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Monetary Aspects of, and Implications for, Federalism

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While it might not seem important to focus on fiscal and monetary issues in a volume on federalism, nothing could be further from the truth. The macroeconomic environment—growth, stability, inflation—has large effects on state and local spending, taxes, and interest costs on debt through several channels. Fiscal and monetary policy have been stretched far beyond their usual norms and require considerable adjustment, which is likely to have sizable effects on state and local governments and their relationship with the federal government.¹

The discussion here begins with the federal budget, and this leads naturally to an overview of monetary policy issues. I then examine the important implications of national fiscal and monetary policy for federalism.

The State of the Federal Budget

Consider two tables drawn directly from the Budget of the US Government for Fiscal Year 2024 as submitted in March 2023. Table 12.1 shows the projected growth rate of real GDP from 2021 through 2031 in both year over year and fourth quarter to fourth quarter percentages. Note the rebound from the pandemic in 2021. However, there is very little growth after that for the next ten years by either measure. The average is only about 2 percent per year.

Table 12.2 shows the total federal budget for the same period, both in billions of dollars and as a percent of GDP. Outlays and receipts continue to grow, as does the deficit in billions of dollars. As a percent of GDP, receipts, outlays, and the deficit remain high. Receipts and outlays show virtually no decline. Thus, the fiscal state of the union is not good. Efforts need to focus on reducing budget totals with the ultimate aim of a balanced budget.

Basic economic theory and empirical models imply that high federal government debt has a cost: it reduces real GDP and real income per household

Table 12.1 Growth rate of real gross domestic product (real GDP)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
% change, year/year	5.9	1.8	0.6	1.5	2.3	2.1	2.0	2.0	2.1	2.2	2.2
% change, Q4/Q4	5.7	0.2	0.4	2.1	2.4	2.0	2.0	2.0	2.1	2.2	2.2

Source: Data from Office of Management and Budget (2023), Table S-9, Economic Assumptions, 167.

Table 12.2 Budget totals in billions of dollars and percent of GDP

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Receipts	4,897	4,802	5,036	5,419	5,773	6,080	6,400	6,669	6,953	7,264
Outlays	6,273	6,372	6,883	7,091	7,294	7,589	8,003	8,205	8,639	9,040
Deficit	1,376	1,569	1,846	1,671	1,521	1,509	1,604	1,536	1,686	1,776
<i>Budget totals as a percent of GDP:</i>										
Receipts	19.6%	18.2%	18.5%	19.1%	19.5%	19.7%	19.9%	19.9%	19.9%	19.9%
Outlays	25.1%	24.2%	25.3%	24.9%	24.6%	24.6%	24.9%	24.5%	24.7%	24.8%
Deficit	5.5%	6.0%	6.8%	5.9%	5.1%	4.9%	5.0%	4.6%	4.8%	4.9%

Source: Data from Office of Management and Budget (2023), Table S-1, Budget Totals, 135.

compared to what these would be with lower debt levels. A reexamination of the issues yields the same results. Hence, there is a need for a fiscal consolidation strategy in which government spending grows more slowly than GDP, and government spending is thus reduced as a percentage of GDP.

Formal model simulations with such a fiscal consolidation show that the impact on real GDP would be positive in both the short run and the long run. Real GDP increases throughout the model simulation, with the benefits rising over time. Even in the short run, the consolidation of government finances is found to boost economic activity in the private sector sufficiently to overcome the reduction in government spending. Consumption and output increase at the start, with further increases later on. Investment rises by only a little in the short run, but by more in the longer run.

The economic rationale for these positive results is straightforward: With a gradually phased in and credible budget plan, households can take into account future reductions in government spending and higher expected future incomes. Businesses will also be able to adjust.

Given a reduction in tax rates in later years, they would also face more favorable conditions for production, investment, and work effort. To reap these positive benefits, it is essential that the tax and budget plan be credible.

There is another possible policy response, one that would work better in the future.² The response is based on certain established economic principles: that fiscal policy should be *permanent, pervasive, and predictable*, and thereby effect incentives throughout the economy. There are many good fiscal packages that are consistent with these three principles. One would consist of: (1) Committing to keep income tax rates where they are, effectively making current income tax rates permanent; (2) Making the tax credits permanent rather than temporary; (3) Enacting responsible government spending plans that meet reasonable long-term objectives and that put the US economy on a credible path to budget balance; and (4) Recognizing that the “automatic stabilizers” will help stabilize the economy, and therefore make them part of the overall fiscal package, even if they do not require legislation.

This is not the kind of economic policy that has recently been proposed. Rather than being predictable, the policy response has created uncertainty about the debt, growing federal spending, future tax rate increases, and new regulations. Rather than being permanent, it is temporary, and thereby has not created a lasting economic approach. And rather than being pervasive, it targets certain sectors or groups. It is not surprising, therefore, that the policy has resulted in lower growth forecasts.

The good news is that we can get back to a strong recovery by following an economic policy based on these clear economic principles. As argued in a *Wall Street Journal* article “A Better Strategy for Faster Growth” (Shultz et al. 2013), recent experience makes the case for doing so stronger than ever.

Guidelines for Fiscal Policy: Permanent, Pervasive, and Predictable

The mantra often heard during debates about stimulus proposals is that it should be temporary, targeted, and timely (see Elmendorf and Furman 2008, for example). Going forward, we need a renewed set of principles and a new mantra. Based on the arguments presented above, as well as experience and basic economic theory, I recommend this alternative mantra for fiscal policy: permanent, pervasive, and predictable.

Permanent The most obvious lesson learned from the recent stimulus program is that one should have strong misgivings about a temporary stimulus program. Such a program is not likely to have much impact, and any impact it has will be short lived. Temporary is not a principle we want to follow if we want to get the economy moving again. Rather we should be looking for more lasting or permanent fiscal changes. More lasting or permanent tax changes will be more effective in helping to turn the economy around in a lasting way. We need to worry about the next few years, not just the next few months.

Pervasive One of the arguments in favor of targeting the stimulus package is that by focusing on people who were “liquidity constrained” the program would be more cost effective. But such targeting does not prevent the stimulus from being ineffective. Moreover, targeting implies letting tax rates increase. But increasing tax rates on businesses or on investments would increase unemployment and further weaken the economy. Better to seek an across-the-board approach where both employers and employees benefit. When people are losing their jobs and their life savings, the last thing they want government to do is increase tax rates on the firms who hire them or on the asset markets where their money is invested.

Predictable While timeliness is an admirable attribute, it is only one temporal property that a good fiscal policy should have in a large, dynamic economy. Even more important is that policy actions be clear and understandable—that is, predictable—so that individuals and firms know what to expect as they make decisions that depend

on future government actions. One of the most widely heard complaints about government interventions is that they have been too erratic or ad hoc. In my view, financial markets are clamoring for clarity. Economic policy—not only fiscal policy and monetary policy discussed here, but also regulatory policy and international policy—works best when it is as predictable as possible.

Monetary Policy Issues

With these fiscal policy principles in mind, we turn to a discussion of monetary policy. Starting around 2017, the Federal Reserve began to move to a more rules-based monetary policy of the type that had worked well in the United States in the 1980s and 1990s. Many papers written at the Fed and elsewhere reflected this revival, and they showed the benefits of rules-based policies. In July 2017, when Janet Yellen was Chair of the Federal Reserve Board, the Fed began to include a whole section on rules-based monetary policy in its *Monetary Policy Report*.

Many central bank leaders and monetary policy experts made favorable comments about the rules-based policy, and central bankers were supportive. Jerome Powell, who followed Janet Yellen as chair of the Federal Reserve Board, said: “I find these rule prescriptions helpful.” Mario Draghi, then president of the European Central Bank, said, “We would all clearly benefit from . . . improving communication over our reaction functions.” Raghu Rajan, former governor of the Reserve Bank of India, said, “What we need are monetary rules.” The evidence was that the move toward rules-based policy was beneficial and economic performance improved.

This move toward monetary policy rules was interrupted when the pandemic hit in 2020. Rules were removed from the Fed’s *Monetary Policy Report* in July 2020. In February 2021, rules were put back, only to be taken out again in the February 25, 2022, edition of the report. But on March 3, 2022, Chair Powell said that rules would be back in. And in the *Monetary Policy Report* released on June 17, 2022, policy rules were back in, including the Taylor rule, which was back as the first on the list.

This approach has continued through the Fed’s *Monetary Policy Report* released on March 3, 2023. As stated in the report, “Throughout 2021 and 2022, the target range for the federal funds rate was below the prescriptions of most of the simple rules, though that gap has narrowed considerably as the FOMC [Federal Open Market Committee] has expeditiously tightened the stance of monetary policy and inflation has begun to moderate” (FRB 2023).

Table 12.3 Rules included in the March 2023 *Monetary Policy Report*

A. Monetary policy rules	
Taylor (1993) rule	$R_t^{T93} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t)$
Balanced-approach rule	$R_t^{BA} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2(u_t^{LR} - u_t)$
Balanced-approach (shortfalls) rule	$R_t^{BAS} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2\min\{u_t^{LR} - u_t, 0\}$
Adjusted Taylor (1993) rule	$R_t^{T93adj} = \max\{R_t^{T93} - Z_t, \text{ELB}\}$
First-difference rule	$R_t^{FD} = R_{t-1} + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t) - (u_{t-4}^{LR} - u_{t-4})$

Note: R_t^{T93} , R_t^{BA} , R_t^{BAS} , R_t^{T93adj} , and R_t^{FD} represent the values of the nominal federal funds rate prescribed by the Taylor (1993), balanced-approach, balanced-approach (shortfalls), adjusted Taylor (1993), and first-difference rules, respectively.

R_{t-1} denotes the midpoint of the target range for the federal funds rate for quarter $t-1$, u_t is the unemployment rate in quarter t , and r_t^{LR} is the level of the neutral real federal funds rate in the longer run that is expected to be consistent with sustaining maximum employment and inflation at the FOMC's 2 percent longer-run objective, represented by π^{LR} . π_t denotes the realized four-quarter price inflation for quarter t . In addition, u_t^{LR} is the rate of unemployment expected in the longer run. Z_t is the cumulative sum of past deviations of the federal funds rate from the prescriptions of the Taylor (1993) rule when that rule prescribes setting the federal funds rate below an effective lower bound of 12.5 basis points.

The Taylor (1993) rule and other policy rules generally respond to the deviation of real output from its full capacity level. In these equations, the output gap has been replaced with the gap between the rate of unemployment in the longer run and its actual level (using a relationship known as Okun's law) to represent the rules in terms of the unemployment rate. The rules are implemented as responding to core PCE inflation rather than to headline PCE inflation because current and near-term core inflation rates tend to outperform headline inflation rates as predictors of the medium-term behavior of headline inflation.

Source: Federal Reserve Board, *Monetary Policy Report*, March 3, 2023, 43.

Table 12.3 shows the rules included in the March 3, 2023 Report. The notation is standard, and is given in the footnote to the table. The symbol r is the interest rate, π is the inflation rate, u is the unemployment rate, and the superscript LR means the long run. The results are similar to what one finds by looking at the Taylor rule, which is listed first. The results can be compared by looking at the average gap in percentage points between the FOMC interest rate and the settings of each of the other rules.

Getting Back on Track

It is good that rules are now back in the Fed's *Monetary Policy Report*, and it is good that they might continue in future monetary policy reports. It would be more helpful if the Fed incorporated more aspects of these rules or strategy ideas into its actual decisions. Apparently, this has recently begun to happen, as I show by comparing the interest rate path and policy rules for the interest rate. But at first, only small changes were seen in actual monetary policy.

So a gap existed between rules-based policy and policy actions. This was the case at the Fed and also at other central banks. Thus, high inflation will continue unless monetary policy actions—including monetary actions in other countries—are taken. Events in Ukraine and the Russian response recently raised reported inflation, but not the basic story.

Figure 12.1 shows the effective federal funds rate from late 1960 through late 2023. While the gap between the rules and the effective funds rate has narrowed, it still exists.

To illustrate this, the equation in figure 12.2 shows the Taylor rule as it appeared over thirty years ago in Taylor (1993). The variables are defined below the equation. Note that y shown in the equation is the percentage deviation of real GDP from its potential, which is closely related to the deviation of the unemployment rate from the natural rate.

Now let us use the equation to see when and by how much the Fed was—and continues to be—behind the curve. Using this policy rule, we can see that if the inflation rate is 2 percent and the target for the interest rate is 2 percent, then the interest rate should be 4 percent. That is $2 + 2 = 4$. If the equilibrium interest rate is 1 percent, then the funds rate should be 3 percent.

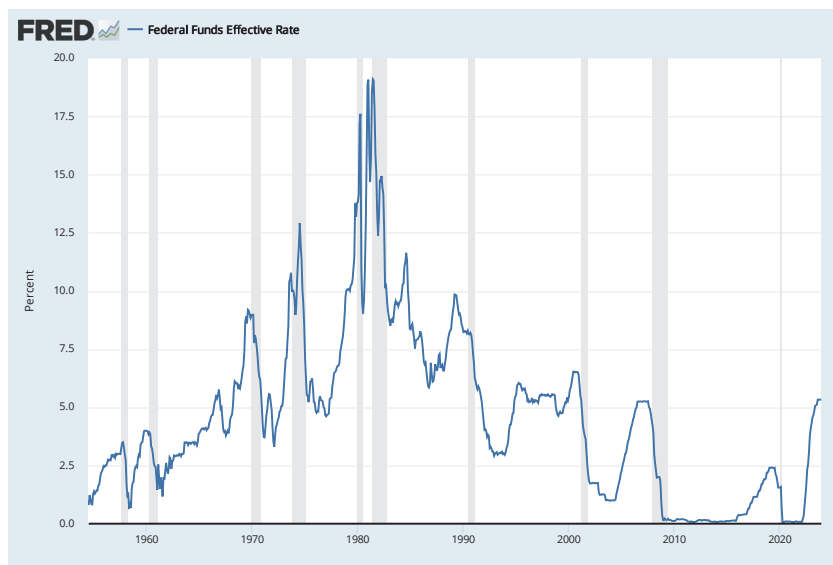


Figure 12.1 The effective federal funds rate

Source: Board of Governors of the Federal Reserve System (US), retrieved from FRED, Federal Reserve Bank of St. Louis.

$$r = p + .5y + .5(p - 2) + 2$$

where

- r is the federal funds rate,
- p is the rate of inflation over the previous four quarters
- y is the percent deviation of real GDP from a target.

Figure 12.2 Taylor rule

Source: Taylor (1993), 202.

During much of 2022 the actual rate was thus well behind the curve. If the inflation rate rises to 3 percent, then the funds rate should be 4.5 percent ($1 + 3 + .5(3 - 2) = 4.5$), which is about where it is now. If the inflation rate is 4 percent, then the funds rate should be 6 percent ($1 + 4 + .5(4 - 2)$).

Thus, if we use the Taylor rule in the most recent *Monetary Policy Report*, and plug in an inflation rate over the past four quarters of 4 percent, a target inflation rate of 2 percent, an equilibrium interest of 1 percent, and the gap between real GDP and its potential level of 0 percent, then you get a federal funds rate of 6 percent. So even with these inflation numbers, the Fed is still behind the curve, though as Chair Powell has indicated, the Fed may be still catching up. Note that these calculations assume that the equilibrium interest rate is 1 percent.

Federalism and the Impact on State and Local Government Fiscal Policy

It is important to emphasize that this type of fiscal and monetary policy at the federal level, especially the fiscal consolidation, will have important impacts on state and local fiscal issues. This effect may seem obvious to those who are not focused on the relationship between federal and state issues, but it is essential to understanding the importance of the federalism environment and how it operates in the United States.

First, slower growth of federal spending will induce slower growth of expenditures that the federal government will pass on to the state and local sector. This will tend to reduce the total size of state and local expenditures.

Second, stronger long-run national economic growth from the improved fiscal consolidation would improve the revenue side of the state and local finances as income tax receipts grow with a stronger economy. This impact will be amplified with higher sales taxes, due to stronger economic growth and the resulting higher consumer spending.

Third, a steadier and more predictable future path of the economy and federal finances would enable better planning by state and local governments,

and thereby reduce the general tendency to increase spending at the state and local level during recessions.

All this provides an incentive at the state and local level to wait to receive the federal funds rather than make commitments for future spending, and this puts less stress on natural capacity issues, which may then imply less real output. These are the key benefits at the state and local level of more predictable and permanent aspects at the federal level.

Conclusion

There are many fiscal packages that are consistent with the three principles that good policy should be predictable, permanent, and pervasive, and these would put the economy on the road to an improved fiscal and monetary state, and therefore faster and more inclusive economic growth.

One example fiscal package would consist of the following:

- A commitment to keep income tax rates where they are now, effectively making current income tax rates permanent. This would be a significant stimulus to the economy and to the financial markets.
- Responsible government spending plans that meet reasonable long-term objectives, put the US economy on a credible path to budget balance, and are expedited to the degree possible without causing waste and inefficiency.
- An explicit recognition that the “automatic stabilizers” are likely to help stabilize the economy and should be viewed as part of the overall fiscal package, even though they may not require legislation.

Regarding monetary policy, clearly the Fed got behind the curve on rules-based monetary policy in the United States, but it appears to have outlined a method to get back on track. By reviewing the years leading up to the present monetary situation, this paper provides the background needed for analyzing current and future monetary policy decisions.

The answer to the key question, Are we entering a new era of high inflation? is clearly *yes*, unless monetary and fiscal policymakers move toward a more rules-based monetary and fiscal policy, and do not revert to the policy that led to high inflation. An approach based on sensible rules would lead to an appropriate mix between fiscal policy and monetary policy.

There are now more reasons than ever for the fiscal policymakers and central bankers to use a more rules-based fiscal and monetary policy. Central banks should begin to establish rules that markets understand. The policy

interest rate would increase as inflation rises, as has already happened. It would of course be a contingency plan, as are all rules, but it would greatly reduce chances of a large, damaging change later.

Notes

1. This paper touches on some of the ideas that I presented at Committees of the House of Representatives in March 2023 (see Taylor 2023a and Taylor 2023b).

2. In testimony entitled “The State of the Economy and Principles for Fiscal Stimulus,” which I gave before the Senate Budget Committee in November 2008 (Taylor 2008), I recommended this type of fiscal policy, and followed up in Taylor 2010a, 2010b, 2015, and 2019.

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