

TOP *of* MIND

CENTRAL BANK INDEPENDENCE



The US Federal Reserve’s sharp pivot toward easing amid substantial White House pressure has raised concerns about central bank independence, as have developments in other advanced and emerging market economies alike. How worried we should be about this threat—and its implications for policy, the economy, and markets—is Top of Mind. We feature interviews with former central bankers Donald Kohn and Sir Paul Tucker who explain why central bank independence is critical to maintaining price and financial stability—even today when too little, rather than too much, inflation is the main problem. But while Kohn is concerned that Trump’s overt pressure could undermine Fed credibility, Tucker worries more that

over-reliance on central banks since the GFC has left them vulnerable to politicization. We argue that political pressure is already influencing Fed policy through indirect channels such as bond market pricing and trade policy, but think this in itself shouldn’t inflict too much harm on the economy or markets unless inflationary pressures rise materially.



Central banks should have constrained missions centered on maintaining monetary system stability... The more they stray into other areas, the greater the distributional effects, and so the greater the temptation—or even the need—to re-politicize them by the back door.

- Sir Paul Tucker

It is crucial to have a group of people who analyze the economy with respect to the long-run goals of economic policy... politicians have a much shorter timeframe in mind than is consistent with achieving these goals.

- Donald Kohn

While I don't think the Fed is cutting rates because the White House is telling them to, you can't completely separate the politics from the market signals feeding into the Fed's decision-making.

- Jan Hatzius



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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

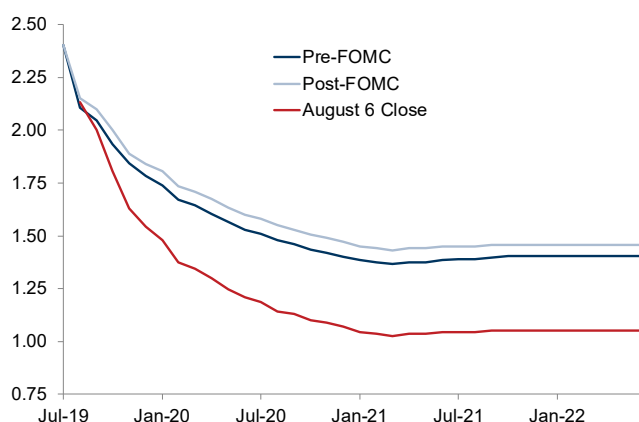
- We now expect a 25bp Fed rate cut in October, for a total of three 25bp cuts in 2019, in light of trade war threats, market expectations for much deeper cuts, and rising global risks.
- We no longer expect a US-China trade deal before the 2020 presidential election given policymakers' hardening stance.

Datapoints/trends we're focused on

- Stronger hard economic indicators despite weaker survey data; we still expect GDP growth close to 2% in H2, though trade uncertainty skews risks to the downside.

Priced to ease

Federal funds rate implied by futures, %



Source: Bloomberg, Goldman Sachs Global Investment Research.

Japan

Latest GS proprietary datapoints/major changes in views

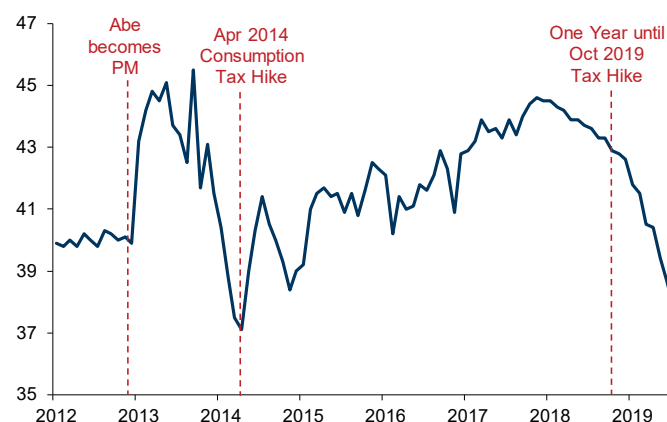
- No major changes in views.

Datapoints/trends we're focused on

- The BOJ's decision to maintain the status quo in July; we expect an extension of forward guidance in October, but do not see the bank taking rates more negative unless USD/JPY continues to appreciate at least beyond 100.
- Japan's decision to tighten export controls on S. Korea, which we don't think will lead to sustained disruptions in bilateral trade.
- The sharp deterioration in consumer confidence in July.

A less confident consumer

Japanese consumer confidence, index



Source: Cabinet Office, Goldman Sachs Global Investment Research.

Europe

Latest GS proprietary datapoints/major changes in views

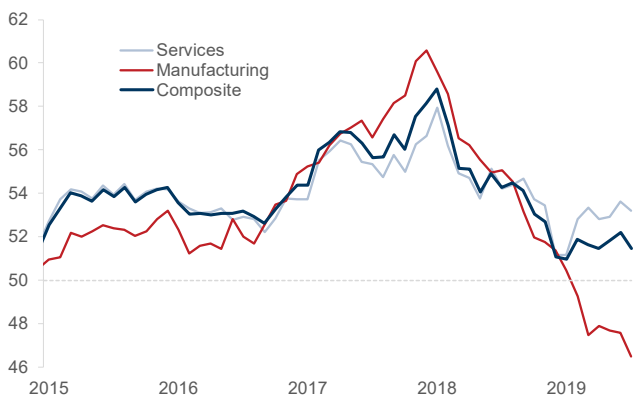
- We raised our odds of a "no deal" Brexit by 5pp to 20% with Boris Johnson becoming the UK's new prime minister.

Datapoints/trends we're focused on

- Still-soft Euro area activity data, including weaker PMIs in July, and a steep decline in German industrial output in June.
- Ongoing weakness in Euro area inflation, which we expect to remain stuck around 1% through year-end.
- Details of the ECB's easing package in September; we see a 20bp rate cut, stronger forward guidance, and a return to QE.

Looking weaker

Euro area PMI



Source: Haver Analytics, Goldman Sachs Global Investment Research.

Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

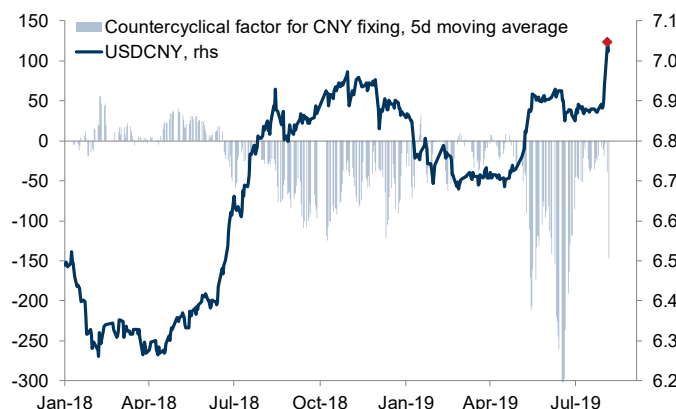
- No major changes in views.

Datapoints/trends we're focused on

- The CNY's depreciation past 7.0 versus the USD, as well as any additional trade retaliation from China.
- Earlier/steeper-than-expected rate cuts in Thailand and India; and likely synchronized policy easing in Latin America ahead on low growth and inflation; we see 50bp of additional rate cuts in Brazil this year, and expect Mexico to deliver its first cut in September.
- Softer Russian inflation, likely pointing to more rate cuts this year.

Past the barrier

Countercyclical factor in USD/CNY fixing, 5dma; USD/CNY (rhs)



Source: Bloomberg, Goldman Sachs Global Investment Research.

Central bank independence

The US Federal Reserve's sharp pivot toward easing amid substantial White House pressure has raised concerns about central bank independence. But it's not just US developments that have provided cause for worry. Indeed, slow growth since the Global Financial Crisis (GFC), an associated rise in populism, and the potential need for greater coordination between monetary and fiscal policy in a world of low interest rates has brought both the effectiveness and credibility of monetary policy into question across advanced economies—issues which have possibly been reinforced by the appointment of Christine Lagarde, a politician rather than a central banker, as the next ECB President. And beyond advanced economies, President Erdogan's recent replacement of the Turkish central bank's governor was a stark reminder of Emerging Market (EM) economies' ongoing struggle to maintain strong institutions. How concerned we should be about the threat to central bank independence—and its implications for the policy, the economy, and markets—is Top of Mind.

We kick off with some perspective from two former central bankers: Donald Kohn, past Vice Chairman of the US Fed, and Sir Paul Tucker, former Deputy Governor of the Bank of England (BOE). Kohn reminds us why central bank independence is so important in the first place: It's crucial to have a group of people focused on the long-run goals of economic policy that aren't always aligned with politicians' short-term goals of winning the next election. In Kohn's view, while the case for independence is typically closely associated with inflation-fighting—indeed, central bank independence is often credited with defeating the inflationary monster that dominated the 1960-70s—it's just as important in today's era of deflationary forces, and inflation could rear its head again in the future. (Note: GS US economist David Choi reviews these arguments and the evidence that independent central banks produce better economic outcomes on pg. 10.)

In this context, Kohn is worried about White House pressure on the Fed today, which he says isn't unprecedented, but is more intense and constant than we've seen in the past. And he is particularly concerned about the overt nature of the criticism, which he believes raises questions about the Fed's motivations—and therefore risks undermining the Fed's credibility—even if their actions are justified by the economics.

Tucker agrees that independent central banks are crucial to maintaining price and financial stability. But he argues that post-GFC, advanced economies have become too reliant on central banks to solve all of their problems—many of which central banks aren't equipped to tackle (i.e., low productivity, inequality, etc.). And this over-reliance has left central banks vulnerable to backdoor politicization. He therefore believes central banks should exercise self-restraint in sticking to their missions of maintaining monetary system stability and leave the rest to the politicians. All that said, while Tucker also notes the unusual intensity and transparency of President Trump's pressure on the Fed today, he thinks overt pressure (see pg. 7 for a long list of Fed-related Trump quotes...) is preferable to covert pressure, which is harder to detect and, in turn, to resist.

So is all of this overt pressure influencing monetary policy today? GS Chief Economist Jan Hatzius does not believe the Fed has responded directly to pressure from the White House. But he is concerned that such pressure may be influencing Fed policy indirectly, in particular through bond market pricing, which the Fed

seems to be paying more attention to than in the past. And he sees a risk that the current political environment will make it more difficult for the Fed to hike rates heading into the 2020 election if macro conditions warrant it; although he thinks a delay in needed rate hikes likely wouldn't be that harmful to the economy unless inflation is far above the target.

GS Chief US Political Economist Alec Phillips explains why direct political influence over the Fed is probably limited today, but also explores other indirect ways White House actions are already influencing Fed policy. In a week where trade escalation has yet again thrown markets for a loop, at the top of the list is trade policy, which Trump has increasingly tied back to Fed policy, arguing that easier policy will help put the US on equal footing with China. And with the trade war threatening to morph into a currency war, Phillips warns that growing potential for FX intervention, which the Fed has historically participated in alongside the Treasury, could further test Fed independence.

As for the ECB, GS Chief Europe Economist Jari Stehn expects Lagarde to follow through with the policy easing that Mario Draghi has set in motion in the Euro area given her track record of concern about low inflation and advocacy of fighting strongly against it during her time at the IMF. If anything, he believes Lagarde will reinforce the ECB's credibility on the inflation front. And to the extent that more coordination between monetary and fiscal policy is required to get the Euro area out of its current rut, Stehn thinks Lagarde is well-positioned to facilitate these moves without eroding the ECB's independence. Tucker, for his part, is more dubious of Lagarde's unorthodox background—and more cautious that her appointment, while potentially appropriate for the ECB given its unique constitutional status, likely isn't for other national democratic states.

GS Co-Chief CEEMEA Economist Kevin Daly then looks beyond advanced economies, arguing that while advanced and EM economies alike are facing threats to central bank independence, the latter's problems are more about institutional weakness than anything else. The good news: setbacks like the one in Turkey are more the exception than the rule these days, with EM central banks on the whole making significant progress towards achieving greater independence and credibility in recent decades.

Finally, GS Chief Interest Rates Strategist Praveen Korapaty assesses the potential market implications of reduced central bank independence. He concludes that a return to the bond pricing environment of the 1970s—a period of "central bank co-option" by fiscal authorities characterized by much higher short-term rates, much steeper yield curves, and less well-anchored inflation expectations—would be dramatic. But he argues that such a paradigm shift would require a fundamental change in inflation dynamics, which is only likely to occur over a long horizon. So it's not back to "that 70s show" anytime soon.

Also...check out the podcast version of this and other recent GS Top of Mind reports on [Apple](#), and [Spotify](#).

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Interview with Paul Tucker

Sir Paul Tucker is chair of the Systemic Risk Council and Research Fellow at the Harvard Kennedy School. A career central banker, he served as Deputy Governor at the Bank of England (2009-13). He recently published [*Unelected Power: The Quest for Legitimacy in Central Banking and the Regulatory State*](#). Below, he argues that central bank independence is critical, but that their missions should be constrained to avoid creeping politicization and preserve legitimacy.

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



Allison Nathan: In your recent book, *Unelected Power*, you voice some concerns about central bank independence. What are they?

Sir Paul Tucker: Let me take it at two levels. At the level of high principle, it matters for our system of government that independent central banks are now incredibly powerful. They have

quasi-fiscal powers and law-making powers, which we call regulation. Yet, in contrast with our rich understanding of the place of the judiciary or military, there is a rather thin set of principles about how central banks and other independent agencies should fit into a constitutional democracy. I regard central banks as a “third pillar” of unelected power, which has much less well-articulated constraints.

On a practical level, advanced economies have relied far too much on central banks since the Global Financial Crisis (GFC). The best measure of this is not the actions of the central banks; it is the relative absence of elected fiscal authorities. I often ask people what face they associate with the efforts to pull the West out of the Great Depression in the 1930s, and the answer is almost always President F. D. Roosevelt. What faces do people associate with the response to the GFC in the US? Ben Bernanke, Tim Geithner, and Hank Paulson. The invisibility of both Presidents Bush and Obama is extraordinary. That tells us that something important has changed in our societies.

Allison Nathan: Are central banks to blame for taking on too much responsibility since the GFC?

Sir Paul Tucker: Up to a point, their mandates have left them with little choice, so I don't want to be overly critical of them. But there has been a nasty dynamic whereby fiscal authorities have assumed that central banks will just have to do more if they, the politicians, do less—so why bear the political costs of taking action? But central banks can't solve all of our problems. They don't have the tools to improve productivity growth, increase dynamism, or cure inequality; only elected politicians do. So the central bankers found themselves a bit trapped. What's more, once you look as though you're in charge, people start expecting you to perform miracles. If you're the only game in town, it's important not to seem like you're enjoying it, because that fuels unrealistic expectations.

Allison Nathan: Should central banks be less independent?

Sir Paul Tucker: No—-independent central banks are critical in maintaining price stability and a stable banking system, which are some of the basic preconditions for prosperity. Some critics argue that there's not much evidence that independence cured the inflation problem in the 1980s because inflation declined all

over the world, not just in the countries with independent central banks. I don't accept that. I think independent central banks in Germany and the US basically did the heavy lifting in killing inflation—and, in a world of floating exchange rates, everybody else was then forced to get their house in order. That said, I believe that independent central banks should have constrained missions centered on maintaining monetary system stability. They should also exercise self-restraint. The more they stray into other areas, the greater the distributional effects, and so the greater the temptation—or even the need—to re-politicize them by the back door.

Allison Nathan: What policy tools should an independent central bank have at its disposal?

Sir Paul Tucker: Interest rates should remain the key tool, but vanilla Quantitative Easing (QE)—buying government bonds in the pursuit of price stability and stabilization of the business cycle—is appropriate. I'd note that QE should never have been described as “unconventional”; central banks have been operating in government bond markets for 200 years, and some had employed variants of QE over recent decades. As for purchases of other assets, there should be no favoritism, and they should not lead to the central bank effectively owning the business sector. Central banks should be aiming to return to much smaller balance sheets when they can, because the distortions to asset prices matter.

On the financial stability side, central bank policy should be more clearly rooted in their balance sheet role. So, they should be obliged to act as the lender of last resort, which would have avoided problems in the UK during 2007/08, but only to sound borrowers—not to prop up fundamentally insolvent businesses. I now think it would be helpful for banks and bank-like organizations to be required to cover 100% of their short-term liabilities with assets that can be discounted at the central bank. Through their excess collateral—i.e. haircut—policies, minimum equity and long-term debt requirements would de facto be set, which could help to simplify much of today's rather elaborate prudential-regulatory apparatus.

Finally, central banks should not be forced to provide monetary financing to government because those are fiscal measures, which should be decided by elected politicians, and used only if independence is suspended by law.

Allison Nathan: So there shouldn't be fiscal and monetary coordination?

Sir Paul Tucker: No, there can be. There's a difference between coordination and politicians being able to tell you what to do. Some situations, particularly in a crisis, call for cooperation. For example, when the BOE embarked on QE in early 2009, we asked the government to pledge publicly that

they would not extend the duration of their debt issuance to take advantage of—and, by doing so, at least partially undo—the lower yields, and they agreed. That cooperation did not dilute independence at all. The US failed to do the same. But, while there can be some coordination, the central bank should not be forced to lend money to the government. That would be a monetary policy mistake—it would become inflationary and so self-defeating—and a violation of our deepest political values as only the legislature has the power to tax, and surprise inflation is a redistributive tax.

Allison Nathan: Could the institutional construct of the Fed learn something from other countries?

Sir Paul Tucker: To some extent, yes. In the UK, a couple of key differences have left the BOE's monetary policy less controversial politically, even though Britain hasn't enjoyed better economic outcomes for other reasons. For example, the elected government, through a parliament-endorsed process, decides the BOE's detailed objectives such as the 2% inflation target. In contrast, the Fed sets its own targets. I think the UK approach is healthier and less prone to controversy. I realize that's not easy under the US system of government, and I applauded when, under Ben Bernanke, the Fed set itself an inflation target. But they could have consulted the public more, not least to help public understanding. So I think Chair Powell is taking a big and healthy step in consulting publicly on the monetary policy framework.

More broadly, if central bank independence is essentially institutional technology for making the commitment to price stability credible, that objective needs broad-based support and some involvement of the people's representatives in specifying what it means. That creates a better dynamic between elected politicians, the central bank, and the general public. By the way, it's how the US system has worked at its best. For example, when Paul Volcker became chair of the Fed with a view of killing the inflationary monster, we now know that he had the backing of President Carter. I don't think he could have achieved so much without the mood of the country behind him.

This is partly about clear communication with the public—the most important audience for central bankers. The Fed has sometimes seemed to treat Wall Street as its main audience, which up to a point is understandable given how quickly financial markets react to Fed-related news. But it's exceptionally important to explain your actions in language that the people you serve—the public—can understand.

Allison Nathan: Are you worried that current pressure from the White House is undermining the Fed's independence?

Sir Paul Tucker: Not so far—top Fed officials understand that they are independent under the law. Of course, it's unusual for pressure to be so open, overt and repeated. But, if I had to choose, I'd rather pressure be out in the open as it is today than hidden, as, for example, occurred when the Reagan Administration attempted to pressure Paul Volcker behind closed doors. That said, while short-lived and overt attacks are easily recognizable and therefore more easily resisted, a constant drip, drip, drip of overt criticism could end up slowly poisoning the well of American public opinion. If that were to happen, the dollar's international role and so US global power would erode. Fed independence is a geopolitical asset.

Generally, though, I worry less about crude and overt attacks on independence than about more subtle and covert ways of re-politicizing them. Let me elaborate. There are basically two means of undermining independence. One is through appointments. As recently occurred in the US, that's not easy when potential candidates fall well outside of the normal criteria for a central banker. More worrying are appointments that, on the face of it, seem reasonable, but turn out to be quiet but committed allies of the leading politicians. A well-documented case occurred in the US in the 1970s, when Arthur Burns was clearly prioritizing Richard Nixon's prospects in the run-up to the 1972 election. No one should think that was the last example of an ally being appointed to a central bank, which is one of the reasons central bankers need to live by an ethic of self-restraint; if central banks can be painted as political, it is easier to get away with politicized appointments.

The other means of re-politicizing the central bank is to change the mandate. The crude variant is elected politicians simply voting to reduce or repeal central bank independence. That's not easy. A more subtle way of achieving essentially the same goal would be to give the central bank more and more responsibilities—to the point where no decent central banker could do anything but consult political leaders on how to act. The more central banks are perceived as the only game in town, the more likely this becomes, which is another reason for self-restraint. A lot of politics is inevitably opportunistic, so how central banks conduct themselves affects politicians' opportunity set. As I say, I worry more about the subtle or covert approaches, precisely because they are more likely to go undetected. I wish people would look out for them.

Allison Nathan: Will the appointment of Christine Lagarde—a politician rather than a central banker—as ECB president harm the credibility/independence of the ECB?

Sir Paul Tucker: Madame Lagarde has a striking record of helping the IMF repair its standing around the world. The ECB faces even greater challenges—greater than any other major central bank—because of its unusual constitutional status—alone at the pinnacle of Euro area macroeconomic policy with no fiscal counterpart. With the next President as well as the recently appointed Vice President of the ECB having no central bank background, they will undoubtedly be highly dependent upon members of the ECB Executive Board and—crucially—key members of staff. But those staffers are unlikely to testify publicly. So the democratic deficit problem may increase.

More broadly, imagine a supreme court in which the judges weren't actually former judges or even lawyers, but were shrewd people advised by fantastically capable staff lawyers—it would be a very different system. Now, maybe this is right for the ECB given its peculiar constitutional role; the ECB has no choice but to do many things that would be inappropriate or irrelevant for central banks in national democratic states—like guarding against the breakup of the currency union. But what is good for the ECB cannot always be an example for central banks serving a normal constitutional republic. So this will be something to watch going forward, although I'm not optimistic that people will.

Q&A with Jan Hatzius



Jan Hatzius is Chief Economist at Goldman Sachs. Below, he argues that political pressure may indirectly influence Fed policy through bond markets.

Q: Is there reason to be concerned about Fed independence today?

A: I think you have to be more concerned—at least more than we have been over the last few decades when the White House generally stayed out of Fed policy. Research clearly shows that economic outcomes are better with independent central banks. So you have to be more vigilant in an environment in which the president is openly tweeting about the need for lower rates, considering nominees for the Fed Board of Governors that fall outside of the mainstream, and threatening to demote or fire Fed Chair Powell.

Q: You have argued that the macro environment today doesn't warrant Fed rate cuts, and yet the Fed recently cut rates. Does this move more likely suggest that the Fed is giving into overt pressure from the Trump Administration to ease policy, or is just focused on different indicators in making its policy decisions?

A: At this point, I think it is mostly the latter. In particular, the Committee seems more focused on sentiment measures and bond market indicators, including market pricing for the next FOMC meeting, the slope of the yield curve, and break-even inflation. But since it is pretty clear that markets themselves respond to political pressure, this increased focus on the bond market can be an indirect avenue for political pressure to influence Fed policy. In short, while I don't think the Fed is cutting rates because the White House is telling them to, you can't completely separate the politics from the market signals feeding into the Fed's decision-making.

Q: The Trump Administration has also considered intervening in FX markets. Is that a backdoor route to influence Fed policy?

A: While FX intervention is not our base case, it is indeed a rising risk. It would be the Treasury's decision, but the Fed has historically participated both as the Treasury's agent and by matching the Treasury's funds with its own. If the Fed again decided to participate, the market might interpret this as a sign that the Fed is "under the thumb" of the Administration, and will subordinate broader monetary policy to currency objectives. However, I don't think that would be the correct interpretation. In fact, a successful intervention—leading to a large dollar depreciation that eases financial conditions—could even provide more reason for the Fed to resist other monetary easing measures.

Q: How concerned are you that the degree of political pressure today will make it difficult for the Fed to hike rates again next year—a presidential election year—even if the macro conditions warrant it?

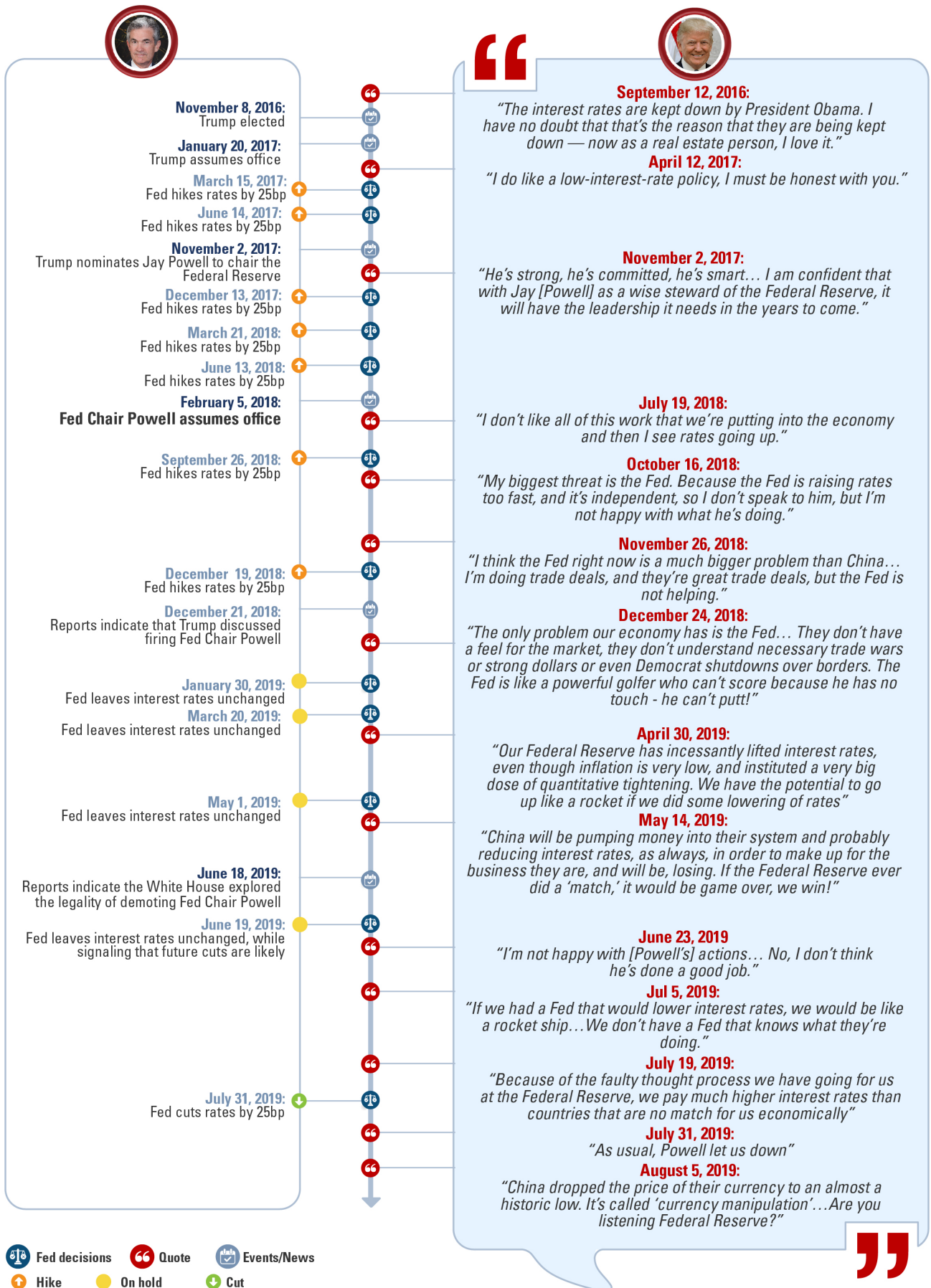
A: That's a risk. If the situation is clear enough, I think they would still hike as I don't share the view that there can't be hikes in the run-up to the 2020 presidential election; the Fed has hiked in a number of election years, for example in 2000 and 2004. But I do think the hurdle will be higher than in past election years just because the environment is so much more divisive today. How much this would matter for the economy would depend on the inflation environment. As long as inflation is close to either side of the target, I don't think delaying some needed rate hikes a little bit longer than you might have in a completely apolitical environment would probably do much harm. But if the economy is clearly overheating, it would be a different story.

Q: What would you need to see to make you concerned that the Fed is more directly losing its independence?

A: I think it would be a spectrum of developments. One or two appointments of people that share the President's monetary policy views and are pretty far out of the mainstream of the FOMC probably would not be dramatic; it's a big Committee and there are often outliers on specific issues. That said, there can be a nonlinear effect, meaning if you add one more person, maybe it's not that big a deal, but if you add another few, eventually you end up with a critical mass of people that would be more willing to make politically-motivated decisions. And, of course, the chairmanship is an important issue. If we saw a second Trump Administration and Chairman Powell is replaced with somebody who is much more susceptible to pressure from the White House, that would warrant quite a bit of concern. So a lot would still need to happen in terms of the composition of the Board of Governors. We're not at a tipping point here, but those developments are certainly something to watch.

In terms of actual decisions, right now this is a judgment call. Our view is that rate cuts really aren't needed; we're not particularly concerned about inflation undershooting given our view that many of the factors leading to inflation weakness are temporary, and we think the economy is doing fine. However, there's still a plausible case to be made for rate cuts. The potential for further trade war escalation presents downside risk to growth; inflation has been below target for the better part of a decade, and there is some merit to the view that the 2% target should be symmetric, so providing some push in that direction is reasonable. If next year we're at 2.2% or 2.3% core PCE inflation and we're still talking about cutting further rather than when to take back the cuts we've made, then I'd be more concerned about undue political influence and the orientation of Fed policy more broadly.

Trump on the Fed



Source: Bloomberg, NY Times, CNBC, Federal Reserve, WSJ, Fox Business, Twitter, various news sources, Goldman Sachs Global Investment Research.

Interview with Donald Kohn

Donald Kohn is former Vice Chairman of the Board of Governors of the Federal Reserve System and current Robert V. Roosa Chair in International Economics and senior fellow at the Brookings Institution. Below he argues that recent attacks on the Federal Reserve risk undermining public support and its ability to achieve its dual mandate of maximum employment and stable prices.

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



Allison Nathan: Why is Fed independence so important?

Donald Kohn: It is crucial to have a group of people who analyze the economy with respect to the long-run goals of economic policy, including full employment and stable prices. The problem with having a non-independent central bank is that politicians have a much shorter timeframe in mind than is consistent

with achieving these goals. Politicians are looking at the next election and their impulse—as we are seeing today—is to step on the gas as hard as they can to maximize their chances of winning the next election, and then worry about the consequences later. Elected representatives were very wise to recognize their own potential shortcomings and create an independent central bank that would have a longer perspective in policymaking.

Allison Nathan: Does the argument for Fed independence still hold given muted inflation globally today?

Donald Kohn: The desire for central bank independence certainly grew out of the 1960s and 1970s, which was a very inflationary period given political pressure on the central bank to focus on employment rather than on price stability. Ultimately, there was a realization that in order to achieve price stability and solid economic performance over time, an arms-length relationship between the technocratic central bank and the political process was required.

But just because low—rather than high—inflation seems to be the problem today, doesn't mean that central bank independence is less important. Indeed, during and after the Global Financial Crisis (GFC), independence enabled the Fed to engage in unconventional policies, which eventually returned the economy to full employment and inflation close to its target, even as such moves were subject to intense political criticism and unfounded concerns that they would create an inflation problem or make it very difficult to tighten policy in the future. And just because inflation has remained quiescent over most of the last decade doesn't mean it will always remain so. I would be quite concerned that if the Fed's independence were badly compromised, we would run into an inflation problem again down the road given politicians' focus on the here-and-now.

Allison Nathan: Why has monetary policy come under attack in the recent period? Is this all about President Trump, or are there other factors at work?

Donald Kohn: It's not unusual for presidents, particularly those facing re-election, to want easier monetary policy. President Nixon pressured Fed Chair Arthur Burns. In Paul Volcker's recent memoir, he talks about an incident in which President Reagan's then chief of staff, James Baker, invited him to the White House in 1984 and told him not to raise rates again. And the elder President Bush—along

with a bi-partisan group of senators—constantly beat on Alan Greenspan for lower rates in a very intense and public way. So, political pressure is not uncommon historically. But, at least in my view, President Trump's actions of late have been more intense, more constant and more denigrating towards the people making monetary policy decisions than in the past.

That said, there is little doubt that the perception of the Federal Reserve took a hit during the GFC. People look to the Fed to preserve financial stability, and therefore blamed the Fed, at least in part, for the severity of crisis. There also seemed to be a narrative that the crisis response favored banks and lenders rather than the people, and that the unconventional policies favored the rich over the poor. I don't think that's true. But it has undoubtedly been a long, hard recovery. Taken together, I think the series of events during the crisis—mixed with subpar performance of the US economy in the wake of it—have reduced confidence in the Fed, and perhaps left it marginally more vulnerable to attack.

Allison Nathan: So how concerned should we be about the Fed's independence today?

Donald Kohn: I think concern is warranted. The president's criticism has not changed the legal framework supporting Fed independence; there is still budgetary independence, fixed terms, and independently operating reserve banks. But I do think the legal framework rests on public support. And I am somewhat worried that constant criticism could over time undermine public support for Fed independence. I also think that the criticisms have raised questions about whether the Fed's motivation for its shifts in communication and policy comes from political pressure, even if the Fed's actions are fully justified in economic terms, which I think is the case today. So overall, I think the open expression of pressure that we're seeing today is just not helpful and tends to undermine the credibility of the central bank. If the president has valid concerns, he and we would be better served if he raised them behind closed doors.

“ I think the open expression of pressure that we're seeing today is just not helpful and tends to undermine the credibility of the central bank. If the president has valid concerns, he and we would be better served if he raised them behind closed doors.”

Allison Nathan: Do Trump's appointments to the Fed give you any pause?

Donald Kohn: Not at this point. So far, all of the people that he has actually put on the Fed's Board of Governors have been very well qualified, including Fed Chair Powell. But President Trump has

apparently realized that these appointments are not behaving in ways consistent with his views on monetary policy, so the people that he has recently discussed nominating have been much more in agreement with these views.

Now, I don't think we should be surprised that a president would nominate people who were broadly in agreement with his or her policy views; that's part of democratic accountability. But even if Trump succeeds in doing so, I would emphasize that just putting a couple of new people on the Board with particular views doesn't change policy; given the small number of new faces, those people will need to convince their colleagues that their prescription for policy will do a better job of fulfilling the Fed's legislative mandates before we would see a meaningful shift in the direction of monetary policy.

Allison Nathan: With the Fed—and other major central banks around the world—already shifting back into easing mode so close to (or beyond) the Zero Lower Bound (ZLB), should there be greater coordination between monetary and fiscal policy, and can we achieve that without eroding central bank independence?

Donald Kohn: At the ZLB, unconventional policies can have some effect, but probably not as much as traditional monetary policy does when we're not at the ZLB. So fiscal policy may be the more effective tool. But I don't think formal coordination is necessary. During the GFC, the Fed took interest rates down to essentially zero, and vowed to keep rates there for a long time while also purchasing Treasury securities. Together, that facilitated the fiscal expansion that helped the US begin to recover from the recession. So a formal coordination mechanism wasn't necessary; when the fiscal authorities and the monetary authorities have the same aim—recovery from deep recession—their policies will naturally tend to complement each other.

That said, I think fiscal authorities generally need to be more active when monetary authorities are stuck at or close to the ZLB. This might include introducing larger automatic stabilizers so that when the economy falls into a recession, fiscal policy automatically becomes more expansionary. And, in order to ensure that these expansionary policies are sustainable, policymakers should address the high and growing level of government debt in good times so that they can double down on fiscal policy in bad times. I worry that is not happening today.

Along those lines, I also think there could be more focus on macroprudential policies in the current environment. After all, it was the fragility of the financial system that got us stuck close to the ZLB in the first place. Especially when monetary policy may be constrained, I think it's critical that the financial system be made resilient to shocks by making sure that there's enough capital and that risk is being well managed in the banks and non-banks such that if the unexpected happens, the financial system isn't making things worse. We have come a long way in this regard since the GFC, but we still have a long way to go in terms of guarding against risks that exist outside of the heavily regulated banking sector in areas like the real estate sector, for example.

Allison Nathan: It's been argued that economies without independent central banks, such as China, fared better in the GFC. Is there merit to the view that independent central banks aren't always a good thing, i.e. in times of crisis?

Donald Kohn: No. First of all, the Chinese faced a different set of problems. The US was at the epicenter of the crisis, whereas China was just dealing with spillovers. Second, China is an authoritarian state with only a semi-market economy. So I wouldn't draw any conclusions from China's experience during the GFC. Elsewhere in the world, some central banks lack independence; for example, in Turkey President Erdogan recently dismissed the central bank governor for not following his preferred policy prescription. I think that's short-sighted. In my view, the citizens of these countries would fare better over time if the central banks were given clear mandates for price stability and employment and then held accountable for delivering on those mandates, but left to their own devices to do so.

Allison Nathan: What actions—if any—could the Fed take to protect its independence that it's not taking right now?

Donald Kohn: The Fed is absolutely doing the right things at this point, but it must continue to be proactive. First, and most importantly, it must make sure that any policy action is justified by the Fed's objectives, and is based on sound economic reasoning to avoid looking like it's giving into political pressure. Second, it must continue building relations with the legislature and with the people. That means explaining the importance of independence to members of Congress, and talking in plain English to ordinary people about what the Fed is doing and why. I think the more the bank builds understanding both on Capitol Hill and around the country about what it's doing, the easier it will be to protect its independence.

All of these things have been reinforced to me in my time at the Bank of England (BOE), where I've been a member of the Financial Policy Committee (FPC) for the past six years. The BOE concentrates heavily on getting its message out to the public in a number of ways—and one of those is public testimony. Indeed, I've participated in numerous hearings for the Treasury Committee of the UK Parliament. They do a good job of oversight; and I think this accountability to the legislature and the public is key to preserving independence, along with setting clear goals for policymakers and ensuring a diversity of opinion among policymakers within the BOE itself.

Allison Nathan: What do you make of the appointment of Christine Lagarde as ECB president? Will her background as a politician—rather than an economist/central banker—have any influence on the bank's independence?

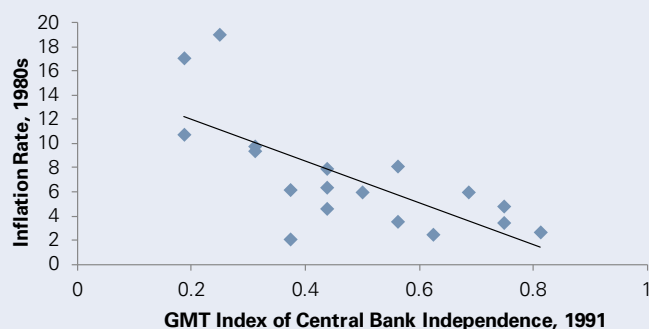
Donald Kohn: The ECB's independence is protected by treaty and is hard-wired into the European Union, so I'm not worried about the bank's independence. Christine Lagarde has extensive experience dealing with issues related to financial stability and monetary policy from her time at the IMF; she's deeply knowledgeable even though she's not an economist. Of course, she will need to consult closely with the economists around her, as well as the staff, who she will likely lean on for some of the more sophisticated analysis. But, overall, I think she's well-positioned for her new role.

The case for central bank independence

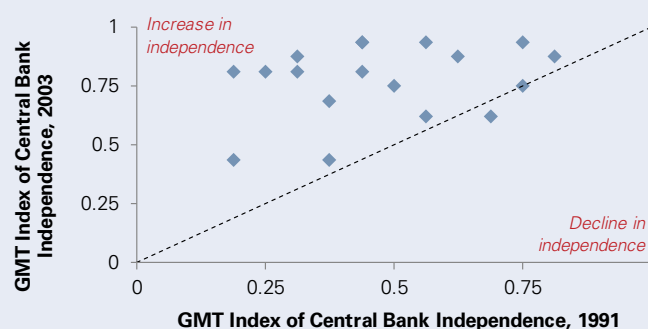
In the decades prior to the financial crisis, a clear consensus emerged on the desirability of central bank independence. Theoretical academic studies showed that if short-term oriented political officials controlled monetary policy, the public would rationally anticipate easier policy, resulting in higher wages and prices with no gain in output.¹ This was borne out in the 1970s and the first half of the 1980s, a period when monetary policy was often subject to the whims of politicians, and when developed economies were plagued by high inflation and high unemployment.

Evidence backs theory

Empirical studies provided further support for central bank independence. Cross-country analyses showed the close correlation between more independent central banks and lower and more stable inflation, with no negative effect on output.² The Grilli, Masciandaro and Tabellini (GMT) index, one of the most widely used measures of central bank independence, showed a strong relationship between the GMT index when the index was first constructed in 1991, and inflation in the 1980s for 20 developed OECD countries.³



Source: Grilli, Masciandaro, Tabellini (1991); Goldman Sachs GIR.



Source: Grilli, Masciandaro, Tabellini (1991); Arnone, Laurens, and Segalotto (2006); GS GIR.

The theoretical and empirical evidence thus convincingly made the case for independent central banks, and a push for more independence emerged globally. Central bank officials across the world were given clearly defined goals related to price stability, and were then left to use the tools at their disposal to enact policy as they saw appropriate. A 2003 update of the GMT index shows that almost all of the 20 countries in the original analysis had more independent central banks in the years following the study.⁴ The global rise in central bank independence was universally seen as a positive, with little further academic work done on the topic.

A weakening case for independence?

However, in the aftermath of the financial crisis and the subsequent slow recovery globally, the debate on central bank independence has resurfaced, reflecting several factors. First, the problem of high inflation—the primary factor pushing for more central bank independence in the first place—has been replaced by concerns about below-target inflation and declining inflation expectations.

Second, research has shown that in a world of low nominal interest rates and thus limited room to ease monetary policy, fiscal and monetary cooperation can provide powerful stimulus during a growth slowdown. In addition, a central bank with a bias towards easing can help push up inflation expectations if the public believes the central bank will allow policy to remain easy in the future. This could help lower real interest rates at the effective lower bound, but may not be perfectly credible if central banks are fully independent.

Third, the link between independence and inflation has become less clear over the last decade. Empirical studies using more recent data have found relatively little correlation between central bank independence and inflation outcomes in the 21st century.⁵ However, this may partially reflect the small amount of variation in independence across developed economies today, and may also reflect well-anchored inflation expectations due to high levels of central bank independence itself.

Consensus on maintaining credibility

While the recent experience of developed economies has led to a revival on the debate about central bank independence, any suggested tweaks to the current framework are mostly incremental in nature, and still allow central bank officials to implement monetary policy as they best see fit. For instance, if done properly, central bank officials would likely welcome fiscal-monetary cooperation as a way to stimulate the economy near the effective lower bound. Few economists suggest direct interference from political officials on the conduct of monetary policy, which could threaten a central bank's operational independence and lead to the erosion of hard-won credibility built over the last several decades.

David Choi, GS US Economics Research

¹ See, for instance, Barro and Gordon, "A Positive Theory of Monetary Policy in a Natural Rate Model," *Journal of Political Economy*, 1983.

² See Alesina and Summers, "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence," *Journal of Money, Credit, and Banking*, 1993 for an influential study.

³ See Grilli, Masciandaro, and Tabellini, "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries," *Economic Policy*, 1991 for more details on the construction of the index.

⁴ See Arnone, Laurens, and Segalotto, "Measures of Central Bank Autonomy: Empirical Evidence for OECD, Developing, and Emerging Market Economies," *IMF Working Paper*, 2006 for an update of the GMT index.

⁵ See Balls, Howat, and Stansbury, "Measures of Central Bank Autonomy: Empirical Evidence for OECD, Developing, and Emerging Market Economies," *IMF Working Paper*, 2006.

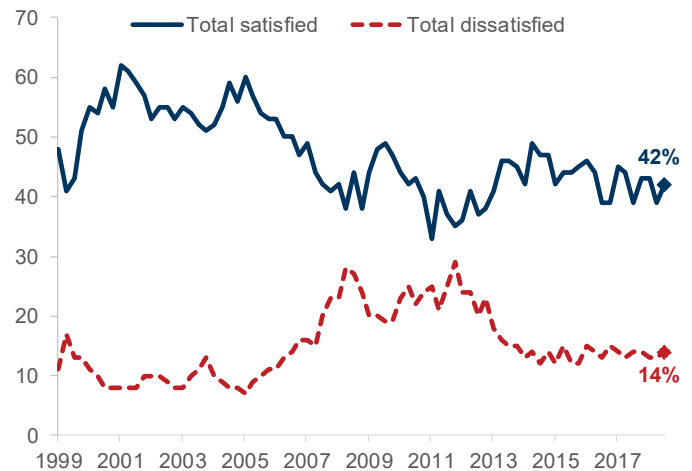
Central banks and public opinion

Americans have mixed—and volatile—views on the Fed...
How would you rate the job being done by the Fed?*, %



*Excludes "no opinion" responses.
Source: Gallup.

...while UK citizens generally approve of the Bank of England
How satisfied/dissatisfied are you with the BOE?*, %



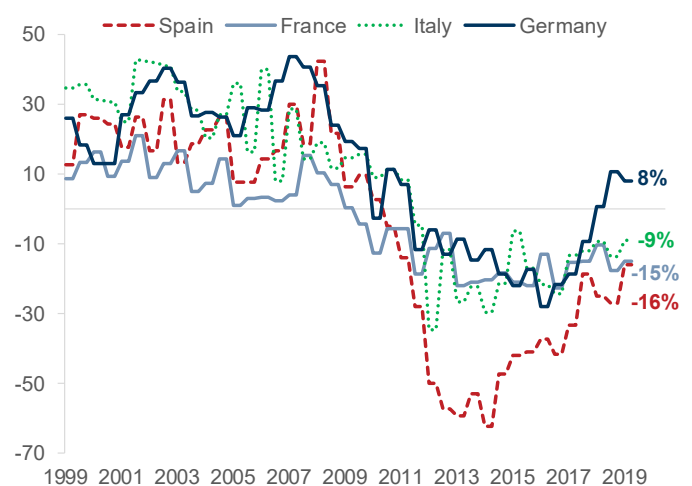
*Includes "very" / "fairly" (dis)satisfied responses; excludes neutral / "no idea" responses; question specifically asks about BOE's success in setting rates to control inflation. Source: BOE.

Trust in the ECB has risen of late...
EU citizens' trust in the European Central Bank, %



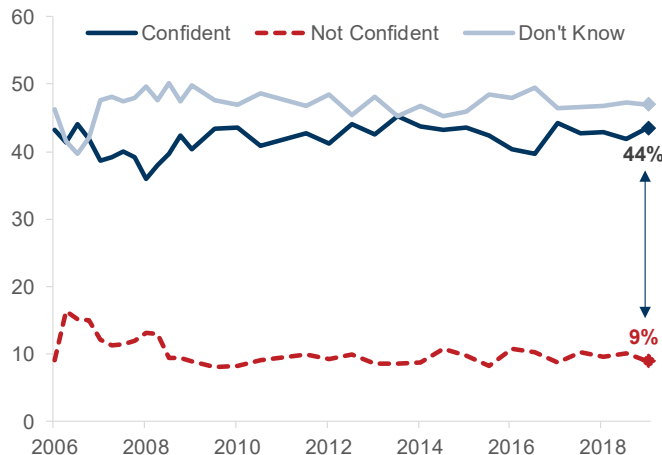
*Excludes "don't know" responses.
Source: European Commission.

...though opinion differs across the Euro area
Net trust in the ECB ("tend to trust" – "tend not to trust"), %



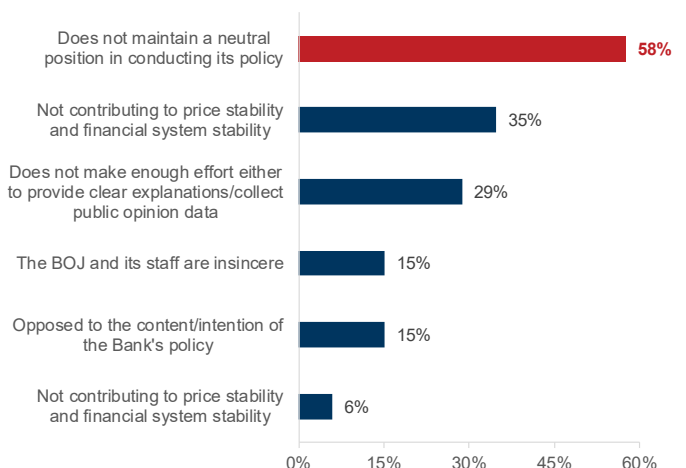
*Excludes "don't know" responses.
Source: European Commission.

People remain confident in the Bank of Japan...
How would you describe your level of confidence in the BOJ?*, %



*Confident includes "somewhat confident" / Not Confident includes "not particularly confident" responses. Source: BOJ.

...though a lack of neutrality remains a top concern
Why do you not have confidence in the BOJ?, %



*Up to two answers are allowed; survey conducted June 2019. Source: Bank of Japan.

Assessing political influence on the Fed

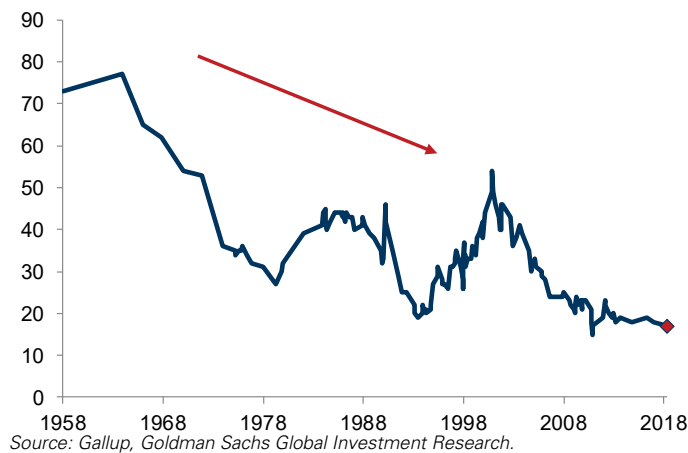
Alec Phillips argues that political pressure is unlikely to influence Fed policy directly, but is already influencing policy through indirect channels, such as trade policy

President Trump’s continued criticism of Fed policy has raised new questions in financial markets regarding Fed independence. Political scrutiny of the Fed has increased for three basic reasons, in our view. First, the Fed’s response to the financial crisis blurred the lines between monetary policy, where political independence is well-established, and fiscal and regulatory policy, where it is not. The Fed’s undertaking of quantitative easing and various financial stability programs increased political oversight of Fed activities.

Second, trust in public institutions has declined across the board, not just related to the Fed or central banks. For many years the American public has become progressively more skeptical of most institutions, including the media, business, and the federal government. This has coincided with a rise in political populism and has left public institutions such as the Fed more susceptible to political interference.

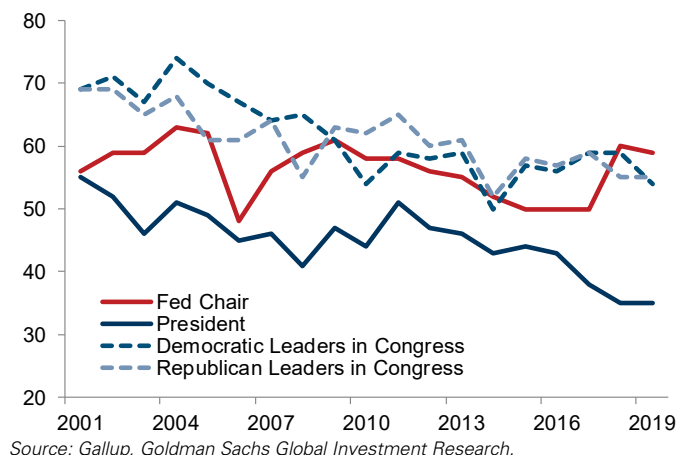
US public trust is waning...

Trust the federal government "always" or "most of the time", %



...across institutions

"Great deal" / "fair amount" of confidence to do the right thing for the economy, %



Third, President Trump has amplified this mistrust. While many US presidents over the years have privately tried to influence

the Fed to hold interest rates down, the intensity of President Trump’s public criticism of the Fed is unprecedented. Beyond a desire for lower interest rates, the Fed might also be an easy target for President Trump given that his base of conservative Republicans has a net unfavorable view of the Fed (54% unfavorable, 33% favorable), while moderate Republicans and all Democrats have a favorable one. The Fed’s lower public profile might also contribute to the political pressure; Fed Chairs tend to remain politically neutral, and past polling has shown that only around one quarter of the public could name the Fed Chair, while virtually all poll respondents could name the President.

Limited risks of direct political influence...

Attempts to influence Fed monetary policy decisions by both Congress and the White House are not unusual. This is a natural role for Congress, which created the Fed, sets its goals, and oversees it. However, for the time being we do not expect any legislation to be enacted that would meaningfully affect monetary policy. While many members of both parties appear to support greater scrutiny of Fed activities, they differ on what goals the Fed should seek. With little consensus on what the Fed should do, the risk to Fed independence from Congress is likely limited to greater transparency, though even “audit the Fed” legislation has languished for years.

Political interference by the White House is a more immediate issue, however. President Trump has criticized the Fed Chair on several occasions, recently saying that he is “not happy with his actions” and that he “doesn’t think he’s done a good job”. While this puts public pressure on Chair Powell and the rest of the FOMC, it also makes clear that, unless a dramatic change occurs, President Trump is fairly unlikely to re-nominate Powell for a second term as Fed Chair if he wins the 2020 election (Powell’s term ends January 2022). With no expectation for re-nomination, Chairman Powell is arguably even less vulnerable to potential influence than other chairs who might have sought a second term.

Of course, the President could also seek to influence Chairman Powell’s views by threatening to remove him from the job, and President Trump has indicated that he believes he has the power to do so. However, the legal issues are complicated and his authority in this area is unclear. The Federal Reserve Act protects members of the Board of Governors from dismissal except for “cause”, which is unlikely to include disagreements over monetary policy. While the Chairman is not explicitly protected in the statute, Fed former general counsel Scott Alvarez, among others, has argued that when Congress changed the law in 1977 to require Senate confirmation of the Fed chair for a set 4-year term, this conferred the same protection to the chair as board members, who are also Senate confirmed for fixed terms. In light of the legal complexities, as well as the potential difficulty of confirming a successor in the Senate, we think it is unlikely that Chairman Powell would be dismissed or demoted prior to the end of his term.

...but indirect influence on Fed policy is already occurring

Although we do not believe the President’s statements on monetary policy have directly influenced Fed decisions, the White House has clearly already influenced Fed policy indirectly

through the Administration's own actions. Some of these actions, like tax reform, were simply policies the Administration pursued as an end in themselves; but monetary policy nevertheless likely tightened more than it would have without the fiscal boost from tax cuts and spending hikes.

Tariff increases also likely began with other motivations—an attempt to protect certain domestic industries and to pressure trading partners into new agreements—but at this point it seems likely that the President is formulating trade policy with the Fed in mind. President Trump has commented several times over the last few months about his desire for the Fed to ease policy to put the US on an equal footing with China, where he appears to believe monetary policy is better coordinated with trade and other policies.

Trade policy influencing Fed policy

Federal funds rate implied by the 12-Month futures price, %



Source: Haver Analytics, CME, Goldman Sachs Global Investment Research.

Financial markets might have also recognized a closer linkage between US monetary and trade policy; expectations of Fed policy have moved closely with some of the most significant trade announcements. In a recent [analysis](#) we noted that the initial tightening in financial conditions in response to the President's recent announcement of a 10% tariff on \$300bn of imports from China was substantially smaller than the predicted tightening following prior tariff escalations. One likely explanation for this is that market participants expect the Fed to ease further as tariffs escalate. That said, in light of the recent market sell-off following the CNY depreciation through 7.00, market participants might also believe there is a limit to how much the Fed will offset.

Given the increasing focus on currency issues, an emerging issue the Fed might be forced to consider is whether to join the Treasury in intervening in the value of the dollar. While the White House stated recently that the Administration was not planning an intervention, the President's comments over the last few days regarding CNY devaluation suggest that the issue has at least risen in importance. He has also explicitly linked this to the Fed, tweeting: "China dropped the price of their currency to an almost a historic low. It's called 'currency manipulation.' Are you listening Federal Reserve?" Historically, the Fed has joined the Treasury in currency interventions, although the US has not engaged in consistent intervention since the mid-1990s. To the extent that the Treasury pursues such intervention, this could represent yet another test of the Fed's independence.

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EM independence: progress amid setbacks

Kevin Daly argues that EM challenges to central bank independence differ from DM ones, and notes that recent setbacks to EM independence are the exception, not the rule

EM central banks face different challenges to DM central banks in maintaining their independence. Whereas DM central bank independence is threatened by poor post-crisis growth, an associated rise in populism and the need for greater fiscal co-ordination in a world of low interest rates, the primary threats to EM central bank independence are the relative weakness of their institutional frameworks and their limited history as independent institutions. However, despite a number of high-profile setbacks in recent years (e.g., Turkey), EM central banks have, on the whole, made significant progress towards achieving greater independence and monetary policy credibility.

EM central banks: Latecomers to independence party

The logic of delegating responsibility over monetary policy to an independent central bank first emerged in the developed world in response to the experience of the 1970s. At that time, policymakers believed there was a stable trade-off between unemployment and inflation and, having faith in this link, they attempted to offset the effects of the 1970s oil shocks through the maintenance of loose monetary policy. The result was a rapid rise in inflation *and* higher unemployment across most of the developed world.

In response to that experience, economists started emphasizing the importance of “time consistency” in monetary policy-making, arguing in favor of transferring responsibility for monetary policymaking away from short-term political influences and towards independent central bankers with longer-term horizons.⁶ In order to address concerns that devolving important powers to unelected civil servants in this way was undemocratic, there was a broad convergence to the view that central banks should have independence over *how* they achieved their goal(s), but that the goals themselves should be set by elected representatives. Starting with the Reserve Bank of New Zealand in 1989, an increasing number of central banks in the developed world were granted independence and tasked with achieving an inflation target.

Over the next twenty years, this monetary policy framework went largely unquestioned. The period between the early 1990s and 2008 was one of remarkable macroeconomic stability in the developed world and there was a wide consensus that the combination of central bank independence

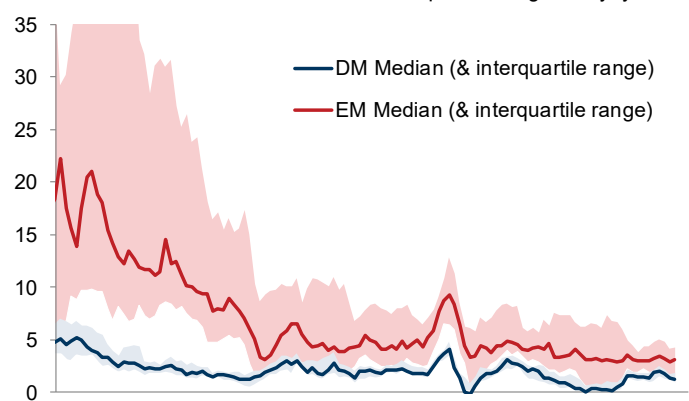
and inflation targeting had been instrumental in bringing that stability about. Cross-country studies found a clear negative relation between central bank independence and inflation in developed economies (see pg. 10).⁷

Following the success of this framework in the developed world, an increasing number of EM economies started to adopt similar frameworks from the late 1990s onwards. The list of EM economies combining greater central bank independence with the adoption of inflation targets during this period includes Poland (1999), Brazil (1999), South Africa (2000), Hungary (2001) and the Philippines (2002), among others.⁸

While the success of inflation targeting across EM economies has been varied, increased central bank independence together with the widespread adoption of inflation targets has played a key role in boosting monetary policy credibility across EM economies and reducing average inflation rates over time.⁹

Coming together

DM and EM median inflation rates and interquartile ranges, % yoy



Source: Haver Analytics, Goldman Sachs Global Investment Research.

DM challenges: growth, populism, zero lower bound

Central banks in the developed world now face two fundamental challenges to their independence. First, DM economies have faced weak post-crisis growth that has given rise to populism. The relative stability of both growth and inflation in the twenty years leading up to the Global Financial Crisis (GFC) in 2008/09 was widely attributed at the time to the success of central bank independence/inflation targeting, and this success was instrumental in the widespread adoption of this framework across DM and (eventually) EM economies. It is not surprising, therefore, that the poor economic performance in developed economies since the GFC has led to a re-evaluation of that framework. Moreover, the weakness of income growth since the crisis has contributed to the rise in

⁶ Kydland and Prescott (1977) first highlighted the importance of time consistency in monetary policymaking, Barro and Gordon (1983) addressed the importance of credibility and rules versus discretion in monetary policymaking, while Cukierman (1992) connected the different strands of research into an argument for central bank independence.

⁷ See, for example, Berger, de Haan and Eijffinger (2001).

⁸ The shift to independent central banks was largely restricted to EM democracies, with central banks in autocracies remaining under direct or indirect government control. However, given that the primary logic of making central banks independent is to isolate monetary policymaking from the short-term political pressures that

are created by the electoral cycle, it is not clear that making central banks independent is necessary to encourage long-termism in autocratic regimes (for all the other failings of these regimes).

⁹ See “The Convergence in EM Inflation” ([EM Macro Themes, 26 January 2018](#)). Increased monetary policy credibility has not been the only factor underlying the secular decline in EM inflation. There has also been a reduction in the frequency of EM currency crises, reflecting a long-term improvement in EM balance sheets, with rising net international investment positions and a shift from debt-based to equity-based financing.

populism and a more widespread questioning of devolving economic policymaking to “technocratic experts.”

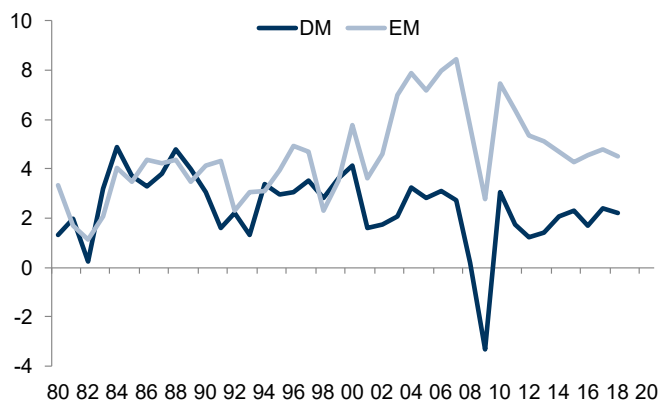
Second, DMs have found themselves in a low-interest-rate world that requires increased fiscal coordination. When central banks are constrained by the zero lower bound (ZLB) and are forced to engage in unconventional policy measures—including the purchase of government securities—the division between monetary and fiscal policies becomes less clear-cut. The blurring of this boundary increases the need for monetary and fiscal coordination, potentially constraining the ability of central banks to operate independently. Faced with weak growth and low inflation across many developed economies, a number of economists have advocated that central banks could fund increased government spending directly.¹⁰ While there are legitimate arguments in favor of such a policy, it is easy to envisage the political difficulties that a central bank would encounter in trying to exit such an arrangement.

The EM challenge: Institutions

The challenges that EM central banks face in maintaining independence differ from those of their DM counterparts in important respects. For EM countries, the initial hit to national income from the GFC was typically less marked than in DM economies and, while growth in EM economies has slowed somewhat in the decade since the crisis, income convergence remains intact.¹¹

EM outperformance since the crisis

Annual EM and DM GDP growth, %



Source: IMF, Haver Analytics, Goldman Sachs Global Investment Research.

Demand for policy upheaval is, therefore, generally less marked in EM than in DM economies. Moreover, while monetary policy in many developed economies is constrained by the proximity of the zero lower bound, there remains ample scope for further monetary easing across the majority of EM economies.

A larger threat to EM central bank independence is the fact that their institutional frameworks are less robust and the history of central bank independence is typically shorter in EMs. This leaves them more exposed to their independence being undermined, especially now that the central bank independence/inflation-targeting framework no longer appears

to be the panacea that it did in the twenty years prior to the GFC.

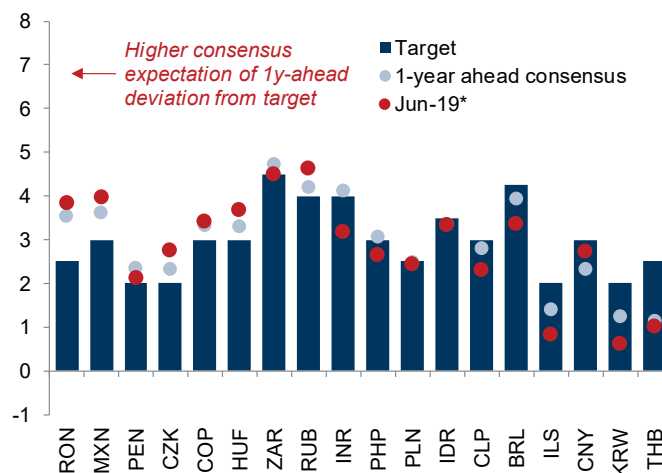
Policy credibility: Setbacks, but also progress

The weaker footing upon which central bank independence rests in EM economies has been brutally exposed by a number of high-profile departures from central banks in the past couple of years. In Turkey, the governor of the TCMB was forced to resign this year, reportedly for having refused to cut interest rates as quickly as President Erdogan would have liked. In India, the Governor, Urjit Patel, and one of the Deputy Governors, Viral Acharya, of the RBI resigned after clashing over the erosion of independence. And, in South Africa, proposed changes to the SARB’s unusual private ownership structure are viewed as a potential threat to the bank’s policy independence.

Focusing on these high-profile examples, it would be natural to view central bank independence in EM economies as being significantly undermined. However, set against these examples, the majority of EM central banks have maintained relatively high real interest rates in recent years and have overseen a steady decline in both inflation and inflation expectations. If stabilizing inflation expectations at relatively low levels is the primary measure of monetary policy credibility, it is difficult to deny that EM policy credibility has risen over time.

On the mark

Cons. inflation expectations, 1y realised inflation; CB inflation target, %



*IDR, PEN, KRW, and THB have July inflation data. Source: Consensus Economics, Haver Analytics, Goldman Sachs GIR.

Concentrating only on the high-profile examples offers a distorted picture of what is happening in aggregate. The threat to central bank independence in EM economies is real, but so is the considerable progress that those central banks have already made in recent years to bolster their monetary policy credibility.

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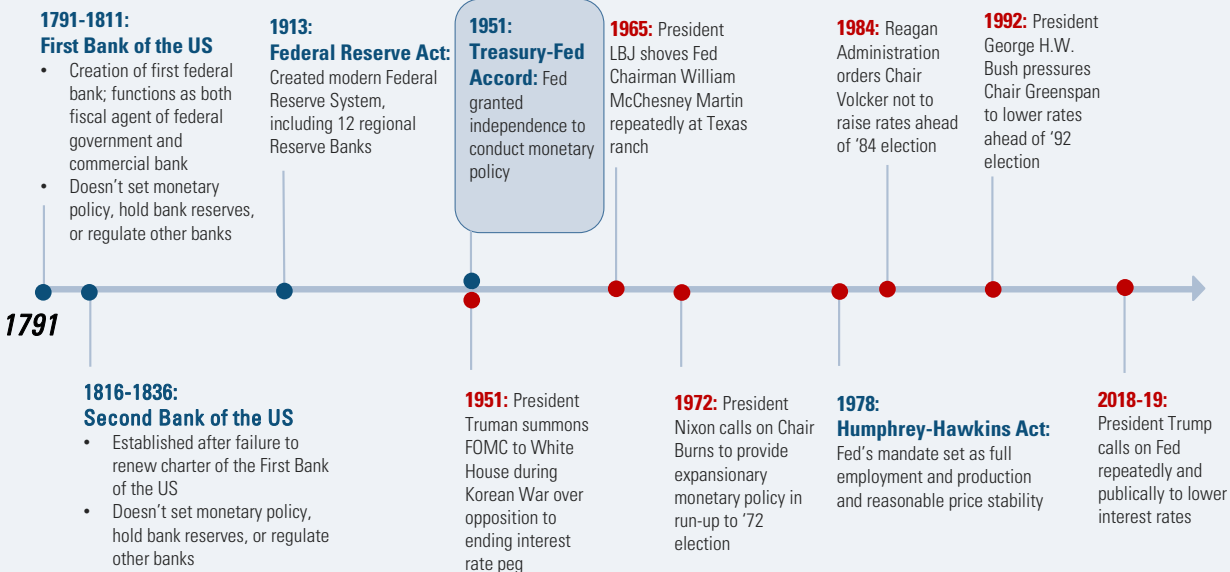
¹⁰ Blanchard and Summers (2018).

¹¹ See “Arrested Development – EMs Are Still Converging But Productivity Growth is Lower Everywhere” ([EM Macro Themes, 20 December, 2016](#)).

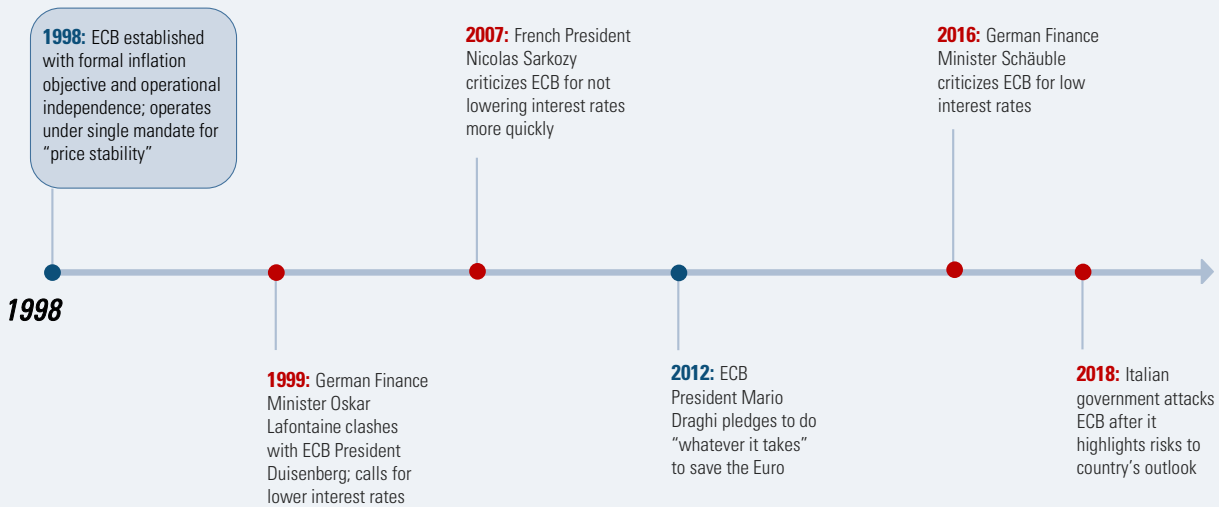
History of central bank independence

■ Date of independence ● Institutional developments ● Political influence/coordination

US: The Federal Reserve



EA: European Central Bank



Sources: US Federal Reserve, European Central Bank, various news sources, "The Federal Reserve and Global Central Banking" (Orphanides, 2013), Goldman Sachs Global Investment Research.

■ Date of independence ● Institutional developments ● Political influence/coordination

Japan: Bank of Japan

1882:

BOJ Act of 1882;

- Bank of Japan established
- Serves both commercial and public roles
- Government appoints governor and vice governor

1882

1942:

BOJ Act of 1942;

Government control over policymaking increased; stipulates that Ministry of Finance is able to dictate monetary policy

1949:

Amendment of BOJ Act;

Policy board modeled on US Federal Reserve System introduced; known as “sleeping board” because policy remains firmly in government hands

1998: BOJ Act of 1998;

Operational independence established; sets core goal as “price stability;” abolishes ability of Ministry of Finance to dictate policy and dismiss officials for policy differences

2012: Prime Minister Abe wins election in part on pledge to increase inflation target and engage in “unlimited easing”

2013: Appointment of Governor Kuroda; start of “bazooka” stimulus; BOJ and government pledge to “strengthen policy coordination and work together” to overcome deflation

2013: BOJ Governor Shirakawa steps down early amid government pressure to ease policy

UK: Bank of England

1694:

Bank of England founded

- Helps to finance war efforts against France
- Serves both commercial and public roles

1694

1844:

Bank Charter Act;

BOE given monopoly on issuance of banknotes in England and Wales

1866: BOE takes on lender of last resort authority after failure of financial house Overend Gurney

1946: BOE

nationalized by government of Prime Minister Atlee, giving it ability to appoint governors and directors

1980: Prime Minister Thatcher summons Governor Richardson and calls for tighter monetary policy

1997: BOE granted operational independence; inflation target set by Treasury

2016: Prime Minister May calls for changes to quantitative easing and low interest rates in party conference speech

Sources: Waseda Institute of Political Economy, “Til’ Time’s Last Sand: A History of the Bank of England, 1694-2013,” various news sources, Goldman Sachs Global Investment Research.

That 70s show?

Praveen Korapaty argues that reduced central bank independence is unlikely to spur a quick return to bond market pricing of the 1970s-80s

Central banks globally have executed a sharp turn in direction towards easing. In some places, such as the Euro area, the case for looser policy is clear. But given that the rationale is less obvious in the US—where growth remains relatively solid, in our view—the question of central bank independence is now top of mind. Rather than trying to predict how (or if) the erosion of central bank independence may occur, however, we draw on historical experience to explore how such a shift would impact interest rate markets.

Paradigm shift

In countries with limited foreign currency debt, fears about waning central bank independence center on inflation—or, more specifically, on the de-anchoring of inflation expectations to the upside. We saw such a de-anchoring play out in the US throughout the 1970s and 80s, when central bank-enabled fiscal expansion in the 1960s was followed by high inflation and inflation risk premia in subsequent decades. This period of “central bank co-option” by fiscal authorities can be contrasted with a distinct phase that began in the mid-90s, when central banks largely established their independence and inflation fighting credentials. So how did these two inflation “regimes”—marked by different levels of central bank independence—differ in terms of economic and market outcomes?

First, while average growth rates in the two periods diverged by less than 1%, the difference in average short-term interest rates was substantial. Indeed, short-term rates since the mid-1990s have been nearly 5% lower on average than in the 1970s-80s. A large part of that difference can be attributed to a change in the level of inflation, which averaged nearly 6% throughout the 1970s-80s (vs. 1.8% in the current regime). There is also a smaller but significant gap in average short-term real rates, which were 1.3% higher in the earlier period against the backdrop of less central bank independence.

Second, the average compensation for the risk of holding longer maturity debt, which we proxy using 10-year term premia, dropped by nearly 150bp—from about 2.5% in the 1970s-80s to about 1% over the past 25 years. And since 2015, the average level of this risk compensation has actually turned negative (-20bp), resembling term spreads more typically seen during the gold standard.

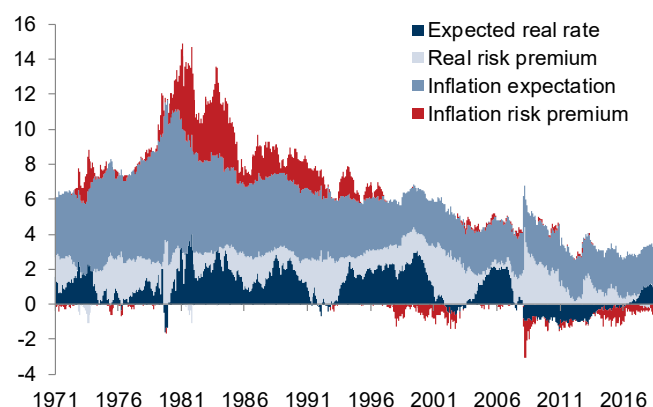
Third, increased central bank inflation-fighting credibility in the most recent period can be seen in the skew in US inflation outcomes—which went from fairly positive on average in the 1970s-80s to quite negative in the past three decades or so—as market perceptions of upside inflation risk declined. In general, well-anchored inflation expectations have led to more stable inflation; indeed, the persistence of inflation readings (measured by autocorrelation) dropped substantially in the past 25 years vs. the inflationary regime of the 1970s-80s. Finally, inflation risk premia have declined sharply from being substantially positive to slightly negative, as the sign of the

correlation between inflation and growth flipped from strongly negative in the 1970s-80s to mildly positive in the current regime.

Of course, some of these changes between the two inflationary regimes were driven by structural shifts in the economy (e.g., a decline in growth rates). But, in all cases, central bank behavior played a crucial role.

Regime change

10-year US Treasury yield decomposition, %



Source: Haver Analytics, Federal Reserve Banks, Goldman Sachs GIR.

Back to the 70s?

So would the erosion of central bank independence today mean that bond pricing and yield curves are headed back to the 1970s? We believe such a paradigm shift would require a fundamental change in inflation dynamics. But even with persistently stimulative monetary policy and little slack, this can take a long time, as extended periods of high realized inflation are likely needed for inflation expectations to rise. Further, lesser indexation (e.g., wages linked to price indices) in the economy means price spirals are less likely. And unlike in the 1960s, interest rates globally are closer to the effective lower bound, leading to concerns that central banks may have little policy space to adequately respond to downturns. This makes it harder for markets to anticipate that inflation can rise when growth falls in the near future.

All that said, another potential consequence of a co-opted central bank is that it enables the expansion of the debt capacity of a fiscal authority issuing in its own currency—and this, in and of itself, can have inflationary consequences. This worry has merit; even if the central bank is initially successful in capping the cost of capital by using its balance sheet to absorb government debt, other input resource constraints (ones that cannot be manufactured as easily as fiat money) are likely to become binding at some point. But even though this could eventually drive a meaningful shift in inflation dynamics, it's only likely to rear its head over a longer horizon.

So all things considered, while a return to bond market pricing of the 1970s-80s is possible should central banks become less independent, we believe it is a long road to get from here to there.

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Goldman Sachs and Co. LLC

Q&A with Jari Stehn



Jari Stehn is Head of Europe Economics at Goldman Sachs. Below, he argues that Christine Lagarde's unique background will reinforce the ECB's credibility.

Q: What does the appointment of Christine Lagarde as the new ECB President mean for ECB policy over the near term? Longer term?

A: In the near term, it points to continuity of the policy direction set by President Draghi. Lagarde's past comments during her time at the IMF suggest that she was quite concerned with low Euro area inflation in the 2013-15 period, and advocated forceful action to prevent a slide into deflation, including negative interest rates, QE, and so forth. More recently, she has expressed concern about the global outlook given trade tensions, and has argued that both monetary and fiscal policy are needed to support the economy. We therefore expect her to support the change in policy direction that Draghi has laid out over the last few months, which we expect to lead to the announcement of a significant easing package at the September meeting.

Longer term, I expect Lagarde to support the continued evolution of the ECB as an institution. Initially, the ECB was closely modelled on the Bundesbank with a heavy focus on monetary aggregates and headline inflation, and a fairly narrow set of policy tools. Draghi oversaw a substantial evolution from that starting point, with a notable expansion of the tool kit, including QE, refinancing operations, as well as a more symmetric interpretation of the 2% inflation mandate. I think Lagarde will likely continue this evolution, further broadening the tool kit, maintaining Draghi's "whatever it takes" pledge, and also supporting a framework review that seems to be gaining some momentum, making clear that the inflation target is symmetric and possibly also discussing some of the aspects that we've seen with regard to the Fed, including moving in the direction of an average inflation target. I don't think these shifts will be immediate, but I expect them over the longer term.

Q: Will Lagarde's background as a political figure—rather than a central banker or economist—have implications for the Fed's independence and/or credibility?

A: I don't think Lagarde's appointment has any immediate consequences for ECB independence, which is written into law. If anything, the ECB is more independent on some metrics than other central banks, and I would expect it to stay that way. Now, there is a risk that increasingly unconventional policies could erode public support for the ECB in certain jurisdictions and thus threaten independence at some point. Lagarde will therefore need to be mindful of these concerns, particularly when it comes to distributional issues like potential deviations from the capital key (the structure that governs the proportion of bonds the ECB can buy from each country) or the possibility of buying bank bonds.

That said, I think her background should reinforce, rather than tarnish, the ECB's credibility. Her long-held concerns about low inflation and the need to fight against it should support the ECB's credibility in returning inflation back to the target. And, while of course the ECB doesn't have a fiscal mandate, to the extent that the Euro area's current predicament requires more coordination between monetary and fiscal policy, her background positions her well to help facilitate this; her role at the IMF provided her with a clear understanding of fiscal issues, and she's well-connected with the political leadership in Europe. So I think it's possible that coordination with fiscal policy will be somewhat smoother and more natural than in the past. If done properly, I don't see such coordination posing a threat to the ECB's independence; the ECB is focused on price stability; fiscal policy is focused on supporting the cycle; and those two things should be complimentary.

Q: What does the appointment of Lagarde potentially imply for EMU reform ahead?

A: Lagarde clearly supports further EMU reform, including completion of banking or capital markets union, and setting up a common Euro area fiscal capacity that could foster greater coordination. And so I would expect her to be quite vocal and supportive of further reform in that direction. But, again, EMU reform and fiscal policy are not mandates of the ECB, which has a purely advisory role in these matters. Draghi has tried for many years to achieve more progress on EMU reform and more coordination with fiscal policy. As I said, I think there's some chance that Lagarde's background will make her more effective on these issues, especially during a crisis period, when I could see her being quite effective in putting together intervention and crisis support. But I think ultimately other European appointments—namely the new Presidents of the European Commission, Ursula von der Leyen, and the European Council, Charles Michel—will be more important for fiscal policy and reform issues. We see them as quite pro-European and in favor of further integration, but progress will likely remain slow.

Central bank policy snapshot

	Interest Rate Policy	Recent Bias	Balance Sheet Policy	Outlook
Fed	<ul style="list-style-type: none"> Federal funds rate: 2.00%-2.25% Last changed: July 2019 (-25bp), the first rate cut since the Global Financial Crisis in 2008. 	<ul style="list-style-type: none"> Dovish: In July, the Fed delivered a 25bp cut, characterizing the move as part of a "mid-cycle adjustment" which we see as consistent with a policy of limited easing through year-end. 	<ul style="list-style-type: none"> The Fed announced an end to its balance sheet reduction in July, two months ahead of schedule. The Fed's balance sheet stands at about 18% of US GDP. 	<ul style="list-style-type: none"> We expect the Fed to cut rates in September and October, by 25bp (for a 75bp total cut this year), though a 50bp cut is still possible, before going on hold in December as core PCE rises close to its 2% target. Risks to our view include a White House decision not to follow through on the latest China tariff threat, or conversely, a move to intensify the trade war by increasing tariffs in the upcoming round from 10% to 25%.
ECB	<ul style="list-style-type: none"> Main refinancing operations rate: 0% Last changed: March 2016 (-5bp), the 8th cut since the ECB temporarily raised interest rates in 2011. Deposit facility rate: -0.40% Last changed: March 2016 (-10bp), the 7th cut since the ECB temporarily raised interest rates in 2011. 	<ul style="list-style-type: none"> Dovish: In July, the ECB remained on hold, but provided a strong signal that it will deliver a package of easing measures in September. 	<ul style="list-style-type: none"> Currently reinvesting maturing government bonds, ABS, covered bonds, and corporate bonds. The ECB's balance sheet stands at about 40% of Euro area GDP. 	<ul style="list-style-type: none"> We expect the ECB to deliver an easing package in September that includes a 20bp deposit rate cut, paired with a tiered reserve system; a return to net asset purchases, including corporate and sovereign debt; enhanced forward guidance, and a signal that the Governing Council stands ready to expand QE beyond its current limits if economic conditions don't improve. We see the ECB's first deposit rate hike in end-2021.
BOJ	<ul style="list-style-type: none"> Policy deposit rate: -0.10% Last changed: January 2016, when it was first introduced, in addition to the BOJ's target for the monetary base. As of September 2016, the BOJ also targets 0% for 10-year Japanese Government Bond (JGB) yields under its Yield Curve Control (YCC) framework; in July 2018, the fluctuation band around this target was expanded to around +/-20bp. 	<ul style="list-style-type: none"> Neutral: In July, the BOJ kept monetary policy unchanged in all areas while signaling a more positive stance toward further easing, but room to do so remains constrained. 	<ul style="list-style-type: none"> Targeting ¥80tn/year in JGB purchases since October 2014, when it expanded its Qualitative and Quantitative Easing program. Asset purchase program also covers commercial paper, corporate bonds, ETFs, and J-REITs. In practice, the pace of JGB purchases <u>has been slowing</u>, to around ¥30tn/year currently. In general, under YCC policy, the BOJ now emphasizes interest rate targets over its balance sheet target. The BOJ's balance sheet stands at about 100% of Japanese GDP. 	<ul style="list-style-type: none"> We expect the BOJ to remain on hold in 2019 and into 2020, while refraining from additional easing—especially as the bank's remaining easing options appear limited, in our view. We expect asset purchases to continue declining towards ¥25-30tn/year in 2019. Risks to our view include heightened odds of Fed rate cuts, concerns over the side effects of current easing policies, and a potential sharp appreciation in the USD/JPY beyond 100.
BOE	<ul style="list-style-type: none"> Bank Rate: 0.75% Last changed: August 2018 (+25bp), the second rate increase since the Global Financial Crisis and Brexit referendum. 	<ul style="list-style-type: none"> Neutral: In July, the BOE left rates unchanged and reiterated its view that a "gradual and limited" path of policy tightening is warranted in the event of an orderly Brexit. 	<ul style="list-style-type: none"> Announced its latest round of asset purchases in August 2016, in response to the Brexit referendum. Currently reinvesting maturing Gilts to maintain the overall size of its balance sheet. The BOE's balance sheet stands at around 20% of UK GDP. 	<ul style="list-style-type: none"> We expect the BOE to remain <u>on hold</u> until Brexit is resolved given lingering two-sided risks to inflation. From there, we think the BOE will raise rates by 25bp once per year. We forecast the next BOE rate hike in November 2020. The BOE has indicated that the stock of purchased assets will not be reduced until Bank Rate reaches "around 1.5%." On our medium-term forecast, that interest rate threshold is only reached in late 2022.

Source: Federal Reserve, European Central Bank, Bank of Japan, Bank of England, Goldman Sachs Global Investment Research.

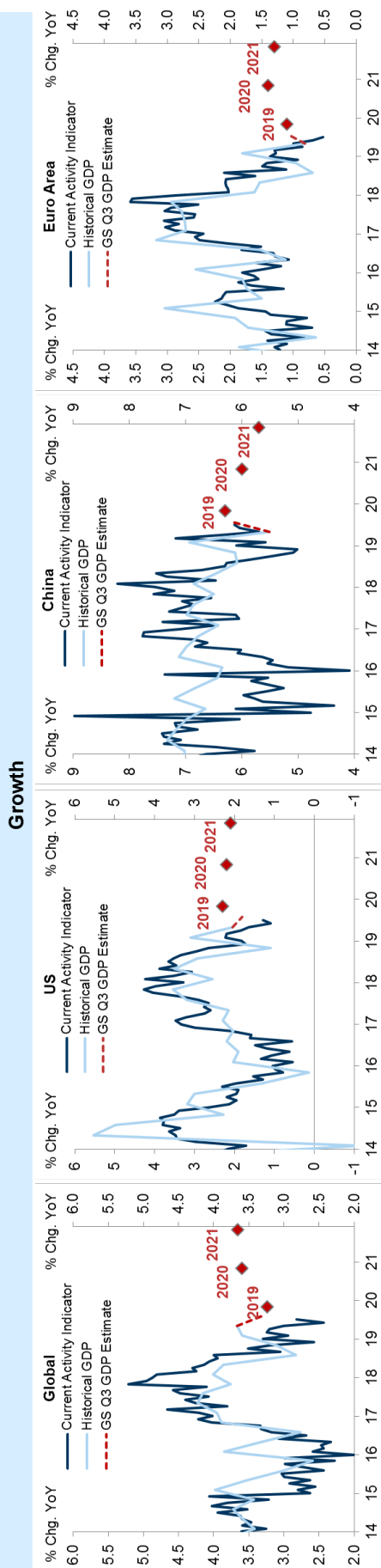
Summary of our key forecasts

GS GIR: Macro at a glance

Watching

- **While global growth is running at a below-trend rate of about 2.2% (vs. 4% one year ago), we still expect annual growth of 3.2% in 2019 aided by a synchronized tilt towards policy easing.**
- **In the US, we expect slightly above-trend growth in H2, with the drag from past tightening in financial conditions continuing to fade.** While the economy remains in decent shape, ongoing trade escalation skews risks to growth to the downside.
- **We think the Fed will deliver two additional 25bp cuts this year, in September and October;** we see the funds rate remaining below 2% through the 2020 election.
- **In the Euro area, we see GDP expanding slightly above 1% in H2, with a weaker external environment, among other factors, weighing on growth;** trade tensions pose additional downside risks. We expect Brexit with a deal, most likely in late 2019/early 2020, though odds of “no deal” have risen under new PM Boris Johnson, and tail risks are likely to intensify into Q4.
- **We expect the ECB to cut rates by 20bp,** re-start net asset purchases, and deliver stronger forward guidance in September given still-sluggish growth/inflation in the Euro area and strong signals of additional easing at the bank’s July meeting. The appointment of IMF chief Christine Lagarde to succeed Draghi points to continuity in ECB policy.
- **In China, we expect full-year GDP growth of 6.3% in 2019, after a slowdown in Q2.** We think accommodative policy will provide a boost to growth at least through Q3, though recently proposed US tariffs would likely have a modest direct negative effect on growth. We view the US designation of China as a currency manipulator as mostly symbolic and unlikely to result in disruptions on the scale of recent tariffs or sanctions.
- **WATCH TRADE.** We expect the Trump Administration will follow through on its threat to implement 10% tariffs on \$300bn of Chinese goods, and don’t believe a deal will be reached before the 2020 US presidential election. While we do not expect broad US auto tariffs, the risk has risen after the Administration’s latest trade announcement. We believe passage of the revised NAFTA (USMCA) is more likely than not by year-end.

Source: Goldman Sachs Global Investment Research.



Source: Haver Analytics and 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 "Trackin' All Over the World - Our New Global CAI." Global Economics Analyst, February 25, 2017.

Forecasts

Economics	2019			2020			Markets																																						
	GS	Cons.	GS	GS	Cons.	GS	FX	Last	E2019	E2020	12m	3m	Last	E2019	E2020	12m	3m	Last	E2019	E2020	12m	3m	YTD	E2019 P/E																					
GDP growth (%)	3.2	3.3	3.6	3.3	3.3	3.3	Global	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2																				
US	2.3	2.5	2.2	2.2	1.8	1.8	US	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2																				
China	6.3	6.2	6.0	6.0	6.0	6.0	China	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3																				
Euro area	1.1	1.1	1.3	1.2	1.2	1.2	Euro area	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1																				
Policy rates (%)	E2019			E2020			Commodities			Interest rates 10Yr (%)			Credit (bp)			Equity Returns (%)			Equity Returns (%)			Equity Returns (%)			Equity Returns (%)																				
US	1.63			1.34			Nat Gas (\$/mmBtu)			4.0			2.8			USD			IG			119			108			115			S&P500			4.0			13.0			16.3			17.7x		
Euro area	-0.60			-0.65			Crude Oil, Brent (\$/bbl)			58.9			65.5			60			HY			431			342			385			MXAPJ			11.0			15.0			3.7			13.5x		
China	2.50			2.64			Copper (\$/mt)			5,656			6,400			7,000			IG			120			112			119			Topix			7.0			12.0			1.7			13.1x		
Japan	-0.05			-0.14			Gold (\$/troy oz)			1,465			1,450			1,475			HY			393			336			357			STOXX Europe 600			3.0			10.0			9.6			14.1x		

Source: Bloomberg, Goldman Sachs Global Investment Research.

As of Aug 6, 2019.

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.

Global Leading Indicator (GLI)

The GS GLI was designed to provide a timelier reading on the state of the global industrial cycle than existing alternatives did, and in a way that is largely independent of market variables. The GLI has historically provided early signals on global cyclical swings that matter to a wide range of asset classes. The GLI currently includes the following components: a consumer confidence aggregate, the Japan IP inventory/sales ratio, Korean exports, the S&P GS Industrial Metals Index, US initial jobless claims, Belgian and Netherlands manufacturing surveys, the Global PMI, the GS AUD and CAD trade-weighted index aggregate, global new orders less inventories, and the Baltic Dry Index.

For more, see our GLI page and Global Economics Paper No. 199: An Even More Global GLI, 29 June 2010.

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)

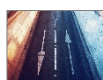
GS MAP scores facilitate rapid interpretation of new data releases for economic indicators worldwide. MAP summarizes the importance of a specific data release (i.e., its historical correlation with GDP) and the degree of surprise relative to the consensus forecast. The sign on the degree of surprise 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.

Real-Time Indicator of Activity (RETINA)

GS RETINA uses a comprehensive econometric methodology to filter incoming information from the most up-to-date high-frequency variables in order to track real GDP growth in the Euro area and the UK.

For more, see European Economics Analyst: RETINA Redux, 14 July 2016 and European Economics Analyst: Introducing RETINA-UK, 2 August 2017.

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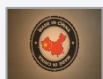
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Reg AC

We, Allison Nathan, David Groman, David Choi, Kevin Daly, Jan Hatzius, Praveen Korapaty, Alec Phillips, and Sven Jari Stehn hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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