



## Scale Economies Are a Distraction

*The real issue for policy is credible resolution  
of failing financial firms, not bank size*

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A small cadre of banking economists (including, for a time, me) has studied banking companies for nearly half a century in an effort to answer the following question: Can banks become more efficient by growing larger? Or, in the technical vernacular, do banks exhibit *scale economies*? This question has garnered fresh attention today as policymakers consider steps to regulate bank size in light of too-big-to-fail concerns.

Possible scale economies in the banking industry were also a crucial question for bank regulatory policy during the 1980s and 1990s. Existing regulations kept banks small by prohibiting their expansion across state lines; bankers argued that these rules made the U.S. banking system inefficient. Removing these constraints, they said, would enable them to expand their geographic footprints and capture scale economies. And because banking services are sold in competitive markets, much of the resulting cost savings would be passed along to customers and not simply accrue to bank shareholders.

The question of scale economies was important for banks of all sizes. If two small banks from neighboring states merged, would running the resulting medium-sized bank be cheaper than running the two small banks separately? What if two medium-sized banks merged to create a regional bank? Or if two regional banks merged to create a bank with national presence?

According to the earliest statistical studies, scale economies “ran out” once a bank had accumulated assets of \$100 million or \$200 million—that is, only small banks could hope to capture scale economies by growing larger. But as my research colleagues developed new and better analytical tools, their conclusions evolved. Subsequent studies found available scale economies up to \$500 million in assets ... then \$1 billion ... then \$10 billion to \$25 billion—that is, all but a handful of U.S. banks at the time had access to scale economies. By the mid-

1990s, some of the more innovative studies were reporting that, under certain circumstances, even the largest banks had access to scale economies.<sup>1</sup>

In retrospect, those scale economy studies were the right tool for the job. They provided objective evidence on an argument being made by the (perhaps less than objective) financial services industry. In a significant way, those studies helped pave the way for deregulation and the mix of local, regional and national banks in existence today.

### Scale economies redux

The last of the major restrictions on banking geography were removed in 1997 when the Riegle-Neal Act was implemented. In the wave of industry consolidation that ensued, banks of all sizes grew larger by acquiring banks in other states.

At the upper end, the merger wave created banking companies far larger than the banks examined in the scale economy studies of the 1980s and 1990s. For example, today the three largest U.S. banking firms (Bank of America, JPMorgan Chase and CitiGroup) all exceed \$2 trillion in assets, while the three next largest (Wells Fargo, Goldman Sachs and Morgan Stanley) all have assets in excess of \$800 billion, well above the range covered by academic researchers.

In 2008 and 2009, some of these banking giants suffered huge financial losses that, by virtue of their size alone, threatened the stability of financial markets and the macroeconomy. Government policymakers judged that the risks of allowing those firms to fail were too great; famously, financially troubled banking firms received hundreds of billions of dollars in capital injections and other forms of taxpayer-backed bailouts.

Preventing such an episode from happening again was the focus of long congressional debates this year over legislation to reregulate financial institutions. However, the new law that emerged

leaves important questions related to bank size unanswered: Should the public continue to live with these large banks and the risks they impose? Should regulators break up these firms? Or should policy give these firms incentives to downsize, such as imposing size-based taxes or higher capital requirements?

Clearly, understanding the existence and/or limits of bank scale economies is once again important for forming public policy. But the nature of this inquiry is different from the deregulatory questions of the 1980s and 1990s. First, policymakers and researchers are now interested only in scale economies at the very largest banks, not at banks of all sizes. Second, policymakers now need to know whether any resulting efficiencies are substantial enough to justify living with the social costs and macroeconomic risks posed by these newly enormous firms.

Despite the hard and often ingenious work of my colleagues in the bank scale economy field, I am not optimistic that this line of research will generate the answers needed this time around. Why not? The standard approaches to measuring scale economies are the least accurate for precisely those firms most relevant to the question at hand: the very largest banking companies.

### The wrong tool for the job

It is well-known that the statistical techniques employed to measure scale economies in any industry deliver the most accurate estimates for “average” companies in that industry; for firms that are substantially smaller or larger than average, estimates grow increasingly less precise. This characteristic is especially problematic for the banking industry, due to the drastically skewed size distribution of its firms. As of March 2010, the three largest banking companies (mentioned above) each had assets of over \$2 trillion, *10 times* larger than the 13th-largest banking company, Bank of New York Mellon, with assets of \$220 billion. They were *100 times larger* than the 43rd-largest bank, BOK Financial of Tulsa, Okla., with assets of \$23 billion. Because of these dramatic size differences, statistical estimates of scale economies among large banks can be quite sensitive to the good or bad financial fortunes of just one or two of these largest banks.

A second problem arises because the largest banks operate quite differently than small and

medium-sized banks; that is, they differ in kind, not just size. But because most of the available data come from the thousands of small and medium banks, bank scale economy models are based on the business processes most often used by these banks. This segment of the industry relies predominantly on traditional banking approaches: holding illiquid loans, issuing liquid deposits to finance those loans and earning profits chiefly from the resulting interest margin. But the very largest banking companies produce financial services quite differently. They rely less on deposits and more on short-term market financing, they sell many of their loans rather than hold them, and they earn a substantial portion of their profits from customer fees rather than interest margins. Using models built around smaller bank production processes to describe the relative efficiency of large banking companies can be misleading.

These methodological deficiencies did not prevent scale economy studies from usefully informing the deregulation debate of the 1980s and 1990s. Geographic deregulation was relevant for banks of all sizes and, at that time, bank production processes were still pretty similar for large and small banks. But these issues may be debilitating in today’s debate over reregulating the largest banking companies—while scale economies *might* exist for these banking giants, we cannot be sure because measuring these phenomena stretches our analytic tools to, and perhaps beyond, their limits.

### What about market forces?

Perhaps there is a simpler way. Rather than estimating complex models of bank scale economies, could we simply depend on the market to reveal the best size for banks?

The argument goes like this: The fact that banks have grown increasingly large over time is *prima facie* evidence that scale economies exist for even the largest banks. If this were not the case, managers of large banks would be operating inefficiently large firms, and their ill-served shareholders would attribute lower profits to *diseconomies* of scale and sell their shares. Investors would purchase, pull apart and reallocate the assets of these firms.<sup>2</sup> Thus, market discipline would ensure that banks would exhibit the most profitable range of sizes and other attributes.

While I generally embrace this line of reasoning, the argument fails for the very largest banking com-

panies in the United States today. Even if these banks are too large to operate efficiently, shareholders are unlikely to recognize or act on this, because the performance-detracting effects of scale diseconomies are masked by the performance-enhancing effects of the too-big-too-fail subsidies enjoyed by these banks. Given the government bailouts of 2008 and 2009, there is no longer any doubt that the largest U.S. financial companies are considered too big to fail. Because these firms can perform poorly and still remain in business, shareholders and creditors benefit from upside success without suffering the full downside losses, which gives the largest banking companies a cost-of-capital advantage over their smaller rivals. In other words, there may be the appearance of scale economies for these firms where none really exists.

### Focus on resolution policy, not bank size

If we cannot confidently measure scale economies at the very largest banking companies—and indeed, although researchers have attempted methodological “fixes” of the deficiencies I’ve mentioned above, I am not sure that we can—then are we forced to make uninformed regulatory policies for these firms? Must we make decisions about whether to break up, downsize or somehow limit the growth of these institutions without reasonable certainty as to the consequences of such actions for the future efficiency of the banking sector?

My sense is that the question of scale economies in banking, while of real interest, is something of a distraction to the primary issue. The chief concern should be not how big banks must be to achieve optimal efficiency, but rather, how policymakers can establish a credible strategy for resolving banks when they fail—regardless of their size, complexity and inter-connectedness. The public needs policies and policymakers that impose harsh discipline on the managers, shareholders and junior debt holders of large failed banks—while simultaneously using bridge banks, other available resolution techniques and expanded resolution authority to preserve the liquidity of borrowers, depositors and other counterparties of these banks.

Of course, this is a tall order. But the current inability to do this is the root cause of the too-big-to-fail problem often attributed to bank size. And by addressing this root cause—rather than placing regulatory limits on bank assets or some other measure

of size, an ad hoc policy that will surely result in unintended consequences—we will generate a number of benefits. Chief among them: The primary justification for too-big-to-fail subsidies would disappear. Large banks might continue to pose a problem for competitive efficiency (a concern of antitrust policy), but no longer for macroeconomic stability. And we could then rely on the marketplace—no longer handicapped by poorly designed policy—to reveal the optimal size for banks. ■

### Endnotes

<sup>1</sup> An article by Allen Berger, Rebecca Demsetz and Philip Strahan in the February 1999 *Journal of Banking and Finance* discusses this literature in more detail (see pages 157-60). While the advancing research has found increasing access to scale economies for banks, no similar consensus has emerged regarding the dollar magnitudes of these savings or whether managers running large banks are able to fully exploit the potential for savings.

<sup>2</sup> Because changes in ownership of banks require regulatory approvals, this “market for corporate control” mechanism would likely work more slowly in the banking industry than in other industries.