Comments on "Local currency bond returns in emerging market economies and the role of foreign investors"

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1. Summary

Emerging market economy (EME) bonds include sovereign bonds, quasi-sovereign bonds and corporate bonds. They can also be divided into local currency and US dollar-denominated bonds. This paper specifically focuses on local currency-denominated sovereign bonds. The issuance of such bonds has experienced a phenomenal growth, having reached USD 10 trillion by 2017. These bonds have relatively low default risk and better liquidity; however, they might still be subject to exchange rate risk.

The authors (So, Valente and Wu) study the cross-sectional risk-return relation of these bonds. Interest rate risk can be immunised by matching duration. The concerns relating to default risk and liquidity are already low for these bonds. In addition to the exchange rate risk, this paper also looks at new systemic risk originating from foreign (institutional) investors' portfolio return. Foreign investors hold, on average, 20% of EME local currency sovereign bonds. Institutional investors account for the majority of foreign investors, who usually look for higher yields or portfolio diversification.[2]

This paper asks the following:

- How do foreign institutions' participation affect the cross-sectional return variation in EME local currency bond markets?

- Will a change in risk appetite or the monetary policy of advanced economies (AEs) transmit to EME local currency bond markets?

- How can we quantify the risk premia driven by the fund flows of foreign investors actively managing portfolio holdings?

Specifically, the paper builds a theoretical model to incorporate the portfolio management decisions of foreign institutional investors and fund flows and proposes a conditional asset pricing model to explain the cross-section of EME local currency bond returns. Empirically, it tests the model using 16 EMEs[3] and five different maturities (1–5 years) of zero coupon bond, over the 2007–2018 period. The authors define the (passive) bond market portfolio using the JP Morgan GBI Global Traded

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Index, which contains local currency bonds in both AEs and EMEs. The JP Morgan GBI-EM Broad Index, which only contains EME local currency bonds, serves as a proxy for the active bond market portfolio. They use the Emerging Portfolio Fund Research (EPFR) sovereign bond fund flows to and from EMEs as a proxy for the aggregate net outflows from the active fund.

The findings show that there exists a large variation in beta-to-active fund risk. High beta (country) bonds earn high expected returns and show weak fundamentals. Moreover, the portfolio with high beta bonds has a positive beta-premium sensitivity.

2. Comments

This paper raises an important question given the rise of EME local currency sovereign bonds. It studies the relationship between risks and returns for those bonds under a conditional asset pricing model and incorporating foreign institutions' portfolio decisions. The theoretical framework is carefully designed. The empirical implications are also well defined. This paper contributes to the literature on intermediary asset pricing and the role of institutions on financial markets. It also contributes to the literature on the cross-section of bond returns.

In terms of policy implications, this paper provides an explanation into why fragile countries' local currency bonds experience high expected return. It could be due to the high exposure to active fund risk. The positive beta-premium sensitivity suggests that the risk exposure also increases when the risk premium goes up during periods of stress. Such change in the risk premium is related to capital outflows from EMEs. This research could help bring about a better understanding of the causes of the Great Financial Crisis. In particular, the growth of bond exchange-traded funds (ETFs) raises the concern of commonalties among bonds held together. If flow is also affected by such commonalties, risk premia also increase under this paper's prediction. Therefore, EMEs with high exposure to active fund risk might want to mitigate foreign institutions' decisions to actively sell during periods of market stress.

The authors may need to better clarify active vs passive fund risk. This paper uses the framework of Vayanos and Woolley (2013). A passive index fund has no cost; an active fund tracks true market portfolio with a cost. In the context of the paper, active means only investing in EME bonds rather than in bonds from both AEs and EMEs, which is merely a choice of asset allocation. Therefore, it needs a better proxy for active funds – eg mutual funds or ETFs. It also needs a better proxy for fund flows of active funds. For example, a shock to foreign investors could cause outflows from both market funds and active funds. Empirically, are market fund returns also related to capital flows? If so, the risk exposure to market fund risk might also be significant.

Other issues:

1. This paper could look at US dollar-denominated EME sovereign bonds. This would help to avoid exchange rate risk. However, market segmentation may exist between different fund investors.[4]

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[4]   For example, BlackRock offers both foreign currency-denominated and local currency EME sovereign bond information: iShares JP Morgan USD Emerging Markets Bond ETF (EMB) vs iShares JP Morgan EM Local Govt Bond UCITS ETF (IEML).

2. This paper could also extend the empirical analysis to EME local currency corporate bonds rather than just sovereign bonds. It could provide more observations and increase statistical powers for cross-sectional tests. For example, the authors could select a sample of corporate bonds with reasonably low default risk and high liquidity, eg quasi-sovereign bonds.

3. The channel of active fund risk could be due to liquidity. Naturally, the price impact from outflows is due to block sales and fire sales. Therefore, EME local currency bonds with low liquidity would have high risk exposure.

4. The authors could also compare their research to the literature relating to the common factor approach on the cross-section of bond returns, in addition to the traditional consideration of idiosyncratic credit risk, downside risk and liquidity risk measures etc.

5. The current framework in this paper cannot exclude the impact of exchange rate (currency) risk. Given this imperfection, how to capture the cross-sectional variation in currency risk is worthy of further investigation. For example, when outflows can be induced by exchange rate changes, then the exposure to exchange rate risk could affect the risk premia to active funds.

3. Conclusion

This is an interesting paper with promising policy implications. It studies an important question given the increased issuance of EME local currency sovereign bonds. Specifically, it investigates the risk-return relationship between those bonds under a conditional asset pricing model and incorporating foreign institutions' portfolio decisions. The theoretical framework is carefully designed, while the empirical implications are also well defined.

The paper contributes to the literature on intermediary asset pricing and the role of institutions on financial markets. It also contributes to the literature on the cross-section of bond returns. For policymakers' consideration, it provides an explanation into why fragile countries' local currency bonds can experience high expected returns.

The paper could be further enhanced by conducting additional empirical analyses. This includes, for example, defining active bond fund returns more precisely, constructing more direct measures of fund flows on active bond funds, and by conducting a deeper investigation into the liquidity channel.

Reference

Vayanos, D and P Woolley (2013): "An institutional theory of momentum and reversal," *Review of Financial Studies*, vol 26, pp 1087–145.