

# Comments on “Measuring corporate bond liquidity in emerging markets: price- vs quantity-based measures”

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## 1. Findings and contributions of the paper

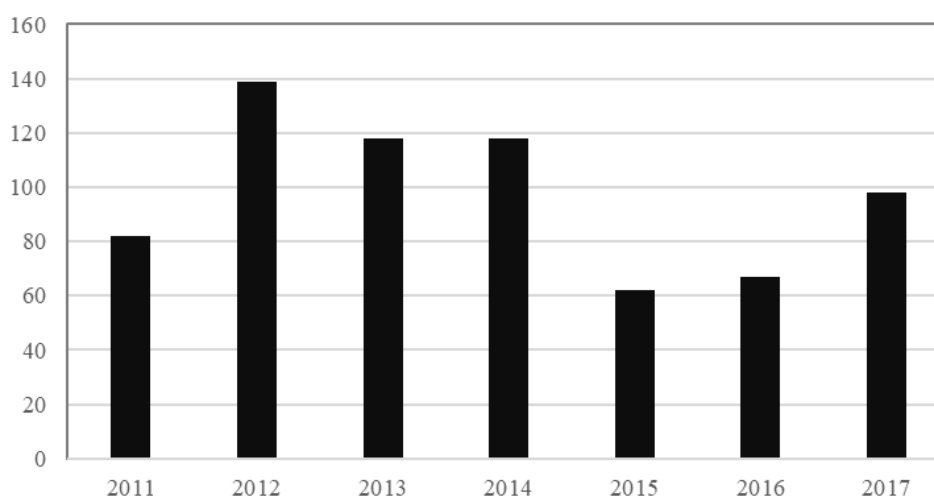
The authors of this paper (Hameed, Helwege, Li and Packer) examine the liquidity of corporate bonds in emerging market economies (EMEs). Their main goal is to identify the most effective measures of corporate bond liquidity in EMEs. Six quantity-based (eg turnover) and six price-based (eg the absolute return over volume ratio or the Amihud measure) measures are studied. Analysing a large sample of corporate bonds from Malaysia during the period 1997–2017 with transactions recorded on an electronic trading platform, the authors find that quantity-based measures are more effective in capturing bond liquidity differences than price-based measures. Their findings are the same for both Islamic and conventional bonds. Overall, the bonds under study are considerably illiquid.

Establishing ways to accurately measure bond liquidity is of interest to traders and policy makers. Bond market makers may demand premiums for liquidity provisions. If liquidity is not measured correctly, market makers will be less able to support the proper functioning of the bond market. Policy makers are also keen to gauge the current liquidity status of the bond market so as to effectively intervene, when necessary, to improve financial conditions and thus benefit society in general. For example, in recent years, central banks worldwide have begun engineering bond purchase programmes to improve bond market liquidity and corporate finance (eg the European Central Bank initiated the corporate sector purchase programme in June 2016).

This paper contributes to the literature by providing evidence showing that quantity-based measures are more appropriate than price-based measures in capturing bond liquidity differences in EMEs. Moreover, it sheds light on the development of the corporate bond market in EMEs. Despite its great potential, the Islamic bond market has not grown much. New issuances have been fluctuating at around \$80 billion per year (see Table 1). A potential cause of the stagnation of the market is lack of liquidity. Given that the majority of the sample bonds are Islamic bonds, this study makes a useful contribution to our understanding of the Islamic bond market.

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## 2. Comments and suggestions

The paper provides many useful statistics about a valuable dataset. It raises new questions beyond the results discussed in the paper and could pave the road for future studies.

### 2.1 Islamic versus conventional bonds

Malaysia has the world's largest Islamic bond market. It is the best place to study Islamic finance. However, the paper does not detail the unique aspects of Islamic bonds nor does it outline the differences between conventional and Islamic bonds (one would assume Islamic bonds are substantially different from conventional bonds, hence the needs for different labels).

Chen, Cherian, Shao, and Subrahmanyam (2018) analyse Islamic sovereign bonds in Malaysia. They find that Islamic bonds have higher yield spreads than conventional bonds after controlling for bond characteristics and liquidity. They argue that there is a clientele effect in Islamic bond investments. It is interesting to study how Islamic and conventional bonds obtain the same liquidity features. Johnes, Ongena, Pappas, Tsionas and Izzeldin (2018) study these aspects, while Alzahrani (2019) provides an overview of Islamic finance.

## 2.2 How different are EMEs from advanced economies (AEs)?

Corporate bond liquidity is extensively studied in literature using data from AEs, especially the United States. It is useful to discuss why one may expect different results from EMEs before diving into the data.<sup>2</sup> This discussion is also necessary because Schestag, Schuster, and Uhrig-Homburg (2016), using US data, find that the price-based measures of corporate bond liquidity perform well. The current paper concludes that quantity-based measures are more reliable for EMEs (ie Malaysia), thus raising the question: What drives different results between AEs and EMEs?

## 2.3 Methodological concerns on the comparison of liquidity measures

This paper uses a regression method to assess the effectiveness of various liquidity measures. Specifically, the authors relate liquidity measures to bond size, age and remaining maturity. They posit that good liquidity measures should be significantly related to those explanatory variables and with the “correct” signs. This method is a reasonable starting point. However, a more rigorous method may provide for a more convincing conclusion. At a minimum, some validation analysis for the method employed by the authors would be helpful. For example, many may agree that sovereign bonds, on average, are more liquid than corporate bonds. For a mixed sample of sovereign and corporate bonds, will quantity- or price-based liquidity measures be better able to identify those bonds that are more liquid?

Constructing new liquidity measures and identifying the best measures remain ongoing research topics. Chernenko and Sunderam (2018) construct a new measure of bond liquidity without using transaction data. Future studies can apply this measure to EMEs.

## 2.4 Other EMEs such as China

While the authors argue that Malaysia has a well-developed bond market with a high debt-to-GDP ratio, a question remains over whether the findings from this study are applicable to other markets. Many EMEs are substantially larger than the bond market in Malaysia. The first that comes to mind is China. In the last decade, China has developed a large corporate bond market, which may become the world’s second largest in 2019. Amstad and He (2019) provide a detailed introduction to the bond market in China.

The corporate bond market in China is worth more attention because it has experienced many reforms. There are plenty of “natural experiments” or “policy shocks” that can be used to test fundamental corporate finance or asset pricing theories. In a study by Chen, Chen, He, Liu and Xie (2018), for example, policy change in China is used to show that bond prices are affected by its pledgeability as collateral.

<sup>2</sup> Hund and Lesmond (2008) provide some relevant discussions.

### 3. Concluding remarks

This paper helps readers understand corporate bond liquidity in EMEs. The authors discuss a large set of liquidity measures and find evidence for the superior performance of quantity-based measures from a sample of Malaysia corporate bonds. Many new promising research questions are raised along these lines. Future studies should focus on the unique features of Islamic bonds, comparing the effectiveness of different liquidity measures in EMEs to that of AEs, employing different methods and looking at different markets such as China.

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