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Working Paper No. 488

Demand Constraints and Big Government

by

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January 2007

. *I thank Yeva Nersisyan for able and essential research assistance.

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Demand Constraints and Big Government

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In a series of articles and books, Harold Vatter and John Walker attempted to make the

case that the U.S. economy suffers from chronically insufficient demand that leads to

growth below capacity. Of particular interest are a 1989 Journal of Post Keynesian

Economics article that extends Domar's work on the supply side effects of investment

spending and a 1997 book that provides a comprehensive analysis of the evolution of the

U.S. "mixed" economy. Their analysis of secular growth complements the well-known

writings of Hyman Minsky, who also emphasized the role of the "big government" and

the "big bank" in stabilizing an unstable economy over the cycle. This article will

summarize, provide support for, and extend the Vatter and Walker approach, concluding

with an examination of some of the dangers facing the U.S. economy today. As

appropriate, the ideas of Minsky will be used to supplement the argument.

Keywords: Demand Constraints, Economic Growth, Domar, Vatter and Walker, Sectoral

Balances

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¹ I thank Yeva Nersisyan for able and essential research assistance.

1

A SUMMARY OF VATTER AND WALKER'S MAIN THESES

In a series of articles and books, Harold Vatter and John Walker attempted to make the case that the U.S. economy suffers from chronically insufficient demand that leads to growth below capacity. Of particular interest are a 1989 Journal of Post Keynesian Economics article that extends Domar's work on the supply side effects of investment spending and a 1997 book that provides a comprehensive analysis of the evolution of the U.S. "mixed" economy. Their analysis of secular growth complements the well-known writings of Hyman Minsky, who also emphasized the role of the "big government" and the "big bank" in stabilizing an unstable economy over the cycle. This article will summarize, provide support for, and extend the Vatter and Walker approach, concluding with an examination of some of the dangers facing the U.S. economy today. As appropriate, the ideas of Minsky will be used to supplement the argument.

In the *General Theory*, Keynes had addressed the demand-side effects of investment: rising investment generates income that in turn induces consumption spending. Keynes singled out investment as the major "autonomous" component of spending, as it is focused on future sales and expected profits over the life of the plant and equipment. Hence, fluctuations of investment "drive" the economy. Because Keynes was most interested in explaining the determination of aggregate output and employment at a point in time, he tended to hold constant the productive capacity of the economy. Whether the economy was operating at full capacity or with substantial excess capacity could then be attributed to the level of effective demand, itself a function of the quantity of investment.

If the economy were operating below full capacity, then the solution would be to raise effective demand—either by encouraging more investment, or by increasing one of the other components of demand. After WWII, "Keynesian policy" came to be identified with "fine-tuning" of effective demand, accomplished through various investment incentives (tax credits, government-financed research and development, countercyclical management of interest rates) and countercyclical fiscal policy. In practice, policy tended to favor inducements to invest over discretionary use of the federal budget—indeed, "more investment" has been the proposed solution to slow growth, high unemployment,

low productivity growth, and other perceived social and economic ills for the entire postwar period.

However, Domar had already recognized the problem with such a policy bias at the very beginning of the post-war period. When we turn to the subject of economic growth, it is not legitimate to ignore capacity effects as investment proceeds. Not only does investment add to aggregate demand, but it also increases potential aggregate supply by adding plant and equipment that increase capacity. To be more precise, a portion of gross investment is used to replace capital that is taken out of service (either because it has physically deteriorated, or because of technological obsolescence), while "net investment" adds to productive capacity. Further, note that while it takes an increase of investment to raise aggregate demand (through the multiplier), a constant level of net investment will continually increase potential aggregate supply. The "Domar problem" results because there is no guarantee that the additional demand created by an increase of investment will absorb the additional capacity created by net investment. Indeed, if net investment is constant, and if this adds to capacity at a constant rate, it is extremely unlikely that aggregate demand will grow fast enough to keep capital fully utilized. This refutes Say's Law, since the enhanced ability to supply output would not be met by sufficient demand. As such, "more investment" would not be a reliable solution to a situation in which demand were already insufficient to allow full utilization of existing capacity.

Vatter and Walker carried this a step further, showing that after WWII, the output-to-capital ratio was at least one-third higher than it had been before the war (Vatter and Walker 1989). Due to capital-saving technological innovations, it takes less fixed capital per unit of output so that the supply-side effects of investment will persistently outpace the demand-side multiplier effects (for example, as a constant level of net investment adds to capacity at a rising rate). The only way to use the extra capacity generated by net investment is to increase other types of demand. These would consist of household spending (on consumption goods, as well as residential "investment"), government spending (federal, state, and local levels), and foreign spending (net exports). For reasons to be explained below, Vatter and Walker believed that growth of government spending would normally be required to absorb the capacity created by

private investment. Indeed, they frequently insisted that government spending would have to grow at a pace that exceeds GDP growth in order to avoid stagnation (Vatter and Walker 1983, 1989, 1997).

This should not be interpreted as endorsement of Keynesian "pump-priming" to "fine-tune" the economy. Indeed, Hansen had previously demonstrated that pumppriming would fail (Vatter and Walker 1997). If government increases its spending and employment in recession, raising aggregate demand and thus, economic activity, only to withdraw the stimulus when expansion gets underway, will simply take away the jobs that had been created, restoring a situation of excess capacity. The larger the government, the harder it becomes to cut back spending because jobs, consumption, income, and even investment all depend on the government spending. According to Vatter and Walker, in a well-run fiscal system, government spending will rise rapidly when investment is rising (to absorb the created capacity), and then will still rise rapidly when investment falls (to prevent effective demand from collapsing). They call this a "ratchet"—rather than countercyclical swings of government spending, "government as a share of the economy should rise indefinitely" (Vatter and Walker 1997). Adolf Wagner had argued that economic development leads to industrialization and urbanization, which generates an absolute, as well as a relative, increase in the demand for more government services (of course, J.K. Galbraith made a similar point). Hence, for political and socioeconomic reasons, government should grow faster than the economy. If it does not, not only will this leave society with fewer publicly provided services than desired, but it will also generate stagnation through the Domar problem.

These arguments concerning secular trends can be supplemented by the Kalecki/Minsky analysis of the role of government over the cycle. Aggregate profits are equal to investment, plus the government deficit, plus the current account surplus, plus consumption out of profit, and less saving out of wages. When investment falls, profits fall. As Minsky (1986, 1993) put it, past investment undertaken on the expectation of future profits cannot be validated at the lower level of investment, depressing current investment, and further lowering profits through a process of cumulative causation. In a big government economy with a budget that automatically swings in a counter-cyclical manner, deficits are created that attenuate effects on profits. Capital-saving innovations

increase the capacity effects of investment, thus, so long as investment remains above replacement levels, potential aggregate supply rises. To utilize this new capacity, aggregate demand must increase even though investment has fallen to a lower level. Unless another source of demand fills the gap, the government's budget must become more stimulative. This is more easily accomplished with a bigger government because of the larger potential swings of its budget balance relative to the size of the economy as a whole. Minsky argued that government must be at least as large as investment, however, government will have to be larger to the extent that investment swings are large and if automatic swings of the budget are relatively small. Further, as discussed below, persistent trade deficits will increase the role of government in maintaining profits and demand.

Minsky argued that positions in capital assets are financed through a combination of internal and external funds. Growth of investment generally leads to growth of debt; over the course of an expansion, leverage ratios rise (both debt-to-net worth and debt-toincome) and financial positions evolve from largely hedge (interest and principal payments are made as they come due) toward speculative (only interest can be paid) and even Ponzi (interest must be capitalized). Thus, an expansion led by investment spending will tend to lead to a fragile financial structure (Minsky 1963). Leverage ratios and fragility will be increased to the extent that expansion also generates a trade deficit (as demand and profits leak to the foreign sector) and a government budget surplus (depressing demand and profits). On the other hand, Minsky (1963) argued that a government-led expansion would not increase fragility because budget deficits would raise private sector income and wealth, generating profits and filling private portfolios with safe and liquid assets. However, profits and robust private balance sheets would be likely to induce investment and risk-taking. Hence, there is an inherent contradiction because financial stability is enhanced by a growing role for government in leading an expansion, but this can generate a run-away inflationary spiral that is held in check only if the government's budget moves sharply toward surplus to suck income, profits, and wealth from the private sector—creating financial instability. For this reason, institutional constraints are needed to limit the natural trend toward fragility. These can be imposed through rules, regulations, and supervision of financial institutions, as well as by lender

of last resort intervention when all else fails. For this reason, the "Big Bank" (central bank) is a natural complement to the "Big Government".

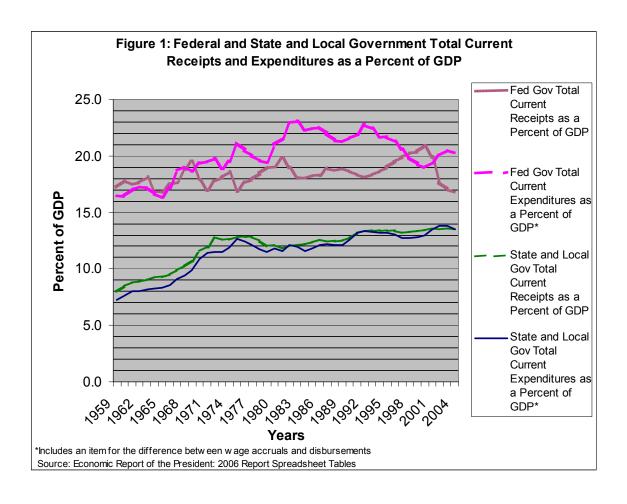
Interestingly, Vatter and Walker concluded that the United States has experienced secular stagnation since 1910, with GDP growth averaging 4% per year before that date, but less than 3% from 1910–1990 (Vatter and Walker 1997). High growth before 1910 could be described as "Keynesian," that is, led by investment. However, the "Domar problem" surfaced by 1910, apparently because investment had become subject to capital-saving innovations that increased capacity effects. This seems to be most true of investment in structures, which was permanently lower after 1910. Vatter and Walker identified several different regimes in the post-1910 period. While all of them produced slower growth than that experienced before 1910, performance was better in some than in others. For example, the period 1910–29 can be characterized as a "small government," slow-growth laissez faire economy, with the gold standard providing an additional constraint (Minsky 1993). Its growth rate was just 2.8%, attributed to low investment, especially in structures (Vatter and Walker 1997). During some periods, other types of spending temporarily made up for lower trend investment—such as military spending during WWI and an installment-debt led consumer durables boom in the late 1920s. However, with a small government there was no sustainable source of demand to allow the economy to grow more robustly.

After 1930, growth of government spending outpaced GDP growth, especially during WWII; this more than made up for lower trend investment so that GDP growth improved. The early postwar "golden age" period (Minsky 1993 called it a "practical best") followed the dictates of Wagner's Law, while the slow-growth period after the early 1970s suffered the consequences of breaking that law. For example, during 1948–73, real purchases by all levels of government grew at a compounded pace of 4.24%, faster than real GNP growth of 3.67%. Government payroll employment grew at a rate of 3.62%, compared with just 1.57% for the civilian labor force. In contrast, after 1973, the rate of growth of real government purchases and payroll employment averaged just 1.8%, while real GNP grew at 2.4% and the civilian labor force at 2%—both figures significantly higher than the comparable government figures.

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² Data in this paragraph are from Vatter and Walker 1997, chapters two and three.

Figure 1 shows federal government revenues and expenditures, as well as state and local government revenues and expenditures, relative to GDP for the period 1959 to the present. The Vatter and Walker arguments are readily apparent: federal government expenditures rose relative to GDP from the mid 1960s until the early 1970s, and then rose again after the Reagan recession before falling during the Bush, senior, and Clinton administrations. Spending by state and local government grew strongly from 1959 until about 1974, then stagnated until the early 1990s when there was a brief period of more rapid growth, somewhat renewed during the "new economy" boom of the late 1990s. Over the entire period, federal government spending rose by three percentage points of GDP, while state and local government expenditures doubled as a percent of GDP, rising by 7 percentage points.



The important point stressed by Vatter and Walker in all of their studies is that the main constraint on economic growth since 1910 has been chronically insufficient aggregate demand. While they do not dismiss the possibility of supply-side bottlenecks, they insist that the U.S. economy is, and has been, capable of growing at a 4% rate on a sustained basis. However, aggregate demand has not been held high enough to permit growth at capacity, resulting in secular stagnation. While demand occasionally does meet or (rarely) exceed the necessary level, it is quickly brought back down—often through intentional policy measures, such as interest rate hikes or temporary tax surcharges, or simply due to political opposition to expansion of government at the necessary pace. What has been needed all along is faster growth of "Big Government"; Vatter and Walker insist that to achieve sustained growth of real GDP at a feasible rate requires only a small increase of investment, but a large increase of government spending (Vatter and Walker 1997).

Interestingly, orthodox economists and policy-makers habitually misread the problem, proposing the wrong policy solution. Conventional wisdom imagines supply-side constraints that limit feasible (inflation-adjusted) sustained growth to something on the order of 2–2.5% per year. However, growth at such a pace leaves capital and labor idle—discouraging investment and productivity growth. The proposed orthodox solution is always a policy to encourage "more saving" to generate "more investment" that will attenuate the imagined supply constraints. Of course, "more saving" would mean less consumption, increasing idle capacity and hence discouraging investment! Further, if investment were increased through such policy, it would create more excess capacity.

Compounding the problem is the resurgence of balanced budget conservatism over the past quarter century, which likens the federal budget to that of a household that will bankrupt itself if it continually spends more than its income. In addition, ivory tower academics have concocted fanciful tales about the effects of fiscal deficits, running from "crowding-out" of investment, to "debt burdens" on future generations, and finally to "Ricardian equivalents" that imagine that "rational" households increase current saving to pay future taxes. Vatter and Walker (1997) provide a thorough examination of the evolution of attitudes toward government and its budget. In the early 1930s, the conservative attitude toward government was well-summarized by President Hoover:

"Though the people support the government, the government should not support the people" (Vatter and Walker 1997). The Great Depression, the New Deal, and WWII abruptly displaced that orthodoxy, and helped to push through the Employment Act of 1946 that asserted government responsibility for macroeconomic performance. While government budgeting was never understood, even during the heyday of "Keynesianism," the notion that government must balance its budget over a period determined by the movements of celestial objects was viewed as no more plausible than astrological influence on worldly outcomes. During that early post-war era, Abba Lerner promoted functional finance—the idea that fiscal policy should be formulated to achieve desired results, rather than with a view to balancing the budget—and together with Domar emphasized that far from burdening the population, government debt represents net wealth in the form of safe and liquid assets.

In any event, the federal government did run deficits in most years, and as we have seen, government grew faster than the economy until the early 1970s. However, over the course of the past quarter century, conservative ideology managed a comeback. In Hoover-like statements, Reagan asserted that "government is the problem" and promised to scale it back while eliminating budget deficits through the magic of Laffer Curve supply-side dynamics. Congress proposed and finally adopted mandatory budgetary constraints in the Gramm-Rudman-Hollings Act of 1985. Various groups pushed for a constitutional amendment that would go even further, by requiring a balanced budget.

Vatter and Walker insisted that "the logic of the national debt in a fiscal policy world is a ratchet. Debt never goes down..." (Vatter and Walker 1997). Still, conservative orthodoxy had become so dominant by the mid-1990s that President Clinton promised to run perpetual budget surpluses so that all of the federal debt issued since 1837 (the one and only time the U.S. government was debt-free) would be retired. Economists not only applauded the effort, but endorsed the projections! The Fed even held a conference to discuss how monetary policy would be conducted once all the debt was retired. However, the budget surplus threw the economy into a recession that destroyed the tax revenue flow so a large and chronic budget deficit quickly returned. Still, the prevailing political rhetoric refers to growing debt burdens for our grandchildren

and the possible insolvency of our nation's government. Through an ironic ideological about-face, the Democrats have become the party of "fiscal responsibility," promising to slash spending and increase taxes should they gain control of government.

In a very nice exposition of the bankruptcy of orthodox policy making, Vatter and Walker (1989) examined the projections made by the Council of Economic Advisors in each of the annual Economic Reports of the President, through both Democratic and Republican administrations (1979–86) for the coming year.³ Table 1 reports and extends their arguments. The CEA consistently predicts low economic growth (average = 2.6%) GNP growth for 1979–1991; 2.7% for 1992–2005), fiscally austere budgets (average growth of federal purchases = negative 0.4% over 1979–1991), and robust investment (average growth of fixed nonresidential investment = 3.9% for 1979–91). Vatter and Walker concluded the "expected stagnation was chronically overachieved," with actual GNP growth averaging a miserable 2.0%. Ironically, actual federal purchases grew far above projections, at 3.1% per year, while actual investment averaged a growth rate below projections at 3.2%. In other words, the CEA persistently expected more robust growth, fueled by investment, but the real engine of growth was government spending, albeit at levels that were too low to allow the economy to grow at its true potential of 4% per year. If the CEA had been able to induce policy-makers to hold growth of government spending below zero, as projected, actual GNP growth would have been even lower, resulting in less inducement to invest, as capacity utilization would have been even further from what was technically feasible.

³ See Table 1, which reproduces their results for the period 1979–86, and extends the analysis to later years. For the period 1979–91, the CEA reported predicted and actual growth for GNP or GDP, for federal purchases, and for fixed non-residential investment using a consistent procedure; after 1992, the CEA provided explicit predictions only for GDP.

Table 1: CEA Projections and Actual Outcomes

Year	GDP		Federal Purchases		Fixed Non-residential Investment	
	predicted	actual	predicted	actual	predicted	actual
1979	2.25	0.8	1	1.1	4.25	1.7
1980	-1	-0.3	3.25	4.7	-0.25	-6
1981	1.75	0.7	3.25	6.6	1.25	1.4
1982	3	-1.2	-1.5	6.6	7	-8.4
1983	3.1	6.1	1.2	-6	-0.3	11.5
1984	4.5	5.6	3.7	14.2	9.5	16.6
1985	4	2.5	2.2	11.8	6.8	6
1986	4	2.2	-4	1.8	5	-5.4
1987	3.2	3.8	-2.5	2.9	2.5	3.7
1988	2.4	2.6	-4.6	-4.4	4.4	8.4
1989	3.5	2.4	-0.6	-3.0	4.9	4.3
1990	2.6	0.3	-2.7	5.5	4.2	0.9
1991	0.9	0.2	-3.9	-1.7	1.6	6.9
average (1979-						
1991)	2.6	2.0	-0.4	3.1	3.9	3.2
1992	2.2	2.6				
1993	2.9	2.8				
1994	3	4.0				
1995	2.4	1.3				
1996	2.2	3.2				
1997	2	3.8				
1998	2	4.6				
1999	2	5.0				
2000	2.9	2.8				
2001	3.2	0.1				
2002	2.7	2.9				
2003	3.4	4.4				
2004	4	3.8				
2005	3.5	3.5				
average (1992- 2005)	2.7	3.2				

Source: Economic Report of the President, Various Years

In broad outline, that summarizes the basic Vatter and Walker, and Minsky, theses. While the "bigger government" associated with the post-war economy did (perhaps) achieve smaller cyclical amplitude, thanks to the stabilizing influence of countercyclical budget swings, the long-term trend was well below potential output growth and below growth rates achieved in the small government, laissez faire economy

of the 19th century. To get back to growth rates closer to potential requires faster growth of government spending. That, however, appears highly unlikely in the current political environment.

UPDATING VATTER'S THESES

Vatter and Walker attributed post-war fluctuation of GDP growth over the medium term to differential rates of growth of government spending. The more typically Keynesian approach would be to look at government deficits, with larger deficits indicating a greater net contribution made by government to aggregate demand. Vatter and Walker tended to ignore taxes because they could not perceive any significant changes to tax policy: whether the administration was liberal Democrat or conservative Republican, tax policy was focused on tax cuts for the rich—in the form of reduction of the progressivity of personal income taxes, tax credits to saving or investment, or lower taxes on capital gains and wealth. Further, the federal budget deficit is an automatic stabilizer, with tax revenues falling in recession and rising in expansion (and with some government spending also automatically moving countercyclically). For this reason, the movements of the budget deficit would attenuate the cycle, without raising trend growth—which would require that government spending grow faster than GDP on trend. Finally, the budgetary outcome is largely non-discretionary because it depends on economic performance. Given tax policy, it is spending that is in some sense *causal*, while the budget deficit is an ex post result.

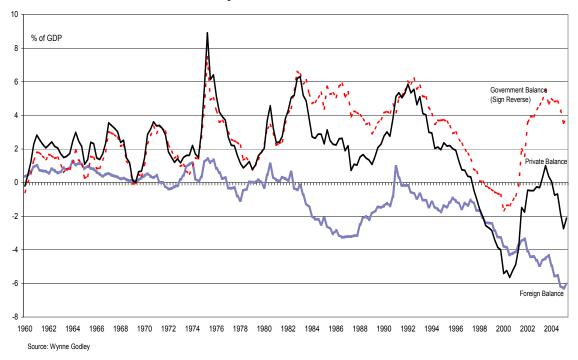
While I agree, it is necessary to update the analysis to take account of major changes that have occurred since the mid 1990s: a) growth of consumption—financed by borrowing—has played a surprisingly large role in fueling growth over the past decade; b) a chronic, and growing, trade deficit has worsened the dynamics of growth; and c) there have been fairly substantial changes to tax policy, especially under the current administration.

a. Growth of Consumption and the Trade Deficit

After Keynes, it has been assumed that consumption is a stable fraction of income, thus, rather passively adjusts to growth of income. Indeed, that assumption lies behind the notion of the multiplier, and stability of the consumption function was built into virtually all empirical models of the macro economy. Even the more radical Kaleckian approach presumed that "workers spend what they get" (and capitalists "get what they spend"). Consumers were believed to have neither the desire nor the ability to spend without regard to income. However, as Wynne Godley has shown, the private sector taken as a whole (firms and households) has continually spent more than its income since 1996 except for one year during the depths of the last recession. And over the course of the recovery since 2001, it has been household deficit spending—not spending by firms—that has driven GDP.

Let us quickly summarize the current situation. For many years, the Levy Institute has been using the "three balances" approach developed by Godley, decomposing the economy into 3 sectors: domestic private, government, and foreign. If one sector spends more than its income, at least one of the others must spend less than its income because for the economy as a whole, total spending must equal total receipts or income. While there is no reason why any one sector has to run a balanced budget, the system as a whole must. In practice, the private sector traditionally runs a surplus—spending less than its income—accumulating net financial wealth. For the United States, this has averaged about 2–3% of GDP, but it does vary considerably over the cycle—reaching as high as plus 9% and recently going into quite negative territory (see Figure 2). Private sector saving (or surplus) is a leakage that must be matched by an injection. Before Reagan, the United States essentially had a balanced foreign sector. Over the course of the Reagan-Bush years, the current account deficit grew to 3.2% of GDP, and briefly fell to less than 2% before growing to more than 6% of GDP today. That is another leakage that drains domestic demand.





The U.S. government sector taken as a whole almost always runs a budget deficit, reaching to well above 5% of GDP under Reagan and both Bushes. For the United States, that has been the main injection that offsets the "normal" private and occasional foreign sector leakages. With a traditional private sector surplus of 2–3% and a more or less balanced trade account, the "normal" budget deficit needed to be about 2–3% of GDP during the early Reagan years to generate the saving leakage to the private sector.

Until the Clinton expansion, the private sector never ran a deficit (its surplus briefly hit zero in 1960 and 1969). However, since 1996 the private sector has been in deficit every year except one (during the depths of the last Bush recession), and that deficit climbed to more than 5% of GDP at the peak. A private sector deficit acts as an injection, raising domestic demand and encouraging production. As production and employment rise, tax revenues grow faster than government spending—reducing the budget deficit. This actually drove the federal budget into a surplus of 2.5% of GDP at the peak of the Clinton boom. With the trade deficit above 4% of GDP, the private sector deficit (5.6%) was the sum of the overall budget surplus (1.6%) and the current account deficit. As discussed above, almost all economists and policy makers thought the Clinton

budget surplus was a great achievement, never realizing that by identity the private sector had to spend more than its income, so that rather than accumulating financial wealth, it was running up debt. This drove the economy into recession because the size of the required injection from private sector deficits to offset the budget surplus was unsustainable. As the economy slowed, tax revenue plummeted and a budget deficit was restored.

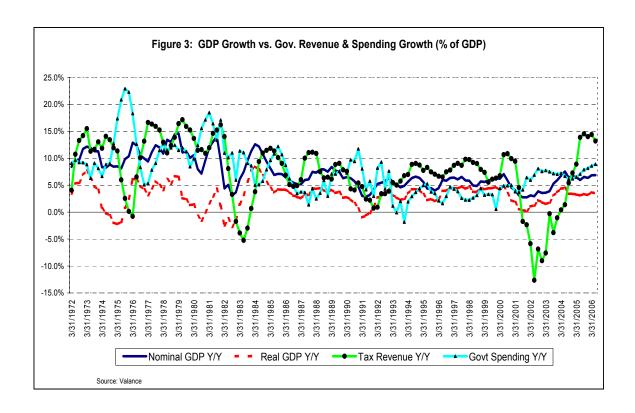
b. Chronic and Growing Trade Deficit

As mentioned, the trade deficit represents a leakage of demand from the U.S. economy to foreign production. If we add today's current account deficit (above 6% of GDP) to a "normal" private sector of 2–3% of GDP, that gives us a total "normal" leakage out of aggregate demand above 8 or 9% of GDP. This leakage would have to be made up by an injection from the third sector, the government—the only way to sustain such a large leakage is for the overall government to run a deficit of that size. Since state and local governments are required by constitutions and markets to balance budgets, and on average run surpluses, it is up to the federal government. The federal budget deficit is largely nondiscretionary over a business cycle, and at least over the shorter run the trade balance is also largely outside the scope of policy—with imports a function of domestic demand, but exports depending on rest of world demand.

Given how large the external (current account) leakage has become even at current moderate rates of growth, the private sector cannot achieve balance between income and spending unless the budget deficit exceeds 6% of GDP. Further, there is little political will to allow the budget deficit to rise to, say, 8% or 9% of GDP should the private sector finally decide to return to a "normal" surplus balance of 2% or 3% of GDP. Rather, the adjustment would probably come through growth rates that are slow enough to permit some combination of a reduced current account deficit and a budget deficit far beyond that which is thought desirable.

c. Tax Policy

While Vatter and Walker were skeptical about a large independent role played by tax policy in influencing long term growth, this should be amended to take account of recent changes. Figure 3 plots GDP growth rates (nominal and inflation-adjusted) with the rate of growth of federal government spending and revenue. Focusing on growth of tax revenue since the late 1990s, it is obvious that there have been fairly dramatic reversals. In the late 1990s, tax revenue grew at rates as high as 10% per year, very much faster than government spending (around 3% per year) or real GDP (about 4% per year). The "favorable" fiscal situation led, of course, to the Clinton budget surpluses that lasted for three years. Economic expansions usually do lead to growth of tax revenue at a pace above the growth rate of GDP generating fiscal drag, especially if the growth of tax revenue exceeds the growth of government spending by a large margin. By 2000, real GDP growth collapsed to zero, and tax revenue began an unprecedented four-year fall (by March of 2002, revenues fell at a rate of 15% per year)—partly due to tax relief, but also, in large measure, a result of the recession. Only near the end of 2003 did tax revenues begin to rise. As of Fall 2006, revenues are increasing on a year-over-year basis at almost 15%—far outstripping growth of government spending (growing half as fast), nominal GDP growth (less than 7%), and real GDP growth (just over 3%).



Note that the current situation with tax revenues growing five times faster than real GDP is historically unusual, reminiscent of the period before the Reagan-era recession. However, the late 1970s and early 1980s were periods of very high inflation, which drove tax revenue growth through "bracket creep." Comparing tax revenue growth with the rate of growth of nominal GDP, one finds the current period is even more unusual—there is no other extended period since 1970 in which taxes grow twice as fast as nominal GDP. Finally, many of the previous periods that saw tax revenues growing at a pace above 10% annually were followed closely by recession: 1972–74 (average = 12%); 1977–81 (average=15%); 1999–2000 (average = 10%). The exceptions (1984–5, 1996–98) were during earlier stages of expansions with average growth rates of tax revenues a bit lower than 10%.

In its January 2006 Budget Outlook, the Congressional Budget Office notes that during 2005, individual income tax receipts had grown by 14.6% over the previous year, and projects that tax revenues will again outpace economic growth in 2006, with individual income tax receipts growing by 8.2%. Revenue growth over the next decade will be fueled by a combination of economic growth, legislated tax changes, growth of

distributions from tax deferred plans and IRA's, "real bracket creep" (real growth pushes taxpayers into higher brackets), and provisions of the Alternative Minimum Tax (AMT). Originally enacted to prevent high-income taxpayers from taking full advantage of various tax preferences, the AMT is not indexed to inflation. Thus, greater numbers of middle-income earners fall under the AMT's provisions each year which limit exemptions, deductions, and credits, resulting in higher tax liabilities. Projected AMT receipts will rise sharply from \$5 billion in 2005 toward a peak of \$100 billion in 2010, as the number of affected returns rises from 5 million in 2005 to nearly 35 million in 2010.

This rapid rise of tax burdens is creating fiscal drag. While the cause-and-effect is complex as relatively robust growth drives tax receipts, taxes are growing very much faster than income—both due to statutory changes, as well as to performance of asset markets and the economy. At some point, this will have an impact on spending as households and perhaps firms find they are squeezed. When spending and income decline, tax revenue growth will fall; however, based on the results shown in Figure 3, this appears to occur with a lag. As indicated by rapid growth of receipts of quarterly payments made against nonwithheld income and payroll tax liabilities this year, many taxpayers are already aware that taxes are growing faster than personal income. Many others will not find out until they do their returns next April that the amount of taxes being withheld is too low. The CBO projects that most of the extra \$35 billion of revenue in 2006 due to the AMT will not be paid until 2007. Even if growth of spending and income were to begin to fall soon, the growth of tax liabilities could remain high for many months, adding to deflationary pressures. Hence, it appears that the structure of the federal tax system is now geared to constrain demand long before the economy achieves full employment, and thus, plays a major role in creating the headwinds that lead to secular stagnation.

DANGERS FACING THE U.S. ECONOMY

In this section we will examine the shorter-run, as well as the longer-run dangers facing the United States. Let us first dispense with three commonly cited dangers. Many commentators point to inflation pressures that are supposed to endanger economic growth. Other than the recent "shock" resulting from geo-political-corporate-pension and hedge fund manipulation of oil prices, there is no evidence that prices have increased sufficiently above "white noise" that we can be sure inflation exists. Further, there is no evidence that "creeping" inflation accelerates inexorably (see Vatter and Walker 1982, for example). Additionally, there is no evidence that low to moderate inflation hinders economic growth, indeed, there is plenty of evidence to the contrary. The second supposed danger arises from chronic budget deficits, as well as from "infinite horizon" projections of "unfunded" government liabilities through eternity. However, government deficits lead to bond issues that increase private sector wealth, so those future "unfunded" liabilities are exactly equal to the wealth that government deficits will create in the future. Finally, a continued U.S. trade account deficit is claimed to be "unsustainable" and is said to even threaten U.S. "solvency." However, U.S. current account deficits create dollar-denominated assets for the rest of the world, and they will come to an end when the rest of the world decides it has accumulated a sufficient quantity of such assets. That turn around is almost certainly a long time off, and it will come slowly. When it does come, domestic and foreign demand for U.S. production will be, ceterus paribus, higher, allowing for more U.S. production, reducing the leakages that generate stagnation.

However, there are real dangers facing U.S. growth—both in the near term, and over the longer run. As discussed above, federal government purchases are not growing on trend above the rate of GDP growth. Since 1960 this has been somewhat offset—first by federal transfers to state and local government, and later by growth of transfers to households in the form of "welfare" and old-age pensions. However, welfare spending essentially stagnated after the early 1970s (relative to GDP), and Clinton ended "welfare as we know it" by pushing tight constraints on individuals and on states that will prevent social transfers growth. Further, the supposed "unfunded liabilities" of Social Security and Medicare are used by generational warriors in their attempt to dismantle the safety

net for seniors. While successes have so far been limited (to payroll tax hikes and phased increases to the normal retirement age—both pushed through in "reforms" formulated by a commission headed by Alan Greenspan in 1983), they might be more successful in the future. Finally, the federal government has been less supportive of state and local government spending since the mid 1970s. Ironically, this has occurred even as responsibilities have "devolved" to the states—leading to a recurring "fiscal crisis" at the state and local government level (Plotkin and Scheuerman 1994; Sherman 1983; Wray 2003).

On the other side of fiscal policy, taxes are overly restrictive. State and local taxes are, on the whole, regressive. Given a presumed inverse relation between the propensity to consume and the level of income, regressive taxes reduce aggregate demand. At the federal level, payroll taxes are regressive, but worse, they penalize employment by taxing both wage earners and wage payers. This raises the cost of domestic employment, favoring employment in nations that do not tax payrolls. Finally, as discussed above, many taxpayers will not correctly anticipate the AMT and will be hit with an "April surprise" in the form of an unexpected tax bill, with possible ramifications for spending next spring and summer.

The third area of concern is the trend rate of growth of private sector debt. To be sure, debt has been growing persistently since 1960, however, recent private sector deficits have accelerated the rate of growth of debt relative to income. Household debt stands at twice disposable income. Willingness to deficit spend helped to fuel the Clinton boom, and fueled the Bush "recovery." This might have been due, in part, to "democratization" of access to credit—which is not necessarily a bad thing. In addition, the strength and length of the Clinton boom, as well as the stock market bubble and new economy hype, probably raised expectations of American households. When the bubble came to an end, the private sector temporarily retrenched, but borrowing soon was renewed at a rapid clip. Since 2001, two factors appear to have played the dominant role in generating household deficits. First, the Bush recovery has been weak in terms of jobs created, and, more importantly, in terms of growth of wages. This is the first "expansion" since WWII in which real wages have not risen, indeed, the median hourly wage actually fell by 2% since 2003 (Peters 2006). Wages and salaries have reached their lowest share

of national income since data began to be collected in 1947—just 45% of GDP in the first quarter of 2006, compared with 53.6% in 1970 or 50% as recently as 2001. Even workers at the 90th percentile have seen real pay fall for the past three years (Peters 2006). A detailed study of census data found that all of the growth of median income in the United States from 2001 to 2005 was due to growth of incomes of those over age 65; for those under age 65, income fell by an average of \$2000 (NYT 2006). The real income of men was actually lower in 2005 than it had been in 1973 (Dionne 2006). In 2005, the top quintile received more than half of all income, while the share of other quintiles continued to fall (Dionne 2006). So, to some extent, growth of debt is necessary to maintain rising—or even constant—living standards in an environment of stagnant or falling real income, except at the very top of the income distribution.

That explains some of the "push" into debt, while the real estate and commodity price bubbles provided the "pull." After the stock market crash, investors looked for alternative earning assets, and found them in commodities and real estate. The commodities price boom gained attention because of the impact of rising (and now, falling) crude oil prices on gas prices and U.S. inflation. While it is beyond the scope of this article, much more needs to be written on this topic, including an analysis of the role played by pension funds and hedge funds in fueling the commodities boom, as well as an examination of the possible impacts on the United States and world economies of the coming crash of commodities prices. This could easily reduce GDP growth by a half of a percentage point or more. Here we will consider only the real estate boom, which has added a significant boost to aggregate demand and generated 30% of employment growth during the recovery (Goldman Sachs 2006a; Nutting 2006).

U.S. housing wealth doubled from \$10.4 trillion in 1999 to \$20.4 trillion in the first quarter of 2006 (Baker 2006). Households used their homes like ATMs, with "cashout equity" financing consumption, taking out at least \$50 billion per year. In addition, mortgages have been increasingly in the form of higher interest rate "non-prime" loans as buyers stretched to afford more expensive homes. Indeed, in 2005, a quarter of all mortgage loans were non-prime, compared with just 11.5% in 2004 (Reuters 2006). For blacks, non-prime loans accounted for a shocking 55% of home purchase loans. Further, about half of the growth of non-prime loans is in the form of "piggy-back lending," or

second lien mortgages to provide a "down payment" when the buyer cannot come up with the usual 20% down payment (Reuters 2006). Much of the borrowing was at variable interest rates that are now beginning to rise. Indeed, over the next few years, several trillion dollars of ARMs will reset. Goldman Sachs estimates that the expected ARM reset will swallow 10% of the income of a typical household with an ARM, amounting to \$6600 per year in additional mortgage payments, or \$24 billion per year in the aggregate (Goldman Sachs 2006b). To be sure, interest paid by one household is received by another as interest income. However, financial wealth-holders tend to be richer and older than the average household (Wray 2006a), so the impact on aggregate demand could be significant. Unfortunately, almost all news from the real estate front is now bad, with sales falling, inventories rising, and weak mortgage demand (Nutting 2006; Goldman Sachs 2006a). Rising interest rates and falling house prices would be a recipe for consumer distress. Further, it is not necessary for housing prices to actually fall in order for consumers to be forced to reduce spending, as they have relied on rising prices to collateralize their borrowing and deficit spending. If households merely bring spending back into line with their incomes, the hit to aggregate demand would be around 4% of GDP.

The fourth area of concern is globalization and external pressure on wages and prices. While many analysts emphasize the effects of increased openness on the U.S. trade balance, that is not really the issue at hand. As elementary economics teaches, imports are a benefit and exports are a cost, so net imports represent net benefits. The problem is that elementary analysis presumes full employment. The United States can reap the net benefits of its trade deficit only if it operates at full capacity. Unfortunately, the instinctual response to trade deficits is to reduce domestic demand by imposing fiscal and monetary policy austerity—which only compounds the problems generated by the leakage of demand to imports. This ensures that the potential benefits of a trade deficit will not be enjoyed. The correct response is to find employment for those displaced by a trade deficit, and to ramp-up domestic demand to cover the trade deficit leakage. That, however, is extremely difficult in the current politico-economic environment, in which the trade deficit is attributed to American consumers "living beyond their means," by relying on "foreign savings." In truth, the U.S. current account deficit is the source of the

dollar assets accumulated by foreigners. While it may be true that American consumers are over-indebted, their debt is in dollars and it makes little difference whether that is owed to domestic wealth holders or to foreigners. What does matter is that foreign competition has been reducing U.S. wages and salaries, and, perhaps, causing American job loss. However, this becomes a problem only if U.S. policy refuses to respond with job creation, as well as protection for decent living standards. Again, this is a medium term or even long run problem, not simply a result of business cycle forces. It is not clear that policy makers understand the nature of the dangers, nor can they mount a proper response because they see exports as a benefit and imports as a cost.

The final longer-term problem is the growth of "neoconservative" ideology. While this may not be easy to define in precise terms, it represents a turn against the "mixed economy" in which "Big Government" has a positive role to play. Essentially, it is a return to Hoover-era laissez faire in which the ideal is a small government, and in which private initiative is supposed to fuel economic growth. That may have been fine in the 19th century, when the economy was relatively undeveloped and productive capacity was limited. In that era, high private investment added to demand and to supply to an approximately equal degree. However, technological advance and innovation increased the capacity effects of investment to the extent that they easily outstripped demand side effects.

Hence, while the neoconservative ideology might be appropriate to some stage of the development of capitalism, it is clearly out of place in the modern economy, where the capacity effects of investment are huge. Further, the neocons would violate Wagner's Law by reducing the relative size of government as the economy develops. This ignores the social desire and need for increased provision of social services as the economy grows. The argument that J.K. Galbraith made in the early 1960s concerning the relative dearth of public services is only very much stronger today—with unmet needs for universal health care, for universal access to higher education to prepare youth for the "knowledge" economy, and for greater public involvement in finally eliminating the remaining inequalities that result from intransigent racism, sexism, and cultural biases. All of these are difficult issues and there is no plausible argument or evidence that they can be resolved through "private initiative." In fact, the neocon ideology has played an

important role in reversing progress made since WWII on these and other fronts. Neocon policies reward the privileged and punish the have-nots. The rich get vouchers for well-funded private schools; the poor see funding of their public schools reduced. The rich get tax relief on capital gains and inheritances; the poor get higher local sales taxes and federal payroll taxes. The Katrina victims are evicted from Femaville trailers while the Haliburtons get no-bid contracts to rebuild New Orleans as a playland for well-heeled business conventioneers. Obviously, this reduction of the role played by government moves the U.S. economy in the wrong direction.

As Hyman Minsky used to argue, capitalism was a failed system in 1930. The growth of "Big Government" was singled out by Minsky and by Vatter and Walker as the necessary medicine to build a viable and robust version of capitalism. Minsky always insisted that there are "57 varieties" of capitalism, with different systems appropriate to different historical epochs. Unfortunately, the modern Hooverites are attempting to return to 1929, that is, to a system that was not even appropriate to the pre-war period. The evolutionary or institutional approach taken by Domar, Minsky, and Vatter and Walker, which recognizes the necessity of the "mixed economy," is the alternative that will help us to formulate policy appropriate to today's problems.

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