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Does transparency pay? Evidence from IMF data transparency policy reforms and emerging market sovereign bond spreads ☆

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ABSTRACT

Does an effort to enhance data transparency pay? We answer this question by analyzing the effect of the data transparency policy reforms, as reflected in subscriptions to the IMF's Data Standards Initiatives, namely, the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS), on the spreads of emerging market sovereign bonds. Employing a short-run event study with daily data, we convincingly show that market participants react to the transparency reform news positively. We then measure its medium-term effect, which is more relevant for economic decisions. By showing that the reform decision is largely independent of a country's macroeconomic development we mitigate endogeneity issues regarding a decision to adopt such reforms. On average, the adoption of the SDDS and GDDS lead to a 13% reduction in the spreads over one year, following such reforms. This finding is robust to various sensitivity tests, including careful consideration of overlapping events, controlling for additional variables, and a placebo test.

"Nothing would help improve standards more than if countries that met higher standards were rewarded with lower borrowing costs... If this awareness translates into lower spreads for those meeting higher standards, the standards initiative will begin to pay off both for individual countries and for the system as a whole."

[Fischer (2003)]

1. Introduction

A large body of literature has examined whether greater transparency at the country level has promoted its economic growth and financial development via improved policies and institutions (Goldstein, 1998; Alesina et al., 1999; Stiglitz,

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1999.; Glennerster and Shin, 2003; Frenkel and Menkhoff, 2004; Kaufmann and Bellver, 2005; Alt and Lassen, 2006).[1] However, to the extent to which greater transparency is associated with overall quality of institutions, identifying the causal effect of transparency on economic growth and financial development is subject to an endogeneity concern. As pointed out by Glennerster and Shin (2003), earlier studies treat transparency as a by-product of good institutions and economic performance and do not convincingly resolve the associated omitted variable or reverse causality problems. Moreover, transparency is often defined in different ways, which results in an inherent bias of its measures (Glaeser et al., 2004).

We overcome these problems by using an objective measure of enhanced transparency as reflected in a country's adoption of the IMF Data Standards Initiatives, such as the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS). In this context, transparency has a narrow definition: the coverage, timeliness, and periodicity of economic data released to the public. The standardized requirements for the SDDS and GDDS across countries further mitigate the issue regarding the measurement of transparency. Moreover, to the extent to which countries adopt such reforms to improve data transparency at different times, a panel estimation with country-fixed effects allows us to identify the effect of the reforms using variation over time in a given country, and thereby mitigates the omitted variable bias in cross-sectional studies, where countries with better institutions tend to have better economic outcomes, including lower sovereign borrowing costs (Eichler, 2014).

We assess whether policy reforms to improve data transparency pay off by gauging their effect on sovereign bond spreads in emerging market economies. Among various economic outcomes, we focus on sovereign bond spreads to evaluate the effect of these reforms for two reasons. First, identifying their causal effect on other macroeconomic variables, such as GDP is difficult because of their slow-moving property. However, financial variables are expected to react to reforms more quickly, which allow us a cleaner identification of the causal effect of interest. Second, as Fischer (2003) emphasizes, the international financial system can reach equilibrium with greater stability and resilience if the market rewards country efforts to improve data transparency with a lower risk premium.

Reforms to enhance transparency are expected to lower borrowing costs by reducing risk premiums while investing in emerging market economies where the quality of institutions or economic policies is often questioned. By providing necessary economic and financial data to the public promptly and accurately, data transparency policy reforms reduce the degree of information asymmetry, which is an important factor of risk premiums in these countries (Gelos and Wei, 2005; Andritzky et al., 2007; Brandão-Marques et al., 2013). For example, Mrkaic (2010) show that data transparency initiatives substantially improve the statistical quality of the IMF's World Economic Outlook Forecasts, which contribute to effective policy discussions. Tapsoba et al. (2016) also find that improved statistical capacity attributable to IMF technical assistance helps reduce fiscal pro-cyclicality.

However, greater transparency does not always translate into financial market stability as it may encourage herding behavior among investors (Morris and Shin, 2002; Walsh, 2007). Moreover, Tong (2007) finds that public disclosure crowds out private investment in information by analyzing stock market analysts' forecasts in developing economies. Such theoretical ambiguity leads us to empirically test the link between data transparency and economic outcomes using exogenous events.

Using an event study to mitigate the endogeneity issues mentioned above, we assess the effect that subscription to the IMF's data standard initiatives had on sovereign bond spreads in a secondary market. We use J.P. Morgan's Emerging Market Bond Index Global (EMBIG) to measure sovereign bond spreads in emerging market economies, which serves as a timely risk assessment by international investors.

Regarding the size of the event window, there is a trade-off between a short and long size of the window. Identification in an event study can generally be strengthened by studying a short-event window using high-frequency data (MacKinlay, 1997) by limiting the chance of other confounding factors to contaminate a causal relationship of interest. However, our interest is not restricted to whether financial market participants perceive the data transparency policy reforms as good news on impact. Perhaps a more policy-relevant question is whether such a reduction in sovereign borrowing costs is persistent over the medium-term or not. To balance out this trade-off, we take two complementary approaches using daily and quarterly data.

We find that the reforms designed to improve data transparency reduce sovereign bond spreads significantly, not only on impact (using daily frequency data) but also over the medium-term (at a quarterly frequency). We further show that our findings are robust to a battery of sensitivity tests, including careful consideration of overlapping events, controlling for additional variables, and a placebo test. If anything, the effect tends to be larger when a longer horizon is considered, and subscriptions to the SDDS with more stringent transparency requirements result in a larger reduction in sovereign bond spreads when compared to the GDDS. The fact that the reforms reduce the spreads in the secondary market suggests confidence in holding those sovereign bonds and will lead to more demand from international investors in primary markets, thereby deepening sovereign bond markets in these economies.

The remainder of the paper is organized as follows. Section 2 documents the background related to data transparency policy reforms. Section 3 describes data used in the analysis. Section 4 presents the primary results using both daily and quarterly data. Section 5 presents further results from robustness exercises. Section 6 concludes the paper.

[1] We do not intend to summarize the literature on the relationship between a broader concept of transparency and economic performance. Rather, we limit the scope of transparency and focus only on the reforms to improve data transparency.