A “Cookie-Cutter” Approach Is the Wrong Way for Countries to Regulate and Supervise Banks

by
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4/15/2002

In March of this year, the heads of state or government from more than 50 countries convened in Monterrey, Mexico to formulate a plan to overcome world poverty and to ensure sustainable economic development. It is widely agreed that this means that financial resources available to countries must be mobilized in a manner to assure they are efficiently channeled to the most productive investment projects. There is far less agreement, however, as to whether one component of these resources, namely foreign aid, has been properly used to accomplish this objective. Some argue that such aid has been largely ineffective, while others argue to the contrary.

No matter how laudable the effort to resolve this controversy may be, there is a much larger issue that merits more immediate attention. It is grounded in the non-controversial fact that foreign aid pales in comparison to other resources within countries that must ultimately be primarily relied upon to fight poverty and to promote development. This, in turn, means that developing countries must focus on their banks, which are typically the biggest players in their financial systems and therefore so crucial for assuring that resources are allocated to best promote stable economic growth. The key role of banks is underscored by the fact that there have been banking crises in more than two-thirds of the member countries of the International Monetary Fund (IMF) during the past two decades. In view of this regrettable situation, it is understandable that the participants at the UN International Conference on Financing for Development in Monterrey whatever their differences over foreign aid nevertheless unanimously agreed that enhanced regulation and supervision of banks is urgently needed.

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The importance of banks for growth coupled with their susceptibility to fragility has clearly led governments everywhere to establish agencies to regulate and to supervise them. The common goal for these agencies is to promote a healthy and stable banking industry. Yet, two crucial questions naturally arise: (1) Which specific regulations and supervisory practices should these agencies implement that will best achieve this goal? (2) Are the best regulations and supervisory practices the same for each and every country?

The Need for a New Database

Answers to these pressing questions are urgently being sought, even as many governments have recently instituted regulatory and supervisory reforms. This requires two key pieces of information. The first involves what is currently being done and the second involves the effect on bank performance and stability of different regulations and supervisory practices. To this end, we have assembled a new database on the regulation and supervision of banks in over 100 countries.[1] It should prove useful to policymakers in comparing the different choices countries have already made and in deciding upon which if any potential reforms would be most desirable. Indeed, we have already used the data to assess which among many regulations and supervisory practices in countries around the globe best promote bank performance and stability.[2]

The database itself is the culmination of the efforts of numerous individuals over two years who helped document the current state of bank regulation and supervision in 107 countries. A survey composed of twelve parts, with about 175 questions, was sent to the official banking authorities in each country. Considerable effort was devoted to assuring the accuracy of

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[1] The database is described in James R. Barth, Gerard Caprio, Jr., and Ross Levine, "The Regulation and Supervision of Banks Around the World: A New Database," Brookings-Wharton Papers on Financial Services 2001, Robert E. Litan and Richard Herring, Editors, Brookings Institution Press, Washington, D.C. and is available at the World Bank's website for financial sector research http://www.worldbank.org/research/interest/intrstweb.htm under the heading "Data."
[2] See James R. Barth, Gerard Caprio, Jr., and Ross Levine, "Bank Regulation and Supervision: What Works Best?" August 2001, which is available at www.ssrn.com and http://www.worldbank.org/research/projects/bank_regulation.htm.

the responses. This was done in part by relying upon information collected in separate but related surveys by the Office of the Comptroller of the Currency and the Institute of International Bankers.[3]

The remainder of this article will briefly describe the richness of the database and then discuss some lessons that can be drawn from it. The comprehensiveness of our new database can be appreciated with several illustrations of the choices that individual countries have already made and the resulting diversity that exists across countries. But first one must realize that there are wide differences in the size and structure of banking industries across countries.

Banking Industries Differ Widely in Size and Structure

The size and structure of banking industries could hardly vary more widely across countries. For example, total bank assets as a percentage of GDP range from 313 percent in Germany, to 156 percent in Spain, and 66 percent in the United States. The ownership of banks also displays wide variation. The percentage of total bank assets that are state owned, for example, ranges from 80 percent in India, to 43 percent in Taiwan (China), and zero percent in the United States. The percentage of total bank assets that are foreign owned, in turn, ranges from 99 percent in New Zealand, to 40 percent in Peru, and zero percent in Saudi Arabia. Furthermore, the concentration of bank assets displays substantial variation. In terms of the percentage of deposits accounted for by the five largest banks, for instance, the figures range from 97 percent in Finland, to 50 percent in Turkey, and 25 percent in Italy.

What Is a Bank?

What a bank may do also differs widely across countries. Indeed, what a bank is allowed to do largely defines what is meant by the word "bank." Specifically, the degree to which banks

[3] We, of course, welcome any comments on the existing database or comparable information for countries not yet included in our database (which may be sent to Gcaprio@worldbank.org, jbarth@business.auburn.edu, or rlevine@cscom.umn.edu).

are permitted to engage in securities, insurance, and real estate activities as well as to own and be owned by nonfinancial firms differs widely. Countries like Germany and New Zealand are very permissive in this respect, whereas others like China and Indonesia are severely restrictive. The U.S. recently changed from being very restrictive with respect to allowing "non-traditional" activities to being very permissive. At the same time, however, it decided to tighten the prohibitions on the mixing of ownership between banks and nonfinancial firms.

The most restricted bank activity among countries is real estate, while the least restricted is securities. Indeed, in the 107 countries surveyed, forty prohibit real estate activities, whereas only seven prohibit securities activities. A much larger number of countries permit unrestricted ownership of banks by nonfinancial firms (thirty nine) than the ownership of nonfinancial firms (fourteen). More generally, contrary to the recent action taken in the U.S., the mixing of banking and commerce is prohibited in a relatively small number of countries.

Supervisory Practices Are Not Uniform

Our database provides information on various supervisory practices that are used to monitor and control bank behavior. This information tells whether the supervisory authorities can take specific actions to prevent and correct problems. In seventy-four countries the authorities can supersede shareholder rights and declare a bank insolvent, whereas in the other twenty-seven they cannot. Also, in forty-nine countries there are predetermined levels of solvency determination that force automatic actions, such as intervention, whereas in fifty-five countries there are not. Furthermore, in twenty-nine countries supervisors cannot meet with external auditors to discuss their reports without bank approval and in forty-two countries auditors are not legally required to report any misconduct by managers and directors to the supervisory authorities. The supervisory authorities cannot suspend either the directors' decision to distribute dividends in twenty-two countries or to distribute bonuses in forty-one countries. In seventeen countries the supervisory authorities can forebear certain prudential

regulations regarding bank restructuring and reorganization. Some countries, moreover, hold their supervisors legally liable for their actions, whereas others do not. There is a fairly even split, with forty-two countries (including Argentina and Brazil) doing so, and with fifty-six not doing so (such as the UK and US).

Information Beyond Supervisory Practices

The new database also provides information on capital regulations, foreign loans, liquidity requirements, and deposit insurance schemes, among other factors. For example, in fifteen countries banks are prohibited from making loans abroad, and in twenty-six countries there is no minimum liquidity requirement. Every country except one has a minimum capital requirement that conforms to the Basel guidelines, but in eighty-one countries it does not vary with market risk. Countries also differ with respect to having an explicit deposit insurance scheme. Of the 107 countries, fifty do not have a scheme.

Differences among Country Groups

Some of the more interesting differences among countries are evident when they are grouped

1. By income:

    - There is a clear trend for the restrictiveness of bank activities to decline as one moves from the lower-income countries to the higher-income countries.
    - The stringency of capital requirements is lower for lower-income countries than for upper-income countries.
    - The degree of private monitoring increases as one moves from lower-income countries to high-income countries.
    - Government ownership of banks increases in countries, on average, as one moves from the high-income level to the lower-income level.

2. By development status:

    - Developing countries place more limitations on foreign bank ownership of domestic banks and foreign bank entry through branching than developed countries.
    - The independence of the supervisory authority is lower in developing countries than in developed countries.

- The number of supervisors per bank is more than three times greater in developing countries than in developed countries.

3. By geographic regions, such as the EU:

    - The EU countries are uniformly the least restrictive when it comes to securities, insurance, and real estate activities as well as bank ownership of nonfinancial firms.
    - They are the least restrictive with respect to the ownership of banks by nonfinancial firms.
    - They place no limitations on foreign bank entry in contrast to other regional groupings.
    - They display the greatest stringency as regards capital regulation.
    - They have the fewest supervisors per bank.
    - They display the greatest degree of independence with respect to the supervisory authority.
    - Both foreign bank ownership and government bank ownership are the lowest in the EU countries as compared to the other groupings.

4. By South Asia:

    - South Asian countries, in contrast to the EU countries, are the most restrictive with respect to the ownership of banks by nonfinancial firms.
    - These countries also place the most limitations on foreign bank entry, with the East Asian and Pacific countries a close second.
    - The South Asian countries have the highest number of supervisors per bank, again with the East Asian and Pacific countries not far behind.
    - The South Asian countries have the lowest degree of private monitoring and the highest degree of moral hazard.
    - These countries have nearly the lowest percentage of foreign-bank ownership, while simultaneously having the highest percentage of government-bank ownership.

5. By Offshore Centers:

    - Compared to other groupings, banks in offshore centers display the highest degree of foreign ownership, highest fraction of domestic entry applications denied, and least degree of supervisory authority independence.

Which Differences Matter?

Our new database clearly demonstrates that countries differ widely in terms of banking size, structure, regulation and supervision. There is, in other words, a broad menu from which individual countries can mix and match various items when it comes to banking reform. However, knowing the "lay of the land" or providing various "benchmarks" for more than 100

countries around the world does not tell one which combination is best for promoting a healthy and stable banking industry within individual countries. This database, however, should prove invaluable in attempting to address this crucial issue. Banking researchers everywhere can now use this information to begin assessing which combination of regulations and supervisory practices are best in individual countries. We have already begun this process and will now report on our initial and necessarily tentative effort.

Bank Development and Regulation / Supervision

We have examined the relationship between bank development and various regulations and supervisory practices. Some argue that to alleviate market failures and improve bank performance, governments may restrict foreign-bank ownership, limit bank entry, restrict bank activities, rigorously supervise banks, and perhaps direct credit through government-owned banks. Yet, we find that bank development does not improve with tighter entry regulations, more restrictions on bank activities, greater power of the supervisory agency, or a higher degree of government ownership of banks. However, greater supervisory independence, which may proxy for supervisory skills, is linked positively with bank development.

Our results highlight governments' success in promoting bank performance and stability when they empower the private sector and do not restrict bank activities. More specifically, the results suggest that an overall approach to bank regulation that stresses private-sector incentives is associated with greater banking-system success than an overall approach that emphasizes official government oversight and regulation of bank activities. Official government power is particularly harmful to bank development in countries with closed political systems.

We find that the denial of entry applications, regulatory restrictions on bank activities, and government ownership of banks hurt bank development, while regulations that boost private monitoring of banks and tight capital requirements promote bank development.

Regulations on Bank Activities and Banking/Commerce Links

Our empirical results indicate that restricting banking activities is negatively associated with bank development. Bank development is a particularly important indicator to examine because this variable exerts a positive impact on economic growth.

Our results also provide qualified support that restricting bank activities tends to increase the likelihood of suffering a major crisis. Specifically, we find a weak, positive link between the likelihood of a crisis and restricting bank activities. The ability of banks to stabilize income flows by diversifying activities, however, may only work in countries with some basic level of securities market development. When restricting the sample to countries where the International Finance Corporation (of the World Bank) has been able to collect at least some data on stock market transactions, we find that greater regulator restrictions are indeed positively associated with the likelihood of suffering a crisis. Thus, the results are consistent with the view that diversification of income sources through nontraditional bank activities tends to be positively associated with bank stability, especially in economies with active nonbank-financial markets.

Regulations on Domestic and Foreign Bank Entry

Our results indicate that tighter restrictions on entry into banking tend to increase overhead costs. We find that although regulatory restrictions on competition influence bank performance, there is no link between bank performance and the actual level of bank concentration. The impact on bank efficiency from restricting entry, however, is economically small.

Our results further indicate that the likelihood of a major banking crisis is positively associated with greater limitations on foreign-bank participation. We find that foreign-bank ownership per se is not critically linked to the likelihood of a crisis. We also find no evidence that restricting bank entry enhances performance or stability.

Deposit Insurance Design

We do not find a strong link between the generosity of the deposit insurance system and bank development. We do find a very strong and robust link between the generosity of the deposit insurance system and bank fragility. Countries with more generous deposit insurance schemes have a much higher likelihood of suffering a major banking crisis. This result is consistent with the view that deposit insurance not only substantially aggravates moral hazard but also produces deleterious effects on bank fragility. The results, moreover, suggest that the adverse incentive effects from deposit insurance overwhelm any stabilizing effects.

Regulations on Capital Adequacy

We examined whether more stringent capital regulations produce positive effects in particular policy environments. Strict capital adequacy regulations may be particularly important in countries with very generous deposit insurance regimes. We find no evidence for the proposition that official regulatory restrictions ameliorate the risk-taking incentives produced by generous deposit insurance.

This finding contradicts conventional wisdom and the current focus of policy advice being advanced by international agencies. These results do not suggest that bank capital is unimportant for bank fragility. They do, however, suggest that there is not a strong relationship between the stringency of official capital requirements and the likelihood of a crisis after controlling for other features of the regulatory and supervisory regime.

Supervision

The main message that emerges from our study, which encompasses a large number of official supervisory policies, is that we were not able to identify a strong connection between bank performance and official supervision. Specifically, overall official supervisory power is not

related to bank development or bank efficiency or the level of nonperforming loans. Declaring insolvency power is also unrelated to development or efficiency. Prompt corrective power is negatively related to bank development. There is some weak evidence that supervisory forbearance discretion is positively related to bank efficiency. There is, moreover, a positive link between supervisory tenure and bank development. Supervisory independence, loan classification stringency, liquidity requirements, diversification guidelines, and restrictions on making loans abroad are not related to bank development or efficiency or the level of nonperforming loans. In sum, those features of official "core" supervision are not strongly linked to bank development, bank efficiency, and the level of nonperforming loans in a predictable, convincing manner.

In terms of banking crises, the same basic message emerges (with one exception). Official supervisory power, declaring insolvency power, loans classification stringency, and supervisory independence are all unrelated to the likelihood of a crisis. In turn, prompt corrective power and provisioning stringency are unrelated to the likelihood of a crisis.

The one exception involves diversification (which refers to diversification guidelines and the absence of restrictions on making loans abroad). There is a negative relationship between diversification and the likelihood of suffering a major crisis in small economies.

Regulations Promoting Private-Sector Monitoring of Banks

Private monitoring is strongly linked with bank performance and negatively associated with net interest margins and the level of nonperforming loans. The relationship is economically large. In terms of crises, there is not much of a link between private-sector monitoring and the likelihood of a banking crisis.

Again, the results emphasize that those economies facilitating private-sector monitoring of banks have better performing banks than countries less focused on empowering private-sector corporate control of banks. Taken together with the results of official supervisory power, the

results are less consistent with those emphasizing direct government oversight and more consistent with those emphasizing private-sector corporate control.

Government Ownership of Banks

In terms of the direct relationship between bank performance and government ownership of banks, government ownership is generally positively related to the level of nonperforming loans in an economy but not robustly linked with the other performance indicators. We do not find a strong, positive relationship between government ownership and the likelihood of a crisis. Furthermore, there is no evidence, even in under-developed economies, that government-owned banks overcome market failures and channel credit to productive ends, however.

Conclusion

The evidence suggests that regulatory and supervisory strategies that focus on empowering the private sector and limiting the adverse incentive effects from generous deposit insurance work best to promote bank performance and stability. Countries without excessively generous official deposit insurance regimes have greater bank development and less bank fragility. Countries that impose fewer regulatory restrictions on bank activities enjoy better bank performance and a lower probability of suffering a major banking crisis. Countries that do not impose severe limits on foreign-bank entry enjoy greater banking-sector stability. Countries with policies that promote private monitoring of banks have better bank performance. Thus, the results are consistent with the view that legal and regulatory reforms that promote and facilitate private monitoring of financial institutions offer a useful financial reform strategy.

These findings raise a cautionary flag regarding reform strategies that place excessive reliance on countries adhering to an extensive checklist of or a "cookie-cutter" approach to regulatory and supervisory practices that involve direct government oversight of and restrictions

on banks. Indeed, our findings suggest that regulatory and supervisory practices that (1) force accurate information disclosure, (2) empower private-sector corporate control of banks, and (3) foster incentives for private agents to exert corporate control work best to promote bank performance and stability. Our results do not suggest that official regulation and supervision are unimportant. Indeed, we find that regulations and supervisory practices limit the moral hazard incentives of poorly designed deposit insurance critically boost bank performance and stability. Our basic results emphasize that a strategic approach to bank regulation that stresses private-sector monitoring of banks tends to be associated with greater banking-system success than strategies that place excessive emphasis on direct official government oversight of and restrictions on banks.