



Causes of the Great Depression

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Introduction

These are my lecture notes from my college course on macroeconomics. There is not a lot of fluff here; rather it is pure theory and right to the point. However, it does have great explanatory value and answers the question. I may someday turn this into a book, with all its embellishments and make it more readable.

I believe the Great Depression is a worthy study, even for those who have a passing interest in economics. The reason is it highlights inherent risks in our postmodern mixed economy.

This period illuminates one fundamental flaw in the way we have built our economic base. That is, we built our economy on a misconception of the true nature of money. Specifically, our monetary systems are built on a monopoly of money, and its corollary debt created by money that is not free.

Any study on the causes of the Great Depression also begs another question: will there another Great Depression of this magnitude on the horizon? Unless there were catastrophic

exogenous events, it would be hard to image because how the modern economy is structured. Yet, there are still structural cracks in our system that could cause another prolonged economic downturn, even if it was not a replay of the past. History repeats analogously but never exactly.

Because of automatic stabilizers that have been build into our political economy, business cycles may not manifest such deep unemployment levels as seen during the Great Depression, that is 28%. Instead, something else will occur.

The severity of an economic downturn could be seen in other ways. That is, people losing their homes and retirement savings as well as social security not being funded, government accumulation of debt that crowds out private sector innovation. Mass migrations of people around the world, escaping poverty caused by another downturn.

The downturns of the future could have high unemployment but more likely simply recoveries that create more and more jobs that do not pay enough for families living in a modern world. That is, the majority of people have jettisoned the idea of self-sufficiency for dependency on the current

economy in the form of jobs and career dependency although it does not have the bravado of high unemployment. This also translates to a loss of human potential and suffering.

Therefore, I think it is essential to study the theory behind the events. Why this is happening. If we understand the theory, then progress can be made. Although theory at times seems abstract, it has a real impact on the world around us.

This is because the political process takes cues from academia when it comes to complex issues. At the very least, it has the potential to initiate a change in paradigmatic thinking. The collective unconsciousness can shift and improve our human condition. A descriptive analysis of the event, although interesting, does not do this. This is why this study is about the theory of the causes of the Great Depression rather than a chronology of events.

That is, this study does not go into the story of the drama of the time; instead, its objective is to look at the theory from the two leading paradigms and try to answer the question, 'what caused the Great Depression?'

Causes of the Great Depression

What was the Great Depression?

The great depression was a global economic upheaval, from 1929 to 1940. It was manifest by a sharp decline in business activity, high unemployment, and deflation.

The peak of unemployment was 28% in 1933. GDP fell 15%, and international trade declined 50%. Industrial production fell 46% from 1929 to 1932. Wholesale prices decreased by 32% between 1929 and 1932. Individual fortunes were wiped out, for example, the founder of GM lost everything in the market crash.

However, these are numbers, and they cannot accurately represent the hardship of the time when compared to our standards of living today.

A sequence of events marked the Great Depression:

1. The stock market crash and sell-off of financial assets, for example, Black Tuesday.
2. The decline in commodity prices and general deflation
3. Drop in the demand for credit
4. A sharp decline in business activity
5. Rise in unemployment

Note, the stock market crash, from its dizzying highs of 1929 did not cause the Great Depression. The stock market is a leading indicator, a symptom, but not a root cause. We have to turn to economic theory to understand the primary reason for the Great Depression.

The two leading models which explain the causes of this business cycle are:

1. Consumption model - Keynesian school of economics
2. Monetary model - Austrian school of economics

There were also many heterodox models that explained the crisis with shocks from the primary sector, such as drought and the dust bowl. In another theory increasingly restrictive labor policies, such as Herbert Hoover's pro-labor policies of propping up the wages with the rationale that with lower wages spending would decline; however, this restricted the labor markets adjust to equilibrium. Or the Smoot—Hawley Tariff of 1930 that stifled international trade.

On the other hand, the Marxist view was that the capitalistic system was inherently unstable. However, the theories that we will look at are the consumption model and monetary model as they have the most plausibility at this time.

Each model has explanatory value

Since economics is a social science rather than hard science, models are estimated as the most probable, with degrees of certainty. That is,

models should not be viewed as entirely correct or incorrect, but rather which model has the most explanatory value. Further with different business cycles or parts of a business cycle, the context is different. Therefore, the contributing causes of the lengthening of that business cycles might be different depending on what stage of the cycle the economy is in.

However, I still believe there is one fundamental cause, and we will look at what that is.

Also, each school of thought has a prescription to moderate or cure an economic decline, based on lessons learned from the Great Depression, which is based on their theory of the causes.

What do the models look like?

The Keynesian Explanation for the Great Depression

The Keynesian and Neo-Keynesian models are consumption based models. Using Aggregate demand and supply analysis the model examines why the economy departed from long-run equilibrium and settled at an equilibrium below the natural rate of unemployment.

The basis of this short run settling at a point below the optimal is a fall in aggregate demand initiated by underconsumption. This decline in consumption in turn resulted in a reduction in autonomous investment spending.

That is, in the case of the Great Depression, there was a loss of confidence in the economy and this led to underconsumption. The emotional component of spending versus savings was what Keynes called 'Animal Spirits', which primarily was another term for consumer confidence.

When consumers are not spending, business profitability and retained earnings decline and this leads to a reduction in investment spending, which leads to unemployment which drives consumption demand lower and leads to persistent unemployment below the natural rate.

Therefore, in everyday language consumers and investors were on the sidelines. This dampened business activity and perpetuated the cycle. Consumers and investors, instead of being engaged in the market, held money because this was perceived as their optimal choice given market conditions.

That is, there was a preference for liquidity. Holding cash became profitable as prices dropped. Cash in a time of deflation is a risk-less investment with a return. This liquidity preference further decreased aggregate demand, and it became a liquidity trap.

A liquidity trap being when people prefer to hold cash over bonds when interest rates have fallen too low to make the investment worth their while. Spending or the lack of spending had a multiplier effect throughout the economy.

When demand fell, firms had to cut costs. Labor being a variable cost, they have a choice to cut wages or lay people off. Keynes believed wages were sticky. That is people generally do not accept wage cuts. Therefore, unemployment increased. When people were out of work, this further perpetuated a decline in demand as they were not spending or consuming. Thus, GDP fell also.

In textbook terms:

If $Y=C+I+G$ and C and I are stuck in low gear, then Y or GDP is by definition down.

One of the reasons that Keynesian economics has had so much influence was, within the context of Keynes' times, this theory made logic sense.

If you were living in the 1930s, this is what you would have observed 'a sharp decline in consumer confidence, exacerbated by bank failures, people hoarding money and businesses spending declining. Next unemployment, a lagging economic indicator increased. Further, it seemed like it would not turn around through market forces, at least in the short or intermediate run.

If nothing else Keynes theory was an excellent descriptive analysis of the observed world with some causal links, however, his approach was useful in explaining an aspect of the 'how,' but critics question Keynes explanation of the 'why'.

Further, his logic was not subject to empirical validation. That is from the vantage point of the Great Depression, his theory made logical sense, but ideas were untested.

For example, is the money multiplier a valid idea empirically? What does the data tell us about the multiplier? Or is it just an idea. Regardless, Keynes was observing the world around him and offered a theory and a prescription for help, and therefore, the emotional appeal was strong.

This was a paradigm shift from the classical view that markets adjust relatively quickly. Changes away from the natural rate of unemployment would with time be self-correcting in the long-run. Keynes pointed out this may happen, but in the long-run, we are all dead.

A Monetary Explanation of the Great Depression

The Keynesian theory of the causes of the Great Depression is more understandable to the layman than the monetary or Austrian theory of the origins of the Great Depression. The Keynesian argument is essentially people were not spending enough. In contrast, the monetary explanation is more abstract and therefore, harder to understand for non-economists. This might explain why it does not have widespread appeal.

There are different versions of a monetary explanation for a business cycle depending on the economist. We will focus on the Austrian school of Economics. Specifically, the expansion of credit in the 1920s which led to malinvestments, which triggered and the Great Depression.

As far as a model for understanding the causes of the Great Depression it has more explanatory value because it explains the impetus that caused the initial shock as well as what prolonged the Great Depression more robustly. That is it included the essential commodity, money, at the center.

A monetary explanation of the business cycle centers on the idea that disequilibrium in the market for money causes shocks in the real sector.

To understand this statement, we need to build this theory based on some key concepts:

1. Money
2. Credit
3. Banks
4. The Central Bank
5. Interest rates
6. The Market rate of interest
7. The Natural rate of interest
8. Disequilibrium

Money: Why money is the central component to the cause of the Great Depression and business cycles

The theory behind the theory is an understanding of what money is, how it has evolved and what its function is in society. This is an important point. One needs to understand the why not just the how of money.

Money has evolved as a tool to efficiently satisfy the double coincidence of wants in a modern economy and therefore, used as a medium of exchange. Philosophically society has gained an enormous advantage using money as an instrument to solve the logistical issues associated with the double coincidences of wants in a barter economy. This is why we all use money and credit to consume and do modern business world. Unless you live off the grid in a zero waste tiny home or live in the age of stone knives and bear skins, you need money or credit. As a consequence, money is involved in every economic transaction, except for barter.

Therefore, money and its derivative credit have the advantage of allowing us to function in a modern economy. However, it has the issue that if the market for money is unstable, it will send shock waves to every sector in the real economy. It is beyond the butterfly effect, it is systemic, as money is the lifeblood of the economy.

The power of money compared to every other commodity

For example, if the market for potatoes is in disequilibrium because of let's say government price subsidies for potatoes growers, then there is a loss to society in terms of utility derived from potatoes. This loss in consumer surplus is generally isolated to the potato market.

However, if the market for money and credit is in disequilibrium, it will have a cumulative effect throughout the economy as money is a unique commodity because it is in every market. Using this tool of money exposes societies to potential risks because it is part of every transaction. This risk is especially true when there is an external non-market force that restricts the tool of money to restrict adjust to equilibrium quickly. This would be a central bank.

Have no illusions, money, and credit are commodities, and the laws of supply and demand apply. Money seeks to find equilibrium, just like every other commodity, unless something other than the free market controls it.

If money and credit are subject to the laws of supply and demand than why does it not equilibrate?

It begs the question of why it did not find this equilibrium in the 1930s? What was it that caused money and credit to be in long-term disequilibrium?

The ubiquitous nature of money and credit coupled with long-term departures from equilibrium was disastrous in the 1930s, the dotcom bubble and the Great Recession of 2008 and potentially the next economic crisis.

The disequilibrium spread to the real economy, prices became unstable, and people lost their jobs. The real economy being, the demand, and supply for consumer and producer goods and services.

Symptomatically this was manifest in macroeconomics measures like inflation, GDP and unemployment. Therefore, monetary disequilibrium did not self-correct and negatively impacted the economy as a whole because money is involved in every transaction, and further, something prevented the market mechanism in the commodity of money from adjusting. The question is what it that went wrong was?

Credit: Are you talking about Money or Credit?

Taking a step back it should be noted the Austrian version of this monetary theory of the business cycles, including the Great Depression is connected to credit and purchasing power, rather than a narrow definition of money.

It is essential to understand that monetary theory is broader than the commodity of money, fiat money, M1 or M2. The monetary theory of the business cycle is a theory of loanable funds or purchasing power. The expansion and contraction of credit based purchasing power is

governed by the rate of interest and effectuated through the banking and the financial intermediary systems.

Credit is ultimately based on money but is not money in itself or even the velocity of money. However, credit increases the buyer's or investor's ability to spend. It is an extension of the purchasing power of money.

If you think about purchasing power in the modern economy, it is not coins in a piggy bank or dollars in your wallet that matters. What matters is your purchasing power based on your ability to obtain credit. This is true for consumer demand such as houses and cars and when you go to the mall, as well as business and entrepreneurial demand to start and expand operations.

Therefore, our monetary theory of the business cycle is focused more on credit, which is an extension of money, rather than money itself. The direct mechanism that regulates the credit market and the supply and demand for loanable funds is the interest rate. The interest rate is, in essence, the price of credit. The interest rate is at the center of the theory of credit and purchasing power and the monetary explanation of the business cycle.

Banks: The Intermediaries

To say credit expanded too quickly which lead to a bubble is a nice metaphor that describes the Great Depression but does not give us any meaningful insight, besides a nice metaphor. We have to look deeper into the story. That is, why and how does credit expand and contract in a less than optimal way to cause this disequilibrium.

At the center of the story of monetary disequilibrium, as observed in the Great Depression are banks, not just the sheer number of banks that failed and the fact that people lost their savings, but rather, perhaps more important the role banks play. Banks are the conduit for loans, both consumer and investment loans, and have the role of coordinating investors and savers through the interest rate mechanism. Banks were not explicitly responsible; rather they are the middlemen, the staging area for malinvestment. If the banks were not responsible for the Great Depression, who was?

The Central Bank: The non-free market solution for money

The Central bank was established in 1913 and started operations in 1914. As a historical footnote, the Fed chairman was Roy Young from 1927 to 1930. Fed Chairman Eugene Meyer was in charge from 1930

to 1933. This period was known as the great contraction when, when the monetary base decreased by 35%.

The Chairman during the roaring twenties was Daniel Richard Crissinger from 1923 to 1927.

The Central Bank's purpose was to influence and stabilize key economic indicators like inflation, deflation, and GDP. The existence of a fractional reserve banking facilitated economic expansion but contributed to this instability. The Federal Reserve wants to smooth out business cycles by controlling the monetary base.

The instruments which the Federal Reserve Bank orchestrated the monetary expansion and contraction varied, including the money supply and the reserve ratios, which is often the focus for economic analysis of the 1920s and 1930s.

However, in this analysis, we are focusing on the interest rate because it more clearly illuminates the issue from a theoretical standpoint, and is based on a theoretical economic lineage from Knut Wicksell, to F.A Hayek. Specifically, the central bank maintained a low discount rate during the 1920s, which created the expansion and malinvestment. They subsequently raised rates, and this exacerbated the cycle in place.

Regardless of the specifics or the tool one focuses on, the key idea is, inordinate purchasing power was created in a fractional reserve system that brought the majority of markets in the real sector to a state of disequilibrium through malinvestments.

Malinvestment being investment spent on ventures and risks that would typically not be profitable, and this resulted in inefficient production and allocation of capital.

To quote former Federal Reserve Chairman Ben Bernacke replying to two monetary theorists, Milton Friedman and Anna Swartz regarding Great Depression. “You're right; we did it. We're very sorry. But thanks to you, we won't do it again.” It should be noted the Fed chairman said this right before the Great Recession of 2008.

However, it would be intellectually reckless to stop there. We need to see how this scenario came about. In this case, we will focus on the interest rate.

Interest: Interest is the Price of loanable funds or purchasing power.

The mechanics of this process of monetary disequilibrium is explained regarding an interplay between what is known as the market rate of interest and the natural rate of interest. We will define these two rates of interest below.

First, conceptually what is an interest rate? An interest rate is the price of money, with time value factored in. In a modern economy, more precisely the price of loanable funds in a modern economy. Interest is a price. It is the price of loanable funds or credit.

Any price is the mechanism that brings markets to equilibrium. Conversely, if any price in any market is incorrect than disequilibrium results.

It is not much different if I bring potatoes to the farmer's market and try to sell them. If I charge 20 dollars a pound, no one will buy my potatoes and my product will not clear the market because the price is too high. However, if I charge 1 cent a pound I will sell out of my potatoes; however, I will not make a profit. Therefore, I will not have enough economic incentive for me to grow them next season, let alone cover my costs of production. In both cases the price is incorrect, and it is a market failure. Free market prices optimize productive and allocative efficiency.

We can conclude, if the interest rate is a price, essentially the price for loanable funds, a derivative of money, and if the price is incorrect, then just like any mispriced item, the market will not result in productive or allocative efficiency for loanable funds. In other words, credit and purchasing power will be too much or too little and misallocated.

This means if the interest rate is too low or too high than disequilibrium will result in the market for money. The implication is this misalignment between the supply and demand for loanable funds, between savers and investors. This incongruence has a real impact on investment and consumption. That is because money or a derivative of money is central to every economic transaction in a non-barter economy. This was the scenario that caused the Great Depression. The money market was not in equilibrium, and this had an impact on the real sector.

That is the market for money was in disequilibrium because the interest rate was too high or low.

What does it mean the interest rate is too high or low?

However, the question is what does it mean that a rate of interest is too high or too low. Observable rates are relative or nominal unless it is compared to an expected norm.

When you see interest rates for a saver, such as a bank CDs, time deposits or someone looking for a loan at the bank, either as a consumer or an entrepreneur or business owner, that is called the market rate. It is the observable market rate most people think of as the interest rate.

What can this be compared to? What can we compare the market rate to in order to determine if it is too high or too low? The answer is something called the natural rate of interest.

A business cycle such as the Great Depression is expressed as a disequilibrium between two rates of interest, the observable market rate, and the natural rate.

The natural rate is the rate that would equilibrate the market for money or loanable funds.

Let's examine what these two rates, the market rate and the natural rate in further details

What is the Market rate of interest?

The market rate is reasonably easy to understand; it is the observable bank rate ‘ the cost for loanable capital.

The interest rate can be seen at financial intermediates such as banks and is indirectly controlled by the Federal Reserve. This is the market rate at the storefront of the bank. The market rate is a rate which the central bank indirectly sets through its policy tools. It is the Central Bank’s responsibility rather than the market’s that determines the price of loanable funds. Banks respond to Central Bank action and set the rate you see advertised for mortgages, car loans, and business loans.

The problem with this scenario is, if the central bank miscalculates what the proper interest level should be, then the supply and demand are not at the optimal market equilibrium. There will be an imbalance. There will be too much or too little demand for loanable funds relative to what would exist if the free market set the market rate. This improper rate of interest will initiate a cumulative process of price changes and malinvestment.

Again in every other market, the price of a commodity finds equilibrium through information in the market mechanism. However, in

contrast, in our economy since the establishment of a central bank in 1913/ 1914, the price of money/ loanable funds is indirectly determined by the central bank through Federal Reserve monetary policies.

That is, the market rate of interest is not determined by the supply and demand for money/ loanable funds as in a competitive market model such as free banking. Instead, the market rate of interest is determined through the influence of central bank monetary policies. These monetary policies include such things as the reserve ratio (the percentage of cash banks need to keep on hand in reserve), open market operations (buying and selling of government securities) and the discount rate (rate received by financial intermediaries for loans from the central bank).

Without the collective intelligence of the market to set the price in an equilibrating way, the central bank needs to estimate the interest rate and ultimately the level of money in the economy based on their best judgment.

What is the Natural rate of interest?

The natural rate of interest is a hypothetical rate. That is it is not an observable rate, but rather a theoretical concept. The natural rate is

also called the neutral rate, the equilibrium rate or 'R staret' among econometricians.

This natural rate of interest is defined as the rate of interest which represents the marginal return on capital in an economy if barter ratios are used. The Swedish Economist Knut Wicksell postulated this as a rate to explain price movements and developed by neo-Wicksellians and the Austrians to explain business cycles, such as the Great Depression. In other words, it is approximately the return on capital in a moneyless economy. This theoretical rate is the rate that would bring the supply and demand for loanable funds to equilibrium.

One primary tactical objective of the central bank is to harmonize this theoretical natural rate of interest with the observability market rate. This harmonization is what the Central Bank believes will make money neutral and the real economy function based on the supply and demand of individual commodities rather than monetary distortions. This fits into their strategic objective of stabilized prices and the business cycle.

So what caused the Great Depression?

The Great Depression was caused by the Federal Reserve Bank setting interest rates set too low relative to the natural rate in the 1920s. It was a story of interest rates. There was a divergence of the natural and market rate of interest. This caused monetary disequilibrium manifest in an inordinate expansion of credit and purchasing power that resulted in malinvestment.

The theory of money and interest as the primary cause of the Depression is founded on the underlying premise that money is ubiquitous and involved in every economic transaction in some form as a medium of exchange. Hence, interest rate monetary economic shocks causes disruptions in capital formation.

This monetary shock brought by an over expansion of credit because of low interest rates created the boom of the roaring 20s. In explaining the Depression, it is the boom that is the focus because embedded in every credit fueled expansion is a latent bust. Generally the timing of economic cycles are hard to predict, but the effects are seen usually with a leading indicator like the stock market that declines, then a decline in GDP and lastly a rise in unemployment.

Lastly, the recession of the 1930s turned to a depression when the Federal Reserve subsequently restrictive monetary policies that were not congruent with the conditions of the time.

Does Economic theory matter?

The Great Depression was not necessarily caused the Federal Reserve misestimating the natural rate of interest and setting the discount rate below the hypothetical rate.

Instead, the reason the monetary policy was incorrect for the context of the time was, the economic theory of the time did not articulate this conceptual framework, at least not it had not penetrated the consciousness of the chairman of the Federal Reserve. In a word the Fed was flying without a clear map, without an understanding of the relationship between the natural rate and market rate of interest.

The Federal Reserve was looking more generally at the interest rate in relation to the inflation rate and testing the Federal Reserve's new power to steer markets. It was the experience of the Great Depression that brought this early theory of the natural rate of interest to light. The natural rate has been brought to the forefront of modern Federal Reserve econometric models. However, there is a new

set of issues regarding the ability to estimate this natural rate or if there is more than one natural rate, which is another topic.

Even with this theory and debate and new understanding in academia and the Federal Reserve about the causes of the Great Depression from a monetary perspective, history seems to repeat itself.

The lesson learned from the economic cycles of the past is, not how we can better fine-tune the economy by microengineering monetary variables, but rather, we should question if the central commodity of money and its derivative credit, should be managed at all, or left to the markets to decide its value.

Therefore, the Central bank inadvertently caused the Great Depression. The Federal Reserve Bank of the United States initiated and deepened the Great Depression with monetary policy.

The irony is the Central Bank's monopoly of money came about in an attempt to stabilize business cycles, the price level and GDP. However, it can not do this as efficiently as the market mechanism. In conclusion, it was not that capitalism failed during the Great Depression, it was that the United States departed from the idea of the free market in the essential commodity of money.