The Economy

Lecture 20: The Great Depression

Module 10: Financial Crises in History

Columbia University | Summer 2020
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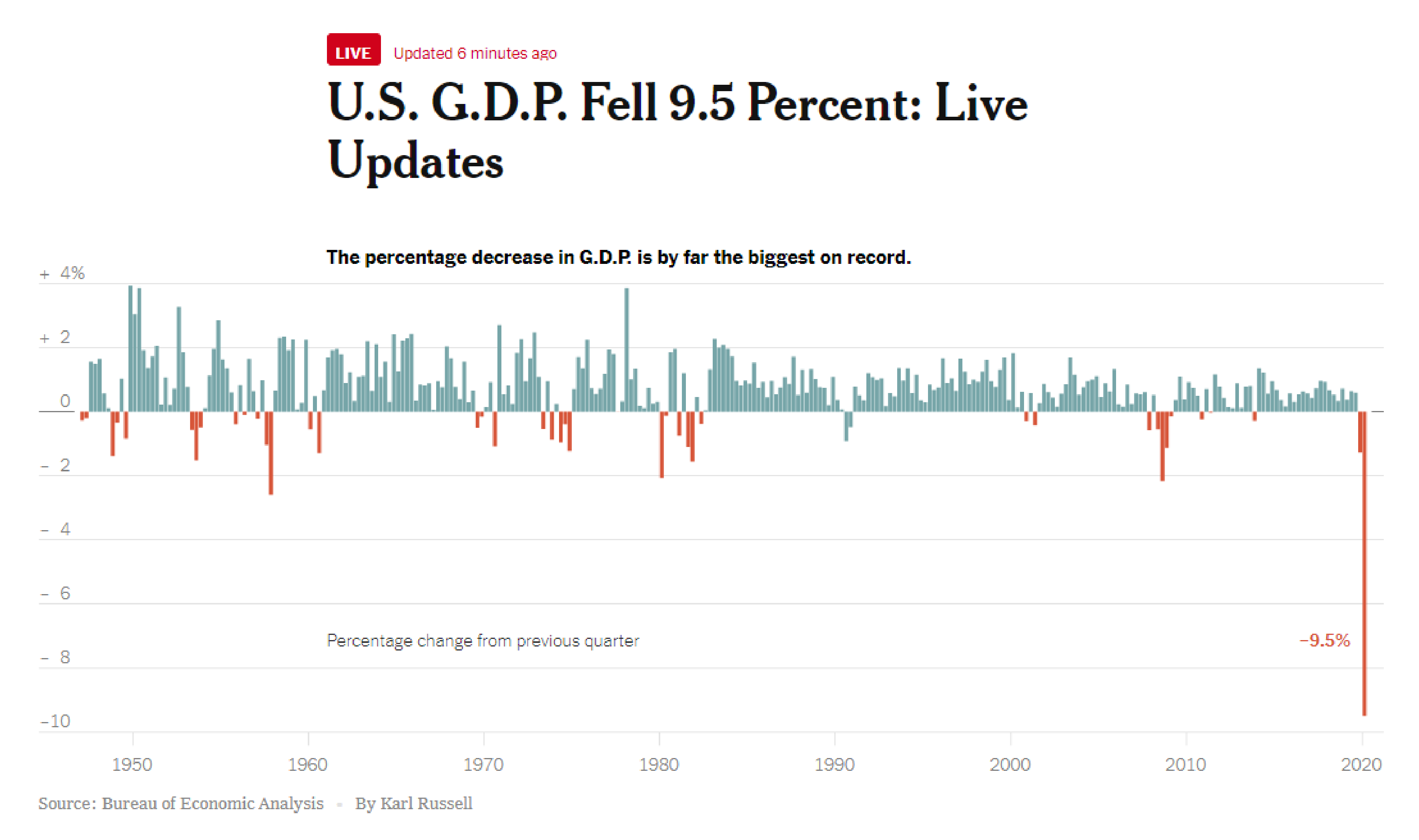
Hot off the presses

Bureau of Economic Analysis quarterly economic report

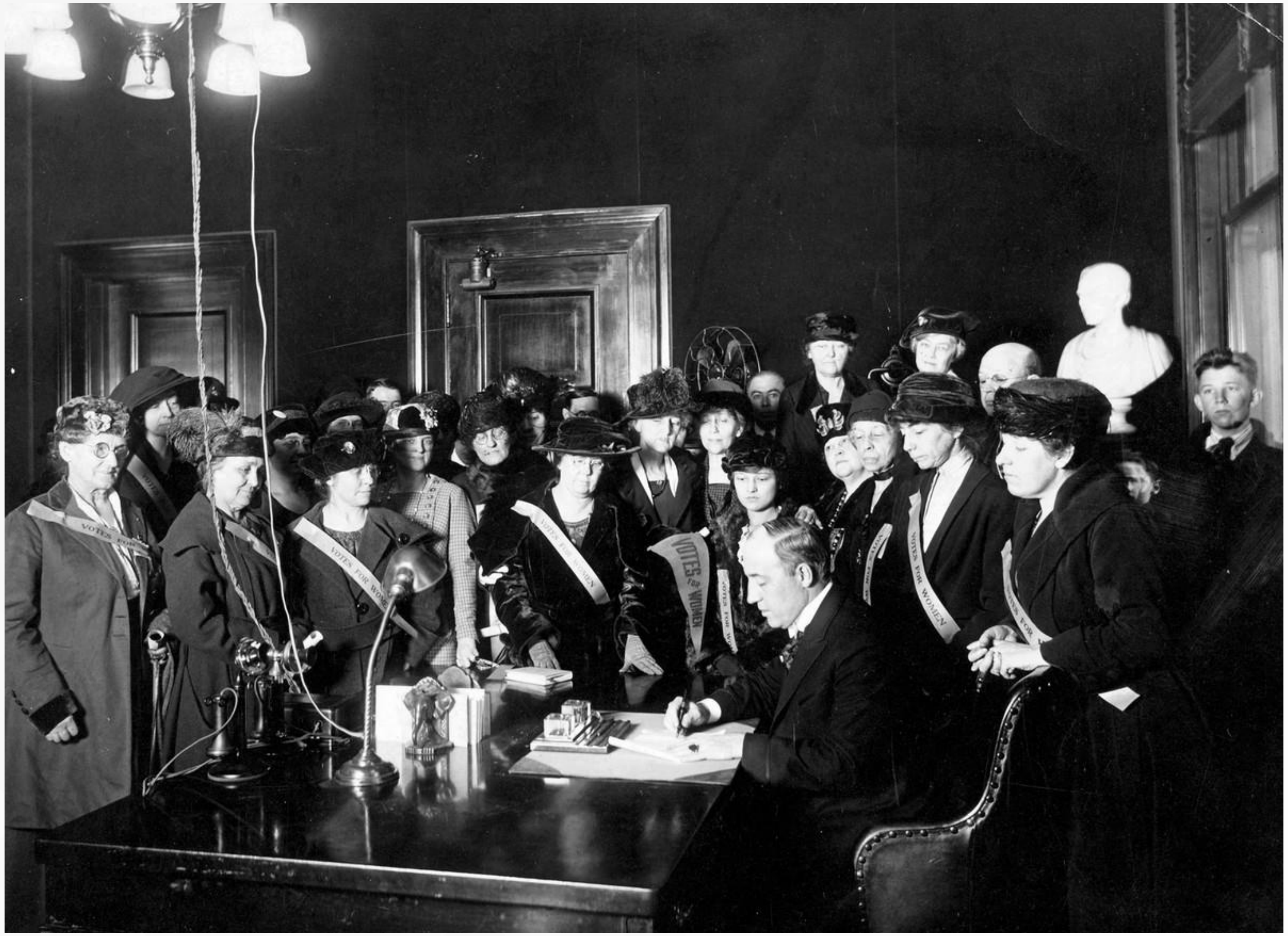


The New York Times. July 30, 2020. Access July 30, 2020. https://www.nytimes.com/live/2020/07/30/business/stock-market-today-coronavirus

Table Of Contents

A. The world before the Great Depression

Expanding voting rights



"Kentucky Governor Edwin P. Morrow signs the bill ratifying the **Nineteenth Amendment** (the "Susan B. Anthony Amendment"), giving women the right to vote, surrounded by members of the Kentucky Equal Rights Association, on January 6, 1920."

Source: Taylor, Alan. "100 Years Ago in Photos: A Look Back at 1920." *The Atlantic.* Jan 30, 2020. https://www.theatlantic.com/photo/2020/01/1920-photos-100-years-ago/605794/

The communist sphere of influence

"The **Russian revolutionary leader** Vladimir Lenin gives a speech to Red Army soldiers leaving for the front during the Polish-Soviet War, in Sverdlov Square (now Theatre Square), in Moscow, on May 5, 1920. On the right side of the platform are People's Commissar Leon Trotsky and a Politburo member, Lev Kamenev."

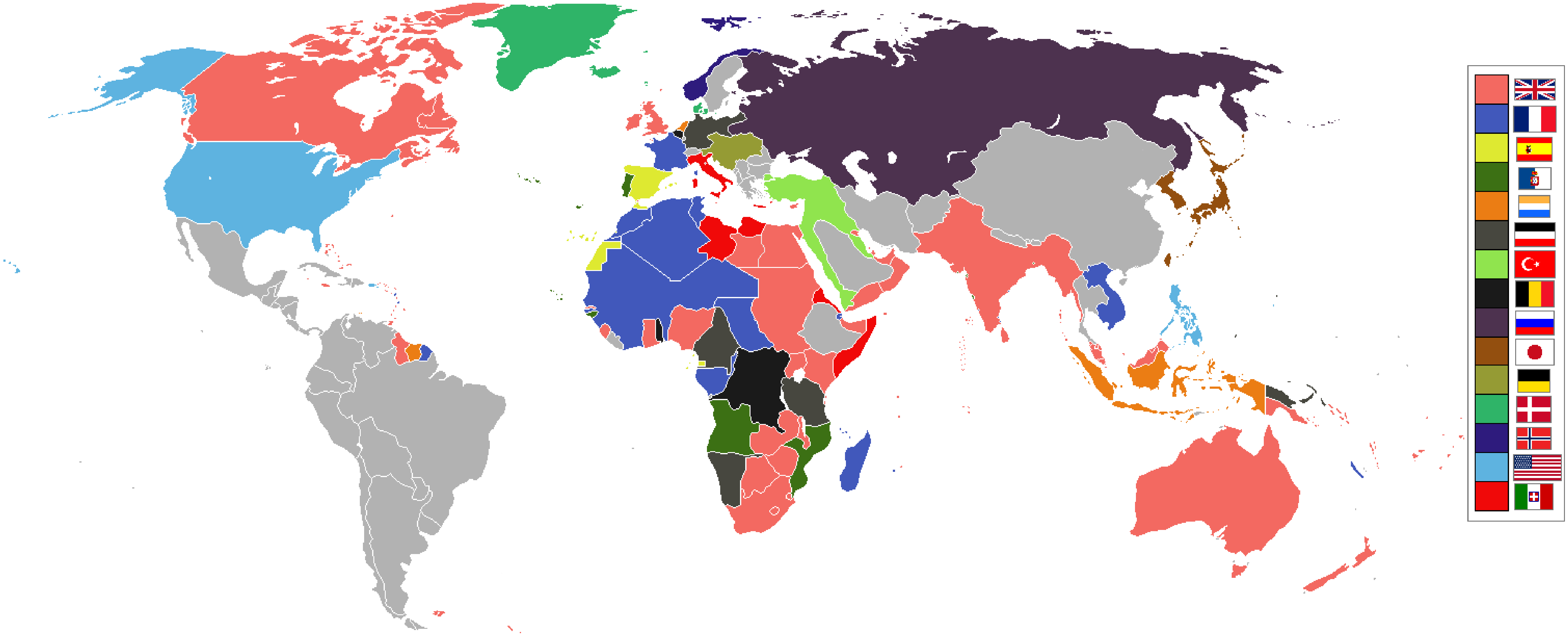
Source: Taylor, Alan. "100 Years Ago in Photos: A Look Back at 1920." *The Atlantic.* Jan 30, 2020. https://www.theatlantic.com/photo/2020/01/1920-photos-100-years-ago/605794/

Labor movement across the world

"Japanese women hold a **demonstration to protest low wages** paid to female factory workers."

Source: Taylor, Alan. "100 Years Ago in Photos: A Look Back at 1920." *The Atlantic.* Jan 30, 2020. https://www.theatlantic.com/photo/2020/01/1920-photos-100-years-ago/605794/

Colonial empires – 1914



Source: https://commons.wikimedia.org/wiki/File:World_1914_empires_colonies_territory.PNG

The world in the 1920's

- Aftermath of World War I (1914-1918):
  - 40 million casualties, 20 million dead (~10 million military, 10 million civilian)
  - Widespread destruction of capital (e.g. factories) in Europe.
- As European production declined significantly in the aftermath of the war, exports from Europe to Asia and South America largely stopped. Industrialization took off in countries that previously relied on goods manufactured in Europe.
- The world returned to the **gold standard** for currency valuation after suspending it during the war.

Source: Liman, S. (1926). "The Effects of the World War on Trade." *The Annals of the American Academy of Political and Social Science*, 127: 23-29.

Interlude:
A word on gold standard and exchange rates

All that glitters is gold…

- The **gold standard** is a monetary system in which a nation’s currency is pegged to the value of gold.
- The currency is backed by gold, meaning that people can exchange paper money for a fixed amount of gold.
- The gold standard limits the effectiveness of monetary policy – the only way to increase the supply of money is to increase the national stockpile of gold.
- During WWI, many countries had abandoned the gold standard so that they could print money to finance the war.

Exchange rate

- The **exchange rate** is the number of units of domestic currency that can be exchanged for one unit of foreign currency.

exchange rate of JPY = (number of JPY) / (one US dollar)

- Think of the exchange rate as the price of one currency in terms of another.
    - **Depreciation** is the decrease in the value of a currency relative to another currency, e.g. ¥100/$1 → ¥120/$1.
    - Conversely, **appreciation** is the increase in the value of a currency relative to another currency, e.g. ¥100/$1 → ¥90/$1.

Exchange rate as a determinant of X and M

- Exports are priced in domestic currency and imports are priced in foreign currency.
- When the exchange rates **depreciates**:
  - ¥100/$1 → ¥120/$1
  - Domestic goods become **less** expensive → exports **increase**.
  - Foreign goods become **more** expensive → imports **decrease**.
- The opposite is true when the exchange rate **appreciates**.

Determinants of the exchange rate

- Put simply, a currency's exchange rate is driven by demand for it.
- Foreign investors will demand currency of the economy in which they want to invest. The more profitable the investment, the higher the demand.
- **Changes in the interest rate** affect the demand for domestic currency:
  - Higher (lower) interest rates → higher (lower) return on investment → higher (lower) demand for currency → currency appreciates (depreciates)
- The **gold standard** also acts as a peg for an exchange rate: if the currency trades for gold at a fixed rate, then it cannot appreciate or depreciate relative to other currencies.

Back to our regularly scheduled programming

US economy in the early 20th century

- A relatively prosperous time period, the “roaring 20’s” were marked by low unemployment, high productivity growth, and rising inequality.
- There are booms in construction and automobile industries.
- Installment agreements become available to households to purchase consumer durables. Households begin to accumulate debt.
- Although prices of goods stayed relatively stable, stock market prices increased between 400% and 600%.

Sources: “Great Depression”. Encyclopedia Britannica. Accessed July 29, 2020. https://www.britannica.com/event/Great-Depression
“What Caused the Stock Market Crash of 1929?” History Channel. Accessed July 29, 2020. https://www.history.com/news/what-caused-the-stock-market-crash-of-1929

C. The Great Crash of 1929 and the Great Depression

Stock market bubble

- Stock market prices had risen considerably compared to prices in other markets.
- Many ordinary individuals also invested in the stock market by “buying on the margin” – paying as little as 10% of the share value and borrowing the rest from stockbrockers.
- There was, very clearly, a bubble.
- The Federal Reserve increased interest rates to slow down the rise in stock market prices. Stock prices did not respond immediately, but this did discourage investment in construction and auto purchases.

Source: “What Caused the Stock Market Crash of 1929?” History Channel. Accessed July 29, 2020. https://www.history.com/news/what-caused-the-stock-market-crash-of-1929

Black Thursday: the stock market crash

- Thursday, October 24, 1929 (known as "Black Thursday"), the US Dow Jones Industrial Average fell 11%.
- This started a **3-year decline** of the US stock market.

Source: "Great Depression". Encyclopedia Britannica. Accessed July 29, 2020. https://www.britannica.com/event/Great-Depression
People gathering on the steps of the building across from the New York Stock Exchange on Black Thursday, October 24, 1929, the start of the stock market crash in the United States. *AP*

From recession to depression

- Although the wealth decline from losses on the stock market was relatively small for most people, it had a profound impact on the public's confidence (what economists would call **animal spirits**).
- Firms and households reduced investment.
- Unemployment increased and unemployed households' consumption dropped.
- However, consumption also dropped for the households that were still employed. Why?
  - **Uncertainty** about the future.
  - **Pessimism and the desire to save more** because of lower expected wealth.

Households in the depression

- **Paradox of thrift:** while one household saving money for a rainy day is good, all households doing so – without an increase in investment by firms to offset the decline in consumption – is bad.
- There was widespread **deflation** as unsold goods piled up in stores.
- Deflation meant a decline in the value of homes.
    - **Financial accelerator:** value of houses as collateral declines and households are able to borrow less.

Amplification mechanisms

- Several other factors turned the depression into an even worse economic crisis.
  - **Banking crisis and collapse of credit:** 1930-1931 there was a wave of failures of small, weak, and largely unregulated banks across the US. As savers began to fear for the safety of their (uninsured) deposits, there was a wave of **bank runs**.
  - **Deflation and expectations:** as prices of goods fell, this created deflationary expectations – consumers expected prices to drop even further so they put off purchases.
  - **Deflation and debt:** deflation increased the real value of debt, making it more difficult for households to make their debt payments.

D. Fiscal and monetary policy response in the United States

US fiscal policy, take 1

- At the time, economists and policy makers did not yet have the benefit of knowing about Keynesian economics! So what did they do?

- <u>Balanced budgets</u> were the number one priority for governments.

- **April 1932**: Pres. Herbert Hoover advocates for *“far-reaching reduction of government expenditures”.*

- At the start of the Great Depression, **austere fiscal policy amplified and prolonged the shock**.

US monetary policy, take 1

- **From 1925 and onward**, real interest rates in the economy were increasing, first because of bank policy, then (after 1929) due to persistent deflation.

- **Until April 1933**, the currency was also pegged to the gold standard, meaning that exchange rates were fixed and the US could not devalue its currency to boost exports.

- This **contractionary monetary policy also exacerbated the crisis**.

US response to the depression, take 2

- Good news: eventually, the government did get it right! Well, sort of…
- **1932-1936:** under Pres. Franklin Roosevelt, the government begins to run <u>budget deficits</u>, financing large spending projects like the New Deal.
- **1933:** the US drops the gold standard and the dollar is devalued.
- **Mid-1930's:** stricter bank regulations are introduced by the government.
- **1938-1939:** the deficit shrank because of another recession as the government cut back spending, which only exacerbated and prolonged the crisis.
- A true recovery did not begin until 1940-1941, when **huge military spending by the government to fight in World War II boosted AD**.

E. Response around the world

How did other countries deal with the depression?

- Some countries dropped the gold standard pretty early on while others held on much longer (US was one of the last to drop).
- Countries that left earlier seem to have weathered the recession better.
  - Japan dropped the gold standard in 1931, the yen devalued quickly, exports became cheaper, and GDP grew by as much as 7% for a few years.
  - However, many other factors were at play.
- Some countries implemented Keynesian-style fiscal stimulus policies before it was cool.

F. Aftermath and legacy of the Great Depression

Impact in the United States

- In the US between the peak and the trough of the Great Depression:
  - Production had declined 47%;
  - Real GDP fell by 30%;
  - Unemployment by some estimates had reached 25%.

- By comparison, during the Great Recession GDP had fallen by 4.3% and unemployment was about 10%.

Source: "Great Depression". Encyclopedia Britannica. Accessed July 29, 2020. https://www.britannica.com/event/Great-Depression
Evicted sharecroppers along a road in southeastern Missouri, U.S., January 1939.*Arthur Rothstein—Farm Security Administration/Library of Congress, Washington, D.C. (LC-DIG-fsa-8a10410)*

Impact around the world

- The depth and length of the depression varied substantially around the world.
- UK depression began in early 1930 and drop in production was 1/3 of the US.
- In Germany, the economic downturn began in 1928, and the drop in production was equivalent to that in the US.
- Argentina and Brazil experienced relatively mild downturns compared to the rest of Latin America.
- Japan had a relatively short and mild depression.

Source: “Great Depression”. Encyclopedia Britannica. Accessed July 29, 2020. https://www.britannica.com/event/Great-Depression

Economic legacy

- The severity of the Great Depression made economists question the current economic models and the idea that markets are *always* in (or at least adjust very quickly to) equilibrium.

- The Great Depression also redefined the role of governments and central banks in dampening economic fluctuations.

- John Maynard Keynes was instrumental in pioneering the ideas behind aggregate demand, fiscal stimulus, and, most importantly, macroeconomics as a new field.

Source: “Great Depression”. Encyclopedia Britannica. Accessed July 29, 2020. https://www.britannica.com/event/Great-Depression

“Your Moment of Zen”™

PRICES FOR LIONS SLUMP.

First Class Animals Bring Only $700—Elephants Are Cheap.

With everything else going down, the price of lions has also dropped. At a recent sale in Hamburg, big lions, in excellent condition, went for less than 3,000 marks, just about $700. Hippopotami, too, have been affected by trade depression—they bring only 8,000 marks. Giraffes go for 20,000 a pair, and riding elephants bring between 8,000 and 12,000. Snakes, sold by the meter, are also inexpensive.

Commenting on German prices yesterday, Dr. Raymond L. Ditmars, curator of reptiles and mammals at the Bronx Zoo, said that locally the value of lions is determined by size and age. He said that the other listed commodities seemed about right, save that giraffes appeared very cheap indeed in Hamburg.

The cause of the slump, he said, is that zoological parks now know more about their animals, and so can keep them longer. There are the same number as of old.

The New York Times
Published: August 29, 1930