The Case Against the Case Against Discretionary Fiscal Policy

by

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Times change. When I was introduced to macroeconomics as a Princeton University freshman in 1963, fiscal policy—and by that I mean *discretionary* fiscal *stabilization* policy—was all the rage. The policy idea that would eventually become the Kennedy-Johnson tax cuts was the new, new thing. In those days, discussions of monetary policy often fell into the "oh, by the way" category, with a number of serious economists and others apparently believing that monetary policy was not a particularly useful tool for stabilization policy. The appropriate role for central bank policy was often said to be "accommodating" fiscal policy, which was cast in the lead role. Thus many people, probably including President Kennedy, thought that Walter Heller, who was then chairman of the Council of Economic Advisers, was more instrumental to stabilization policy than William McChesney Martin, who was then chairman of the Federal Reserve Board. Indeed, it was said that Kennedy only remembered that *Martin* was in charge of *monetary* policy by the fact that both words began with the letter M.³

Multiply by -1, and you have a capsule summary of the conventional wisdom today.

As the opening quotation suggests, virtually every contemporary discussion of stabilization policy by economists—whether it is abstract or concrete, theoretical or practical—is about monetary policy, not fiscal policy. It never crosses anyone's mind that Greg Mankiw might be more influential in formulating stabilization policy than Alan

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¹ See, among others, Stein (1969, pp. 36-352).

² Curiously, this phrase has survived into current Federal Reserve jargon. Even though the Fed is clearly in the driver's seat when it comes to stabilization policy, it routinely refers to increasing or reducing the degree of "monetary accommodation."

³ Stein (1969, p. 4). I was astonished to find, in researching this paper, that the index of Heller (1966) does not contain a single reference to Martin.

Greenspan. And President Bush, I trust, does not need a mnemonic to remember what Greenspan does for a living. This paper explores whether this complete about-face in the conventional wisdom was well justified.

But don't be alarmed by the title. It speaks only of "the case against the case against" fiscal policy, not "the case for." I have no intention, at a Federal Reserve conference or anywhere else, of challenging the now-standard view that the central bank *should* and *does* have a dominant role in stabilization policy. This paper agrees that a sharp revision of the naively optimistic views held by some economists *circa* 1966 was called for. But it suggests that the pendulum may have swung just a bit too far, that the case against fiscal policy may have been taken to extremes. Yes, monetary policy merits the preeminent role in stabilization policy that it now holds. It is perfectly appropriate for there to be 10-20 conferences on monetary policy for every one on fiscal policy. My modest suggestion is only that the idea of using fiscal policy to help stabilize demand should not be relegated to the dustbin of history. There are circumstances under which the lessons of Lord Keynes are best not forgotten.

I. The Issues

The prevailing view today is that stabilization policy it is about filling in troughs and shaving off peaks, that is, reducing the variance of output around a mean trend that is itself unaffected by monetary or fiscal policy. For the most part, I will adhere to this canon. But note that contemporary conventional wisdom makes two assumptions that are at least debatable:

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⁴ Old-timers may note that I have adapted the title from Solow (1966), and for much the same reasons that he used it.

Assumption 1: The macroeconomy is not subject to hysteresis. In a system with a unit root, any shock to aggregate demand—whether it be from fiscal policy or anything else—will leave a permanent impact on output. There are many possible rationales for hysteresis in a macroeconomic setting. One example is insider-outsider models (Lindbeck and Snower (1988)) in which workers who become unemployed cease having any effect on wage settlements. Another example is based on endogenous human capital formation. If a boom brings more people into the labor market, the new workers may acquire skills on the job that naturally augment the supply of labor for the future. Conversely, skills may atrophy during lengthy spells of unemployment. Hysteresis can also come from technology shocks, if faster (slower) technological progress is induced by a booming (slumping) economy.

But theorizing is cheap. The more important question is whether any of these theories of hysteresis capture the essence of macroeconomic reality. To begin with, does output actually have a unit root?

Unfortunately, that question is difficult to answer statistically. In a well-known and provocative paper written nearly two decades ago, Campbell and Mankiw (1987) argued that it does. But more recent work has emphasized how hard it is to discriminate between a model with a unit root and a trend stationery model with a root close to but below unity—especially with relatively short time series. For example, Stock and Watson (1999, p. 55) estimate that the 90% confidence interval for the largest autoregressive root in the time series for log real GDP in the U.S. runs from 0.96 to 1.10. For analyzing and describing *very long-run* behavior, it makes a world of difference whether the largest root is, say, 0.98 or 1.00. But, in the *short run*, these two time-series models are virtually

indistinguishable. Believers in mean reversion have taken solace from this point. But it also means that it is not easy to dismiss hysteresis.

Assumption 2: The conventional, though much-disputed, effects of fiscal deficits on interest rates, and thus on the capital stock, leave no lasting imprint on GDP. The old "crowding-out" argument holds that deficit finance, while expansionary in the short run, is contractionary in the long run because a larger accumulated public debt leads to higher real interest rates, and thus to less business investment, and thus to a smaller capital stock and lower potential output in the future. Indeed, this chain of logic is one of the ideas behind several of the models that the Congressional Budget Office (2003) recently used for the "dynamic scoring" of tax cuts. Thus, in several of those models, the estimated long-run effect of the 2003 Bush tax cut was to reduce real GDP, not to raise it.

Furthermore, in most of what follows, I will adhere to the consensus view by assuming that:

Assumption 3: Due to some sort of nominal rigidities, real output does respond in the short-run to aggregate demand shocks, such as monetary and fiscal policy; and:

Assumption 4: The macroeconomy has the natural-rate property, by which I mean (a) that output returns to potential and (b) that the path of potential output is unaffected by either monetary or fiscal policy. (However, see Assumption 2 above).

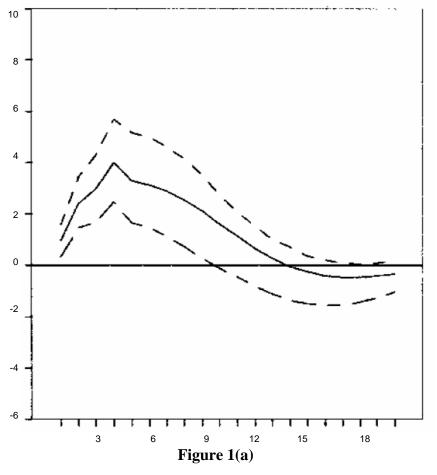
Assumptions 3 and 4 imply that both fiscal and monetary multiplier paths—which, these days, are often identified with impulse response functions—have characteristic "hump" shapes, rising to a peak and then falling back to zero. Two examples of such paths for fiscal policy are displayed in Figure 1. Each requires some explanation, for standard impulse response functions and multipliers are really two different animals.

Figure 1(a) comes from a VAR analysis of fiscal policy by Blanchard and Perotti (2002). In interpreting this graph, recall that, in any VAR, a shock sets in motion complex dynamic reactions that move *all* the variables. So, in particular, an initial fiscal shock in the three-variable Blanchard-Perotti model leads to subsequent changes not just in real GDP, but also in both government spending and taxes. This fact makes interpreting the impulse response functions in their paper as "fiscal multipliers" somewhat problematic; and many of them do not have the familiar hump shape. So I have chosen to display instead the reaction of real GDP to their dummy variable for 1975:2—because that was the quarter of a large, unanticipated income tax rebate. The dummy, of course, does not change subsequently; and the dynamic responses of government spending and taxes to this shock shown in Blanchard and Perotti's paper (but not repeated here) are very small. So Figure 1(a) comes close to showing the pure effect of a one-time, non-repeated fiscal stimulus.⁵

Figure 1(b) shows the dynamic multiplier path generated by a simulation of the Federal Reserve Board's FRB/US model—a large, structural, macro-econometric model with forward-looking expectations developed and used by the Fed staff. It simulates the effect of a sustained rise in government spending, allowing for the partially-offsetting monetary policy reaction implied by a Taylor rule. But, unlike a VAR, there are no further (endogenous) responses of other fiscal variables. Thus, although panels (a) and (b) look similar, the comparison between them is not clean. That said, they both display the characteristic hump shape.

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⁵ Blanchard and Perotti (2002, p. 1346) present VAR results with both deterministic and stochastic trends. Figure 1(a) corresponds to their deterministic trend case.



actual

0.5

0.0

potential

2001 2002 2003 2004 2005 2006

Response of real GDP to a one-shot tax reduction

Figure 1(b)

Response of real GDP to a sustained rise in government purchases

Source: Blanchard and Perotti (2002, Figure IV)

Source: Elmendorf and Reifschneider (2002, Figure 11)

The two panels of Figure 1 should remind us of an important but oft-ignored point about fiscal policy: "Transitory" does not necessarily mean "fleeting." In Figure 1(a), the peak effect on GDP comes after five or six quarters, but there are still notable effects three *years* or more later. In Figure 1(b), the peak multiplier (of about 1) is reached immediately, and then it recedes gradually. But there are still sizable effects one and two years after the fiscal shock. With real effects lasting as long as these, well-designed fiscal policy can indeed be used to "fill in troughs and shave off peaks"—which would appear to make fiscal policy a viable candidate for the role of macroeconomic stabilizer. And indeed, in the early post-Keynesian period, fiscal policy was expected to play precisely that role.

So why, then, did educated opinion converge on the proposition that fiscal policy is, to a first approximation, useless? There appear to be two very different sets of arguments.

Practical/political arguments

The lags depicted in Figure 1 are called *outside lags*, the time that elapses between a fiscal policy shock and its effects on the economy. Most evidence suggests that these outside lags are substantially shorter than the corresponding outside lags for monetary policy.

But fiscal policy is also subject to potentially long *inside lags*, the delays between recognition (by whom?) of the need for fiscal stimulus or restraint and the promulgation of the appropriate policies. Some of these inside lags occur for compelling administrative reasons. For example, if Congress decides to stimulate economic activity by building more public infrastructure, the natural spend-out rate of such programs will probably be very slow. Speeding up the process artificially for stabilization purposes would be

wasteful. Similarly, when tax changes are made, the Internal Revenue Service needs some time to change withholding schedules, send out rebate checks, issue new tax forms, and so on.

Other inside lags occur for political reasons. Even when there is a modicum of bipartisanship and good will, Congress may need (or take) a long time to reach a decision on whether and how to change taxes or spending. After all, they don't call the United States Senate "the world's greatest deliberative body" for nothing. Beyond that, political wrangling can delay Congressional decisions for many months, especially in a presidential system with weak party discipline like ours, rather than in a more disciplined parliamentary system like the United Kingdom's. Delays from this source are particularly likely when different parties control the White House and Congress. Thus, at least in the United States, long political lags may be the most cogent argument against discretionary fiscal policy.

Theoretical/economic arguments

I noted earlier that nominal rigidities are sufficient to imbue aggregate demand shocks with short-run effects on real output. But some well-known theoretical arguments imply that fiscal policy cannot even affect aggregate *demand*. During the long-running monetarist-Keynesian debate, monetarists argued that fiscal policy was powerless to move aggregate demand, which was controlled instead by monetary policy--presumably because the LM curve was vertical. That old debate has a slightly (and deservedly) archaic ring to it today. For decades, the most-discussed argument for why fiscal policy

might be impotent is the so-called and badly named "Ricardian equivalence" proposition.⁶

Suppose the pure permanent income hypothesis (PIH) with perfect foresight holds, so that only present-value budget constraints matter. ⁷ Then a bond-financed tax cut simply defers tax payments until some future time when the interest and principal payments come due. *It does not change the present value of those tax payments* because the present value of the future payments to the bondholders must be exactly equal to the market value of the bonds, and hence of the tax cut. On the assumption that only present-value budget constraints matter to consumers, then, spending will be unaffected by what amounts to a pure shift in timing. ⁸ As Barro (1974) and, before him, Patinkin (1956) pointed out long ago, consumers will simply save their tax cuts so as to be able to make the interest and principal payments when they come due.

In subsequent sections, I will evaluate both the practical/political and the theoretical/economic arguments for the futility of fiscal policy. But first, it may be useful to summarize briefly the interplay of events and ideas that led to such dramatic changes in the conventional view of the feasibility of conducting a stabilizing fiscal policy. The roles of both sets of arguments will be apparent.

II. Changing Views: A Brief History of Events and Ideas on Fiscal Policy

The history of thought on fiscal policy since its birth in 1936 divides naturally into four episodes.

⁶ It is badly named because Ricardo did not believe in it. See O'Driscoll (1977).

⁷ Perfect foresight is not necessary. Rational expectations will do.

⁸ As is well known, this assumes, among other things, that consumers discount future flows at the government bond rate.

The triumph of Keynesianism, 1936-1966: The first three decades following publication of *The General Theory* (1936) were the years of what Herbert Stein (1969) called The Fiscal Revolution in America. Keynes' ideas, which emphasized fiscal over monetary policy, ⁹ spread like wildfire. Abba Lerner (1943) wrote of the importance of using well-timed budgetary changes for "functional finance"—his term for what we now call fiscal stabilization policy. The early editions of Paul Samuelson's path-breaking textbook, *Economics* (first edition: 1948), explained the use of both fiscal and monetary policy but clearly emphasized the former. One notable section of that text (pp. 353-354), entitled "The Inadequacies of Monetary Control of the Business Cycle," emphasized the (now) old saw that a central bank can "lead a horse to water but cannot make him drink." Mindful of potential political delays, Richard Musgrave (1959) later promoted the idea of "formula flexibility," whereby Congress would pre-legislate both the form of and the trigger (say, a drop in GDP) for future tax or expenditure changes for stabilization purposes—thereby converting discretionary policy into automatic stabilization. ¹⁰ Others advocated maintaining a backlog of spending projects "on the shelf," for use when cyclical conditions warranted.

The Kennedy-Johnson tax cuts of 1964-1965 marked the first *deliberate* use of fiscal policy in U.S. history, and they were judged to be a great success. From a modern perspective, one can only marvel at the unabashed blend of activism and optimism exuded by Walter Heller (1966) in his book of reminiscences about the New Frontier. Heller wrote that both monetary and fiscal policy had "to be put on constant, rather than intermittent, alert" in order "to provide the essential stability at high levels of

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particularly useful reference on many of the points touched upon in this paper.

⁹ Probably because interest rates were so low during the Great Depression. I will return to this point later. ¹⁰ Seidman (2003) and Solow (2002) have recently tried to revive this idea. Seidman's book is a

employment and growth that the market mechanism, left alone, cannot deliver." To do so, fiscal policy must become "more activist and bolder," and "has to rely less on the automatic stabilizers and more on discretionary action." In brief, fine tuning was "in."

The consensus crumbles, 1967-1977: But it would soon be "out." A series of adverse events first shook and then destroyed faith not only in fiscal policy, but in stabilization policy more broadly. In the space of a scant decade, the old consensus utterly collapsed.

The first blow was the Vietnam War, which piled heavy government spending atop an economy that was already fully employed. President Lyndon Johnson overrode the counsel of his Keynesian advisers by insisting on prosecuting the war without either trimming Great Society spending or raising taxes. 12 The predictable—and, in fact, predicted—result was an overheated economy. Soon inflation was on the rise, and Keynesian economics was being accused, unjustly, of being inherently inflationary.

That charge received apparent support from both the world of ideas and real-world events. On the intellectual front, Friedman (1968) and Phelps (1968) challenged, and eventually demolished, the notion that the Phillips curve represented an exploitable longrun tradeoff. Aiming to keep unemployment below the natural rate, they argued, would drive inflation ever higher.

On the policy front, what Gordon (1980, p. 136) aptly called "the Waterloo of activist fiscal stabilization" came when the 1968 tax surcharge failed to curb the Vietnaminduced inflation.¹³ The failure of the 1968 surtax greatly damaged the idea of using fiscal policy for stabilization purposes—and in two distinct ways. First, the 2½ year delay in getting the tax hike enacted illustrated just how painfully long the inside lags in fiscal

<sup>Heller (1966). The quotations come from pages 9, 68, 69.
See Okun (1970), especially Chapter 3.
See Eisner (1969) and Okun (1971).</sup>

policy could be.¹⁴ In a world in which recessions typically last less than a year, and an entire business cycle takes, say, four years, an inside lag of over a year makes fiscal policy a dubious proposition, at best. Second, Robert Eisner (1969) raised an intellectual conundrum. Activist use of tax policy for stabilization purposes would seem to call for *temporary*, and perhaps even frequent, changes in income taxes. But the PIH implies that such tax changes, if believed to be temporary, should have only small effects on consumer spending.¹⁵ So repetitive use of the income-tax weapon for stabilization purposes should severely undermine its efficacy.

These dual failures seemed to be replicated in the deep recession of 1974-1975 when first President Nixon and then President Ford failed to recommend anti-recessionary policies until it was too late. Then the temporary nature of the 1975 tax cut undermined its effectiveness. My study of the 1968 and 1975 episodes together (Blinder [1981]) concluded that the two temporary taxes had about half as much short-run impact on aggregate demand as equal-sized permanent tax changes would have had.

Long inside lags, weak tax effects due to the PIH, and the vertical long-run Phillips curve have precious little to do with the monetarist claim of fiscal impotence owing to a vertical LM curve. But all these problems with fiscal policy seemed to get mixed up together in the anti-Keynesian backlash, and fiscal stabilization fell deeply out of favor. Its nadir may have come when President Carter's call for a short-term fiscal stimulus in 1977 was swiftly rejected by Congress—an event that would be repeated 16 years later for President Clinton.

¹⁴ Johnson's advisers urged a tax hike on him as early as late 1965 (see Okun (1970)). LBJ resisted until the middle of 1967, when he recommended a temporary income tax surcharge. Then Congress then took about 18 months to enact one.

¹⁵ This very point resurfaced recently in the context of the Bush tax cuts in 2001.

¹⁶ But Congress acted speedily this time, demonstrating that the inside lag could be short.

Huge deficits crowd out stabilization policy, 1981-2001: President Reagan's massive tax cuts proved to be another landmark in the history of fiscal policy. Despite the Reaganite attack on the weak Carter economy, the 1981 tax cuts were justified not by Keynesian aggregate demand considerations—which were denigrated—but by a new doctrine called supply-side economics. This is not the place to discuss that ill-fated (and, some would say, silly) doctrine, other than to observe that it helped pave the way for a huge multi-year tax cut which ushered in an era of chronically-large federal budget deficits.

The Reagan legacy of huge deficits "as far as the eye can see" fostered a dramatic repositioning of fiscal policy—away from (cyclical) stabilization policy and toward (secular) deficit reduction. The new-found devotion to fiscal prudence grew to be so extreme that, in 1985, Congress passed the Gramm-Rudman-Hollings Act which, had it actually been followed, would have short-circuited even the automatic stabilizers by requiring strict adherence to annual targets for the federal budget deficit (an endogenous variable). Five years later, when the economy slipped into recession, fiscal stimulus was considered out of the question. Instead, taxes were *increased* as part of the 1990 deficit-reduction package. By then, even Keynesian economists were so desperate for deficit reduction that they accepted this procyclical tax hike without protest.

After the election of 1992, things went quite a bit further. President Clinton's original budget proposal combined substantial long-run fiscal consolidation with a small, short-run fiscal stimulus—a strategy of one step backward, five steps forward. But this two-pronged strategy proved to be too clever by half, and the stimulus part was quickly rejected by Congress. Instead, a deficit-reduction package even larger than the one

Clinton had proposed (barely) passed. So Clintonomics tuned out to be about, first, reducing the deficit, then balancing the budget, and finally building a sizable budget surplus. (There are worse policies, and we have them.)

The new political realities of the 1980s and 1990s were reflected rapidly in academic thinking. Scores of papers appeared on the effects (or lack thereof) and the sustainability (or lack thereof) of budget deficits. Tellingly, the 1986 NBER conference volume, *The American Business Cycle: Continuity and Change* (Gordon [1986]), did not even include a chapter on fiscal policy—despite the cyclical focus of its title. Instead, there was a long essay by Barro (1986) on "The Behavior of United States Deficits," which focused on the tax-smoothing hypothesis (Barro [1979]).

The fact that the Clinton boom started almost immediately after Congress passed a budget *reduction* package gave rise to some rethinking—some of it serious, some of it muddled—of even the *sign* of the fiscal-policy multiplier. Among politicians and media types, the notion that raising taxes and/or cutting spending would expand (rather than contract) the economy took hold rapidly and uncritically—with seemingly little thought about exactly *how* this was supposed to happen. Quicker than you can say "Robert Rubin," the idea that *reducing* the budget deficit (or increasing the surplus) is the way to "grow" the U.S. economy—even in the short run—came to dominate thinking in Washington. This thinking was, of course, profoundly anti-Keynesian.

In the academic world, some earlier theoretical research by Turnovsky and Miller (1984) and Blanchard (1984) was dusted off and used to explain how a *credible* reduction in *expected future* budget deficits could in fact increase aggregate demand by lowering long-term interest rates today. Those models, of course, did not claim that a reduction in

the *current* budget deficit would be expansionary. Still, the Turnovsky-Miller-Blanchard thesis offered one theoretically coherent explanation of the Clinton boom. 17 But could the lessons of those glory years be generalized? Few people asked the question. 18

The new era, 2001-??: It is hard to know how to characterize the fiscal policy of the current President Bush. The ideas that eventually morphed into the tax cuts of 2001-2003 began as campaign promises in 1999. Given what has happened since, the original argument sounds like a bad joke: The federal government should "give back" the money to the people rather than run excessive budget surpluses. The tax cuts were most emphatically *not* recommended for short-run stabilization-policy purposes. ¹⁹ In fact, the Federal Reserve was worried at the time that the U.S. economy might be overheating. But when the economy slowed in 2000, and then sagged in 2001, the Bush administration quickly changed its rationale for the tax cuts to the more traditional Keynesian one: The economy needed stimulus. But the policy itself barely changed.

In terms of our brief history of events and ideas, three remarkable things have already happened during the presidency of George W. Bush. First, consistency proved to be the hobgoblin of small minds. Without skipping a beat, both political parties and most of the press jettisoned the Clinton-era view that deficit reduction was the way to stimulate the economy and returned to the older Keynesian notion that deficit expansion would do the trick—apparently, without noticing the inconsistency.

Second, a political consensus in favor of fiscal stimulus formed quickly and decisively in 2001—so quickly that both the 2001 and 2003 tax cuts were enacted in a matter of

¹⁷ There were also many incoherent ones, usually involving the restoration of confidence.

¹⁸ For more on this subject, see Blinder and Yellen (2001, Chapter 4.)

¹⁹ Nor was it ever argued, even by opponents, that lower taxes that led to a deficit would slow down economic growth!

months, thereby demonstrating that the inside lags in fiscal policy could really be quite short, even in a narrowly-divided Congress.

Third, yet another old Keynesian idea—the liquidity trap—rose like Lazarus from the tomb of discarded notions.²⁰ As the Fed lowered the federal funds rate toward 1%, and the economy still did not revive, economists began to express concern about the zero bound on nominal interest rates—a trap that had already ensnared the Bank of Japan and, on that account, had engaged the interest of a number of academic and Federal Reserve economists.²¹

Briefly, the problem is this. Once the central bank lowers the overnight interest rate to zero, it is left with only "unconventional" monetary tools because base money and short-term debt become perfect substitutes. But these unconventional weapons are weaker than the conventional weapon: lowering the short-term interest rate by purchasing short-term government paper.

For example, the central bank can always expand the monetary base by purchasing long-term bonds rather than short-term issues. But that is equivalent to a two-part policy in which the central bank first purchases short-term debt in the open market (thereby creating bank reserves) and then turns around and sells this debt to purchase an equivalent amount (at market value) of long-term debt. The first part of this operation is a conventional open-market purchase, which has no effect when the nominal interest rate is zero. The second part is a dose of "Operation Twist" which, we have been conditioned to believe, does not accomplish much. If that is what monetary policy comes down to at zero nominal interest rates, then fiscal policy, for all its flaws, starts to look like a viable

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²⁰ See Krugman (1998).

²¹ For example, it was the subject of a Federal Reserve conference in October 1999. See the November 2000 special issue of the *Journal of Money, Credit and Banking*.

option after all. And, indeed, some of the most compelling suggestions for ending Japan's deflationary slump combine expansionary monetary and fiscal policy in monetized deficit spending (or tax cutting).²²

Were it not for the fact that the ink is not yet dry on this fourth episode in U.S. fiscal-policy history, it would be tempting to say that we have come full circle. Just think about what has been restored since George W. Bush took office: belief in fiscal stimulus, belief that the inside lags in fiscal policy are short, and skepticism about the efficacy of monetary policy. This is a world that Walter Heller would recognize.

With this as background, I now turn to some of the economic/theoretical arguments that have been made *against* the efficacy of fiscal stabilization policy.

III. Temporary Income Taxes and Present-Value Budget Constraints

Theory

The structure of the basic argument against the use of temporary *income* tax changes as stabilization devices is very straightforward—much simpler than much of the literature, with its emphasis on intergenerational transfers, bequest motives, transversality conditions, and the like. Here is the simplest non-stochastic version of the Ricardian-equivalence argument.

Suppose a representative consumer's current spending depends *only* on the present discounted value of her lifetime resources:

$$W_t = A_t + \sum_i \delta^i y_{t+i} ,$$

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²² Among the many sources that could be cited, see Bernanke (2000).

where A_t is current net worth, y_{t+i} is future after-tax earnings, and δ^i is the appropriate discount factor for cash flows at date t+i. This is the central assumption; as Hillel said (though in an admittedly different context), all the rest is commentary.

Now consider a tax cut of Δy financed by issuing bonds. Current receipts rise to y_t + Δy . But future taxes must rise by just enough to meet the interest and principal payments on the bonds—meaning that the *present value* of these future taxes must rise by exactly Δy . Thus W_t is not changed by this fiscal operation, which alters only the *timing* of receipts and *not* its discounted present value. In consequence, consumption is also unchanged.

This basic argument can be, and has been, gussied up in many ways. But, in essence, all the fancier variants come down to the same simple argument I just made. What can go wrong with this argument? Many things. But since most of the objections to Ricardian equivalence are so familiar, I will list them very briefly.

1. Bequests: Suppose some of the future tax burden falls on generations yet unborn. That part cannot, of course, affect their spending today; they are not alive yet. But Barro (1974) pointed out long ago that, under one particular specification of intergenerational altruism, today's consumers will essentially act as farsighted agents for their heirs—and adjust their bequests so as to make debt and taxes equivalent. Of course, Barro's model is not the only possible model of the bequest motive, and much ink has been spilled over this issue. But, in my view, most of the debate is beside the point because, in the real world, the bonds that will be issued to cover deficits will almost always mature in less than 10 years—a time frame within which most of today's taxpayers will still be around

to pay the bills. So intergenerational aspects of present-value budget constraints are mostly irrelevant.

- 2. Liquidity constraints: Current consumption may not depend only, or even mostly, on the present-value budget constraint. If liquidity constraints are binding, for example, current income will matter more than future income because it loosens liquidity constraints. In that case, a debt-financed tax cut will raise spending. Even if only a portion of the population is liquidity constrained, as the evidence suggests, Ricardian equivalence will fail. Because they are so important to the central questions of this paper, I will return to liquidity constraints later.
- 3. *Different discount rates*: The simple present-value argument assumes that taxpayers and bondholders discount future cash flows at the same rate. But if taxpayers discount the future at an interest rate higher than the government bond rate, the present value of the *current* purchasing power gained will exceed the present value of the *future* purchasing power lost—and consumption will rise in consequence. A variant on this objection is:
- 4. *Myopia: Homo sapiens* may not be as farsighted as *homo economicus*. Real people, it appears, give insufficient weight to the future or, what comes to the same thing, discount future flows at extraordinarily high rates or have short planning horizons. For such (real) people, the rise in current income is a stronger influence on current consumption than the fall in future income.
- 5. *Precautionary saving:* Precisely this last sort of behavior can even be rationalized (for many reasonable utility functions) on optimizing grounds by the theory of precautionary saving.²³ Receiving more income today and *expecting* to receive less income in the future reduces income uncertainty, which reduces the need for

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²³ See, for example, Barsky, Mankiw, and Zeldes (1986).

precautionary saving. As long tax payments rise with income, such a swap of present for future income can lead to higher spending today.

6. Consumer spending may react more than consumption: Current tax receipts that are not spent must be saved. One way to "save," by economists' definition, is to purchase a consumer durable that yields a flow of consumption services into the future. But that part of saving actually adds to current aggregate demand.

While each of the six objections summarized above is familiar, a seventh one seems not to be:

7. The present-value government budget constraint is irrelevant in practice. Modern economic models lean heavily on the so-called present-value government budget constraint (PV-GBC)—which ensures, for example, that any additional deficit run today must be balanced by surpluses eventually because the debt cannot explode upward forever. It is the PV-GBC that makes every income tax change, in a sense, temporary. Let's grant this point. But note that the transversality condition from which the PV-GBC is derived holds only asymptotically. As Ronald Reagan proved in the 1980s, and as George W. Bush may be proving again today, the government budget can traverse an explosive debt path for a decade or two without any cataclysmic consequences. The PV-GBC is thus a theoretical nicety that places no meaningful constraint on policy today, next year, or for, say, the next decade or two.

Evidence

Okun (1971) was the first to study the temporary tax issue empirically. His context was the explicitly temporary income tax surcharge enacted in 1968. Using the

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²⁴ For example, Canzoneri, Cumby, and Diba (2002, footnotes 22 and 23) note that the PV-GBC is derived from the government's flow budget constraint and the transversality condition of the household's maximization problem.

consumption equations of four different econometric models, he compared the "full effect" view (that the surcharge reduced spending by as much as a permanent tax increase would have) to the "zero effect" view (that the surcharge did not affect spending at all). Okun concluded that the "full effect" view explained the data better. However, Solow and I (1974, pp. 107-109) subsequently showed that an intermediate "50% effect view" fit Okun's data better than either extreme.

Modigliani and Steindel (1977) and Eckstein (1978) conducted similar studies of the effects of the 1975 tax rebate, using the consumption equations of two large-scale econometric models. Like Okun, each found sizable effects on spending—although Modigliani and Steindel (1977) expressed skepticism about the model's predictions. Some years later, I re-examined the 1968 and 1975 episodes together (Blinder [1981]), using a more complex specification that treated a temporary tax change as a weighted average of a permanent tax change and a pure windfall. (Note that a windfall does not have "zero effect" on spending under the PIH.) The point estimate of the weighting parameter was exactly 0.50, although its standard error was a large 0.32. However, when Deaton and I (1985) re-examined this question with a different model and, perhaps more important, revised data, we found something closer to Okun's original "zero effect" view.

This older time series literature tested the PIH by asking whether consumers' responses to *explicitly temporary* income changes are larger than predicted by theory. But, as Deaton and I (1985, p. 498) concluded, the time series data offer so few observations on temporary taxes that the "results are probably not precise enough to persuade anyone to abandon strongly held *a priori* views." A newer strand of research, influenced profoundly by Hall's (1978) rational expectations approach to the

consumption function, poses a different, though related, question: Is the response of consumers to *easily-predictable* income changes greater than theory suggests? And it seeks answers mainly in cross-sectional data.

Some of this research takes advantage of what might be called natural experiments. It began with a clever paper by Shapiro and Slemrod (1995), who noted that the first President Bush conducted a rather curious tax experiment in 1992: He reduced withholding rates by executive order beginning in March of that year even though Congress had not cut income tax rates! Thus American taxpayers were treated to higher cash flow (but no higher accrued after-tax income) over the last ten months of 1992, only to owe more in taxes in their April 15, 1993 settlements. The Bush experiment therefore amounted to a *very temporary* increase in disposable income that was quickly reversed. According to the PIH, consumers should have ignored such a change in the timing of receipts, exactly as in the Barro (1974) model. Yet nearly half of the respondents told the University of Michigan's survey takers that they would spend "most" of their (very temporary) increase in take-home pay. A similar subsequent study by the same authors (Shapiro and Slemrod [2003]) of the so-called income tax "rebate" of 2001 found that only 22% of respondents said they would spend "most" of it.

Parker (1999) exploited the fact that, for a minority of workers each year, the payroll tax for Social Security falls abruptly to zero when their earnings rise above the Social Security maximum, and then suddenly jumps back to normal again on the following January 1st. Under the pure PIH, such predictable, seasonal fluctuations in after-tax

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²⁵ Well, not quite *exactly*. Since the government gave taxpayers *interest-free* loans, the present value of lifetime resources was raised slightly.

income should have no effect on spending. But Parker (1999) found that they do; in fact, he estimated a marginal propensity to consume of about 0.5 over a three-month period.

Similarly, when Souleles (1999) studied consumer responses to income tax refunds—another predictable source of after-tax income—he found an MPC of around 0.6. And, in a subsequent study, Souleles (2002) found that, even though the phased-in Reagan tax cuts were pre-announced and predictable, people did not spend their additional after-tax income until they had the money in hand. The estimated MPC for non-durables was 0.6 or greater when the taxes were actually cut. This last finding echoes what Deaton and I (1985) had found years earlier in studying consumer responses to the Reagan tax cuts.

Hsieh (2003) reported some puzzling findings for Alaskan families. Their spending seemed not to react to the relatively large and predictable annual payments from the Alaskan Permanent Fund (which come from oil revenues), but did react strongly to relatively small and predictable income tax refunds—just as Souleles (1999) had found.

Most recently, Johnson, Parker, and Souleles (2004) assessed the spending effects of the so-called 2001 tax rebate. This episode was interesting for two reasons. First of all, while widely described as a "rebate," the 2001 tax cut was actually an early installment payment on a permanent tax-rate reduction. Second, for administrative reasons, the checks were sent out on a randomized basis. This latter feature enabled Johnson *et al.* to estimate sizable initial-quarter spending responses with some precision.

While these two strands of the consumption literature ask different questions, their respective answers have a certain consistency: Both point strongly toward the importance of binding liquidity constraints. In the time-series literature, it is presumably liquidity constraints that make consumers react much *more strongly* to current cash income than

the PIH says they should. In the cross-section literature, liquidity constraints are the presumptive reason why households react much *less strongly* to anticipated future income—even when the "future" is not very far off. Instead, they wait until they have their hands on the money, just as the time series evidence suggests.

The lesson for stabilization policy, therefore, seems clear: Even *temporary* income tax changes can pack substantial punch, though perhaps not quite as much as a permanent tax cut. Deaton (1992, pp. 101-102) had it about right a dozen years ago, when he wrote in his survey of consumption that "if macroeconomic policy-makers wish to use taxes to fine-tune the economy,... then the empirical failures of the [permanent income] theory [with rational expectations] are certainly large enough to make a big difference." Perhaps we economists have taken the PIH too much to heart.

IV. Temporary Tax Changes and Intertemporal Substitution

Making an *income* tax change temporary probably undermines its effectiveness, at least somewhat. But there are other sorts of tax changes which become *more* powerful when they are made temporary. I refer, of course, to taxes that create incentives for intertemporal substitution, such as investment tax credits, value-added taxes, sales and excise taxes, and the like.

The idea is simple enough. Consider a one-year reduction in a consumption tax from τ_0 to $\tau_1 < \tau_0$, reverting back to τ_0 next year. The relative price of goods next year versus goods this year will rise from $P_{t+1}/(1+r_t)P_t \equiv \lambda_t$ when the tax rate is the same in both periods to:

$$P_{t+1}(1+\tau_0)/(1+r_t)P_t(1+\tau_1) = [(1+\tau_0)/(1+\tau_1)]\lambda_t > \lambda_t$$

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when the tax rate is τ_1 this year and τ_0 next. In theory, this change in relative prices should redirect spending from next year to this year.

Can intertemporal tax incentives like this be used effectively as instruments of fiscal policy? Sumner (1979) found little evidence that temporary changes in Ontario's retail sales tax had an extra-large impact on consumer spending due to intertemporal substitution.

In the United States, there is no value-added tax, and sales taxes are the province of the states. So the main intertemporal tax policy that has actually been utilized as part of U.S. fiscal policy is the *investment tax credit*. The credit was invented by President Kennedy's Council of Economic Advisers and introduced in 1962—for Keynesian reasons by the way—at a 7% rate. Between then and its abolition as part of the Tax Reform Act of 1986, the ITC was suspended or repealed twice and had its rates readjusted twice—often for cyclical reasons.²⁶ ITCs have also been implemented in a number of other industrialized countries, often under a different name.²⁷

Economic theory strongly suggests that the credit should be more powerful when it is enacted on a temporary basis. In his famous paper on econometric policy evaluation, Lucas (1976, p. 30) observed that: "The whole point, after all, of the investment tax credit is that it be viewed as temporary, so that it can serve as an inducement to firms to reschedule their investment projects." Yet when the ITC was made "permanent" in 1979, two years after what I labeled the "nadir" of fiscal policy, the U.S. Treasury (1979, p. 365) stated emphatically that "changes in the investment tax credit rate should not be considered in terms of short-run stabilization objectives."

²⁷ See, for example, Jorgenson and Landau (1993).

²⁶ See Chirinko (1999), which is a particularly useful source of information on the ITC.

Econometric appraisals of the "bang for the buck" effectiveness of the ITC have given the credit mediocre reviews.²⁸ One reason may be that the credit has never been made *marginal*—it has always been applied to all qualified investments. Economists in the 1992 Clinton campaign had persuaded the candidate to propose a marginal ITC as a low-cost way to provide some fiscal stimulus. But the idea was quickly scrapped in 1993 for lack of support in Congress. I still think the idea is a good one.

The 2002 tax cut bill included a provision that offered accelerated (called "bonus") depreciation for about 18 months. A year later, the "bonus" was increased and the period slightly extended (to the end of 2004) as part of the 2003 tax cut. The idea, of course, was exactly the same as that behind the ITC: to put investment goods "on sale" for a while, and thereby to encourage intertemporal substitution. Nonetheless, a controversy arose at the time, with economists in the Bush administration claiming that the bonus depreciation provision would be more powerful if enacted for a *longer* period! It is, of course, too early for there to have been any econometric studies of this most recent episode.

V. Countercyclical Variations in Government Purchases

As mentioned earlier, one stabilization-policy idea that dates back to the early Keynesian period is the use of timely variations in expenditures on "public works" to smooth cyclical fluctuations. While the roots of this idea are thoroughly practical and atheoretical, it makes good theoretical sense on allocative grounds—at least in principle. After all, periods of slack resource utilization are times in which the shadow values of

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²⁸ See Auerbach and Hassett (1991), and Chirinko (1993) for a survey.

factor inputs are presumably low in the private sector. What better time to put those resources to use for public purposes?

Barro (1981) found that federal government defense purchases have a significant positive impact on real output, with temporary changes (mainly associated with wars) having larger effects than permanent ones. He argued that this finding provides support for a theoretical model in which temporarily higher government purchases raise the real rate of return, thereby inducing intertemporal substitution in both consumption (less today, more tomorrow) and labor supply (more today, less tomorrow). But Barro's theoretical rationale (intertemporal substitution) and his empirical results (wars boost real output) are sufficiently disconnected that one can accept the latter without buying into the former.

The major objections to using public expenditures as a countercyclical weapon seem to be more practical than theoretical. But I think they are powerful nonetheless. To begin with, wars do not seem like particularly promising devices for stabilization policy!

More seriously, there are normally quite lengthy lags in the political process before new spending projects are authorized by Congress. Then, since authorizing committees and appropriating committees are different, still more time elapses between legal *authorization* and the actual *appropriation* of funds. These legislative lags could conceivably be short-circuited by having a queue of projects pre-authorized, pre-appropriated, and sitting "on the shelf" ready to go when the cyclical need arose. But I, for one, have a hard time imagining the U.S. Congress doing anything like that. And even if the lags in the authorizing and appropriating processes could be completely eliminated, the slow natural spend-out rates of most public infrastructure projects remains

a serious handicap. For example, out of each \$1 appropriated for highway expenditures, less than one-third is likely to be spent within a year. Accelerating the pace of spending on public works for stabilization purposes would be inefficient and wasteful.

To my mind, this all adds up to a recognition that the inside lags for many sorts of government purchases are lengthy enough to vitiate their usefulness for stabilization policy. The idea works in theory, but not in practice. If fiscal policy is to be used for stabilization purposes, taxes (and transfers) are probably the instrument of choice.

VI. Is There a Case for Streamlining Fiscal Policy Institutions?

This discussion points to the long inside lags as perhaps the most critical element of the case against discretionary fiscal policy. But these lags are not immutable. The sources of many, if not most, of them lie in policymaking institutions that can be changed—at least in principle. And a number of suggestions for doing just that have been made over the years.

One such idea, formula flexibility in setting income-tax rates or public expenditures, was discussed earlier. Its main virtue is both obvious and substantial. If what we now think of as *discretionary* policy changes for stabilization purposes could somehow be made *automatic*, then the lengthy inside lags in fiscal policy could be reduced dramatically. Since the outside lag for most garden-variety fiscal policy changes are relatively short, the feasibility of conducting a stabilizing fiscal policy would thereby be greatly enhanced.

What's the down side? For (good) reasons elucidated earlier, most discussions of formulaic fiscal responses have focused on taxes rather than government spending. But,

as noted above, temporary changes in income tax rates are believed to elicit muted spending responses. Perhaps more important, Congress has not shown the slightest inclination to relinquish any of its ability to bestow gifts upon taxpayers when the economy is weak. And symmetry does not rescue us when the economy is strong. It is true that members of Congress wish to avoid the blame for raising taxes at times of peak demand. But they have a straightforward way to accomplish that objective right now: In a reversal of the old Nancy Reagan motto, they just don't do it. The last time Congress enacted a tax *increase* aimed squarely at reducing aggregate demand for stabilization purposes was in 1968.²⁹ Instead, it lets the Fed do all the dirty work by raising interest rates. So it is not at all surprising that Congress has shown no interest whatsoever in formula flexibility.

A related ivory-tower idea should be mentioned in this context. In a paper published seven years ago (Blinder [1997]), I asked why some economic decisions are delegated to unelected technocrats while others are reserved for politicians. One important specific example of this question is: Why do just about all countries put monetary policy in the hands of independent central bankers, and yet leave tax policy in the hands of elected politicians? I went on to speculate on whether technocratic decisionmaking on tax policy might produce better outcomes than political decisionmaking, suggesting that the answer might indeed be yes.

In broaching the idea of transferring some aspects of tax policy from the political sphere to the technocratic sphere, I was not thinking about stabilization policy, but rather about getting the details of the tax code—with their complex allocative and distributive

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²⁹ Congress did raise taxes in 1983, 1990, and 1993. But in none of those cases was cyclical restraint the main reason.

effects—right. However, the same point applies to getting the *timing* right in a business-cycle setting, as advocates of formula flexibility realized many decades ago.

Suppose a group of technocrats, modeled on the Federal Reserve Board, were empowered to make decisions on the *level* of taxation, subject to (potentially numerous) constraints laid down by Congress. Under that institutional structure, the possibility of conducting a timely and rational fiscal policy would be greatly enhanced. Of course, the probability that Congress would delegate such authority is probably roughly equal to the probability that the Red Sox will win the World Series. But fans can dream.

Subsequently, the Business Council of Australia (1999) picked up on this idea and advocated the establishment of an independent fiscal-policy agency for Australia, along the lines just suggested. In one version of their proposal, a new agency as independent as the Reserve Bank of Australia would actually be given the *power* to make small, across-the-board adjustments in personal and/or corporate tax rates for stabilization purposes—unless their order was publicly and explicitly countermanded by the government. In a softer version of their proposal, the new agency would be merely *advisory*, making public recommendations to the government.

A series of related proposals has been made for the euro zone, although the focus there has been on (secular) budget discipline rather than on (cyclical) stabilization. The much-maligned—and, one might say, much-ignored—Stability and Growth Pact (SGP) requires member governments to limit budget deficits to no more than 3% of GDP. Even before the pact was agreed upon, critics noted that the 3% limit could in principle interfere with the workings of the automatic stabilizers because it was phrased in terms of *actual* budget deficits rather than *cyclically-adjusted* deficits. So if weak economic performance

lowered tax revenue and raised social welfare expenditures sufficiently, even a "responsible" fiscal policy could produce a deficit in excess of the 3% limit—thereby requiring offsetting fiscal actions that are procyclical.³⁰ In practice, European governments have shown themselves unwilling to take such actions, preferring to violate the pact instead. So the pact has become something of an embarrassment.

Notice the analogy to the old formula flexibility discussions in the United States. In principle, the SGP requires *discretionary* responses to (certain) changes in economic activity. But those changes have proven difficult or impossible to sustain politically, and they may not make good economic sense, anyway (e.g., if they are procyclical). So some economists have proposed institutional changes that would make long-run fiscal discipline somewhat closer to *automatic*, while still allowing for cyclical responses. For example, von Hagen and Harden (1995), Wyplosz (2002) and others have called for replacing the SGP's excessive deficit procedure with a council of experts not unlike the "softer" version of the Australian proposal.³¹ This group of technocrats would report and opine—quite publicly—on the sustainability of the fiscal programs of the euro-zone governments. The idea would be to bring public and market pressure to bear on governments that insist on pursuing unsustainable policies.

VII. Out of the Detritus: Some Creative Ideas for Fiscal Stabilization

A short summary of the conclusions so far might run something like this. The *theoretical* arguments against the efficacy of fiscal policy as a stabilization tool turn out

³⁰ Qualitatively, the analogy to the central problem with the Gramm-Rudman-Hollings Act in the United States is almost perfect. However, marginal tax-and-transfer rates are much higher in the euro zone than in the United States, making the quantitative dimensions of the problem more severe in Europe. (See Canzoneri, Cumby, and Diba (2002), pp. 340-343.)

³¹ For a summary of and rationale for such proposals, see Fatas *et al.* (2003).

to be pretty thin gruel. But the *practical* arguments seem much more compelling. Timely variations in government purchases (say, public works) for stabilization policy, though fine in theory, do not appear to be either sensible or workable. Changes in taxes and/or transfer programs are far more suitable for stabilization purposes, but current institutional arrangements make prospects for success slim. Nor do any of the institutional changes that would make successful fiscal stabilization more achievable seem likely to be adopted. So maybe the current conventional wisdom is right after all.

Before giving up, however, let us consider some creative suggestions for stabilizing fiscal policies that have been made in recent years. Each of them is designed to address the main perceived weakness of using temporary income tax changes to alter consumer spending: Elementary theory says that temporary changes in income taxes should yield less aggregate-demand "bang" for each income-loss "buck" than permanent tax changes. Yet the rhythm of the business cycle virtually dictates that tax-transfer changes for stabilization purposes should be temporary. What to do?

Targeting tax-transfer payments better

One response suggested by the empirical literature would be to target tax-transfer changes made for stabilization purposes on those people who are most likely to be liquidity constrained, and therefore to have MPCs at or near one. To some extent, that means targeting income tax changes on lower-income households, who are more likely to be living hand to mouth. There are two drawbacks.

First, the suggested remedy is strikingly asymmetric. When the economy needs stimulus, targeting income tax *reductions* and *increases* in transfer payments disproportionately on the poor serves both stabilization and distributional objectives

admirably. But the idea of targeting income tax *hikes* or *cuts* in transfers on the poor when the economy needs restraint is repugnant to most people. On the other hand, as noted earlier, Congress never uses fiscal policy to "shave off peaks" anyway. If discretionary fiscal policy is only used when stimulus is called for, maybe this problem is not important in practice.

Second, income is an imperfect predictor of who is and who is not liquidity constrained; the ratio of assets to income may make more sense on theoretical grounds.³² In principle, large negative *transitory* income should be a better predictor of who is constrained, since a sizable negative income shock should indicate a strong likelihood of a binding liquidity constraint. And, since transitory income and current income are highly correlated,³³ current income may be a decent statistical proxy. Nonetheless, it would be nice if we could do better. Two suggestions have been made in that regard.

One idea is to use receipt of unemployment insurance (UI) benefits as a proxy for being liquidity constrained. After all, most people who are collecting UI have recently suffered a severe drop in earnings (about 50% on average), making their transitory incomes negative and large. If these people are striving to maintain their previous consumption levels, they are probably liquidity constrained.

Extending UI benefits during times of high unemployment has indeed become almost standard practice in the United States.³⁴ An additional 13 weeks of coverage, beyond the usual 26 weeks, is triggered *automatically* in a particular state once the level of insured

more likely to be liquidity constrained. Age and wealth are also relevant, however.

33 For example, Hall and Mishkin (1982) estimate that the variance of the innovation to transitory income is more than twice as large as the variance to the innovation of permanent income.

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³² See, for example, Zeldes (1989). But Jappelli (1990) finds that people with lower income are indeed

³⁴ However, the Bush administration and the Republican-controlled Congress refused to do so in late 2003, despite objections from Democrats.

unemployment breaches certain levels.³⁵ And Congress often enacts additional *discretionary* increases in UI coverage that become effective during, and especially after, recessions. Data on payments under the Extended Benefits program display sharp spikes in 1976, 1983, 1992-1993, and 2002-2003³⁶—all years following recessions.

During the Congressional debate over the 2001 stimulus package, a number of Democrats and liberal economists argued that UI benefits should be extended in time and broadened in coverage—e.g., by making part-time workers eligible.³⁷ The main problem with this idea appears to be magnitudes. Feasible policy changes in UI benefits are simply not big enough to combat a recession. Or are they? Let's look at some numbers.

Between the years 2000 (when the unemployment rate averaged 4.0%) and 2002 (when the unemployment rate averaged 5.8%), total UI benefits increased from \$20.5 billion to \$42.1 billion.³⁸ Let's imagine that aggressive policy changes might have boosted that \$21.6 billion *increase* by 50%—that is, by another \$10.8 billion—which seems a high-end estimate of what Congress might actually have done. Assuming an MPC of one, which is probably too high, and no multiplier effects, which is probably too low, those additional UI payments would have raised GDP by \$10.8 billion. By comparison, the peak-to-trough decline in real GDP actually experienced between 2000:4 and 2001:3 (expressed in 2002 dollars) was \$55.2 billion. And the 2001 recession was very mild by historical standards. So clearly, no conceivable expansion of UI benefits can make a big dent in a large recession.

³⁵ Some states add an additional seven weeks.

³⁶ See http://workforcesecurity.doleta.gov/unemploy/content/chartbook/images/chtb1.gif on the Department of Labor website.

³⁷ See, for example, Krueger (2001).

³⁸ Economic Report of the President, 2004, Table B-45, p. 337.

Nonetheless, in designing stabilization policies, we should be thinking about *mitigating* recessions, not *eliminating* them. And in that context, discretionary variations in UI benefits may deserve a more prominent role than they have been given to date. By like reasoning, a more generous UI program would be a better *automatic* stabilizer.

A second idea along these same lines, which was suggested by several Democratic politicians in 2001, is temporarily rebating the "first part" of the payroll tax. Here the numbers are potentially much larger. The Social Security Administration reports 144.8 million wage and salary workers in 2002. Of these, 103.5 million workers earned \$10,000 or more, and hence would have been eligible for the full \$620 tax cut—for a total expenditure of \$64.2 billion. A rough estimate of the value of the 6.2% tax cut to the 41.3 million workers with covered earnings below \$10,000 adds another \$10.7 billion³⁹—raising the total cost to about \$75 billion. That is more than enough to "fill in a trough." The problem in this case is targeting. Under this particular payroll tax rebate plan, even middle- and upper-income households will receive temporary tax cuts. Many of them—perhaps the majority, weighted by income—will not be liquidity constrained.

Exploiting Intertemporal Substitution

Two other recent fiscal policy suggestions seek to exploit the idea that, unlike income taxes, variations in sales taxes are likely to be made *more* powerful by enacting them on

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³⁹ See http://www.ssa.gov/policy/docs/statcomps/supplement/2003/4b.html#table4.b7. That source divides the 41.3 million sub-\$10,000 workers into three ranges:

Income range	Workers	<u>(millions)</u>	
		,	

0-\$999 8.24 \$1,000-\$4,999 17.62 \$5,000-\$9,999 15.44

The calculation in the text assumes that the average earnings in each of these three brackets is the midpoint of the bracket.

⁴⁰ Another problem is that the Social Security Trust Fund cannot spare the revenue. But this problem can be overcome by using general revenue to replace any payroll-tax receipts that the Trust Fund loses.

an explicitly temporary basis.

As a way to bring incentives for intertemporal substitution to bear on stimulating consumer spending, Martin Feldstein (2001) suggested temporarily suspending Japan's 5% value-added tax (VAT), and following that by an increase two years later. He subsequently offered a more complicated version of this idea (Feldstein (2002)): The government of Japan should embark on a multi-year plan of simultaneously *raising* the consumption tax and *reducing* the income tax, in a balanced-budget way. The idea is the same in each case: to create incentives for consumers to buy now rather than in the future.

That was the same idea behind a suggestion I made during the debate over the 2001 stimulus package in the United States (Blinder (2001)). The federal government in the U.S. has neither a VAT nor a general sales tax. But 45 of the 50 states have the latter. So I suggested that the federal government offer to replace the lost tax revenue of any state that would agree to cut its sales tax (up to some limit) for the next twelve months. Of course, I would not want to exaggerate the impact of such a policy, given the low rates of sales taxation in the United States and the modest degree of intertemporal substitution suggested by econometric studies. A *temporary* and *marginal* ITC might be a more potent option.

VIII. Wrapping Up: Is There Anything New Under the Sun?

Today's conventional wisdom holds that discretionary changes in fiscal policy are unlikely to do much good, and might even do harm. Why is that? Because the lags in fiscal policy, especially the inside lags, are long—perhaps longer than the duration of a

typical recession. Because the most plausible fiscal policy weapon, changes in personal income taxes (or transfer payments), is likely to be weakened by deploying it on a temporary basis. And because an obviously superior stabilization weapon—namely, monetary policy—is readily available.⁴¹

When might that argument go wrong? Well, to begin with, there will occasionally be times and places—such as Japan in the 1990s—where the need to boost aggregate demand is extremely large and lasts a very long time, longer than any conceivable lags in fiscal policy. Models with hysteresis offer extreme examples of this possibility, but a model with a maximum root of 0.98 or so will do almost as well. And remember, Stock and Watson (1999) estimated the maximum root for real GDP in the United States to be between 0.96 and 1.10.

Second, there are institutional structures that can make the inside lags in fiscal policy quite short. The U.K.'s parliamentary system legislates fiscal changes very quickly, and even the U.S. Congress has shown itself capable of moving within a few months—on occasion! It may be that we generalized too glibly from the terribly long inside lags witnessed in 1968 and 1974. Furthermore, if we really want to speed up fiscal policy decisionmaking, there are a variety of institutional changes that could help.

Third, to the extent that we are worried that low MPCs out of temporary income tax changes will undermine the effectiveness of fiscal policy, there are (non-income) tax options that can induce intertemporal substitution by reducing current prices relative to future prices—for both consumer goods and investment goods.

interest rates.

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⁴¹ In summarizing the case against fiscal stabilization, Feldstein (2002) added one further item to this list: the possibility that tax cuts or expenditure increases can depress demand by raising long-term interest rates. But he did not suggest that tax *increases* or expenditure *cuts* can stimulate the economy by lowering

Fourth, but these more exotic options may not even be needed, for a fascinating body of recent econometric evidence suggests that a sizable fraction of the U.S. population (even weighted by income) is, or acts as if it is, subject to binding liquidity constraints. Thus, even explicitly temporary changes in income taxes may pack significant spending punch. Furthermore, with a little ingenuity we can target tax cuts on people who are more likely to be living hand to mouth, such as poor people and the unemployed.

Fifth, there will occasionally be extraordinary circumstances—contemporary Japan is again the outstanding example—where the zero bound on nominal interest rates makes monetary policy a less powerful instrument of stabilization than it usually is. In such a situation, monetary policy *alone* may be too weak to do the job, and a combined monetary-fiscal effort—deficit spending or tax cuts financed by printing money—may be needed. Indeed, fiscal policy might well be the senior member of such a partnership, since a liquidity trap not only reduces the power of monetary policy but also increases the power of fiscal policy (because there is little or no "crowding out" from higher interest rates). Precisely this sort of two-pronged stabilization policy is what many economists long urged on Japan.

Sixth, in certain rare "emergencies"—such as the U.S. in the aftermath of the 9/11 attacks—the monetary policy medicine may simply be too slow-acting to provide a timely cure. The inside lags in monetary policy would probably be negligible in a clear emergency.⁴² But the outside lags remain quite long—a year or more for real GDP, and two years or more for inflation—and there is not much the Federal Reserve can do about it. With monetary policy lags as long as that, fiscal policy may be the only cyclical medicine that can work in time—provided (and this is truly a big "if") the inside lags can

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⁴² For example, the Federal Reserve cut interest rates within days of the 9/11 attacks.

be kept short. In fact, in the end, I am inclined to conclude that the long inside lags (with the concomitant politics) constitute the most important count in the indictment against fiscal policy.

So my overall conclusion runs something like this. Under *normal* circumstances, monetary policy is a far better candidate for the stabilization job than fiscal policy. It should therefore take first chair. Nothing in this paper is intended to dispute this piece of conventional wisdom. That said, however, there will be occasional *abnormal* circumstances in which monetary policy can use a little help, or maybe a lot, in stimulating the economy—such as when recessions are extremely long and/or extremely deep, when nominal interest rates approach zero, or when significant weakness in aggregate demand arises abruptly.⁴³ To be prepared for such contingencies, it makes sense to keep one or more fiscal policy vehicles tuned up and parked in the garage, and perhaps even to adopt institutional structures that make it easier to pull them out and take them for a spin when needed.

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⁴³ As previously noted, I see little hope that fiscal policy can be used effectively in the contractionary direction.

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