

TOP *of* MIND

BIDENOMICS: EVOLUTION OR REVOLUTION?



As President Biden’s economic agenda—“Bidenomics”—takes center stage in Washington DC, how big of a shift in US economic policy it represents, and the economic and market implications of what actually passes, are Top of Mind. We get insights from Harvard’s Jason Furman, CEPR’s Dean Baker, Stanford’s David Brady, and our own analysts. Their views differ on the extent to which Bidenomics truly marks a policy shift, with Baker seeing more of a sea change than others. And despite recent progress toward a bipartisan infrastructure bill, all see major challenges to passing much of Biden’s agenda in this manner, and greater odds that more of it passes under a party-line approach, though success there too isn’t

assured. Furman and Baker also disagree on the near-term economic impact—with Furman more concerned about higher inflation—but mainly agree on its longer-term benefits. And we argue that one of the biggest implications could be a higher neutral interest rate, which could break, or even reverse, long-prevailing market trends.



Bidenomics is big and progressive, but it’s still on the continuum of policies proposed by recent Democratic administrations.

- Jason Furman

Bidenomics represents a large policy shift in two ways. First, it has placed greater emphasis on getting the economy back to full employment quickly...and second, [it’s] beginning to tackle some big structural issues that have long been problematic.

- Dean Baker

With a very small [Democratic] majority in the House and a 50/50 Senate, there is no clear mandate for a new progressive policy era.

- David Brady



Allison Nathan | allison.nathan@gs.com Gabriel Lipton Galbraith | gabe.liptongalbraith@gs.com Jenny Grimberg | jenny.grimberg@gs.com

WHAT’S INSIDE

INTERVIEWS WITH:

Jason Furman, Professor of Economic Policy, Harvard School of Government

Dean Baker, Co-founder, Center for Economic Policy Research

David Brady, Professor of Political Economy, Stanford Graduate School of Business

THE US FISCAL (R)EVOLUTION
Alec Phillips, GS US Economics Research

BIDENOMICS: AN INTERNATIONAL PERSPECTIVE
Jan Hatzius and Daan Struyven, GS Economics Research

MARKET IMPLICATIONS OF BIDENOMICS
Dominic Wilson, GS Markets Research

BIDENOMICS IMPLIES A HIGHER TERMINAL RATE
Daan Struyven and Jan Hatzius, GS Economics Research

EUROPE: LED BY, AND LEADING, BIDENOMICS
Filippo Taddei, GS Europe Economics Research

...AND MORE

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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

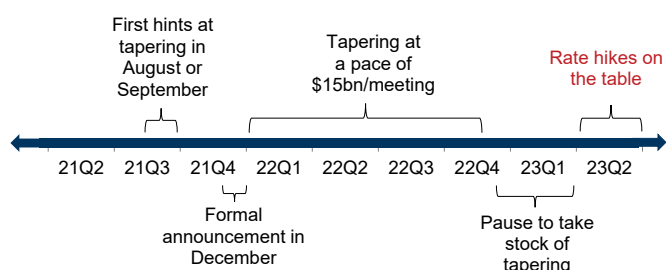
- We pulled forward our expectation for the timing of the first rate hike to 3Q23 following the June FOMC, during which the Fed appeared to set a lower inflation bar for liftoff.
- We now expect core PCE inflation to end the year at 3.0% after recent upside inflation surprises.

Datapoints/trends we're focused on

- Fiscal policy; we expect the passage of ~\$3tn in spending and ~\$1.5tn in tax hikes over 10 years in mid/late Q3 or Q4.
- Taper timeline; we expect tapering will be announced in December and the Fed will begin tapering in 1Q22.

1Q2022 taper, 3Q2023 rates liftoff

Timeline for tapering, GS forecast



Source: Goldman Sachs GIR.

Japan

Latest GS proprietary datapoints/major changes in views

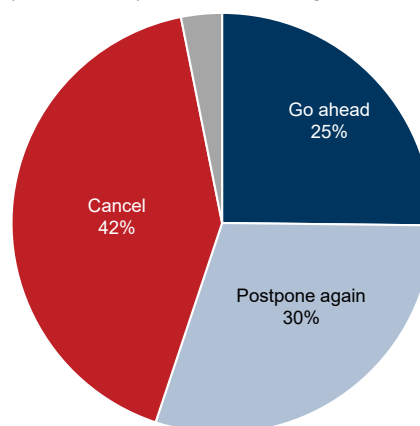
- We lowered our 2Q21 real GDP growth forecast to 0.3% qoq ann. after an extension of the third state of emergency.

Datapoints/trends we're focused on

- Vaccine pace, which has accelerated sharply from May, and we expect 50% of the pop. to be vaccinated by end-August.
- Fiscal policy; the possibility of additional stimulus is rising.
- Tokyo Olympics; we estimate an economic loss of ¥1.2tn (0.2% of 2020 GDP) in the event of cancellation.
- Climate policy; we expect the BoJ to present a preliminary outline of a new financing program to address climate change issues at its July meeting.

Majority of the public is against holding the Olympics

Average of responses to 5 polls on whether games should be held



Source: Asahi Shimbun, Mainichi Shimbun, Jiji Press, ANN, JNN, GS GIR.

Europe

Latest GS proprietary datapoints/major changes in views

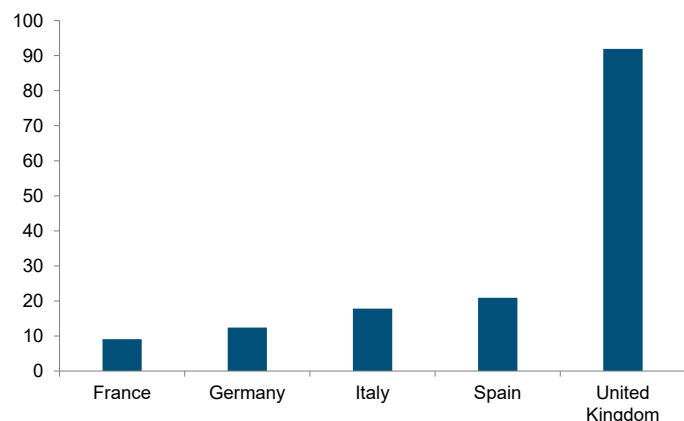
- We slightly lowered our full-year 2021 Euro area growth forecast to 5.2% to reflect longer restrictions on summer travel until later in July due to the spread of the delta variant, which is likely to weigh on tourism in Southern Europe.
- We pulled forward our expectation for the timing of BoE balance sheet unwinding and the first Bank Rate hike to 3Q23 and 1Q24, respectively, due to an earlier-than-expected return to full employment and 2% inflation.

Datapoints/trends we're focused on

- The EU Recovery Fund, which has started to issue debt and we expect to boost growth, especially in Southern Europe.

Delta variant driving a rising proportion of new cases

Share of delta cases, %



Source: GISAID, Bloomberg, Goldman Sachs GIR.

Emerging Markets (EM)

Latest GS proprietary datapoints/major changes in views

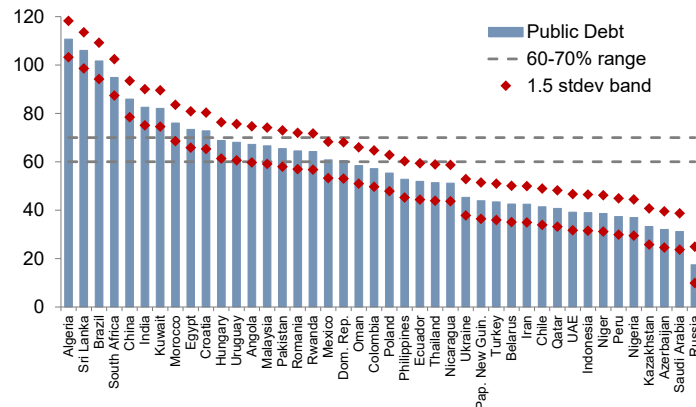
- We lowered our Q2 and full-year 2021 India real GDP growth forecasts to -27.6% qoq ann. and 9.3% yoy, respectively.

Datapoints/trends we're focused on

- Virus spread, which declined in India but increased in Brazil (from an already high base) and Mexico (from a low base).
- China fiscal policy, which we expect to turn more stimulative in 2H21 to support the growth recovery as exports peak.
- EM debt deleveraging; the scope for conventional debt adjustments appears limited, and we believe some EMs may be compelled to pursue unconventional measures.

Several EMs will likely be highly indebted by 2026

% of GDP



Source: IMF, Goldman Sachs GIR.

Bidenomics: evolution or revolution?

President Biden has laid out his key priorities for US economic policy: make the tax and transfer system more progressive, increase investment in climate change mitigation and infrastructure, and strengthen the use of fiscal policy during negative economic shocks. This agenda extends recent progressive policy shifts already in train—reinforced by the aggressive policy response to the pandemic—leaving some observers to characterize it as potentially ushering in a new “progressive era” in the US. But how big of a shift in economic policy does Bidenomics truly represent? And how might it impact the economy and markets? With Congress beginning to debate aspects of the American Families Plan (AFP) and the American Jobs Plan (AJP), these questions are Top of Mind.

To begin to answer the first question, Jan Hatzius, GS Head of Global Investment Research and Chief Economist, and Daan Struyven, GS Senior Global Economist, first take stock of where US economic policy lies on the progressive spectrum today relative to other countries and where it would be after the expected policy changes. They find that while Bidenomics will mostly move the US towards its more progressive peers on income redistribution, climate change mitigation, and infrastructure, the US is already more progressive in terms of its willingness to employ countercyclical macro policy—and Bidenomics would move it even further in that direction.

So, how much of a shift would Bidenomics really represent? We get perspectives from our own Alec Phillips, GS Chief Political Economist, Jason Furman, head of the Council of Economic Advisers in the Obama administration, Dean Baker, Co-founder of the Center for Economic Policy Research and David Brady, Professor of Political Economy at the Stanford Graduate School of Business. Phillips sees this shift as an extension of a trend towards less concern about deficits and greater use of countercyclical policy already underway prior to the Biden administration. But he also thinks the COVID-19 crisis has accelerated the process, marking a pendulum shift towards increased support among voters for a greater role for government in society.

Furman, for his part, argues that despite its significant size and ambition, Bidenomics still mostly lies on the policy continuum of recent Democratic administrations, given that Biden continues to insist that at least part of it (and maybe even too much of it) is paid for through higher taxes and that it doesn't include the top economic priorities of the party's progressive wing today: student loan debt relief and Medicare for all. But Baker sees Bidenomics as an important departure in economic policy both in terms of its greater emphasis on using fiscal policy to return the economy to full employment and its commitment to tackling long-problematic structural issues. And, from a historical perspective, Brady sees it as somewhere in between FDR's New Deal and Obama's agenda, but, he says, ultimate judgement will depend on how much is passed.

So what parts of Biden's proposals (see pg. 8 for a detailed view of them) are likely to be enacted? Brady believes that Biden's initial agenda is much further left than what's actually going to pass, given the razor-thin Democratic margins in Congress that suggest there's no clear mandate for sweeping change, the substantial ideological polarization of the parties today (see pgs. 16-17 for a history of how party polarization has affected legislative compromise), and the influence of Democratic

moderates like West Virginia Senator Joe Manchin, who have already and will likely continue to pull policy back from the progressive wing of the party. Phillips, Furman and Baker generally agree—all seeing decent odds that a narrow bipartisan bill, like the current one on infrastructure, passes—although the road to passage will undoubtedly prove challenging—and perhaps better-than-even odds that most, but certainly not all, of the rest of the agenda could pass on a party-line basis. And Furman and Baker think there's a non-trivial chance (~20-25%) that nothing passes at all.

So, how might this all impact the economy? In the near term, Furman is concerned about inflationary pressures resulting from the significant amount of money that the American Rescue Plan (ARP) injected into the economy over a short period of time, which he thinks could prove more persistent than broadly expected. But, he says, the Fed has the tools to address this, and he would not be shocked if the Fed hikes rates in late 2022—earlier than the Fed or the market currently expects. Baker, in contrast, argues that most of the recent price explosions have likely resulted from temporary shortages associated with economies reopening, and will end up being transitory (which GS economists generally agree with). And he thinks the potential for productivity to remain higher than in the past should mitigate inflation fears.

But both Baker and Furman are relatively unconcerned about the prospect of longer-term inflation dynamics as well as the large deficits and debt servicing costs resulting from the next round of stimulus, even if it is fully enacted (see pg. 18 for a snapshot of US deficits/debt). While [some](#) observers are more concerned about the longer-term implications of using more aggressive fiscal policy in the US and beyond, the mindset around their detrimental effects has [broadly diminished](#). And Hatzius and Struyven argue that the potential success of Bidenomics could push the consensus further in that direction.

This would not only be relevant for the outlook for US policy, but also for European policy. Indeed, Senior European Economist Filippo Taddei details that Europe's pandemic response and the ECB's current framework review lean in that direction, although whether these shifts will persist remains a key question. But beyond these cyclical issues, he contends that the crisis also breathed new life into addressing one of Europe's remaining structural issues—underinvestment—which could herald a new era of European fiscal integration ahead.

Finally, what could all of this mean for markets? Struyven and Hatzius make the case that larger government deficits and green investments could result in a higher neutral real short-term interest rate (r^*) than markets are currently pricing, with wide-ranging consequences. And GS Senior Markets Advisor Dominic Wilson believes that this shift and Bidenomics more broadly could reinforce the case that this economic recovery may break—or even reverse—long-prevailing market trends, which could potentially support higher bond yields, a normalization of inflation, a structurally bullish commodity backdrop, and more balanced performance between cyclical/value and growth stocks.

Allison Nathan, Editor

Email: allison.nathan@gs.com
Tel: 212-357-7504
Goldman Sachs and Co. LLC



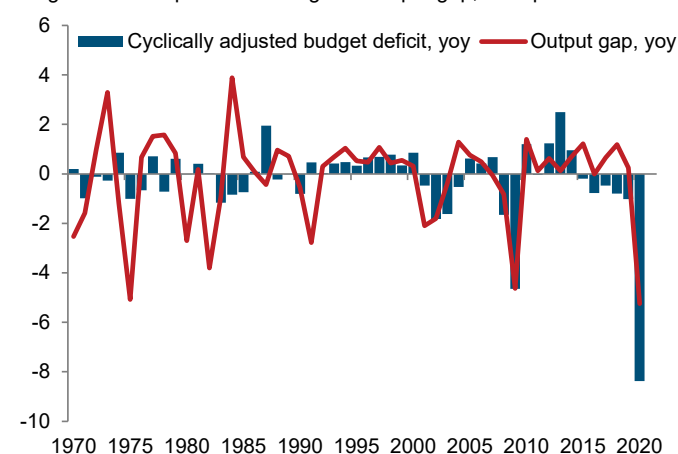
The US fiscal (r)evolution

Alec Phillips discusses the shifting attitudes of US political parties and the voting public towards deficits and taxes, and implications for President Biden's economic agenda

Almost 10 years ago, Washington was on the cusp of a fiscal battle that shook markets, led to a downgrade of the US' sovereign rating, and involved bipartisan negotiations that eventually resulted in large spending cuts. Much has changed since then. Congress has approved extra spending worth more than 25% of GDP over the course of a year, and a bipartisan group is currently haggling over how many hundreds of billions to *increase* spending. Although the COVID-19 crisis acted as an accelerant, this move toward greater countercyclical policy was already in train prior to the Biden administration. Congress went from passing deficit reduction legislation during the 1990 recession, to modest fiscal stimulus during the 2001 recession, to more substantial stimulus during and after the Global Financial Crisis (GFC). The fiscal response to the pandemic has been greater still, both in absolute terms and relative to the state of the economy.

Greater countercyclical policy, pre-Biden

Budget deficit response to changes in output gap, % of potential GDP



Source: CBO, OMB, Goldman Sachs GIR.

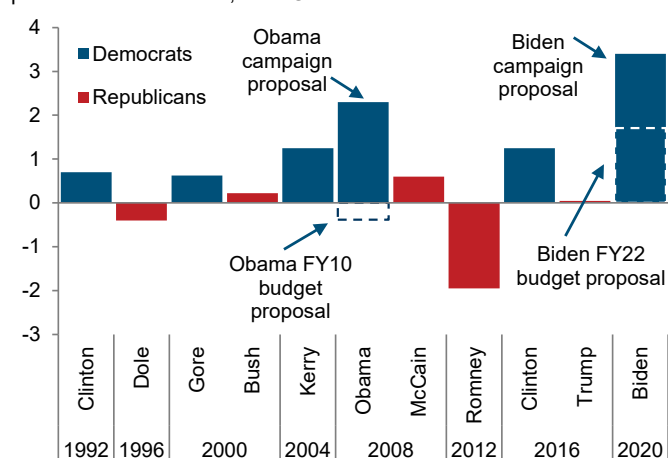
Increasing support for countercyclical spending and beyond

But support for greater spending goes beyond countercyclical policy. For most of the last few decades, a majority of the public has preferred government have only a limited role in society. Exceptions to this occurred around major events like the 9/11 terrorist attacks and Hurricane Katrina. The pandemic swung views in favor of government action even more strongly than those events, driven largely by Democrats and Democratic-leaning independents (see pg. 9).

It's therefore not surprising that President Biden's campaign proposals called for more spending than any other Democratic nominee in the last few decades, and that he continues to propose a substantial amount now that he is in office—around 1.7% of GDP over the next ten years. By contrast, President Obama's first budget submission to Congress called for a reduction in spending over many years, despite having much larger Democratic majorities in the House and Senate than President Biden does today.

Republican views have also changed. In contrast to the fiscally conservative messaging of the mid-1990s and early 2010s, congressional Republicans have focused relatively little criticism on the American Rescue Plan (ARP) that passed in March. Campaign messages have also shifted. Trump's 2016 campaign, which explicitly ruled out cuts to Medicare and Social Security, contrasts sharply from the entitlement reform focus of Romney's 2012 campaign, for example. This makes political sense: voters 65+ have been the most Republican-leaning age group since 2004 and Republicans have narrowed the gap with low-income voters from -32pp in 2008 to -8pp in 2020. Both of these groups benefit from greater entitlement spending.

Biden's spending proposals: larger than other Democrats' Presidential campaign proposed spending changes, non-incumbent presidential candidates, % of GDP



Source: The Economist, Tax Foundation, CRFB, OMB, CBO, Goldman Sachs GIR.

Fewer concerns about debt and deficits, but tax increases still controversial

Views on the deficit have also changed, as has the amount of public attention it receives. Low interest rates offer a partial explanation. When Congress passed successive deficit reduction measures in the late 1980s and early 1990s, the debt-to-GDP ratio was rising but still relatively low at 35-45%, and the primary deficit averaged only 0.5% of GDP during that period. The outlier was interest expense, which peaked in the early 1990s at 3.2% of GDP, or around 15% of total federal spending. The substantial amount that went toward interest expense was among the issues that drove Congress to curtail spending and raise taxes. Today's interest expense of 1.5% of GDP, or 5% of total federal spending, is far below those levels. The limited effects of the jump in public debt following the GFC and again over the last year also seem to have calmed fiscal concerns. Plenty of lawmakers, including some Democrats, still quietly worry about the dangers of deficits and will likely influence policy this year, and President Biden himself is proposing to offset most of his proposals with tax increases. But, while deficit concerns still exist, they are no longer at the center of the debate.

Views on taxes have also shifted, but not quite as much. Most Republicans in Congress have objected to any tax increases, even to finance projects like traditional infrastructure spending, which they support. And the response to Biden's proposed tax hikes suggests some unease among centrist Democrats, whose support would be necessary for their passage. While polling over the last few months generally shows that half to two-thirds

of the public supports tax increases on high-income individuals and corporations to fund infrastructure and other investments, it is easy to imagine sentiment shifting against tax increases as the issue gets more public attention.

So what's most likely to become law?

With views on spending and deficits arguably changing somewhat more than views on taxes, the path of least resistance would seem to be a spending boost paired with a smaller tax increase that increases the deficit. This is basically what we expect, but thin margins in both chambers of Congress make it very hard to predict the legislative path, let alone the outcome.

As it stands, three pieces of relevant legislation could determine how much of Biden's agenda becomes law. The first, a bill that authorizes \$250bn in new spending to increase American economic competitiveness, has already passed the Senate and looks likely to become law later this year. The bill does not include any budgetary offsets and would therefore expand the deficit.

The second bill, which is only a two-page outline at this point, would be an infrastructure package. A bipartisan group of senators has agreed with the White House on the contours of the \$579bn bill, including a list of potential "pay-fors" to finance its cost. However, it is far from clear that these would actually cover the full cost of the bill. For this effort to succeed, lawmakers may face a choice between scaling back the spending in the bill or accepting an increase in the deficit.

The third bill, which does not yet exist in any form, would be a budget reconciliation package that includes the aspects of President Biden's American Jobs Plan (AJP) that do not make it into one of the other two bills, as well as Biden's American Families Plan (AFP). Overall, the AJP and AFP would increase spending and tax credits by \$4.25tn over ten years. Of this, around \$800bn has been included in the infrastructure and competitiveness bills, leaving around \$3.5tn that would only pass if they are included in the reconciliation package.

It seems unlikely that Congress will pass a reconciliation package that large. Members of the minority party rarely support reconciliation bills or the budget resolutions that generate them, which means that Democrats will need every Democratic senator and nearly every Democratic member of the House to vote for passage. Assuming that the progressives would rather enact some of their priorities than none and ultimately support the bill, this leaves centrist Democrats in both chambers with substantial influence over the outcome.

At a high level, those centrists will need to make three decisions. First, they must decide how much of a deficit increase they are comfortable with. Since most of the new spending under the AJP and AFP would be financed with tax increases, those proposals would expand the deficit by \$800bn over ten years. Democratic leaders appear to have a larger figure in mind—Senate Budget Committee Chairman Bernie Sanders is reportedly considering a \$3tn deficit expansion in the forthcoming budget resolution—but we believe centrist Democrats are likely in the range of the Biden figure.

Centrist Democrats will also need to decide how much of a tax increase they are willing to accept. Biden's proposals would raise taxes by around \$3.5tn over ten years. Public comments

from several Democratic senators make clear that they will not support all of these proposals. A 25% corporate rate looks more likely than the 28% Biden has proposed. International corporate changes are also likely, but probably on a smaller scale than what the Treasury envisions. A capital gains tax increase is a very close call: we think it is slightly more likely that the capital gains rate rises, but only to the mid-to-high 20s. Even an increase in the top marginal tax rate for individuals could face some resistance, though we expect it to rise. Overall, a tax increase of around \$1.5tn over ten years looks plausible.

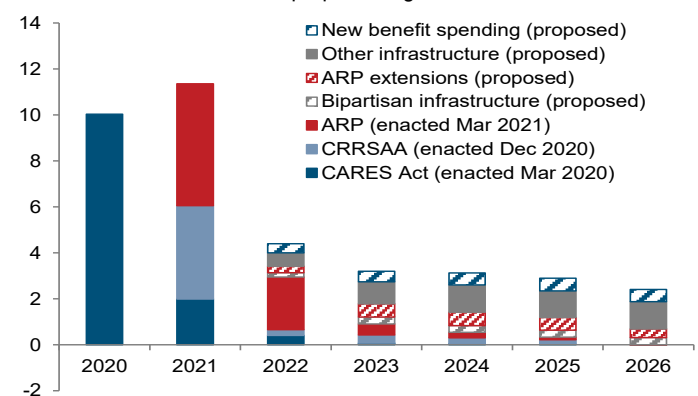
The third decision centrists will need to make is how to proceed legislatively. House Speaker Nancy Pelosi has indicated that she will not bring a bipartisan infrastructure bill to the House floor for a vote before the Senate has passed its reconciliation bill. And whether the standalone infrastructure bill can win 60 votes in the Senate is unclear, particularly if it is contingent on a separate bill that does not have bipartisan support. If the bipartisan infrastructure bill fails, the Democratic senators who negotiated it will need to decide whether to support a partisan reconciliation bill instead. We think they ultimately would, but reaching that point will involve many twists and turns.

Some, but smaller, fiscal stakes

For all of the uncertainty, the fiscal and economic stakes are smaller than they might seem, particularly in comparison to the actions Congress has taken since the start of the pandemic. Some policies are very likely to become law regardless of which legislative path centrists and party leaders choose. We think most elements of the bipartisan infrastructure package are likely to pass in some form, and it is difficult to envision Congress leaving for the year without extending the expanded Child Tax Credit passed this spring. This suggests that policies boosting spending (incl. tax credits) by at least 1% of GDP annually over the next few years will pass. But if we are correct about the political limits on tax increases and deficit expansion, the overall size of a reconciliation package could probably not exceed around \$2.5tn over ten years, which would put the annual amount of spending over the next few years well under 2% of GDP. While this is still a wide range of outcomes, it would be far less than the fiscal support put in place for 2021.

The fiscal stakes from here are smaller than they may seem

Fiscal effects of enacted and proposed legislation, % of GDP



Source: CBO, BEA, Goldman Sachs GIR.

Alec Phillips, Chief Political Economist

Email: alec.phillips@gs.com
Tel: 202-637-3746

Goldman Sachs and Co. LLC

Interview with Jason Furman

Jason Furman is Professor of the Practice of Economic Policy at the Kennedy School of Government at Harvard University and former Chairman of the Council of Economic Advisers in the Obama administration. Below, he argues that while Bidenomics is a step in a more progressive direction, the policy shift is more of an evolution than a revolution.

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



Allison Nathan: How significant of a shift does Bidenomics represent in US economic policy versus the Obama administration that you served in, and more broadly?

Jason Furman: Bidenomics is big and progressive, but it's still on the continuum of policies proposed by recent Democratic administrations.

The \$4-5tn of new spending in areas like infrastructure, child care, and education is larger than anything proposed by Presidents Obama or Clinton, which mainly reflects frustration with decades of perceived underspending in those areas. But despite a very different environment today than when we passed the 2009 American Recovery and Reinvestment Act during the Global Financial Crisis—characterized by low interest rates, less concern about high deficits and debt after a decade of few negative consequences from them, a fledgling economic recovery and rising political demands to "go big" with further fiscal spending—President Biden has continued to insist that at least some things are paid for. I actually think enough fiscal space exists today for more deficit-financed investment in certain areas than he's proposed.

And while the magnitude of Biden's proposed tax increases is also larger than those proposed by Obama or Clinton, that's mostly because taxes have fallen steadily over the past two decades. Under the Biden plan, taxes as a share of GDP actually aren't that much higher than they were during Clinton's second term. The composition is different because President Biden has proposed keeping most of the middle-class tax cuts from the past 20 years while making up for the lost revenue by raising taxes on high-income households and corporations. But, in many respects, there hasn't been a sea change in the conduct of fiscal policy. And there's still a lot of uncertainty about what will get passed in the short term—the midterm elections could totally change how much gets done over the next few years. So, we're in the midst of a revolution in thinking, but in terms of a revolution in outcomes, it's very premature to declare that anything is close to a done deal.



In many respects, there hasn't been a sea change in the conduct of fiscal policy."

Allison Nathan: So is the narrative that progressives are in the driver's seat from a policymaking perspective overblown?

Jason Furman: When it comes to fiscal policy, yes. The two top priorities of the progressive wing of the Democratic Party right now are student loan debt relief and Medicare for all.

President Biden hasn't proposed either of those, and he's actually somewhat skeptical of both of them. He doesn't endorse the idea of modern monetary theory (MMT)—that the government can essentially increase deficits without limit with few repercussions—which has been embraced by many on the far left of the Democratic Party. Again, his aim to partially offset spending increases with tax increases is a testament to that. That's not to say that Biden's proposals are centrist. But the proposals themselves dramatically contradict the view that Biden is doing whatever Bernie Sanders wants.

Allison Nathan: Has the American Rescue Plan (ARP) been a success?

Jason Furman: We've certainly had more inflation and slower job growth than generally expected. The ARP erred by having too many dollars per month and not enough months. I wouldn't have minded an even larger \$3tn plan spread out over a longer period. But the country clearly couldn't handle that much money injected into the economy that quickly, with nothing much permanent to show for it. That said, it's still early days, and the challenges of coming out of the pandemic make things tougher to gauge. The extended unemployment insurance benefits have almost certainly slowed jobs growth, but that problem will go away as those benefits expire. For these reasons, it's too early to make any definitive judgement on the ARP. Overall, though, I'd take US fiscal policy over European fiscal policy, where the recovery of GDP back to trend will likely be much slower than in the US.

Allison Nathan: How does the legislative environment that President Biden will have to navigate to achieve the rest of his economic agenda compare to what President Obama faced?

Jason Furman: President Biden has an advantage in that 95% of Democrats in Congress are thinking bigger today than they were in 2009. But he's at a disadvantage because he needs 100% of Democrats to pass any bill on a strict party-line vote. Obama never needed 100%. It could end up that President Biden's plan provides the only landing pad that can work, and the choice ends up being between defeat and his proposal. So, the narrow margin can be viewed as a small asset, but it also creates a huge challenge to getting anything done.

Allison Nathan: So how likely are the rest of his fiscal proposals to pass, and by what means?

Jason Furman: Legislative processes are always hard to predict, and considering the Democrats' razor-thin Senate margin, there's even more uncertainty than usual. But despite recent compromise on a framework, passing a bipartisan bill will still be very challenging because it entails getting 10 Republican Senators, keeping 50 Democratic Senators on board, and passage in the House. A narrower bipartisan

agreement, such as the microchips bill that's already passed the Senate or a smaller infrastructure bill that only tackles highway funding has a greater chance of passing. And I would say there's roughly a two-thirds chance of doing something on a party-line basis through the reconciliation process. Using that approach, there's probably around \$1.5tn of pay-fors that are relatively low-hanging fruit. There may even be some wiggle room to convince Democrats to pass around \$2tn of new spending, some of which would be deficit financed. That's the most optimistic read of what can get done with only Democrats. Within that, the Democratic caucus is quite comfortable with raising the corporate tax rate to 25% and the top individual tax rate to 39.6%, and increasing taxes on corporations internationally. But there is about a 25% chance that they just can't figure out how to solve the puzzle and nothing gets done at all. No law says that every president has to get something big done in their first year. And, by the way, Biden has already gotten something quite big done.

Allison Nathan: What are the most and least valuable parts of his proposals?

Jason Furman: The evidence to support the spending and investments in the American Families Plan (AFP) is more clear cut compared to what's in the American Jobs Plan (AJP). To take one example, preschool is the highest return investment we can make. Investing in childcare and providing paid leave is overdue and will benefit a wide swath of Americans. Much of what's included in the AJP is economically positive, including the emphasis on research, climate change, and infrastructure. But the provisions that verge on industrial policy by picking favorites in the manufacturing sector probably make the least sense.

Allison Nathan: Will all this stimulus lead to higher inflation down the road?

Jason Furman: Inflation is a legitimate concern when it comes to the ARP because it was a ton of money all at once. And, in the near term, I expect higher inflation than many people. There's some danger that inflation expectations become de-anchored as sticky prices and wages that haven't moved yet start to rise, with demand set to exceed supply over the next year. So I see reasons to worry about inflation right now. But those should be the Fed's worries, and the Fed has the tools to handle them.

Inflationary concerns about the next package, though, don't make sense. The spending will be spread out over many years, so the Fed can react if it needs to. Much of the spending will be paid for. And, from a fiscal policy perspective, it's a one-sided bet. If secular stagnation is a reality, then this will help us escape it. If secular stagnation is not a reality, then the Fed can just undo it. So, in one case it's a win, and in the other case it's neutral. While we can argue about the relative likelihood of those cases, I'm not at all worried about the inflationary consequences of the next round of spending. In assessing these forward fiscal policies, we should keep the inflation discussion with the Fed where it belongs and focus the fiscal policy discussion on whether investments are good and fiscally sustainable.

“ Inflation is a legitimate concern when it comes to the American Rescue Plan.... [But] inflationary concerns about the next package don't make sense.”

Allison Nathan: So will the Fed likely have to react faster than markets expect?

Jason Furman: That's less true today after the markets reacted to the recent hawkish turn in the Fed, but I wouldn't be shocked to see a rate increase in the second half of 2022—earlier than the Fed or the market is currently expecting. Again, that doesn't have much to do with the fiscal outlook, but is rather the result of the measures that have already been implemented. In coming months, employment gains are probably going to accelerate quickly, and inflation will likely be more persistent than many people expect if more of it shows up in wages. So, the Fed could end up with a more compressed schedule between the onset of tapering and rates liftoff than the market is now pricing.

Allison Nathan: Could high debt and debt service costs eventually become a problem if rates rise?

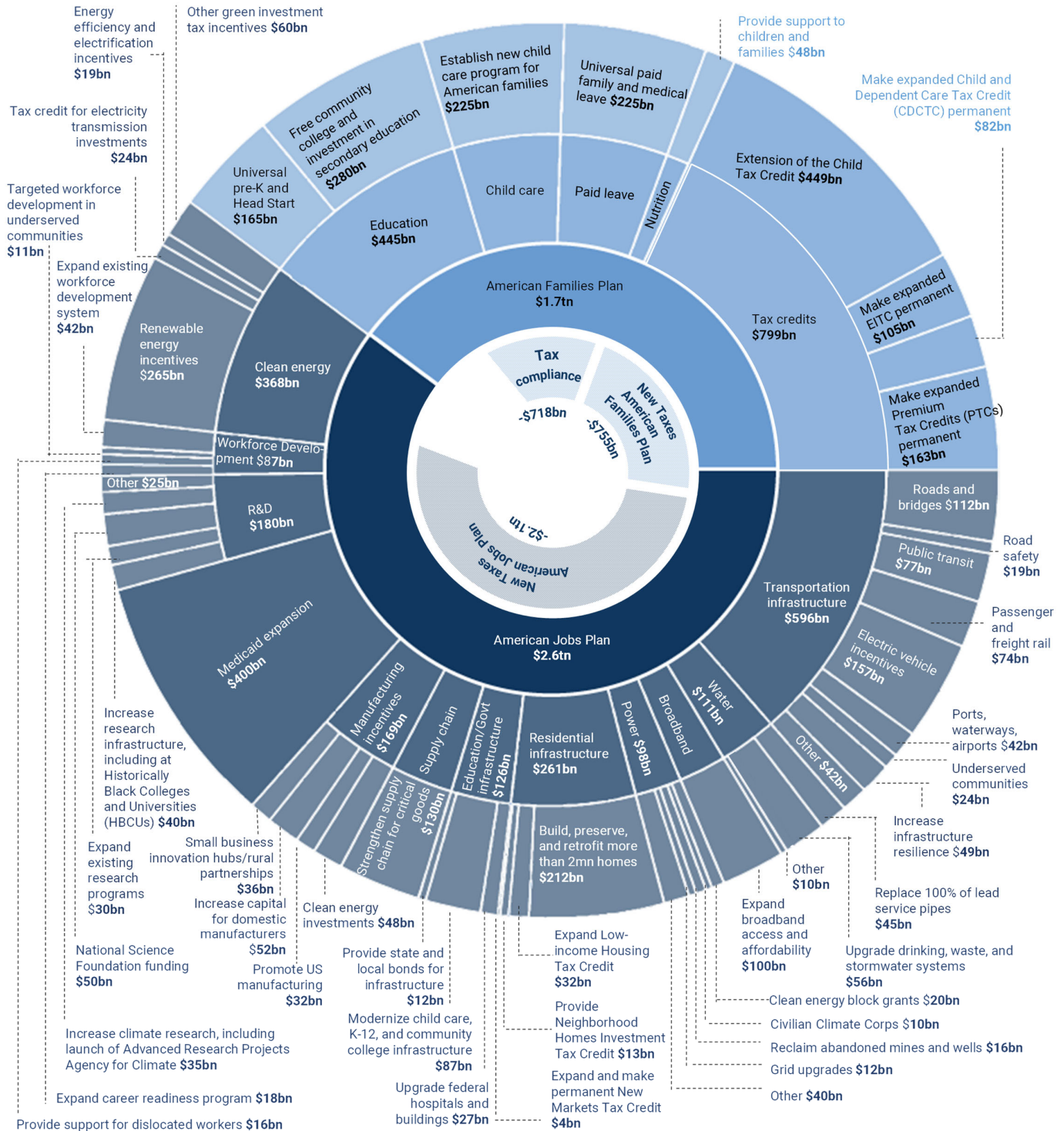
Jason Furman: I don't think so, and there's a fair case that the level of debt is even too low, not too high. The debt eventually needs to stabilize, but the question is at what level. For a large open economy like the US in our current low interest rate world, stabilizing debt at 125-150% of GDP would probably be fine. And more important than the overall level is the cost of servicing the debt. Over the next decade, the latest estimates suggest debt service as a share of GDP adjusted for inflation will rise to around 0.5% in the US. Real debt service in the US and in other countries has run as high as 2% with no problems. So, US 10y Treasury yields could probably rise to 3-4% to accommodate more debt without any meaningful disruptions. That's not to say that some adjustment won't eventually need to be made. It will be important to address Social Security funding, for example, which I'd tackle more with revenues than with spending. But debt bouncing around 115% of GDP is not at the top of my worry list.

Allison Nathan: So, given all of the above, is Bidenomics a net positive for growth?

Jason Furman: It's a mild positive for economic growth and a larger positive for other goals like tackling climate change, improving economic inclusion, helping families and investing in opportunities for children. Three factors matter for this type of growth analysis. One, the macro impulse from increased spending, which is a small positive. Two, the micro investments in our productive capacity, which is also a positive. And three, the tax changes, which are a small negative. Even [models](#) from fairly conservative organizations find the impact of the tax proposals would be a less than one-tenth of 1% per year reduction in the growth rate. Putting this together, these policies are net positive for economic growth. But, more importantly, on the question of whether they will help combat climate change, address inequality, etc., the answer is resoundingly yes.

Bidenomics: the next round, visualized

American Jobs Plan – Total New Spending: ~\$2.6tn
American Families Plan - Total New Spending: ~\$1.7tn

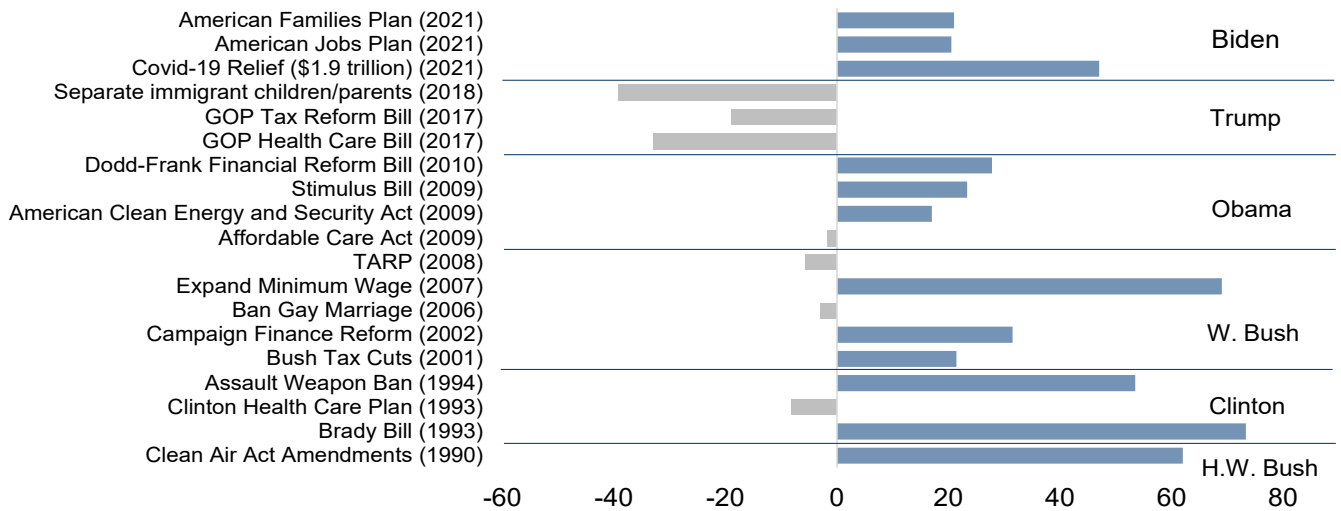


Note: Reflects spending and tax proposals of FY22 budget as proposed by the Biden administration; see pgs. 4-5 for GS expectations on legislative outlook. Source: White House, Goldman Sachs GIR.

Biden(omics): where the public stands

The popularity of Bidenomics is comparable to past pieces of major legislation

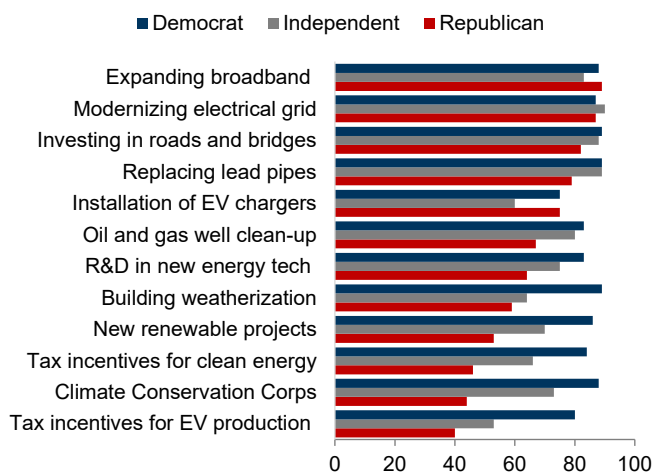
Average net support, %



Source: Christopher Warshaw, various polls, Goldman Sachs GIR.

Bipartisan support exists for parts of Jobs Plan, others less so

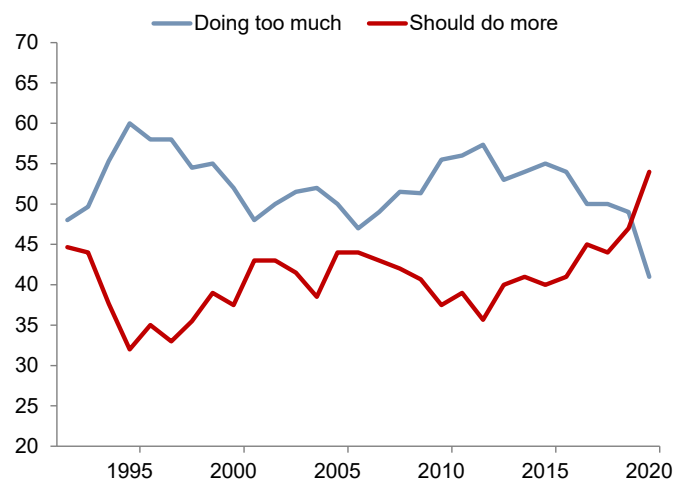
Support among likely voters, %



Source: Data For Progress, Goldman Sachs GIR.

Americans increasingly favor greater government involvement

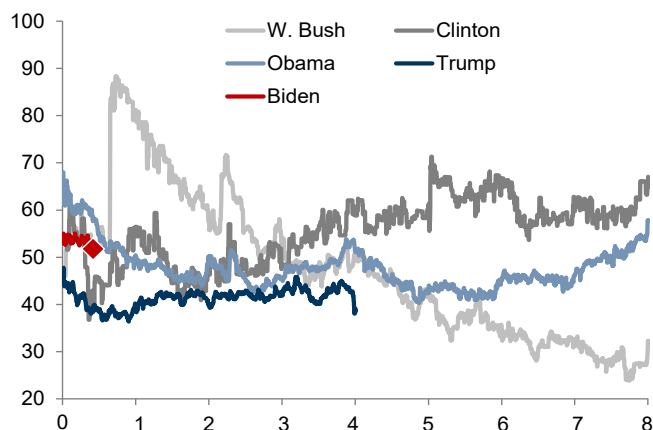
Americans' preference for role of government, %



Source: Gallup, Goldman Sachs GIR.

Biden is more popular than Trump, but less popular than Obama at same point in his presidency

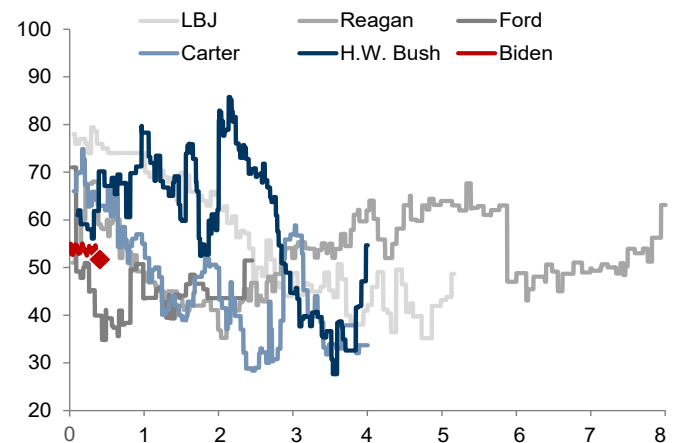
Approval rating by years into presidency, %



Source: FiveThirtyEight, Goldman Sachs GIR.

But past presidents have started out with higher initial support

Approval rating by years into presidency, %



Source: FiveThirtyEight, Goldman Sachs GIR.

Interview with Dean Baker

Dean Baker is Co-founder of the Center for Economic Policy Research (CEPR). His areas of research include housing and macroeconomics, intellectual property, Social Security, and Medicare, among other issues. Below, he argues that Bidenomics would represent a large progressive policy shift if most of it passes.

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



Allison Nathan: How significant of a shift does Bidenomics represent in US economic policy?

Dean Baker: Bidenomics represents a large policy shift in two ways. First, it has placed a greater emphasis on getting the economy back to full employment quickly. President Obama's first stimulus package was just over \$700bn—or

around \$1-1.1tn adjusting for the size of today's economy—and back then the economy was in a much bigger hole than it was when President Biden got the entirety of his \$1.9tn American Rescue Plan (ARP) through. The substantial stimulus this time around should get the economy back to full employment by sometime in early 2022, if not by the end of this year. And second, Bidenomics is beginning to tackle some big structural issues that have long been problematic. As part of the ARP, Biden expanded the Child Tax Credit with a goal of reducing child poverty by around 50%, increased subsidies in the Obamacare exchanges while capping premiums at 8.5% of income to make health insurance more affordable for middle-income households, and expanded Medicaid for low- to moderate-income people. And through the American Jobs Plan (AJP) and American Families Plan (AFP), he's aiming to get a foot in the door on dealing with climate change and catching up with other countries on providing affordable childcare, which should translate into higher labor force participation rates for women. These are very big steps that would have a significant impact on the economy if Biden is able to get them passed.

Allison Nathan: What factors led to this policy shift—a change in the Democratic Party, the voter base, or something else?

Dean Baker: Two key factors led to this shift. One is the increased prominence of the progressive branch of the Democratic Party, led by Bernie Sanders. The progressives certainly don't account for the majority of the party, but they now comprise a substantial portion of the Democratic constituency. That represents a large change from the Clinton and Obama administrations in which more traditional, "Wall Street" Democrats largely dominated, and the progressive wing was mostly ignored. Today, traditional Democrats have largely been discredited; a significant portion of the party no longer thinks it's acceptable for economic policy to be determined by what the financial sector wants. And the Biden administration has appointed many progressives to top level positions, including Heather Boushey and Jared Bernstein to the Council of Economic Advisers and Lina Khan to head the Federal Trade Commission. It would be wrong to say that progressives are running the show, but they clearly have an important voice today in a way that wasn't true in the Clinton administration or even the Obama

administration, and the bold measures within the AJP and the AFP reflect this.

The other factor is the economy. Over the last decade, the mainstream of the economics profession—academics, bank economists, the Federal Reserve Board, the Congressional Budget Office (CBO), etc.—has consistently grossly overestimated inflation and interest rates. In 2010, the CBO forecasted a huge jump in 10y Treasury rates to 4-5%, but that never happened. It estimated a NAIRU—or how low unemployment can fall before inflation starts to accelerate—of around 5.5%. But over the next decade unemployment fell to a low of 3.5% amid no evidence of spiraling inflation. These forecasts were used to support more modest limits on deficit spending, given the belief that they would eventually lead to higher interest rates or economic overheating. But when an economic theory yields forecasts consistently shown to be wrong, it's hard to continue using that theory.

It also certainly helped that President Trump put the idea that deficits are less concerning in train, by enacting huge tax cuts and spending increases. As a result, Democrats, and certainly the Biden administration, no longer feel they need to take Republican complaints about deficits seriously, at least as a political matter.

Allison Nathan: Has there also been a permanent shift in thinking about the role of fiscal policy in supporting the economy?

Dean Baker: Yes. In the 1990s and the 2000s, economists widely believed that central banks could handle an economic downturn themselves, by lowering interest rates to bring about the recovery. That's not to say that fiscal policy couldn't help speed up the recovery, but it wasn't considered necessary. But during the Great Recession, central banks cutting short-term rates to zero and engaging in quantitative easing didn't bring the economy anywhere close to full employment. That brought about a recognition among most economists that traditional monetary policy would no longer be sufficient to boost the economy back to full employment in all cases.

Allison Nathan: So is the ARP achieving what it set out to do for the economy, and do unintended consequences like worker shortages and rising inflation worry you at all?

Dean Baker: First and foremost, the ARP was intended to return the economy to full employment quickly. Many people, including myself, were initially disappointed on this front because our expectations were skewed by the large number of jobs the economy added in March, which was followed by a much smaller-than-expected gain in April. But once you realize that we can't expect to add 900K+ jobs every month like in March and instead look at the three consecutive months of 500K+ jobs gains, things actually look pretty good. And the ARP deserves substantial credit for that.

Although many have flagged worker shortages and rising inflation as negative consequences of the package, I don't believe either is a result of the stimulus. Is the \$300/week unemployment top-up keeping some people from working? I'm sure it is. But the extent of the disincentive is probably overstated. Several studies looking at the \$600/week supplement that was in the original CARES Act found very little effect on employment, and one [study](#) found that it raised the unemployment rate by 0.2-0.4%—not trivial, but not huge in the scheme of things. So the \$300/week supplement is not the major factor behind worker shortages. The bigger story is likely that as many businesses reopen at the same time, it's hard to find enough workers at once.

And in terms of inflation, it's true that prices have exploded in some sectors. Lumber in particular has received a lot of attention, but prices have plummeted in the last several weeks. Used car prices accounted for close to half of the April/May inflation due to a semiconductor shortage, but most car assembly plants are now back up and running. So most of the price gains have been due to temporary shortages associated with economies reopening, and will likely end up being transitory. This suggests that fears that we're back to the spiraling inflation of the 1970s are completely unfounded. On top of that, a big part of the 1970s inflation story was the slowdown in productivity growth—a quarter century of 3% annual productivity growth from 1947 to 1973 was followed by 1% growth until 1980. Annual productivity growth over 2009-2019 was only trivially above 1%, but in 2020 it rose to 4.1%. It likely won't remain that high, but 2% is certainly plausible as companies restructure and reorganize the workplace. That type of sustained, more rapid productivity growth would significantly mitigate the risk of inflation.

Allison Nathan: What about the AJP and the AFP—how likely are they to pass, by what means, and what are the most valuable aspects of the packages?

Dean Baker: I put the odds of getting something done in a bipartisan manner at around 50%. I don't see sufficient Republican support for most of the AJP and AFP, but Republicans could potentially agree to a \$1.1-1.3tn package focused on more traditional infrastructure. Biden would be on board with that, both because he wants to be able to say he did something bipartisan, and to garner support on subsequent legislation from moderates like West Virginia's Joe Manchin and Arizona's Kyrsten Sinema who would like to see a good faith effort to bring Republicans along. In that scenario, most but not all of the rest of his proposals would likely get done through reconciliation. In the case that the bipartisan effort fails and the packages get pushed through reconciliation, 80% or more of his proposals would likely pass. And there's probably a 20% chance that at the end of the day, Biden walks away with nothing—not a trivial possibility, but the least likely outcome.

The promotion of clean energy is the most valuable aspect of the packages, both for environmental and economic reasons. The idea that the environment and the economy are two separate issues is nonsense. But providing affordable childcare, universal preschool, funding for home healthcare, and free community college is also valuable, because we know they all have significant positive impacts on educational, work, and life outcomes.

Allison Nathan: What do you expect to pass on the tax side, and what are the economic implications of that?

Dean Baker: Biden likely has a good chance of raising the corporate tax rate to 25%, and cries that this is going to wreck the economy are enormously overblown. Until 2017, the US corporate tax rate was 35%, although the effective rate was closer to 21-22% based on what was actually paid, and there's no evidence in the macro data that investment rose in 2018/19 due to Trump's tax cuts. So raising the nominal rate back up to 25%—which could imply a similar effective rate of 21-22%—is hard to see as a problem. And it makes sense to set a tax rate close to what's actually going to be collected rather than ratcheting it back up to 35% so that companies don't just waste effort jumping through a lot of hoops to game the system.

Allison Nathan: But is it reasonable to expect that the large proposed spending increases can be sustained without ultimately also raising taxes on the middle class?

Dean Baker: Initially, yes, because some of the proposals are just getting a foot in the door. But if many were to be made permanent and carried further, taxes on the middle class would likely have to rise. My personal view is that if you have programs that people like, people will pay for them. Look at Medicare and Social Security—I don't doubt that if/when we get to the point when Social Security funds are depleted, there would be an enormous amount of support for raising taxes if the alternative is cutting benefits meaningfully.

Allison Nathan: Is there a point at which we should be worried about the large deficits and the cost of servicing the debt resulting from Bidenomics?

Dean Baker: There's a lot of misunderstanding about debt burdens. Debt-to-GDP ratios today may be hitting records last seen during WWII, but the interest burden is still very low at around 1.5% of GDP, and in real terms it's actually negative. And more broadly, while that constitutes an explicit debt, the government also creates debt in other ways. My favorite example of this is the \$500bn/yr Americans spend on prescription drugs, which would likely decline to \$100bn/yr if the government no longer granted patent monopolies. That \$400bn/yr differential is every bit as much of a burden on Americans as servicing explicit debt. That's not to say that we shouldn't think about explicit debt, but the burden from other types of debt people aren't thinking about will likely be a larger future burden than what we're going to pay in debt service.

Allison Nathan: Given all that, will Bidenomics be a net positive for growth?

Dean Baker: Absolutely; I have no doubt that the net effect would be positive for growth. The potential negative impacts, like the Child Tax Credit incentivizing some people to opt out of working or higher taxes denting investment, are likely to be very small, and outweighed by the benefits of providing good childcare, home healthcare for seniors and the disabled, preschool education, free community college, and jumpstarting clean energy. I was actually struck by the very modest growth boost the administration published with their budget—only 0.1-0.2% ten years out. That's a very conservative estimate, but even that amount of incremental growth would make a big difference over time.

Bidenomics: an international perspective

Jan Hatzius and Daan Struyven discuss where US economic policy lies on the progressive spectrum relative to other countries, both before and after expected policy changes

President Biden's American Rescue Plan (ARP), American Families Plan (AFP), and American Jobs Plan (AJP) extend the progressive shift in US economic policy that began with the Fed's framework review and last year's aggressive policy response to the COVID-19 crisis. Its key pillars are: 1) more aggressive income redistribution via the tax and transfer system, 2) increased government spending on climate change mitigation and infrastructure, and 3) stronger monetary and fiscal policy action against underemployment and "lowflation".

Do these shifts have further to run? What effects will they have on economic performance? Will other countries emulate them? These big questions are closely intertwined with electoral politics and societal preferences. To start answering them, we first look at how the US compares—both before and after the expected policy changes—to its international peers, which should help provide a factual background for some of these bigger and thornier questions.

Income redistribution

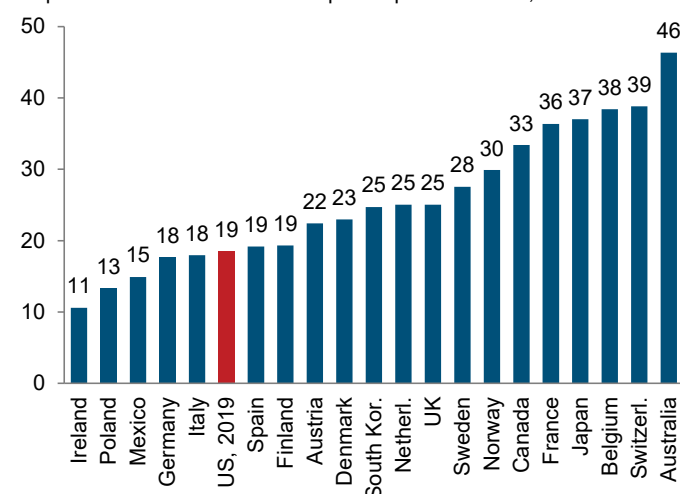
The US is mostly moving toward its peers in terms of income redistribution. As of 2019, pre-tax US income inequality was relatively high while social safety net spending was relatively low—the pre-tax income share of the top 1% of US earners was the highest among rich countries and the US spent only 20% of GDP on social benefits to households. Biden's proposals to increase spending on child tax credits, childcare, paid leave and education would shift the US closer to international norms on social safety net spending.

Prior to the pandemic, low government transfers went hand in hand with relatively low effective US corporate and top personal income tax rates. On the corporate side, tax revenues are comparatively small as a share of corporate profits. Our expectations of a hike in the statutory corporate tax rate to 25% would shift the effective US corporate tax rate closer to international norms. Similarly, the average combined federal, state, and local US top marginal individual income tax rate is toward the lower end of the international range, at least for households in low-tax states. While we expect that US tax increases will bring the average combined federal, state, and local US top marginal individual income tax rate closer to international norms, even a full implementation of Biden's proposals would only partially close the gap.

By contrast, capital gains taxes are relatively higher in the US than internationally. Even our baseline expectation of a smaller increase in the federal top capital gains tax rate to 28% than the proposed 39.6% would move the US combined rate into the top half of the international range. While we doubt that other countries will emulate any US moves in the areas of individual income and capital gains taxes on a significant scale, the recent G7 deal to create a global minimum corporate tax illustrates the global repercussions of the progressive shift in US economic policy.

The US lags behind international norms on effective corporate tax rates

Corporate taxes as a share of corporate profits in 2018, %

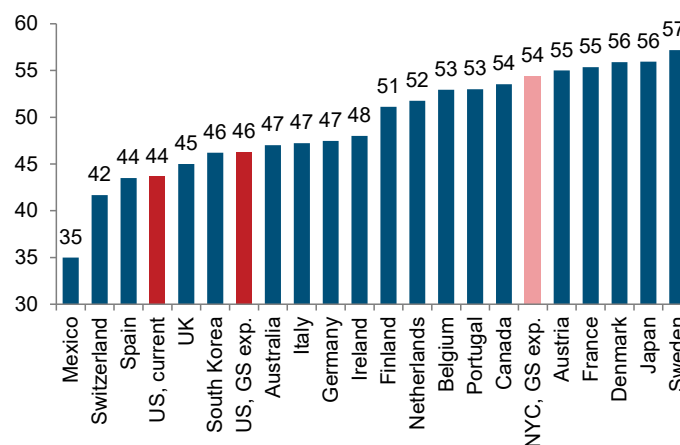


Note: The harmonized profit measure is net operating surplus of non-financial corporations—business income after subtracting compensation, production taxes, and depreciation, but before subtracting net interest payments and business transfer payments; we reduced US corporate profits by 22% because S-corporations do not pay corporate taxes and used 2019 data on profits from the BEA and on corporate taxes from the OMB.

Source: KPMG, OECD, IRS, BEA, Goldman Sachs GIR.

US tax increases will still leave the top marginal personal income tax rate somewhat below international norms

Top marginal individual ordinary income tax rate (incl. state and local), %



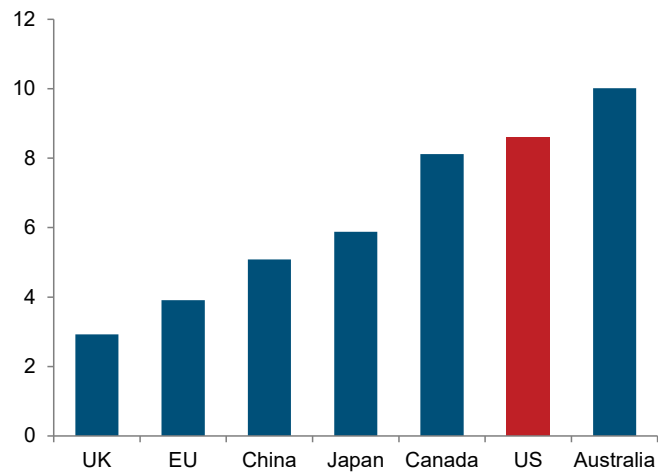
Source: OECD, Goldman Sachs GIR.

Climate change and infrastructure

The US is likewise playing catch-up on climate change mitigation and infrastructure spending. Among major economies, annual US carbon emissions per capita are second only to Australia at around 16 tons per person—twice as high as those of Germany and China, and three times as high as those of the UK and France. Biden recently pledged to achieve a 50-52% reduction in net US greenhouse gas pollution from 2005 levels by 2030. Given the public goods nature of emissions and jawboning from US officials, this has already increased the incentives for other countries to follow suit. Brazil, Canada, and Japan pledged to curb domestic emissions at Biden's climate summit. But while Biden's pledge implies a similar speed of cutbacks as promised by the major European countries, it would still leave the level of US emissions per capita twice as high.

Biden’s emissions pledge would still leave US emissions twice as high as those of major European countries

Target-implied Co2 emissions per capita in 2030, tons/person-year

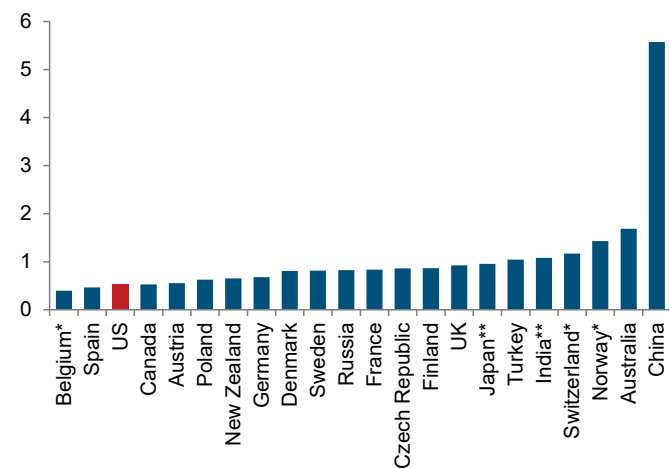


Source: Goldman Sachs GIR.

Similarly, US infrastructure spending is fairly low relative to other advanced economies and extremely low relative to China. Total US spending on transportation infrastructure across all sources of financing and on both new and maintenance projects totaled 0.5% of GDP in 2018, compared to roughly 1% in Japan and the UK and nearly 6% in China. Such low levels of spending, combined with strong political and academic support for increased infrastructure spending, suggests that this infrastructure shift has more room to run.

US infrastructure spending is relatively low

Total inland transportation infrastructure in 2018, % of GDP



*2017 data; **2016 data. Source: OECD, Goldman Sachs GIR.

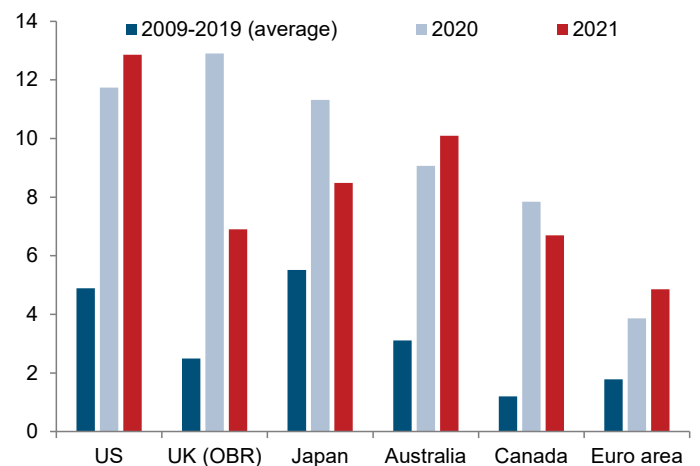
Macro policy

US fiscal and monetary policy have long taken a more aggressive approach to managing economic cycles than most other countries, and with the recent policy changes revealing a meaningful shift further in this direction, US macro policy is moving further away from the international norm. On the fiscal policy side, the US already ran relatively large cyclically adjusted budget deficits by international standards, partly because of a relatively more activist response to the Global Financial Crisis. This gap widened further in 2020 and 2021, as US

policymakers have taken an even more aggressive approach to income stabilization than their advanced-economy peers, motivated partly by a desire to avert the negative scarring impact of long-lasting unemployment. While the US deficit is expected to decline sharply in coming years, we still expect a federal deficit of over 5% of GDP even in FY2024, when we forecast an unemployment rate of around 3%.

The US already ran relatively large cyclically adjusted deficits prior to the pandemic

IMF cyclically adjusted deficits, % of potential GDP



Source: IMF, OBR, Goldman Sachs GIR.

On the monetary policy side, the Fed has historically been more willing to ease policy in order to boost employment and keep inflation closer to 2% than other major central banks, especially the ECB, and the Fed’s new framework has further increased this willingness. Although the latest FOMC meeting implied a somewhat more backward-looking and formulaic approach to average inflation targeting (AIT) than expected, the Fed still seeks to achieve inflation that averages 2% over time and therefore aims for moderate inflation overshoots following an undershoot. Moreover, whereas the Fed’s previous strategy had been to minimize *deviations* from maximum employment, the new employment side of the dual mandate is asymmetric as it seeks to eliminate *shortfalls* from maximum employment, defined as a broad-based and inclusive goal assessed through a wide range of indicators.

If the further US policy shift in this direction proves to be a success—and avoids substantial and persistent overheating—this would strengthen the argument for other countries to follow suit both on fiscal and monetary policy, at least directionally, potentially encouraging countries to run larger structural deficits and keep more accommodative monetary policy for longer. This is particularly relevant for Europe (see pgs. 22-23), where both fiscal and monetary policy are already turning somewhat more aggressive.

Jan Hatzius, GS Head of GIR and Chief Economist

Email: jan.hatzius@gs.com Goldman Sachs and Co. LLC
Tel: 212-902-0394

Daan Struyven, Senior Global Economist

Email: daan.struyven@gs.com Goldman Sachs and Co. LLC
Tel: 212-357-4172

Interview with David Brady

David Brady is Professor Emeritus of Political Economy at the Stanford Graduate School of Business and Davies Family Senior Fellow at the Hoover Institution. His research focuses on Congress, the party system, and public policy. Below, he discusses the current political dynamics in the US and how they could affect the passage of President Biden's economic agenda.

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



Allison Nathan: President Biden's economic agenda is being portrayed as highly progressive, and perhaps ushering in a new "progressive era." Do you agree with that portrayal, and how does it compare with past progressive eras in the US?

David Brady: President Biden's economic agenda is not as progressive as the New Deal, which solidified the Democratic Party's preference for greater government involvement in managing and regulating the economy. And while President Obama had a progressive agenda, with the exception of the Affordable Care Act (ACA), most of it didn't pass. So Biden is more progressive than Obama, but less progressive than FDR.

As for whether Biden ushers in a new progressive era, that totally depends on what he gets done. His first stimulus package was bigger than what Obama got through in the wake of the Global Financial Crisis, but he will have a tougher time than Obama did getting legislation passed from here because Democrats today have smaller margins in both houses of Congress. And while Trump may have lost the 2020 election, that outcome was a referendum on Trump—not on the Republican Party. In contrast to Obama's 2008 win, down-ballot Republicans gained seats in the House and would have likely kept control of the Senate had it not been for Trump's claims of voter fraud in Georgia that reduced Republican turnout in the run-off election. With a very small majority in the House and a 50/50 Senate, there is no clear mandate for a new progressive policy era.

Allison Nathan: There seem to be two conflicting narratives today: that President Biden has been forced to adopt a more progressive agenda than he intended by an increasingly powerful progressive wing of the Democratic Party, and that the centrist West Virginia Senator Joe Manchin—who is the party's marginal vote—is helping lead the party towards moderation. Which of these is actually true?

David Brady: That's the million-dollar question, and we'll likely get an answer to it over the next month or two as legislation like the American Jobs Plan and the American Families Plan either get modified through a bipartisan agreement or pushed through on a party-line basis via reconciliation, with the latter signaling greater influence of the progressive wing. But while Manchin is a crucial vote, he's not the only moderate that matters. A cluster of moderates including Arizona's Kyrsten Sinema, New Hampshire's Jeanne Shaheen, and Montana's Jon Tester will be potentially important in shaping policy and have arguably already pulled policy back from the progressives.

Allison Nathan: But has the more progressive wing of the Democratic Party—and the conservative wing of the Republican Party, for that matter—become more powerful?

David Brady: What we've really witnessed is a sorting of the political parties over the last 40 years. In 1980, about 40% of self-identifying conservatives were Democrats, and 20-25% of self-identifying liberals were Republicans. Today, there are few conservatives in the Democratic Party and few liberals in the Republican Party—70-75% of Republicans consider themselves to be conservative or very conservative—with the share of "very conservative" up even from the Obama period—and the share of people identifying as liberal and very liberal is up in the Democratic Party as well. That said, the Democratic Party is more heterogeneous than the Republican Party—it has more moderates and conservatives than the Republican Party has moderates or liberals, which is related to education. In the Democratic Party, those who identify as liberal or very liberal are better educated and earn more than those who identify as moderate or conservative Democrats.

Allison Nathan: Does this dynamic differ between the House and the Senate?

David Brady: The House tends to be more liberal or more conservative—depending on who's in control—in line with these shifts, and the Senate more moderate irrespective of them. That's mainly because members of the House get elected by districts, and there are many safe districts due to relatively small populations and the impact of redistricting over time. So, in any given election, maybe 30-40 House seats could swing between parties. But members of the Senate are elected by the entire state, so a much greater percentage of seats could swing. This more centrist tendency in the Senate is apparent in the pattern of failed legislation—the Senate killed the repeal of the ACA, recently refused to pass H.R. 1, and will likely refuse various other pieces of Biden's agenda.

Allison Nathan: Is this shift towards more ideological parties being driven by the voters or by the parties?

David Brady: More the latter. In a sense, elected representatives are a bit out of touch. A lot of moderates still exist in the US, but most of the time the parties only offer the public a choice between candidates on the left and the right rather than in the center. A [study](#) by Danielle Thomsen at the University of California, Irvine that interviewed state legislators—which is a large source of congressional candidates—found that only liberals and conservatives are willing to run for Congress. That's largely because a lot more money is available for liberal and conservative candidates than for moderate candidates. That, coupled with the fact that people who vote in Democratic primaries tend to be liberal and those who vote in Republican primaries tend to be conservative, means that both parties nominate candidates on the left or on the right, but not many in the middle.

Allison Nathan: Given this political backdrop, what parts of Biden's economic agenda are likely to get passed, and how?

David Brady: Bipartisan negotiations on an infrastructure bill have made some progress, with a bipartisan group of senators, including Utah's Mitt Romney, Maine's Susan Collins, Manchin, and Sinema, recently striking a deal on an infrastructure framework that President Biden has agreed to. But the question now is whether that can capture enough other Democrats and Republicans to get a majority. Such center-out coalitions that start with moderates agreeing on a policy and then moving that policy out into the wings to capture enough support have succeeded in the past, such as the compromise that forced President H.W. Bush to go back on his "read my lips: no new taxes" pledge in the early 1990s. I think a similar center-out coalition succeeding today would be difficult, but it has the best chance on the infrastructure bill, where some common ground seems to exist between the parties.

Passing other parts of Biden's \$6tn economic agenda will likely be even tougher because Congress will adjourn for the summer recess shortly, and the focus will shift to re-election campaigns when they return in the fall. At that point, what the voters say and how they feel will be crucial. That said, various parts of Biden's agenda have some Republican support, because Trump brought a huge number of non-college educated white voters into the party who felt neglected by the Democratic Party but favor higher taxes on the wealthy, providing aid to families, and other broad aspects of Biden's economic agenda that suit their needs. So Trump has ironically increased the chances of Biden gaining bipartisan support for some of his economic proposals, but certainly not all of them. And most probably won't pass without being pared back, and some even if they are.

Allison Nathan: Is Biden likely to get more of his economic agenda passed under reconciliation?

David Brady: Probably, but even then it's not clear that the Democrats can pass all or much of the agenda, not only because they'll still need the votes of moderates like Manchin and Sinema, but also because reconciliation has a lot of constraints, which has only been exacerbated by the recent decision by the Senate parliamentarian to allow only one reconciliation budget this year. So the Democrats will likely end up proposing legislation closer to the center because that has the best chance of passing, which the progressive members of the party like Bernie Sanders and AOC may not support. And in that case, we'll end up with the status quo—budgets that just bring back the previous year's totals. That's just one possibility, but the bottom line is that policy proposals at this point are much further left than what's actually going to pass under any process.

Allison Nathan: How likely is it that midterm elections stop a more progressive economic agenda in its tracks?

David Brady: There likely won't be a wave election in the House in which 35-40 seats swing from one party to the other. But given how small the current Democratic margin is, it doesn't take much for control of the House to swing back to Republicans. Seven seats shifted away from Democrats to Republicans following the 2020 Census—Texas will pick up two seats, Montana, Florida, and North Carolina will each pick up

one, etc. So Republicans are probably going to do well just on the basis of reapportionment without even any large national trend playing in their favor. And the question will then become, what does that mean for Trump's future influence on the Republican Party? Most Republican representatives today are worried about getting primaried by pro-Trump candidates if they're not seen as supportive enough of Trump. So if Republicans gain control of the House, Trump may become even more ensconced in the Republican Party.

In the Senate, however, the Democrats likely have a better chance of picking up a seat or two than the Republicans do, although that depends on how Biden is perceived, and his approval rating is slipping. The more moderate he gets, the more likely the Democrats are to do well in the midterms, because that way they don't put a moderate senator at risk. We saw this in the patterns of Democratic losses in 1994 and 2010. While Sanders and others in the Democratic Party at the time claimed that the party lost in midterms because it didn't go big enough, the evidence is absolutely counter to that. Those who lost in 1994 were Democrats from moderate districts who supported President Clinton's relatively progressive agenda in over 75% of votes. Candidates from the same district that didn't support Clinton as much didn't lose. And, in 2010, Democrats who came from competitive districts and voted for the ACA and cap-and-trade lost overwhelmingly. If you're from a centrist district or a state like Manchin's and the party pulls you left, you'll suffer in the midterms. So the extent to which Biden and progressives don't pull too many people away from such districts will likely determine whether Democrats retain control of the Senate.

Allison Nathan: What are the implications of the current dynamics for bipartisanship, elections, and democracy?

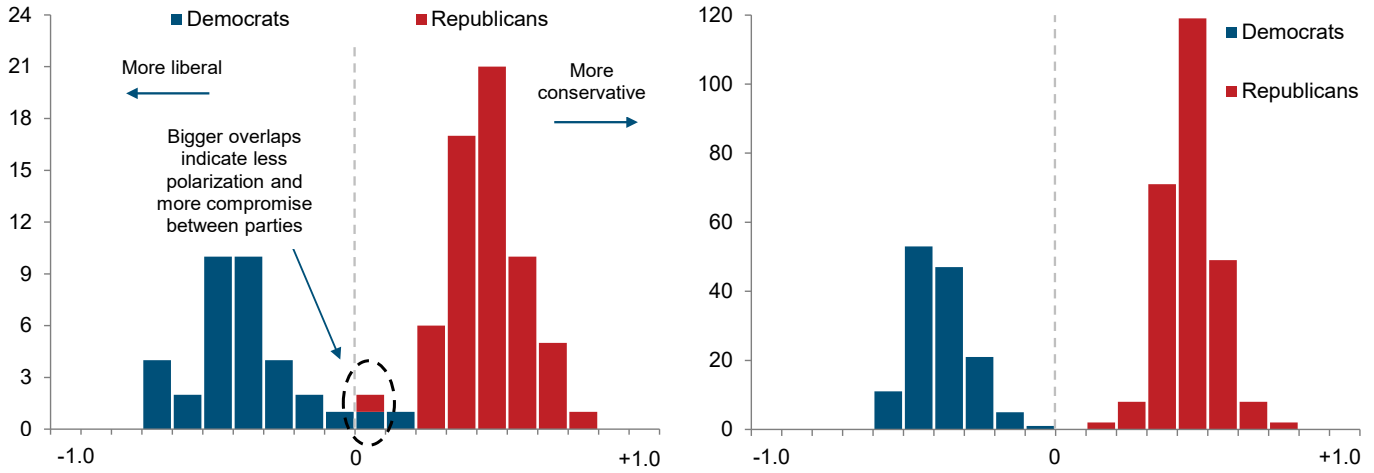
David Brady: A key problem today is that the very thin margins in Congress reduce incentives to compromise—and therefore impede bipartisanship—because doing so may jeopardize winning control of Congress in the next election. Historically, this type of problem has generally been solved in American politics by one party continually winning, which eventually forces the other party to change. For example, during the New Deal era, Democrats won until Republicans shifted their platform to one of less welfare spending and less regulation rather than no welfare spending and no regulation—more in line with the mood of the electorate. We could see such a resolution today, although that would take two or three elections to play out.

But the bigger challenge that makes resolution of this divisiveness perhaps harder this time around is doubt in the credibility of our democracy itself; 30% of Democrats thought the 2000 Bush vs. Gore election was stolen, and a majority of Republicans believe the last election was stolen. A close election like 2000 when Gore still attended Bush's inauguration is one thing, but having a large portion of the public disagreeing about every election result is a different kind of crisis—one that we haven't experienced in the US since the Civil War. That makes solving the problem of how to legitimize elections crucial. The Democrats tried to solve that through H.R. 1 and the Republicans are trying to solve it at the state level. But if we don't get to some bipartisan agreement on how to maintain trust in our elections, our problems are just beginning.

A look at political polarization in the US

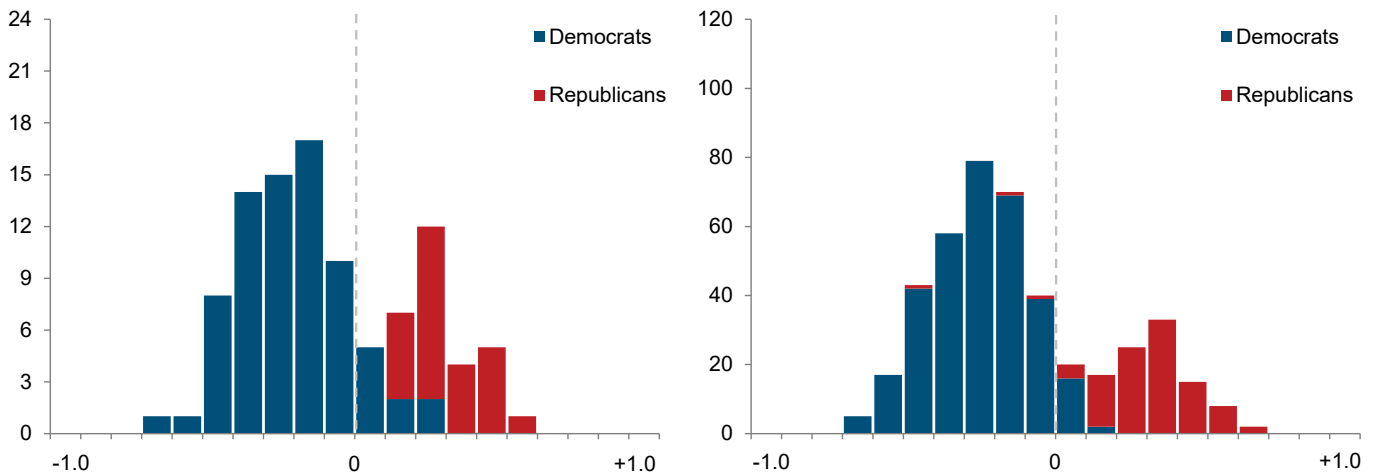
The Progressive Era was marked by relatively ideological parties and political polarization...

Ideological scores of Senate (left) and House (right) members of the 59th Congress (1905-1907)



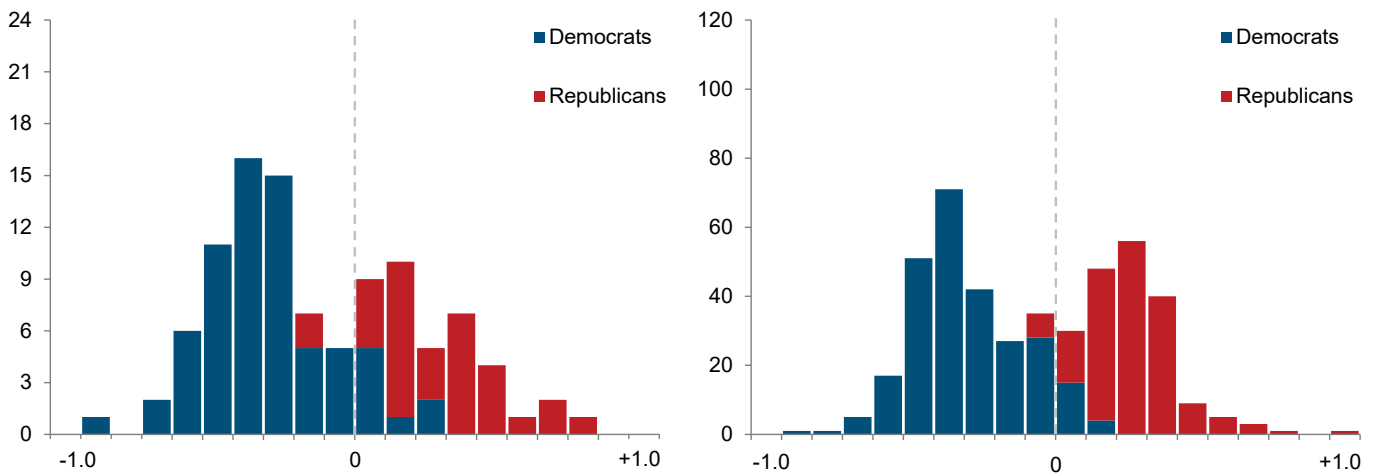
...but by the New Deal Era, both parties had become more moderate and Congress was less polarized...

Ideological scores of Senate (left) and House (right) members of the 74th Congress (1935-1937)



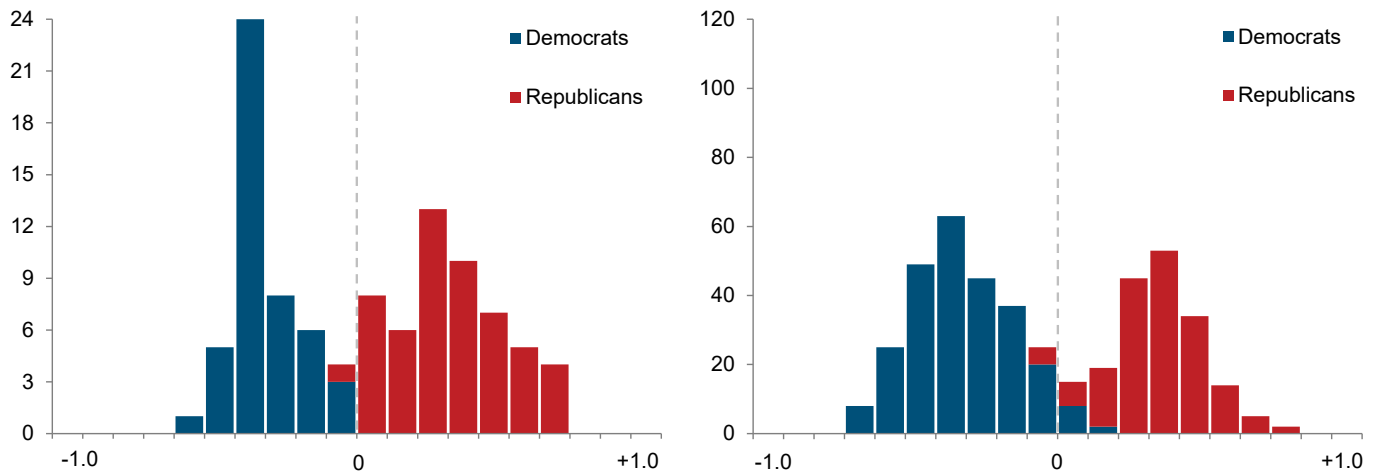
...while Democrats moved slightly left during Johnson's Great Society, the decline in polarization continued...

Ideological scores of Senate (left) and House (right) members of the 88th Congress (1963-1965)



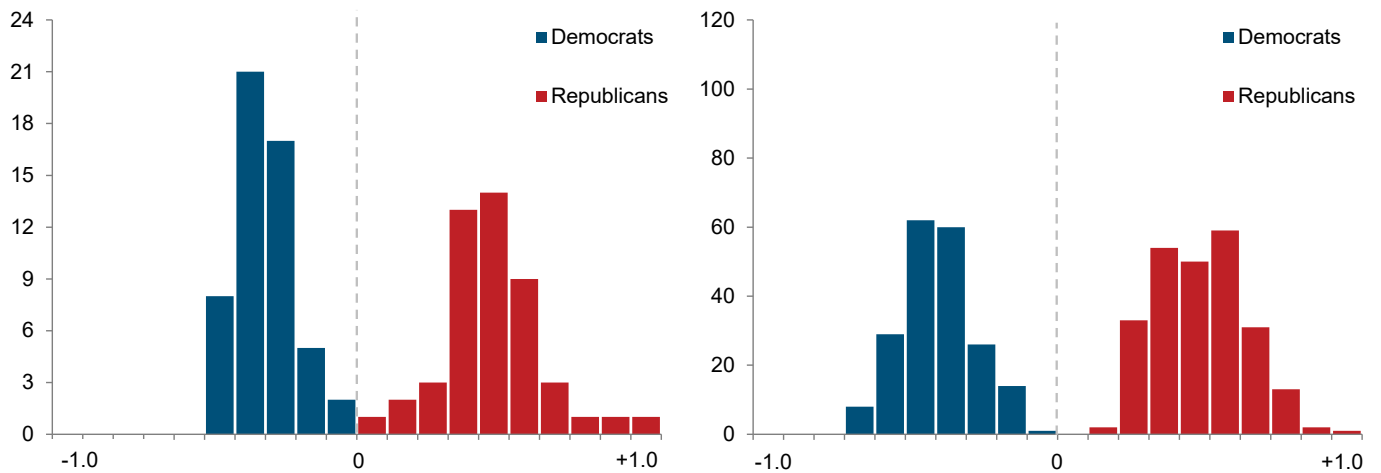
...but by the Reagan years, polarization increased again as Republicans became more ideological...

Ideological scores of Senate (left) and House (right) members of the 99th Congress (1985-1987)



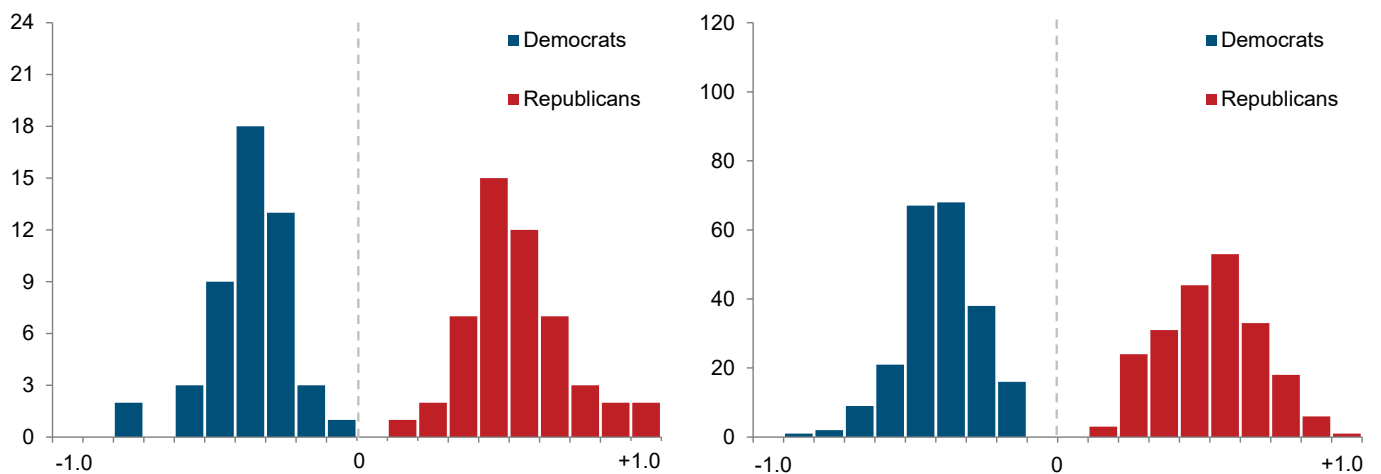
...and both parties became more ideological during the Obama years, increasing polarization further...

Ideological scores of Senate (left) and House (right) members of the 112th Congress (2011-2013)



...a trend which has continued and even grown today

Ideological scores of Senate (left) and House (right) members of the current Congress



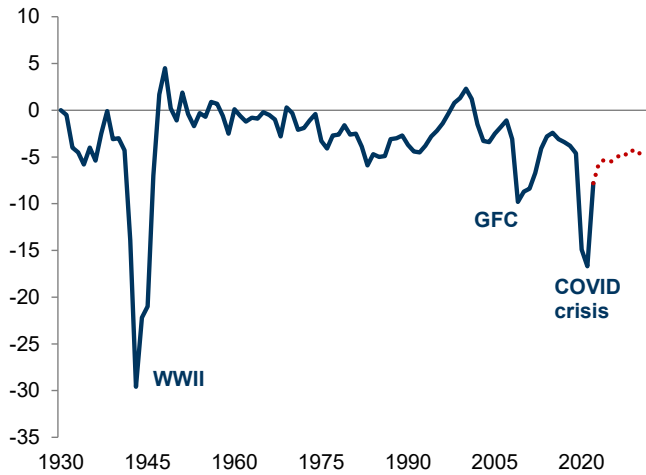
Note: Ideological scores are calculated using [methodology](#) developed by Keith T. Poole and Howard Rosenthal, which aggregates all roll call votes cast in each legislative session; vote scores of each member of Congress range from most liberal (-1 to 0) to most conservative (0 to +1); y-axis is a frequency measure for each score range; analysis excludes votes by independents and any third parties.

Source for all charts: [Jeffrey B. Lewis, Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, Luke Sonnet \(2021\), Voteview: Congressional Roll-Call Votes Database](#), Pew Research Center, Goldman Sachs GIR.

Bidenomics: a new era for fiscal policy?

US deficits are the largest since WWII

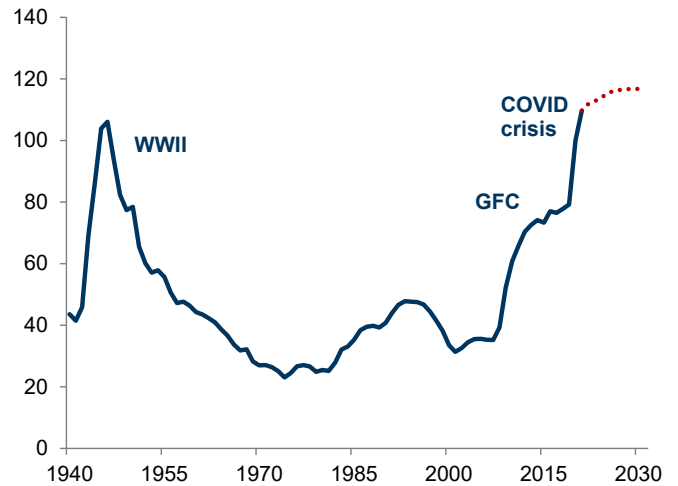
US deficit/surplus as % of GDP



Note: Dotted line reflects OMB projections.
Source: OMB, Goldman Sachs GIR.

And debt levels have risen to all-time highs

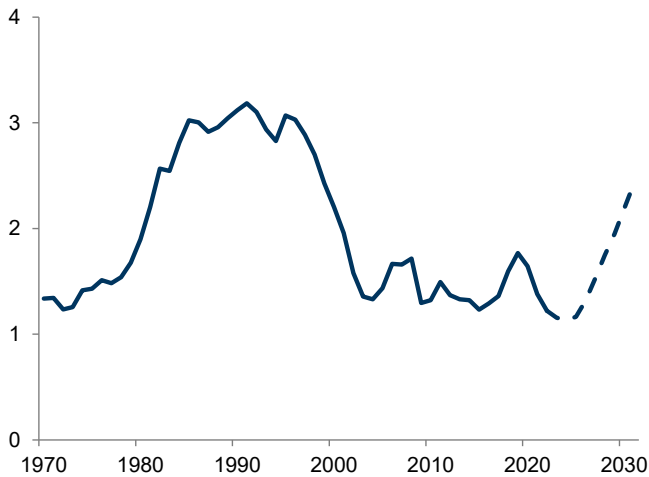
US debt-to-GDP ratio, %



Note: Dotted line reflects OMB projections.
Source: OMB, Goldman Sachs GIR.

But the cost of servicing debt remains fairly low

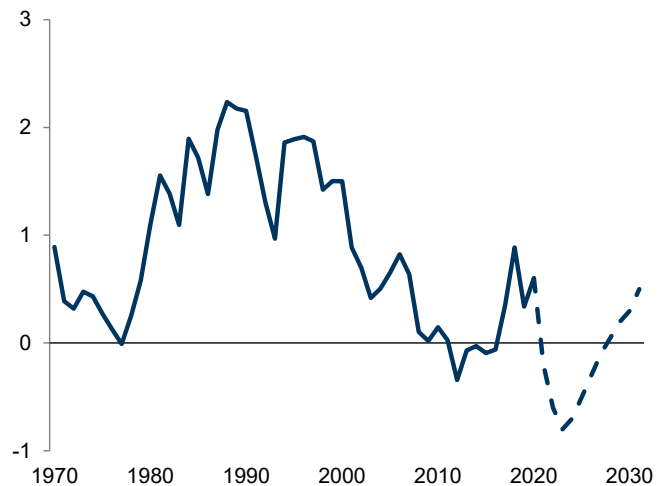
US nominal debt service cost, % of GDP



Note: Dotted line reflects CBO projections.
Source: CBO, Goldman Sachs GIR.

And real debt service costs are actually negative

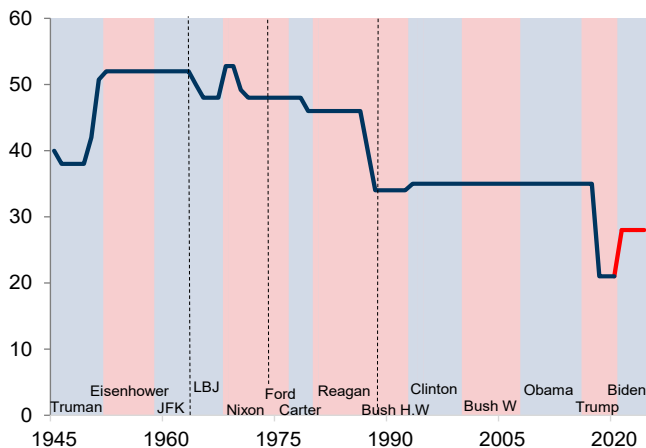
US real debt service cost, % of GDP



Note: Dotted line reflects OMB projections.
Source: CBO, IMF, OMB, Goldman Sachs GIR.

Biden's corporate tax proposal is sizable, but from low base

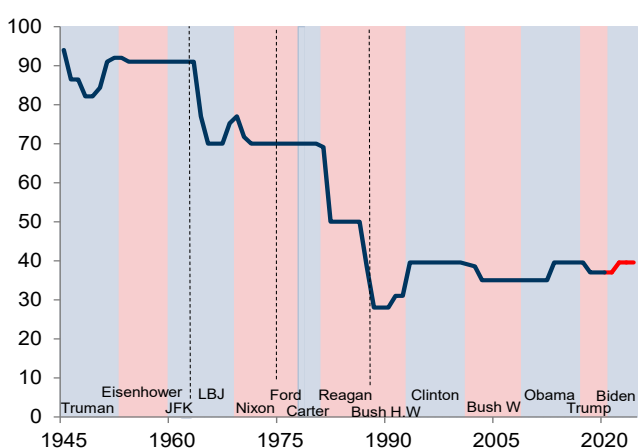
Top US corporate tax rate, %



Source: IRS, Goldman Sachs GIR.

And his income tax proposal would restore Obama-era top rate

Top marginal income tax rate, %



Source: IRS, Goldman Sachs GIR.

Bidenomics implies a higher terminal rate

Daan Struyven and Jan Hatzius argue that the progressive shift in US and global economic policy suggests that the neutral interest rate could be higher than markets think

What are the implications of Bidenomics for interest rates? In our view, the progressive shift in US and global economic policy (see pgs. 12-13) suggests that the neutral real short-term interest rate (r^*)—that is, the interest rate consistent with full use of economic resources and steady inflation near target levels—may be above depressed market-implied levels of around 0% in the US and -1.5% in Europe.

Some historical context

Globally, in low and stable inflation environments over the postwar period, the actual real short-term interest rate (r) averaged about 1% over the cycle, although with a great deal of variability. The 1984-1999 post-Volcker period was an outlier to the high side when policymakers stabilized inflation with very elevated real rates, while the 2008-2017 post-Global Financial Crisis (GFC) period was an outlier to the low side. So where should it fall in an environment potentially characterized by greater tolerance for increased government spending and inflation relative to the past?

Fiscal and climate shocks pushing r^* higher

We think the answer is broadly higher. In particular, a savings-investment framework, which defines r^* as the r that equilibrates savings and investment in the long-run, suggests that larger government deficits and the green investments needed to achieve net zero carbon emissions could boost r^* by around 60bp relative to the post-GFC cycle.¹

On the investment side, we estimate that the green investment needed to pull off the transition to net zero should substantially boost investment demand by 0.9% of global GDP in coming years. On the savings side, an expanded US safety net and reduced fear of government deficits should substantially lower public savings demand. We believe that other countries are likely to partly follow the US in running bigger and more countercyclical structural deficits. Specifically, we forecast government deficits in 2022-2024 that are around 3.5pp higher than the pre-pandemic expansion norm in the US and 1.6pp higher globally. This fundamental analysis of the impact of the progressive shift in fiscal and climate policy, together with our historical analysis, is a key reason why we believe that r^* may be above depressed market-implied levels.

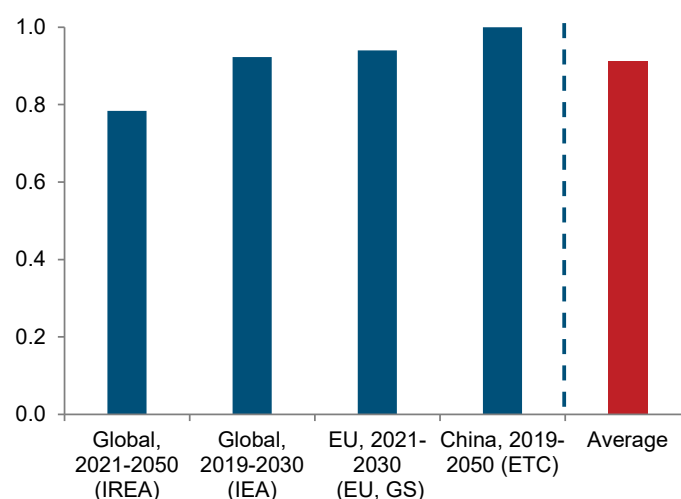
A higher terminal rate

In the near term, we expect the funds rate in the US and most other major economies to remain at its effective lower bound for longer than markets are currently pricing. However, we eventually expect a rise to at least 3% in the US, well above the levels discounted in the forwards. This is partly because r^* could turn out to be higher than the current market-implied level and partly because—if the Fed deliberately falls

somewhat behind the curve in the context of a long expansion— r will likely need to rise above r^* . However, given the loose links between real rates and the real economy, as well as the central role of financial conditions, the uncertainty around the terminal rate is substantial and strongly skewed to the upside. And even if our forecast of at least 3% turns out to be correct, it could be years before markets embrace this view.

Higher green investment could boost investment demand by nearly 1% of GDP

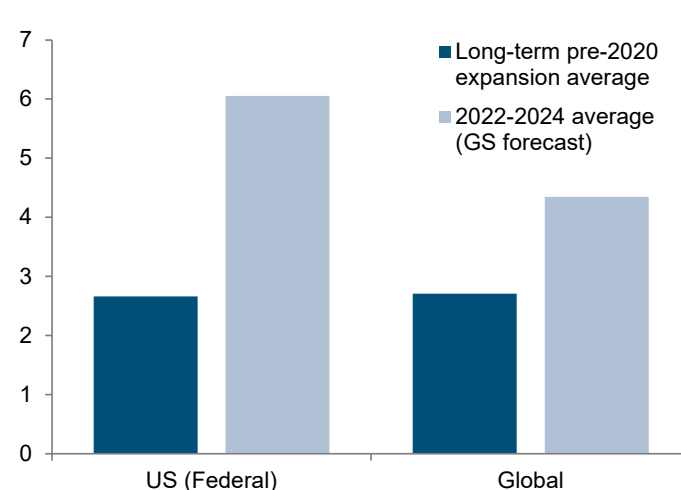
Incremental annual green investment, % of GDP



Source: IRENA, IEA, EU, Energy Transition Commission, Goldman Sachs GIR.

We expect persistently larger deficits over the next several years

Government deficit, % of GDP



Note: Expansion averages include 1992-2000, 2002-2007, and 2011-2019 in the US, and 2005-2007 and 2011-2019 globally.

Source: CBO, BEA, Goldman Sachs GIR.

Daan Struyven, Senior Global Economist

Email: daan.struyven@gs.com

Tel: 212-357-4172

Goldman Sachs and Co. LLC

Jan Hatzius, GS Head of GIR and Chief Economist

Email: jan.hatzius@gs.com

Tel: 212-902-0394

Goldman Sachs and Co. LLC

¹ We quantify this based on estimates from the Fed and the BoE of the relationship between investment demand, savings demand, and the neutral rate. See Lukasz Rachel and Thomas Smith, "Are Low Real Interest Rates Here to Stay?", International Journal of Central Banking, September 2017, and Stanley Fischer, "Why Are Interest Rates So Low? Causes and Implications", October 2016.

Market implications of Bidenomics

Dominic Wilson argues that Bidenomics could reinforce the case that this recovery may break, or even reverse, long-prevailing market trends should its policy shifts prove persistent

The last year and more has seen significant shifts in the role of policy in the US economy, and the market is still digesting the potential longer-term implications. Beyond the details of the individual policy proposals, three areas of the Biden administration's macroeconomic policies stand out as having the potential to broadly impact market pricing. First is the decision to pursue broadly expansionary fiscal policies, and run sustained fiscal deficits, outside of recessions. Second is the greater focus on expanded income support payments and investments focused on climate change and broader infrastructure, partially funded by increases in corporate and personal taxes. The third is a possible increased willingness to use fiscal policy—including cash transfers—as a tool to stabilize the economy in the face of negative shocks, rather than relying on monetary policy alone.

In many of these cases, our US economics team points out that ascribing these shifts only to the new administration is inaccurate (see pgs. 4-5). The Trump administration engineered a sharp expansion in the deficit and debt profile during a recovery period, though driven more by tax cuts than spending increases. And the shift to using fiscal policy—and income replacement in particular—as a more aggressive countercyclical tool also began during the prior administration as part of the response to the COVID-19 recession, though the Democratic House played a key role in shaping those policies.

Nor is the persistence of these shifts yet clear. The mid-term elections in 2022—and election cycles beyond that—will play a key role in determining whether these three trends extend or reverse. And in some areas—particularly the willingness to use fiscal policy more actively for macroeconomic stabilization—it is hard to know whether the policies adopted for the unusual recession of 2020-21 will be used in the same way in different periods of economic weakness.

If the shifts in these three directions do prove persistent, they reinforce the case that this recovery may be accompanied by a break, or even reversal, of some of the trends that dominated the prior cycle, potentially supporting a drift higher in bond yields, a normalization of inflation, a structurally bullish commodity backdrop and more balanced performance between cyclical/value and growth stocks.

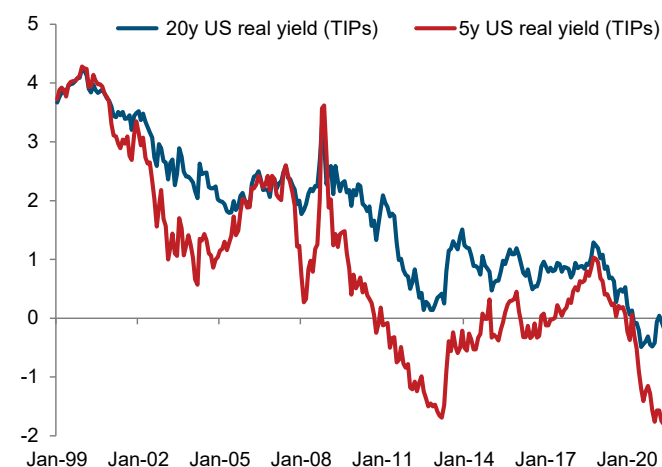
Tailwinds to the neutral rate

Despite the uncertainties over the form and longevity of some of these policy shifts, it is still possible to speculate on how they may affect broad asset markets if they persist.

The most obvious impact is on the neutral real interest rate, or the short-term interest rate consistent with full employment and stable inflation. The long decline in neutral rates has been a huge force across asset markets over the last decade or two, underpinning a strong secular tailwind for global bond yields, a premium on yield and carry in fixed income markets and a premium on long-duration equities, particularly those with strong secular growth stories.

A prolonged decline in real yields

Yield, %



Source: Bloomberg, Goldman Sachs GIR.

There are good reasons to believe that current policy settings could deliver a higher neutral real rate than in the prior cycle. A structurally more expansionary fiscal policy is the most important shift here, alongside the green investments needed to reach net zero carbon emissions. While the US stands out on the fiscal front, variants of these arguments also apply in Europe (see pgs. 22-23). Simple estimates suggest that those could push the real rate up by 60bp or so relative to the post-GFC cycle, all else equal (see pg. 19). But enhanced income support, increased public investment and any potential income redistribution are all policies that might also reverse some of the forces that may have contributed to a lower real neutral rate.

A higher neutral real rate would have its most obvious impact on bonds, ultimately allowing the Fed funds rate to rise to at least 3% and pushing the structure of the yield curve higher in parallel. Our Rates Strategy team has argued that the skew of risks is firmly in that direction in both the US and Europe. A structurally looser fiscal policy might also put further upward pressure on inflation and term premia. The path there is more likely to be sudden than gradual, but we think over time that the current policy mix may be conducive to a yield curve well above current levels.

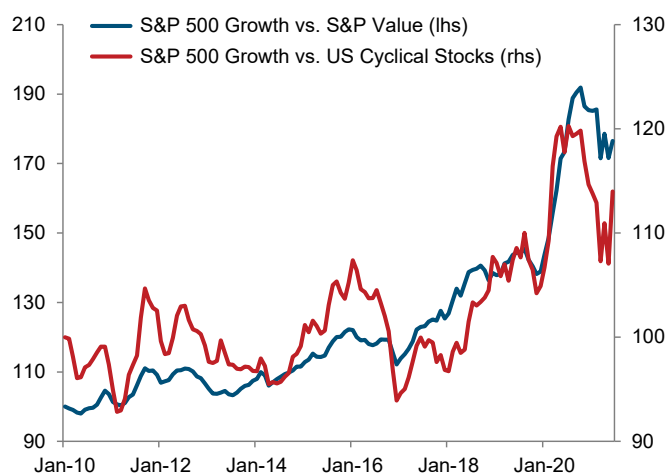
A longer-term drag on "growth" stocks, but boon to cyclical commodities

Our analysis suggests that rising real yields could have several short-term market implications, such as the underperformance of tech-related and other high-duration stocks, but longer-term shifts are also possible. This trend would probably limit the scope for further rises in US equity valuations over time—placing the burden of further gains firmly on earnings growth. It would also reduce the tailwind to long-duration growth stocks, while arguably providing a more favorable backdrop to banks given the stickiness of deposit rates. And it could put downward pressure on gold prices, which over the long-term follow patterns in US real yields quite reliably. A higher return on risk-free assets might also modestly reduce the appetite for spread products, which have benefited on a relative basis from the scarcity of yield.

The pattern of income and spending of new fiscal policies may have important market implications as well, at least at the

margin. Our Commodities team has emphasized that both the clean energy investment cycle and stronger support for low-income households are potential tailwinds to a bullish commodity demand story over the next few years. Stronger fiscal support and a more robust transfer system might also support credit quality at the low end of the household borrowing spectrum and help the relative prospects of companies who benefit more from spending from low-income households. After the aggressive income replacement of the last 15 months, some of those shifts may already be well reflected, though.

Cracks in the outperformance of growth vs. cyclical/value Index, January 2010=100



Source: Bloomberg, Goldman Sachs GIR.

Potential shifts to cyclical and inflation risks

A deeper and more complicated question is whether the shifts in macro stabilization policy—and a greater willingness to rely on countercyclical fiscal policy—should affect asset pricing. A higher neutral real rate could, in principle, make the Fed's job easier, reducing the risks of getting stuck in the liquidity trap and allowing more room for conventional rate cuts to operate in recessions. As Treasury Secretary Yellen [said recently](#), the ability to sustain higher rates could be a good thing in terms of macro policy.

And increased spending or cash transfers—alongside Fed support for bond markets where needed—are potentially a more direct and effective buffer against recessions than reliance on asset purchases to influence spending through financial conditions. So it may be that deeper downside cyclical and inflation risks should receive less weight in distributions if the current policy regime persists. The Fed's average inflation targeting framework and more expansionary structural fiscal policy arguably push in the same direction. If that is true, the compression of the equity risk premium that we have already seen in the last year may be able to run further, cushioning the impact of higher bond yields on equity valuation, while higher inflation risk premia in bonds might again be appropriate.

By the same token, the shift from a "Fed put" to a "fiscal put" may also change the nature of the assets that receive support in recessions. The template of the last cycle—where economic weakness led quickly to QE and asset purchases—arguably increased the negative correlation between bonds and equities, making bonds even more valuable as a cyclical hedge, which may have contributed to the unusually low term premium. If

fiscal policy shoulders more of the burden of policy support going forward, that too might ultimately justify a higher term premium and a larger discount of Treasuries to close substitutes. In both cases, this could argue for some reduction in the valuation discount on more cyclical assets versus duration-sensitive assets and, again, lower downside skew to the distribution of growth and inflation risk. This may also leave equity/bond correlations less reliably and persistently negative than in the last cycle (correlations have already turned positive in recent months), lowering the value of bonds relative to other kinds of protection in diversified portfolios.

The market is putting more weight on upside inflation risk, although less than in the past

Implied probability from distribution based on inflation caps and floors



Source: Bloomberg, Goldman Sachs GIR.

Not your post-GFC regime

As the old saying goes, "it is hard to make predictions, especially about the future." And predictions about the longer-term future are harder still. While it is difficult to be very confident about the exact impact of the shifts in the US policy regime on markets, they reinforce the broader story that the template of the post-GFC expansion may not be a good analogue for the current recovery. In that cycle, a combination of private sector deleveraging, public sector austerity and financial aftershocks dominated. As a result, bond yields and inflation pricing drifted systematically lower along the curve, long-duration growth stocks dramatically outperformed and traditional cyclical equities and commodity markets de-rated.

A shifting policy regime is certainly not the only reason to question whether that pattern will be repeated. But the direction of US macro policy, and perhaps European policy to a lesser extent, adds to the case that this recovery may be accompanied by a break, or even reversal, of some of these trends. They may help to underpin a drift higher in bond yields, a normalization of inflation and term risk premia, a structurally bullish commodity backdrop and, if not further broad outperformance of cyclical and value equities over growth, then at least a more nuanced and balanced picture than before.

Dominic Wilson, Senior Markets Advisor

Email: dominic.wilson@gs.com
Tel: 212-902-5924

Goldman Sachs and Co. LLC

Europe: led by, and leading, Bidenomics

Filippo Taddei argues that while the US has long led Europe on cyclical policy, Europe has been ahead on structural issues, but the COVID-19 crisis has breathed new life into addressing one of Europe’s remaining structural shortfalls

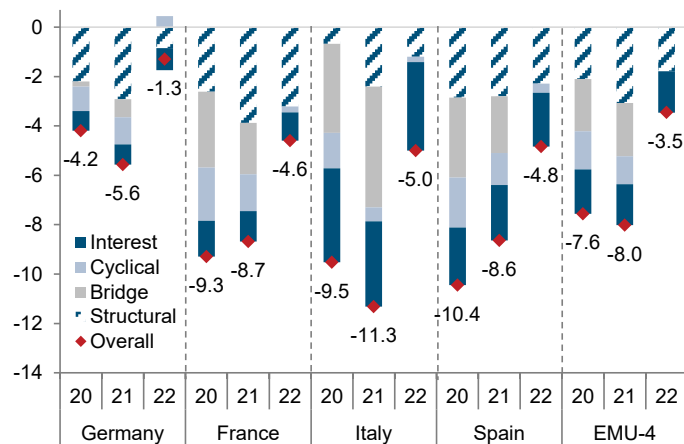
Fiscal and monetary policy in the US have long been more front-loaded and countercyclical than macro policy in the Euro area, and the pandemic response was no exception. But the COVID-19 crisis nonetheless forced policymakers to deliver unprecedented cyclical support into the region. As Bidenomics shifts US policy further in this direction, whether the shift towards more aggressive cyclical macro policy in Europe will prove lasting is a key question. But Europe has long been ahead of the US in a structural sense—with more aggressive income redistribution policies and a greater focus on climate change mitigation (see pgs. 12-13). That said, there is still work to be done on addressing the Euro area’s persistently low levels of investment. With the crisis breathing new life into solving this issue through fiscal policy, a new era of greater European fiscal integration could potentially lie ahead.

From recession to recovery

Euro area governments have sharply expanded fiscal policy in response to the pandemic crisis, pushing public deficits to record-high levels.

Fiscal support through the pandemic and beyond

Budget balance, % of GDP



Note: GS estimates; 2020 cyclical expenditures in Germany include a drawdown of the employment agency’s reserves equivalent to ~0.6% of GDP, which does not show up in the deficit.

Source: Goldman Sachs GIR.

A large share of the persistent 2021 deficit is due to the size of the pandemic-related income support that remains in place across the major economies in the Euro area (EMU-4). In addition to the usual automatic stabilizers, such as unemployment insurance and short-term work schemes, governments have introduced non-standard measures to target segments of the economy typically excluded from standard support schemes. These “bridges” to the recovery, combined with cyclical measures, have provided sizable income support, ranging from just below 2% of GDP in Germany to over 4% in

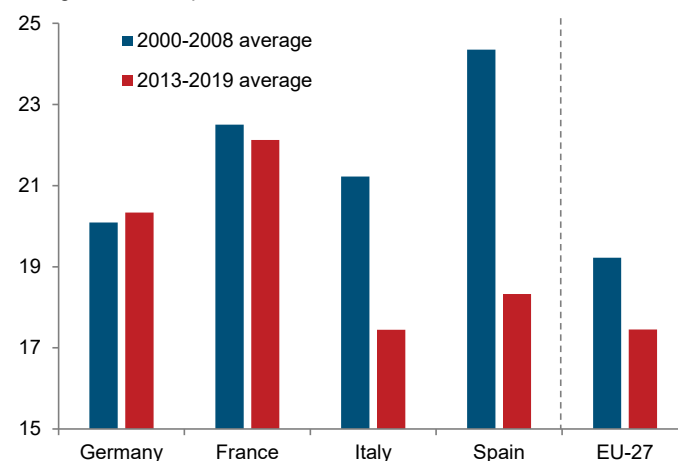
Italy. Looking ahead, we expect the current fiscal support to be phased out only slowly, in contrast to what happened in the aftermath of the Global Financial Crisis (GFC), and expect EMU-4 fiscal deficits to remain elevated well into 2022, with the likely exception of Germany.

From recovery to resilience

Since the GFC, most Euro area countries have experienced substantially lower levels of investment, especially Southern Europe. Persistently subdued investment is one of the most important factors hindering productivity gains and long-run growth. European governments and institutions have viewed the challenge of the COVID-19 recession as an opportunity to address the persistent investment gap that began over a decade ago.

A decade of subdued investment

Real gross fixed capital formation, % of GDP



Source: Haver, Goldman Sachs GIR.

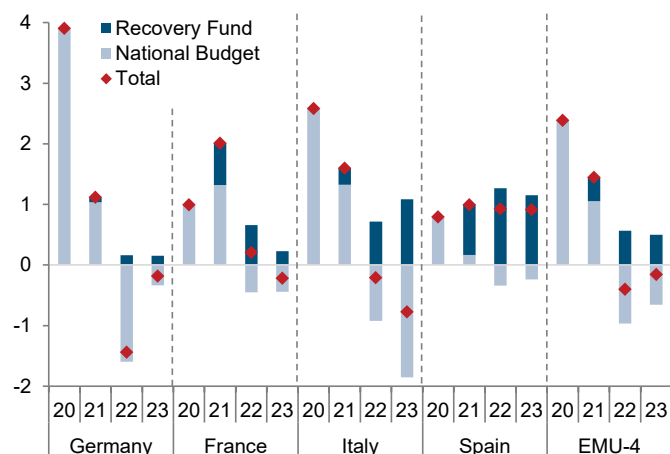
The EU Recovery Fund—currently worth EUR 800bn—has taken center stage in this initiative as the largest European Union program on record to facilitate structural change in the economy. It targets the underwhelming level of investment with the aim of increasing the competitiveness and sustainability of the economy, while allocating a larger-than-proportional share of funding to the member countries most affected by the pandemic. In this sense, it represents a major step towards fiscal integration in the EU.

The Fund has three distinctive features. One, it is a fiscal initiative that focuses on investment and thus addresses one of the main structural weaknesses of European economies. Two, it is a long-term policy framework that will extend until at least 2026. And three, it is a sizable initiative at 6% of EU GDP, which should allow governments in the periphery to maintain an expansionary fiscal stance despite the tighter domestic fiscal policy that will likely be required in the future.

To gauge the Recovery Fund’s effect, we estimated its impact on structural balances, capturing changes in the government balance beyond the impact of the business cycle on public finances. These balances translate into an expansionary fiscal stance, imparting a growth impulse beyond the stabilization of economic fluctuations until 2022. In the EMU-4, the main exception is Germany, where Recovery Fund receipts will not compensate for the withdrawal of discretionary domestic COVID-19 support next year.

European funds set to provide persistent fiscal support

Fiscal stance by funding, % of GDP



Source: Goldman Sachs GIR.

New fiscal rules ahead?

The introduction of the Recovery Fund, combined with large national fiscal deficits, has spurred a discussion on the future of fiscal integration that has immediately translated into the need to update fiscal rules in the EU. While uncertainty around the ultimate outcome of the debate on fiscal rules abounds, there is no shortage of proposals, which broadly fall into three categories. First, the EU Commission could proceed with interpretative tweaks by exerting flexibility in applying the current rules. Such tweaks would be temporary and would be the least demanding on the broader political process of the three options, but would offload the adjustment burden onto the Commission, which would then become the only entity politically accountable for the introduction of fiscal flexibility.

A second, more demanding, option would involve the European Parliament and the EU Council weighing in on amendments to the parameters of specific rules. For example, the 1/20th rule on the pace of debt reduction could be diluted so as to reduce the intensity of the debt-reduction effort that every country with debt-over-GDP exceeding 60% needs to undertake¹. This requires a change to European law, which would have the benefit of making such selective tweaks permanent.

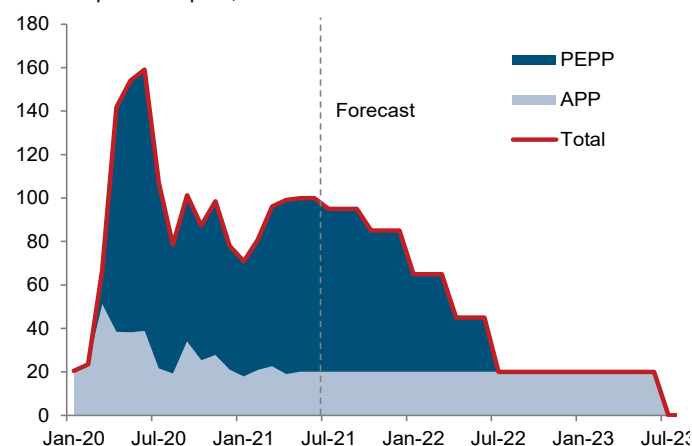
The last and most ambitious group of proposals advocate for a comprehensive and permanent overhaul of the fiscal rules. The preferred option for many commentators is a "Nominal Expenditure Rule", which ties the growth rate of nominal expenditures to the long-term nominal growth rate, therefore allowing nominal expenditures to outpace the wider economy in a downturn and providing the desired countercyclical cushion. Another more pragmatic proposal is the "Golden Rule" for public investment, which aims to nudge member states toward covering their depreciation costs by shielding net investments from any deficit and debt criteria. Such reform could gain traction with European institutions and national parliaments keen to address the investment gap and avoid the investment-heavy consolidations that Europe underwent following the GFC.

Persistent monetary support

ECB staff estimates for the European economy have turned more constructive as governments have started to reopen their economies and activity has picked up. That said, the completion of the ECB's ongoing strategy review is likely to underscore that monetary policy will need to remain accommodative for an extended period of time. Recent comments from ECB officials suggest that agreement on a 2% symmetric inflation aim is very likely, while the Governing Council continues to debate the appropriate strategy to sustainably lift inflation. We remain skeptical that the ECB will follow the Fed in committing to an inflation overshoot, but we do see room for a soft form of average inflation targeting (AIT), under which the Governing Council's forward guidance is strengthened to more clearly signal that it plans to maintain a highly accommodative policy stance well into the pandemic recovery. Consistent with this, we expect QE to run until mid-2023 and do not expect the first rate hike until 2025.

Monetary policy will likely remain highly accommodative well into the recovery from the pandemic crisis

ECB QE purchase path, EUR bn



Source: ECB, Goldman Sachs GIR.

Putting Europe to the test

The expected agreement on a soft version of AIT in which the ECB Governing Council places more weight on past inflation could provide sufficient time for Europe's institutions and governments to reach a compromise on fiscal integration while the recovery turns into sustained growth.

Given limited appetite for a fundamental overhaul of the EU's fiscal architecture among the more fiscally prudent member states, tweaks to the existing European fiscal rules currently appear to be the most likely next step in fiscal integration. But the full impact of the Recovery Fund on structural issues within the European economy remains unclear, with upside potential. A timely and efficient implementation of the program will be the most important factor in determining whether the pandemic has provided a stepping stone towards further fiscal integration, or if it will turn out to be a one-off response to an unprecedented crisis.

Filippo Taddei, Senior European Economist

Email: filippo.taddei@gs.com
Tel: 44-20-7774-5458

Goldman Sachs and Co. LLC

¹ According to the 2011 *six-pack* reform within the *Stability and Growth pact*, the European fiscal rules state that, when the debt-over-GDP ratio is above 60%, the excess over 60% must be reduced at an average annual rate of 1/20th. The average speed of debt reduction is assessed by also taking into account the impact of the economic cycle.

Summary of our key forecasts

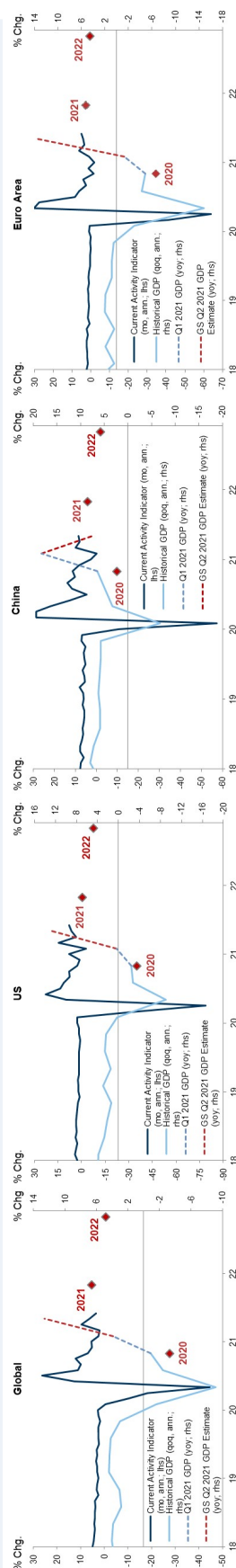
GS GIR: Macro at a glance

Watching

- **Globally**, we expect above-consensus growth of 6.6% in 2021. Our optimism reflects the view that post-vaccination reopening, accommodative monetary and fiscal policy, pent-up savings, and limited scarring effects will support a continued recovery in economic activity, though pockets of vaccine hesitancy and more infectious virus strains remain important risks.
- **In the US**, we expect above-consensus full-year growth of 6.8% in 2021 on the back of significant fiscal stimulus and widespread immunization—with over 50% of the population having now received a first dose. We expect the unemployment rate to fall to 4% by year-end, and we believe that core PCE inflation has likely already peaked or will peak in coming months, and will end the year at 3.0%.
- **The Fed** has adopted outcome-based guidance for asset purchases, and we expect tapering will be announced in December and begin in 1Q22, though the risks are skewed earlier. With the Fed now appearing to set a lower inflation bar for liftoff, we forecast that the Fed will begin to hike rates in 3Q23, although we believe the odds of a hike by the end of 2023 are only modestly better than 50%. On the fiscal policy front, we expect the passage of additional spending focused on infrastructure, social benefits, and long-term investment totaling around \$3tn and tax hikes of around \$1.5tn over 10 years in mid/late Q3 or Q4, though risks tilt in the direction of a smaller package.
- **In the Euro area**, we expect above-consensus full-year growth of 5.2% in 2021 on the back of widespread immunization—with 50% of the population of the EMU-4 countries now having received a first dose. We expect core inflation to peak at 1.8% in November, but see it falling back to 1.1% in 2022.
- **We expect the ECB** will announce a reduction of the PEPP purchase pace at the September meeting, partly due to the strong growth outlook, and see PEPP running until June 2022 and the APP continuing at EUR 20bn until mid-2023. We expect the strategy review to conclude in September with a symmetric 2% inflation aim and strengthened forward guidance on the rate path as a soft form of average inflation targeting to signal that the Governing Council intends to keep policy highly expansionary well into the recovery. We expect the ECB will keep rates on hold until 2025.
- **In China**, we expect 2021 real GDP growth of 8.5% and believe a pickup in government-led investment will be the main growth driver in 2H21 amid a peak in exports and an only gradual recovery in consumption. With 40% of the population now vaccinated, we expect 70-80% will be vaccinated by year-end 2021.
- **WATCH CORONAVIRUS**. While the trajectory of the coronavirus remains highly uncertain, our base case assumes that rising immunity owing to a combination of vaccination and prior infection will drive a continued recovery in global economic activity this year. We expect 60-80% of people in all of the major economies will have some degree of immunity to COVID-19 by end-2021.

Goldman Sachs GIR.

Growth



Source: Haver Analytics and Goldman Sachs Global Investment Research. Note: GS CAI is a measure of current growth. We have recently revised our methodology for calculating this measure. For more information on the methodology of the CAI please see "Lessons Learned: Re-engineering Our CAIs in Light of the Pandemic Recession," Global Economics Analyst, Sep. 29, 2020.

Forecasts

Economics	GDP growth (%)				Interest rates 10Yr (%)				Markets				Equities										
	2021		2022		Last	E2021	E2022	FX	Last	3m	12m	S&P 500	E2021		E2022		Returns (%)	12m	YTD	E2021	P/E		
GDP growth (%)	Global	6.6	6.0	4.8	4.5	US	1.49	1.90	2.10	EUR/\$	1.19	1.20	1.25	Price	4,300	-	4,600	-	S&P500	4.0	14.0	22.9x	
	US	6.8	6.6	4.7	4.1	Germany	-0.23	0.00	0.05	GBP/\$	1.39	1.36	1.42	EPS	\$193	\$192	\$202	\$212	MXAPJ	9.0	6.0	16.7x	
	China	8.5	8.5	5.7	5.5	Japan	0.06	0.30	0.30	\$/JPY	111	110	106	Growth	35%	35%	5%	10%	Topix	9.0	9.0	20.6x	
	Euro area	5.2	4.4	4.5	4.2	UK	0.73	1.10	1.25	\$/CNY	6.4	6.4	6.15	Credit (bp)					STOXX 600	6.0	14.0	17.9x	
Policy rates (%)	2021		2022		Commodities				Wage Tracker 2021 (%)														
	GS	Mkt.	GS	Mkt.	Last	3m	12m		Last	2021	E2021	Consumer	E2021	E2022	Q1	Q2	Q3	Q4					
	US	0.13	0.17	0.13	0.40	Crude Oil, Brent (\$/bbl)	75	80	75	USD	IG	81	92	88	US	4.5	4.0	2.1	3.5	4.4	-	-	
	Euro area	-0.50	-0.49	-0.50	-0.44	Nat Gas (\$/mmBtu)	3.82	3.25	2.90	HY	310	300	Euro area	1.9	8.9	1.3	8.1	-	-	-	-	-	-
China	2.25	1.64	2.25	1.82	Copper (\$/mt)	9,361	10,500	11,500	EUR	IG	96	90	85	China	1.0	-	1.2	-	12.1	-	-	-	-
Japan	-0.10	-0.05	-0.10	-0.06	Gold (\$/troy oz)	1,760	2,000	2,000	HY	292	305	295											

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

Glossary of GS proprietary indices

Current Activity Indicator (CAI)

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

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

Dynamic Equilibrium Exchange Rates (DEER)

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

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

Financial Conditions Index (FCI)

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

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

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

Goldman Sachs Analyst Index (GSAI)

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

Macro-Data Assessment Platform (MAP)

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

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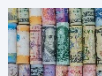
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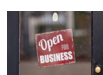
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