Republic of, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Solomon Islands, South Africa, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Democratic Republic of, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Republic of, Zambia, and Zimbabwe.

Developing Asia (26) [DEVASIA]

Afghanistan, NOT IN DATABASE
 Bangladesh,
Bhutan,
Brunei Darussalam, NOT IN DATABASE
Cambodia, NOT IN DATABASE
China,
Fiji,
 India,
Indonesia,
Kiribati,
Lao People's Democratic Republic, NOT IN DATABASE
Malaysia,
Maldives, NOT IN DATABASE
Myanmar, NOT IN DATABASE
Nepal, NOT IN DATABASE
Pakistan,
Papua New Guinea,
 Philippines,
Samoa, NOT IN DATABASE
Solomon Islands,
Sri Lanka,
Thailand,
Timor-Leste, NOT IN DATABASE
Tonga, NOT IN DATABASE
Vanuatu,
Vietnam, NOT IN DATABASE

Western Hemisphere (32) [WESTHEM]

 Antigua and Barbuda, NOT IN DATABASE
Argentina,
Bahamas,

Barbados,
Belize,
Bolivia, NOT IN DATABASE
Brazil,
Chile,
Colombia,
Costa Rica, NOT IN DATABASE
Dominica, NOT IN DATABASE
Dominican Republic, NOT IN DATABASE
Ecuador, NOT IN DATABASE
El Salvador,
Grenada, NOT IN DATABASE
Guatemala,
Guyana, NOT IN DATABASE
Haiti, NOT IN DATABASE
Honduras, NOT IN DATABASE
Jamaica,
Mexico,
Nicaragua,
Panama, NOT IN DATABASE
Paraguay,
Peru,
St. Kitts and Nevis, NOT IN DATABASE
St. Lucia, NOT IN DATABASE
St. Vincent and the Grenadines, NOT IN DATABASE
Suriname, NOT IN DATABASE
Trinidad and Tobago,
Uruguay,
Venezuela, NOT IN DATABASE

Central and eastern Europe (15) [CEE]

Albania,
 Bosnia and Herzegovina, NOT IN DATABASE
 Bulgaria,
Croatia,
Estonia,
 Hungary,
Latvia,
Lithuania,
Macedonia, NOT IN DATABASE
Former Yugoslav Republic of, Montenegro, NOT IN DATABASE
Poland,
Romania,
Serbia, NOT IN DATABASE
Turkey.