Thoughts on Financial Crises and Coronavirus

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Financial markets have been roiled with bad news about the spread of coronavirus in the US and globally – the US stock market fell on Thursday more than any day since 1987. Many are concerned that this is another financial crisis on a par with the 2008 global crisis, with similar causes and similar outcomes.

But the current crisis stems from very different causes and so the outcome may well be different. The 2008 crisis was at its core a banking liquidity crisis. Currently we are suffering a shock to the real economy, not the financial sector. We do not know how the pandemic will play out and we do not know how bad the financial fallout will be, but looking to 2008 for a direct analogy is probably not appropriate.

The 2008 crisis was so devastating largely because it was a banking liquidity crisis. The most damaging crises historically have been centered on money, banking, and the financial system. The current crisis is about the pandemic's potential effect on the world economy – a shock first and foremost to the *real* economy and not the monetary and banking system. The financial system is and will continue to be stressed. The stresses may in the end produce a banking liquidity crisis. But the monetary and banking system appears to be in better shape than in 2008, able to withstand a certain level of stresses transmitted from the real economy rather than itself provoking a crisis.

A simple analogy may help in understanding why a banking liquidity crises can be so damaging. Think of a functioning economy as a well-oiled machine. In a normal recession the machine slows down – we are poorer because not as much is produced. The coronavirus pandemic is similar (if possibly more severe) - it is making us poorer because factories are shuttered, vacations cancelled, all sorts of economic value lost forever. But when the pandemic passes, as it will eventually, the economy can pick up again. A banking liquidity crisis, however, is different – it damages the machine itself, the very foundations of the economy. When banks stop functioning, businesses and individuals struggle to do any business. Economic activity can grind to a halt. Recessions associated with banking liquidity crises are particularly damaging.

Examining the history of crises and panics in the US highlights the severe damage done when the banking and monetary system malfunctions. We all remember the 2008 financial crisis – global, severe, with the financial system slowing dramatically even with extreme intervention by the Federal Reserve (and central banks around the world). The core of the problem, however, was in the banking system itself, as US banks had substantial exposure to very risky home mortgages with only small

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capital margins to protect against adverse outcomes. When house prices and mortgage value started to fall, the banking system began to falter. Absent the massive liquidity injection in fall 2008 ("Quantitative Easing 1") the US and global banking and financial system would most likely have collapsed.

Earlier severe crises, such as the Great Depression of the 1930s and the 1907-08 depression, were both liquidity crises that produced severe consequences for the real economy, but the liquidity crises were fueled by the fragility and fragmentation of the US banking system.

To understand 1907-08 we need to understand the dysfunctional nature of the US banking system at the time – indeed US banking from roughly 1830 to 1990. Banking was under control of individual states and interstate and even branch banking (within states) was widely banned. In 1914 (to pick one representative year) there were 27,349 banks for a population of roughly 99 million – about 3,600 *people* per bank (and fewer customers per bank). Most banks were simply too small and localized to diversify risk or reap economies of scale in operations, lending, or management. (Contrast this with our northern neighbor Canada, which in 1890 had 38 banks (each with multiple branches) and roughly 126,000 people per bank.)

This produced a banking system ideally suited to instability and banking runs – a fragile system waiting for a trigger or shock that would stress some banks, and from a few to many and then the whole system. As Milton Friedman and Anna Schwartz say:

> In a unit banking system with some 20,000 independent banks, the impact [of any shock] was bound to be uneven, to force some banks into suspension, and to threaten a chain reaction involving a cumulative increase in the desire on the part of the public to convert deposits into currency. (Friedman and Schwartz [1963] p. 169

In 1906 the San Francisco earthquake and subsequent events provided such a trigger. In August 1907 a recession started. In October 1907 two speculators lost on a copper company stock market speculation, triggering concern about New York banks related to the speculators. By October 18th the run on the Knickerbocker Trust company started, followed by a more general banking panic and restrictions imposed by stronger New York banks. The liquidity and banking panic seems to have transformed the recession (already underway) into a much worse "depression".

The important point, however, is that the severe nature of the crisis and the recession was a result of fragility and dysfunction within the financial system: a trigger amplified by fractures within the banking system. History shows that during this period recessions that were associated with banking liquidity crises were substantially more severe than "normal" recessions. From 1870 through 1928 there were 15 recessions, and four were associated with systemic banking crises. These four were substantially more severe, with output falling roughly 6 percent versus 1 percent for the others.

The story of the 1930's "Great Depression" is even more stark. Banks in the US were as fragile in 1930 as in 1907 but the new Federal Reserve System was designed to provide the necessary liquidity to banks during a time of liquidity stress. The shock of the 1929 stock market crash stressed New York banks. Stresses built and banks started to suffer liquidity demands. In contrast with 1907 (when New York banks coordinated their response and suspended convertibility) it was now the Fed's responsibility to provide liquidity, but it failed to do so. As Ben Bernanke said, the Fed was responsible for the severity of the Great Depression:

> Let me end my talk by abusing slightly my status as an official representative of the Federal Reserve. I would like to say to Milton and Anna: Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again.
> Bernanke, Ben and Board of Governors of the Federal Reserve System (U.S.) [2002]

The important fact, for the 1930s as for 1907, is that the crisis was severe because the financial system was fragile and the collapse of the banking and financial system (and poor Fed policy) turned a bad recession into the Great Depression.

In sum, the current crisis results from a severe shock to the real economy – the coronavirus pandemic. We will all be poorer as all sorts of economic benefits are lost forever. But the source of this shock is not fragility or dysfunction within the financial system. The financial system is and will continue to be stressed, and it could possibly grow into a banking liquidity crisis. But it is not for now, and this is not a re-run of 2008.

Additional Readings

I have written a few pages about Milton Friedman & Anna Schwartz's *Monetary History of the United States*: `http://www.hilerun.org/econ/chicagohistory/MonetaryHistory_1.pdf`

The best book I have read about banking, money, and financial crises (see Section 2 on the US): Calomiris, Charles W., and Stephen H. Haber. 2015. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit.* Princeton University Press.

And of course, Friedman and Schwartz: Friedman, Milton, and Anna Jacobson Schwartz. 1963. *A Monetary History of the United States, 1857-1960.* Princeton, NJ: Princeton University Press.

Update – Growth After 1918 Pandemic (versus Contemporary Financial Crises)

Economic growth following the 1918 pandemic is a valuable reference point, and the after-effect appears surprisingly small. There was a recession - NBER marks it as running from August 1918 through March 1919 - but it barely shows up in the annual growth numbers. Table 1 shows that average growth for 1918-1919 was 4.1%. Growth for the year 1919 was slower than 1918 (0.4% compared to 7.8%) but it was still positive.

The experience of 1918-19 was nothing compared to the "depressions" that occurred periodically during this period - events invariably associated with financial stress and crisis. From 1890 through 1921 there were three: 1893-94 and 1907-08 mentioned above, plus the 1920-21 crisis resulting from severe tightening by the Federal Reserve. Table 1 shows that these were truly severe: growth for *each* of two years was -3% or worse.

Of course our current national and world economy are dramatically changed. The world in 1918 was more globalized than often recognized, but society was more rural - even for developed economies like the U.S. one-quarter of the labor force was agricultural. Today, increased urbanization and dramatically higher shares of workers in white collar and service industries make the economy far more vulnerable to the disruptions of "social distancing" and lock-downs. Nor do the GDP growth statistics from 1918 capture the high social costs of the influenza deaths. Nonetheless we should remember the apparently mild economic after-shocks from the 1918 pandemic compared with the severe economic repercussions from the financial crises or the time.

Table 1: Growth Following 1918 Pandemic and During Selected Contemporaneous Recessions

Years	Events and Description of Period	Recession begin/end (NBER)	Avg %GDP
1893-94	Severe Recession - Banking panic, restriction of convertibility by NY banks	Jan 1893 - Jun 1894	-5.7%
1907-08	Severe Recession - Banking panic, restriction of convertibility by NY banks	May 1907 - Jun 1908	-5.1%
1918-19	Period during and after influenza pandemic	Aug 1918 - Mar 1919	4.1%
1920-21	Severe recession - Engineered by Federal Reserve	Jan 1920 - Jul 1921	-3.2%
1914-1918	WWI, included for comparison with 1918-1919		1.6%
1891-1922	Long period before & after 1918-1919, included for comparison		1.6%

Data for annual real GDP from Maddison Project, https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018

References

Bernanke, Ben and Board of Governors of the Federal Reserve System (U.S.). On Milton Friedman's Ninetieth Birthday: Remarks before the Conference to Honor Milton Friedman, University of Chicago, Chicago, Illinois, November 2002. URL `https://www.federalreserve.gov/BOARDDOCS/SPEECHES/2002/20021108/`.

Milton Friedman and Anna Jacobson Schwartz. *A Monetary History of the United States, 1857-1960*. Princeton University Press, Princeton, NJ, 1963.