Fiscal austerity was the wrong agenda before the crisis and it is even more wrong now.

Fiscal conservatives are opportunistically looking to use the recession induced spike in the budget deficit to revive their crusade for fiscal austerity. The case for fiscal austerity is based on flawed economic analysis and it is not supported by thoughtful budget analysis. It was the wrong agenda before the crisis and it is even more wrong now.

Though there is understanding of the need for budget deficits to provide short-term Keynesian fiscal stimulus, there is little understanding of the medium-term need for budget deficits to facilitate the process of private sector deleveraging and to restore growth.

The U.S. economy needs a new engine of growth and deficit-financed public investment has an important role to play. Deficit financed investment can create a "virtuous" circle whereby public investment spurs growth, in turn improving the budget outlook. The fiscal austerity agenda risks creating a "vicious" circle in which austerity slows growth, necessitating further austerity.

The budget numbers show the U.S. has a health care cost problem rather than a budget deficit problem. Fiscal austerity does not solve the health care cost problem and it also risks undermining growth. That makes fiscal austerity economic malpractice.

Finally, the politics of fiscal austerity does a double disservice. First, it pushes public understanding in the wrong direction by presenting government as the problem when the crisis has shown it is the private sector that has failed and needs reform. Second, by misleading the public it opens the door for all sorts of policy mischief - most notably cutting Social Security.

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Déjà vu all over again

The U.S. economy is still struggling to find a bottom in face of the deepest recession since the Great Depression of the 1930s. The recession is due to massive financial excess within the private sector. Yet, even as the recession rages, much of the economic policymaking community is already back to arguing government is the problem in the form of massive budget deficits that threaten future financial stability.

Budget deficit alarmism has been a perennial feature of the Washington policy landscape for the past thirty years, and the return of budget deficit alarmism represents a case of “déjà vu all over again.” The push for fiscal austerity was the agenda of Concord Coalition Republicans and Hamilton Project New Democrats long before the crisis, and these groups have now opportunistically seized on the crisis-induced spike in the budget deficit to revive that agenda. With economic policy largely controlled by former Hamilton Project personnel, there is a grave risk the Obama Administration could go along with this renewed alarmism.

The fiscal austerity program is rooted in wrong-headed economic analysis. It was the wrong economic agenda before the economic crisis, and it is even more wrong in light of the deep economic weaknesses the crisis has revealed.

Not only is fiscal austerity the wrong economic agenda, it is also the wrong political agenda. At a time when the nation is trying to recover from three decades of laissez-faire excess, the fiscal austerity agenda revives neo-liberal anti-government sentiment by presenting profligate government as the problem. The real problem is flawed market arrangements that have promoted income inequality and financial excess that has undermined shared prosperity and can no longer deliver growth.

The fiscal austerity message does triple damage. First, it makes reform of existing flawed market arrangements more difficult by misdirecting public understanding and saying government is the source of problem. Second, it uses budget deficits as a “Trojan Horse” for launching an assault on vital public programs - including Social Security, Medicare, and spending on education and public infrastructure. Third, it threatens to create a fiscal austerity trap in which fiscal austerity lowers growth, thereby lowering tax revenues and necessitating more austerity.

Fiscal conservatives claim that closing the budget deficit represents “fiscal responsibility.” That claim is absolutely wrong. The reality is fiscal austerity under current circumstances would constitute “fiscal irresponsibility.” The U.S. likely confronts an extended period of economic weakness in which budget deficits will be needed to ensure adequate aggregate demand (AD).

Budget deficits also have an important role to play in spurring growth. The old growth model, based on debt and asset price inflation, is broken. That calls for a new growth model in which deficit-financed public investment should be a central part.
The economic crisis has discredited neo-liberal economics. It should also have discredited the neo-liberal obsession with fiscal austerity. The fact that the fiscal austerity agenda has managed to regain traction so easily shows how deeply ingrained are the misunderstandings of neo-liberal economics, and how far there is to go to establish a new healthier economic conversation.

II The role of budget deficits in combating recessions
One reason for the revival of the fiscal austerity agenda is the spike in the budget deficit due to the recession and financial crisis. Fiscal conservatives have opportunistically seized upon this as further proof of government profligacy, yet the reality is the recession would have been far worse if policy had not allowed the deficit spike.

The recession is due to a fall in AD caused by a sharp decline in private sector spending. That decline was itself due to a collapse of consumer and business confidence, destruction of household wealth due to the implosion of the house-price bubble, and contraction in the supply of credit caused by the banking crisis.

The budget deficit increased in response to these developments through a combination of reduced tax revenues, increased government spending including the financial sector bailout, and increased transfers (such as unemployment insurance) from government to households. This increase in the deficit prevented a financial sector collapse and offset the fall in AD, thereby helping maintain employment and income.

These developments represent a validation of Keynesian economics. In a slump, the private sector is either unwilling or unable to spend, resulting in a demand shortfall. If that shortfall is not plugged, employment and output fall. The way to plug the shortfall is for the public sector to step in with policies that increase demand such as increased spending, tax cuts, and transfers. As shown in Technical Box 1, such policies serve to sustain aggregate spending and economic activity, thereby helping a recovery of confidence and lending that can restore private sector demand.
In response to recessions, responsible fiscal policy calls for increasing the budget deficit at a time when the deficit is already automatically increasing because of reduced tax revenues. Yet, many fiscal conservatives are using public misunderstanding of deficits, built up over the last three decades, to argue for immediate fiscal austerity. That call poses a danger that premature reversal of fiscal stimulus and a shift to fiscal austerity could trigger a second leg to the recession. In this regard, history holds lessons. In 1937, in the midst of the Great Depression, the Roosevelt administration succumbed to political pressure to reduce the government deficit, causing a second recession.

III The role of budget deficits in helping deleveraging

The short-run role of deficits in combating recession is reasonably well-understood by many policymakers and journalists. However, less well understood is the medium-term role of deficits in combating debt over-hangs and re-building private sector balance-sheets.

The current recession is not a normal recession. Instead, it is a balance-sheet recession brought about by two decades of financial excess. The private sector is over-borrowed and must now deleverage, which has amplified the fall in demand by causing additional saving to repay debt.

Budget deficits have an important role to play in facilitating the deleveraging process so that it does not produce massive economic contraction. A feature of monetary economies is that for every seller there must be a buyer and for every saver there must be a taker. This argument was recognized long ago by James Tobin (1963) in his discussion of budget deficits. Private sector deleveraging represents an attempt to rebuild financial net worth and it involves increased saving to pay down debt. The important implication is that the private sector as a whole is trying to save more out of income than it is willing to invest.

In this event, the private sector must find a taker for that extra saving. One possibility is that the private sector sells to foreigners (i.e. increases exports) and saves by accumulating foreign assets. However, that requires increased
exports, which is difficult in the current environment of globally weak demand and "export-led growth" policies that many foreign countries have adopted.

A second possibility is for government to run budget deficits so that private sector saving is directed into government bonds. This enables the private sector to build up its financial wealth, but there is no adverse impact on aggregate demand because deficit spending offsets private sector saving.

This logic is illustrated in Technical Box 2. The critical Keynesian insight is that if the private sector wants to save more than it wants to invest and no party is willing to take that savings and spend it, national income will contract and force private sector net saving into alignment with deficit spending plus net exports. That will worsen the effect of the debt over-hang by deepening the economic contraction and slowing the de-leveraging process of restoring balance-sheet health.

**Technical Box 2.** Economic theory says that every saver requires a taker. Thus, if the private sector wants to build up its net financial asset position it must either sell to foreigners or lend to the public sector. If it cannot find takers for its saving the excess saving will cause income to contract, which will reduce saving and restore balance.

The requirement that every saver have a taker implies:

Private sector net saving = Public sector borrowing + Net foreign asset accumulation,

or \( S - I = (G - T) + (X - M) \)

where \( S \) denotes gross private sector saving; \( I \) private sector investment; \( G \) government spending; \( T \) tax revenues; \( X \) exports; \( M \) imports. Deleveraging has caused a massive increase in \( S \) as the private sector tries to restore its balance sheet. \( I \) is weak because of weak demand. So too is \( X \) because of the global recession. That means government must borrow (i.e. run a deficit) or else there will be sustained income contraction. This logic is captured in the figure below. Private sector saving has increased \( (S_t > S_0) \). Absent any other changes, income contracts \( (y_t < y_0) \). However if government increases its deficit \( (G_t - T_t > G_0 - T_0) \), then government can take the private sector’s saving, offset its effect on demand, and support income \( (y_t > y_0) \).

![Graph of private saving, public deficit plus trade balance vs income](image)

This logic means that at a time of sharply increased private sector desire to save, weak domestic investment demand, and weak global demand for exports, the public sector has a vital role in helping the private sector deleverage so as to avoid a huge contraction in income. Having the public sector step-in and run deficits that absorb excess private sector net saving can accelerate the process of restoring private balance sheets, thereby accelerating the return to more normal growth.

**IV Economic growth and deficit-financed public investment**

Another area in which the affirmative role of budget deficits is not adequately appreciated concerns economic growth. In this regard, there is an extensive economic literature that documents how public capital formation can make a large positive contribution to growth (Aschauer, 1989; Munnell, 1990). The economic logic is that public capital - such highways, airports, and other infrastructure - has a multiplier effect that raises the productivity of
private capital. Additionally, public capital can contribute to a higher standard of living and improved quality of life by saving individuals' time.

This positive growth effect means deficit-financed public investment can create a "virtuous circle" as is illustrated in Figure 1. The logic of the circle is as follows. Deficit financed public investment raises demand and private sector productivity. That raises growth which generates higher income and tax revenue. That in turn creates fiscal space, helping resolve the long-term budget concerns that fiscal conservatives are worried about. In contrast, a fiscal austerity agenda could transform that pattern into a vicious circle. Thus, fiscal austerity would lower public investment, thereby lowering growth, reducing fiscal space and compelling more fiscal austerity.

Figure 1. The “virtuous” circle linking growth and deficit financed public investment.

This vital contribution of deficit-financed public investment to growth is missing in the budget policy debate, and it is doubly troubling given the widely acknowledged weak extended economic outlook. The Obama administration has rightly argued for classic Keynesian policy whereby fiscal stimulus temporarily fills in for a shortfall of private sector AD. The goal is to support demand and "pump prime" the private sector, setting the stage for a revival of growth. However, the current recession is different from past recessions in that it marks the end of an era of growth based on debt and asset price inflation (Palley, 2009). The old growth model is broken, which means pump priming will not be enough because the well is dry.

That means there is need for a new growth strategy to which deficit-financed public investment can make a significant contribution. Consequently, not only are deficits justified in the shorter term to provide fiscal stimulus and help with the deleveraging process, they are also needed in the longer term to finance public investment that contributes to reviving growth.

The combination of thirty years of neglect of the public capital stock and collapse of the neo-liberal growth model make the current moment the right time to increase public investment. This will create jobs in a time of recession and install public capital that will increase income in future when the nation will face the increased obligations that go with an older population.

V Other economic arguments for budget deficits

In addition to the above arguments there are several financial and inter-generational equity arguments for long term budget deficits. First, government bonds perform an important financial function, providing a safe, liquid store of value that acts as collateral and helps determine the pure risk-free interest rate. Ensuring a supply of bonds that grows with the economy needs a non-zero deficit. A budget surplus would mean declining debt, while a balanced budget implies no deficit and constant debt which means the debt-to-GDP ratio must fall to zero over time as GDP grows.

Second, balanced budgets and surpluses would create significant problems for our current monetary system. A growing economy requires a growing money supply in order to avoid the adverse effects of deflation. Under current
arrangements, the Federal Reserve validates the creation of money by purchasing government bonds. However, if the bond supply was contracting this would become increasingly difficult to do.

Third, as noted earlier in the section III, budget deficits facilitate private sector financial wealth accumulation. Budget surpluses are a permanent tax on the private sector that drains it of financial wealth. Rather than increasing private investment, sustained planned budget surpluses will decrease investment. This is a critical point that casts in doubt the entire economic logic of the fiscal austerity argument.

Fourth, much government spending is on long-lived human and physical capital that provides benefits long into the future. This capital includes education, infrastructure, public buildings, defense equipment, and publicly financed R&D that adds to the stock of knowledge. Just as households and businesses borrow to finance long-lived capital investments, so too there is reason for government to borrow to finance such investments so that payment is matched against future use.

Fifth, much of the benefit from long-lived public capital expenditures will accrue to future generations who will also have higher incomes due to increased productivity. That suggests it is appropriate for future generations to contribute to their cost. This can be done by financing public capital expenditures with debt that future generations pay back, thereby contributing their share.

VI Do deficits pose an immediate inflation and interest rate threat?

A major claim of fiscal conservatives is that budget deficits increase inflation and interest rates. Though there are circumstances in which that can be true, in the current economic environment budget deficits pose neither an inflation nor interest rate threat.

Currently, the U.S. economy is characterized by significant demand shortage and massive excess capacity, as reflected in low rates of capacity utilization and high rates of unemployment. In this environment, where unused productive resources are plentiful, increased deficit-financed government spending will not cause inflation.

With regard to interest rates there is also little danger. Interest rates are determined by demand and supply in the bond market. The conservative argument is budget deficits add to the supply of bonds, which drives interest rates up in order to entice buyers for the increased supply.

However, on the demand side there are now several favorable factors:

a) First, there has been a big increase in household saving reflecting a combination of precautionary saving, wealth re-building, and a return to long-run patterns of saving from saving rates that were abnormally low. This increased saving has increased demand for bonds, which will keep interest rates down.

b) Second, the Federal Reserve has lowered the short-term interest rate that it controls, which has lowered yields on financial investments such as money market funds. That has caused wealth-holders to shift their portfolio demands toward bonds, which now have a relatively attractive yield compared to money market funds and bank deposits. This too will keep rates down.

c) Third, the Federal Reserve has signaled that it expects short-term interest rates to remain low for an extended period because it anticipates a weak and anemic recovery. That too will increase demand for bonds. Indeed, both the U.S. and global economy may have entered a new secular period in which interest rates are permanently lower because structural weakness in global demand.

d) Fourth, the Federal Reserve has been a large buyer of bonds as part of its "quantitative easing" monetary policy. Given the absence of an inflation threat owing to the existence of extensive excess capacity, the Federal Reserve has room to continue this policy. That again will keep bond rates down by providing additional demand for bonds.

On the supply side, there are also favorable factors. Though government issuance of bonds is up, consumer borrowing is down and consumers are actually repaying debt. Moreover, given the experience with excess leverage, consumer borrowing looks like it will be subdued for an extended period. This will dampen bond supplies, creating room for government to issue bonds without increasing interest rates.

For twenty-five years fiscal conservatives have argued budget deficits cause higher interest rates. Yet, empirically,
it is nearly impossible to find an effect of budget deficits on interest rates after controlling for Federal Reserve monetary policy and economic conditions. The implication is current conditions provide room for large deficits without any adverse effect on interest rates.

If there is a long-run threat to interest rates, it will only emerge after the economy has returned to full employment and households have restored their balance-sheets. That is a future problem that is not helped by fiscal austerity now. Indeed, fiscal austerity now could prevent a return of full employment by undermining demand and impeding the deleveraging process, and that could worsen the long-run fiscal outlook by lowering growth, reducing tax revenues, and raising budget deficits.

That said, there is one current danger to interest rates. This danger is bond market vigilantism whereby bond holders sell bonds owing to mistaken understanding of the true economic situation. Thus, if bond holders believe current budget deficits inevitably entail higher inflation and higher interest rates, they may sell now to avoid future losses. This is an instance when bad economic theory can cause self-fulfilling economic outcomes. Ironically, deficit alarmism invoked by fiscal conservatives actually encourages this vigilante trap.

For the time being, economic fundamentals appear sufficiently weak to keep the bond market vigilantes at bay. However, there is a perennial danger that economic recovery may be truncated by bond market vigilantism that causes a spike in interest rates that kills growth. That makes bond market vigilantism the one real and present threat to the immediate interest rate outlook.

**VII Budget deficits, fiscal policy and the crowding-out fallacy**

The belief that budget deficits drive up interest rates is part of a family of arguments known as "crowding-out." These crowding-out arguments repeatedly appear in both the media and policymaking circles even though they are fundamentally flawed.

One type is "financial crowding-out," the argument being that budget deficits raise interest rates which in turn lower (i.e. crowd-out) investment.[1] This argument is flawed on two grounds. First, there is little evidence that budget deficits raise interest rates. Second, budget deficits raise demand and income and higher income likely raises investment. Thus, far from "crowding-out" investment, budget deficits likely "crowd-in" investment.

A second type of crowding out is "perfect offset" which claims private households perfectly and fully offset government activity so that government has no effect on economic activity. Thus, if government increases spending by a dollar, private households decrease their spending by a dollar. Similarly, if government lowers taxes by a dollar, private households increase saving by a dollar.

This perfect offset argument relies on implausible assumptions. For instance, for government spending to fully displace private spending it must be a perfect substitute, which is like saying roads and bridges are a perfect substitute for shoes. For tax rebates to be one hundred percent saved households must have no need for extra liquidity today and must believe they are fully on the hook for future tax increases exactly equal to the amount they receive today. These arguments have been theoretically (see Haliassos and Tobin, 1990) and empirically (see Auerbach and Gale, 2009) discredited.

Interestingly, the perfect offset argument is also inconsistent with financial crowding out since the former claims budget deficits have no effect on overall economic activity or interest rates. Moreover, it also claims budget deficits can be any level up to one hundred percent of GDP because they have no effects. That position is implausible, which casts grave doubt on the entire argument.

A third type of crowding-out is known as the "Treasury view." This view was popular with the British Treasury in the 1930s and was invoked against Keynes in the Great Depression. The argument is the economy has a fixed amount of resources and if government claims more that means less for the private sector. The modern incarnation of this Treasury view is the twin deficit hypothesis, the claim being in a globalized world, increased government spending or tax cuts just suck in more imports (i.e. increases the trade deficit) with no effect on economic activity.

The fallacy of the Treasury view is it assumes the economy is at full employment so that no resources are available to increase production. However, if the economy has unemployment and unused capacity, resources are available.
Budget deficits that increase demand can then cause those resources to be put back to work. Consequently, in the presence of unemployment, budget deficits can increase output.

The fourth and most primitive type is "credit crowding out." This is more of a layman's argument but it can be viewed as the monetary twin of the Treasury view. It holds that the supply of money credit is fixed, so that government borrowing leaves less credit for private sector borrowers. However, the reality is money credit is infinitely expandable in our system of fiat money. The critical constraint is not the quantity of money credit, but rather the Federal Reserve's base interest rate that significantly influences the cost of money credit.

VIII Other incorrect arguments of fiscal conservatives
Along with the fallacies of crowding-out, fiscal conservatives also make a number of other incorrect arguments.

(a) The fallacy that governments and households are the same.

One such error is inappropriate and inaccurate comparison of households and government. With regard to inaccuracy, fiscal conservatives often rail against budget deficits on the grounds that government is living outside its budget constraint in a way that households do not. This claim is clearly wrong since households also run deficits, as evidenced by household borrowing - especially to finance large expenditures like home and auto purchases and educational expenses.

Beyond this, having government mimic household behavior (i.e. cut spending when income is down) would destabilize the economy by making the budget pro-cyclical. Government has special financial powers to issue money and bonds that households do not, and sensibly using that power can stabilize the economy. In particular, government can use that power to offset swings of private sector demand. It does so by increasing budget deficits in bad times and reducing them in good times. Fiscal conservatives, who recommend government mimic households, would have government cut spending in recessions when households also cut back, which would deepen recessions.

(b) The fallacy that budget surpluses increase investment.

Another fiscal conservative error is the claim that government surpluses increase capital accumulation (De Long, 2008). This argument is a variant of the Treasury view. The thinking is that if budget deficits drain the pool of saving and lower investment, surpluses add to the saving pool and raise investment. Such thinking reflects a mistaken view of the economy as an agricultural "corn" economy in which corn must be saved (saving) to be planted (investment). The reality is we inhabit a monetary production economy in which industrial production takes place in response to money orders.

The fiscal conservative error follows from interpreting accounting identities as causal explanations. The national income accounting identity (for a closed economy) states the following:

\[ [Taxes - Government spending] = [Investment - Saving] \]

This makes it look as if increased budget surpluses, T - G, increase investment. However, basic Keynesian logic shows if government sets out to run a surplus by increasing T or decreasing G, it will decrease demand causing output to fall. Aggregate investment and saving will then tend to fall, leaving them both lower.

At the financial level, a permanent surplus is a form of permanent tax on the private sector that drains it of financial wealth (see Technical Box 2). The government is effectively building up its wealth at the expense of the private sector, which is deflationary.

In practice, low household saving and increased consumption spending generate budget surpluses by increasing income and tax revenues. That was the lesson of the U.S. experience in the 1990s. Increased consumption spending on "domestically produced" goods also stimulates investment by getting firms to invest more.

Fiscal conservatives and mainstream economists have lost sight of this commonsensical Keynesian logic, which is why they are continually offering contradictory advice. On one hand they recommend more household saving, yet
on the other hand they also recommend more consumption spending to maintain growth. Harvard professor Ken Rogoff (2009), a leading fiscal conservative, exemplifies this confused thinking. At the same time as advocating fiscal austerity and higher household saving to increase growth, Rogoff argues that economic growth after the crisis will be permanently lower because of lower consumption spending:

"U.S. consumption, the single biggest driver of global growth, is surely headed to a lower level, on the back of weak housing prices, rising unemployment, and falling pension wealth. During the boom, U.S. consumption rose to 70% of GDP. In the wake of the crisis, it could fall towards 60%." (Rogoff, 2009)

Such contradictory thinking is common among mainstream economists and the media.

(c) The twin deficits fallacy

A third fiscal conservative canard is the so-called "Twin Deficits" hypothesis that blames the trade deficit on the budget deficit. The trade deficit has always been unpopular because of its impact on manufacturing and it has played a huge role in fostering the crisis (Palley, 2009). Fiscal conservatives seek to harness this unpopularity to push fiscal austerity by arguing budget deficits cause trade deficits.

By now, the twin deficits hypothesis ought to be thoroughly discredited by the evidence. Germany and Japan have both persistently run large budget deficits and trade surpluses. The U.S., in the 1990s, ran record budget surpluses and record trade deficits. In the current recession, the U.S. trade deficit has fallen at the same time the budget deficit has hit new record highs.

At the theoretical level, budget deficits have a second order impact on trade deficits, and trade deficits are principally determined by other factors such as exchange rates. Moreover, trade deficits can cause budget deficits. This is because trade deficits cause leakage of spending on imports out of the economy. That lowers demand for domestic production, which lowers output and income, in turn causing lower tax revenues.

Despite this, the twin deficit hypothesis is back. For instance, Fred Bergsten, Director of the Peterson Institute for International Economics, writes:

"There is a very strong case for initiating, and maintaining, preventive policies that will limit the external imbalances of the United States to a modest (perhaps 3 percent) share of GDP. This could be achieved by running the economy at subpar rates of growth on a continuing basis but that is obviously undesirable.... The only prudent alternative is to run a responsible fiscal policy, including at least modest surpluses in periods of above-normal growth. " (Bergsten, 2009, p.9)

In similar vein, Harvard University professor Martin Feldstein writes in the Wall Street Journal (July 25, 2009)

"A large fiscal deficit increases the need for foreign funds to avoid crowding out private investment.... Unfortunately, the U.S. fiscal deficit is projected to remain high for many years....That would mean the U.S. would continue to need substantial inflows of foreign capital to fund business investment and housing construction."

There is neither empirical nor theoretical support for these claims, yet they persist. The reality is the trade deficit is the result of the flawed model of U.S. international economic engagement (Palley, 2009), which should be focus of trade deficit adjustment. But that cannot be acknowledged by fiscal conservatives as it brings into question their parallel agenda of corporate globalization.

(d) The fallacy that China should determine U.S. budget deficit policy

A fourth and final argument for budget austerity, made by Eichengreen (2009), is that the U.S. needs to cut its budget deficit to placate China, which is a big holder of bonds. This argument effectively has China stepping in to
play role of bond market vigilante, thereby forcing U.S. government budget policy to capitulate to the Chinese government's investor sentiment. However, there are several objections to this argument.

First, though China has the ability to cause financial disruption, its own self-interest mitigates against this. Large-scale bond sales would inflict enormous capital losses on China. Moreover, to the extent bond sales drove up interest rates and damaged the U.S. economy that would rebound and damage the Chinese economy. This is because economic contraction in the U.S. reduces U.S. demand for Chinese exports, which hurts China's economy. Given China's dependence on exports for jobs and growth, it is unlikely it would engage in actions that sabotage the U.S. market and risk roiling the global economy. That means fears of a large-scale Chinese bond sell-off are misplaced and Chinese talk of such a possibility is rhetorical saber-rattling.

Second, the Federal Reserve could step-in and buy bonds if China exits. Such actions would be similar to the quantitative easing the Fed has already undertaken to combat the recession, whereby it has bought hundreds of billions of dollars of Treasury bonds. Third, in dire circumstances that threaten economic stability, the U.S. could impose administrative restrictions that freeze Chinese holdings and prevent sales.

IX What is a sustainable budget deficit?
The previous sections have presented the theoretical case for budget deficits, including refutation of fiscal conservative arguments for fiscal austerity. That in turn raises two pragmatic questions. First, what is a sustainable level of federal debt and budget deficits that the U.S. economy could support? Second, where does the current projected extended budget outlook stand relative to that sustainable level?

By themselves, both the federal debt and budget say little. Instead, their true significance depends on the size of the deficit and public debt relative to GDP. From that perspective, a sustainable debt is one that keeps the debt-to-GDP ratio constant, which requires the debt to grow at the same rate as GDP.

A sustainable deficit is one that is consistent with a sustainable debt. It cannot be too large or else the debt ratio will grow, and it cannot be too small or else the debt ratio will fall. Given this, the level of the sustainable deficit depends on (1) the growth rate of GDP and (2) the target debt-to-GDP ratio. Faster GDP growth supports a higher sustainable deficit because the sustainable debt can grow faster, which means the deficit can be larger. This logic highlights the critical significance of growth for fiscal sustainability, linking back to earlier arguments regarding the importance of public investment.

Table 1 reports calculations of the sustainable deficit using alternative assumptions about the target debt-to-GDP ratio and rate of growth. Doubling the rate of growth of GDP doubles the rate at which the debt can grow, and it also doubles the sustainable deficit.

For instance, assuming a target debt-to-GDP ratio of 50 percent (i.e. approximately the current ratio) and a 1.5 percent growth rate, the permanent sustainable deficit is 0.75 percent of GDP. If the growth rate rises to 3 percent, the sustainable deficit rises to 1.5 percent of GDP.
If the target debt-to-GDP ratio is 75 percent, a 1.5 percent growth rate supports a permanently sustainable deficit of 1.125 percent of GDP. A 3 percent growth rate supports a 2.25 percent permanently sustainable deficit.

The other dimension of deficit sustainability is the impact of deficits on the interest burden. Deficits add to debt and debt imposes interest costs on the budget. Table 2 shows the interest burden of alternative debt-to-GDP profiles. If the real interest rate is one percent, a 75 percent debt-GDP ratio imposes a budget cost equal to 0.75 percent of GDP. If tax revenues are 20 percent GDP, that burden is equal to 3.75 percent of tax revenues, which is supportable.

Table 2. The interest burden of alternative debt/GDP profiles assuming tax revenue equals 20 percent of GDP.

<table>
<thead>
<tr>
<th>Real Interest rate (%)</th>
<th>Debt/GDP</th>
<th>Interest cost/ GDP (%)</th>
<th>Interest cost/ Tax revenue (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>50%</td>
<td>0.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td>75%</td>
<td>0.75%</td>
<td>3.75%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>1%</td>
<td>5</td>
</tr>
<tr>
<td>2%</td>
<td>50%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>75%</td>
<td>1.5%</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>2%</td>
<td>10</td>
</tr>
</tbody>
</table>

If the real interest rate is two percent, a 75 percent debt-GDP ratio imposes a budget cost equal to 1.5 percent of GDP. If tax revenues are 20 percent GDP, that burden is equal to 7.5 percent of tax revenues, which is again supportable.

**X Is the current budget outlook sustainable?**

Table 1 provides measures of the sustainable deficit under alternative economic scenarios. That leads to the second question whether the current actual budget outlook is sustainable or not. For this purpose assume the maximum tolerable debt-to-GDP ratio is 75 percent, a level that was shown to yield reasonable outcomes in Tables 1 and 2.
The most recent Congressional Budget Office budget outlook (August 2009) projects the publicly held debt, as a percent of GDP, will increase from 53.8 percent in 2009 to 67.8 percent in 2019. If the real interest rate is 2 percent the interest cost of the debt in 2019 will be 1.36 percent of GDP. If tax revenues are 20 percent of GDP, the interest cost will be 6.8 percent of tax revenues. These calculations show the existing ten year budget outlook is sustainable and there is even room to increase deficit spending to finance public investment since the debt-to-GDP ratio in 2019 will be below the 75 percent threshold.

What about the sustainability of longer term budget projections? Here, the answer is more nuanced and sustainability will require sensible tax policy and health care cost containment.

The Center for Budget and Policy Priorities (Kogan et al., 2008) reports that at the end of 2008, based on then current policy, the debt-to-GDP ratio was predicted to rise from 46 percent in 2009 to 279 percent in 2050. That increase is equivalent to a projected average annual deficit over the next 40 years of 4.2 percent of GDP. These estimates remain little changed.

On the face of it these are daunting and unsustainable numbers. However, reading below the headline reveals a starkly different picture as shown in Table 3. First, if the Bush - Cheney tax cuts from 2001 and 2003 are allowed to expire in 2010, the 40 year projected average annual deficit drops by 1.9 percent of GDP to 2.3 percent of GDP. Those tax cuts were part of the failed Bush - Cheney growth agenda and they should now be jettisoned as required under current law.

Second, the reality is that the bulk of the deterioration in the budget deficit outlook is explained by excessive health care cost growth. If health care cost growth is held equal to per capita GDP growth, the deficit drops another 3 percent of GDP and the projected long-run average annual budget outcome becomes a surplus of 0.7 percent of GDP. If we are less successful on health care cost control and cost growth is held equal to “per capita GDP plus one percent,” the deficit only drops by 1.5 percent of GDP. That would imply an average annual deficit of 0.8 percent, which is still completely manageable.

Putting the pieces together, Table 3 shows the real problem is health care costs, but that is a problem which is not solved by fiscal austerity. Instead, it needs health care cost reform. Moreover, even without health care cost containment, simply eliminating the Bush - Cheney tax cuts puts the budget projections close to sustainability. Such a picture does not support budget deficit alarmism.

**XI Conclusion**

The U.S. economy faces a difficult period of transition and renewal following the deep recession caused by the
bursting of the house-price bubble and the ensuing financial crisis. Whereas there is widespread understanding of the need for budget deficits to provide short-term Keynesian fiscal stimulus to combat the recession, there is far less appreciation of the need for budget deficits in the medium term to facilitate the process of private sector deleveraging and to spur growth.

The demise of the bubble economy means the U.S. needs a new engine of growth and deficit-financed public investment has an important role to play. Deficit financed investment can create a "virtuous" circle whereby public investment spurs growth which in turn will improve budget outcomes. In contrast, fiscal austerity risks creating a "vicious" circle in which austerity slows growth, necessitating further austerity.

The budget numbers show the U.S. has immediate fiscal space for a public investment agenda. Longer term, the budget outlook is more problematic but that is due to health care costs. Fiscal austerity does not solve the health care cost problem and it also risks undermining growth which would further weaken the fiscal outlook. That makes fiscal austerity economic malpractice.

References

[1] The financial crowding-out argument was popular among monetarists and was discredited in the debate between monetarists and Keynesians (Tobin and Buiter, 1976; Friedman, 1978). However, it persists in the media.