

"TOO BIG TO FAIL": SYSTEMIC RISK AND ITS WORRYING PREVALENCE

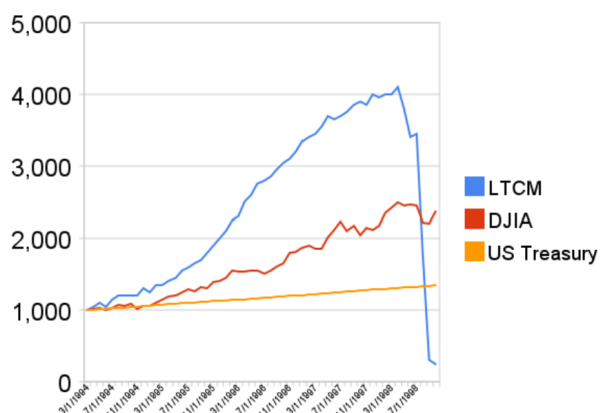
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Since the days of Standard Oil, the U.S. government has been forced to toe the line between laissez-faire capitalism and interference to maintain order in the market. In the modern world, conglomeration has given rise to a new, volatile problem: systemic risk, or the risk of a breakdown of an entire system rather than simply the failure of individual parts. Examining past financial disasters, it becomes evident that companies that are "too big to fail" due to their importance in the system indicate a fundamental problem in the Federal Reserve's handling of risk. Despite the importance of this issue, insufficient regulations have been put into place to maintain stability in the U.S. economy and avoid the degradation of standard risk-management practices. As markets grow more interconnected, systemic risk remains one of the factors most urgently in need of attention from world governments.

Long-Term Capital Management

One of the most potent examples that "forced the world to change its assumptions about risk-taking" (Slivinski) is the case of Long Term Capital Management (LTCM). In 1998 LTCM, a hedge fund based out of New York, faced a catastrophic liquidation of assets that forced its collapse and a \$3.65 Billion recapitalization bailout from 14 banks organized by the Federal Reserve (the Fed). The collapse came as a great surprise to the financial world: LTCM had returned returns that significantly beat the markets in its previous years of existence, clearing 21 percent, 43 percent, and 41 percent returns respectively in its first three years. Nonetheless, in 1998 it lost \$4.6 Billion in less than 4 months due to Russia's default on its national debt and the Asian financial crisis.

The reason this case is a well known case study among risk managers is not the missteps of LTCM, but rather the Federal Reserve's reaction to the failure. In fact, without the New York Fed's swift intervention to broker a liquidation deal it is believed that LTCM would have had a messy collapse to the detriment of its creditors. Ordinarily a governmental response of



this sort would be unusual: why would a private hedge fund, a for-profit institution with only wealthy shareholders, get the benefit of being bailed out of its self-imposed risk by the Federal Reserve? The answer was claimed not to lie in favoritism, lobbying, or corporate greed. Instead, the Fed determined that because of LTCM's preposterously leveraged positions (at one point reaching a leverage ratio of 1 to 250), a disorderly collapse would cause a chain reaction of defaults among its creditors that could trigger a recession in the U.S. economy.

This event had a profound effect on economic stability in the public eye: if the Fed needed to intervene in a part of the financial system that seemed remote from its jurisdiction, where would the next fault points be, and would the Fed's arms be long enough to reach them? This incident brought systemic risk to the forefront of economic discussion, and set the stage for the real effects that were observed in the great recession only a few years later.

The 2008 Financial Crisis and "Too Big to Fail"

After the bankruptcy of Lehman Brothers and partial collapse of the global economy in 2008, Americans began to take issue with the government's expansive involvement in the "well-being" of financial institutions, principally in policies such as the Troubled Asset Relief Program (TARP) which purchased "toxic" assets from financial institutions using taxpayer dollars. The term "too big to fail" was coined by U.S. Congressman Stewart McKinney in reference to the collapse of Continental Illinois to mean an institution that is so large or interconnected that its collapse would harm the economy greatly, and was later applied to the many banks bailed out by the Fed in September of 2008.

Some justifications of the Federal government's use of TARP leverage the failure of Lehman Brothers to say that the Fed let firms whose "wounds were self-inflicted" like Lehman fail, while others like AIG whose "collapse would have caused a worldwide systemic macro even with cataclysmic repercussions" almost necessarily had to be propped up (Knowledge at Wharton). Regardless, the fact that any firms were too big to fail had problematic implications that would not go unignored.

Problems with Bailouts

One of the principal criticisms of the concept of "too big to fail" financial institutions is the danger that said institutions will begin operating with less risk aversion, given that it is likely they will be aided by the Fed's "catastrophe insurance". Unlike real corporate insurance, "too big to fail" banks don't pay premiums, instead leveraging the economic well-being of the American populace as collateral. This allows them to commit "adverse selection" in the insurance sense creating unstable balance sheets and the expectation, rather than the relief, that a bank collapse will be braced by taxpayer dollars.... Another dire consequence of the "too big to fail" precedent is that the Fed may incorrectly anticipate the disorderly collapse of a firm and provide a "cushion" that unjustly alleviates the firm from facing certain losses. A good example of this goes back to the story of LTCM, where Fed officials worried after the situation's resolution that "the Fed intervention either directly or indirectly discouraged a bid from a large investor" (Haubrich), namely Warren Buffett.

According to later reports, "Goldman Sachs, AIG, and Berkshire Hathaway offered Merriwether [LTCM's manager] \$250 Million to buy out the fund's partners. The offer was stunningly low to LTCM's partners because at the start of the year their firm had been worth \$4.75 billion" (Lowenstein). LTCM lapsed on the time limit for the offer and the buy-out did not transpire, much to the dismay of the Fed officials who later asserted "one

can only presume that they did so because they were confident of getting a better deal from the Federal Reserve's consortium" (Haubrich). In the same statement they lay guidelines for what was problematic about this instance of intervention and what should be considered more strongly in the future.

Namely, they espouse that the Fed should never act in collusion with private parties against another private party alternative bid as it did in this case against Buffett, but rather serve as a bidder of last resort who can settle outstanding problems when no other private bidder comes to the table. The consortium deal that was ultimately agreed upon left LTCM's partners with 10 percent equity in the fund, whereas the alternative Berkshire deal would not have left them with no stake at all.

Public Outcry

Due to the clear danger behind the economy's dependence on few firms, many have argued that the government must make sure that no institution is "too big to fail" through regulation and trust-busting. The most well known of these demonstrations, Occupy Wall Street, attracted 15,000 demonstrators to the heart of New York and inspired millions of others around the country to protest and advocate against the power that they believed banks had over the political system and their perceived "infallibility" after 2008. In large part, these protests demanded a breaking up of "big finance", and a consolidation of the banking sector into small, more expendable pieces.

This sentiment was even echoed by Alan Greenspan, Chair of the Fed until 2006, stating "If they're too big to fail, they're too big" (Bloomberg). The case for legislation that limits the scale of financial institutions is not unfounded: "today the four largest financial institutions are on average nearly 80 percent bigger than they were before we bailed them out [in 2008]", and the same banks control 36 percent of all bank deposits (Sanders). It stands to reason that the Fed's philosophy toward the market share of banks has nonetheless not changed significantly since 2008: the few biggest corporations continue to make up an indispensable component of the market.

Regulations

Beginning in the 90s and with much more vigilance in the early 2000s when systemic risk caught the public eye, certain regulations have been put in place to attempt to prevent market operations from becoming oversaturated. By far the most important of these is the Dodd-Frank Act, enacted in July 2010, which includes several provisions that attempt to restrict individual firms' influence and eliminate significant systemic risks that survived the 2008 crisis.

The first of these provisions classifies firms known as systemically important financial institutions (SIFIs) such as banks, insurers, and asset managers and subjects them to much more stringent oversight and requirements. This includes more conservative thresholds for capital reserves and liquidity, higher expectations for market swing tolerance, and in certain cases special supervision from the Federal Reserve. In 2011, the idea was adopted more broadly and the Financial Stability Board published a list of G-SIFIs, companies systemically important to the global market, including over 29 international banks, showing that caution towards systemic risk is expanding even at the global scale.... Dodd-Frank also established the Financial Stability Oversight Council (FSOC) and the Orderly Liquidation Authority (OLA). The FSOC is composed of members of various regulatory agencies, specializing in

addressing systemic risks and adding the "systemically important" label to organizations even beyond the banking sector, subjecting them to the same aforementioned heightened controls. OLA is meant to provide guidelines in the event of the failure of a systemically important institution, such that such a failure does not shock the economy or place undue burden upon taxpayer dollars.

Despite the regulatory efforts implemented in Dodd-Frank, many economists and organizations including the International Monetary Fund argue that the United States' systemic risk problem is not close to being solved (Harding & Atkins). In particular, the 2008 market crash showed that errors in credit rating, for example, can cause banks to conform to regulations without actually mitigating their risk. In that time this resulted in overrated mortgage products, but in general ad litteram adherence to regulation could result in institutions ignoring real risk metrics so long as they conform to a heuristic.

Another important point of fault is regulatory capture, the idea that "regulatory agencies may come to be dominated by the interests they regulate and not by the public interest" (Kenton). With public disdain for corporate lobbying and "big finance" becoming very common, it has become a prevalent belief that the government may in certain cases act in the interest of banks' bottom lines rather than the well-being of the American taxpayer. Landmark Supreme Court decisions such as *Citizens United v. FEC* in 2010, which uncapped corporate donations to political campaigns, have only served to feed into the post-recession public belief that large banks and other systemically important financial institutions retain their power through extensive lobbying or corruption.

The general opinion of economists and world leaders is that the fact that there is still a yearly definitive list of SIFIs indicates that regulations are only a band-aid on a widely prevalent structural problem. Thus, while current policies reduce the negative effects of "too big to fail" institutions they do not limit their existence in the first place. This means that if a global event triggered a financial crisis that put firms at risk of collapse in the same way as 2008, the Federal Reserve would at that point be in largely the same situation as it was before. The likelihood of a potential failure has been reduced, but the "too big" component has been ignored.

International Perspective

One of the main contributing factors to the unpredictability of global markets is the heavy tailed nature of return distributions, whose high variance can bring about rare, but not impossible divergent events that destroy financial positions. In global markets this kind of event can be political, natural (e.g. natural disasters), or feed from any other source of unpredictability. Because of nations' dependence on trade many economies are highly correlated, leading to a spiraling effect when an aforementioned catastrophe occurs. A good illustration of this is the fact that after the '08 crash virtually all western nations went into recession due to the chain-reaction that took place across interconnected markets.

Real GDP growth rates in 2009. Brown indicates that the nation was in recession (Wikipedia)

One of the concerns of regulators in the United States is that if heavy restrictions are imposed on investors on U.S. soil, they will continue their operations by incorporating in a foreign entity or simply moving their business outside of the United States. This raises an important question: if systemic risks in other countries lead to correlated downturns in the

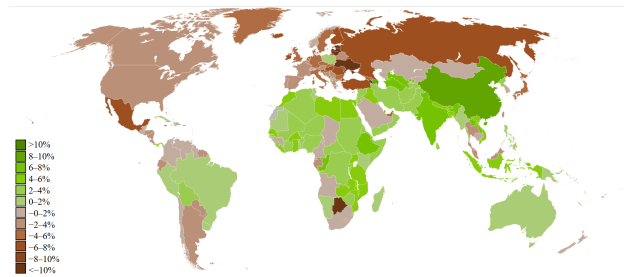


FIGURE 1. Real GDP growth rates in 2009. Brown indicates that the nation was in recession (Wikipedia)

U.S. economy, does that mean current domestic policies do not mitigate total risk as much as they are thought to?

Concern over this possibility has led economists to look beyond regulation on the federal level and suggest that some kind of system that mitigates single points of failure on the international level must be implemented to reduce the risk of a global financial collapse. In practice, this is a largely unsolved problem. Even though large global economic mediators such as the International Monetary Fund (IMF) and the World Bank Group exist, their abilities certainly do not extend far enough to enact global regulations and there is debate on whether their currently vested powers are sufficient to prevent any kind of downturn at all. Former Vice Chairman of Congress' Joint Economic Committee Jim Saxton points out that the IMF lacks the power to maintain reserves, lacks the ability to act quickly like a central bank, and does not meet the standards of transparency normally sought in an important lender (Saxton). Thus the world is currently without an international lender of last resort.

Economists searching for a resolution to this problem have argued that the U.S. Federal Reserve could theoretically take on this responsibility due to the dollar's international influence, but this function has never been formally recognized. This leaves the table open for contagious systemic failure sprouting from nations lacking sufficient regulations. At the same time, most policymakers agree that the significant responsibility that would come with regulating international markets should not be placed on the central bank of one country....

Conclusion

Because of the relative infrequency of outlier events that shake world markets, systemic risk largely flew under the radar until the beginning of the twenty-first century. Now that government intervention to stabilize the economy has been forced on several occasions, large imbalances in the United States' financial organization have been exposed. "Too big to fail" firms taking advantage of their importance to the economy has been identified as an issue, but current regulations do nothing but push the problem back and fail to break up the risks. In addition to this, systemic risks coming from across international borders have the potential to bring about global financial crises which governments are ill-equipped to control. Altogether the worrying uncertainty of the systemic risk problem should be a high priority for economic policymakers, at the risk of otherwise contributing greatly to future financial disasters.

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