Note: The following is a redacted version of the original report published May 15, 2025 [27 pgs].

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TOP of MIND

FED INDEPENDENCE: HOW CONCERNING?

President Trump's public criticism of the Fed and, more importantly, his attempts to turn words into action by setting in motion a challenge to the landmark ruling that has prevented presidents from removing officials of independent agencies without cause have raised serious concerns about Fed independence. We talk to former Fed Vice Chair Richard Clarida, the Hoover Institution's John Cochrane, and GS' Jan Hatzius and Joseph Briggs, who explain what Fed independence means and argue that it's vital to better economic outcomes, particularly lower inflation. We then rank the threats to Fed independence, with Clarida and Hatzius most worried about the potential removal of Fed officials—which Wharton's Peter Conti-Brown opines on the history and legality of—while Cochrane argues that the Fed has become too independent in some ways. Finally, we assess what a less independent Fed could mean for assets, with GS strategists arguing that it could dent the appeal of the Dollar and USTs, but may make gold shine even brighter.

"When I was Vice Chair, I thought the odds of the Supreme Court overturning the relevant court case that would make Fed independence null and void was essentially zero, and I can't say the same today.

- Richard Clarida

The Fed *should* bend to political pressure every now and then. We live in a democracy. We do not give technocrats perpetual power to follow their whims.

- John Cochrane

The Fed is never the underdog in political fights for its independence, and the legal and normative constraints to political interference remain intact.

- Peter Conti-Brown"

WHAT'S INSIDE

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Macro news and views

We provide a brief snapshot on the most important economies for the global markets

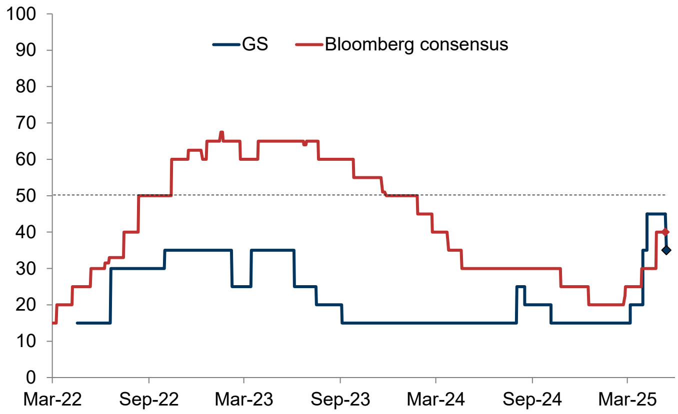
US

Latest GS proprietary datapoints/major changes in views

- We revised our US growth, unemployment rate, and recession forecasts following the US-China trade deal, and now forecast 2025 real GDP growth of 1.0% (Q4/Q4), a YE unemployment rate of 4.5%, and 35% odds of a recession over the next 12 months.
- We now expect the Fed to begin a series of three rate cuts in December and cut at every other meeting (vs. consecutive cuts starting in July before).
- We lowered our end-2025 US core PCE inflation forecast to 3.6% (from 3.8%) to reflect less trade redirection given the larger-than-expected tariff rollbacks in the US-China deal.

Fading US recession risk on trade de-escalation

US 12-month ahead recession probability, %



Source: Bloomberg, Goldman Sachs GIR.

Japan

Latest GS proprietary datapoints/major changes in views

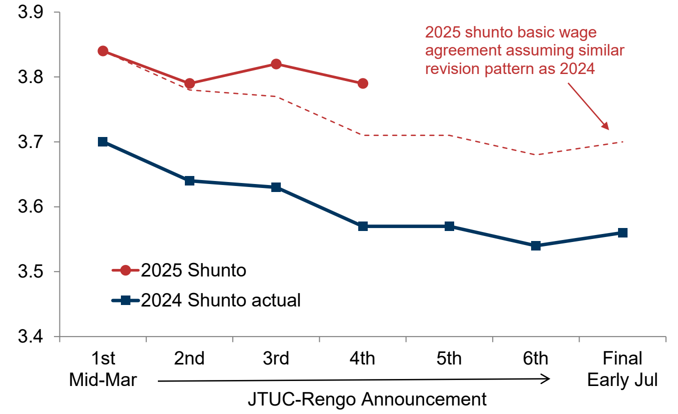
- We recently pushed back our expectation for the next BoJ rate hike from July 2025 to January 2026 after policymakers delayed their timing for achieving 2% inflation amid significant trade policy uncertainty, though we maintain our terminal policy rate forecast of 1.5%, partly as wage growth and inflation expectations remain encouraging.

Datapoints/trends we're focused on

- BoJ balance sheet policy; we expect the BoJ to maintain the current pace of JGB tapering until March 2026 and see a high chance of a slower pace of tapering starting in April.
- Japanese business sentiment, which remains favorable.

Japan: wage growth still strengthening

Aggregate *shunto* results, % base pay rise



Source: Bloomberg, Goldman Sachs GIR.

Europe

Latest GS proprietary datapoints/major changes in views

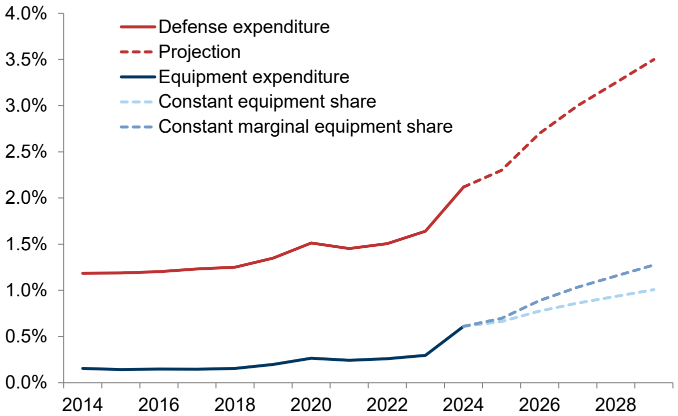
- We raised our 2025/26 Euro area real GDP forecasts to 0.9%/1.1% (from 0.8%/1.0%, annual averages) and raised our 4Q25/26 core inflation forecasts to 2.1%/1.8% (from 2.0%/1.7%) and now expect the ECB to cut to 1.75% in July (vs. 1.5% in Sept before) following the US-China deal.
- We now expect 2025/26 UK growth of 1.2%/1.1% (vs. 1.0%/1.0% before) given better Q1 data, firmer growth abroad, and easier financial conditions, and now expect the BoE to cut to 3% in Feb 2026 (vs. 2.75% in Mar before).

Datapoints/trends we're focused on

- German defense spending, which we expect to rise ahead, but the impact on manufacturing will likely be initially limited.

Germany: bolstering its defenses

German defense expenditure relative to GDP, %



Source: NATO, Haver Analytics, Goldman Sachs GIR.

Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

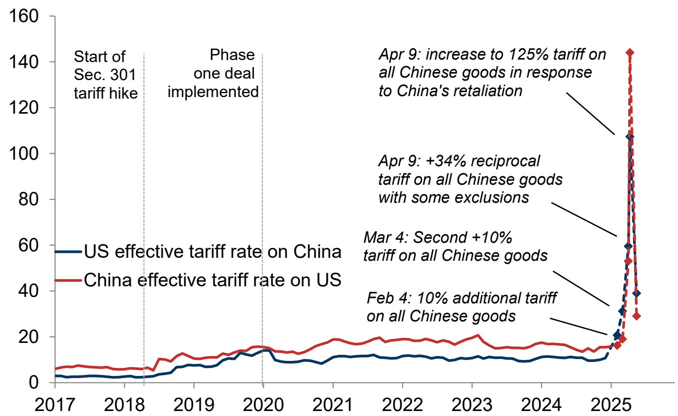
- We recently raised our 2025/26 China real GDP growth forecasts to 4.6%/3.8% (from 4.0%/3.5%) and now expect only one 10bp policy rate cut for the rest of 2025 (vs. two before) following the larger-than-expected US tariff rollback.
- We recently lowered our 2025/26 China headline PPI inflation forecasts to -2.1%/-0.6% (from -1.6%/0.5%, yoy) given a weak April PPI print and falling commodity prices.
- We raised our 2025 Mexico real GDP growth forecast to 0% (from -0.5%) to reflect stronger US growth and firmer Q1 GDP.

Datapoints/trends we're focused on

- China's manufacturing sector, which remains the world's largest and continues to drive China's growth.

A bilateral tariff retreat

US and China effective tariff rates, %



Source: USTR, USITC, Goldman Sachs GIR.

Fed independence: how concerning?

President Trump's public criticism of the Fed isn't new. But this time around the Administration is preparing to turn its words (see pg. 8) into action, most stridently by setting in motion a challenge to the landmark 1935 Humphrey's Executor ruling that has prevented presidents from removing officials of independent agencies without "cause". So, how concerned should we be today about the threat to Fed independence—and the implications for the economy and markets?

We first ask three Fed watchers what Fed independence actually means and why it's so important: former Fed Vice Chair Richard Clarida, the Hoover Institution's John Cochrane, and GS' Jan Hatzius. Clarida explains that the Fed has "instrument independence"—the freedom to use its toolkit without political interference—but not "goal independence", as he and Cochrane emphasize that Congress created the Fed in 1913 to achieve its own policy goals, which today are maintaining maximum employment and price stability. Cochrane says this narrow mandate, together with a relatively small toolkit consisting primarily of control over interest rates, means that the Fed has "*limited* independence".

But Clarida, Hatzius, and Cochrane generally agree that such independence is nonetheless vital to produce better economic outcomes, particularly lower inflation, with Cochrane warning that a scenario in which politicians can tell the Fed what to do would risk plunging the US economy back into 1970s-style inflation. Indeed, GS senior global economist Joseph Briggs sifts through the evidence from global central banks to conclude that a shift toward a less independent Fed would likely result in higher inflation, higher long-end rates, lower equity prices, and a weaker currency, with the latter two impacts more pronounced in global instances when central bank officials were removed.

So, how likely is such a scenario, which Clarida warns "would end Fed independence as we know it"? Peter Conti-Brown, a legal scholar and Fed historian, notes that a president has never in history been able to remove a Fed chair without the chairperson acquiescing. But he warns that the courts overturning the Humphrey's Executor for-cause removal protection, which several subsequent cases have upheld (see pg. 13), could change that and usher in "open season on appointees across government." That said, he and Clarida note that even if this protection is overturned, Fed officials could be exempted given the Fed's arguably unique position among the independent agencies.

But even if President Trump doesn't gain the ability to fire Fed officials, he could appoint a political ally as chair upon the end of Chair Powell's term in just a year's time. Hatzius and Clarida are somewhat less concerned about the prospect of an allyship appointment—which Conti-Brown notes would be unusual but not unprecedented in the history of the Fed—given the rigorous Senate confirmation process for Fed officials as well as the committee structure of the Federal Open Market Committee (FOMC) in which each of the 12 voting members—including the chair—has only one vote for all monetary policy decisions, with all decisions made by majority vote. While Clarida and Conti-Brown concede that Fed chairs tend to be extremely influential, with Conti-Brown pointing out that the Fed chair "virtually never votes in the minority", they believe that the broader FOMC probably wouldn't hesitate to express dissent if a new chair tried to pursue policy inconsistent with the Fed's dual mandate.

Lastly, least concerning of all the threats to Fed independence, according to Hatzius and Clarida, are Trump's demands for rate cuts. While Clarida notes that attempts to publicly "talk down" interest rates are unusual in the context of the last few decades, they aren't unusual in Fed history, with Hatzius noting that past demands for easier monetary policy have ultimately had limited impact on policy outcomes, which he expects will remain the case over the near term. So, while serious risks to Fed independence exist today, Trump talk isn't one of them.

And Cochrane goes further, making the case that the Fed has become *too* independent in some ways by wading into areas outside of its limited remit, such as choosing to subsize housing by buying large amounts of mortgage-backed securities and dipping its toes into climate change and inequality. This, he argues, warrants a strategic reset for the Fed to realign it with the goals that Congress and, ultimately, voters intended for it. Clarida and Conti-Brown don't agree, with the former arguing that the Fed didn't engage in "mission creep" during his time there and the latter that the Fed going beyond the confines of its original mandate is necessary given how much the world has changed, but that such actions shouldn't cross the line into advocacy on inherently political issues.

All that said, given the risk of reduced Fed independence ahead, we then dig deeper into the potential asset implications. GS senior FX strategist Michael Cahill makes the case that a less independent Fed could result in more frequent currency intervention, an erosion of the Dollar's unique funding role as the Fed potentially pulls back on the crucial support it provides during periods of financial stress, and an undermining of the Dollar's long-held reserve currency status, which would all weigh on the Dollar's appeal.

And GS Head of US Rates Strategy William Marshall argues that a less independent Fed could also reduce the appeal of US Treasuries among foreign investors, which would be consequential given that such investors own a significant share of the Treasury market. He therefore thinks that risk premia may need to rise to motivate foreign investors to continue demanding Treasuries in such a scenario, which could entail another leg lower in US bond prices.

But one asset that could benefit from a less independent central bank is gold, according to GS commodities strategist Lina Thomas. She explains that gold's functionality as a store of value that doesn't rely on institutional trust has benefitted it in past periods of weak institutional credibility. So, should fears about a potentially less independent Fed intensify, Thomas argues that gold prices—which have recently taken a breather from their recent meteoric rise on reduced tariff worries—could notch yet another leg higher.

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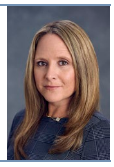


Interview with Richard Clarida

Richard Clarida served as Vice Chair of the Federal Reserve Board of Governors (2018-22). He is currently Global Economic Advisor at PIMCO and Professor of Economics and International Affairs at Columbia University. Below, he argues that the Fed's instrument independence is vital, and any Supreme Court decision that would effectively overturn that independence would be consequential for the real economy and financial markets.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.

Allison Nathan: What does Fed "independence" really mean?

Richard Clarida: The Fed has what's known as "instrument independence", which means that the Fed can raise or lower interest rates or buy and sell Treasuries without political interference. This independence derives from several statutory protections that include, one, appointing Federal Reserve governors for 14-year terms and on a staggered basis—once every two years—so that it would be difficult for any one president to appoint an entire board. And two, stipulating that governors can only be removed for cause—interpreted by the Supreme Court as inefficiency, neglect, or malfeasance in office—to ensure that the president could not fire Fed officials solely based on policy disagreements, a protection the Supreme Court upheld in 1935 via the Humphrey's Executor case. So, both statutory language and processes as well as Supreme Court precedent help insulate the Fed from the political process.

But the Fed does not have "goal independence". Rather, Congress created the Fed to achieve congressional policy goals, which have evolved over time. For example, Congress originally tasked the Fed with providing an elastic currency to facilitate bank intermediation. But, in recognition of the important role the Fed had to play in economic performance, in 1977 Congress formalized in statute the Fed's current mandates of maximum employment and price stability.

Allison Nathan: Why is instrument independence vital?

Richard Clarida: It's vital because history shows that central banks that are shielded from the political process produce better economic outcomes—and especially lower inflation—than central banks that are more responsive to political pressure. Independent central banks produce lower inflation without any trade-off in terms of excessive volatility of GDP or employment. So, the data suggests that an operationally independent central bank is the closest thing to a free lunch in terms of economic policy.

Allison Nathan: Your term as Vice Chair of the Fed spanned President Trump's first term and President Biden's term. What was it like to be a sitting Fed official during the first Trump Administration, and did your experience change at all during the Biden Administration?

Richard Clarida: President Trump made no secret that he was unhappy with the Fed during the first part of my Vice Chair term in 2018/19; notably, the Administration was critical of the Fed in the fall of 2018, when we were hiking rates, as well as in 2019 when we were cutting them. That public criticism stood out compared with the recent practice of presidents refraining from publicly criticizing the Fed. But such presidential criticism was not anomalous when one considers the full history of the Fed, in which instances of US presidents criticizing and pressuring the Fed were relatively common. For example, President Truman publicly pressured the Fed to not raise rates during the Korean War; President Johnson did likewise in public and in private meetings with the Fed chair during the Great Society and Vietnam War period; White House tapes of private Oval Office meetings revealed that President Nixon successfully pressured the Fed to keep policy easy to aid his 1972 reelection bid; and while President Reagan was more discreet publicly, memoirs show that his senior advisors put substantial pressure on Paul Volcker. A different norm only began to evolve during Bill Clinton's presidency, when Robert Rubin, Clinton's first National Economic Council director, reportedly initiated a best practice of avoiding public criticism of the Fed. So, only since 1990 has this been the norm.

That said, perhaps surprisingly, there was not much discontinuity in terms of White House criticism of the Fed between the last year of President Trump's first term and the first year of President Biden's term because the pandemic crisis required the Fed to act boldly in support of the economy, about which the Trump Administration made little public commentary, and, when they did, it was often complimentary.

Allison Nathan: Did Administration pressure in Trump 1.0 have any bearing on the FOMC's decision-making?

Richard Clarida: Simply and definitively, no. The FOMC remained committed to its dual mandate, as the publicly available transcripts of the meetings during that period reflect.

Allison Nathan: Do you observe any notable differences between the Trump 1.0 vs. 2.0 approach toward the Fed?

Richard Clarida: President Trump has remained publicly critical of the Fed in his second term, and the White House recently indicated that it was continuing to study whether the President could remove Powell as Fed chair. But the key difference is that the Justice Department in Trump 2.0 is taking the position that the 1935 Supreme Court decision that protects the Fed as an independent agency should be overturned because it represents an unconstitutional constraint on the executive authority of the president. The Administration, in two current court cases—Slaughter v. Trump, which stemmed from Trump's attempts to fire two FTC commissioners, and Wilcox v. Trump, the result of Trump's dismissal of a member of the National Labor Relations Board—makes this claim. The Administration is also taking the position that regulations issued by independent regulatory agencies are subject to White House review, for which they have carved out an exemption for Fed monetary policy decisions but not for Fed regulatory and supervisory responsibilities. So, this time the Administration is taking concrete steps to act on its Fed criticism if it so chooses.

Allison Nathan: How concerning would it be if the court does not uphold the "for cause" removal protection?

Richard Clarida: If the Supreme Court were to rule that Humphrey's Executor was inconsistent with the Constitution and overturn it, thereby invalidating the "for cause" removal protection, that would end Fed independence as we know it unless there was a specific exception granted to the Fed.

It's worth noting that central banks in some other countries do not have this particular protection but still act independently, so it would not be impossible for the Fed to remain independent in this scenario, but independence would have to be reestablished in a different way. Several central banks, for example, have established independence through a public agreement between the Finance Ministry and themselves. But such a Supreme Court decision would undoubtedly introduce huge uncertainty into financial markets and probably lead to expectations of higher inflation, as asset prices and capital flows are intimately related to investors' assumptions that advanced economy central banks are reasonably independent, and that price stability is a reasonable long-term forecast. International financial markets would look substantially different if the long-run rate of inflation was subject to the whims of elected officials. So, such a move could be very consequential.

Allison Nathan: The other major concern is that President Trump appoints an ally as Fed chair when Chair Powell's term ends next year. How concerning would that be?

Richard Clarida: That would not be as concerning as one might initially assume. The main reason is that the Fed chair is not an autocrat; monetary policy is set by the FOMC, which by statute is comprised of seven governors that are nominated by the president and then confirmed by the Senate, and five of the 12 Reserve Bank presidents. Each of these FOMC voting members—including the chair—has only one vote for all monetary policy decisions, and all decisions are made by majority vote. So, if a new chair were to attempt to pursue a policy demonstrably inconsistent with the Fed's dual mandate, he or she could be outvoted. Now, by tradition and in practice, Fed chairs are very influential; I am hard-pressed to think of an instance when a Fed chair was outvoted on an FOMC decision, and historical examples exist of FOMC members being seduced by bad policy, as occurred in the 1970s. But the committee structure of the Fed's decision-making body acts as an important check on the power of any one individual in setting policy.

Other checks and balances also exist. As I mentioned, President Trump's nominee for Fed chair will be subject to Senate confirmation, which is not a rubber stamp. Although Republican Senators will be inclined to support the President's nomination, Senators take Fed chair confirmations very seriously. So, I am confident that whoever makes it through the gauntlet of Senate confirmation will be someone who can be entrusted with achieving the Fed's assigned goals and preserving the independence necessary to do so.

Lastly, perhaps one of the most compelling checks is that even a small amount of armchair history reading would lead any Fed chair or central bank governor to realize that they will be judged first and foremost by their success in achieving the Fed's price stability mandate; history would not be kind to them if they fail.

Allison Nathan: With all that in mind, how concerned are you about Fed independence today?

Richard Clarida: Let me put it this way: when I was Vice Chair, I thought the odds of the Supreme Court overturning the relevant court case that would make Fed independence null and void was essentially zero, and I can't say the same today. So, I am more concerned now. But I am comforted by the numerous checks and balances built into the process. So, I am more concerned than before but not overly so.

Allison Nathan: Some people argue that the Fed has become too independent in the sense that it has waded into areas inconsistent with its remit. What's your view?

Richard Clarida: I don't agree. The "mission creep" criticism focuses on three issues. The first relates to Fed's activities in the domain of climate change which, per se, is clearly not in the Fed's statutory mandate. But during my tenure as Vice Chair, the Fed only focused on climate in its supervisory capacity, namely, supervising financial institutions substantially exposed to potential losses associated climate change, which to me did not indicate "mission creep".

A second area of criticism revolves around quantitative easing given that the Fed ballooned its balance sheet during and after the Global Financial Crisis and during and after the pandemic collapse and expanded its asset purchases beyond Treasuries to mortgage-backed securities (MBS). Large-scale asset purchases in and of themselves don't represent mission creep, largely because after conservatorship, the Fed viewed MBS and Treasuries as essentially equivalent in terms of their default characteristics and were clearly authorized to purchase them under long-standing authority. What I do acknowledge is that, as a result of the purchases and the fact that they have been only partially unwound, the Fed's footprint in the Treasury and even more so the MBS market has expanded enormously. And, certainly, when the Fed buys MBS, it is supporting a particular segment of the financial market. So, I would distinguish between decisions to keep the balance sheet large from decisions to use asset purchases as a stabilization tool.

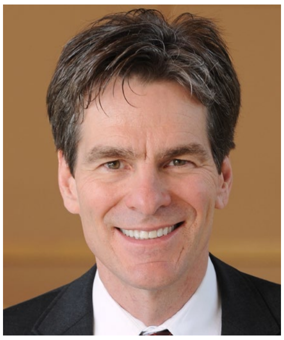
The third area of criticism involves the Fed's supervisory and regulatory responsibilities, and here one needs to be careful. The Fed's regulation of bank holding companies (BHC) and state-chartered members of the Federal Reserve System, which has come under scrutiny, is directly in statute, so cannot be called mission creep under any interpretation.

All told, I did not perceive that the Fed was at risk of mission creep during my time there. That said, the Administration is clearly pursuing a reset of the Fed's autonomy in regulation and supervision. So, if a reset does happen, it will be because that is the direction of political and, ultimately, judicial travel.

Interview with John Cochrane

John Cochrane is Rose-Marie and Jack Anderson Senior Fellow of the Hoover Institution at Stanford University and author of *The Fiscal Theory of the Price Level.* Below, he argues that the Fed should, at times, bend to political pressure given that it is accountable to Congress and, ultimately, voters, but that politicians telling the Fed what to do would be damaging.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.



Jenny Grimberg: Are concerns about central bank independence warranted?

John Cochrane: Central bank independence is obviously in focus today as President Trump has expressed a desire for lower interest rates and to fire Fed Chair Powell. But the Fed's independence is not absolute. Fed independence isn't written in the Bible as the 11th Commandment. Independence was invented by Congress to further Congress' goals of price stability and maximum employment, and to insulate the Fed from political pressure that Congress knew it and the Administration might be tempted to place from time to time. But Congress also limited the Fed's toolkit, primarily consisting of control over interest rates, to fulfill this limited mandate. It's interesting that the toolkit isn't the most effective in achieving the Fed's dual mandate. Giving people money and taking it away—taxing and spending—is the most effective way to control inflation, and adjusting the structure of social programs, unemployment insurance, labor laws, and education is the best way to impact employment. But the Fed is denied such tools. Why? Because they are intensely political and so are rightly the domain of elected officials rather than unelected technocrats. So, the Fed has *limited* independence.

But the terms of that deal merit rethinking. The world has changed. When the Fed's independence was established, everyone assumed that the Fed had complete control over inflation—changes in the money supply were thought to be the primary driver of inflation as well as recessions. We've since learned that isn't the case. The last two recessions clearly weren't the result of the Fed mishandling the money supply. And the pandemic-era inflation surge was the result of the Treasury's fiscal blowout, though the Fed certainly abetted it with its decision to print money. And now higher interest rates have a huge effect on the budget. So, the Fed doesn't have one apolitical tool—the money supply—tightly linked to one goal—inflation. That makes it harder to separate the monetary and fiscal authorities.

> "Fed independence isn't written in the Bible as the 11th Commandment. Independence was invented by Congress to further Congress' goals of price stability and maximum employment."

Jenny Grimberg: So, there should be coordination between political agencies and the central bank?

John Cochrane: Yes, in some cases. For example, the fiscal and monetary authorities should cooperate on the maturity structure of US debt, which is important for borrowing costs and debt sustainability. The Treasury issues long-maturity debt because it wants to protect itself against interest rate increases. The Fed, in its quantitative easing era, bought this long-term debt and issued overnight debt, which essentially threw away the insurance the Treasury had bought. Now, the Fed claims to have nothing to do with government deficits, while Treasury claims to have nothing to do with the Fed. But the government as a whole, through this significant shortening of the maturity structure, has created a situation in which any increase in interest rates puts the US in a precarious fiscal position. So, the Treasury and the Fed should absolutely coordinate on this front. We need a new accord specifying who is in charge of the maturity structure of government debt.

Similarly, the Fed says it doesn't worry about exchange rates. But the Trump Administration has expressed a desire for a weaker Dollar, and interest rates obviously play a key role in exchange rates. So, putting the Treasury in charge of exchange rates and the Fed in charge of interest rates also leads to crossed purposes. The same logic applies to price stability, which is ultimately only achievable when fiscal and monetary policy work together. If the Fed wants to raise rates, Congress and the Treasury must agree to pay the higher interest costs on the debt. That calls for better communication between the fiscal authorities and the Fed.

Jenny Grimberg: But should politicians be able to tell the Fed what to do?

John Cochrane: No, and certainly not in a day-to-day "lower rates at the next meeting" sort of way. That's exactly the kind of independence Congress wisely granted. If the Fed were to succumb to political pressure today and lower interest rates when macro conditions don't warrant them, it would be time to get out your bell bottom jeans and wide ties because it would be the 1970s all over again.

Today, the Fed faces a difficult situation. The Administration's tariffs are setting the stage for weaker growth and higher prices, so the Fed will eventually have to choose whether to fight inflation or unemployment. If it raises interest rates to fight inflation, it risks a severe recession, a Silicon Valley Bank-style financial crisis, and a debt crisis. If it lowers interest rates to fight unemployment, it risks significant inflation. This is just the situation that tactical independence was created for. Of course, anyone who loudly proclaims that they will do whatever they think the economic situation calls for, regardless of the political consequences, probably won't get the job of Fed chair. So, the next chair will need to be very politically savvy.

Jenny Grimberg: Some people have argued that the Fed has brought political pressure upon itself by wading into matters outside of its limited remit. Do you agree that the Fed has overreached?

John Cochrane: Yes. The Fed plays a crucial role in financial regulation, which is political territory. It has also bought trillions of dollars of mortgage-backed securities to lower mortgage rates, which is a fundamentally political decision because, by doing so, the Fed chose to subsidize housing versus something else. The Fed also steered into political waters by dipping its toes into the issues of climate change and inequality. So, it's understandable that people who don't like those decisions are dissatisfied with the Fed and calling for it to be reined in.

Jenny Grimberg: But did the Fed have any choice but to take some of these actions, particularly those they took in the aftermath of recent crises?

John Cochrane: There is never no choice, but there are natural choices. A crisis is really a run, and once a run starts, it's very hard to stop except by bailing out the running creditors. So, during the Global Financial Crisis, the Fed rightly felt that it had to do *something*. We can debate the choices. But as a result, the financial system has come to expect bailouts every time something goes wrong. Sure enough, the Fed made good on that again after Silicon Valley Bank went under. The problem is that we have not adequately cleaned up the financial system so runs don't happen again, needing more bailouts, and the expectation of bailouts makes runs more likely.

I don't believe that central bankers had malicious intentions in the actions they took, in times of crisis or otherwise. And in the current political environment, admitting mistakes is incredibly hard. So, even though the Fed has experienced three massive institutional failures over the course of the last two decades—the Global Financial Crisis, the pandemic-era inflation surge, and Silicon Valley Bank's eruption—it has to say that it was right. The government as a whole has a responsibility to clean up. After the financial crisis, it tried with the Dodd-Frank Act. But that clearly didn't work. Once the memory of the crisis faded, the will to reform faded too and we're back to risk-on, lots of leverage, and expected bailouts.

We need to move to a much simpler regulatory system based on narrowly-backed deposits and equity financing for all risk-taking activity. Independent as it is, the Fed is not powerful enough to force through that kind of reform on its own. Such reform requires congressional action. Unfortunately, right now neither Congress nor the Administration is in much of a mood to turn off the big banks' subsidies and protections.

Jenny Grimberg: So, what should the construct of the Fed look like going forward?

John Cochrane: The Fed should undergo an internal reform and recalibration to realign itself with its congressional mandate. Within that, the Fed should also think hard about the meaning of price stability. Is a 2% inflation target on a forward-looking basis where all mistakes are forgotten appropriate, or should price stability mean price stability—aiming for a stable level of prices over the long run? Congress presumably meant the latter. These are the types of foundational questions Fed officials should be asking themselves. Congress might ask too just how "price stability" morphed to bring inflation back to 2% and forget mistakes. This rethink should extend to the Fed's role in financial regulation, where it has greatly overreached by, just to give one example, preventing the creation of narrow banks. Such rethink and reform is a tough ask for an institution that regards itself as successful. But it's crucial.

"The Fed *should* bend to political pressure every now and then. We live in a democracy. We do not give technocrats perpetual power to follow their whims."

Jenny Grimberg: How concerned are you that such a strategic reset, however necessary, could be perceived as the Fed succumbing to political pressure?

John Cochrane: The Fed *should* bend to political pressure every now and then. We live in a democracy. We do not give technocrats perpetual power to follow their whims. As we've discussed, the Fed is a creature of our government, accountable to Congress. And if the Fed wanders off into areas it has no business being in, or decides to interpret its mandate in ways that voters dislike—tolerating a cumulative 20% inflation rate so long as it's "transitory," for example—and voters express their dissatisfaction with those actions through their elected officials, the Fed needs to change its behavior. At the end of the day, elections have consequences, and the principle that the Fed must be independent shouldn't be used as an excuse to ignore the will of the American public.

Jenny Grimberg: Do you believe there is appetite for a limited central bank, as it was originally envisioned?

John Cochrane: Yes. Limited independence, with limited powers is a good recipe. Some want stronger limitations. Milton Friedman wanted the Fed to stick to a money growth rule that would see the Fed increase the money supply at a fixed rate every year regardless of economic conditions. John Taylor wanted the Fed to follow his namesake rule and get out of the business of making judgements about the economic outlook. Many people today think the US should return to the gold standard, which would be a terrible idea, but just speaks to how uncomfortable people are with the idea that government officials should set interest rates and the value of the Dollar. So, there is appetite for more limited monetary policy authority, but no clear vision of how exactly that would work.

It's also important to think about financial regulation when we think about the Fed. President Trump has said that he doesn't understand why setting interest rates is a full-time job—just go to DC, move rates up or down, and go home. He had a point, but a large part of the Fed's work has to do with financial regulation. The right boundary between political responsiveness and independence there is worth exploring.

Trump 2.0 on the Fed

January 29, 2025:
Fed leaves interest rates unchanged

March 19, 2025:
Fed leaves interest rates unchanged

April 4, 2025:
"We have stressed that it will be very difficult to assess the likely economic effects of higher tariffs until there is greater certainty about the details... While uncertainty remains elevated, it is now becoming clear that the tariff increases will be significantly larger than expected. The same is likely to be true of the economic effects, which will include higher inflation and slower growth..."

April 16, 2025:
"Tariffs are highly likely to generate at least a temporary rise in inflation. The inflationary effects could also be more persistent... Our obligation is to keep longer-term inflation expectations well anchored and to make certain that a one-time increase in the price level does not become an ongoing inflation problem... As that great Chicagoan Ferris Bueller once noted, "Life moves pretty fast." For the time being, we are well positioned to wait for greater clarity before considering any adjustments to our policy stance."

May 7, 2025:
Fed leaves interest rates unchanged

January 20, 2025: Trump reassumes office

January 23, 2025:
"I think I know interest rates much better than they do, and I think I know it certainly much better than the one who's primarily in charge of making that decision... If I disagree, I will let it be known."

April 17, 2025:
"The ECB is expected to cut interest rates for the 7th time, and yet, Too Late Jerome Powell of the Fed, who is always TOO LATE AND WRONG, yesterday issued a report which was another, and typical, complete "mess!" Oil prices are down, groceries (even eggs!) are down, and the USA is getting RICH ON tariffs. Too Late should have lowered Interest Rates, like the ECB, long ago, but he should certainly lower them now. Powell's termination cannot come fast enough!"

April 21, 2025:
"...With Energy Costs way down, food prices (including Biden's egg disaster!) substantially lower, and most other "things" trending down, there is virtually No Inflation. With these costs trending so nicely downward, just what I predicted they would do, there can almost be no inflation, but there can be a SLOWING of the economy unless Mr. Too Late, a major loser, lowers interest rates, NOW."

April 22, 2025:
"I would like to see [Powell] be a little more active in terms of his idea to lower interest rates... but, no, I have no intention to fire him."

May 2, 2025:
"Gasoline just broke $1.98 a Gallon, lowest in years, groceries (and eggs!) down, energy down, mortgage rates down, employment strong, and much more good news, as Billions of Dollars pour in from Tariffs... Consumers have been waiting for years to see pricing come down. NO INFLATION, THE FED SHOULD LOWER ITS RATE!!!"

May 4, 2025:
"Well, [Powell] should lower [rates]. And at some point, he will. He'd rather not because he's not a fan of mine. You know, he just doesn't like me because I think he's a total stiff... No, no, no. That was a total – why would I [remove Powell before his term ends]? I get to replace the person in another short period of time."

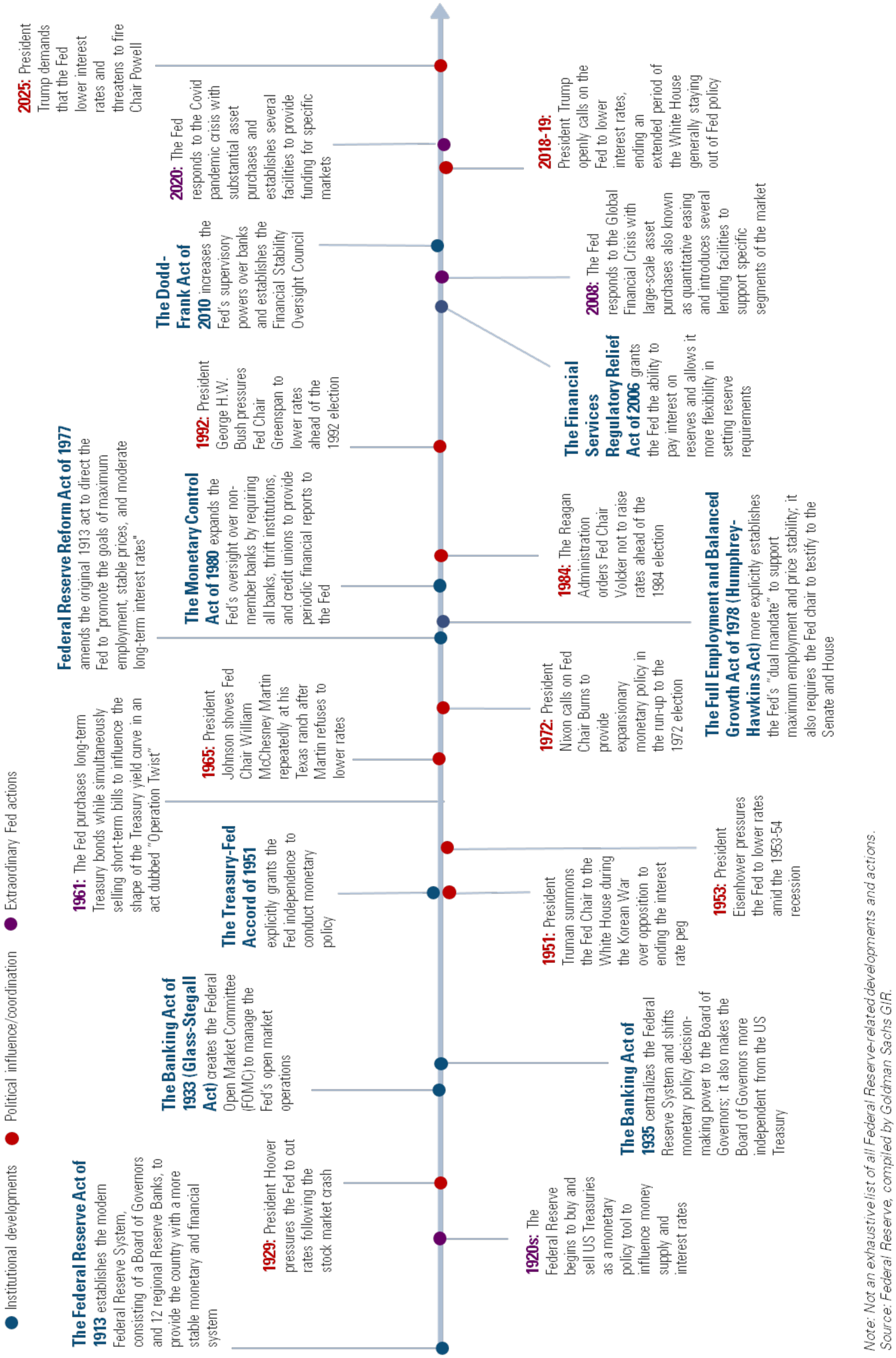
May 8, 2025:
"Too Late Jerome Powell is a FOOL, who doesn't have a clue. Other than that, I like him very much!..."

May 13, 2025:
"No Inflation, and Prices of Gasoline, Energy, Groceries, and practically everything else, are DOWN!!! THE FED must lower the RATE, like Europe and China have done. What is wrong with Too Late Powell?..."

Quote | Events/News | Fed decisions | On hold

For Trump 1.0 on the Fed, see August 2019 Top of Mind: Central Bank Independence.
Source: Truth Social, various interviews and speeches, Federal Reserve, compiled by Goldman Sachs GIR.

A history of Fed independence



Note: Not an exhaustive list of all Federal Reserve-related developments and actions.
Source: Federal Reserve, compiled by Goldman Sachs GIR.

The macro and markets of independence

Joseph Briggs explores the macro and market implications of a less independent Fed

The benefits of central bank independence have long been recognized, most cleanly evidenced by the historical relationship between increased independence and lower inflation across many countries. However, President Trump's recent comments criticizing the Fed as well as pending court cases have raised concerns around three main risks to US monetary policy independence that could have meaningful implications for inflation and markets. All told, a less independent Fed would likely result in upward inflation pressure as well as higher long-end rates, lower stock prices, and a weaker currency.

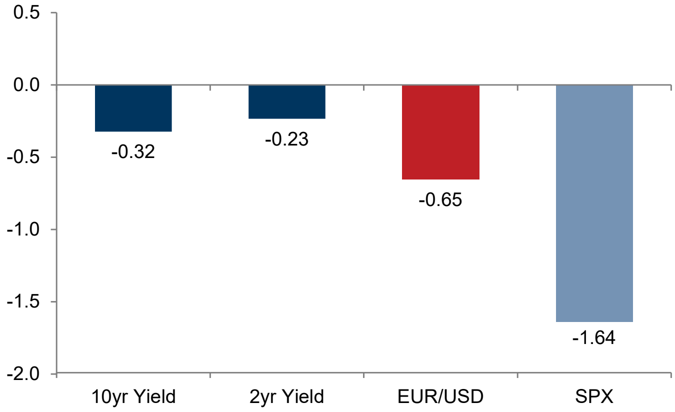
Risk 1: Public political pressure

Trump's recent comments signal a resumption of the public pressure campaign from his first term when he repeatedly called for the Fed to lower interest rates. This could erode the public's perception of US monetary policy independence even if statutory independence remains unchanged.

High-frequency analysis suggests that Trump's comments during his first term were modestly successful in lowering market interest rates in 2018-2019 with little economic cost. In particular, the evolution of market pricing in five-minute intervals immediately before and after tweets that critiqued Fed policy suggest that Trump's comments were associated with lower rates, a weaker Dollar, and lower equity prices, although the effects on Dollar valuation and, more so, equity prices are not statistically significant.

In Trump's first term, his comments on Fed policy led to lower rates, a weaker Dollar, and lower equity prices

Effect of Trump Fed-related Tweets on asset prices, 60-minute pre-/post-averages, bp

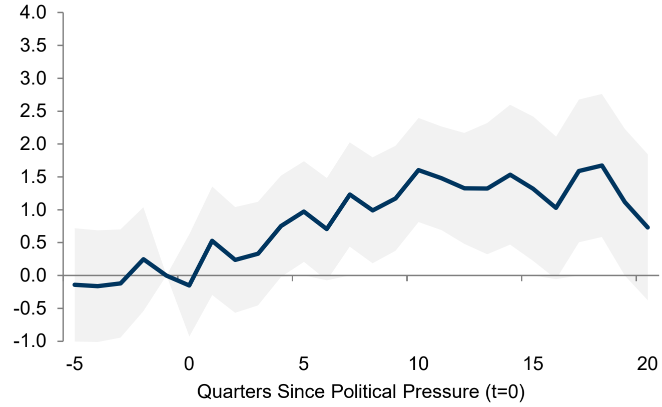


Source: Bloomberg, Goldman Sachs GIR.

That said, broader global evidence suggests that political pressure on central banks to lower policy rates may entail costs of higher inflation and long-end rates. Leveraging data from 118 economies over 2010-19, we find that public political pressure resulted in a 1-2pp increase in inflation in quarters after the start of a pressure campaign, with a peak impact after two years[1]. However, the growth impacts are small, and, if anything, slightly negative.

Public pressure on global central banks has led to higher inflation

Effect of central bank political pressure on QoQ annualized inflation, pp

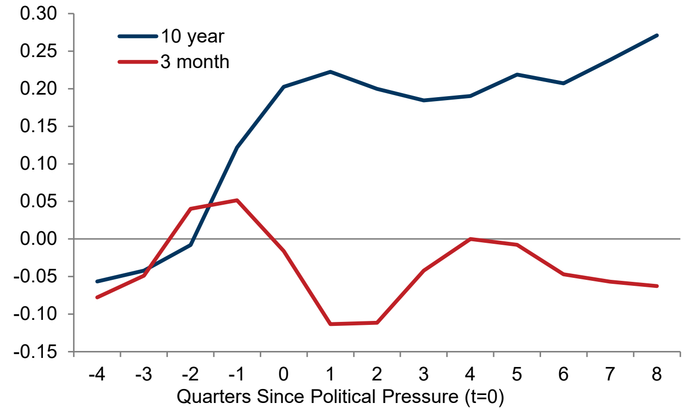


Note: Shaded region represents 90% confidence interval.
Source: Binder (2021), Goldman Sachs GIR.

With regard to interest rates, we find that pressure campaigns were modestly successful at lowering 3-month rates over subsequent months but caused 10-year rates to rise by 20-30bp[2]. This implies that public political pressure on central banks led the yield curve to steepen by around 30bp on average, with the rise in long-end rates—likely driven by the associated rise in inflation—offsetting any near-term benefits from easier policy.

Political pressure on central banks in other economies steepened the yield curve

Effect of political pressure on interest rates, pp



Source: Goldman Sachs GIR.

Taken together, these results suggest that political pressure on central banks globally has led to upward pressure on inflation with limited benefits from higher growth or lower rates.

Risk 2: Statutory changes to independence of Fed appointees

The second risk is that upcoming court cases could erode the statutory independence of the Fed. In particular, these cases could determine that the president has the constitutional right to replace governors without "cause", a standard generally defined as malfeasance or dereliction of duty. Similarly, courts could decide that Federal Reserve Bank presidents are more clearly subordinate to governors than they are today.

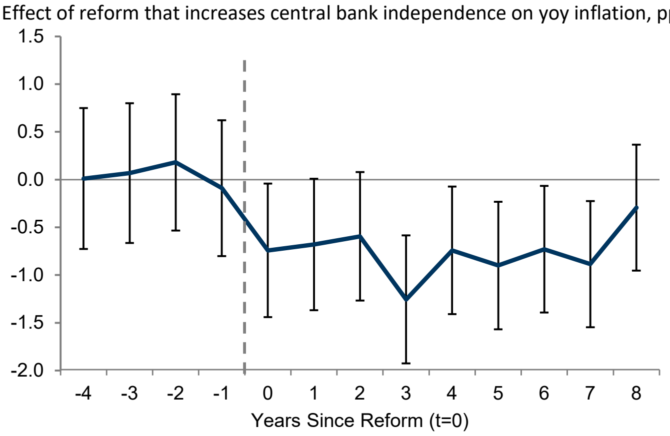
[1] Using data from Binder (2021), which leverages sell-side economics analyst reports to measure whether global central banks faced political pressure in 118 economies for each quarter from 2010-2019, we conduct a series of regressions to estimate whether public political pressure had any meaningful impact on economic outcomes.
[2] We repeat the regression analysis using data from Binder (2021) to estimate whether public political pressure had any impact on interest rates.

Either of these changes to legal precedent would leave the Fed an outlier relative to its DM peers in terms of the protections provided to central bank officials. Officials at G20 central banks are generally granted removal protections that are roughly equivalent to those provided to Fed governors under current US law. Notable exceptions include Canada, where central bank officials can be removed if not exhibiting "good behavior"—a standard stronger than serving "at will" but slightly weaker than only being removable "for cause"—and Turkey, where dismissal protections are reasonably strong as a matter of law but weaker in practice. Other exceptions include Russia, Saudi Arabia, and China.

If legal protections for removal were rolled back, global evidence again points toward higher inflation. Since statutory reforms have almost universally *increased* central bank independence in the modern economic era, we rely on evidence around historical reforms that increased removal protections to estimate the benefits of legal protection and assume that these benefits might reverse if these protections are rolled back. Our estimates suggest that historical reforms that increased central bank independence persistently lowered inflation by 0.5-1pp in subsequent years, with reforms specifically targeting the process of appointing and removing central bank officials having similar quantitative impacts[3].

Increased statutory independence of central banks has led to lower inflation, suggesting this benefit could reverse if legal removal protections are rolled back

Effect of reform that increases central bank independence on yoy inflation, pp



Source: Romelli (2024), Goldman Sachs GIR.

Such patterns confirm the inflation benefits of statutory central bank independence and removal protections for central bank officials, while indicating an inflation cost if such protections are reversed regardless of whether they are acted upon.

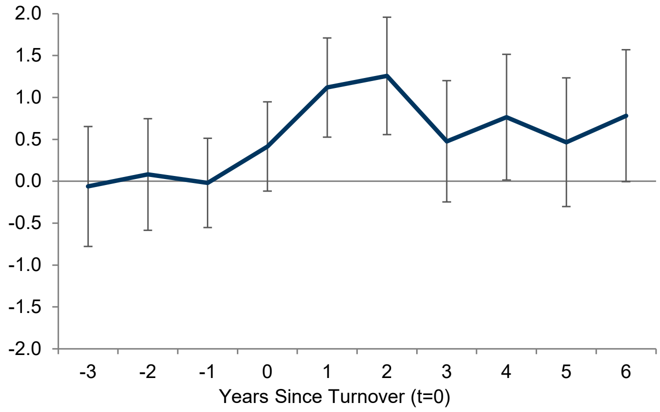
Risk 3: Removal of central bank officials

The third, more extreme risk is that if the Supreme Court grants the president the ability to remove Fed governors without cause, Trump could act to remove Chair Powell and/or other Fed officials despite recently walking back such threats.

The formal removal of central bank officials is rare owing to prevailing legal protections, the political and economic costs of removing officials, and the fact that central bank officials often resign prior to being forced out. However, unscheduled leadership changes at global central banks can be used as a proxy for politically-driven removal of central bank officials. We find that unscheduled leadership changes at global central banks have historically been associated with a 1pp uplift to inflation[4]. We, again, find limited impacts on economic growth from this scenario.

Unscheduled central bank turnover tends to increase inflation

Effect of monetary policy committee turnover on annual headline inflation, pp



Source: Romelli (2024), Goldman Sachs GIR.

We also find that the removal of central bank officials generally leads to a meaningful deterioration in market conditions. In the limited instances where central bank officials have been formally fired or pressured to resign, equities and currency valuations have generally weakened. These patterns are directionally consistent with market reactions to Trump's comments on the prospects of removing Powell. Financial conditions tightened, equity valuations pulled back, and the Dollar weakened after Trump raised the prospect of removing Powell on April 18, while these moves subsequently reversed after Trump walked back his comments on April 22. While it is hard to extrapolate these market reactions to an announcement of a Fed official's removal, they highlight that market participants are evaluating the risks to Fed leadership changes in a similar manner to global investors historically.

Do global lessons extend to the US?

The main caveat to our findings is that most changes in the institutional setup for monetary policy in advanced economies have been in the direction of *greater* independence, while changes in the direction of *reduced* independence have mostly occurred in emerging economies. Our evidence is therefore indirect, and extrapolating our estimates to evaluate the risks to US monetary policy independence should be done with significant caution. In particular, we would expect a smaller impact in the US given its greater macroeconomic and financial market stability. Nevertheless, the available evidence from global central banks suggests that a shift toward a less independent Fed would likely result in upward inflation pressure as well as higher long-end rates, lower stock prices, and a weaker currency.

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[3] Our estimates regress inflation on indicators of central bank reform for 155 countries from 1923 to 2023 (see Romelli (2024) for details).

[4] We use data from Dreher, Sturm, and de Haan (2008; extended through 2018) on central bank turnover to assess the economic impact of the removal of central bank officials.

Q&A on Fed independence

Jan Hatzius is Head of Global Investment Research and Chief Economist at Goldman Sachs. Below, he argues that the Fed's independence is increasingly under threat, including from the particularly worrisome possibility that the President gains the authority to dismiss Fed officials at will.

Q: How concerned are you about Fed independence today?

A: I'm quite concerned. Research clearly shows that economic outcomes are better with independent central banks, yet the Fed's independence has recently come under threat. President Trump has openly called for the Fed to lower rates and even threatened to fire Chair Powell, though he has since walked back these comments. Meanwhile, ongoing court cases concerning Trump's dismissal of several officials at the Federal Trade Commission (FTC) as well as the National Labor Relations Board (NLRB) could set a precedent that would allow the president to remove Fed officials without "cause". And in any case, Powell's term expires next year, giving Trump the opportunity to appoint a close political ally as Fed chair. This all points to greater risk of political influence on monetary policy ahead.

Q: Which of those actions—demands for rate cuts, discussion of removing Chair Powell, or the prospect of the appointment of an ally when Powell's term as Chair ends—is most worrying?

A: Trump's demands for rate cuts are relatively low on my list of concerns. It's not unusual for presidents to want easier monetary policy, and some have certainly been quite vocal about it, but such demands ultimately had minimal impact on policy outcomes. So, although far from ideal, political pressure is unlikely to influence the Fed's near-term policy decisions. I am confident the Fed will base its policy actions on the economic data, not on a desire to comply with—or, conversely, defy—Trump's demands. And while political rhetoric can indirectly influence Fed policy through its impact on bond markets—and we believe Trump was modestly successful at engineering lower interest rates through that channel during his first term—current market pricing looks broadly appropriate for the fundamental macro outlook.

My primary concern is the possibility that Trump dismisses Powell, or, almost as concerning, simply gains the authority to remove the Fed chair and other Fed officials without cause. Such authority would significantly erode the Fed's statutory independence, bolstering the president's ability to exert influence over monetary policy. This would render the Fed far less independent than its G10 peers, putting it more on par with central banks in Russia, China, and Saudi Arabia.

Q: What would you expect if President Trump were to appoint a close political ally as Fed chair when Powell's term expires?

A: Such an outcome could mean that the next Fed chair implements easier monetary policy than appropriate for reaching and ultimately stabilizing inflation at the Fed's 2% target, which would be concerning. However, if the statutory protections around the Fed remain intact and the nomination passes through the standard appointment process, I would be far less concerned. The Senate must confirm any Fed chair nominee, which should act as a constraint on Trump's ability to appoint someone who is not sufficiently qualified to be an independent and competent Fed chair. So, Senate confirmation is a safeguard here, assuming the Senate exercises its advice and consent role with the appropriate care, though any signs to the contrary would be another cause for concern.

It's also important to note that presidential appointees don't always behave as expected. To some degree that's true for Powell himself, a Trump appointee. And, Supreme Court justices have sometimes surprised the presidents who appointed them. President Eisenhower's disappointment with his appointees Earl Warren and William Brennan, who went on to champion left-leaning policies, is a notable example. Once someone is appointed to a position with a substantial amount of independence, I suppose it's not surprising that they tend to exercise that independence.

Q: What are you watching to gauge how Fed independence might evolve ahead?

A: In the very near term, I'll be closely following the rhetoric out of the White House. Trump has walked back his threats to fire Powell, but his criticism of the Fed and Powell could be kicked up a notch if the economy were to show signs of more severe deterioration. And while not our baseline forecast, if a full-blown recession materializes and the Fed is more reactive than preemptive—which would likely be the case given its current challenge of weighing the inflation vs. growth impacts of tariffs—then the volume of criticism would likely intensify.

But, given my primary concern around changes in statutory protections for Fed officials, I will be especially focused on the court cases we've discussed that will litigate the president's ability to remove officials at independent agencies, with the Supreme Court likely to decide on the NLRB case in the next few months. Lastly, discussions around whom Trump will nominate to succeed Powell will also be key to watch. Such discussion has yet to begin in earnest and will likely take some time to conclude, but an eventual decision will provide further clarity on how Fed independence might evolve.

A look at court rulings on independence

US courts have historically upheld for-cause firing protections to independent boards like the Federal Reserve Board of Governors, but recent decisions suggest support for more removal power

Case	Year	Description	Decision
Myers v. United States	1926	President Woodrow Wilson removed Frank Myers, a Postmaster in Oregon, in violation of an 1876 law stating that "Postmasters of the first, second, and third classes shall be appointed and may be removed by the President with the advice and consent of the Senate."	The Court ruled that the president can remove executive branch officers without approval of the Senate or any other legislative body.
Humphrey's Executor v. United States	1935	In 1933 President Roosevelt fired William Humphrey from the Federal Trade Commission (FTC) without cause, despite the FTC Act permitting dismissal only for "inefficiency, neglect of duty, or malfeasance in office."	The Court ruled the dismissal invalid, distinguishing FTC commissioners as quasi-legislative or quasi-judicial officers (not executive officers) that may be removed only with procedures consistent with statutory conditions enacted by Congress.
Wiener v. United States	1958	President Eisenhower removed Abraham Wiener, a member of the War Claims Commission, established by Congress to adjudicate claims from parties affected by World War II.	The Court ruled that Wiener's dismissal was invalid, as the Appointments Clause does not guarantee the president's ability to remove an officer of the United States who exercises quasi-judicial authority at will.
Morrison v. Olson	1988	The Chairman of the House Judiciary Committee forwarded a report to the US AG asking that an independent counsel investigate whether Theodore Olson, Assistant AG for the Office of Legal Counsel, had given false testimony regarding EPA enforcement. Olson argued that the Independent Counsel Act was unconstitutional since it created a "hybrid branch" of the government that took executive powers away from the president.	The Court upheld the Independent Counsel Act, affirming that Congress could create independent agencies with limited removal protections for inferior officers that have limited duties and no policymaking role.
Free Enterprise Fund v. Public Company Accounting Oversight Board (PCAOB)	2010	The PCAOB was created by the Sarbanes–Oxley Act of 2002 as a non-profit organization to oversee the audits of US-listed public companies. PCAOB officers could be removed only "for good cause" by SEC officers who could only be removed by the president for "inefficiency, neglect of duty, or malfeasance in office." The Free Enterprise Fund sued in 2006, challenging that the PCAOB violated the appointments clause of the Constitution and vesting clause establishing the separation of powers.	The Court ruled that the appointment provisions of the Act was constitutional, but struck down the for-cause removal provision for PCAOB members. Chief Justice Roberts noted that "the executive power included a power to oversee executive officers through removal" in striking down for-cause protections, but distinguished the case from Humphrey's Executor by noting that it only dealt with principal officers and from Morrison by noting this precedent didn't "address the consequences of more than one level of good-cause tenure".
Seila Law v. Consumer Financial Protection Bureau (CFPB)	2020	The CFPB was established by the 2010 Dodd-Frank Act as an independent agency with a single director selected by the president and confirmed by the Senate for a five-year term. The Act stated that the CFPB could only be removed for "inefficiency, neglect of duty, or malfeasance in office." Seila Law LLC (Seila Law), a law firm that provided debt relief services, challenged the CFPB's constitutionality.	The Court ruled that the CFPB structure was unconstitutional as it violated the separation of powers by establishing a sole director that could only be terminated for cause. While Chief Justice Roberts acknowledged 1) Humphrey's Executor established constraints on the president's removal power for officers of an agency that exercised "no part of the executive power" and performed "specified duties as a legislative or as a judicial aid" and 2) Morrison established similar constraints for "inferior officers with limited duties and no policymaking" role, the CFPB didn't fall under these exemptions.
Collins v. Yellen	2021	The FHFA was established by the Housing and Economic Recovery Act of '08, with the legislation specifying it was to be overseen by a single director that can only be removed "for cause". Shareholders of Fannie Mae and Freddie Mac argued that the government's 2012 decision to allocate nearly all of Fannie and Freddie's profits to the Treasury was invalid since the FHFA is structured unconstitutionally as an agency with a single director who holds power that isn't subject to appropriate checks by the president.	The Supreme Court ruled that the "for cause" restriction on removal of the FHFA director by the president was unconstitutional given the recent Seila Law decision.
Wilcox v. Trump	2025	Trump dismissed Gwynne Wilcox from the National Labor Relations Board (NLRB) in January 2025 even though her term was scheduled to last until August 2028. Wilcox sued, arguing that Humphrey's Executor protects against without cause removal of "principal officers".	On April 7, the DC Court of Appeals blocked the termination, but the Supreme Court issued a stay on this decision.
Dellinger v. Bessent	2025	United States Office of Special Counsel Head Hampton Dellinger was fired by President Trump in February 2025. Dellinger challenged his dismissal, arguing that the Office of Special Counsel is an independent agency where by law the president can only dismiss its head for "inefficiency, neglect of duty, or malfeasance in office."	The DC District Court stayed Dellinger's dismissal in Feb, and the Supreme Court chose to hold the Trump Administration's appeal to vacate the District's court order in abeyance until expiration, effectively allowing the decision to stand. The DC District Court then issued an injunction against Dellinger's firing on Mar 1 which was stayed on Mar 5 by the DC Appeals Court—effectively removing Dellinger from his position—before Dellinger dropped his suit and accepted his dismissal.
Slaughter v. Trump	2025	In March 2025, Trump attempted to fire two FTC Commissioners, Rebecca Slaughter and Alvaro Bedoya, without cause, in violation of the FTC's governing statute. Slaughter and Bedoya subsequently sued in DC District Court arguing their dismissal was illegal under precedent established in Humphrey's Executor.	Litigation ongoing in DC District Court.

Source: Justia, Supreme Court of the United States, Goldman Sachs GIR.

Special thanks to GS Global Economist Joseph Briggs for the table.

Interview with Peter Conti-Brown

Peter Conti-Brown is Associate Professor of Financial Regulation at the Wharton School of the University of Pennsylvania. Below, he argues that fears about Fed independence are overblown for now but that the legal and normative constraints to political pressure may yet evolve further.

The views stated herein are those of the interviewee and do not necessarily reflect those of Goldman Sachs.

Allison Nathan: What does the law have to say about the Fed's independence and the protections afforded it from political influence?

Peter Conti-Brown: As has been common in American history, Congress has not spoken with clarity on this important matter, and much of what is often regarded as the landmark democratic achievement of central bank independence is based on norms rather than legislation. That said, Congress has not been entirely silent, and the Federal Reserve Act of 1913 affords the Fed some legal protections. First, the president cannot appoint or remove any of the 12 regional Federal Reserve Bank presidents, a key bulwark of Fed independence as they serve on the Federal Open Market Committee (FOMC). Second, the president cannot remove any of the seven members of the Board of Governors before their 14-year terms expire without "cause"—a term the courts have historically interpreted as "inefficiency, neglect of duty, or malfeasance in office". Policy differences have historically not been sufficient.

And while the law has nothing to say about whether the president can demote Board of Governor leadership—namely the chair, vice chair, and vice chair for supervision—before their four-year terms expire, some legal scholars argue that the term length enshrined in the statute implies that the president lacks this authority, which has remained the norm. So, while the legal protections around Fed officials remain somewhat nebulous, prevailing norms have fortified the central bank's independence. However, significant concerns have emerged today as President Trump has insisted that he has the ability to dismiss or demote officials of independent agencies, and a couple such cases are currently making their way through the courts.

Allison Nathan: While it may not be the norm, has a president ever successfully fired a Fed chair?

Peter Conti-Brown: Presidents have, on rare occasions, successfully removed Fed chairs. The first such instance occurred before the office of the Fed chair was established, when the title was the Governor of the Federal Reserve Board. In 1933, the newly-installed Roosevelt Administration pressured President Hoover's appointee, Eugene Meyer, to resign as part of a broader effort to replace Hoover-era appointees, and Meyer agreed to do so after first insisting that he would refuse. Later, President Truman grew dissatisfied with his own Fed chair appointee, Thomas McCabe, after McCabe orchestrated an effort to establish the Fed's independence from the Treasury. As part of an agreement to formalize that independence—what we call today the Treasury-Fed Accord of 1951—McCabe agreed to step down. Finally, President Carter convinced Bill Miller—widely considered the worst Fed chair in history—to resign by appointing him Treasury Secretary, essentially firing him by promoting him.

In all of these instances, however, the Fed chair stepped down voluntarily, albeit sometimes reluctantly. That outcome is unlikely today as Chair Powell has made clear his intention to serve out his full term, which does not expire until May 2026. Powell's insistence has significantly constrained Trump. History shows that removing a Fed chair who does not themselves agree to leave is extremely difficult—both William McChesney Martin and Alan Greenspan remained chairs for decades despite presidential opposition. So, while the law may be murky, the Fed's power is not. The Fed has never been an underdog in these contests for power over its responsibilities, and central bankers, especially in the last 40 years, have been extremely zealous in protecting their sphere of influence. Powell has proven no different in this regard.

Allison Nathan: What might the recent firings of the two FTC commissioners as well as members of the National Labor Relations Board (NLRB) before their terms expired mean for Trump's ability to fire Powell?

Peter Conti-Brown: While the statutes establishing the independent agencies vary, many include similar "for cause" removal protection for sitting officials. The key question for courts now is whether to uphold the 80-year precedent that safeguards independent agencies and prevents new presidents from removing their predecessors' appointees in a clean sweep, a practice very common in the 19th century known as the "spoils system". If that precedent doesn't hold, it will be open season on appointees across the government.

I see no principled reason why the Fed would be treated differently. However, while the two parties are starkly divided on whether the president has the authority to fire officials at independent agencies in general, the Trump Administration appears to argue that the Fed could be considered different. Even some of the more conservative Supreme Court justices argue that the Fed is anomalous given its unique function in setting monetary policy. While I disagree—I don't see the difference between the Fed and other independent agencies—it seems plausible that the Fed will be declared exempt from whatever rulings emerge from the FTC and NLRB cases.

Allison Nathan: Even if Trump doesn't/can't fire Powell, Powell's term as chair ends next year, giving Trump the opportunity to appoint an ally as chair. How unusual would an allyship between the president and Fed chair be?

Peter Conti-Brown: It's not unprecedented—Bill Miller worked on Jimmy Carter's campaign, for example, and Ben Bernanke was a close economic adviser to George W. Bush. And while few people were really close to Ronald Reagan, Greenspan was as close to the conservative movement as anyone. The best example is Arthur Burns, who had an almost familial relationship with Richard Nixon. But it's certainly not the norm. For example, George H.W. Bush despised Greenspan but reappointed him owing to his popularity, and Clinton reappointed Greenspan twice even though it was not in his direct partisan interest.

I am not concerned about a Fed chair with a close personal connection to Trump—I take that as a given at this point. My concern is a chair who fails to understand that the Fed's primary responsibility is to ensure the medium-to-long-term health of the economy with a mandate that spans partisan interests. This means policy actions must, on occasion, conflict with the 24-hour news cycle in a way that might make some politicians unhappy. Senate confirmation offers some reassurance, with the Senate rejecting nominees unqualified to be central bankers in Trump's first term. The Senate will likely be even more sensitive today given their recognition that the post-Covid inflation surge was a major millstone around the neck of the Democrats during the 2024 election and would almost surely be one for them if they barrel through the appointment of a central banker who is poised to let inflation get out of control.

Allison Nathan: How much power would an ally have given that they would be just one vote among 12 on the FOMC?

Peter Conti-Brown: The Fed chair has enormous power far beyond their vote. When the Fed was established, Woodrow Wilson called it the Supreme Court of Finance, but that analogy does not hold. It's true that like the Supreme Court, the Fed operates by majority vote. The Fed chair is not the chief justice, however. The chief justice is rarely looked at as the bellwether of Court decisions; he is often voting in the minority. The Fed chair virtually never votes in the minority. This is not an accident. The Fed chair shapes the FOMC's thinking in several ways, including through control over the staff responsible for the economic forecasts that the Governors factor into their decisions, and by making clear ahead of FOMC meetings their desired policy outcome so that no surprises arise come voting time. All that said, if a Fed chair came in with views entirely orthogonal to the rest of the FOMC because of partisan bias, more dissent would almost surely arise, weakening the chair's historic influence. It could turn the Fed into the Supreme Court.

Allison Nathan: Reserve bank presidents are not appointed by the president. But since they play a key role in setting monetary policy, could they face a constitutional challenge?

Peter Conti-Brown: The statutes governing reserve bank presidents are somewhat unclear, sparking intense debate about their legal status and the protections afforded them. I myself have gone back and forth on this issue. Fifteen years ago, I had a bee in my socks about reserve bank presidents. I thought they were, in constitutional language, "principal officers" of the government, and so either needed to be appointed by the president or removed at will by the president's appointees, neither of which is currently the case. While I no longer fully hold that view, I still believe that reserve bank presidents should be subject to at will dismissal by the Board of Governors. The current statute requires that the Board provide written "cause" to remove a Bank president, but "cause" isn't legally defined. It could be as simple as putting any minor complaint into writing or it could require more stringent justification. In any case, though, such action is unlikely today. A tacit truce exists where reserve bank presidents recognize the Board's oversight and avoid asserting a significant degree of autonomy, which is notably only a recent development after some presidents were seen to be too vocal on partisan matters. So, no constitutional challenge seems to be forthcoming.

Allison Nathan: Does anyone have standing to mount a constitutional challenge to the Federal Reserve?

Peter Conti-Brown: The bar for mounting a constitutional challenge against the Fed is incredibly high. Members of Congress as well as market participants have attempted to file such suits, all of which were ultimately dismissed as the so-called "generalized grievances" presented in the cases did not constitute a sufficient demonstration of justiciability required to bring a lawsuit. Members of the Board of Governors themselves have the best chance to litigate a change in the structure or protections around sitting officials. However, a challenge of this nature has only come close to occurring once—motivated by concerns about a scofflaw Board member during the Truman Administration, James Vardaman—and doesn't seem likely in the current environment given the united front the Fed is presenting.

Allison Nathan: Some people have argued that the threat to Fed independence today owes largely to its wading into matters outside of its legislative remit. What's your view?

Peter Conti-Brown: I don't agree that the Fed should stick to the confines of its mandate as originally intended. This is not the 1950s—the world has changed dramatically, and the Fed needs flexibility to orient itself around evolving challenges that, while seemingly political, also affect the macroeconomic environment, including climate change, AI, and inequality. In fact, the Fed choosing not to investigate how such issues could impact economic stability would be a dereliction of duty. However, the Fed shouldn't be advocating for change around any political issue and has arguably stepped too far in that direction in the past. And the Fed actively trying to shape its own legislative mandates is also inappropriate. A mandate from Congress is meant to reflect oversight—Congress sets the direction that the Fed must follow. But when the Fed has a hand in drafting such legislation, it's effectively telling Congress what to tell it to do.

Allison Nathan: So, given all that, are concerns that this is a watershed moment for Fed independence overblown?

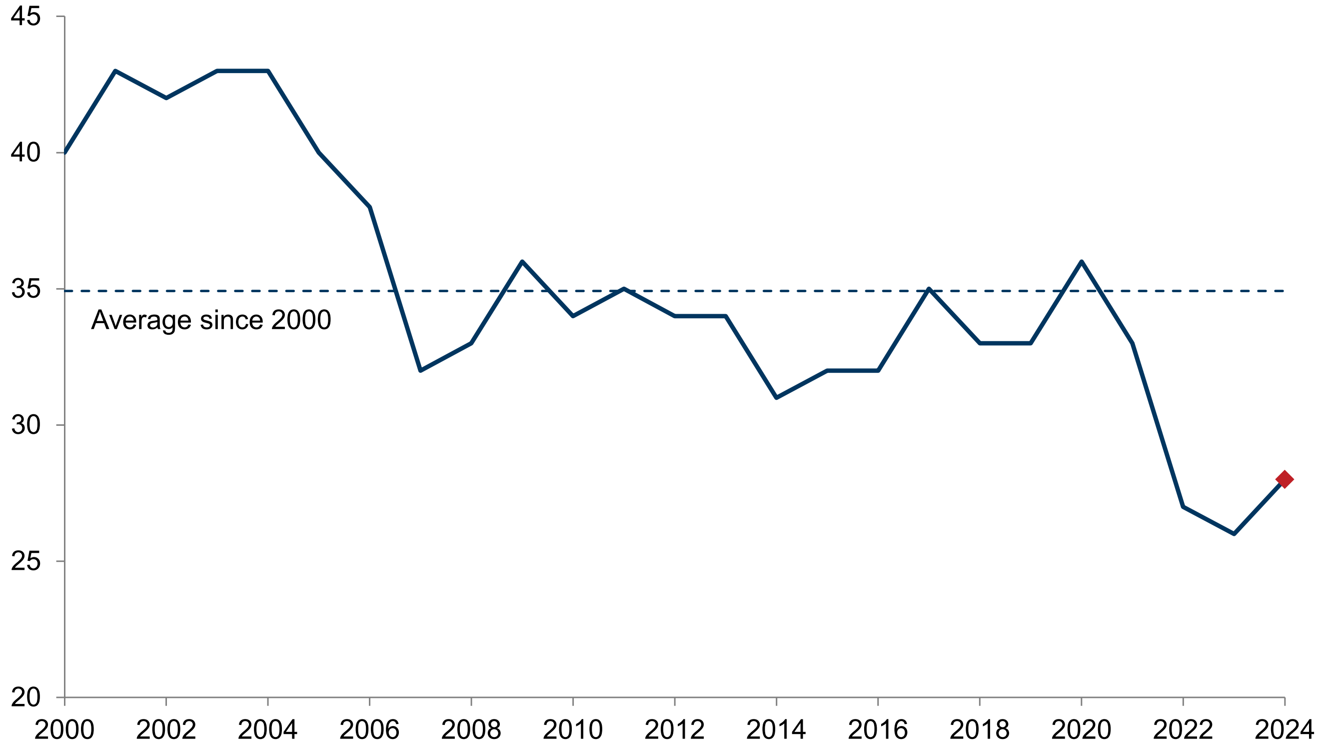
Peter Conti-Brown: If Trump ultimately succeeds in his push for greater influence over the Fed and monetary policy, we would undoubtedly be in a crisis. It would not only mean the enervation, but the elimination of Fed independence. The separation of the central bank from the president is a towering achievement in democratic governance that should be preserved.

However, as we've discussed, the Fed is never the underdog in political fights for its independence, and the legal and normative constraints to political interference remain intact. Powell himself has also done a remarkable job reinforcing the Fed's independence. The Fed may be separate from politics, but the chair is an intensely political role and one which Powell has navigated masterfully. So, I don't join the chorus of people who claim that this is the beginning of the end of Fed independence. Our institutions are far more durable than that, which history has proven time and again. So, while this is an important moment in the history of Fed independence, it's not a singular one, and a lot more history is yet to be written. Whether the next Fed chair will represent such a crisis will await the naming of that candidate.

A look at waning institutional confidence

Confidence in US institutions has fallen over the last two decades, with the decline sharpening in recent years, and while it has recovered somewhat more recently, it remains below the average since 2000

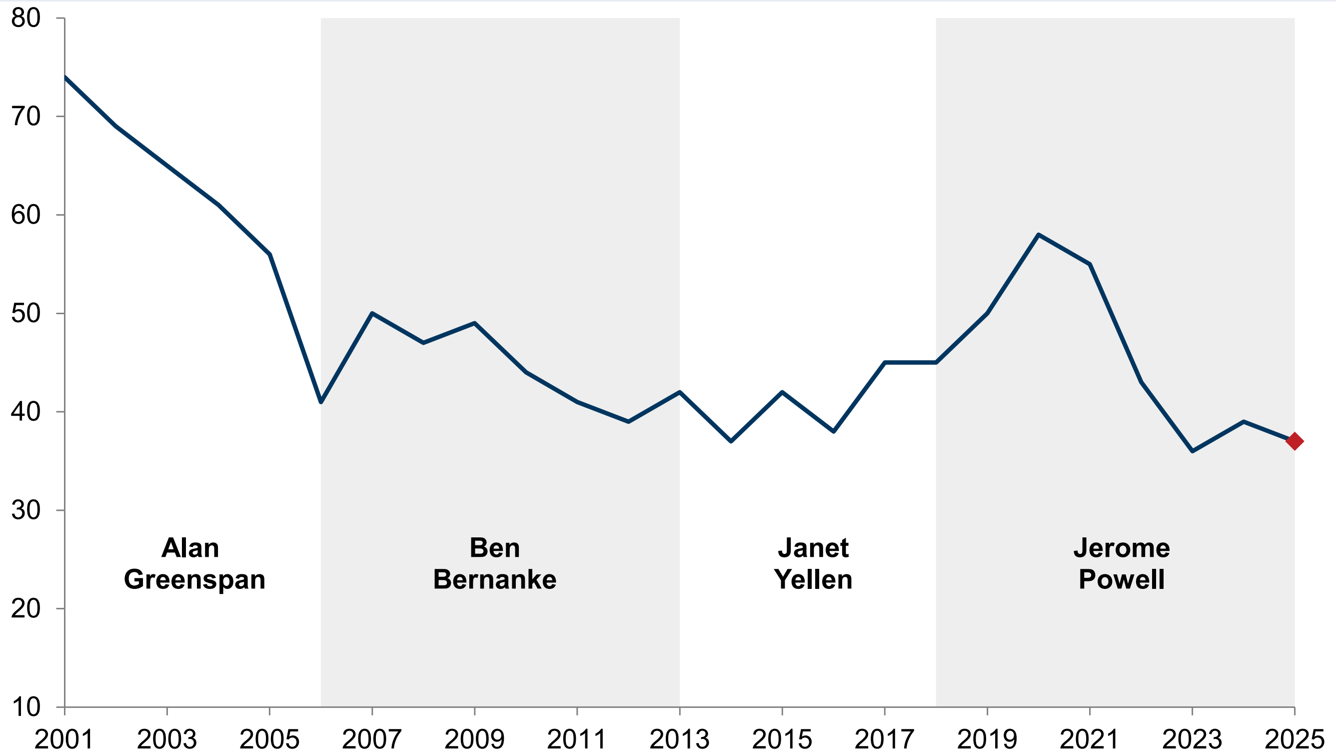
Average confidence in major US institutions, %



Note: Data shows the average percentage of respondents who have "a great deal or quite a lot of confidence" in major institutions. The data includes 14 institutions: the church or organized religion, the military, the US Supreme Court, banks, the public schools, newspapers, Congress, television news, organized labor, the presidency, the police, the medical system, the criminal justice system, and big business.
Source: Gallup, complied by Goldman Sachs GIR.

Confidence in the Fed chair under Jerome Powell has also declined notably in the last few years and is now at levels largely below those observed during the terms of the prior three Fed chairs

Confidence in Federal Reserve chairs, %



Note: Data shows % of respondents who answered they have "a great deal or fair amount of confidence" in Fed chair to do or recommend right thing for the economy.
Source: Gallup, compiled by Goldman Sachs GIR.

The Dollar: in the Fed we trust?

Michael Cahill argues that a less independent Fed could weigh on the Dollar's appeal

An independent Fed promotes sound monetary policy which, in turn, supports the Dollar both directly and indirectly. Directly, low and stable prices preserve the Dollar's real purchasing power over time. Indirectly, sound policy contributes to the perceived reliability and stability of the Dollar. However, a less independent Fed risks politically-motivated FX intervention and an erosion of the Dollar's unique funding role as well as its reserve currency status.

Annuit Cœptis – Undertaking FX intervention

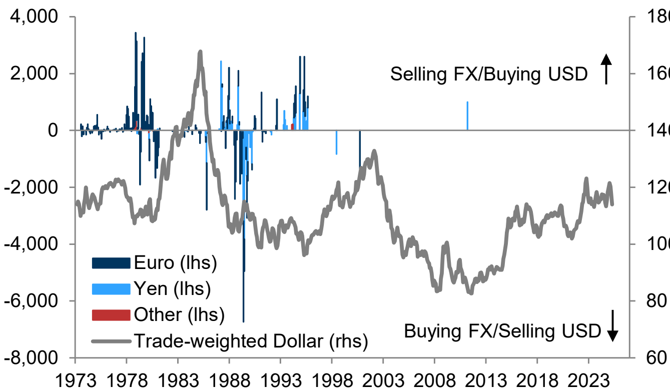
The most likely and important way that a less independent Fed can impact the Dollar is by running monetary policy too loose, which would weigh on the Dollar's purchasing power and reduce investor confidence. But the most *direct* route is through a presidential push for FX intervention. The US reportedly came very close to conducting FX intervention during Trump's first term—perhaps even closer than widely appreciated at the time.

We note that currency intervention is not especially radical—it was fairly standard for developed markets, including the US, up until the mid-1990s, and is still a standard policy tool among most emerging markets. And intervention would not be a giant leap from the standard balance sheet tools the Fed relies on. While the operation changes from buying domestic assets to buying foreign assets, it works largely in the same way, and can even be a more effective tool under certain conditions.

However, overt currency targeting creates challenges for both investors and policymakers. Preventing flexible exchange rates from adjusting to market conditions can undermine trust in the Dollar's stability and ability to reflect market conditions. Politically-motivated FX intervention will raise inflation concerns and weigh on the Dollar's appeal. This also tends to create other policy challenges. For example, the inflationary impulse from a weaker Dollar might necessitate more restrictive policy rates and weaker domestic activity.

FX intervention was fairly standard in the US up until the 1990s

US monthly intervention by currency (lhs, $mn) vs. trade-weighted Dollar index (rhs)



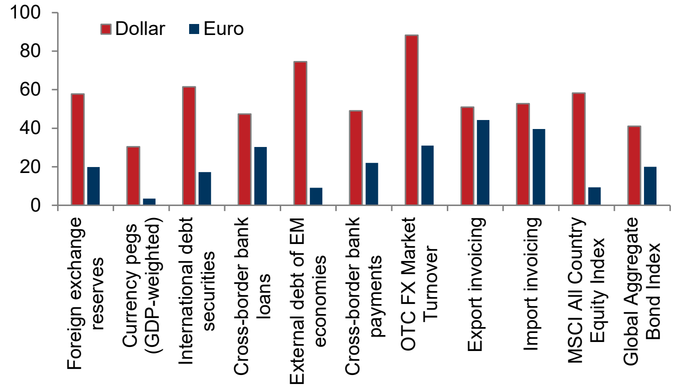
Note: Deutsche Mark shown prior to the introduction of the Euro.
Source: Goldman Sachs GIR.

E Pluribus Unum – The dollar's unique funding role

A less independent Fed is also likely to weigh on the Dollar's unique funding role. The Dollar is unlike any other currency. While the US' share of global trade has declined over time, the Dollar's role in international markets has not. It remains the currency of choice in the vast majority of FX transactions and is the typical denominator of global capital markets. Such a role becomes especially clear in times of financial stress. Acute financial market disruption typically sets off a "dash for dollars" as investors reset currency hedges and companies seek to raise cash. The Fed plays a key role in this process by supplying Dollars to worthy borrowers in need of them via swap lines and other lending facilities. Historically, this reliable market access has been a key determinant of international currency adoption. But if a less independent Fed leads to questions about its provision of such support, that could prompt users to consider potential vulnerabilities stemming from the widespread use of the Dollar and possibly turn toward other currencies.

The Dollar remains the currency of choice in global markets

US Dollar and Euro shares of international currency usage, %



Source: Goldman Sachs GIR.

Novus Ordo Seclorum – A new reserve currency order

Lastly, a more political Fed could lessen the appeal of holding Dollar reserves, potentially diminishing the Dollar's reserve currency role. The Dollar's share of global currency reserves has already fallen to the lowest level since the advent of the Euro. While much of that is the result of reserve managers seeking better returns in non-traditional, higher-yielding reserve currencies, some of it reflects shifting geopolitical dynamics. Russia has diversified away from the Dollar, and other countries have seemingly followed suit. This isn't unusual; we and others have found that military alliances and geopolitics strongly influence reserve allocation decisions. And while the Dollar has been the dominant reserve currency since WWII, reserves still fell into regional blocs until the 1990s. A more political Fed would almost certainly amplify this dynamic.

A less independent Fed could also impact the Dollar's reserve currency status by eroding reserve managers' reliance on Treasuries. Following the Euro area crisis in 2011-2012, some reserve managers reduced their holdings of peripheral Euro area debt because these assets had repeatedly lost value in times of market stress. Recent Treasury market weakness could similarly prompt reserve managers to reassess their holdings. We still believe it is not possible to replace the Dollar as the dominant reserve currency anytime soon as its capital market depth remains unrivaled and there is a lot of inertia in these decisions. But more reserve diversification and polarization are likely if Fed independence is seriously threatened.

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USTs: all eyes on foreign demand

William Marshall argues that what happens to foreign demand for Treasuries amid growing institutional credibility concerns is worth keeping a close eye on given the important role of foreign investors in the UST market

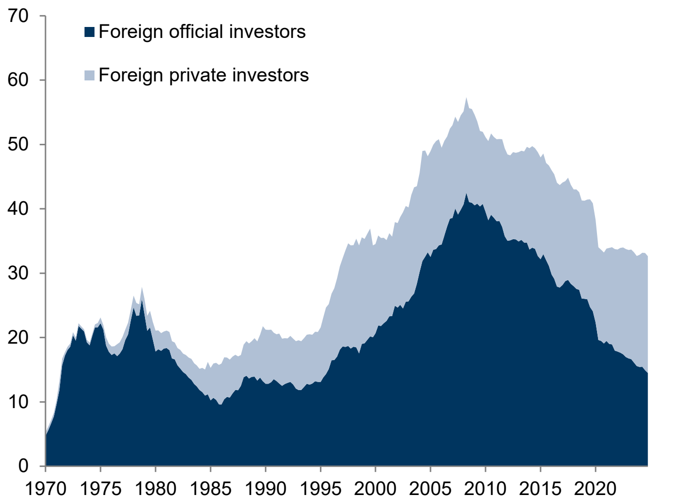
President Trump's episodic pressure on the Fed has raised questions about institutional credibility, fueling concerns that investors could shift away from Dollar assets. In the rates market, these concerns have centered squarely on foreign investors, who own a significant share of the Treasury market. While we see limited evidence of outsized foreign selling so far, institutional credibility concerns as well as a challenging near-term inflation vs. growth trade-off and a more competitive safe asset landscape over the longer term raise the risk of a passive decrease in foreign appetite for USTs, which would be consequential.

Foreign demand: the who and why

Foreign investor participation in the Treasury market has evolved significantly over the last few decades, peaking at close to 60% in the late 2000s before declining to a still-significant 30-35% currently, with foreign private investors accounting for a bit more than foreign official investors. Since the beginning of April, episodes of higher yields, tighter swap spreads, and a weaker Dollar have fueled worries about foreign holders stepping back. We see little compelling evidence so far of outsized foreign selling of USTs, though flows data have suggested a rotation of private investors' preference away from longer maturities toward the front-end of the curve.

Foreign ownership of the Treasury market has declined from the late 2000s peak, but remains significant

Portion of UST market held by, %



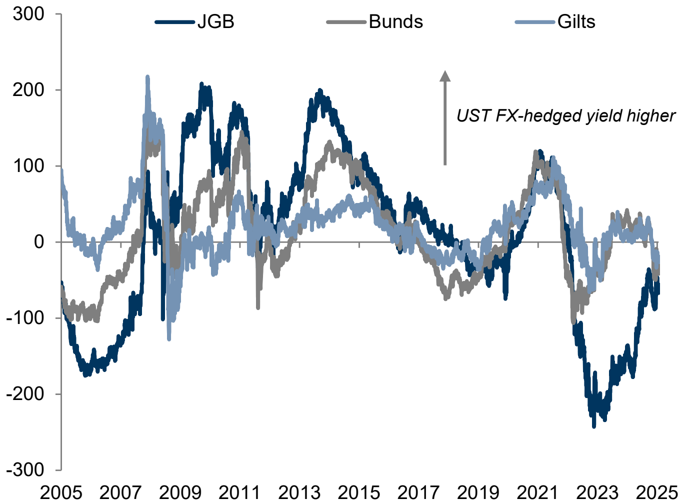
Source: Federal Reserve, Goldman Sachs GIR.

Still, the lack of buying is itself notable—historically, a weaker Dollar would have typically induced a positive demand response. For foreign official investors in particular, global reserve accumulation and Dollar performance have played significant roles in their demand for USTs. Periods of Dollar strength are typically consistent with weaker foreign official demand, likely reflecting rebalancing flows as investors seek to maintain a desired portfolio composition. This means that, aside from the Fed, foreign official investors tend to be the least price-sensitive buyers of USTs. As such, a decline in foreign official sector demand would shift a greater burden onto more economically-motivated investors and require a higher yield to clear markets.

For foreign private investors, meanwhile, relative price and hedge value considerations tend to have a meaningful bearing on appetite for USTs. A larger yield pick-up versus other sovereign markets and a more negative correlation between USTs and equities (i.e. when Treasuries are providing a hedge to risk assets) typically act as tailwinds to foreign private demand. Prior to the pandemic, USTs for the most part offered a positive yield pick-up (both on an outright and hedged basis) versus JGBs, Bunds, and Gilts. Relative scarcity considerations have also likely played a role in foreign private demand for USTs as significant bond buying by domestic central banks and/or somewhat constrained fiscal policy limited the relative availability of supply in places such as Germany and Japan. While foreign private investors' demand is not quite as inelastic as that of their official sector counterparts, our estimates suggest that a shift toward greater reliance on domestic investors would still come at a cost as domestic investors are more price-sensitive than foreign ones.

Treasuries offered a positive yield pick-up vs. other G4 bonds during most of the pre-pandemic period

10y UST hedged yield pick-up vs. other G4 bonds, bp

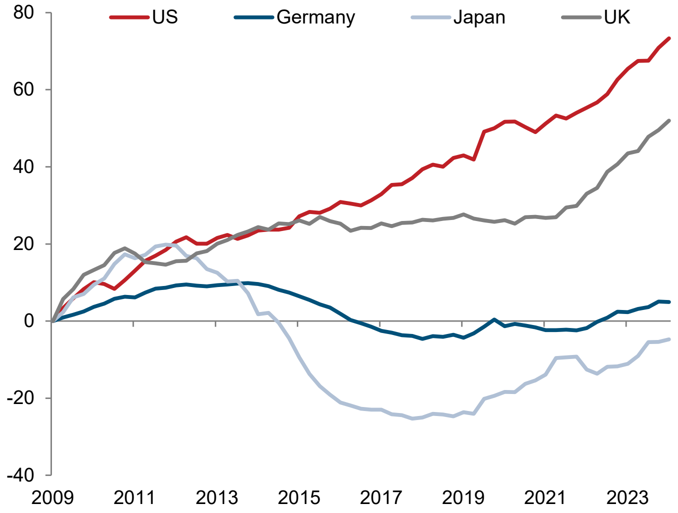


Source: Goldman Sachs FICC and Equities, Goldman Sachs GIR.

The motivations and factors that helped to sustain foreign demand for Treasuries over the last decade also offer a roadmap for the path ahead. While there is no getting around the fact that as long as the US runs a current account deficit, it must remain a net exporter of financial assets to the rest of the world, multiple ways exist to achieve that balance. The role of Treasuries in that balance will depend significantly on their hedging value, concerns about institutional credibility, and the longer-term safe asset landscape, all of which point in the direction of higher risk premia to incentivize future foreign demand.

Free float in Germany and Japan has remained roughly flat as a share of GDP over the last decade+ while increasing in the US

Change in free float as % of GDP, pp

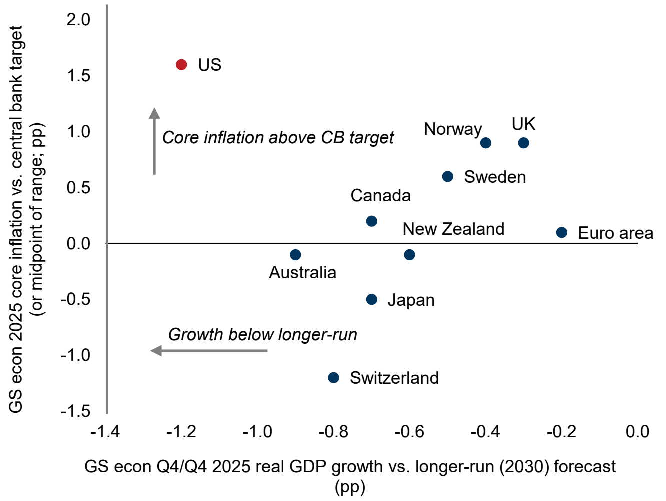


Source: IMF, Goldman Sachs GIR.

Inflation versus growth trade-off a near-term UST headwind...

The tension between upside inflation risks and downside growth risks is more pronounced in the US than elsewhere in G10. Even assuming that tariff-driven inflation will prove to be a one-off, the less friendly near-term growth-inflation balance nonetheless leaves the Fed at a disadvantage versus other G10 central banks to proactively mitigate downside growth risks; the ECB, by contrast, made clear its assessment that the Euro area is facing a "negative demand shock." While that constraint should be most relevant for the very front-end of the curve, evidence from the last month suggests that a sufficiently large shock can complicate Treasuries' traditional hedge properties even further out the curve as well.

The tension between near-term growth and inflation risks is more pronounced in the US than the rest of G10



Source: Goldman Sachs GIR.

We believe this headwind would present a shorter-term rather than more persistent source of outright and relative upward pressure on US Treasury term premia. Nonetheless, the relative steepening and cheapening of the Treasury curve aligns with some need to adjust to incentivize buyers to absorb supply that, for now, appears less useful in a portfolio context. And a more material undermining of Fed independence would argue for a sharper and more durable shift in term premia, both outright and versus G10 peers.

...and increased safe asset supply a longer-term one

In the near term, wholesale diversification away from US assets is complicated by the relative scarcity of safe asset alternatives to Treasuries, which suggests any diversification would likely be gradual or passive, entailing a lack of buying, rather than the result of active asset sales. However, supply constraints in other core bond markets should ease as Europe embarks on fiscal expansion, and the shrinking footprint of both the ECB and BoJ in their respective sovereign bond markets should also free up capacity in those markets. While this broadening of the global safe asset pool should weigh on UST valuations, it's not a headwind to Treasuries alone, as valuations should adjust across all markets. However, medium-term fiscal sustainability and institutional credibility questions may pose more specific challenges to Treasuries amid this global backdrop.

Following the recent cheapening, UST valuations seem reasonably aligned with the relative supply picture—as a share of domestic GDP, Treasury free float—the total amount of Treasuries outstanding minus those that sit on the Fed's balance sheet—is higher than for Bunds and Gilts and swap spreads are tighter to reflect this (Japan is somewhat of an outlier, likely owing to the uniquely large central bank ownership and relatively limited foreign presence in the JGB market). The long-run relationship between swap spreads and free float across all three markets shows some consistency, potentially reflecting a common pattern of convenience yields—as safe asset supply grows relative to the size of the economy, the convenience of holding those bonds versus other forms of near-risk free duration erodes. As things stand, current Treasury, Gilt, and Bund yields all look similarly elevated versus swaps after controlling for differences in the supply environment.

While a relative build in risk premia doesn't necessarily need to come through cheaper duration—a weaker currency can help shoulder some of this burden—to the extent that the marginal Treasury buyer is motivated by yield and/or spread considerations (characteristics of foreign private investors) as well as fiscal and institutional concerns, that would, at a minimum, argue for some persistence in the recent cheapening in USTs.

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Gold: benefitting on independence fears

Lina Thomas argues that gold would benefit should concerns around Fed independence intensify given its function as a store of value that doesn't rely on institutional trust

Despite nearly doubling in price since 2022, we see further upside for gold ahead. We expect prices to rise to $3,700/toz by year-end (+16% from current levels), with scope for prices to move even higher—above $4,500/toz—if markets begin to reprice tail risks, a big one being a potential loss of Federal Reserve independence.

A store of value, no institutional trust required

Gold functions as neutral collateral—a store of value that doesn't rely on institutional trust. Its value tends to rise when confidence in the existing monetary system is in doubt and no new or restored monetary anchor has yet been secured. The transition between monetary anchors often takes time, with gold serving as a backstop during historic periods of re-anchoring.

The post-WWII experience serves as a useful illustration of gold's value. The US Dollar replaced the British Pound as the dominant global currency in the aftermath of WWII primarily because it was contractually tied to gold; Dollar dominance didn't require trust in the Federal Reserve because convertibility into gold enforced the Dollar's value. That explicit linkage to gold—rather than economic dominance alone—made the Dollar the default medium for international exchange.

The 1970s: gold's shining moment

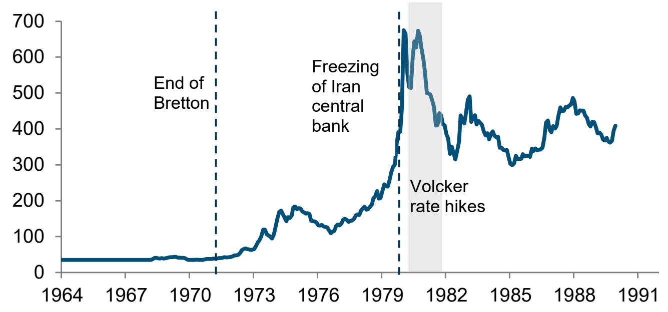
When President Nixon ended Dollar convertibility to gold in August 1971, the Dollar system shifted from being based on collateral to being based on institutional credibility, specifically on the Federal Reserve's ability to preserve purchasing power by maintaining price stability and to operate independently from political and fiscal pressures.

What happened after demonstrated the role of gold in an environment of weak institutional credibility. Throughout the 1970s, the Fed appeared subordinate to political demands, inflation surged, and real interest rates declined into deeply negative territory. Gold prices increased fivefold, from $42/toz to over $200/toz, between mid-1971 and late 1978 as the market sought a trustworthy store of value.

By 1979, a second fracture occurred. The Iranian Revolution and the US' subsequent freeze of Iran's central bank reserves raised fresh questions about the neutrality of Dollar-based reserves. The erosion of both monetary and geopolitical neutrality culminated in a final spike in gold prices to $850/toz ($3,500/toz in 2025$ terms) in January 1980.

It wasn't until the early 1980s that credibility in the Dollar system and the Fed's ability to stabilize prices was fully restored as Chair Volcker took the reins at the Fed, raising interest rates sharply to signal a renewed commitment to price stability, which fueled a 20%+ correction in gold prices.

Gold has benefitted in periods of eroding monetary neutrality
Monthly gold price, $/toz



Source: Haver Analytics, Goldman Sachs GIR.

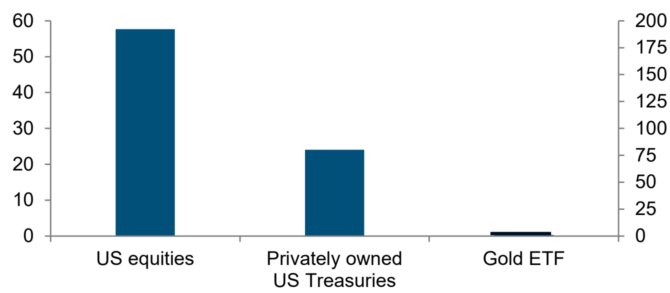
History rhymes

Similar pressures are present today, though the sequencing of geopolitical and monetary drivers of Dollar diversification has reversed. In the 1970s, monetary credibility broke first, with geopolitical neutrality following. This time around, geopolitical neutrality fractured first with the freezing of Russia's central bank reserves in the wake of the 2022 invasion of Ukraine. Since then, gold demand from central banks—in particular, EM central banks, which are significantly underweight gold compared to their DM counterparts—rose fivefold as they have sought insulation in the only reserve asset that cannot be frozen when held in domestic vaults. We estimate that central banks will likely continue rapidly purchasing gold for at least another three years to reach their gold reserve targets. Fresh questions around the future of the Fed's independence will only boost the demand for gold and, in turn, prices. We estimate that gold prices rose a cumulative 1.5% in the 12-hour windows around President Trump's recent social media posts pressuring Fed Chair Powell.

A potentially large price impact

Should institutional credibility concerns intensify, private investors could join in alongside central banks in the shift to less Dollar-dominated portfolios, which would push gold prices well above our forecast. The gold price upside in such a scenario would be very large because the gold market is quite small, with global gold ETF holdings worth only around 1% of outstanding US Treasuries and 0.5% of the S&P 500 market cap. As a result, any small step out of US fixed income or risk assets may be the next giant leap for the gold market.

The gold market is small compared to stock and bond markets
Latest notional outstanding value, $tn (lhs), as x of gold ETF market (rhs)



Source: Bloomberg, US Treasury, Goldman Sachs GIR.

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Summary of our key forecasts

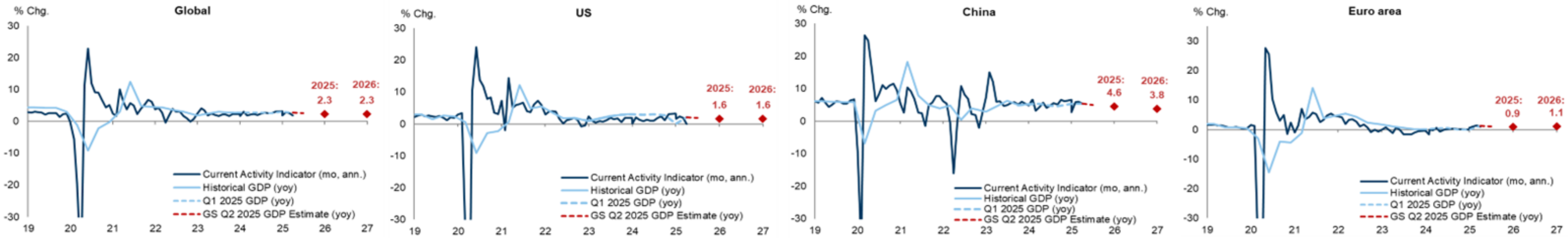
GS GIR: Macro at a glance

Watching

- **Globally,** we expect real GDP growth will slow to 2.3% yoy in 2025, reflecting headwinds from higher US tariffs. We expect global core inflation to remain relatively steady this year and end the year at around 2.8% as the tariff-driven boost to inflation in the US is largely offset by disinflationary impulses from declines in shelter inflation and wage inflation as well as lower energy prices.
- **In the US,** we expect real GDP growth to slow to 1.0% in 2025 on a Q4/Q4 basis as higher tariffs and a rise in policy uncertainty weigh on disposable income, consumer spending, and business investment, although recent financial conditions easing should provide some relief. We see a 35% probability of entering a recession over the next 12 months. We expect core PCE inflation to rise to 3.6% yoy by end-2025 reflecting a boost from higher tariffs. We expect the unemployment rate to rise to 4.5% by end-2025.
- **We expect the Fed** to deliver a series of three 25bp rate cuts starting in December and cut at every other meeting to a terminal rate range of 3.5-3.75%.
- **In the Euro area,** we expect real GDP growth of 0.9% yoy in 2025 amid higher US tariffs and still elevated trade policy uncertainty, although firmer growth abroad and easier financial conditions should provide some support. We expect core inflation to fall to 2.1% by end-2025, reflecting a further cooling in services inflation, lower demand, as well as a modest disinflationary impulse from excess supply amid higher US tariffs.
- **We expect the ECB** to continue delivering sequential 25bp cuts until the policy rate reaches 1.75% in July 2025, with the risks skewed toward more cuts given ongoing trade policy uncertainty.
- **In China,** we expect above-consensus real GDP growth of 4.6% yoy in 2025 amid the de-escalation in US-China trade tensions, although higher US tariffs should remain somewhat of a drag on growth along with continued domestic headwinds including weak consumption and the property market downturn. We expect inflation to remain very low this year with CPI inflation and PPI inflation likely to end the year at 0% and -2.1%, respectively, amid deflationary forces from the trade war and falling commodity prices.
- **WATCH US POLICY AND GEOPOLITICAL DEVELOPMENTS.** Uncertainty about US policy and especially tariff policy remains high, presenting substantial risk to the US and global economies. Geopolitical developments also remain important to watch as the conflict in the Middle East continues, US-China relations remain fraught, and a potential resolution to the Russia-Ukraine war remains highly uncertain.

Goldman Sachs Global Investment Research.

Growth



Source: Haver Analytics, Goldman Sachs Global Investment Research.
Note: GS CAI is a measure of current growth. For more information on the methodology of the CAI please see "Improving Our Within-Month CAI Forecasts," Global Economics Comment, Mar. 06, 2023.

Forecasts

Economics

GDP growth (%)	2025 GS (Q4/Q4)	2025 Cons. (Q4/Q4)	2025 GS (CY)	2025 Cons. (CY)	2026 GS (CY)	2026 Cons. (CY)
Global	1.7	--	2.3	2.2	2.3	2.3
US	1.0	0.9	1.6	1.4	1.6	1.5
China	3.7	3.7	4.6	4.2	3.8	4.0
Euro area	0.6	0.7	0.9	0.8	1.1	1.1

Policy rates (%)	2025 GS	2025 Mkt.	2026 GS	2026 Mkt.
US	4.13	3.86	3.63	3.42
Euro area	1.75	1.72	1.75	1.90
China	1.30	1.34	1.10	--
Japan	0.50	0.85	1.00	0.96

Markets

Interest rates 10Yr (%)	Last	E2025	E2026	FX	Last	3m	12m
US	4.53	4.00	4.45	EUR/$	1.12	1.12	1.20
Germany	2.68	2.80	3.25	GBP/$	1.33	1.32	1.39
Japan	1.45	1.50	1.90	$/JPY	147	138	135
UK	4.65	4.25	4.25	$/CNY	7.18	7.20	7.00

Commodities	Last	3m	12m	Credit (bp)		Last	2Q25	4Q25
Crude Oil, Brent ($/bbl)	66	60	57					
Nat Gas, NYMEX ($/mmBtu)	3.49	3.90	4.50	USD	IG	91	105	95
Nat Gas, TTF (EUR/MWh)	34.74	39	29		HY	301	335	303
Copper ($/mt)	9,621	9,100	10,050	EUR	IG	109	116	108
Gold ($/troy oz)	3,192	3,370	3,920		HY	319	355	330

Equities

S&P 500	E2025 GS	E2025 Cons.	E2026 GS	E2026 Cons.	Returns (%)	12m	YTD	E2025 P/E
Price	6,100				S&P 500	10.3	7.8	22.6x
EPS	$262	$264	$280	$299	MXAPJ	1.0	-0.8	14.4x
Growth	7%	7%	7%	14%	Topix	0.4	0.2	14.7x
					STOXX 600	4.8	7.1	14.9x

Consumer	2025 CPI (%, yoy)	2025 Unemp. Rate	2026 CPI (%, yoy)	2026 Unemp. Rate	Wage Tracker 2025 (%) Q1	Q2	Q3	Q4
US	3.1	4.5	3.1	4.4	3.8	--	--	--
Euro area	2.1	6.4	1.8	6.5	--	--	--	--
China	0.0	--	1.0	--	--	--	--	--

Source: Bloomberg, Goldman Sachs Global Investment Research. For important disclosures, see the Disclosure Appendix or go to www.gs.com/research/hedge.html.

Market pricing as of May 14, 2025

Glossary of GS proprietary indices

Current Activity Indicator (CAI)

GS CAIs measure the growth signal in a broad range of weekly and monthly indicators, offering an alternative to Gross Domestic Product (GDP). GDP is an imperfect guide to current activity: In most countries, it is only available quarterly and is released with a substantial delay, and its initial estimates are often heavily revised. GDP also ignores important measures of real activity, such as employment and the purchasing managers' indexes (PMIs). All of these problems reduce the effectiveness of GDP for investment and policy decisions. Our CAIs aim to address GDP's shortcomings and provide a timelier read on the pace of growth.

For more, see our CAI page and Global Economics Analyst: Trackin' All Over the World – Our New Global CAI, 25 February 2017.

Dynamic Equilibrium Exchange Rates (DEER)

The GSDEER framework establishes an equilibrium (or "fair") value of the real exchange rate based on relative productivity and terms-of-trade differentials.

For more, see our GSDEER page, Global Economics Paper No. 227: Finding Fair Value in EM FX, 26 January 2016, and Global Markets Analyst: A Look at Valuation Across G10 FX, 29 June 2017.

Financial Conditions Index (FCI)

GS FCIs gauge the "looseness" or "tightness" of financial conditions across the world's major economies, incorporating variables that directly affect spending on domestically produced goods and services. FCIs can provide valuable information about the economic growth outlook and the direct and indirect effects of monetary policy on real economic activity.

FCIs for the G10 economies are calculated as a weighted average of a policy rate, a long-term risk-free bond yield, a corporate credit spread, an equity price variable, and a trade-weighted exchange rate; the Euro area FCI also includes a sovereign credit spread. The weights mirror the effects of the financial variables on real GDP growth in our models over a one-year horizon. FCIs for emerging markets are calculated as a weighted average of a short-term interest rate, a long-term swap rate, a CDS spread, an equity price variable, a trade-weighted exchange rate, and—in economies with large foreign-currency-denominated debt stocks—a debt-weighted exchange rate index.

For more, see our FCI page, Global Economics Analyst: Our New G10 Financial Conditions Indices, 20 April 2017, and Global Economics Analyst: Tracking EM Financial Conditions – Our New FCIs, 6 October 2017.

Goldman Sachs Analyst Index (GSAI)

The US GSAI is based on a monthly survey of GS equity analysts to obtain their assessments of business conditions in the industries they follow. The results provide timely "bottom-up" information about US economic activity to supplement and cross-check our analysis of "top-down" data. Based on analysts' responses, we create a diffusion index for economic activity comparable to the ISM's indexes for activity in the manufacturing and nonmanufacturing sectors.

Macro-Data Assessment Platform (MAP)

GS MAP scores facilitate rapid interpretation of new data releases for economic indicators worldwide. MAP summarizes the importance of a specific data release (i.e., its historical correlation with GDP) and the degree of surprise relative to the consensus forecast. The sign on the degree of surprise characterizes underperformance with a negative number and outperformance with a positive number. Each of these two components is ranked on a scale from 0 to 5, with the MAP score being the product of the two, i.e., from -25 to +25. For example, a MAP score of +20 (5;+4) would indicate that the data has a very high correlation to GDP (5) and that it came out well above consensus expectations (+4), for a total MAP value of +20.

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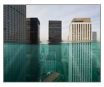
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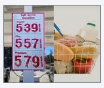
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