Economic Perspectives on the Causes of the Great Depression Brian Rhindress 6 April 2020

Introduction

The Great Depression from 1929-1941 brought unprecedented hardship to individuals and collective economic turmoil to the United States and the world. The mere data lead to some consensus over this severity. At the heart of the depression in the US in 1933, unemployment peaked at 25%, total GDP dropped by 50% to \$57B, and prices fell (deflated) by nearly 27% as measured by the Consumer Price Index.ⁱ In addition, open economies were hit, with international trade through the US decreasing by 65% from 1929 to 1939.

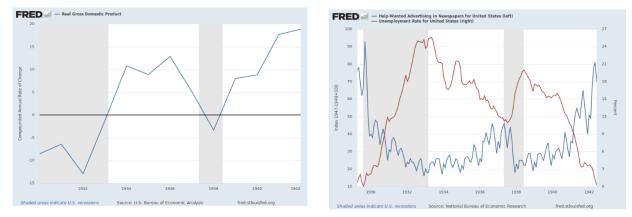


Figure 1: See GDP drop in from 1929-1933 and Unemployment peak in that same time period, before both recover briefly during the New Deal period (Source: FRED, NBER)

However, there has been historically less agreement over the causes of The Great Depression amongst "economic scientists and historians," as shown by a 1995 survey by Robert Whaples in the Journal of Economic History.ⁱⁱ For instance, Whaples found only 39% of economic scientists and 49% of historians believed that "A fall in autonomous spending, particularly investment, is the primary explanation for the onset of the Great Depression." This statement constitutes much of the heart of the Keynesian perspective, which dominated macroeconomic thought and much national policy from the 1930s through the 1960s. ⁱⁱⁱ At the same time, Whaples found 52% of economic scientists and 66% of historians believed that "Monetary forces were the primary cause of the Great Depression." This constitutes just a small majority and came after 30 years of advocacy from Milton Friedman and the Monetarists arguing

this very point. At least as of 1995, the debates about the causes of the depression raged on and were split ideologically.

In this paper, I will explain the core ideas put forth within these two major schools of thought: 1) the Keynesians, represented by Keynes' *General Theory of Employment, Interest and Money (1936)* and some important additions in Minksy's *Financial Instability Hypothesis (1992)*, and 2) the Monetarists, including foundational work in Irving Fisher's *Debt Deflation Theory (1933)* setting up the archetypal *A Monetary History of the United States (1963)*, by Friedman and Schwartz. It is worth noting that these theories are not necessarily mutually exclusive, nor do they fit neatly into these categories. With 600+ page books by each Keynes and Friedman, synopses must be necessarily condensed and, in doing so, nuance is lost. With this said, I am presenting the theorists in this order, as it best composes some conceptual and ideological coherence.

Causes of The Great Depression

Background Events

The Great Depression had four key events with which economists have tried to assign differing levels of causality: The Stock Market Crash of 1929, Smoot-Hawley Tariffs in 1930, the "first banking crisis" in 1930, and the global collapse of commodity prices. We will use these events to better understand each perspective. 1

John Maynard Keynes

John Maynard Keynes was a British economist and long-time progressive advocate trained at the University of Cambridge.² His crowing work, *General Theory*, came about in response to witnessing firsthand (and financially suffering) the events of The Great Depression. At the heart of Keynes' *General Theory*, is that real business cycles cause instability in the

¹ Due to limited research time, this paper will only consider the first three events.

² Progressive meaning, truly concerned with the overall well-being of the general public, at least in the western world. For instance, at the Treaty of Versailles, he advocated for limited German reparations requirements as he suspected an imminent reactionary movement to be realized in the Nazi Party. However Keynes also took part in Britain's imperial apparatus and some claim that he had imperialist views commensurate with the times. See more at: https://mises.org/wire/keynes-young-imperialist-1906-13.

economy and should be rectified by government intervention, primarily fiscal policy. Namely, this instability came in business investment (and to some extent, private consumption- though it was considered more stable). Unlike the Classical economists that came before, Keynes did not believe that free markets had self-correcting mechanisms generating full employment. Also important to Keynes' theory was that prices are slow to adjust (or "sticky"), especially under labor contracts.

Applying the Keynesian tradition, the primary cause of The Great Depression was the decline in autonomous investment^{vi} – first business investing, followed by consumer spending. Leading up to the Stock Market Crash of 1929, the US developed a new class of investors – everyday people with a bit of disposable income. vii After WWI, financial innovators in the stock exchange began offering private stocks to the public. New investors saw great gains to be had, and benefitted from "margin buying," purchasing stocks with debt. This resulted in a bull market, with company stocks increasing to the point that the profits of companies (such as the auto industry) did not warrant additional business investment. The real value of the stocks was less than their nominal price, and stock owners discovered this all at once when the market crashed and 2.5M shares were sold in an hour on Thursday, October 1929.

Thus, the initial shock to the economy was caused by a real business cycle, fueled by Keynesian "animal spirits" – expectations and herd mentality— of investors, followed by firms and consumers. Then, a significant drop in confidence resulted in a decrease in spending on the consumer side. According to Keynes, the appropriate response at this time would have been to stabilize aggregate demand by increasing government spending. Instead, Hoover's administration passed a tax increase, and the Smoot-Hawley Tariff in 1930. VIII Thus, aggregate demand dipped even further with a decrease in government tax revenues, and a decrease in exports due to retaliatory tariffs in other countries. Due to a lack of profits, companies laid off workers, leading to unemployment. This cycle continued until Keynesian-inspired New Deal policies began infusing spending back into the economy, regenerating aggregate demand.

Hyman Minsky

Minsky was an economist who lived until 1996, wrote his *Financial Instability Hypothesis* in 1982, and was 10 years old at the start of The Great Depression. Minsky was influenced by Keynes, his research advisor Joseph Schumpeter, Marx,³ and Irving Fisher. Unlike many mainstream economists between Keynes and Friedman, Minsky put The Great Depression at the heart of his research, asking "Can another Great Depression happen again [and, if so] why hasn't it happened again since WWII?" Minsky's work built on Keynes' thoughts by focusing on intervening in, and stabilizing financial markets. He is sometimes considered part of the Post-Keynesian school of economists.

In analyzing The Great Depression, Minsky built a simple model based on identities: "Capital stock determines output → output determines employment → employment determines rate of change of wages → output minus wages equals profit → profit determines investment → investment is the rate of change of capital." The interesting thing is, when modeled with debt, these identities produce a non-equilibrium, cyclical system of the following sort. Within a single cycle, an economy that is recovering from a recent crash will result in high interest rates, careful lending, and cautious investment. But as the economy starts to do better, firms and individuals begin to take on more debt at lower rates, and with decent returns on investments, begin to create an accelerating economy in which the debt/equity ratio rises. With "euphoric expectations," Ponzi financiers emerge and eventually result in an endogenous shock to the economy when they cannot pay their debts. Ultimately, this leads to a debt-induced recession.

In this sense, Minsky models the bursting of the bubble in the 1929 Stock Market Crash that occurred as a result of and as a first step in the process of decreased Aggregate Demand in the Keynesian model. In response to his self-posed question about why another Great Depression hasn't occurred, Minsky states that big government spending has played a big role, but at the time of writing believed that there were serious concerns about the types of spending that the government had taken part in. In particular, he believe that government spending did not create productive assets or employment, as it was primarily for defense spending and transfer

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³ Minsky rarely, if ever, made mention of Marx, due to fears of 'red baiting' and McCarthyism which took place in the beginning to core years of his career. Still, he took a sympathetic view towards Marx, especially with cynicism towards the financial sector.

payments. He believed that it would need to do a better job regulating financial markets and investing in education, research, infrastructure, etc. to be able to better prevent against future depressions.

Irving Fisher

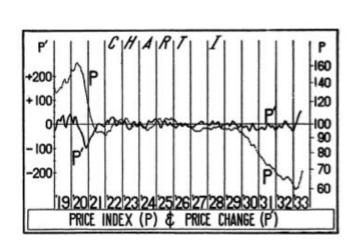
Prior to The Great Depression, Irving Fisher was more of a classical economist who believed the market could correct itself in times of panic. I am including him as a transition into Milton Friedman's monetary theory because he developed the *Quantity Theory of Money*^{xii} which served as one of the key identities for Friedman's theories, as well as because his *Debt-Deflation Theory*^{xiii} astutely identified the ills of deflation in causing the worst parts of the Great Depression.

Fisher's debt-deflation theory identified an explosive two-factor cause of The Great Depression – as the name suggests, debt and deflation. Fisher believed that an economy is almost always in disequilibrium with respect to numerous variables. He thought there were cycles which could be broken down into "forced," external astronomical forces like seasonal variation, and "free cycle" which was an endogenous wave motion. XiV Of all the variables contributing to recessions and depressions, Fisher came to believe that the worst of cases were caused by overindebtedness followed soon by deflation.

He developed a 9-point causal chain to explain this, which he applied to The Great Depression, and which particularly helps explain "the first banking crisis" later analyzed by Friedman. In this 9-part chain of The Great Depression, after the Stock Market Crash of 1929 destroyed confidence of investors, 1) the liquidation of debt (people paying off loans and banks calling them back) caused 2) the contraction of currency (money supply), and with banks extending less credit, this decreased the velocity of money circulation. This caused 3) a fall in the level of prices (the inflation rate was 0.6% in 1929 and sharply dropped to -6.9% in 1930).**

Next, 4) the fall in prices caused net worth of companies to send businesses into bankruptcy resulting in 5) reduction of output, leading to 6) higher levels of unemployment. Finally, this results in 7) cyclical and continued pessimism in the economy, resulting in 8) hoarding, slowing more the velocity of money, 9) even further deflation.

This process of debt-deflation provided an early and cohesive explanation for multiple bank runs and failures, and the deepening of the crisis with over 744 failing in 1930, and 4,000 in 1933, resulting in over \$140B in losses for depositors. **vi* For a more data-driven visualization, see the two fancy antique graphs from Fisher's 1933 paper. On the left, we see that inflation was low in the 1920s leading into mild deflation at the time of the Stock Market Crash of 1929. Couple this low inflation and some the high level of debt shown in 1929 at \$200B (~55% debt/GDP ratio), and the explosive debt-deflation cycle ensued. By 1933, while the total amount



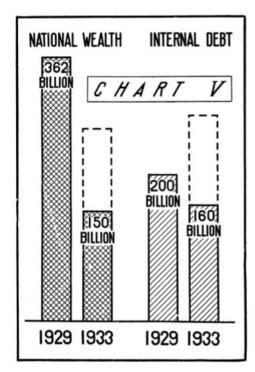


Figure 2: Charts from Fisher's 1933 Debt Deflation Theory of Great Depressions

of debt had gone down from debt liquidation (step 1 of Fisher's cycle), the real amount owed by debtors increased due to the vicious deflation seen in those first few years of the depression (106% debt/GDP ratio).

Overall, Fisher's contributions to explaining The Great Depression were important as a generalized explanation of what causes the most severe depressions, as well as an early monetary policy guidebook for how to prevent a depression – by controlling the price level. Fisher believed this to be true having seen Sweden maintain stable prices through these same years, and in watching FDR's polices targeting deflation effectively turn around the economy.

Milton Friedman

After nearly 30 years of Keynesian descendants dominating economic policy discussions, Monetarism emerged in full force with Milton Friedman and Anna Schwartz's *A Monetary*

History of the US, 1867-1960 in 1963. Triedman summed up his beliefs publicly on many occasions with a grin: "The Great Depression was caused by a failure of government, it was a failure of the Fed to do its job." The Monetarists believed that money supply was the most important factor in regulating short-term GDP. In the long-run, money supply influenced prices. This depended on a key assumption in the identity from Fisher's *Quantity Theory of Money*: MV = PY. In order to place such importance on the money supply, the monetarists believed that the velocity of money circulation was relatively stable.

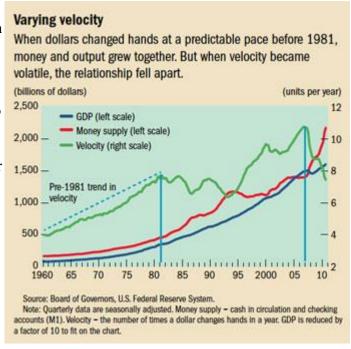


Figure 3: Velocity of money, showing variability in late 1980s and beyond. (Source: https://www.imf.org/external/pubs/ft/fandd/2014/03/basics.htm)

This belief was counter-challenged by Keynesians. The stagflation of the 1970s allowed Friedman to convince many of the tenets of monetarism, with relatively stable velocity of money. However, fluctuations in the 1990s and beyond challenged his theories (see graph above).

Regarding The Great Depression, Friedman and Schwartz argued that the Stock Market Crash of 1929 alone did not cause the depression, since similar crashes had happened before.^{xx} Rather, in the past, private banks acted as clearinghouses for each other (e.g. in 1907), meaning they would bail each other out in times of a panic. However, creation of the Federal Reserve in 1913 prevented private banks from acting in this capacity. This would have been ok, had the Fed acted successfully as a lender of last resort. However, it failed to do so during the banking panics from 1930-33. Worse, leading up to the 1929 Crash, the Fed had begun contracting the money supply, despite briefly expanding it under the influence of NY Fed Governor Strong prior to his

death in 1928. This monetary policy of the Fed precipitated the deflation stages of Fisher's debt-deflation model. Thus, Friedman and Schwartz blamed the Federal Reserve for the worst aspects of the depression. It is interesting that Friedman and Schwartz were so adamant about the velocity of money being relatively stable, since Fisher showed that velocity of money was not stable in a vicious cycle of debt deflation. **xi* However*, perhaps Fisher only meant this would occur during the 9-step process, as he also wrote, similar to Friedman and Schwartz, that the Fed could have prevented the depression altogether had it continued open market purchases started by Governor Strong of the NY Fed prior to his death.

Why didn't the fed pursue expansionary monetary policies? Friedman and Schwartz argued that perhaps the Fed didn't conceptually understand the grave circumstances. XXIII On a more cynical note, it is possible that Fed officials were affiliated with larger Northeastern banks, and less concerned about letting smaller banks go under (the majority of earlier bank failures), since their large banks might benefit from the new business.

Conclusion

We have now covered a spectrum of perspectives about the causes of The Great Depression. Of course, it is worth noting just a few critiques of each of these views. In their tradition, Monetarists critiqued Keynesians deficit spending plan, suggesting that it would lead to inflation in the long-term. On a high, superficial level, this seems to be the very reason for the traction of Monetarist theory, since Keynesians could not explain how to rectify the stagflation of the 1970s.

One criticisms of the Monetarist view is the idea that "you can bring a horse to water, but you can't make it drink." That is, even if the money supply were expanded, there is a chance that, sensing the lack of confidence in the economy after the Stock Market Crash of 1929, banks would have held it, similarly reducing the velocity of money. Peter Temin has also critiqued Friedman and Schwartz by pointing out the contradiction in their belief – that the market economy was fundamentally stable since just backstopping the banks would have prevented the depression, yet a small change in monetary policy from open market operations to contraction set the stage for a massive depression. Lastly, as was mentioned above, the assumption that the

velocity of the circulation of money was somewhat stable was tenuous, and possibly disproven in the 1990s both in the US, and abroad in Japan and other countries. xxv

Despite the disagreement, one thing seems clear from Keynes to Minsky to Fisher to Friedman and Schwartz. Speculating on debt is a bad idea. And whether it caused the depression or merely exacerbated the first step, it's good to know we have learned from that mistake (not).

ⁱ Amadeo, Kimberly. "How the Lows of the Great Depression Still Affects Us Today." The Balance. The Balance, December 16, 2019. https://www.thebalance.com/effects-of-the-great-depression-4049299.

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iv Temin, Peter. "The Great Depression." NBER, 1994. https://doi.org/10.3386/h0062.

^v What Is Keynesian Economics? - Back to Basics - Finance & Development, September 2014. Accessed April 7, 2020. https://www.imf.org/external/pubs/ft/fandd/2014/09/basics.htm

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viiTradingCoachUK. "1929 Stock Market Crash and the Great Depression - (Documentary)." *YouTube*, 6 July 2018, www.youtube.com/watch?v=qlSxPouPCIM.

viii Amadeo, Kimberly. "How the Lows of the Great Depression Still Affects Us Today." The Balance. The Balance, December 16, 2019. https://www.thebalance.com/effects-of-the-great-depression-4049299.

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^x Steve Keen on Minsky: https://www.youtube.com/watch?v=G9_nqc-A5_Y

xi Ibid.

xii Pigou, A.C. "The Value of Money". Quarterly Journal of Economics, 32, November 1917, pp. 38-65.

xiii Fisher, Irving. "The Debt-Deflation Theory of Great Depressions." *Econometrica* 1, no. 4 (1933): 337. https://doi.org/10.2307/1907327.

xiv Ibid

xv Amadeo, Kimberly. "How the Lows of the Great Depression Still Affects Us Today." The Balance. The Balance, December 16, 2019. https://www.thebalance.com/effects-of-the-great-depression-4049299.
xvi Ibid.

xvii What Is Monetarism? - Back to Basics - Finance & Development, March 2014. Accessed April 7, 2020. https://www.imf.org/external/pubs/ft/fandd/2014/03/basics.htm.

xviiii Milton Friedman - The Great Depression Myth." YouTube, 25 Mar. 2010, www.youtube.com/watch?v=dgyQsIGLt_w.

xix What Is Monetarism? - Back to Basics - Finance & Development, March 2014. Accessed April 7, 2020. https://www.imf.org/external/pubs/ft/fandd/2014/03/basics.htm.

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xxi Fisher, Irving. "The Debt-Deflation Theory of Great Depressions." *Econometrica* 1, no. 4 (1933): 337. https://doi.org/10.2307/1907327.

xxii Jr., Ivan Pongracic. "The Great Depression According to Milton Friedman: Ivan Pongracic Jr." FEE Freeman Article. Foundation for Economic Education, September 1, 2007. https://fee.org/articles/the-great-depression-according-to-milton-friedman/.

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xxiv Temin, Peter. "The Great Depression." NBER, 1994. https://doi.org/10.3386/h0062.

xxv Krugman, Paul. "Samuelson, Friedman, and Monetary Policy." The New York Times. The New York Times, December 14, 2009. https://krugman.blogs.nytimes.com/2009/12/14/samuelson-friedman-and-monetary-policy/.