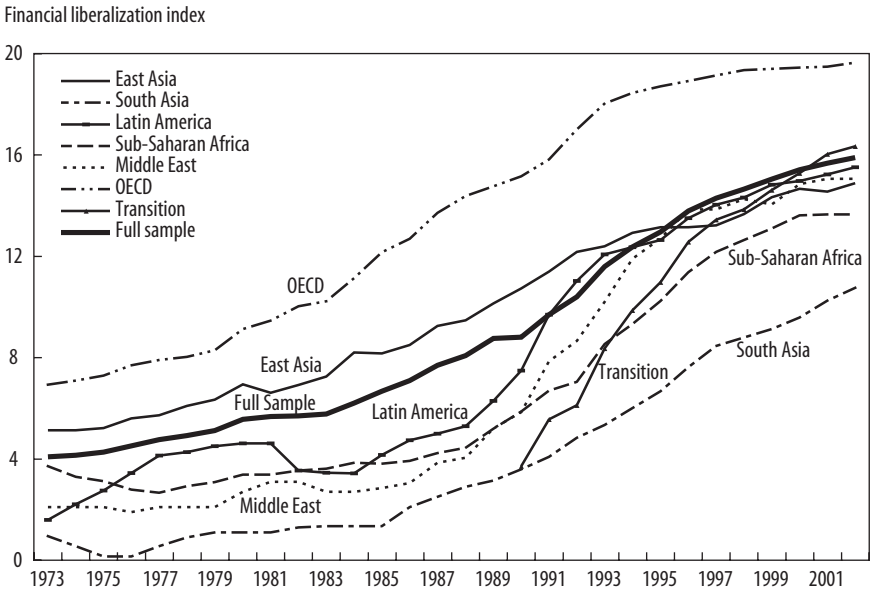


## Comments

**Enrica Detragiache:** The financial sector has seen a huge amount of reforms in the last two decades all over the world, and Latin America has certainly had its share of changes. Figure 5 shows an index that tracks a comprehensive set of financial reforms in eighty-two countries beginning in the early 1970s. According to this index, Latin America was the least liberalized region of the world in 1973, with the exception of south Asia. By the early 1990s, however, it had by and large caught up to or surpassed all other groupings except the advanced countries. Bank privatization has been a key component of this remarkable reform effort. Nevertheless, it is one of the components that still lags the most, both in Latin America and elsewhere: table 11 shows the values of the subindexes of financial liberalization that are used as inputs to create the aggregate index of figure 5. Each subindex ranges from 0 to 3. In 2002, the end of the sample period, bank privatization had the lowest score of all components in the full sample and the second lowest score in the Latin American sample. These data suggest that bank privatization still has a way to go, so the questions asked by Levy Yeyati, Micco, and Panizza are not idle ones. Should privatization continue? Do we have evidence that it has worked so far?

The first message I take out of this paper is that it is devilishly difficult to devise a convincing empirical test to disprove the development view of state banks. This is unfortunate, because the issue is politically and ideologically supercharged, which means that reasonable people have strong priors about it. To move people away from strong priors requires very convincing evidence.

Levy Yeyati, Micco, and Panizza rightly point out that state-owned banks may very well be fulfilling their development mandate while exhibiting lower profitability, higher operating costs, and lower quality loans than private banks, as some existing empirical studies document. In fact, these performance indicators should look worse when state-owned banks take on the business that private banks do not want to do, which is the very presumption of the development view.

**FIGURE 5. Financial Liberalization, by Region, 1973–2002**

Source: Abiad, Detragiache, and Tresselt (2007).

An alternative line of attack is to take a macroeconomic approach and test whether financial systems with more state-owned banks grow faster. If state banks perform a development role, then the financial sector should develop strongly. La Porta, López-de-Silanes, and Shleifer go in this direction and find that state banks are obstacles to financial development.<sup>1</sup> Levy Yeyati, Micco, and Panizza follow up with tests using more recent data and a considerably more convincing methodology that relies on a dynamic panel specification. With this methodology, the effect of the variable of interest (namely, the share of bank assets in state banks) on the dependent variable (namely, the ratio of private credit to GDP) is estimated using only within-country time variation. In other words, the methodology analyzes how changes in state bank penetration over time in a given country affect changes in credit to the private sector. The possible endogeneity of the regressors is also taken into

1. La Porta, López-de-Silanes, and Shleifer (2002).

**TABLE 11. Degree of Financial Liberalization, by Component, 2002 Average**

<i>Component</i>	<i>Full sample</i>	<i>East Asia</i>	<i>South Asia</i>	<i>Latin America</i>	<i>Sub-Saharan Africa</i>	<i>Middle East and North Africa</i>	<i>OECD</i>	<i>Transition</i>
Credit allocation	2.4	2.3	1.9	2.3	2.2	2.9	2.8	2.3
Interest rates controls	2.8	2.6	2.7	2.9	2.5	2.8	3.0	2.8
Entry barriers	2.6	2.6	1.3	2.6	2.5	2.6	3.0	2.7
Regulation and supervision	1.9	1.5	1.3	1.6	1.3	1.8	2.6	2.1
Bank privatization	1.8	1.6	0.2	1.9	2.2	1.0	2.3	1.7
Capital account	2.2	2.2	1.3	2.0	1.5	1.8	3.0	2.4
Securities market	2.3	2.2	2.0	2.1	1.5	2.2	3.0	2.3

Source: Abiad, Detragiache, and Tresselt (2007).

account. This is a much stronger test than cross-country regressions, which look at whether countries with more state banks have less credit to the private sector than countries with fewer state banks. No matter how many country characteristics such tests control for, there is always the lingering doubt that some omitted variable causes both a large state bank presence and low financial development.

With these new tests, Levy Yeyati, Micco, and Panizza find that state bank penetration has no significant effect on private credit. The coefficient is negative, but the standard errors are large. This is not quite as bad as the strongly negative results in La Porta, López-de-Silanes, and Shleifer, but it is still a rejection of the development view. Proponents of state banks as engines of financial development will not take much comfort from these results.

In a second set of tests, the authors look at whether private banks are more cost efficient in countries with a large state bank presence, and they find this to be the case. This is consistent with Detragiache, Gupta, and Tressel's results.<sup>2</sup> In that work, we find that a large state bank presence is associated with lower average operating costs in the whole banking system (not only in private banks) in a sample of low-income countries. This result is remarkably robust to controlling for a variety of country characteristics. At the time, we thought the result rather puzzling, and we spent quite some time thinking about what economic mechanism might be driving it. Why might a large presence of state banks—themselves operating at higher costs than private banks—induce private banks to be more efficient? Maybe it is efficient overall to have a group of banks (the state banks) that specialize in serving more remote areas and more difficult customers, while another group (private banks) serves urban areas, large companies, and relatively wealthier customers. I am not sure, however, that I would be able to build a reasonable theoretical model that delivered this prediction.

Levy Yeyati, Micco, and Panizza mention positive spillovers, a rather vague notion, and I would encourage them to work on developing a convincing theory. Without such a theory, it is impossible to interpret this empirical result and, *a fortiori*, make it the basis for policy recommendations.

A third, very interesting, set of results has to do with state bank presence and access to financial services. One of the supposed social roles of state banks is to extend bank services to geographical areas or segments of the population that may not be reached by the private sector. Do state banks accomplish this social mandate? Detragiache, Gupta, and Tressel find that in a sample of low-

2. Detragiache, Gupta, and Tressel (2005).

income countries, more state banks are associated with more bank deposits, suggesting that state banks may help financial development on the deposit side of the balance sheet if not on the lending side.<sup>3</sup> Nonetheless, a high value of aggregate bank deposits may just mean a lot of large deposits by wealthy and well-connected urban dwellers, which clearly does not qualify as extensive financial access. Levy Yeyati, Micco, and Panizza use more sophisticated indicators of access, measuring the number of bank branches, ATMs, and bank accounts per capita or per square mile. Unfortunately for the development view of state banks, these regressions do not show any significant relation between access indicators and state bank presence.

Finally, Levy Yeyati, Micco, and Panizza report results from a previous study suggesting that lending by state banks is less procyclical than lending by private banks, which might be desirable from the point of view of macroeconomic stabilization. On this issue, policymakers in Latin America and elsewhere have better instruments than state ownership of banks to deal with macroeconomic instability, namely, monetary and fiscal policy. Whether they currently make good use of those instruments is debatable, but surely the solution is not to alter the ownership structure of the banking sector to make up for deficiencies in macroeconomic policymaking.

All in all, my reading of the empirical research available so far on the role of state banks is that there is not much evidence that state banks perform a developmental role. On the other hand, there is also not much evidence that state banks are the primary culprits in holding finance back in developing countries. This means that while the investigation continues, policymakers should not expect bank privatization to be a panacea.

**Andrea Repetto:** Levy Yeyati, Micco, and Panizza empirically address a relatively unexplored, yet very interesting question: the effects of state ownership of banks on financial development and credit market efficiency. Despite the importance of government-owned banks in many countries around the world, little is known about their effects on lending, financial market deepness, and overall economic performance.

The authors frame their discussion around three alternative views of the role that state-owned banks may play. According to the social and development view, state-owned banks—and state-owned firms in general—address market failures. Public banks thus improve welfare as long as operations costs are lower than the social benefits. The political view suggests that politicians

3. Detragiache, Gupta, and Tressel (2005).

use public banks to maximize their own personal goals, channeling funds in inefficient ways. Finally, the agency view holds an intermediate position, arguing that although state banks may be created to address market failures, agency costs may lead to weak managerial incentives and the misallocation of financial resources.

These views have very different practical implications. The social view predicts that state-owned banks will channel resources toward projects with high social returns that have limited access to private credit. According to the agency view, public bank managers will allocate resources toward socially efficient projects, but they will not exert effort at the optimal level, diverting resources to other uses. The more skeptical political view suggests that resources will be channeled in a way that enhances votes and political support, but not social welfare. The goal of the paper is to determine, empirically, which of these competing views best describes the actual role played by state-owned banks.

The question of whether public banks promote economic development implicitly involves three other questions: whether there is a market failure; whether the government cares about the market failure; and whether the government has tools that are useful for confronting the failure in a cost-efficient way. In addressing these issues, the authors gather new data, add more controls to the regressions, and use better estimation techniques than most of the previous literature. They find that Latin American state banks tend to have lower profits, charge lower interest rates, pay lower rates on deposits, have a higher share of nonperforming loans, and lend more to the public sector than their privately owned counterparts. The authors also find that state ownership of banks is negatively correlated with private credit growth, although the results are not always statistically significant. Finally, they find that public ownership of banks has a negative correlation with private banks' overhead costs and interest margins, but it has no statistical relation with bank penetration.

Unfortunately, it is difficult to answer the set of questions the paper intends to address with the data at hand. Cross-country regressions are plagued with policy endogeneity problems that are difficult to circumvent. For instance, a negative correlation between private credit growth and the share of public banks may indicate that state-owned banks harm private financial markets, but it is also consistent with the hypothesis that countries with large market failures and low growth set up state-owned banks to address the inefficiencies. These problems can be solved by instrumental variables techniques, a method used by the authors in a companion paper.

However, their instrument—namely, the relative importance of public firms in the economy—shares the same potential endogeneity problem as their measure of state-owned banks.

Cross-country regressions are also affected by omitted-variable problems. For instance, countries that privatized also went through a series of liberalization and stabilization reforms that may have promoted growth and financial market development. Similarly, countries that moved in the opposite direction (perhaps temporarily) nationalized their banks to cope with banking crises.<sup>1</sup>

Finding plausible exogenous instruments that account for policy variables in a cross-section of countries is a daunting task, as is controlling for all potentially omitted variables. My suggestion for future work is to exploit data sets on bank-level information, rather than on country-level information.<sup>2</sup> Moreover, instead of analyzing the role of state-owned banks on outcome variables, I suggest switching the focus toward studying what public banks actually do. This strategy would allow the authors to better address the question of whether state-owned banks are intended to face market failures or to respond to political motives.

A number of hypotheses can then be tested. For instance, if the optimistic view of the government is true, then public banks should tend to lend to firms and sectors that are likely to face market failures (such as small and rural firms that face credit constraints). If the negative view of the government is true, then public banks should tend to lend to firms that are politically connected, but that would have otherwise received credit from the private sector.<sup>3</sup> The characteristics of the branching network are also different under these hypotheses, as is the composition of the rates charged and paid. Similarly, state-owned banks might expand credit faster in electoral periods.<sup>4</sup>

Another hypothesis that could be tested is whether public banks are intended to promote competition in the banking business. Banks tend to raise their lending rates quickly when monetary policy tightens, but not to reduce them as fast when monetary policy becomes more lax.<sup>5</sup> Do state-owned banks behave in the same manner? Or does the existence of state-owned banks

1. Introducing other policy variables may solve the omitted variable problem, but it may exacerbate the endogeneity problem.

2. The dataset that the authors have put together, using balance sheet information gathered by the superintendencies, may represent a promising starting point.

3. Sapienza (2004).

4. Micco, Panizza, and Yañez (2007).

5. Scholnick (1996); Lim (2001).

reduce the extent of the asymmetries in price responses? If so, then the state ownership of banks may act as a good substitute for regulatory measures.

To conclude, the empirical relation between measures of the public banking share and credit market development do not seem to be large and robust. The evidence presented, however, should not lead one to conclude that public banks do not promote financial development. It should not lead to the opposite conclusion, either. The use of cross-country data limits the extent to which the effects of policies can be evaluated, as the policies respond to market failures and political goals that are difficult to identify in the data. To understand these issues, empirical strategies that address the endogeneity issues should be undertaken.



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