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Bank Regulation and Supervision in 180 Countries from 1999 to 2011

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Motivating an investigation of bank regulation and supervision is easy. One can point to the global banking crisis of 2007-2009, the banking problems still plaguing many European countries in 2013, and the more than 100 systemic banking crises that have devastated economies around the world since 1970. All these crises reflect, at least partially, defects in bank regulation and supervision. One can also point to research showing that banks matter for human welfare beyond periodic crises. Banks influence economic growth, poverty, entrepreneurship, labor market conditions, and the economic opportunities available to people. Thus, examining the type and impact of bank regulatory and supervisory policies in countries is a critical area of inquiry.

The problem, however, is that measuring bank regulation and supervision around the world is hard. Hundreds of laws and regulations, emanating from different parts of national and local governments, define policies regarding bank capital standards, the entry requirements of new domestic and foreign banks, bank ownership restrictions, and loan provisioning guidelines. Numerous pages of regulations in most countries delineate the permitted activities of banks and provide shape and substance to deposit insurance schemes and the nature and timing of the information that banks must disclose to regulators and the public. And, extensive statutes define the powers of regulatory and supervisory officials over banks — and the limits of those powers. There are daunting challenges associated with acquiring data on all of the laws, regulations, and practices that apply to banks in countries and then aggregating this information into useful statistics that capture different and important aspects of regulatory regimes. This helps explain why the systematic collection of data on bank regulatory and supervisory policies is only in its nascent stages. Yet, without sound measures of banking policies across countries and over time, researchers will be correspondingly constrained in assessing which policies work best to promote well-functioning banking systems, and in proposing socially beneficial reforms to banking policies in need of improvement.

In our recent NBER working paper, Bank Regulation and Supervision in 180 Countries from 1999 to 2011, my co-authors (James Barth and Gerard Caprio) and I offer a new database on bank regulation and supervision for more than 180 countries, covering the period from 1999 through 2011. Although we do not assess the impact of banking sector policies on banks or the broader economy, we do seek to contribute to research on the design and implementation of policies by providing useful measures of bank regulation and supervision. As reportedly argued by the great scientist Lord Kelvin in the 19th century, "[I]f you cannot measure it, you cannot improve it."

Our database builds on four surveys sponsored by the World Bank. About sixteen years ago, the World Bank asked us to assemble the first cross-country database on bank regulation and supervision. With guidance and help from bank supervisors, financial economists, and World Bank staff, we developed and implemented an extensive survey. We had bank regulatory officials complete the survey—and often had several officials from the same country complete the survey in order to verify the consistency of responses. Survey I covered 118 countries, included over 300 questions, and was mostly completed in 1999. For the second survey, we extended and revised the questionnaire based on input from World Bank staff, country officials, and academics. The World Bank released Survey II in 2003, which provides information on bank regulatory and supervisory policies in 2002. Survey II includes information from 151 counties covering over 400 questions. Survey III was posted on the World Bank's website in the summer of 2007, and it provides information on banking policies in 2006 for 142 countries. In these first three surveys, we were extensively involved in writing the questionnaire, implementing the survey, and assembling the data. For Survey IV, we played a less prominent role in managing the survey. Specifically, we helped the World Bank conduct a major revision of the questionnaire, but we did not implement the survey. Released in 2012, Survey IV provides information on banking policies in 125 countries for 2011. Overall, the surveys cover 180 countries, although the number varies from one survey to the next as already indicated.

The dataset that we make available online differs from the survey responses posted by the World Bank in two key regards. First, we devote considerable effort to identifying and resolving inconsistencies and missing values by reviewing each of the four surveys individually and by considering the time-series of answers for each country. For example, there are cases when a country provides the same information about a technical regulatory rule in Surveys I, II, and IV, but provides a different answer for Survey III, or a country provides the same answers in Surveys I, III, and IV, but gives a different response for Survey II. In such cases, we examine country documents and websites to assess whether there is any reason for such odd changes and reversals in policies to assess whether this represents a coding mistake or an actual change in policy. As another example, for each missing data entry, we reviewed national publications and contacted national regulatory officials in an effort to complete the dataset to a greater degree.

Although we are certain that the resultant dataset is less than perfect, we believe this review process has yielded a more comprehensive and accurate set of data.

The second, and perhaps more important, dimension along which our data differs from the survey responses posted by the World Bank involves the construction of indexes. For each of the four surveys, we provide summary indexes of major categories of bank regulatory and supervisory policies. This is crucial because of the size of the surveys. There are hundreds of questions in each survey, many with sub-questions and sub-components of those sub-questions. As a result, there are limitations to formulating sound impressions about either cross-country differences in policies or cross-time changes in policies from the raw survey data. Consequently, besides providing the answers to all the individual survey questions, we aggregate the responses to individual questions into indexes that summarize notable aspects of bank regulation and supervision. We construct indexes of policies on capital, ownership, the activities of banks, the entry of new banks, the powers of supervisors, the ability of private investors to monitor bank behavior and to govern banks, deposit insurance features, loan classification and provisioning practices, and many other areas of bank regulation and supervision. The result of this effort is the construction of more than 50 indexes. We provide a detailed description of the construction of the indexes in the online dataset.

The dataset also provides information on the organization of regulatory agencies and the size and structure of the overall banking system. We document whether there is a single regulator or multiple regulators and whether countries authorize their central banks to play a key role in bank supervision. We also document the size of each country's banking system, the concentration of the system, and the role of government owned and foreign owned banks and how these characteristics have changed over time. The dataset, therefore, facilitates analyses of the relationships among the organization of national banking authorities, the details of financial regulation and supervision, and the size and structure of the banking system. Moreover, researchers can easily combine these data with other datasets to explore the factors that explain banking sector policies, and the consequences of those policies for a variety of outcomes.

Besides describing the data, this paper provides a wealth of cross-country and cross-time comparisons. We analyze changes in bank regulatory and supervisory practices over time, examine the degree to which banking policies have converged across countries, and document how the organization of bank regulatory authorities and the size and structure of the banking system differ around the world. Although there is some convergence along some dimensions of bank regulation, there remains substantial heterogeneity in policies, organization, and structure.

The full paper is available for download here.