

Peter Temin is the Elisha Gray II Professor of Economics at the Massachusetts Institute of Technology.



## Commentary

Peter Temin

n this article. Fohlin continues her exploration of the role of the German banking system during pre-World War I industrialization—a system that has been celebrated among economists and economic historians for many years. A generation ago, Gerschenkron (1962) argued that Germany needed banking to mobilize savings in the nineteenth century because of its relative backwardness, which was manifest in a poorly developed capital market and a scarcity of savings. When universal banks mobilized savings, this stimulated the growth of heavy industry. The German banking system has also been acclaimed by economists who have argued that the integrated, universal banks of Germany and other countries provide the most efficient intermediation.

Fohlin does not start from Gerschenkron, although I—as one of Gerschenkron's students—will. She adopts a separation that Pagano (1993) used in a survey of models of financial institutions and economic growth. He proposed a simple linear model in which growth was equal to the product of the level of technology, the savings rate, and the cost of financial intermediation. Taking the first of these as given, he argued that we can evaluate financial institutions by their effects on the volume of savings and by their efficiency in intermediation. Increasing the volume of savings often is termed mobilization, while more efficient intermediation equalizes the rate of return across the economy and yields greater output for a given amount of savings. Fohlin calls these outcomes the quantity and quality of investments, and she discusses them in turn.

Gerschenkron emphasized the role of banks in mobilizing savings. Fohlin shows that the ratio of financial assets to GNP was higher in Britain than in Germany before World War I. Banks also had fewer assets relative to GNP in Germany than in Britain, although their assets rose more quickly and passed those of the British banks before the war. Fohlin concludes from these data and from data on bank reserve ratios that financial institutions in Germany did not play the role in mobilizing savings that they played in Britain, or at least not until Germany had caught up with Britain in many dimensions.

But is Britain the right standard of comparison for the question of savings mobilization? Gerschenkron, were he here, would have admitted happily that Germany had fewer financial intermediaries than the British. That was why it needed universal banks, in his view. In other words, the relevant comparison is not with Britain, which did not need universal banks, but with a less developed country that could not mobilize its savings. From the perspective proposed by Gerschenkron, one possible conclusion from Fohlin's data is that the German banks were doing a very good job of mobilizing savings, thereby bringing Germany into the same ballpark as the more advanced British economy.

Fohlin turns next to the efficiency of intermediation. The distinction she makes is clearer in theory than in practice, because the mobilization of savings is itself a measure of efficient intermediation. Fohlin looks at the particular question of supplying capital to industrial firms and argues that German banks held no more equity in industrial firms than their British counterparts. This is an important finding and a thought-provoking conclusion.

One obvious point Fohlin makes is that other countries that did not have the German banking structure—specifically, Anglo-Saxon countries—were not precluded by banking regulation from having this structure. British banks could have



organized themselves the way German banks did in the nineteenth century if they had wished. The same is true of American banks, some of which did so. It is instructive to combine this observation with Fohlin's data.

If the British did not adopt the German banking structure, why not? Two answers are possible: The first, in the spirit of Gerschenkron, is that the British banking structure was preferable to the German. The German banking structure, in other words, was a second-best system forced on the Germans by their relative backwardness. The large British capital market allowed banks to specialize for reasons Adam Smith would have recognized. But German banks, in the more constricted German capital market, did not have this luxury. By this metric, it is impressive that the German banks did almost as well as the British, that they were catching up to the British before the war.

This view suggests that current attention to German universal banking may be misplaced—that nineteenth-century German institutions were used only because conditions would not allow better ones to flourish. It suggests that comparison of the British and German capital markets in the late nineteenth century will reveal greater, rather than smaller, costs of intermediation. Even if such a difference is not apparent, there is no reason to expect to find that German capital markets worked better than British ones.

This view, however, conflicts with that of Calomiris (1995), who argued that, in comparison to the cost of intermediation in American banks, the cost in Germany was very low. He did not compare Germany and Britain as Fohlin did, so his work does not bear directly on this issue. But if the costs of intermediation were similar in the two Anglo-Saxon countries without universal banking—or with very limited universal banking—then his conclusion is relevant. Fohlin did not collect data on the cost of intermediation, so she does not consider this aspect of efficiency. But if the cost of intermediation by issuing equity in Germany was low, then it is surprising that there was not more intermediation.

There is, however, another possible answer to the question of why Britain did not have universal banks. Relying on the concept of complementarity of Milgrom and Roberts (1990), we may conclude that British conditions may not have been conducive to German-style banking. This choice may not have been due to the advantages and disadvantages of the respective banking structures, but rather to how well each complemented the other institutions in its own country. German banks would not have worked well in Britain, just as British banks would not have worked well in Germany.

This is a more complex situation. In a world filled with complementarities, there is no way to evaluate specific institutions and practices in isolation. Each of them is good or bad in specific contexts; they do not stand isolated in the world. To the extent that British or German banking was located within such a web of complementarities, it does not make sense to compare them with each other independent of the rest of the capital market.

Complementarities are relevant here because the German equity market was not as well developed as the British in the late nineteenth century—and it may not be as well developed even now. German firms relied more heavily on debt than British firms; that is, they were more highly leveraged. The composition of debts in the economy as a whole therefore must have differed in the two countries. Fohlin separates assets into debt and equity as she describes bank assets, but not for the economy as a whole.

For example, Fohlin shows that banks in Britain and Germany held approximately the same small share of their assets in the form of equity in nonfinancial firms. Since the equity market was less developed in Germany, German firms relied more heavily on debt financing than did their British counterparts. Edwards and Ogilvie (1996), using data from Goldsmith (1985), calculate that shares of domestic joint-stock companies were 12 percent of national assets in Britain in 1895 and 2 percent in Germany. These shares had changed slightly to 10



percent and 3 percent, respectively, by 1913. The share of business equity held by banks in Germany then may have been larger than in Britain.

Alternatively, many observers have argued that German banks provided capital to industrial firms through what has been translated as the "current account." This was a deposit with automatic overdraft privileges. The interest rate on overdrafts was 1 percent above the market rate; on deposits, it was 1 percent below the market rate. If this practice was used widely in Germany but not in Britain, then the comparison of equity holdings would reveal less about German banks than about British banks.

This discussion leads to another point Fohlin makes. As this is a new point, I need to back up and work back to the issue of the "current account." The literature typically assumes that the great German banks wanted to dominate the economy, just as the Money Trust and J. P. Morgan are alleged to have wanted to do in the United States. But why did they want to do this? Fohlin assumes they wanted to exert this influence to make money—like any other firm in the economy.

This assumption leads Fohlin to ask how German banks could have made money from dominating industrial firms. They could have held the equity of these firms, which would have provided a direct line to their growth and profits. But Fohlin found that the German banks did not hold much equity—certainly not more than the British banks. If they exerted influence over managers, they must have done so by voting shares deposited with them but not owned by them, or by force of personality. How, then, did they make their money?

As I have noted, German banks loaned extensively through the "current account." This was a debt instrument, not equity, in which the interest rate was fixed and rather low; there was little money to be made here. German bankers were not, so far as I know, active in politics. They were not men of great wealth independent of their banks, and their wealth was not increased by the action of borrowing firms. German bankers lived well, but then so did British bankers.

Fohlin therefore has posed a question that the literature on banking needs to take seriously. Were the German universal banks that have been both glorified and vilified over the years simply banks along the lines that we know them, loaning money to firms and earning money by choosing good risks? Or were they like the man pulling the levers behind the curtain in *The Wizard of Oz?* And if they were pulling the levers of industrial power, how were they being paid for doing so?

## REFERENCES

Calomiris, Charles. "The Costs of Rejecting Universal Banking:
American Finance in the German Mirror, 1870-1914,"

Coordination and Information: Historical Perspectives on the

Organization of Enterprise, Naomi Lamoreaux and Daniel Raff, eds.,
University of Chicago Press, 1995.

Edwards, Jeremy, and Sheilagh Ogilvie. "Universal Banks and German Industrialization: A Reappraisal," *Economic History Review* (August 1996), pp. 427-46.

Gerschenkron, Alexander. *Economic Backwardness in Historical Perspective, A Book of Essays*, Harvard University Press, 1962, pp. 5-30.

Goldsmith, Raymond W. *Comparative National Balance Sheets*, University of Chicago Press, 1985.

Milgrom, Paul, and John Roberts. "The Economics of Modern Manufacturing: Technology, Strategy, and Organization," *American Economic Review* (June 1990), pp. 511-28.

Pagano, Marco. "Financial Markets and Growth: An Overview," European Economic Review (April 1993), pp. 613-22.