

A 1929-33 Tariff Analogy

Ray Dalio has always sought to find clues from history to manoeuvre in volatile markets. I believe the most similar time period to today are the 1920s/30s. This note will look at the 1929-33 U.S. stock market crash and compare Ray Dalio's analysis to today. Below are some of the most striking similarities to this historic period:

- High government debt to GDP (>100% now vs. 100-200% in 1920s/30s UK)
- Rivalry between superpowers (US and China now vs. UK and US in 1920s/30s)
- Strong decades of globalisation that had peaked (trade is 25% of global GDP now vs. 9% in late 1920s)
- Moving towards new technologies (electrification now vs. ICE and oil in 1920s/30s)
- Moving to new forms of energy (from oil and gas to renewables now vs. from coal to oil and natural gas in 1920s/30s)
- High inequality (top 1% owns 30% of all household wealth now vs. top 1% owned 12-19% of total share of income in the 1920s)
- High speculation (cryptocurrencies are worth over \$3trn vs. high borrowing of businesses and individuals to buy stocks in 1920s)
- Monopolisation in form of few companies with large market share (the magnificent 7 account for over 1/3 of U.S.'s 500 largest market capitalization now vs. Ford, GM and Chrysler accounted for 70%/85% of all vehicles by 1920s/1940s, US Steel 50% market share¹)
- Interest rates of around 4-5%
- A pandemic (Covid vs. Spanish Flu)
- Conflicts (Ukraine and Gaza war now vs. WW I and II then)
- Trade and migration restrictions after prior free reign (back in the 1920s the British insisted on free trade while the US and Germany turned to tariffs)
- Political extremes between far left and far right, no center

¹ <https://eh.net/encyclopedia/the-u-s-economy-in-the-1920s/>

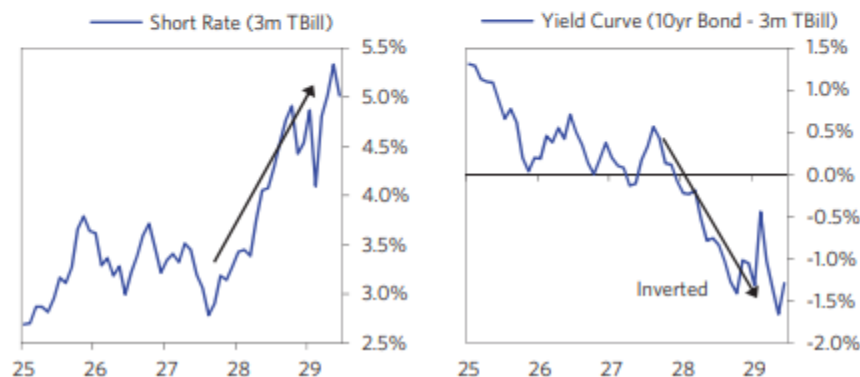
The Top and the Crash

I've done many analyses on the yield curve ([here](#)) and how every inversion always leads to a crash (except in 1999, when the crash came one year later as the Fed hiked rates again). We have now had the longest 10yr – Fed Funds inversion on record (2 years) but came out of inversion in late December 2024. As of late February, we are back inverted. The level of interest rates (up to over 5%), the long duration of the yield curve inversion and depth of inversion of -1.5% of the 10-yr – Fed funds are all very similar now compared to the late 1920s. Where I have a main disagreement with Ray Dalio's analysis is the reason for the crash, as interest rates at 4-5% compared to 3% won't lead levered investments in equity and bonds to turn sour so badly...

Late 1929: The Top and the Crash

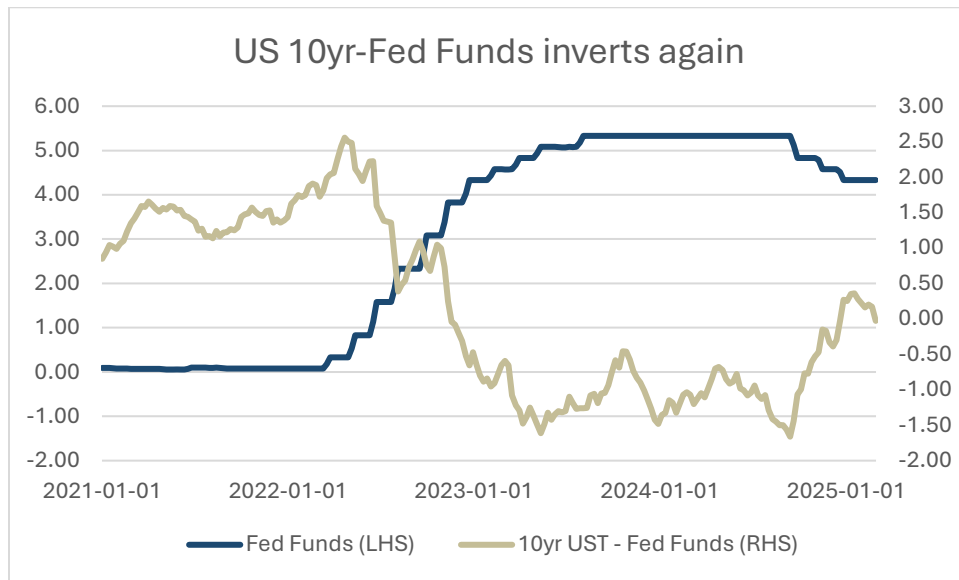
Tightening Pops the Bubble

In 1928, the Fed started to tighten monetary policy. From February to July, rates had risen by 1.5 percent to five percent. The Fed was hoping to slow the growth of speculative credit, without crippling the economy. A year later, in August 1929, it raised rates again, to six percent. **As short-term interest rates rose, the yield curve flattened and inverted, liquidity declined, and the return on holding short duration assets such as cash increased as their yields rose. As loans became more costly and holding cash became more attractive than holding longer duration and/or riskier financial assets (such as bonds, equities, and real estate), money moved out of financial assets, causing them to fall in value. Declining asset prices created a negative wealth effect, which fed on itself in the financial markets and fed back into the economy through declining spending and incomes. The bubble reversed into a bust.**



Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf>

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Source: FRED St. Louis

The Stock Market Crashes

Stocks fell sharply on 19 October 1929 and further in the week of 21 October 1929 – Why? Here I insert a paragraph from a prior note regarding the Smoot-Hawley Act ([here](#)):

The Smoot-Hawley Act was a legislation that increased dutiable import tariffs into the US by around 50% to an average tariff rate of nearly 60% vs. 40% before, and shifted total import tariffs from below 15% to 20%. While the tariffs were initially only thought to target agricultural products, they expanded further towards many industrial products as well. Why were these tariffs imposed and did they cause the Great Depression? Firstly, it is important to understand that President Hoover won the 1928 Presidential Elections partly by promising to protect domestic farmers and issue tariffs to farming products that are imported. Hence, Hoover was pressured to deliver on his election promises. The overproduction in Europe after World War I at that time did not only center around agricultural products, but also on machinery and other industrial goods. However, the sequence of events is key. By May 1929, the House approved the initial Smoot-Hawley tariff, which caused stocks to drop by around 2.5%. Only two weeks later, Republicans met to rewrite the bill. Built on hopes that the final bill will be amended, this in turn led to a market rally, which peaked in September, up over

13% from the June lows². Many industrial tariffs were discussed to be reduced during this phase³. These industrial tariff reductions were then rejected on 21st October 1929⁴, which triggered the market crash.

However, there is a main difference today compared to 1929: There is no legislation in place that sets the tariffs. Trump is negotiating tariffs and hence, it is not clear whether these tariffs end up being implemented. This is a much more careful approach and in line with Trump's historic tariff implementation.

The Stock Market Crashes

Then the bottom of the market fell out. Since so much happened each day during this period, and to give you a granular understanding, I will transition into a nearly day-by-day account, conveying it via both my own description and in the newsfeed.

Stocks fell sharply on Saturday, October 19, which saw the second-highest trading volume ever in a Saturday session and the decline became self-reinforcing on the downside. A wave of margin calls went out after the close, which required those who owned stocks on leverage to either put up more cash (which was hard to come by) or sell stocks, so they had to sell stocks.³⁴ Sunday's *New York Times* headline read, "Stocks driven down as wave of selling engulfs the market."³⁵ Still, traders widely expected that the market would recover when it opened again on Monday. Over the weekend, Thomas Lamont of J.P. Morgan, looking at the economy, wrote to President Herbert Hoover that the "future appears brilliant."³⁶

The week of October 21 began with heavier selling. One analyst described Monday's waves of sell orders as "overwhelming and aggressive."³⁷ Trading volume again broke records. Another wave of margin calls went out and distressed selling among levered players was prevalent.³⁸ But markets rallied into the end of Monday's session, so losses were smaller on Monday than they'd been on Saturday.

Tuesday's session saw small gains and Wednesday's opened quietly. But any hopes that the worst had passed were shattered before the market closed on Wednesday. An avalanche of sell orders in the last hour of trading pushed stocks down sharply, which triggered a fresh round of margin calls and more forced selling.³⁹ The Dow suffered what was then its largest one-day point loss in history, falling 20.7 points (6.3 percent) to close at 305.3.

Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf>

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² <https://www.cato.org/blog/smoot-hawley-tariff-great-depression>

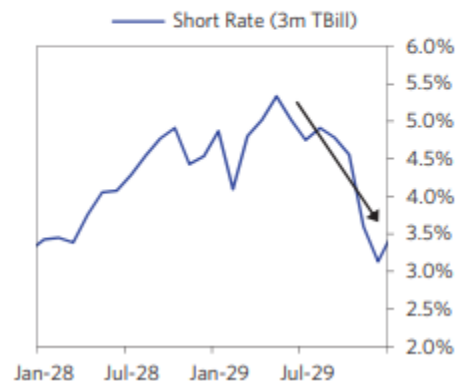
³ https://www.nber.org/system/files/working_papers/w28616/w28616.pdf p.4/5

⁴ <https://www.cato.org/blog/smoot-hawley-tariff-great-depression>

The Fed's reaction

So far, U.S. equities have sold off by as much as 4% in a day. Whilst the current selloff is continuous and somewhat steep, it still lacks the sort of panic that requires the Fed to intervene. Different to the late 1920s, we have also just come through a period of double-digit inflation (2022), which was equivalent to the inflation experienced in 1920, but not 1929 when inflation was low and stable. The Fed has already begun cutting rates from the same level as in 1929 of 5.33% to 4.33% ahead of the tariffs. Recent comments from Jay Powell suggest that the Fed is unlikely to take action for the time being⁵.

As mentioned, the New York Fed aggressively provided liquidity during the crash. Within a month, it cut its discount rate from 6 percent to 5 percent and then cut it again, to 4 1/2 percent.



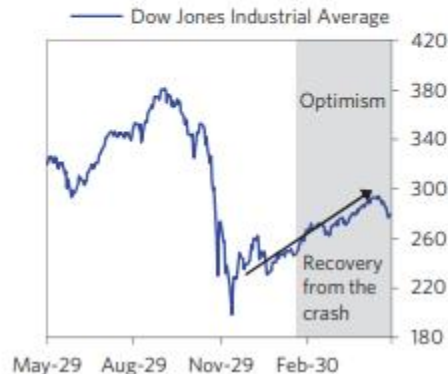
Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf>
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The short recovery

Back in 1929, the initial stock market sold off before the actual implementation of the tariffs by nearly 50%! It was very much driven by panic and at that point, companies continued reporting good results. This led to a market recovery of nearly 50%. Today, we are in the middle of a trade war and the market has only begun correcting. Many companies are already reporting a slowdown in activity. Therefore, we might have skipped the first initial selloff that happened in 1929.

⁵ <https://www.cnbc.com/2025/03/07/powell-says-fed-is-awaiting-greater-clarity-on-trump-policies-before-making-next-move-on-rates.html>

By April 10, the Dow had rallied back above 290. But despite stimulation and general optimism, economic weakness persisted. First quarter earnings were disappointing, and stocks began to slide starting in late April. **In the early stages of deleveragings, it's very common for investors and policy makers to underestimate how much the real economy will weaken, leading to small rallies that quickly reverse, and initial policy responses that aren't enough.**

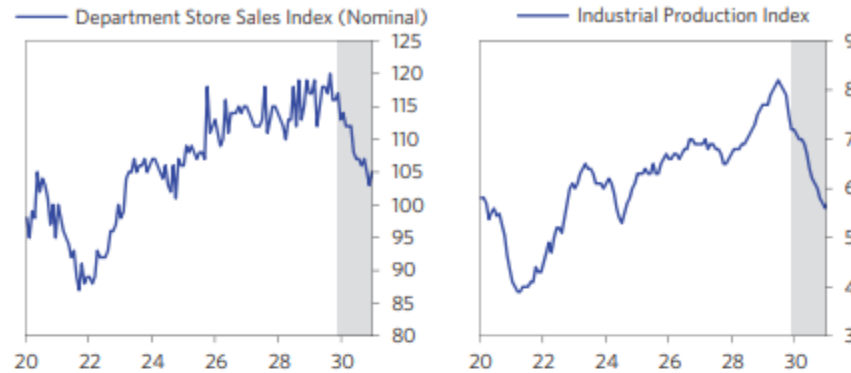


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The economy weakens

It was only in 1930, when the economy started to weaken. Yet, back then, Hoover remained optimistic, just like Trump today, promising the “golden age of America”. Here is where there are the most similarities: General weakness in the economy, seen in weaker department store sales, but also in weaker industrial production. Back then, we also had high protectionism in terms of migration, just as we have today. Credit spreads were ultra tight at around 2.5% just one month ago (BAML US High Yield vs. UST 10yr yield). Now they start to widen. If the Fed were to lower rates due to a panic, credit spreads would shoot up. To stimulate lending in such a scenario, even 0% interest rates would not be enough in the short term. At the same time, Canada was the largest trade partner of the U.S. in 1930 with 20% of American exports going to Canada. Today, Canada’s total trade balance (imports & exports) is 12% (11% & 13%) and ranked # 3 behind China and Mexico (or #4 when including the EU). However, Canada is ranked #1 in terms of export values (in 2023) and hence remains very important. As in 1930, Canada also reacted with strong retaliation this time by threatening to cut electricity and apply high tariffs themselves. It will be interesting to see whether Canada is going to loosen their trade policies towards non-U.S. countries, as it did in 1930.

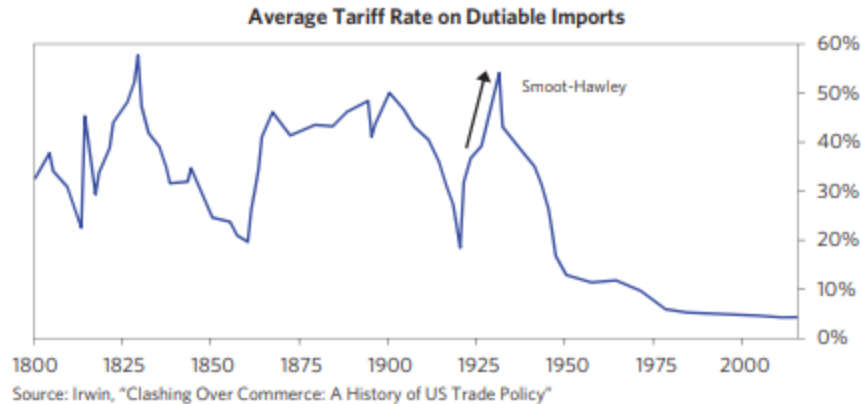


As the economy weakened, the sell-off across markets resumed. Stocks ended the period on a low note: By October of 1930, the stock market had fallen below the lows reached in November 1929. Commodities also fell sharply. Market analysts and investors alike were realizing that their hopes for a quick recovery would not materialize.⁷¹ But Hoover remained optimistic.

Although the Federal Reserve decreased interest rates and the Treasury bond market was strong, spreads continued to widen. This increased the interest rates facing most consumers and businesses. For example, rates rose on long-term mortgage loans, and the yields on municipal bonds, which had performed well following the crash, began to rise as credit anxieties developed. Some industries were hit particularly hard by the worsening credit conditions. Railroads had large amounts of debts they needed to roll, and were facing both tighter credit conditions and decreased earnings.⁷² Because railroads were considered a vital industry, the government wanted to support them, likely with a bailout. (The railroad industry's circumstances in this period parallel the struggles the auto industry faced in the 2008 financial crisis.)

Rising Protectionism

As is common in severe economic downturns, protectionist and anti-immigrant sentiment began to rise. Politicians blamed some of the weakness on anti-competitive policies by other countries, and posited that higher tariffs would help reverse the slump in manufacturing and agriculture, while restricting immigration would help the economy deal with unemployment.⁷³

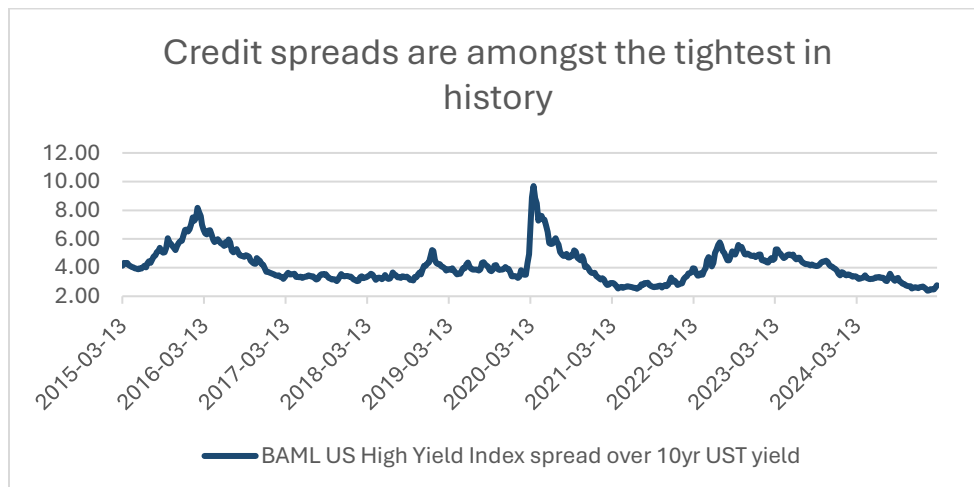


Soon the US faced a wave of retaliatory protectionist policies. The most impactful initial response came from the US's largest trading partner, Canada, which at the time took in 20 percent of American exports. Canadian policy makers increased tariffs on 16 US goods while simultaneously lowering tariffs on imports from the British Empire.⁷⁹ As similar policies piled up in the years that followed, they accelerated the collapse in global trade caused by the economic contraction.

Restricting immigration (both legal and illegal), another common protectionist response to economic weakness, was also pursued by the Hoover administration in 1930. On September 9, Hoover put a ban on immigration, allowing travel only for tourists, students, and working professionals, describing the policy as necessary to deal with unemployment. He later reflected in his memoir his view that, "directly or indirectly all immigrants were a public charge at the moment—either they themselves went on relief as soon as they landed, or if they did get jobs, they forced others onto relief."⁸⁰

Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf>

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Source: FRED St. Louis

US Trade Balance By Country (2023)

Region	Imports	Exports	Balance	Total trade
China	427,525	148,809	-278,716	576,334
European Union	579,548	377,904	-201,644	957,452
Mexico	484,527	323,145	-161,382	807,672
Vietnam	114,432	9,835	-104,597	124,267
Germany	160,088	76,854	-83,234	236,942
All other countries	479,900	396,835	-83,065	876,735
Canada	427,287	354,958	-72,329	782,245
Japan	148,619	76,742	-71,877	225,361
Ireland	82,460	16,953	-65,507	99,413
Korea, South	117,426	66,430	-50,996	183,856
Taiwan	87,791	40,464	-47,327	128,255
Italy	73,341	28,890	-44,451	102,231
India	83,713	40,480	-43,233	124,193
Malaysia	46,222	19,303	-26,919	65,525
Switzerland	52,375	28,133	-24,242	80,508
France	58,176	44,033	-14,143	102,209
Israel	20,898	14,698	-6,200	35,596
Saudi Arabia	15,944	14,225	-1,719	30,169
Singapore	40,860	42,436	1,576	83,296
Brazil	39,089	44,373	5,284	83,462
United Kingdom	65,396	75,089	9,693	140,485
CAFTA-DR	35,458	45,158	9,700	80,616
Belgium	22,922	38,841	15,919	61,763
Australia	16,198	33,767	17,569	49,965
Hong Kong	4,435	28,555	24,120	32,990
Netherlands	38,882	81,373	42,491	120,255
South/ Central America	146,762	200,036	53,274	346,798

Source: US Bureau of economic analysis

The growing debate over economic policy

A key difference to the 1930s is that today, the U.S. government already has deep fiscal deficits (-6%), so do many other Western nations. Therefore, different to the 1930s, austerity is not a mistake, but a necessity. Equally, the U.S. was a major exporter at that time, now the U.S. is a major importer. Many, but not all of these imports are from American companies that opened factories abroad to tap cheap labour, low regulation, and to some degree lower energy costs. Very similar, however, are the political extremes. Canada and the EU did not even negotiate with Trump but slapped or are planning to slap counter-tariffs on the US, despite being much more exposed to a collapse in trade due to trade making up a larger share of their GDP and having strong trade surpluses with the US. Another more concerning analogy is that the Nazis won less than 3% of the votes in 1928 and then surged to 18% in 1930. Whilst the AfD does not appear as extreme as the Nazis, they are a fork in the road and won nearly 21% of the votes in 2025 compared to nearly 13% in 2021 and less than 5% in 2017. On the currency front, so far, we have not seen a USD strength. Crucially, in the 1920s/30s, the world was still on the gold standard, which is not the case today. Whilst the Dollar as a share of global reserves has fallen from around 70% in the late 1990s to less than 60% in recent years⁶, a Dollar shortage could still come if we were to see a market crash.

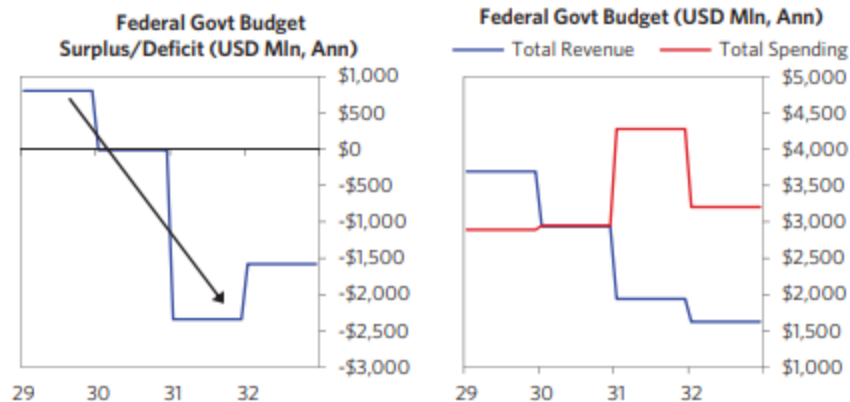
The Growing Debate over Economic Policy

In a depression, the main ways that politics might play a role are by standing in the way of the implementation of sensible economic policies or by leading to extreme policies. These are important risks that can make a depression worse.

⁶ <https://libertystreeteconomics.newyorkfed.org/2022/07/the-u-s-dollars-global-roles-revisiting-where-things-stand/>

Worries over the deficit and a push for austerity are classic responses to the depression phase of a big debt crisis. Austerity seems like the obvious response, but the problem is that one person's spending is another person's income, so when spending is cut, incomes are also cut, with the result that it takes an awful lot of painful spending cuts to make significant reductions in debt/income ratios.

For all the suffering that the Depression had caused, a sense of crisis-driven urgency hadn't yet developed. The economy was still contracting over the first half of 1931, but at a slower rate than the year before. Hoover was certain that indirect relief was meeting the needs of the people and he did not see the need to use additional fiscal supports.⁹⁸ As we'll discuss later, this ultimately tipped the debate, and **the Hoover administration to make the classic rookie mistake of leaning too heavily on austerity and other deflationary levers** relative to more stimulative policies until the pain of doing these things became intolerable.

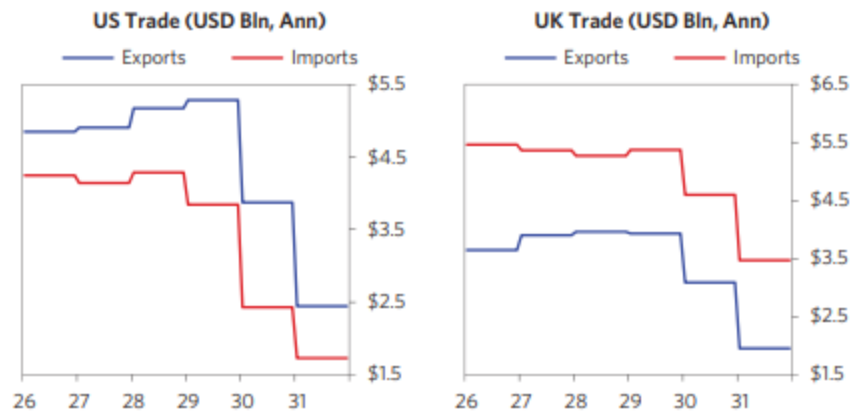


Second Quarter, 1931: The Global Dollar Shortage Causes a Global Debt Crisis and a Strong Dollar

Because dollar-denominated credit was collapsing and a lot of dollar-denominated debt that required dollar credit to service it existed around the world, a global dollar shortage emerged during the first half of 1931. **Classically, there is a squeeze in a reserve currency that is widely lent by foreign financial institutions when there is a collapse of credit creation in that currency.** Although other currencies faced a shortage amid the credit crunch, the dollar was particularly impacted because of its role as a global funding currency. At the same time, falling US imports reduced foreigners' dollar income, intensifying the squeeze. Note that virtually the same dollar squeeze dynamics occurred in the 2008 crisis for the same reasons.

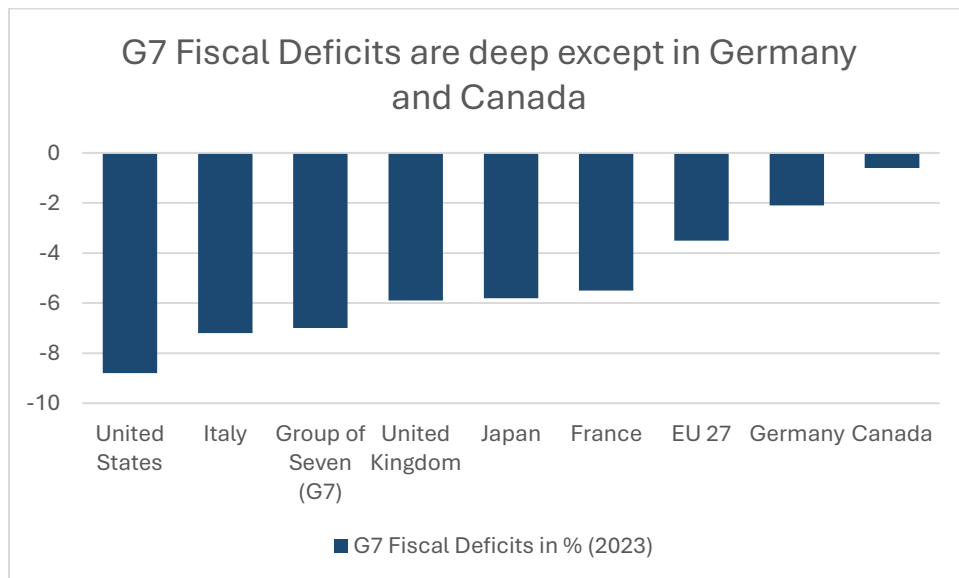
Also, as is typical in such times, economies and wealth disparities fuel the rise of populist and extremist leaders globally, with the ideological fight between the authoritarian left and the authoritarian right. Both the German Communist party and Hitler's Nazi party made big electoral gains as the German economy struggled—with the Nazis going from under 3 percent support in the 1928 Reichstag elections to over 18 percent in September 1930. Meanwhile, the largest party (center left Social Democratic Party) slipped to less than a quarter of Reichstag seats.¹⁰⁰ Together, the far right and far left parties easily had enough parliamentary support to force Germany into an unstable multi-party coalition government. Germany was essentially becoming ungovernable.

The global trade war made economic conditions and the dollar squeeze worse. The collapse in global trade depressed foreigners' dollar income, which in turn made it harder for foreigners to service their dollar debts. As shown below, US imports in dollars had fallen by about 50 percent from 1929 to 1931.

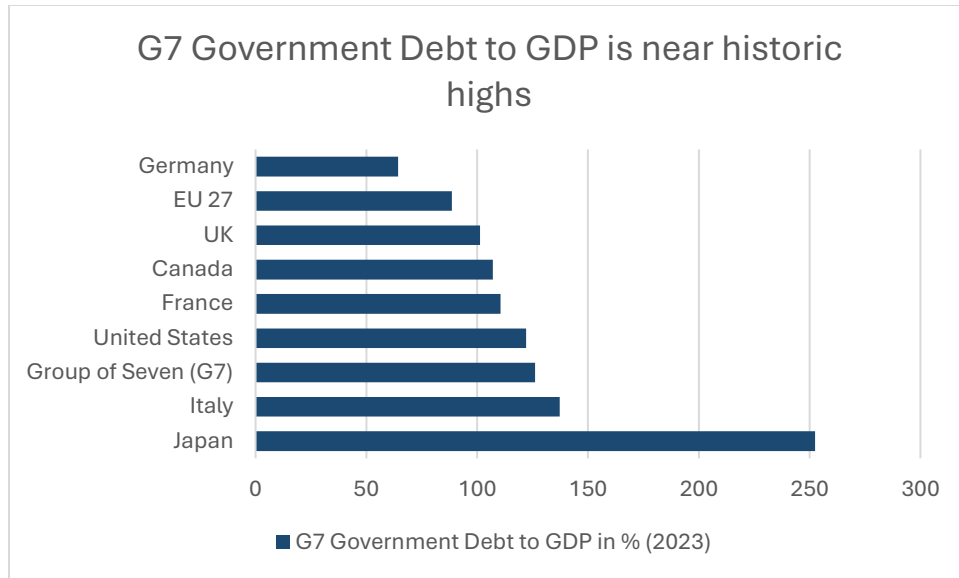


Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf>

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Source: Office for National Statistics



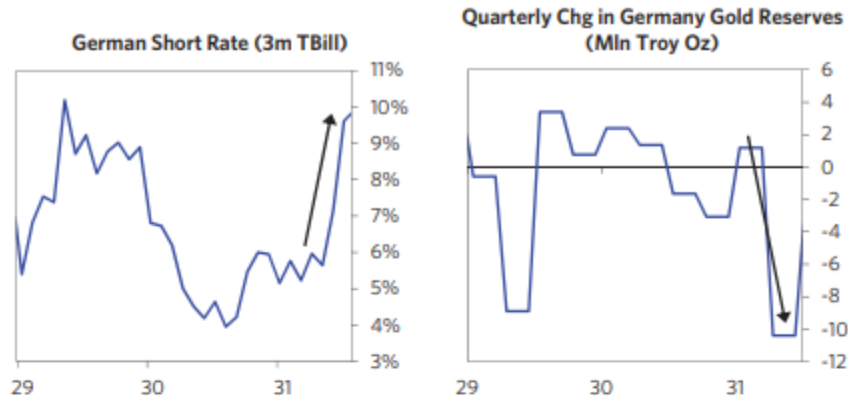
Source: Office for National Statistics

Capital flight

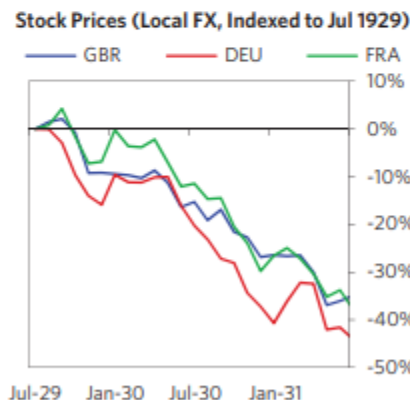
My view was that the beginning of a trade war would mark the peak in interest rates across the curve. Instead, we saw a bear-steepening of the curve in Europe, with UK and German 30yr government bonds selling off – mostly as a result of Germany’s €500bn infrastructure and defense package announcement. Nevertheless, higher yields are not something that I thought would happen. As the world is no longer on the gold standard, central banks will need to move in line with the U.S.’s Fed to avoid a currency depreciation. As higher tariffs could mean higher inflation, interest rates could stay higher than longer. As we had deeply negative bond yields in Europe not so long ago, now, I think we could overshoot on the other side of the spectrum with higher bond yields for long-end government bonds in Europe. Another more justifiable and related reason for the selloff in long-end bond yields is the ever-growing fiscal deficit as a result of higher interest rates. Druckenmiller is right when he said Yellen’s short term bond issuance was the “biggest blunder in Treasury history”⁷, and the growing fiscal deficit is a consequence of that, as all these bills and bonds are rolling over into higher rates. It could also be a reason why the equities selloff is gradual rather than deep and fast as in 1929, because there is no change in asset allocation from equities into government bonds.

⁷ <https://fortune.com/2023/10/31/stanley-druckenmiller-janet-yellen-debt-mistake-interest-rates-bonds/>

Germany was facing capital flight. The country's gold and foreign exchange reserves fell by a third in June, to the lowest level in five years. To stem the outflow of capital, the bank tightened monetary policy, increasing its discount rate to 15 percent and its collateralized loan rate to 20 percent.¹⁰⁸

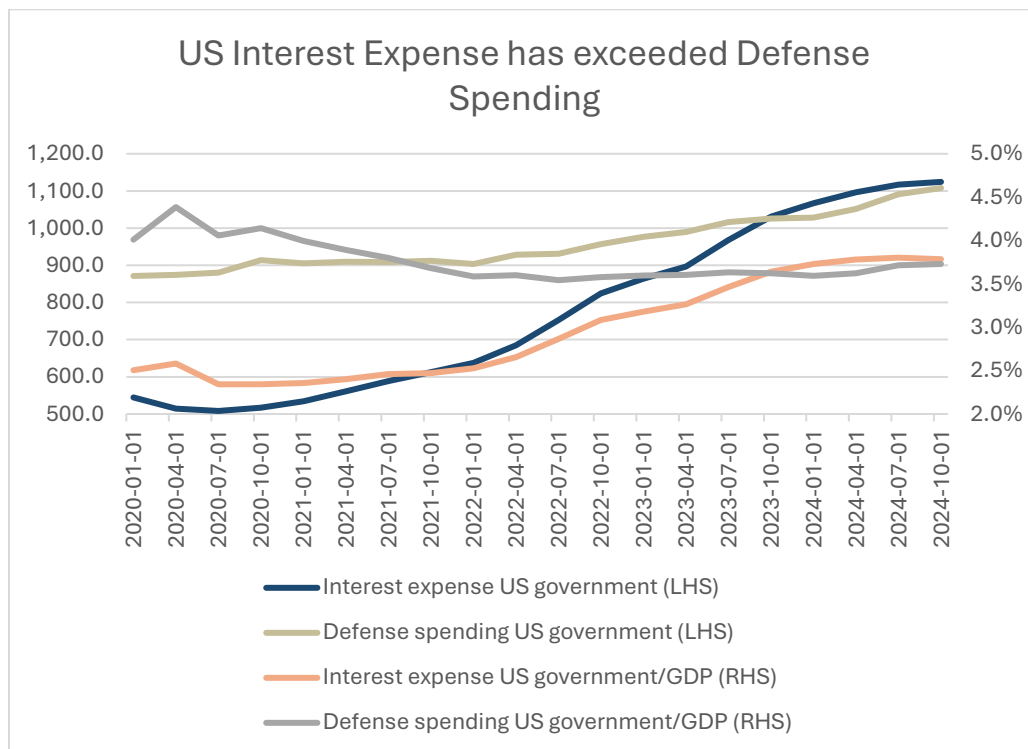
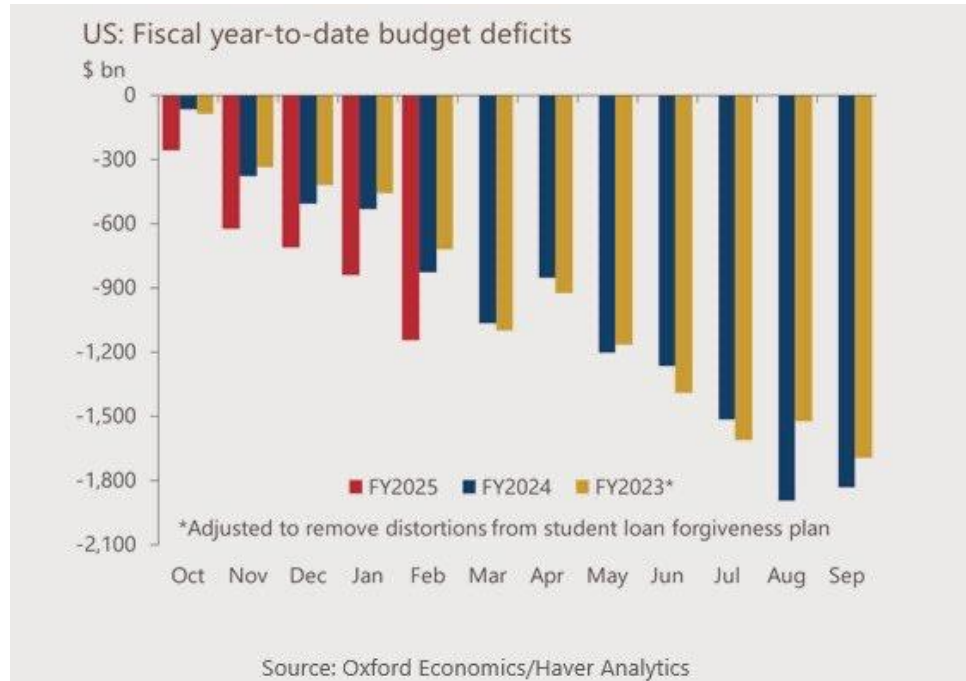


Investors took heavy losses as more and more bank failures hurt the stock market. In May, German stocks fell 14.2 percent, British stocks were down 9.8 percent and French stocks sold off 6.9 percent. In the US, the Dow sold off 15 percent in May following a 12.3 percent decline in April. The world was imploding.



Political turmoil in Europe led funds to flow into the US, which increased demand for US Treasuries and pushed down interest rates. In an attempt to lessen the demand for dollars, the Federal Reserve reduced its discount rate to 1.5 percent.

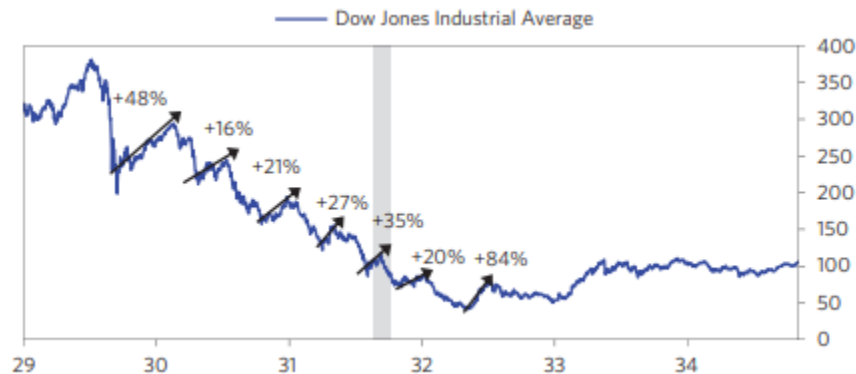
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Source: FRED St. Louis

Capital destruction

One of my favourite charts from the 1929-33 period is the one below. Whilst the market was in a downturn, there were equally strong movements to the upside. Another chart below shows the strongest one day positive % returns of the Nasdaq 100 between 1990 and 2021. Most of these high one-day returns occurred during a downturn. The 2018 selloff, when Trump first imposed tariffs, was also very long-lasting and had somewhat similar characteristics – very important to keep in mind.



Source: <https://www.bridgewater.com/big-debt-crises/principles-for-navigating-big-debt-crises-by-ray-dalio.pdf> p.

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Ranked Nasdaq 100 One Day % Returns

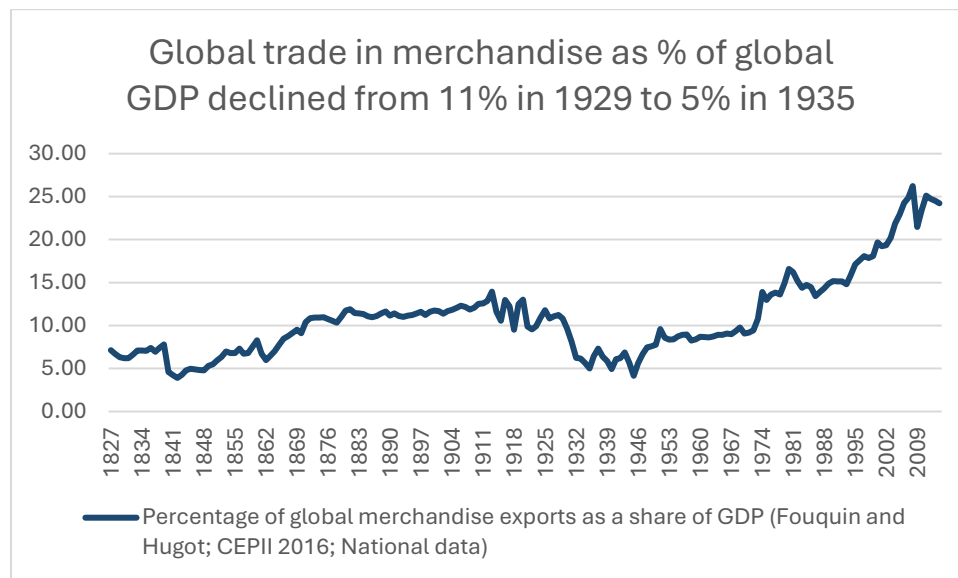
Period: from 1990 to end of 2021

Rank	Date	One-day % Return
1	2001-01-03	18.77
2	2008-10-13	12.58
3	2000-12-05	11.68
4	2008-10-28	10.92
5	2001-04-05	10.82
6	2002-05-08	10.62
7	2000-04-17	10.10
8	2000-05-30	10.08
9	2020-03-13	10.07
10	2001-04-18	9.53
11	2000-12-22	9.50
12	2000-10-13	9.10
13	2000-10-19	8.40
14	2000-04-25	7.99
15	2001-04-10	7.88
16	2020-03-24	7.81
17	2001-10-03	7.77
18	2020-04-06	7.35
19	2000-11-14	7.15
20	1997-10-28	6.95

Source: The Macro Tourist

Conclusion

In conclusion, the peak of global merchandise trade as % of global GDP was reached at 26.2% in 2008 and in all goods and services at 63% in 2022. Is a reversal possible? Absolutely. Will it turn out to be like 1929-33? Maybe. The policies we have had in place over the last few decades appear to have benefitted everyone, but more so those with the largest populations, the least regulation, the dirtiest energy, the lowest taxes and the cheapest labour. I.e. Non-allied countries. During these 3-4 decades of hyperglobalisation, Western nations have seen their government debt climb continuously. Germany, with their “schwarze Null” policy went against the trend, benefitted from negative interest rates, but in combination with a poor energy policy, the country has lost their manufacturing hub and even lost control of their borders, excessively increasing their low skilled workforce. Therefore, there needs to be some kind of reset done, which is the reason of political extremes. Trump’s tariffs might turn out to be the necessary evil, the fork in the road. But what it means to other nations could lead to more extremes in the future, just as it did in the 1930s.



Source: OurWorldinData.org



Source: World Bank Group



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