

THE DEUTSCHE BANK MESS (October 28, 2016)

Deutsche Bank, a venerable 146-year old German bank, whose very name symbolizes the German financial system to many, recently found itself in considerable turmoil. While news that the U.S. Department of Justice had slapped it with a \$14 billion fine for alleged wrongdoings during the 2007–09 financial crisis catapulted the bank into general visibility in the U.S., the bank was already buffeted by a string of bad news earlier. It had suffered a precipitous decline in its stock price in the past year due to a declining investment banking business and dim prospects for its commercial banking business. The decline in the investment banking business may be attributed to the general anemic economic growth in Europe, which results in a paucity of good business opportunities for investment banks. The dim prospects for commercial banks are attributable in part to that and in part to the much tighter banking regulations put in place after the recent financial crisis. With interest rates being at or below zero, net interest margins of banks are quite low, which makes it difficult for banks to build capital through retained earnings and tempts them to undertake riskier strategies to boost earnings. In Deutsche's case, this contributed to the bank taking a large and opaque derivatives exposure, which has also contributed to its problems. There is now speculation about whether the German government will have to bail the bank out, and if it does not, then will the global financial market experience another "Lehman moment"?

While allowing a bank that has the size and prominence of Deutsche Bank to fail is obviously an event that could have seismic repercussions, bailing it out is *not* something that would be easy for the German government to do. There are many reasons for this. One is reputational. Angela Merkel, the German Chancellor, has been critical of other governments (especially in Europe) for using taxpayer funds to bail out their banks. Indeed, she has also been

insistent that other European governments practice fiscal austerity and eschew bailouts. Bailing out Germany's flagship bank would be a blow to German leadership in Europe.

Second, there is little support among German taxpayers for the bailout, so it would also be politically costly.

While it would be interesting to speculate on whether Deutsche Bank will need a bailout, and whether it will be bailed out if it does, there are other questions that are even more pertinent. First, what is the real problem here? Why is Deutsche Bank in the mess it finds itself in? What can we do to prevent our major financial institutions from being so fragile in the future?

While there are many factors responsible for what ails Deutsche Bank, perhaps none figures more prominently than its capital position during and after the crisis. Among its peer institutions, Deutsche Bank AG is the riskiest based on its "leverage ratio", which essentially measures how much equity capital it has as a percentage of its total assets. On June 30, 2016, its leverage ratio stood at a shockingly low 2.68% (as reported by FDIC Vice Chairman Thomas Hoenig). This means that it has only \$2.68 in equity for every \$100 in assets. Banks are required to mark many of their assets to market, so an adverse price movement that reduces the value of their assets by say 3% would completely wipe out their equity. As an aside, note that Deutsche's low capital ratio was not just a phenomenon caused by recent losses that depleted its capital. Its leverage ratio was a mere 3.5% at the end of 2014. The point is that the regulatory capital requirement is simply too low.

We can see how low the bank's capital is from at least two perspectives. One is to recognize that a 2.68% leverage ratio makes Deutsche Bank comparable to Bear Stearns on this dimension before it collapsed and had to be rescued by the U.S. government which provided assistance for it to be acquired by J.P. Morgan Chase. Another perspective is that under the Basel III capital regulation, banks are required to have a leverage ratio exceeding 3%, so Deutsche was

below that (although Hoenig's calculation may not precisely be the same as that of European regulators). As an interesting contrast, U.S. bank regulators have adopted a 5% minimum leverage ratio for U.S. banks. Not high enough, in my opinion, but it is still better than European regulation.

Extensive academic research has revealed that a lot of bad things can happen when a bank has critically low capital. One is that its internal culture gets skewed in favor of growth and excessive risk taking. Indeed, there is a chicken-and-egg issue here. Does a growth-oriented, risk-taking bank culture lead the bank to keep very low capital or does low capital foster a culture that does not adequately value prudent behavior? I believe the effect runs in both directions but culture is more fundamental and it drives the capital ratio choice. With a growth-oriented culture and low capital, high-variance deals that can make the bank a lot of money if they pan out but can also cost the taxpayers (providing deposit insurance) a lot become attractive. The other consequence is that there is "debt overhang"—so much debt that shareholders are unwilling to infuse any more equity into the bank since most of the benefits of the new equity will flow to the depositors and other creditors. So this creates a sort of "doom spiral"—more equity is needed to rescue the bank, but excessive debt stands in the way. Finally, more highly levered banks also make a bigger contribution to *systemic* risk, which is the risk that the whole system will fail, as we saw during the 2007–09 crisis.

We see some evidence of these forces operating at Deutsche Bank. Reports are that the bank is unlikely to raise new equity because its stock price is "too low". It has been trading at about 25% of the book value of its equity. One reason for the low stock price is its dim business prospects, as discussed earlier. The other, of course, is debt overhang. With such low capital, it is also hardly surprising that its U.S. unit failed the Federal Reserve Bank's stress test. The argument that the bank's culture was not aligned with prudential behavior is buttressed by the

fact that there was a report in mid-2014 (New York Times) that The Federal Reserve Bank of New York had issued a second warning to the bank that absent corrective action the bank was likely to fail its stress test. Despite this warning, the bank failed to do enough to improve the situation. Moreover, consistent with the predictions of academic research, the International Monetary Fund named the bank as “the most important net contributor to systemic risk”. In other words, by having a corporate culture that leads the bank to keep capital that is too low from a prudential regulation standpoint, Deutsche Bank is creating risk, not only for itself, but for the whole global financial system.

So, the real problem for global financial stability is not whether Deutsche Bank will be bailed out. It is: what are bank regulators going to do to get more equity capital into banking? In this regard, U.S. bank regulators have done considerably better than European (and Japanese) bank regulators. During the financial crisis, the U.S. government took equity stakes in banks, effectively recapitalizing them. When the shareholders of these banks repurchased the government’s stakes, private equity capital replaced taxpayer-provided capital and the U.S. banking system ended up on a much sounder footing as a result. By contrast, this did not happen in Europe. In fact, banks in Europe lobbied their bank regulators to water down the Basel III capital rules so as to avoid having to raise billions of Euros in new capital. As a result, banking fragility in Europe remains considerably higher than in the U.S.

What should be done going forward? I think the single biggest regulatory imperative in banking is to get banks to have significantly higher capital ratios, both in the U.S. and in Europe, although the problem in Europe is more pressing. And American taxpayers and bank regulators cannot afford to be smug about American banks being better capitalized than European banks. We live in a highly interconnected global financial system, so European banking fragility imperils the U.S. financial system—and indeed the global financial system—as well. Bailouts

generally do not foster future financial stability, higher capital does. So the answer lies in strengthening a safety-focused corporate culture and injecting more capital into banking, not pondering more bailouts.