

POLICY BRIEF

21-2 Fiscal Resiliency in a Deeply Uncertain World: The Role of Semiautonomous Discretion

Peter R. Orszag, Robert E. Rubin, and Joseph E. Stiglitz January 2021

Beyond the COVID-19 pandemic, the United States faces several core economic policy objectives: promoting sustainable growth, expanding economic wellbeing and reducing inequality, and addressing climate change. Achieving these interdependent objectives requires an effective, sustainable fiscal framework, not just now but into the future. Thinking on fiscal policy has shifted significantly over the past decade. Our goal in this Policy Brief is to contribute to this ongoing debate.

Fiscal policy has historically been predicated on top-down fiscal anchors (simple limits on deficits or debt as a share of the economy that governments adopt to check their spending and borrowing—e.g., the Maastricht Treaty's deficit limit of 3 percent of GDP for EU members). Most of the current fiscal discussion has centered on modifying or changing these anchors to reflect an era of substantially lower interest rates, among other factors. Designing a new anchor for a period of low interest rates, however, suffers from the same flaw as previous attempts in other eras: It is likely to fail.

More specifically, we have grown skeptical about the usefulness of basing fiscal policy on *any* top-down anchor. Such anchors are supposed to promote fiscal sustainability, but it is hard to know where any such sustainability threshold is. Even if we knew the critical threshold value, budget outcomes are subject to very wide confidence intervals even over a window as short as a few years. Even if we knew that there would be deep concerns if debt or deficits exceeded a given top-down anchor, that knowledge by itself would not provide much guidance about what we should do today.

The era of low interest rates does not change this fundamental fact. Though the three of us have not always agreed about fiscal policy and continue to disagree in some areas, we indeed agree that while low interest rates change the contours of the fiscal debate, they should not be assumed to persist forever. While it is reasonable to expect low rates to continue for some time as a central forecast, Peter R. Orszag is CEO of Financial Advisory at Lazard and former director of the Office of Management and Budget and the Congressional Budget Office. He serves on the board of directors of the Peterson Institute for International Economics. Robert E. Rubin is chairman emeritus at the Council on Foreign Relations, counselor at Centerview Partners, and former US Secretary of the Treasury, Joseph E. Stiglitz is University Professor at Columbia University, was awarded the Nobel Prize in Economics in 2001, and is former chair of the Council of Economic Advisers.

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we have less conviction than some that the era of low interest rates will remain a permanent feature of the environment.

In our collective experience, fiscal policy should instead be informed by copious amounts of humility, particularly given the role of impossible-to-predict events (including pandemics, wars, and bubbles). A cogent fiscal policy framework should account for this deep uncertainty and provide fiscal policymakers tools to manage it and its fiscal consequences.

The central contention of this Policy Brief is that embracing the deep uncertainty about interest rates and other key parameters determining a country's fiscal position requires a different approach. The rejection of one extreme in the anchors (or rules) versus discretion debate on fiscal policy, however, does not mean the affirmation of the other. The shortcomings associated with any topdown fiscal rule, in other words, do not imply a form of fiscal nihilism and reliance solely on free-floating discretion, having to rethink all the relevant issues from the beginning. Indeed, in a deeply uncertain world, such reliance on discretion alone would overwhelm policymakers.

Instead, we propose a new approach in which fiscal discretion is retained but exercised *after* making the budget adjust more automatically and rapidly in areas where there is broad consensus that doing so is consistent with achieving broader societal goals. Focused automaticity is thus combined with as much discretion as policymakers need to adjust fiscal policy—including the parameters of the automaticity itself—rather than adhering to a top-down fiscal anchor.¹ We sketch five elements in such a semiautonomous discretionary fiscal architecture:

- stronger automatic stabilizers;²
- a new infrastructure program;
- extension of debt maturities;
- indexation of long-term fiscal programs to their underlying drivers; and
- more emphasis on *residual* fiscal discretion.

The goal is to streamline the decisions policymakers must make and curb potential sources of budgetary instability while preserving an ability to make

¹ An analogy may be useful: Modern behavioral economics has highlighted the limitations on individuals' cognitive capacities and the way those limitations impair decision making. Collective decision making is even more difficult. In the presence of these limitations, individuals develop simplified approaches that enable them to manage the decisions they make every day, freeing up their cognitive capacities for dealing with more important and difficult decisions.

² Automatic stabilizers are spending increases or tax cuts that are automatically triggered when the economy weakens, without the need for government action. We propose significantly increasing their role. For example, it makes sense to increase expenditure on unemployment insurance as unemployment goes up, and even to increase the length of time for which unemployment insurance is provided as the unemployment rate increases.

corrections on top of such adjustments.³ To move in this direction, we propose reducing the budget's exposure to interest rate variation while also making it respond more automatically not only to short-term economic conditions but also to drivers of long-term fiscal pressures (for example, in health care and pensions). This perspective conceptually aligns with the focus on broad fiscal standards instead of rules articulated by Blanchard, Leandro, and Zettelmeyer (2021).

Semiautonomous fiscal discretion of the type we advocate would not only enhance fiscal stability but, perhaps more importantly, help promote macroeconomic stability, better enabling the economy to remain at or near full employment without inflation. Fiscal measures to enhance economic stability are especially important in an era when the scope for monetary policy may be highly restricted, simply because with near-zero interest rates central banks have little room for maneuver. They may also enable a more stable public sector, especially important in an era of heightened political polarization and potential gridlock.

Although we agree on much about how fiscal policy should be conducted, we disagree along several dimensions. As one illustration of the ambiguities inherent in an uncertain world, for example, the three of us have different perspectives on whether any spending increases or tax reductions enacted today but that extend past the end of 2022 should be offset by other changes in the budget. One view is that because it is politically easier to cut taxes and increase spending than to do the opposite—and because of the uncertainty about future fiscal constraints new spending increases or tax cuts that extend beyond the end of 2022 should be offset with deficit reduction measures. Policymakers could then undo those offsets in the future if the economy remains weak. A second perspective is that any such offsets should be automatically triggered off if an economic indicator, like the unemployment rate, signals continued weakness in the future (so with similar effects but less discretion than the first perspective). A final perspective suggests that because a robust economy benefits lower-income groups the most, particularly those previously marginalized, one should wait for more compelling evidence that further fiscal stimulus is not needed before enacting the offsets.

SUMMARY OF SPECIFIC PROPOSALS: A SEMIAUTONOMOUS DISCRETION AGENDA

We recognize how often economic and budget projections are wrong, and rather than being surprised once again in the future when reality intrudes on a confidently made prediction, we believe that our fiscal policies should be thoughtfully designed in the first place.

One concern with the streamlining part of the semiautonomous discretion process—which involves in some dimensions more underlying automaticity in the budget, which can then be overridden with discretionary policy—is that it could imply continual changes, when individuals and companies prize stability and certainty. There is indeed some tension between continual adjustments and the complexity that might engender for people and firms, which requires balancing the two objectives. The broader and more important point, however, is that the appearance of stability by projecting more certainty than exists only induces larger and more abrupt changes when that structure ultimately breaks down. Individual and societal costs associated with such large and discrete changes are almost certainly greater than those associated with the smaller but more frequent changes that we advocate. False fiscal certainty should not provide much comfort to people or companies planning for the future.

The need right now is for substantial fiscal support to the economy. In the near term, there should therefore be no overall spending cuts or tax increases until full employment is restored; as a rough heuristic, we would not favor any spending cuts or tax increases before the end of 2022, though that judgment would need to be updated in the future as events evolve.⁴

Beyond support for the economy in the short run, our proposed five-point fiscal architecture includes:

- *Materially augmenting the role of automatic stabilizers.* Stimulus measures, such as state and local aid, should be automatically tied to the state of the economy. Stronger automatic stabilizers will lead to greater macroeconomic stability, which in turn will enhance budget stability.
- A new infrastructure program funded through mandatory expenditures that varies with the state of the economy and expands when the returns to infrastructure are higher. Infrastructure spending has become procyclical in the United States; the current pattern where infrastructure spending contracts during recessions should be reversed. A "permanent" infrastructure program focused on projects that could be quickly undertaken or that would otherwise face cuts or delays during recessions would not only build a brighter future for the country but also help to stabilize macroeconomic fluctuations. The program could be financed by a combination of income taxes and, in some cases, user fees.
- Given deep uncertainty over the future of interest rates and the current slope of the yield curve, extension of debt maturities to mitigate the consequences of a relatively sudden change in interest rates. With an asymmetry in likely movements of interest rates up or down, this approach would also lock in as much of the fiscal benefit of low rates as possible. We support creation of bond maturities beyond the 30-year bond to preserve the flexibility to take advantage of relatively flat yield curves.
- Indexation of long-term fiscal commitments to their underlying drivers. As one example, we support indexing the Social Security program to life expectancy. The goal should be to have programs respond automatically to the primary sources of uncertainty.⁵ For new permanent or long-term programs, we also favor designing them with automatic features geared to the uncertainty around them.
- More emphasis on "residual" fiscal discretion once the budget is adjusted to respond more automatically to the state of the economy and the drivers of long-term fiscal imbalances. Strengthening the automatic stabilizers while simultaneously embedding adjustment mechanisms within long-term fiscal programs will relieve much of the pressure on policymakers, so that

⁴ We focus here on the macroeconomics. Important changes would also be beneficial in the structure of both spending and taxes. These could have macroeconomic effects, and while the economy remains weak, it is important for policy to be attentive to them. As one example, proposals to make the tax system more progressive would bolster the automatic stabilizers and, if done on a revenue-neutral basis, also have a stimulative effect on the economy.

⁵ As discussed further below, programs should be carefully designed to reflect distributional effects. The fact that average life expectancies have increased does not mean that they have for all segments of society. The extent and form of indexation is discussed below.

the discretion they deploy is well-directed. Policymakers should then use discretion to adjust the budget as necessary above and beyond the enhanced "shock-absorbing" features we embrace.

These five points are admittedly more a sketch than a full fiscal plan. But our main point is to highlight the problems in being too certain about fiscal prognostications in a world that continuously surprises all of us, and this fivepoint architecture points the way toward a more resilient budget policy.

RECENT FISCAL POLICY DEVELOPMENTS

An emerging literature breaks with long-standing traditions in economic policy about the optimal role and objectives of fiscal policy. This "new view" of fiscal policy, drawing in part on remarkable developments on interest rates along with lessons from the 2008 global financial crisis, calls for a more central and assertive role for fiscal policymakers in managing business cycles, promoting public investment, and/or addressing long-term growth challenges (see, e.g., Blanchard 2019 and Furman and Summers 2020).⁶

Two recent phenomena have informed this ongoing fiscal debate. First, the empirical evidence on US fiscal policy actions taken in response to the global financial crisis, as well as the more recent COVID-19-related recession, has underscored the effectiveness of discretionary fiscal policy. In both examples, the inside lag was the "dog that didn't bark," though it is possible that inside lag concerns would be more of an issue in less dramatic downturns.⁷ In 2009, the American Recovery and Reinvestment Act (Recovery Act for short) was signed less than a month after President Barack Obama took office, and in 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was enacted within two weeks of the COVID-19 pandemic being declared a national emergency by the Secretary of Health and Human Services. Furthermore, a large body of high-quality evidence exploiting cross-sectional variation in stimulus disbursements from the Recovery Act—particularly in the form of state and local aid—has documented fiscal multipliers as high as 1.5 or more, at least in the context of monetary policy at its zero lower bound (Chodorow-Reich 2019).

By contrast, the effectiveness of monetary policy has been constrained both by the zero lower bound and lags of as long as 18 months before achieving full impact (Ramey 2016).⁸ Thus the greater focus on fiscal policy in macroeconomic stabilization also derives from a growing consensus around the limited efficacy of monetary policy in the current low interest rate environment and the realization

⁶ We note that this "new view" is mostly a return to an older and longer-standing view in Keynesian macroeconomics and is part of the standard debt sustainability analysis, which compares the rate of growth of the economy and the rate of interest at which the government can borrow.

⁷ Concerns about the inside lag reflected the argument that attempts to enact fiscal stimulus would invariably encounter prohibitively long delays due to political economy constraints (Blinder 2004). The classic example is that tax cuts proposed by President John F. Kennedy to stimulate the economy in 1962 were not enacted until 1964, well after the targeted recession had ended.

⁸ Monetary policy may be ineffective for other reasons. One of the main channels of monetary policy is increased lending (credit), but in the presence of high uncertainty and damaged balance sheets, banks are less willing to lend. They respond at most weakly to standard monetary instruments. See Stiglitz and Greenwald (2003).



Figure 1 Interest rates on selected Treasury securities

Source: CB0 (2020a).

that monetary policy, imposing as it does the burden of macroeconomic adjustment on interest-sensitive sectors, may be more distortionary than previously thought.

The other major feature of the fiscal policy debate is the continued and remarkable decline in interest rates, as shown in nominal terms in figure 1. We discuss the uncertainty surrounding the future path of rates below, but here we highlight the historical record. The decline in rates has been stunning, including after adjusting for inflation. Over the past decade in particular, inflation-adjusted interest rates have remained remarkably low. The 10-year yield on inflation-indexed Treasury notes at constant maturity in the United States fell below 1 percent in 2011 and fluctuated close to zero until the pandemic. The yield in the fourth quarter of 2020 averaged under -1.0 percent.

A crucial relationship for long-term fiscal dynamics is that between the interest rate and the growth rate. Given the declines in rates, long-term Treasury yields are presently below growth rates (i.e., r < g). Perhaps more surprisingly, data from Blanchard (2019) suggest this phenomenon is in line with historical norms.

The persistent declines in nominal and real Treasury yields at the short and long ends of the yield curve have significantly increased the projected fiscal space for federal policymakers in recent years (see, for example, Elmendorf and Sheiner 2016). The effect of low rates on the fiscal trajectory is a central thrust of Furman and Summers (2020).

While lower interest rates have been the largest driver of expanded fiscal space in recent years, declines in projected healthcare liabilities have also played a key role (Botev, Fournier, and Mourougane 2016). For example, growth in real Medicare spending per enrollee fell from roughly 5 percent per annum between 2005 to 2010 to -0.5 percent since 2010 (Orszag and Rekhi 2020). As a result of these myriad factors, the long-term fiscal gap fell by 30 percent between 2010 and 2019 (Auerbach, Gale, and Krupkin 2019), highlighting our earlier point on the high level of uncertainty associated with budgetary forecasts.

Average inverse information (percentage points), 1505-2014											
Forecaster	Output gr	owth	Inflation	Interest rates							
	Real	Nominal	(Consumer Price Index)	<i>3-month Treasury bills</i>	10-year Treasury notes						
Congressional Budget Office	1.2	1.2	0.6	1.7	1.1						
Office of Management and Budget	1.3	1.4	0.6	1.6	1.3						
Blue Chip Consensus	1.1	1.2	0.8	1.7	1.2						

Table 1 Average five-year forecast error (percentage points), 1983-2014

Source: CBO (2019a, table 1), using root mean square error. Real and nominal output growth forecast error calculated over the 1979-2014 and 1982-2014 periods, respectively. 10-year Treasury note forecast error calculated over the 1984-2014 period.

Uncertainty, the Budget, and Interest Rates

Most of the discussion about the "new view" of fiscal policy betrays a remarkably high degree of confidence that current conditions will persist in the future. The new fiscal anchors proposed reflect that confidence. Since we are writing in the midst of a mostly unanticipated global pandemic, and one in which household savings have nonetheless increased and credit card debt has declined, we do not feel the need to belabor the point that uncertainty is pervasive. It is, however, useful to remind ourselves that our ability to predict the future remains quite limited. Table 1 illustrates that for many of the crucial economic and budget variables, forecast errors have historically been relatively large. We have no reason to believe, whatever the tone of the current debate, that projections made today will be any better.

Combining these forecast errors, the Congressional Budget Office (CBO) estimated in August 2019 that there is approximately a two-thirds chance that the average annual growth rate of real GDP between 2019 and 2023 would be between 0.7 and 3.3 percent (see figure 2). Its central estimate was 2.0 percent (CBO 2019b). In our view, these are very wide confidence intervals.

Since interest rates play a crucial role in the new thinking about fiscal policy, it is worth exploring that topic in further detail. Conventional wisdom and financial markets both suggest the era of near-zero interest rates will last as far as the eye can see. CBO (2020b) projects the 10-year nominal yield will not return to its 2010 level until 2030. The markets are also signaling they do not expect the era of low rates to end any time soon: The 30-year Treasury inflation-adjusted yield, which should reflect a weighted average of the interest rates expected over three decades, has remained negative since the pandemic took hold except for a very brief period in June 2020.

We think the continuation of very low nominal and real rates for some time is a reasonable central scenario but have less conviction that the risks of an increase in rates are as remote as often described. CBO (2020c) assesses the factors that have driven down real rates over the past several decades and highlights several that could potentially reverse in the future. Fundamentally, given the myriad factors that affect interest rates, any prognostication should be viewed as embodying considerable uncertainty.

The impact of changes in interest rates on the fiscal outlook and on net debt service payments is illustrated in table 2, adapted from CBO (2020a). Under the



Figure 2 Real GDP projections by the Congressional Budget Office

Note: "Low" and "High" reflect the bands necessary to generate a two-thirds chance of being within the projected interval, based on past forecast errors. *Source:* CBO (2019b).

Table 2 Net interest as a share of GDP

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Congressional Budget Office (CBO) baseline (percent)	1.4	1.2	1.2	1.2	1.2	1.2	1.3	1.6	1.8	2.2
With 25 basis point increase in rates per year (percent)	1.5	1.4	1.5	1.7	1.8	2.1	2.4	2.9	3.4	3.9
Difference relative to baseline (percentage points)	O.1	0.2	0.3	0.5	0.7	0.9	1.1	1.3	1.5	1.8
Note: Interest rate increase relative to baseline (percentage points)	0.25	0.5	0.75	1.0	1.25	1.5	1.75	2.0	2.25	2.5

Source: CBO (2020a), assuming linear extrapolation from the 10 basis point per year scenario in table 2–3. The higher rates are assumed to hold across all maturities.

CBO baseline, nominal net interest outlays as a share of GDP are projected to be 1.4 percent of GDP in 2021 and 2.2 percent of GDP in 2030. (Note that these are nominal interest payments and therefore should not be evaluated relative to the Furman-Summers criterion discussed below, which is based on real interest payments.)

The rest of the table illustrates the impact of uncertainty—and assuming no change in inflation, the illustration in terms of differences applies to both nominal and real interest rates. A scenario in which rates increase across the maturity spectrum by 25 basis points in 2021, and then by an additional 25 basis points each year thereafter, is shown to increase net interest by 0.5 percent of GDP in 2024 and 1.8 percent of GDP in 2030. We do not show the impact of a decline in rates relative to the CBO baseline, but it is symmetrical (until any decline in rates is constrained by the zero lower bound).

The effects shown in table 2 are relatively large. To evaluate them, it is therefore important to have a view on the uncertainty around interest rates in the future. CBO ties the reduction in rates over the past two decades to:

- lower real output growth,
- higher saving rates,
- slowing labor force growth and an aging population,
- increase in the capital share of income,
- · changes in the premium on risky relative to safe assets, and
- evolution of the debt-to-GDP ratio.

Some of these factors (such as higher saving and lower real growth) have pushed down rates forcefully over the past few decades and have been only partially offset by other factors (such as an increase in debt as a share of the economy). Looking forward, CBO notes how uncertain many of these factors are—including trend output growth and saving preferences. As CBO (2020c, 15) underscores, "The agency's forecasts of interest rates over the medium and long terms are highly uncertain, in large part because forecasts of the underlying driving factors are uncertain."

One example illustrating the uncertainty is demographics. Goodhart and Pradhan (2020), for example, argue that demographics fundamentally caused the era of low rates. As people work, they save for retirement-and after retirement, saving declines and consumption rises. These cycles tend to mean that as more people enter the workforce, saving rates on net rise, which puts downward pressure on interest rates. As more people enter retirement, by contrast, consumption rises and the pressure on interest rates can reverse. Goodhart and Pradhan argue that the demographic effect of the past three decades is now reversing quickly, as more people are rapidly approaching or entering retirement in the advanced economies and in China. Indeed, working-age populations are now stagnant or falling across most of the world outside Africa and India. They conclude that this "great demographic reversal" will soon boost interest rates. Rachel and Smith (2017) similarly expect demographic changes to increase real rates by almost 50 basis points over the next decade, though Rachel and Summers (2019) argue that rising life expectancy will cause an increased demand for saving that may offset this rise. Others believe the impact of demographics on interest rates is remote and unlikely to be large. So this one factor illustrates the broader point: Even though everyone agrees that populations are aging, substantial uncertainty remains about the impact on interest rates.

The uncertainty over interest rates tends to be greater over the medium and long terms. Even in the near term, though, it is possible to construct scenarios under which interest rates rise. (Admittedly such a scenario is at odds with our call for additional fiscal stimulus in the near term and thus underscores the uncertainty surrounding the economic outlook in the aftermath of the pandemic.) The case for upward pressure on rates in the near term, even if one views it as an outlier scenario, is predicated on the large increase in household and corporate savings and balance sheets as both fiscal and monetary policies responded to COVID-19. Household savings in the United States, for example, have risen by more than \$1 trillion during 2020—a stunning development in the midst of a pandemic—while credit card debt declined and credit scores improved.⁹ At the same time, aggregate supply decreased globally (and in some countries, markedly). If the potential for spending were rapidly converted into actual spending, inflationary pressures could appear, likely inducing the Federal Reserve to raise interest rates, which may cause Treasury yields to rise. A related issue is whether "deglobalization" could shift production decisions over the next several years, putting upward pressure on prices and costs in the places to which the investment is shifted (presumably including the United States). We emphasize that these are not the central scenario envisaged either by the market or by the Fed, and they are not what we expect either—but they are not inconceivable.

In sum, whatever the time horizon, those who believe that rates will almost certainly not rise are too confident in their own views. The forces that have contributed to lower rates are universally difficult to predict, and, as noted above, even modest changes in rates can produce sizable movements in net interest as a share of the economy in the future.

False Attraction of Top-Down Fiscal Anchors

Before turning to our proposed fiscal architecture, we discuss why we have not included a top-down fiscal anchor in it and why the current era of low interest does not change that judgment. Policymakers have often relied on such top-down fiscal anchors, involving the ratio of debt to GDP or the deficit to GDP. For example, the Maastricht Treaty famously embodied rules that debt should not exceed 60 percent of GDP and that deficits should not exceed 3 percent of GDP. Furman and Summers (2020) propose a new fiscal anchor, limiting net inflation-adjusted interest payments to no more than 2 percent of GDP.

The history of defining such anchors has proven problematic, in part because of the arbitrary nature of the numerical anchor. For example, with regard to the Maastricht Treaty deficit target, Priewe (2020, 6) notes:

Journalists found that the 3 percent limit was "invented" by two low-rank young officials in the French Ministry of Finance in 1981. They were asked by Philipp Bilger, deputy of the budgetary department in the Ministry of Finance under Laurent Fabius, the then finance minister under the presidency of Francois Mitterand, to make a proposal for budget negotiations in order to limit the wishes of cabinet members. There was no economic rationale behind the number 3, as the inventors told the journalists. The French negotiators of the Maastricht Treaty used this number, specifically Jean-Claude Trichet, at the time Finance Minister; the Germans agreed.

Similarly, the attempt in Reinhart and Rogoff (2010) to define a specific threshold for debt sustainability—at 90 percent of GDP—was found to be empirically flawed (Herndon, Ash, and Pollin 2014).

⁹ It is important to emphasize, however, that these average numbers mask large variability, with many firms and households under stress, especially when one accounts for the "hidden" debt of missed rental and mortgage payments. Because spending (whether firm investment or household consumption) is a concave function of net worth, increased dispersion will lead to depressed spending.

Our point here is not to cast aspersions at previous attempts to define a fiscal anchor. It is instead to reconsider whether any such top-down fiscal rule is useful. There are two problems with defining an overall fiscal anchor, which in combination vitiate the usefulness of the approach.

First, there is no clear threshold beyond which the budget becomes unsustainable, because that threshold depends on investor perception, the state of financial markets, and other variables that are beyond the purview of most fiscal models and that vary over time and across different environments. The threshold also depends on political economy considerations, such as the degree of social willingness to accept higher taxes and/or lower spending to address fiscal instability. Those considerations are also likely to vary over time. Although we are not certain where any fiscal limit resides, we do not believe it makes sense to assume that one does not exist. In other words, although the economy may be temporarily dynamically inefficient (with r < g) for some periods of time, we would not assume that condition always holds.

The second problem is that, even if an unambiguous sustainability threshold could be defined, the uncertainties surrounding long-term growth rates and other variables affecting the budget vitiate the usefulness of forecasts for when the fiscal path would hit that threshold. For example, the two-thirds spread around CBO's five-year-ahead budget deficit forecast is 4.1 percent of GDP¹⁰; for the debt forecast, it is 12.2 percent of GDP (CBO 2019c).

For both reasons, we embrace the view of Wyplosz (2011) that a debt sustainability anchor is "mission impossible." The appropriate anchor is almost inevitably impossible to define with sufficient precision. Arbitrary ones are therefore chosen, and even with a well-defined anchor, when a country would reach it is subject to massive forecast uncertainty.¹¹

Furman and Summers (2020) propose an interesting new fiscal anchor: that real interest payments not be projected to exceed "around 2 percent of GDP" over the next decade, nor be rising sharply, with the debt service concept adjusting for inflation and covering net interest less remittances from the Federal Reserve and interest on federal financial assets. The Furman and Summers criterion is arguably an improvement but also suffers from both of the flaws above: The 2 percent threshold is chosen relatively arbitrarily (and whether something is "rising sharply" leaves unclear what sharply means) and whether and when we would hit that threshold depends on highly uncertain 10year projections.

As discussed above, interest rate forecasts are deeply uncertain. Table 2 shows that an increase of 100 basis points (or 1 percentage point) in interest rates on Treasuries between now and 2024, which is approximately the root mean square error of CBO rate forecasts over five years, would raise net interest outlays in 2024 by 0.5 percent of GDP. Continued increases in rates, such that they were 200 basis points higher than the baseline by 2029, would increase net interest by 1.5 percent of GDP in that year. We believe such an increase in rates is

¹⁰ In other words, based on CBO's historical forecast errors there is a one-third chance that the five-year-ahead budget deficit deviates from the forecast by at least 2.0 percent of GDP (about half of the 4.1 percent of GDP spread).

¹¹ Economies with imperfect market access to debt finance may nonetheless be particularly sensitive to market views about such fiscal anchors.

within any reasonable confidence interval, and the Furman-Summers rule suffers from the same basic issues around being simultaneously arbitrary and difficult to evaluate given uncertain forecasts as any other top-down fiscal anchor.

These problems with aggregate fiscal anchors are similar to other issues with commitment in economic policy: Commitment has benefits in the absence of deep uncertainty. Where such deep uncertainty exists, however, it may be counterproductive because policymakers become committed to a target that is no longer appropriate when circumstances change, and therefore eventually such commitment will be broken. Instead, policy should reflect greater recognition of deep uncertainty, which as Kreps (1979, 1992) argues, in turn requires a certain degree of discretion and flexibility.

TOWARD A MORE RESILIENT FISCAL PARADIGM WITH SEMIAUTONOMOUS DISCRETION

Given our skepticism about top-down fiscal rules and the magnitude of the uncertainties over key variables, including future interest and growth rates, what exactly should policymakers do? "Semiautonomous discretion" sounds fine, but what does it specifically mean?

The first step in the fiscal paradigm we favor is supporting the US economy's rapid recovery from the COVID-19 crisis and expanding automatic stabilizers to protect against both postcrisis economic uncertainty and future shocks. Putting American families and firms back on sure footing as swiftly as possible should be the top priority of fiscal policy over the coming months.¹² The imperative of action is buttressed by what is now a robust literature on economic scarring effects, or hysteresis, for workers and businesses from prolonged contractions (Ball 2009, Bluedorn and Leigh 2019).

To this end, the latest fiscal stimulus legislation enacted by Congress, after unnecessary drama and delay, will be critical for protecting families' livelihoods. But even more stimulus may be necessary in the short run to restore precrisis economic activity and minimize hardships for American households. Discretionary fiscal stimulus should, at a minimum, continue until the economy has returned to full employment. The risk around not doing so is highly asymmetric: Even a marginally slower path to full employment would cause significant harm compared with the inflationary and/or interest rate implications of ostensibly larger-than-necessary stimulus.

Beyond the immediate need for fiscal support, the five key components of our proposed semiautonomous discretionary fiscal architecture together would expand the resilience of the budget to its long-term drivers and strengthen its role in stabilizing the economy, while preserving as much discretion as policymakers need to adjust as necessary.

¹² The importance of a commitment to sustain unemployment insurance and other assistance as long as unemployment rates remain elevated is highlighted by the large increases in household savings noted earlier. These increases in precautionary balances are partially the predictable response to a high level of uncertainty. See Stiglitz (2020).

Part 1: Strengthen automatic stabilizers

Complementary to the imperative for near-term and ongoing fiscal stimulus is the need to strengthen and expand countercyclical automatic stabilizers, as noted by other observers (e.g., Blinder 2016). Automatic stabilizers have already played a key role in smoothing consumption and investment through prior recessions.¹³ According to the Congressional Budget Office (CBO 2020d), at the trough of the previous recession in 2010, automatic stabilizers added support to the economy of about 2 percent of potential GDP, a fiscal stimulus commensurate in size with the spendout of the Recovery Act and subsequent fiscal measures (e.g., payroll tax holidays), as noted by the Council of Economic Advisers (CEA 2014). Crucially, stabilizers continued to provide much-needed fiscal expansion for the sluggish recovery even as spending from the Recovery Act phased out prematurely. Automatic stabilizers may prove to be just as critical now given economic uncertainty about the recovery path after the COVID-19 crisis (e.g., around vaccine uptake) and in light of increasing political polarization in Washington and its implications for legislative gridlock.

Stabilizers could be enhanced in the form of expanded demand-side transfers, as in proposals regarding direct cash rebates (Sahm 2019) and unemployment insurance (Chodorow-Reich and Coglianese 2019) and those that would increase in-kind transfers like the Supplemental Nutrition Assistance Program, or SNAP (Hoynes and Schanzenbach 2019). The "Sahm rule" can be used as a trigger for such programs.¹⁴ The benefits of a commitment to extended unemployment insurance as long as the economy remains weak (part of the Recovery Act but not made a permanent feature of the nation's unemployment system) go beyond the direct fiscal stimulus such assistance provides. Consumers knowing that they will receive sustained support so long as the economy is weak may sustain consumption—avoiding excessive precautionary saving. And businesses knowing that consumer spending will be stabilized may strengthen investment, further stabilizing the economy.

Also crucial is replacing some of the built-in destabilizers in the US economy with built-in stabilizers. State and local spending, about one-third of all government spending, is largely constrained to satisfy balanced budget requirements, which are counterproductive in the midst of an economic downturn. The marked decrease in revenues in an economic downturn at the state and local levels results in a concomitant reduction in expenditures, which acts as a balanced budget contraction. In the Great Depression, the contractionary force was sufficiently strong to largely counteract the effect of the New Deal (Brown 1956). It was also harmful during the 2008 global financial crisis despite some degree of federal assistance. The situation is the same with the COVID-19 crisis. It is possible to link such state and local fiscal aid to prespecified triggers, as proposed by GAO (2011), among others—notwithstanding the current political economy challenges in doing so.

¹³ Certain forms of automatic stabilizers (e.g., unemployment insurance) are thought to carry large fiscal multipliers (Whalen and Reichling 2015).

¹⁴ The Sahm rule is triggered when the national unemployment rate (U3), measured as its average over three months, rises by 0.50 percentage point or more relative to its low during the previous year.

Part 2: Create a new infrastructure auto-stabilizer

The benefits of additional infrastructure spending have been widely explored.¹⁵ Considerable new investments are warranted in the US energy infrastructure (including hydrogen), broadband (including 5G in rural areas), transportation, water, and many other areas. It will be impossible to reduce carbon emissions sufficiently to address climate risks without significant new infrastructure spending.

While many observers have underscored the benefits of such investment, few have recognized that infrastructure spending has become procyclical. Haughwout (2019, 132) notes that, "The data also indicate that infrastructure investment varies positively with overall economic activity; in other words, investment disproportionately occurs when macroeconomic conditions are strong, and diminishes as the economy weakens.... Periods of declining employment growth go hand in hand with declining infrastructure investment growth, with investment tending to lag employment a bit, especially in more-recent cycles." This pattern should be reversed.

To invest in the necessary infrastructure while also making such spending an automatic stabilizer rather than the opposite, we join Haughwout (2019) in calling for a new infrastructure funding program that would expand during recessions and focus on projects that could be quickly completed (or meaningfully accelerated) during periods of economic weakness. This new infrastructure program should be in the mandatory, rather than discretionary, component of the budget.

One approach would be to create a new federal grant program that would match state and local government infrastructure spending. The federal matching rate would increase when the economy weakened, providing more funding when it is most useful from a macroeconomic perspective, smoothing public investment through the business cycle. The match rate would also, as under Medicaid, vary inversely with per capita income in the state and could be tied to local economic conditions (e.g., by indexing to revenue shortfalls linked to a recession). These design features would help to mitigate some of the concerns expressed about a proposed federal matching program under the Trump administration (Leibenluft 2018), though others of those criticisms would apply to any matching program. Projects eligible for the match should be existing initiatives that face potential delays or cuts when the economy weakens (i.e., due to state balanced budget constraints) or those that can be started and completed quickly.¹⁶

To finance the new program, we support deficit financing through the end of 2022 and then have different views, as discussed above. Possible sources of potential financing after 2022 could be both income taxes and user fees. The income tax provides a progressive way of funding the new program. In addition

¹⁵ See Heintz (2010), Munnell (1992), and Bom and Ligthart (2014) as examples.

¹⁶ It is also possible to imagine expanding this federal mandatory program when the return to infrastructure increases, regardless of the state of the economy. The practical details may be challenging, however. As one example, the federal government could create a technical panel charged with estimating the marginal return on public infrastructure each year. When that estimate exceeds a certain threshold, the federal match rate would rise, subject to an override if Congress votes down the increases.

to the income tax, user fees could finance many types of infrastructure under any new program (Basso and Duvall 2013). A user fee structure can also help to ensure that existing infrastructure is efficiently used. For example, a roadpricing scheme can raise revenue while also reducing congestion. Landing fees at airports and auctioning air routes rather than awarding them administratively are similar in their revenue and congestion effects. A traditional and wellfounded concern with user fees, however, is their distributional consequences (OECD 2018). Modern technology may help to attenuate this concern. A toll on automobiles, for example, can vary with the type of car (with more luxurious cars charged more).

As with our other proposals, this infrastructure program is more of an outline than a full detailed proposal and would require further scrutiny.

Part 3: Extend Treasury maturities

As noted above, the interest rate path in the future is less certain than many commentators and financial markets suggest. The constraining effect of the zero lower bound likely means that this interest rate risk is asymmetric, with greater risk around rate increases than rate decreases. Modest swings in interest rates can have considerable budgetary risks, as shown in table 2 above. These risks are asymmetric: If sufficiently large, spikes in federal debt yields can engender abrupt and costly adjustments to fiscal policy (whether in the form of tax increases or spending cuts), especially in a political context in which some policymakers focus narrowly on traditional anchors.

There are thus two arguments for partially insuring the budget against interest rate volatility now. One is that taxpayers are risk averse and that locking in debt service obligations is therefore valuable even without taking a view on whether interest rates are more likely to rise or fall in the future. The second is that we see the risks themselves as asymmetrical, with a rise in rates more likely than further declines.

The most straightforward way of providing such insurance against rate changes would be to extend Treasury maturities, both by increasing the issuance of longer-dated instruments (i.e., 10-, 20-, and 30-year) and by creating new instruments (e.g., 50- or 100-year bonds or even perpetual bonds). Figure 3 shows that over the past decade, the average maturity of Treasuries has risen from 56 months to 70 months; under the Trump administration, the Treasury also issued a 20-year bond for the first time in over three decades.

These maturities can be substantially lengthened. That would be consistent with issuance activity of several advanced economies issuing 50- and 100-year debt in recent years, including the United Kingdom and Canada. Given that 60 percent of US Treasury debt today matures within 36 months, maturity could be readily extended through natural turnover of the debt stock even without the need to buy back outstanding instruments.

An extension of maturities would help to mitigate the risk of an interest rate increase on the existing stock of debt (which will need to be refinanced in part or whole in the future and therefore can be affected by changes in rates).¹⁷

¹⁷ In addition, by mitigating the potential for a self-fulfilling public funding crisis, maturity extension could reduce overall market risk.



Figure 3 Average maturity of outstanding marketable US public debt

Source: US Treasury.

Such maturity extension would not eliminate all interest rate risk, unless the government overfunds today in anticipation of future deficits, since newly issued debt would bear higher interest rates if rates were to rise in the future. But any such rate shock would be mitigated in terms of the overall interest bill of the government.

Like any insurance policy, maturity extension is not a "free lunch" and would come with certain costs and drawbacks. First, the Treasury would be locking in interest rates that would exceed prevailing levels were rates to decline further in the future. Second, longer-dated Treasuries bear a risk premium for the duration risk borne by investors: For instance, 10-year Treasury notes trade at a 90-basis-point premium to short-term Treasury bills.¹⁸ This term premium has waxed and waned with changes to the yield curve, but the historical record in the United States and overseas suggests that in most periods the budget—and, by extension, taxpayers—would bear the price of rate insurance through higher debt service costs, particularly given the long-term decline in rates (Greenwood et al. 2015, Belton et al. 2018, and Ellison and Scott 2020). Uncertain market demand for longer-maturity instruments could mean these instruments will be required to bear more significant premia for the market to clear as issuance rises.¹⁹ More broadly, the shape of the yield curve is an important input into the desirability of lengthening Treasury maturities.

Given the historically unprecedented situation we are in now, it would be a mistake to rely on data from the past for forecasting what that term premium would look like in the future—and to make inferences about the magnitude, or even sign, of the true "insurance" premium reflected in the term structure.

¹⁸ This spread is in principle inclusive of the term premium and any expected appreciation in short-term, risk-free rates. The cost of the insurance relates only to the term premium. In principle, the term premium can be negative, and at times that has been the case (Stiglitz 1970).

¹⁹ The structure of the European market (e.g., greater prevalence of pension funds) may be more favorable for long-dated debt relative to the US market.

Another set of considerations is macroprudential in nature. The Treasury yield curve serves as the benchmark for a wide range of capital markets, and preserving liquidity across the maturity distribution may be critical for private markets to price duration risk effectively. Lengthening maturities would partly offset ongoing, crisis-related policy of the Federal Open Market Committee (FOMC) to swap long-dated Treasuries for bank reserves (i.e., quantitative easing), though we view this effect as potentially synergistic both by providing a vector for mitigating the costs of maturity extension and expanding room to reduce long-term rates during contractions.²⁰ In any case, for these and other reasons, the Treasury Borrowing Advisory Committee has historically counseled against the use of longer-term instruments (TBAC 2017).

Part 4: Index key fiscal programs to sources of uncertainty

Rather than adopting an overall fiscal anchor, we suggest making major components of the nation's long-term budget trajectory adapt to their drivers more automatically. The budget trajectory depends crucially on productivity, demography, and inequality, and those forces in turn are intermediated in the budget in three main ways in most countries, including the United States: pensions, health care, and revenues. We discuss each in turn.

Our goal here is not to provide definitive methods of better insulating the key long-term budgetary drivers from the sources of uncertainty affecting them. Instead, it is to provide a sketch of the idea, with the hope that with additional work, this approach will prove more fruitful than previous approaches to fiscal policy. Consistent with our preference to make the budget adjust automatically to external events, we favor designing any new long-term or permanent programs with this structure in mind.²¹ Policymakers, taxpayers, and beneficiaries of government programs can reap large benefits from reducing budgetary volatility, even if we do not fully insulate the budget from these drivers.

In general, most of these adjustments should tend toward reducing the long-term fiscal imbalance, though some could operate in the opposite direction from time to time.²² For example, despite recent stagnation and even declines in average life expectancy, we expect life expectancy to increase on average in the future (while also expecting the concerning increase in the life expectancy gap between higher earners and lower earners to be perpetuated and perhaps even

²⁰ Given the limited efficacy of quantitative easing in expanding aggregate demand, the macroeconomic consequences of this may be *de minimis*.

²¹ When programs are designed, it is helpful to clarify the objectives and assess the range of budgetary impacts (including taking into account indexing provisions). Thus, a social insurance program that is designed to mitigate disparities between consumption levels of workers and those of retirees (recognizing the sense in which poverty is a relative concept) might have a different indexing formula than one that was solely focused on actuarially fair annuities for any given generation.

²² It is also possible to make the adjustments explicitly asymmetrical, so that they would not deepen the long-term fiscal imbalance (or reduce the progressivity of the tax system if pretax income inequality declined). We do not favor such asymmetries in general.

grow further). Indexing a program to life expectancy would then reduce its longterm fiscal gap, relative to no such indexation, in most years.²³ If life expectancy declines in some years, the effect could be the opposite.

For example, in Social Security, we view the primary goal of its annuity feature as providing individual-level protection against mortality risk: By having benefits last as long as one is alive and indexed to inflation, the program provides protection against outliving one's assets. The program can provide such insurance by spreading risks across individuals. Providing protection against population-wide increases in life expectancy, however, is a different question. We believe Social Security should provide individual-level life expectancy insurance but should be adjusted to reflect trends in overall life expectancy (including across different lifetime income levels, if mortality trends differ markedly by lifetime income).

We view the general tendency for the adjustments to reduce long-term fiscal pressure as a feature rather than a bug. As noted above, we are skeptical that we can define a top-down fiscal anchor that is sensible and can be practically implemented in the face of substantial uncertainty over budget forecasts. But we believe it is prudent to assume there is a fiscal limit somewhere, even if we do not know where it is (and even if there were not such a limit, if large parts of the population believe there is, it is prudent to be mindful of such in the budget). In a system of semiautonomous discretion, it is therefore helpful to have underlying adjustments that make it easier for future policymakers to focus on and implement the key decisions they face. A tendency toward fiscal balance is therefore broadly helpful, even if we do not know how helpful.

We also recognize that it is generally preferable that any adjustments to budget items be done smoothly. Given that policymakers in the future will have an easier time undoing prebaked fiscal consolidation than in enacting such consolidation, it makes sense to have indexed adjustments that result in sustainable programs.²⁴ The alternative could raise the risk of forcing policymakers to face extremely unattractive choices in the future.

Social Security

Social Security's finances are fundamentally driven by the number of beneficiaries, the real benefit level, and incoming revenue (mostly from the payroll tax). One important underlying factor is rising life expectancy, though the decreases in life expectancy in recent years provide another example of hard-to-forecast changes in the underlying drivers. Increases in life expectancy boost lifetime Social Security benefits because Social Security is an annuity, with

²³ And possibly to disparities in life expectancies. We can expect additional costs associated with protecting those with lower life expectancy from the effects of indexation based on life expectancy.

²⁴ This does not rule out programs that have marked increases in budgetary impacts over the short term. Moreover, the uncertainties already discussed imply caution in taking extreme actions today for potential problems say a quarter century later. Neither the market nor economic forecasters as a whole anticipated the Great Recession even a couple of years before it occurred.

benefits that persist as long as the recipient is alive. That also, however, means that rising life expectancy, holding everything else constant, worsens Social Security's long-term financial position.

Diamond and Orszag (2006) propose an automatic adjustment to Social Security for changes in life expectancy. They would automatically adjust Social Security each year based on actuarial projections of life expectancy and note that this "approach responds to the great uncertainty about how rapidly life expectancy will increase in the coming decades" (Diamond and Orszag 2006, 82). They also argue that Social Security should adjust to the evolution of the gradient in life expectancy by socioeconomic status, which has only grown more severe in the time since their work was published. The increase in life expectancy gaps by lifetime income, for example, makes Social Security less progressive over time as higher earners increasingly receive their benefits over longer periods than others. The program could offset all or part of this decreased lifetime progressivity, based on life expectancy projections by the lifetime income measure used to compute benefits.

We do not all agree on the specific approach adopted by Diamond and Orszag to adjust Social Security, which involves a mix of benefit and tax changes. We note that it is possible to do all of the indexation to life expectancy and its gradient on the revenue side, by automatically increasing the payroll tax rate in response to an increase in life expectancy and by automatically raising the payroll tax cap (\$137,700 in 2020) in response to an increase in the life expectancy gradient by lifetime income.²⁵

Note that life expectancy tends to evolve gradually and the adjustments can and should be spread over time (since the goal is only to balance the present value impact of changes in mortality).²⁶ The result is that any new adjustments would be very modest in any given year.

Medicare and Medicaid

The appropriate way to better insulate Medicare and Medicaid from uncertainty around their key drivers (including demographics, technology, and health status, among others) is even more complex than for Social Security. One major change whose implications have received little attention is the rise in capitated payments within these programs. For example, in Medicare, more than a third of beneficiaries are covered by Medicare Advantage, a system of private insurance in which the insurers accept a fixed payment from the government and in turn pay for the beneficiaries' care. This component of the program is rising rapidly and could cover half or more of beneficiaries by the end of the decade (see figure 4).²⁷

²⁵ Life expectancy may itself be affected by Social Security, especially for individuals with limited income. Differentials in life expectancy across income groups are an important dimension of societal inequalities. This would argue strongly against benefit adjustments in the range of lower- and middle-income Americans.

²⁶ The adjustments could be further smoothed by basing them on the average of changes in life expectancy over, say, the past decade.

²⁷ Some consulting firms project even more rapid growth.



Figure 4 Actual and estimated enrollment in Medicare Advantage

Source: KFF (Kaiser Family Foundation), Medicaid Managed Care Market Tracker, www.kff.org/data-collection/medicaid-managed-care-market-tracker (accessed on January 6, 2021).

Even within the traditional Medicare program, expansions in Accountable Care Organizations and other alternative payment models mean that healthcare providers also intermediate more of the risk, at least on a year-by-year basis, in exchange for fixed payments from the government. Within Medicaid, more than two-thirds of beneficiaries are similarly covered by managed care organizations, with a fixed payment from the government going to the insurance companies and those companies then paying providers for care on behalf of beneficiaries, though the degree of risk sharing varies across contracts.²⁸

The rise in capitation requires careful attention so it does not encourage insurance companies and other intermediaries to shirk from providing necessary care. Most existing structures have schemes for rewarding quality, which are intended to offset any effect of capitation itself on reducing necessary care. But as these systems spread, more attention will need to be paid to this key challenge for the whole approach.

Another important question, and directly relevant to our immediate discussion, is how the government's capitated payments to insurance companies (and providers, through alternative payment models) should evolve over time. One possibility is to use competitive bidding to set the payments to insurance companies each year (Lieberman et al. 2018). If the bidding structure were welldesigned, it would adjust automatically to the cost of care each year. But in the absence of sufficient competition, this structure would become problematic. Part of the motivation for a public option reflects such concerns over inadequate competition in insurance markets.

²⁸ KFF (Kaiser Family Foundation), Medicaid Managed Care Market Tracker, www.kff.org/datacollection/medicaid-managed-care-market-tracker/ (accessed on January 6, 2021).

Especially if competition challenges loom large, another option is for the government to set the overall benchmark payment based on the health status of the population. The increasing digitization of health care opens up new opportunities to index such payments to changes in health status.²⁹ How advances in technology should be incorporated into such a system is a complex question.

To insulate Medicare from the fiscal impact of these changes, revenue dedicated to the program, mostly through the payroll tax, could also be automatically adjusted to changes in health risk scores and in life expectancy. As with the adjustments to Social Security, any such changes could be implemented gradually—and changes in the factors tend to be modest from one year to the next in any case. The result once again should be a very gradual evolution in revenue from year to year. For Medicaid, the lack of a dedicated payroll tax means that any adjustment will need to be implemented through the income tax, which, for example, could include an automatic surcharge to fund changes in Medicaid needs.

Many other possibilities exist. The broader point is that as insurance intermediaries play a larger role in these key government programs, policymakers should consider new methods of paying insurance companies that reflect the key drivers of cost and that also provide adequate incentives for promoting quality and not reducing necessary care.

Income Tax

Beyond insulating Social Security, Medicare, and Medicaid from more of the factors that affect their long-term solvency, policymakers could also create a structure in which the income tax system automatically responds to the need for revenue.³⁰

²⁹ For example, Orszag and Ferris (2016) propose a new health risk score, which would follow individuals over time and would be based on a combination of insurance claims and electronic health record information. With the advent of such risk scores, or even relying on the existing but less accurate risk adjustment factors that measure the health of beneficiaries, one possibility is to index overall government payments to two objectives: to offset the cost of overall health developments in the population as a whole (such as a pandemic) while also providing incentives for the intermediary insurance plans increasingly at the heart of both Medicare and Medicaid to improve the health of the beneficiaries they cover. Hypothetically Medicare payments could increase in aggregate as the health risk scores of those close to Medicare eligibility (e.g., those, say, 55-64 years old under current rules) decline, to offset the role of overall adverse health developments. The payments to a specific plan would be reduced, however, as the risk scores of the covered beneficiaries under that plan decline relative to other Medicare beneficiaries (or compared with the nearly eligible beneficiaries). Similarly, Medicaid payments to insurance plans could increase as the health risk scores of those just above the income eligibility threshold for Medicaid diminish but would be reduced for a decline in the health risk scores of covered beneficiaries under each plan.

³⁰ With regard to the tax code's other principal objective, Shiller (2003) and Burman, Rohaly, and Shiller (2006) propose indexing tax parameters to changes in income inequality. Under this structure, as pretax income inequality rises, the tax code automatically becomes more progressive—and vice versa. More specifically, they would automatically adjust the tax code to changes in the Lorenz Curve, with the adjustments potentially mitigated by spreading the changes over time and possibly through a partial adjustment (so that the tax code offsets only a certain share of the movement in the Lorenz Curve). These proposals are in the spirit of our overall point, that the budget should adjust more automatically to uncertain future changes.

Allowing the income tax to fluctuate in this manner would represent a significant shift in how the tax system has been administered and would require careful study of potential unintended consequences.

Part 5: Increase emphasis on residual discretionary fiscal policy

Even with a more resilient budget that includes the adjustment features discussed above, policymakers will almost inevitably need to act—either to provide additional stimulus in the face of short-term economic difficulties or to augment or modify the long-term fiscal consolidation and responses to changing circumstances that is embedded in the automatic features.

This is the concept of semiautonomous discretion that we embrace. Policymakers should be able to focus more on the core decisions they face, with a streamlined dashboard because the budget responds in a timely and facile way to economic distress (through stronger automatic stabilizers) and also to long-term fiscal pressures (through indexing programs and the tax code to many of the drivers of those pressures). Policymakers can then gradually take any necessary additional actions on a discretionary basis. In sum, we favor leaving the residual policy actions to the discretion and judgment of policymaking officials rather than setting targets ahead of time.

As one example of this structure, we noted earlier that the three of us currently have different views about how policymakers should act in late 2022 and thereafter. We have different views not only about whether any policies enacted now that extend beyond the end of 2022 should be offset but also around whether we should enact additional measures to reduce the deficit at that point, to counterbalance the rise in debt that has occurred over the past two decades. But such a decision does not need to be taken today, and in reevaluating the pros and cons of such a course in the future, policymakers should not be beholden to a top-down anchor.

In guiding discretionary fiscal adjustments, it may be useful to keep in mind a number of principles. First, given deep uncertainty, we should be modest in the confidence with which we project what the future will bring. And that entails building in abundant flexibility and precaution. Typically, large changes are more disruptive than a series of smaller changes, both politically and to market participants. Our proposed framework facilitates smoother adjustments.³¹ Second, well-recognized asymmetries in the difficulty of budget tightening versus loosening should be taken into account in the design of discretionary programs. Third, resources are scarce, particularly once one reaches full employment (though there may be disagreements about where that boundary lies and when it is reached).

³¹ We have not focused on the politics of adjustment in this Policy Brief, but we note that because large adjustments may be politically hard to achieve, there may be a tendency for "too little too late," i.e., not only do the adjustments occur later than they should but also they are made smaller in magnitude, necessitating further discrete and costly adjustments down the line.

CONCLUSION

Fiscal policy should support broader US objectives, including more rapid growth, more widespread economic well-being and less inequality, and helping to address climate change. The question is how to do so most effectively.

Traditionally, policymakers have often asserted greater confidence both in future states of nature and in our economic models than the evidence warranted, in the belief (perhaps correct) that projecting such confidence would itself instill confidence. Simple top-down rules served as coordinating mechanisms in this structure—until it becomes evident, as now, that they are misplaced.

We need to show more humility and prepare better for eventualities. The uncertainties policymakers face are myriad and deep—not just about the course of interest rates but also about possible global macroeconomic shocks, rapid changes in the geopolitical environment, and climate change. We cannot even ascertain the probabilities of such events.

Our proposed semiautonomous discretion paradigm is the best way to address this deep uncertainty. We recognize that some components of our five-point plan are more developed than others. Our goal here is not to put forward a fully detailed fiscal architecture but instead to provide the outlines of a framework that would be better adapted to deep uncertainty than our current budgetary structures and would thereby free up discretionary fiscal policy to focus more on adjusting to the unanticipated.

Finally, we recognize that we may be wrong, and perhaps the world will turn out to be more certain than the thrust of this Policy Brief suggests. Experience, however, indicates this is highly unlikely—and our framework itself provides a way to accommodate to such a world should it occur.

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