

Yield determinants of state development loans

It is a common parlance that yield on state development loans (SDLs) trade at a premium to G-sec yields. This difference in yield attracts a lot of debate across research analysts and market participants and the common refrain is that such a yield differential could possibly be attributed to the fiscal marksmanship of individual states. We however believe otherwise and our results show such spread is a by-product of typical market idiosyncrasies/microstructure.

The importance of market microstructure (trading mechanisms, price formation, depth and liquidity) in various segments of financial markets and its implications for policymaking has been a much less explored area in the Indian context (apart from a 2009 paper *Money Market Microstructure And Monetary Policy: The Indian Experience* by Michael Patra and others).

For an economy that is currently undergoing deep-seated structural reforms, the interaction between monetary policy and the money market is an essential ingredient for understanding the market dynamics as well as for ensuring financial stability.

Interestingly, for the emerging and developed economies, the central position of the money market microstructure in the conduct of monetary policy has started drawing attention since 2000. It was found out that the monetary transmission mechanism in these countries was affected by the lack of depth in financial markets (*The Exchange Rate And The Term Structure Of Interest Rates In Mexico*, by Ogaki Masao, and Julio A. Santaellz).

Coming back to state governments, there is little literature available on the determinants of borrowing cost of SDLs with reference to India. The available literature on the subject shows that the spreads on the bonds of sub-national (state) governments are influenced by factors such as fiscal performance and market liquidity. On the other hand, empirical literature on cross-country experience reveals that there is mixed view on determinants of yield at sub-national level. Some studies suggest that the spread is determined by deficit and debt position of sub-national governments whereas other studies have highlighted factors specific to market microstructure like tradeability of securities, size of bond issuances, bond-issuing strategies being the key determinant of such yield spread.

In India, the yields on SDLs varies among states but largely remain above the G-secs yield (average yield differential of around 56 basis points during 2011-2017). The market perception is that fiscal situation of the state, say fiscal deficit, debt to state gross domestic product (GSDP) ratio are the major determinants of such yield spreads. In order to examine the relative importance of fiscal indicators and market-related variables in determining the yield spread, we made an empirical analysis using the panel data framework of the 15 states (contributing more than 95% of total SDLs) for the period FY12 to FY17.

For our empirical analysis, we estimated a panel regression model by using state-wise weighted average yield of SDLs as dependent variable and fiscal deficit, debt-to-GSDP ratio, average size of borrowing, number of times borrowed in a year, state's share in total borrowing and GSDP growth as independent variables.

The state-wise data on SDLs borrowing indicate that the bigger states like Maharashtra, Tamil Nadu, Uttar Pradesh, Gujarat, West Bengal, Andhra Pradesh and Karnataka borrow more than 60% of the market borrowings through SDLs. North-Eastern states borrow the least, perhaps because of more Central assistance. Karnataka, Bihar, Uttarakhand and Jharkhand are the states whose market borrowing has increased rapidly over the years.

In FY12, the total amount of SDLs borrowed from the market was Rs1.6 trillion that increased rapidly to Rs3.6 trillion in FY17 with a compound annual growth rate of 18.2%. The weighted average yield of all the states has declined to 7.19% in July 2017 (9.17% in FY14).

Interestingly, states like Jammu and Kashmir, Uttar Pradesh, West Bengal, Punjab and Madhya Pradesh have borrowed at higher rates while states like Uttarkhand, Chhattisgarh and Haryana have raised resources at a lower rate.

Our results suggest that the conventional wisdom of the market that fiscal deficit of states, overall debt/GSDP ratio, GSDP growth will mostly explain such yield differential is incorrect. In contrast, most of our market variables related to market microstructure turn out to be statistically significant. For example, the average size of bond issuance of states reveals a negative and statistically significant influence over yield spreads. The same also hold good for both market share and number of bids in a year. Both the coefficients have a negative and significant impact on yield. The result also shows that states that are frequently borrowing from the market with higher ticket size are attracting better yield than those states that are taking less recourse to SDLs.

Additionally, to see the impact of farm-loan waiver on yields, we looked at states like Maharashtra, Punjab, Uttar Pradesh and Karnataka, which have recently waived farm loans. Interestingly, the data indicate that farm-loan waiver has no impact on the yield of these states, as should have been the case. In FY18 till October, Maharashtra, Uttar Pradesh are borrowing at a low yield rate than the median range of 7.37% of all the states. Similarly, Karnataka and Punjab have borrowed close to the median yield rate.

To sum up, apart from market microstructure, we would make three clear suggestions to enable a robust price-discovery mechanism for yields on SDL. These are: (1) Issue SDLs in buckets that have mutual exclusivity with G-secs for active market participation (2) reissue of SDLs for better consolidation, and (3) allow SDLs to be used as a collateral for collateralized borrowing and lending obligation for better price discovery.

Soumya Kanti Ghosh, Debashis Padhi and Tapas Parida are, respectively, group chief economic adviser and economists at the State Bank of India. These are their personal views.

END

Downloaded from crackIAS.com

© **Zuccess App** by crackIAS.com