

Rethinking the Economics of Budget Surpluses

Abstract

The emergence of large budget surpluses in 2000 and the first half of 2001 dramatically altered perceptions of fiscal policy. Now, the surplus has all but disappeared in the wake of the economic slowdown. Monetary policy, based on lower interest rates, seems to be having little impact on spending and gives the appearance of “pushing on a string.” In this environment expansionary fiscal policy becomes the most effective way to stimulate demand. Yet, the case for expansionary fiscal policy remains hobbled by the mistaken conventional wisdom which has for so long pushed for budget surpluses. And even if the dire nature of the situation successfully compels a temporary fiscal expansion, there will remain a danger of deflationary budget surplus economics re-asserting itself the moment recovery becomes visible. For this reason, the current moment provides a critical opportunity to examine the economics of budget surpluses. Our momentary flirtation with surpluses and the prospect of paying down the national debt revealed that persistent surpluses are highly problematic. This makes a non-sense of the existing fiscal paradigm. Government debt plays an important constructive role in modern economies, and the debt should therefore grow with economic activity. This requires government deficits. Rather than being harmful, moderate deficits constitute good economic policy. The size of these deficits should be such that the debt - GDP ratio is maintained at an optimally determined level. This can be termed a “balanced growth budget policy.”

Key words: Fiscal policy, government debt, budget surplus, budget deficit, balanced growth.

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I Introduction

The emergence of large budget surpluses in 2000 and the first half of 2001 dramatically altered perceptions of fiscal policy, with surpluses becoming an end in themselves. Now, the surplus has all but disappeared in the wake of the economic slowdown, and there are signs that the economy may be caught in a downward spiral. Monetary policy, based on lower interest rates, seems to be having little impact on spending and gives the appearance of “pushing on a string.” When firms have massive excess capacity and business prospects are dim, lower interest rates do little to stimulate economic activity. In this environment expansionary fiscal policy becomes the most effective way to stimulate demand. Yet, the case for expansionary fiscal policy remains hobbled by the mistaken conventional wisdom which has for so long pushed for budget surpluses. And even if the dire nature of the situation successfully compels a temporary fiscal expansion, there will remain a danger of deflationary budget surplus economics re-asserting itself the moment recovery becomes visible. For this reason, the current moment provides a critical opportunity to examine the economics of budget surpluses. In the 1980s and 1990s economists inveighed against the danger of deficits. Yet, now in the wake of our momentary flirtation with surpluses and the prospect of paying down the national debt, it has become clear that surpluses are also problematic. This makes a non-sense of the existing fiscal paradigm. Government debt plays an important constructive role in modern economies, and the debt should therefore grow with economic activity. This requires government deficits. Rather than being harmful, moderate deficits constitute good economic policy. The size of these deficits should be such that the debt - GDP ratio is maintained at an optimally determined level. This can be termed a “balanced growth budget policy.”

II The crumbling of surplus orthodoxy

At the beginning of this year the U.S. Congressional Budget Office (CBO) was predicting massive budget surpluses over the next ten years that promised a rapid pay-down of the publicly held national debt. According to CBO the debt held by the public as a percentage of GDP was anticipated to fall from 34.7% in 2000 to just 4.8% in 2011, and with continuing surpluses would eventually be paid down completely.

Though the back-loaded Bush tax cut in tandem with the economic slowdown has made such an outcome less likely, the brief flirtation with the prospect of a disappearing national debt has undermined the claims of fiscal orthodoxy regarding the benefits of budget surpluses and the dangers of deficits. The momentary condition of large predicted budget surpluses has brought to the fore previously unacknowledged problems. When government was burdened by large continuing deficits it was simply assumed that surpluses were good. Now, this turns out not to be the case.

The dramatic shift in perception is illustrated by Federal Reserve Chairman Greenspan's comments before the Congressional Budget Committee (January 25, 2001) on the budget surplus outlook. Having long been a budget hawk arguing for deficit reduction, Greenspan did an about turn and argued for getting rid of the surplus through tax cuts.

“The time has come, in my judgement, to consider a budgetary strategy that is consistent with a preemptive smoothing of the glide path to zero federal debt, or more realistically, to the level of federal debt that is an effective irreducible minimum.... In general, as I have testified previously, if long-term fiscal stability is the criterion, it is far better, in my judgement, that the surpluses be lowered by

tax reductions than by spending increases (Greenspan, 2001).”

For Chairman Greenspan, the problem of continuing budget surpluses was constructed in terms of a neo-Randian argument emphasizing the “political” dangers of government accumulation of private sector financial claims. However, there are a range of other strictly economic arguments that also suggest that sustained budget surpluses are problematic. This has enormous policy implications, especially when linked with previous debate over the balanced budget amendment which showed balanced budgets to be problematic. In effect, policy makers confront a new situation in which persistent large deficits are viewed as bad, as are persistent budget surpluses. A balanced budget is also problematic. Putting the pieces together, this suggests that moderate budget deficits may be the best stance for long run fiscal policy.

II The new debate over the dangers of budget surpluses

For much of the last twenty years the U.S. government has run large budget deficits that contributed to the outstanding publicly held government debt jumping from 25.5% of GDP in 1980 to 45.4% in 1997. The large deficits and deteriorating fiscal conditions dramatically shifted the focus of debate, making budget deficits the central issue of concern. As a result, the 1990s were marked by vigorous debate over the dangers of deficits, and anti-government conservatives also tried to introduce a balanced budget amendment which they hoped would financially handcuff government. The main charge leveled against deficits was that they crowd-out private sector investment spending, thereby impeding capital accumulation and lowering future living standards. However, this charge does not stand up either empirically or theoretically. Indeed, government spending may even crowd-in investment if it stimulates economic activity and investment is positively related to economic activity. At the same time it is entirely appropriate

that governments deficit finance spending on public capital, just as private business borrows to finance private investment spending, and this makes a non-sense of the case for a balanced budget amendment.¹

An irony of the debates of the 1990s is that thought the budget deficit hawks lost the battle over the balanced budget amendment, they won the budget deficit war. Thus, it has become received wisdom that budget deficits are bad and surpluses are good, and this thinking now dominates policy. Now, the recent shift into budget surplus offers an opening for re-assessing such thinking. This is because the shift into surplus has revealed significant problems with a policy of sustained surpluses. These problems are of four kinds. First, there are traditional Keynesian concerns with the impact of surpluses on aggregate demand. Second, there is the problem of the impact of surpluses on private sector balance sheets. Third, there is the impact of sustained surpluses and repayment of the national debt on financial markets, and fourth there is the problem of how the Federal Reserve is to conduct effective capital market neutral monetary policy once the publicly held national debt is paid off.

A key part of the problem is that surpluses cause the stock of debt to “fall” in an unsustainable way, just as excessive deficits cause the stock to “rise” in an unsustainable fashion. In this, there is a symmetry between surpluses and deficits. Both have long run financial implications. Budget deficits must be financed which implies that the stock of government financial liabilities is rising over time. Conversely, budget surpluses imply that the government is collecting more than it spends, so that the stock of government liabilities is falling over time.

¹. The economic case against crowding-out is examined in Buiter (1977), Tobin and Buiter (1980), Eisner (1986, 1989). Palley (1997a) surveys the economic case against the

The Tobin problem: surpluses, aggregate demand, and private sector balance sheets

Keynesian economics emphasizes the centrality of aggregate demand in determining national income. The simple Keynesian model has government surpluses impacting the “flow” of aggregate demand, with surpluses draining income from the circular flow of income and spending that links households and firms. In this framework unemployment arises if there is a shortage of demand for firms’ output, and in such conditions government surpluses can be especially problematic because they amplify the demand shortage -- a feature that has contributed to the current slowdown.

In addition to this flow demand dimension, surpluses also have a balance sheet stock impact which was identified long ago by James Tobin (1963). In a financial economy a decision to save is effectively a decision to lend, and therefore every saver must be matched by a borrower. This means that if government wants to run sustained surpluses (i.e. be a saver), then the private sector must run sustained deficits (i.e. be a borrower). This is clearly seen from the national income identity for a closed economy given by

$$(1) \text{ Saving} - \text{Investment} = \text{Government spending} - \text{Tax revenues}$$

which can be restated as

$$(2) \text{ Private sector surplus/(deficit)} = \text{Government deficit/(surplus)}$$

For an open economy the relationship is slightly more complex and given by

$$(3) [\text{Saving} - \text{Investment}] = [\text{Government spending} - \text{Tax revenues}] + [\text{Exports} - \text{Imports}]$$

which can be restated as

$$(4) \text{ Private sector surplus/(deficit)} = \text{Government deficit/(surplus)} + \text{Trade balance}$$

balanced budget amendment.

The application of this accounting logic is illustrated by conditions in the U.S. economy. In 2000 the private sector ran a deficit of almost 7%, financed by a current account deficit equal to 4.4% of GDP and a government surplus of 2.4% of GDP.

The above national income relationships contain some unpleasant balance sheet arithmetic. If the government sector runs a sustained surplus that pays down the debt, then the private sector must run a sustained deficit. Consequently, the private sector's balance sheet will deteriorate, and this stands eventually to threaten the level of economic activity once the private sector decides that it needs to save more to restore its balance sheet position.²

The Greenspan problem: what should we do with the surplus when the publicly held national debt is paid off?

A second problem of sustained surpluses concerns what to do with continuing surpluses once the publicly held debt has been paid down. This problem has been raised by Federal Reserve Chairman Greenspan. It can be simply illustrated through the government budget constraint relating the government surplus changes in the money supply and outstanding publicly held debt

$$(5) G - T = dM + dB$$

where G = government spending, T = taxes, dM = change in base money supply, and dB = change in publicly held debt. If the government is running a surplus ($G - T < 0$), then the surplus can be used to retire either the base money stock ($dM < 0$) or the publicly held debt ($dB < 0$).

Most discussions of the surplus involve retirement of the publicly held debt, but once this debt has been retired the surplus has to be redirected elsewhere. Chairman Greenspan's concern

². Godley (2000) has emphasized the dangers posed by growing private sector indebtedness to the current economic expansion.

is that the surplus might be used to purchase private sector debt and equities, which risks the possibility of backdoor nationalization.³ A second concern is that such purchases distort the market's allocation of financial capital by favoring those companies whose debt and equity were purchased. A third concern, not mentioned by Greenspan, is that such purchases also risk triggering an asset price inflation since spending the surplus on private sector assets would increase the demand for these assets.

An alternative to debt repayment is retirement of the base money stock ($dB = 0, dM < 0$). However, retirement of the base money stock will generate a contraction of the money supply, thereby engendering deflation.⁴ Though theoretical classical macroeconomics still asserts that deflation is neutral with respect to real output, it is now widely recognized that deflation has significant negative real effects in modern economies with inside bank money and credit. These negative effects have been made clear by Japan's recent flirtation with deflation, and they are also borne out by the experience of the Great Depression. There is also a significant body of theoretical work that explains the negative impact of deflation. This work emphasizes how deflation raises the burden of existing debts (Tobin, 1980; Palley, 1999), how it alters price expectations and gives agents an incentive to switch into money away from real capital (Tobin, 1975), and how it makes it impossible for firms to recover costs that they incur in the production

³. In this event the government budget constraint becomes $G - T = dE$ where dE = change in the outstanding stock of private sector financial claims resulting from government purchases of such claims.

⁴. This is easily seen from the quantity theory equation $MV = PY$, where M = money supply, V = velocity of money, P = general price level, and Y = real output. Expressing in log form and taking the total derivative yields $dM/M + dV/V = dP/P + dY/Y$. Assuming the velocity of money to be constant and the growth of the economy to be g_y , then the rate of deflation would be $dP/P = dM/M - g_y$ which is negative if $dM < 0$.

process (Palley, 1997b). Deflation may also raise real interest rates owing to the existence of nominal interest rates floors (Krugman, 2000), and owing to increased risk of bankruptcy which raises credit risk (Palley, 2000). For all of these reasons using a budget surplus to retire the base money stock is likely to have disastrous economic consequences.

The Minsky problem: implications of repaying the publicly held national debt for financial markets

A third problem from paying down the publicly held national debt concerns the implications for the operation and stability of financial markets. This problem is clearly stated by Minsky (1986, p.33 - 37) who identifies the special role of government debt in stabilizing private sector financial institutions and markets.

Paying down the national debt would represent a dramatic change in financial markets where government debt is widely held. Such debt is held by an array of financial institutions. Those looking to park liquidity for short periods of time, but still wanting to earn interest, hold short term debt. Those with longer term fixed commitments, such as life insurance companies and pension funds, tend to hold long term debt because of the relative scarcity and riskiness of private sector debt of equivalent maturity.

Within the financial system, government debt serves two principal functions. The first concerns pricing, while the second concerns provision of balance sheet liquidity. With regard to pricing, government debt is backed by the “full faith and credit” of the U.S. government, and is therefore viewed as risk free. As such, the interest rate payable on government debt establishes the pure risk free interest rate that provides a benchmark for the entire system. All other debt, which inevitably carries an element of credit risk, is then priced by reference to this risk free rate.

In the absence of publicly traded government debt, there would no longer be an instrument capable of directly establishing the risk free rate. Instead, financial market participants would have to buy instruments that include some credit risk, and they would then have to decompose the yield on these instruments into credit risk and pure risk free interest components. The risk free rate would therefore become unobservable, which would tend to create greater uncertainty and lead to higher interest rates on all credit instruments.

In addition to this “pricing role,” government debt also provides liquidity for private sector balance sheets. Short term government debt is widely viewed as a close substitute for money, but with the advantage of paying interest. Government debt also tends to be more liquid, in the sense of being subject to less price volatility than private sector debt. There are two reasons for this. First, since it bears no credit risk, it is not subject to unexpected credit risk shocks that impact prices. Second, the market for government debt dwarfs that of any single private credit instrument because so much more is in issue. As a result, the market for government debt is deeper and thicker, and prices are less volatile because there are always buyers and sellers. This contrasts with thin markets in which transacting can suddenly become difficult because market opinion may move uniformly in one direction, leading to the disappearance of buyers or sellers and giving rise to large price movements.

These two features - the absence of credit risk shocks and the relatively thicker nature of the government debt market - mean that eliminating government debt would tend to make private sector balance sheets more fragile. This effect can be understood by reference to the liquidity spectrum. This spectrum is defined by the range of assets available. At one end of the spectrum is money, which provides perfect liquidity. Close to money is government debt. Short term debt

that carries little pure interest rate risk is a close substitute for money, while longer term debt which carries more interest rate risk is a more distant substitute for money. Beyond government debt is corporate debt, with the liquidity properties of this debt depending on its term to maturity and the extent of credit risk. Further beyond this are equities, and beyond equities are assets such as real estate, the sale of which tends to involve significant price discovery time and transactions costs.

Given the liquidity spectrum, private sector agents choose to hold a mix of financial assets that meet their liquidity needs. At the moment, this includes holding some government debt which offers an interest bearing close substitute to money. Eliminating government debt would create a large hole in the liquidity spectrum, and take away a choice that is currently available. Agents would likely shift part of the balances currently held as government bonds into money, while the remaining part would be shifted into private credit instruments. However, since money pays no interest there would be a strong incentive to shift the bulk of these balances into private debt instruments. Consequently, private balance sheets would become more fragile in the sense of being exposed to additional price risk arising from credit risk shocks, and this in turn would open the financial sector to more frequent and deeper financial crises. This is the foundation of Minsky's argument that eliminating government debt would remove part of the foundation of a stable liquid financial sector.

The open market operations problem: implications of repaying government debt for the conduct of monetary policy

A fourth problem of paying down the debt is that it stands to undermine the Federal Reserve's ability to conduct monetary policy through open market operations (OMOs). These

operations involve swapping the liabilities of the Federal Reserve for government debt held by the public, and such swaps would no longer be possible if the public no longer held any debt. Though monetary policy would still remain feasible, it would have to be conducted through the discount window, and such a system would be more intrusive with regard to the credit allocation process than the existing system of OMOs.

In the event that debt were eliminated, one possibility is that the current system of OMOs could be replaced by a Lombard lending system as used by the Bundesbank.⁵ In such a system the role of the discount window would change dramatically. At the moment, it is used by few banks, and its role is restricted to meeting temporary seasonal or unexpected liquidity shortages. Under a Lombard system it would become the principal instrument for controlling the price of credit.

The working of a Lombard system is shown in figure 1. The Fed sets the interest rate at which it is willing to lend funds, and this establishes a horizontal supply of short term credit to the financial system. Given this benchmark cost of credit, the quantity of reserves in circulation (R_0) is determined by the demand for reserves (R^d). An important requirement for the Fed to be able to set interest rates is that the demand for reserves exceed non-borrowed reserves (NBR) held by the private sector. In effect, the supply of reserves schedule is an upside down L, with the vertical portion demarcating the level of NBR, and the horizontal portion demarcating the terms on which the Fed is willing to supply borrowed reserves (BR). As long as demand for

⁵. The Fed could also purchase government agency debt or Fannie Mae and Ginnie Mae debt. Both of the latter are already backed by government guarantees so that they are very similar to existing Treasury debt. Some argue that these guarantees already constitute political interference, and should therefore be repealed.

reserves exceeds the level of NBR, the Fed can set rates by raising or lowering the discount rate.

A critical issue in a Lombard system is who gets access to the discount window. Under the existing system discount window access is restricted to banks who are members of the Federal Reserve system. However, window access is irrelevant to the operation of monetary policy which works through OMOs. These operations do not channel funds to specific borrowers. Instead, they work through the price mechanism, with the Fed's purchases and sales affecting bond prices and interest rates. Contrastingly, a Lombard system has funds directly channeled to those with window access, and overall financial system is impacted through this privileged group. Consequently, those with window borrowing rights have a significant competitive advantage. Yet, at the same time, it is not sensible to give equal window access to all since financial institutions differ by credit worthiness. For this reason, a Lombard window system has a more intrusive impact on the credit allocation process than open market operations.

III Conclusion: balanced growth budget policy

The Tobin, Greenspan, Minsky, and monetary policy conduct problems reveal the significant difficulties associated with sustained budget surpluses. A policy of balanced budgets is also problematic since it implies that neither the stock of money nor bonds can grow with GDP. In addition, government cannot finance long lived public capital expenditures with borrowing.

The bottom line is that both sustained surpluses and balanced budgets are problematic. So too are large deficits that grow either the money supply or debt too rapidly. Excessive money supply growth results in faster inflation, while excessive debt growth has the debt to GDP ratio rise over time. This implies an increasing debt service burden, whereby a greater and greater portion of tax

revenues are consumed in the form of interest payments.

These considerations suggest that policy should aim to have the publicly held national debt grow at the same rate as nominal GDP, thereby producing a steady debt to GDP ratio. Such an approach can be termed a “balanced growth budget policy”, in that it restrains government debt to be a fixed share of the economy. This prevents the debt from becoming too large (unsustainable deficits) or too small (destabilizing surpluses). It also enables private sector wealth to grow (i.e. avoids the Tobin problem), as does the stock of money and bonds. This avoids the problem of deflation, and provides a growing supply of government debt needed to support liquid financial markets and enable effective monetary policy through open market operations. Lastly, it permits a steady stream of deficit financing, that grows through time as GDP grows, which provides financial space for financing investments in long-lived public capital.

At the same time, a balanced growth budget policy does not constrain government to never run deficits or surpluses. There remains a place for traditional Keynesian counter-cyclical fiscal policy that operates through automatic stabilizers based on the system of progressive taxation and transfers. In booms there remains a case for surpluses, just as in recessions there remains a case for deficits which would be unsustainable if run on a permanent basis. Thus, the budget deficit can still fluctuate counter-cyclically, but over the course of the business cycle and along the economy’s growth path it is restricted to grow at a rate that ensures a constant publicly held debt to GDP ratio.⁶ This is similar to the private sector which also refrains from an excessive

⁶. Countries that are below their optimal debt to GDP ratios will have an extra margin of freedom that allows for slightly more deficit financing as they approach the limit.

debt to income ratio.

Finally, in closing it should be pointed out that a balanced growth budget policy has direct and immediate policy implications. First, the claim that the Social Security system is unaffordable now becomes even more implausible. This is because allowing the national debt to grow with GDP creates significant additional financial space that can be used to cover any prospective future shortfall in Social Security contributions. Second, in the immediate short term, it provides space to finance investments in public education, infrastructure, and health. This is particularly important right now given that monetary policy appears to be reduced to pushing on a string, making expansionary fiscal policy all the more important.

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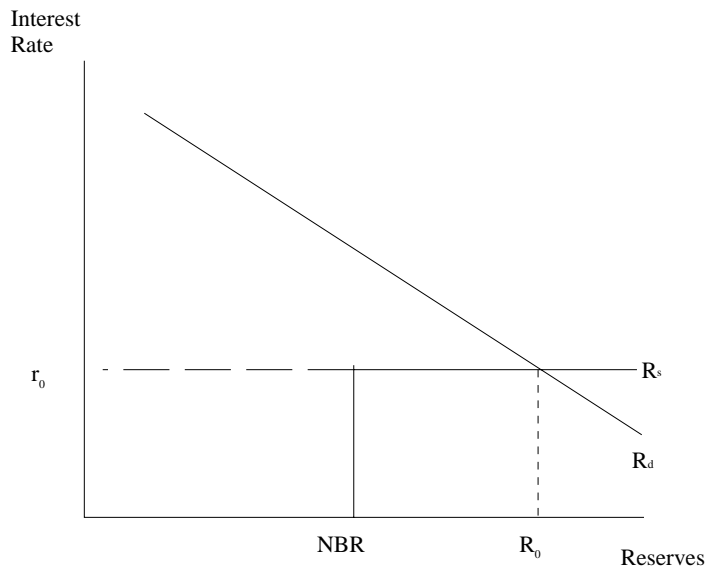


Figure 1 The workings of a Lombard System.