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How Important Are Banks for Development? National Banks in the United States, 1870–1900

BY SCOTT L. FULFORD, BOSTON COLLEGE

There is a growing consensus that financial development contributes to growth. Yet since financial institutions typically go where they expect to make the most profits, it is difficult to determine just how important they are for growth. Moreover, since financial institutions typically do many things and may alleviate many different types of constraints, it is still unclear which financial services matter most.

Understanding the importance of financial institutions is crucial for both developed and developing economies. As developed countries seek the appropriate balance for financial regulation, whether by increasing capital requirements or by putting restrictions on certain activities, it is vital to understand the likely cost of regulations. Some services and institutions may be very valuable, and restricting them too much may harm growth; others may not be important for growth but may add to risk, and so should be strictly regulated. In developing countries, new services outside traditional banking and financial markets are being offered to the poor. Which services and institutions should be subsidized and encouraged, and which should be carefully regulated and restricted, depends on their effects.

My work examines a period in U.S. history of rapid financial, economic, and geographic growth. From 1870 to 1900, the United States expanded economically and geographically, settling its vast interior. National banks, those chartered and regulated by the federal government, expanded with the rest of the country and were by far the most important financial institutions in the period. National banks could issue money directly in the form of bank notes and were central to the flow of funds that accompanied the vast increase in internal trade during the period.

To analyze the effects of these banks, I create a rich new data set that gives the exact geographic location and size of every national bank in 1870, 1880, 1890, and 1900. Charged with regulating the national banks and the money they issued, the comptroller of the currency collected and published the balance sheet of every national bank each year. Since national banks were not allowed to branch, the place of business listed in the accounts allows me to locate each bank precisely and examine how much local financial development mattered.

Concerned with the stability of the money supply, Congress required national banks to have a large minimum dollar amount of equity, called capital stock in

the banking parlance of the day. Unlike the minimum capital-asset ratio typically required today, the large minimum total size meant that banks were limited in where they could enter profitably; not every county could support a bank of the minimum size, and many banks opened with exactly the minimum amount of capital stock. Combined with the no-branching rule, the constraint was binding. For example, when Congress loosened the minimum size in 1900, hundreds of smaller banks opened in just two years and nearly a thousand within the decade.

I introduce and estimate a simple model of constrained bank entry using the minimum capital stock constraint. The estimates suggest that banks were still willing to open even when pushed to have more than double their profit-maximizing equity. Even banks unconstrained by the minimum still had capital stock of more than 20 percent of their assets, far higher than banks today. Because of their high equity and limits on their lending activities, national banks rarely failed, even during the worst of the period's several financial crises. While one should be careful drawing conclusions about modern banking from these estimates, they do suggest that banks can still open and provide valuable financial services even with much higher capital requirements.

How important were these banks for the real economy? Simply comparing areas that had banks with those that did not does not identify the effect of banking, since counties where banks want to enter are also likely to be areas of high economic activity or may grow quickly in the future. The minimum size requirement constrained entry, and so banks did not enter many areas that otherwise could have profitably supported a smaller bank. The underlying discontinuity in entry created a discontinuity in the effect of banking. Some counties had significantly more banking than they would have received if banks were allowed to open at their optimum endogenous size; others had much less since smaller banks could not open. Estimates that compare neighboring counties, or compare counties that get a bank in a given decade with counties that get a bank the next decade, suggest that getting a bank of the minimum size increased production per person between 6 and 11 percent.

To more precisely estimate the causal effects of these banks, I combine the estimates of bank entry with the discontinuity of entry induced by the minimum capital stock requirement. The estimates of bank entry provide

information about the distribution of what banks would have liked to do in each county if they could enter freely. This distribution suggests, for example, the counties in which banks were just barely willing to enter. In 1860, before national banks existed, such counties produced similar amounts to counties that just barely did not get a bank. Combining these underlying distributions with the discontinuity in entry, I estimate that gaining a bank of the minimum size increased the production per person of a rural county by 10.1 percent.

Although the national banks engaged in most of the other functions of modern banks, they were not generally making long-term investments, and in particular they could not take land as collateral. Banking experts at the time considered this limitation particularly problematic for farmers who could not use their major asset, land, as collateral. Instead, these banks helped provide liquidity and working capital as well as risk pooling. They also played an important role in the payments system through their correspondent networks.

Given that these banks were limited in their ability to make long-term loans and could not take land as collateral, one might think that they would have only a limited impact on agriculture. Yet for counties in rural areas, gaining a bank tended to shift production toward agriculture, despite the rapid rise in manufacturing over the period and the limitations for national banks on mortgage lending. The pattern suggests that by aiding farmers or merchants with working capital and so facilitating trade, national banks helped counties move toward comparative advantage.

While the focus of much of financial development theory has been on how financial institutions fund new investments, the working capital, liquidity, and payments services of banks or other financial institutions may be equally or even more important. The rapid expansion of mobile phone banking in many developing countries illustrates that there is still a large unmet demand for basic banking and payment networks today. The national banks played a critical role in the payments system, giving people access to funds where and when they needed them. It is not a coincidence that mail order catalogs from companies like Sears grew explosively during the period. Just as the ability to transfer funds online has allowed new ways to buy goods today, the ability to transfer funds then promoted new forms of commerce. Because the modern financial system is so developed and the advent of telecommunications and information

technology has made the payments system so efficient in developed countries, it is easy to forget that one of the primary roles of banking historically was to provide basic working capital and facilitate commerce by connecting distant places financially.

NOTE

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