

Remarks on “Systemic Risk”

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Risk of system-wide breakdown is an unavoidable characteristic of market economies. So long as there is a division of labor and, hence, private trading counterparties, the possibility of systemic failure cannot be eliminated. Financial institutions that require significant leverage to yield an adequate rate of return on equity are especially prone to a disabling “run on the bank.” A depository institution depends on investors’ willingness to hold its liabilities, knowing full well that if all lenders attempted to withdraw their monies at the same time, the bank or thrift would fail.

Only an institution whose assets are overnight riskless Treasury bills or their equivalent can consistently fend off failure. But no private institution could fund that portfolio, except at a loss. Thus, financial institutions, to profit, must hold portfolios of risky assets in order to obtain a rate of return in excess of private borrowing costs. And for such institutions to be consistently profitable, their portfolio must be successfully diversified.

Banking has always been a game of inducing depositors, or in earlier centuries note holders, to fund bank assets. In the 1840s, for example, U.S. commercial banks had to maintain a capital buffer in excess of 50% of assets in order to create willing holders of their notes. In modern times, this necessary capital buffer has dwindled, reflecting improved information availability and the existence of various government safety nets. However, even with deposit insurance and activist monetary authorities, many banks and other financial intermediaries, have failed, sometimes with disastrous systemic consequences.

The Fed and other central banks have always been aware of the substantial risks inherent in financial intermediation. Let me quote at length from a speech I delivered from this AEI podium more than 9 years ago; remarks that remain relevant to this day. “There is [a] . . . difficult problem of risk management that central bankers confront every day, whether we explicitly acknowledge it or not: How much of the underlying risk in a financial system should be shouldered [solely] by banks and other financial institutions?

“[Central banks] have chosen implicitly, if not in a more overt fashion, to set capital and other reserve standards for banks to guard against outcomes that exclude those once or twice in a century crises that threaten the stability of our domestic and international financial systems.

“I do not believe any central bank explicitly makes this calculation. But we have chosen capital standards that by any stretch of the imagination cannot protect against all potential adverse loss outcomes. There is implicit in this exercise the admission that, in certain episodes, problems at commercial banks and other financial institutions, when their risk-management systems prove inadequate, will be handled by central banks. At the same time, society on the whole should require that we set this bar very high. Hundred-year floods come only once every hundred years. Financial institutions should expect to look to the central bank only in extremely rare situations.”¹

Such a flood almost washed away our financial system following the Lehman default.

Systemic risk in the U.S. is almost exclusively a financial institution risk—a decided concern that defaults of large institutions could dismantle the financial system and with it the

¹ Greenspan, Alan. Technology and Financial Services. Before the Journal of Financial Services Research and the American Enterprise Institute Conference, in Honor of Anna Schwartz, Washington, DC. 14 April 2000.

broader economy, owing to the myriad and intricate ways that finance supports all economic activity. Nonfinancial company systemic risk is far less daunting. Such companies have a different risk mix and much lower capabilities of generating system-wide risk. Fixed plant and equipment, the dominant assets of most nonfinancial businesses, are especially illiquid in that they rarely trade in active markets. The consequence is a need for a much larger capital cushion of one-third to one-half of the value of assets, compared with only 5% to 15% for financial firms. The default of a nonfinancial corporation will affect its creditors, suppliers, and some of its customers, but rarely does it impact much beyond that. Nonfinancial corporate defaults do not have the broad systemic impact that is associated with a financial institution's default.

The perceived systemic impact of the failure of large financial institutions is the genesis of the "too big to fail" (TBTF) or "too big to liquidate quickly" problem. For years I have been concerned about the ever larger size of our financial institutions. A decade ago, I noted that "megabanks being formed by growth and consolidation are increasingly complex entities that create the potential for unusually large systemic risks in the national and international economy should they fail."² Federal Reserve research had been unable to find economies of scale in banking beyond a modest-sized institution. I often wondered: had bankers discovered economies of scale that Fed research had missed? It is clear, in retrospect, that they had not.

One highly disturbing consequence of the TBTF-bailout problem is that I can see no way to convince markets henceforth that every large financial institution, should the occasion arise, would be subject to being bailed out with taxpayer funds. The implicit subsidy that such notions spawn insidiously impairs the efficiency of finance and the allocation of capital.

Effective financial systems are too often underappreciated as major contributors to economic growth and standards of living. Economic growth requires that obsolescent, i.e., low productivity, capital facilities be replaced with cutting edge, i.e., high productivity, technologies. The role of a financial system is to facilitate this process of "creative destruction" by directing a nation's scarce savings to fund capital facilities with the greatest risk-adjusted rates of return—almost always those that offer the highest rates of productivity growth. Inefficiencies in financial systems resulting from inadequate or misplaced capital input thwart this process. Investment in previously capital-starved, but potentially productive areas of economic activity invariably yields above average rates of return and, in the process, supplies the resources to eliminate the inefficiency.

This process was most evident in the United States prior to the onset of the current financial crisis. The combination of domestic saving and borrowed saving (our current account deficit) was modest at best, yet we exhibited above average cyclically-adjusted rates of gain in output per hour because our financial system helped us make good use of the limited funds available. In contrast, there are innumerable examples of developing countries, especially those governed by central planning, where saving rates were high and productivity growth low or nonexistent.

Government guarantees of the liabilities of institutions viewed as too big to fail thwarts the competitive process that produces capital efficiency. It results in protected businesses having market and cost-of-capital advantages, but not efficiency advantages over firms not thought to be too big to fail. TBTF freezes obsolescent capital in place and impairs creative destruction—the primary means by which output per hour and standards of living are raised.

Of all the regulatory challenges that have emerged out of this crisis, I view the TBTF problem and the TBTF precedents, now fresh in everyone's mind, as the most threatening to market efficiency and our economic future.

² Greenspan, Alan. The Evolution of Bank Supervision. Before the American Bankers Association, Phoenix, AZ. October 11, 1999.

There are certain regulatory problems for which there are no good solutions. And TBTF is one of them. All efforts, of which I am aware, at addressing TBTF have drawbacks. At a minimum, we will be forced to offset the TBTF borrowing cost advantage by imposing a comparable cost—such as increased capital requirements of a sufficient magnitude to offset the implicit government-created subsidy, a tricky calculation at best. Early resolution of bank problems under the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) appeared to have worked with smaller banks during periods of general prosperity. But as Peter Wallison pointed out recently, the notion that risks can be identified in a sufficiently timely manner to enable the liquidation of a failing bank with minimum loss, has proved untenable during this crisis. It remains to be seen how such procedures now widely advocated would work for mega-banks.

I am puzzled that there has been no evident rush to form new banks. With interest-rate spreads so wide, a new bank without a legacy of toxic assets could be quite profitable. Major investments in new banks could significantly contribute to the recovery of financial intermediation. Unlike a steel or oil company with facilities that take years to build, a financial intermediary can be put together (and liquidated) in short order. A billion dollar money market mutual fund or hedge fund, for example, with proper legal authority, can be organized, at least theoretically, in days, and then, if necessary, liquidated in days. I admit it is a rather large stretch, but in principle at least, a large part of a newly rebuilt system of financial intermediation can emerge from the ashes, with new, less risky, and *not* TBTF, institutions.

A potential alternative to a capital charge or a banking system broadly populated with new startups is an approach that addresses the problem of TBTF in a wholly different manner.

A major source of financial system breakdown has been the failure of incentive structures to contain risk taking on the part of financial corporate managers. I agree with Jim Glassman who noted earlier this year that a large step in addressing that incentive failure—in fact, a step backwards in time—would be to require non-bank financial activities to be organized as partnerships, in effect reversing the New York Stock Exchange ruling of 1970 that permitted members to incorporate.

As partnerships, investment banks were an exceedingly cautious bunch. They rarely took speculative positions, as general partners were particularly sensitive to their personal unlimited liability. It is inconceivable that, as partnerships, investment banks would have taken the enormous risks that turned out so badly this decade.

One problem with turning back the clock in this way is that commercial banks, for good reason, are currently authorized to engage in investment banking. It is possible that financial non-banks organized as partnerships might simply convert to bank charters so that they could more safely (for them) take on risk.

The deeper issue is a version of the classic principal-agent dilemma. Is there any way to increase the scope of personal liability of corporate executives to replicate the behavior of general partners in a partnership? Modern corporations have lost the effective tie between ownership and management of assets. In capitalist societies, we need shareholders to govern. But their perspective has become increasingly that of investors, not owner-managers. When dissatisfied with corporate performance, they tend to sell their shares rather than seek to change management.

No form of economic organization can fully contain bouts of destructive speculative euphoria. Though history is not encouraging, I like to believe that such human excess can be muted. In principle, at least, there is always a level of capital cushion that will absorb any risk.

Even with the breakdown of self regulation and risk management in the summer of 2007, the financial system would have held together had the second bulwark against crisis—our existing regulatory system—functioned effectively. But, under crisis pressure, it too failed.

Only a year earlier the FDIC had confidently noted that “more than 99% of all insured institutions met or exceeded the requirements of the highest regulatory capital standards.”

Our banks are extensively regulated, and even though for years America’s largest 10 to 15 banking institutions have had permanently assigned on-site examiners to oversee daily operations, many of these banks still were able to take on toxic assets that brought them to their knees. The highly praised U.K. Financial Services Authority was unable to anticipate and thus prevent the bank run that threatened Northern Rock. The Basel Committee on Banking Supervision, representing regulatory authorities from the world’s major financial systems, promulgated a set of capital rules that failed to foresee the need that arose in August 2007 for large capital buffers.

Such evidence of failure is common to every crisis and points up the broader problem that forecasting the onset of financial crisis, except by chance, has always proved to be beyond our reach. This should not come as a surprise. A financial crisis is characterized, in fact defined by an abrupt, discontinuous break in asset prices. But discontinuities are, of necessity, a surprise and that requires that the crisis be largely unanticipated by market participants. For, were it otherwise, financial arbitrage would have diverted it.

Earlier this decade, for example, it was widely expected that the next crisis would be triggered by the large and persistent US current-account deficit precipitating a collapse of the US dollar. The dollar accordingly came under heavy selling pressure. The rise in the euro-dollar exchange rate from, say, 1.10 in the spring of 2003 to 1.30 at the end of 2004 appears to have arbitrated away the presumed dollar trigger of the "next" crisis.

In the years ahead, forecasters will readily identify risk that is underpriced—or at least identify risks priced at less than their historic average. But in instance after instance, risk has remained underpriced for years. Forecasters as a group will almost certainly miss the onset of the next financial crisis, as they have in the past, as will any newly designated “systemic regulator.”

This inherent forecasting incapacity is critical to how we handle systemic risk. It is not possible to identify which financial organization, big or small, has, say, a .999 probability of disabling the whole financial system, should it fail. But short of so high a bar, large numbers of failing institutions will invariably be bailed out. It is one thing to identify firms whose collapse *might* severely impair financial intermediation; it is quite another to identify institutions whose failure *will* lead to systemic breakdown. Systemic *risk* is readily identifiable. Potential systemic *failure* is not.

Those tasked with reforming our current regulatory structure confront an additional policy dilemma. On the one hand, the United States has embraced global free trade. President Obama and his G-20 colleagues recently reaffirmed the principles of the global trading system that gradually evolved during the post World War II years in rejection of the Smoot-Hawley and “beggar thy neighbor” policies of the 1930s. But to compete successfully in the global marketplace requires that the domestic market itself be highly competitive. Heavy regulation and a thwarting of creative destruction undermine that capability. In short, there is a limit to the degree domestic regulation can go without severely impairing the global competitive economic advantages that the U.S. has enjoyed for so many decades.

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I noted in January 2000 before an assemblage of the Economic Club of New York, that “When we look back at the 1990s, from the perspective of say 2010, the nature of the forces currently in train will have presumably become clearer. We may conceivably conclude from that vantage point that, at the turn of the millennium, the American economy was experiencing a once-in-a-century acceleration of innovation, which propelled forward productivity, output, corporate profits, and stock prices at a pace not seen in generations, if ever.” I then countered,

“Alternatively, that 2010 retrospective might well conclude that a good deal of what we are currently experiencing was just one of the many euphoric speculative bubbles that have dotted human history.” Finally, I cautioned, “And, of course, we cannot rule out that we may look back and conclude that elements from both scenarios have been in play in recent years.”³ The last alternative is still on the table.

³ Greenspan, Alan. Technology and the Economy. Remarks at the Economic Club of New York, New York, NY. January 13, 2000.