Comment

Arturo J. Galindo: This paper uses a high-frequency bank-level data set of interest rates and loan disbursements to test the credit channel of monetary policy in Brazil. The evidence reported suggests that the credit channel is strong and acts particularly through large banks. This paper complements a vast set of recent papers on the topic on both developed and emerging economies.[1] It introduces novel features by allowing a cleaner identification of supply and demand channels through the exploitation of a high-frequency (daily) data set. In contrast to other studies in which data are extracted from banks' balance sheets, the authors use credit flow data and marginal interest rates, as opposed to changes in stocks and implicit rates, allowing for a more distinct identification of banks' responses to monetary policy.

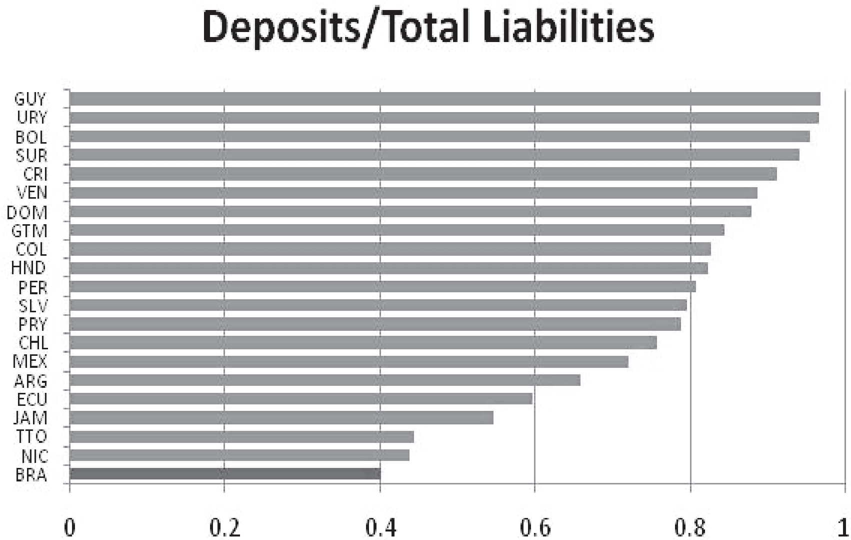
A key finding of the paper is that the impact of changes in monetary policy is stronger in larger banks. A distinctive feature of similar studies for the United States and Mexico is that bank size is a key determinant in the way that the credit channel operates, but in an opposite way.[2] This research suggests that monetary policy changes are transmitted mainly through small banks. For European economies, the evidence is mixed.[3] The key idea behind the link between the response to policy changes and bank size lies in the assumption that informational asymmetries vary across banks and are more pronounced in smaller banks. A monetary tightening that leads to a fall in aggregate deposits should have a stronger effect on the banks that are assumed to be more opaque.

1. In Latin America, the cases of Chile and Mexico have been studied by Alfaro and others (2003) and Villalpando and Guerrero (2007), respectively.

2. See Kashyap and Stein (2000) or Ashcraft (2001) for evidence on the United States and Villalpando and Guerrero (2007) for Mexico.

3. The cases of Greece, Italy, Portugal, and Spain, respectively, are addressed in Brissimis, Kamberoglou, and Simigiannis (2003), Gambacorta (2003), Farinha and Robalo Marques (2003), and Hernando and Martínez-Pages (2003). Ehrmann and others (2003) study the European Union in general.

FIGURE 3. Ratio of Deposits to Total Liabilities



Source: Bankscope.

Similar effects can be expected for banks with different levels of capitalization and liquidity.

A possible explanation for the finding that in Brazil, as opposed to other countries, the drivers of the credit channel are large banks is that large banks rely more on deposits as their main source of funding. The banking sector in Brazil is, in itself, very particular. As shown in figure 3 above, while deposits account for nearly 70 percent of bank liabilities in the average Latin American and Caribbean country, this share barely reaches 40 percent in Brazil. This stylized fact already raises questions on how effectively the monetary channel works, given the limited size of deposits on bank balance sheets. A feature not explored in this paper, due to the difficulty of the exercise, is to compare across countries using different types of data sets and techniques.

In table 4, the paper provides a very interesting description of the liability side of the balance sheet of banks of different size in Brazil.[4] Notably, the

4. It is worthwhile noting some unusual figures in table 4. The minimum value of the ratio of deposits to liabilities is zero in many cases, suggesting either that there are errors in the data or that the sample includes more types of financial intermediaries besides deposit taking institutions.

largest banks rely most on deposits relative to the rest of the system. This may explain why the econometric exercises lead to the conclusion that the credit channel operates mostly through large banks. In a sense, the results are not qualitatively different from those found in other countries in which the banks that rely most on deposits are the principal transmitters of monetary policy changes.

Some refinements could be added to the empirics of the paper in a way that the research question is exploited further. For example, one may wonder if the results vary not only by bank size, liquidity, ownership, or type of credit, as currently done, but by other dimensions, such as the degree of specialization of banks, or by the characteristics of the monetary policy shock (positive or negative). However, any of these would be marginal contributions. From my perspective, the main question has been properly posed and nicely tackled, with interesting results for monetary policy. The evidence suggests that there is a credit channel in Brazil, and the fact that it operates through the largest banks, which concentrate most of the asset share, is reassuring.

Beyond that the paper opens a very interesting research and policy agenda. There seems to be a very interesting story behind the other 60 percent of liabilities that explain the banking system's balance sheet. Pontual Ribero and de Negri suggest that most of these liabilities come from BNDES—the largest development bank in Brazil—discount lines.[5] Apparently this dependence is more prevalent for smaller banks. Clearly, the monetary policy channel could be strengthened through coordination between the monetary authorities and the BNDES. Whether this coordination takes place and how it works is a very interesting policy question. Furthermore, understanding the nature of the asymmetry between the cost and terms of private and public funds is also a key question that the authors could usefully explore in future work.

5. Pontual Ribero and de Negri (2009).

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