

Policy Note

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Can The Expansion Be Sustained? A Minskian View

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Hyman P. Minsky's insights into the relationship between profits, economic growth, and the public and private financial balances are particularly relevant to today's conditions. How can a Minskian view be applied to explain the processes that brought the economy to its current state and to recommend a policy stance for the future?

IN A SERIES OF IMPORTANT PIECES, WYNNE GODLEY has demonstrated the necessary implication of a public sector surplus-a private sector deficit. He has also, rightly, questioned Congressional Budget Office projections that presume that the federal government's surplus not only will continue, but will grow over time. What I will focus on here is the processes that brought us to this point and prospects for the economy. My discussion is informed by the teachings of Hyman P. Minsky, who was a distinguished scholar at the Levy Institute until his death in 1996. All who had the pleasure of knowing him recognize that his views on the state of the economy at this time would have been uniquely insightful. While the following cannot substitute for the analysis he could have supplied, it is hoped that it can contribute to a Minskian understanding of the dangers involved in the current expansion.

In the early 1980s, when I was one of Minsky's students, he introduced us to the Kalecki equation, which he, and we, later found to be similar to Jerome Levy's profits equation. In the Kalecki version,

aggregate profits = private sector investment + government deficit + trade surplus (- trade deficit) + consumption out of profits (capitalists' consumption) - saving out of wages (workers' saving)

In his exposition, Minsky quickly jumped to what is called the classical case, in which capitalists do not consume and workers do not save, so that aggregate profits would be equal to investment plus the government deficit minus the trade deficit.

The early 1980s was interesting because the United States was struggling to break free from the Reagan recession, with almost no private investment and a growing trade deficit. Thus, according to the equation, the only source of profits was the burgeoning federal budget deficit. In Stabilizing an Unstable Economy, Minsky noted that the deep recession of the early 1970s was the first recession in which personal income never fell-and it did not fall because government transfers and deficits rose sufficiently to maintain private income (Minsky 1986). I later showed that the Reagan deficits maintained personal income in a similar manner so that it continued to grow in spite of the 1980 and 1982 recessions (Wray 1989). In Minsky's view, the floor to aggregate demand provided by a deficit's maintenance of personal income is a key stabilizing feature of the postwar big government economy we have inherited; indeed, Minsky counted it and central bank intervention as lender of last resort as the two main stabilizers of the modern economy.

As the Reagan deficits continued to climb through the 1980s, the economy recovered and profits boomed, even though investment remained sluggish. This expansion thus provided a new wrinkle in the Keynesian macro model, in which investment is assumed to be the driving force of the cycle. In fact, neither the Reagan expansion nor the Clinton expansion can be attributed to investment. The early stages of the Reagan expansion can be explained almost entirely by the exploding government deficit; the deficit was similarly important early in the Clinton expansion, but then growth continued primarily because of private sector spending.

One day in 1984, as the economy was recovering and consumers were becoming sufficiently confident to

increase debt, Minsky and I discussed a nonclassical version of the Kalecki equation. Minsky had emphasized the role that government transfers play in fueling consumption, but what if consumers simply borrowed to keep consumption up? In other words, the Kalecki equation subtracts worker saving from aggregate profits, but what if worker saving were negative, that is, what if workers spent more than their income? In that case, even with a trade deficit and sluggish investment, aggregate profits could be positive without a government deficit.

We even considered a more extreme version of the Kalecki equation. What would happen if the government budget moved toward surplus? In the U.S. case, with a trade deficit, profits would have to be generated by capitalist spending (both on investment and consumption) as well as by worker deficit spending. Minsky recognized that theoretically this could happen, but he doubted that it was sufficiently likely to warrant further investigation. Steve Fazzari and I did spend some time trying to get estimates of saving out of wages, but it proved to be too difficult to allocate personal saving between profits and wages. In other words, worker saving may well have been negative in the mid 1980s, with all measured saving actually coming out of profits, but it was impossible to know for sure.

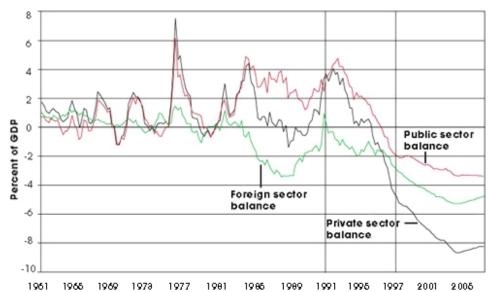
Fortunately for our analysis, two things happened over the next 15 years. First, Wynne Godley came up with a much more fruitful way of looking at the whole matter. Godley simply consolidates all levels of government into a public sector, similarly consolidates households and firms into a domestic private sector, and, for completion, adds a foreign sector. It is clear that if the public sector is spending more than its income (that is, is running a deficit), at least one other sector must be spending less than its income. The United States has been running a trade deficit over the past two decades, and one that has generally been rising. A public sector in deficit tends to generate a private sector surplus-some of which is drained off through a trade deficit. In theory, all of the government sector's stimulus could be drained off that way, but, in practice, the trade deficit has not generally been large enough to do so. With Godley's approach, we do not need to allocate saving between profits and wages; the relevant breakdown is between households and firms, and those data are readily available.

The second thing that happened is that the real world cooperated by generating unprecedented private sector deficits. As Figure 1 shows, the private sector deficit was approximately 5.5 percent of GDP in 1999. What seemed unlikely to Minsky in 1984 became a reality, albeit in a slightly altered form. However, I do not want to imply that Minsky was mistaken in arguing that the real world outcome was highly improbable; indeed, the current situation is virtually beyond the realm of the probable and is almost inexplicable, even from the vantage of hindsight.

If one compares the 1980s expansion with that of the 1990s, one can see that large government deficits helped initiate both. In both cases, once the expansion was under way, the private balance dropped from large, recession-period surpluses toward deficits. In the 1980s the private balance fell from a surplus of about 4.5 percent of GDP to a deficit of about 1.5 percent of GDP-a swing of 6 percentage points. In the 1990s the private balance fell from a surplus of 4 percent of GDP to a deficit of 5.5 percent (and still growing)-a swing of almost 10 percentage points. A swing of such magnitude is entirely unprecedented in the postwar period. It was brought about by the combination of a large trade deficit (although the 1980s expansion saw a similar deterioration in the balance of payments) and an unprecedented shift of the government budget toward large surpluses. How can the economy boom in the presence of large and growing government surpluses, and how can we explain the willingness of the private sector to spend in excess of its income to the tune of 5.5 percent of GDP, and rising?

For most analysts, the current situation is not difficult to explain. The government surplus is adding to the nation's saving, fueling investment in productivity-enhancing technologies. Wall Street is capitalizing future income streams, generating unprecedented private sector wealth. This is a type of saving that is not captured in income and product account figures. Households are devoting a portion of capital gains to consumption, but wealth is growing faster than consumption. Similarly, household debt-to-income ratios are high, but this is not the relevant measure because wealth is growing faster than debt. Government saving is keeping interest rates low so that the burden of servicing debt, even out of measured income flows, is not excessive. The only two black spots these analysts see on the Goldilocks economy are the negative household saving rates (which they explain away, in large part, as a measurement problem) and the growing trade deficit. In any case, they are confident that Chairman Greenspan will be able to sustain Goldilocks in spite of depressionary influences caused by the government surplus and the trade deficit. Of course, most analysts are still more concerned with the possibility that Goldilocks will grow too fast than with the likelihood that she will slow excessively.

Figure 1 The Three Financial Balances



Note: The period between the two vertical bars, from 1991Q2 to 1999Q1, corresponds to the current expansion. Data after 1999Q1 are projections made by Wynne Godley based on Congressional Budget Office analysis. **Source:** National Income and Product Accounts; Congressional Budget Office.

How would Minsky explain the processes that brought the economy to this point, and what would he think about the prospects for continued Goldilocks growth?

First, I think he would observe that consumers became able and willing to borrow to a degree not seen since the 1920s. Credit cards became readily and widely available; lenders expanded credit to subprime borrowers; publicity about redlining provided the stick and the Community Reinvestment Act provided the carrot to expand the supply of loans to lower income homeowners; deregulation of financial institutions enhanced competition. All these things made it easier for consumers to borrow.

Consumers were also more willing to borrow. As memories of the Great Depression faded, people became less reluctant to commit future income flows to debt service. The last general debt deflation is beyond the experience of almost the whole population and the last recession was almost half a generation ago. With only one recession in nearly a generation, it is not hard for people to convince themselves that downside risks are small. Add to that the stock market's irrational exuberance and the wealth effect, and you can pretty easily explain consumer willingness to borrow.

I would add one more point, which is that until recently the average American family had not regained its real 1973 income. Even during the Clinton expansion, real wage growth has been low. Americans are not used to living through a quarter of a century without rising living standards. The first reaction to the slow growth was to increase the number of earners per family, but that has resulted in only a small increase in real income. Thus, it is not surprising that consumers ran out and borrowed as soon as they became reasonably confident that the expansion would last.

The result has been consistently high growth of consumer credit. The debt service burden (see Table 1) increased by about 1.8 percentage points, from about 11.7 percent of disposable income in 1992 to 13.5 percent in 1999; almost all of that growth was due to growth in servicing consumer debt and almost none to changes in servicing mortgages. Still, thanks to relatively low interest rates, the burden is not at record highs. It was above 14 percent at some points during the late 1980s. Of course, interest rates are rising, and everyone expects the Fed to continue to tighten, so we might yet break the 1980s record. In addition, margin debt has been growing rapidly and, with the turnaround on Wall Street, has become a cause for concern. Falling prices lead to margin calls and problems for investors and hurt brokers who have come to rely on interest paid on margin borrowing for as much as a quarter of their income.

The private sector balance is expected to continue to deteriorate. Looking to the public sector, the consolidated government balance is over 2 percent of GDP. The federal budget surplus was 1.4 percent of GDP in 1999,

but, according to CBO projections, that will increase to 2.8 percent by 2010. By then, government spending will equal only 16.9 percent of GDP and tax revenue will still equal nearly 20 percent. The federal debt held by the public will decline from 40 percent of GDP to a little over 6 percent by 2010. It is important to note that this growth of the surplus is projected to occur as economic growth slows down-from about a 4 percent growth rate today to an average of 2.7 percent. In other words, fiscal policy is supposed to tighten substantially over the next 10 years, so that it will be heavily biased toward running government surpluses even when the economy grows far below its long-run average, which is closer to 3.5 percent. So the public sector has gone from a budget that was biased toward huge deficits at moderate rates of growth during the peak of the 1980s expansion to one that is biased toward huge surpluses at even lower growth rates.

Table 1 Debt Service Ratios, Delinquency Rates, and Charge-off Rates, 1985-1999

Household Debt Service Ratios Delinquency Rates, 100 (payments as % of disposable Largest Banks Charge-off Rates, 100 Largest Banks personal income) Consumer Loans C & I Agricultural Credit C & I Agricultural Total Consumer Mortgage Leases Loans Loans All Cards Loans Loans 1985 13.74 8.29 5.44 1.72 3.11 1.13 4.56 na na na 1.82 1986 14.18 8.50 5.69 3.46 1.15 0.36 na na na 1987 13.71 7.92 5.79 6.36 1.89 3.50 0.89 2.15 1.58 14.20 1988 13.36 7.58 5.77 1.26 4.82 10.24 1.86 3.38 0.71 -1.321989 13.51 7.57 5.44 1.77 5.03 8.34 1.99 3.23 1.73 -0.235.99 3.85 1.22 1990 13.25 7.11 6.14 2.27 6.47 2.46 0.07 1991 12.57 6.51 6.05 2.19 5.83 6.62 2.90 5.26 2.10 0.15 4.79 1992 11.70 4.59 2.57 1.07 0.29 6.03 5.67 2.18 5.65 1993 11.60 2.00 3.75 0.50 0.28 6.13 5.46 1.15 2.67 4.05 1994 12.01 2.99 3.40 0.12 6.52 5.49 0.78 1.84 1.90 0.97 1995 12.70 0.98 1.72 2.45 2.24 3.87 0.22 7.05 5.65 0.06 1996 13.09 0.87 1.49 3.52 2.59 4.44 0.08 7.44 5.65 -0.081997 13.17 7.47 1.34 2.94 2.89 4.96 0.24 0.22 5.70 1.08 1998 13.29 7.57 5.72 1.06 1.59 2.47 2.68 4.87 0.52 0.30

Notes: C & I = commercial and industrial; na = not available.

7.58

1999 13.51

All data are for the fourth quarter of each year and are seasonally adjusted.

5.93

Source: Debt service ratios: www.bog.frb.fed.us/releases/housedebt/default.htm (March 24, 2000).

1.82

3.21

2.54

4.37

0.70

0.22

1.27

Delinquency rates: www.bog.frb.fed.us/releases/chargeoff/del_lg_sa.txt (March 2000). Charge-off rates: www.bog.frb.fed.us/releases/chargeoff/chg_lg_sa.txt (March 2000).

I am sure Minsky would reject the notion that retirement of the outstanding debt stock is a worthy goal. Removing the most liquid asset from the economy (as the government destroys nearly \$3 trillion of private sector wealth) cannot be a good thing. Further, I am sure he would argue that the budget is far too biased toward a restrictive stance because it probably will not move toward substantial deficit unless we are far into a deep recession. At that point, it will be too late for the budget to perform its stabilizing function. Minsky would be skeptical about any claims that the Fed will be able to prevent a downturn. For Minsky, the primary role of the Fed in bad times is to prevent asset price deflation through intervention as lender of last resort. I can find nothing in Minsky's work that indicates that he thought that lower interest rates alone can do any good when spending turns down. While he emphasized that rising interest rates can be a bad thing because they can cause present value reversals (that is, force discounted net revenue streams below zero), he never accepted the notion that there is a simple downward sloping demand schedule for credit.

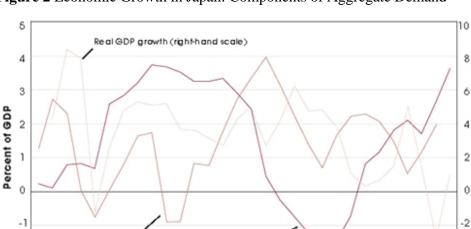
I am sure that Minsky would point to the case of Japan for support. The Japanese budget balance similarly became biased toward surplus by the end of the 1980s (see Figure 2). The government ran a surplus for six

years after 1987; even after the economy turned down, the budget remained in surplus. With the easiest monetary policy the world has seen since World War II (that is, zero interest rates for more than four years), the economy still has not recovered. Japan's budget deficit returned in 1993 and in 1999 was close to 8 percent of GDP. However, the earlier surpluses destroyed the private sector to such an extent that in spite of these huge budget surpluses, monetary ease, and net exports running at 2 percent of GDP, the private sector just absorbs any potential stimulative effects by saving to the tune of 10 percent of GDP. In some ways, the position of the United States looks even worse than that of Japan in 1989. U.S. households have never had much savings and are much more indebted. The economy cannot export its way to growth, and any reduction of household income is going to make it difficult to service debt. Stock market excesses are probably worse than Japan's (although it does seem unlikely that the real estate sector is overvalued to the extent that it was in Japan at the end of the 1980s). Even if one does not think that the situation is as bad as Japan's was, the depths of the Japanese recession should raise alarm about the risks faced by the economy.

I believe Minsky would point to several additional danger signs:

- Charge-offs for consumer loans, especially for credit cards and leases, have been rising since 1996 (see Table 1). Charge-offs on agricultural loans are rising. Delinquency rates have recently been rising for leases and commercial and industrial loans. I know that these rates are not yet inordinately high and that they are to a large extent discretionary (for example, extremely low delinquency rates are taken to be evidence that management is too risk-averse, leading to purchases of riskier pools of customers). But the rising rates may be an indication of problems to come.
- Bankruptcy law is now being reformed in a way that will make it harder for debtors to default. While that will make it easier to collect on debts, it also means that indebted consumers will have to cut back spending elsewhere. This will make it harder to get out of recession.
- The Fed is pushing up interest rates. Although private sector debt ratios are well above any previous level, debt service burdens have been moderated by low interest rates. Higher interest rates will eventually increase debt burdens sufficiently that households will begin to default.
- The stock market has probably already started on the way down. Note that if it is true that the wealth effect has been driving consumption, it is not necessary to have a crash to kill the expansion. As Godley has argued, stock market capital gains provide only a one-time boost to consumption levels; continued economic growth requires rising stock prices.
- While GDP growth rates have remained above expectations, some areas of the economy slowed perceptibly in March-real earnings were down 0.4 percent, and business inventories were growing faster than sales. March retail sales were up by 0.4 percent, but they had grown by 1.8 percent in February.
- Since the middle of 1997 profits growth has consistently been below GDP growth and capital spending by firms, opening up a growing financing gap in the corporate sector. The financing gap is the difference between capital spending and available internal funds; it reached 19 percent in the third quarter of last year, its highest since the mid 1980s.
- Business net interest expense is already rising and will increase sharply as the Fed raises interest rates. A
 cutback of consumer spending combined with rising interest rates will increase the financing gap and
 cause firms to reduce their own spending.

Government budget balance (left-hand scale)



Net Exports (left-hand scale)

Figure 2 Economic Growth in Japan: Components of Aggregate Demand

1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998

Note: Deficits are assigned a positive value and surpluses a negative value. Budgetary data prior to 1986 are for the Budgetary Central Government only; budgetary data for 1986 and forward are the Consolidated General Government.

Source: Export and GDP data: International Monetary Fund, International Financial Statistics CD-ROM.

Budgetary data prior to 1986: IMF, International Financial Statistics CD-ROM.

Budgetary data for 1986 and forward: IMF, World Economic Outlook, May 1994 and December 1998.

(The author thanks Marc-André Pigeon for help in preparing this figure.)

The expansion might not stall out in the coming months, but continued expansion in the face of a trade deficit and a budget surplus requires that the private sector's deficit and thus its debt load continue to rise without limit. Minsky cautioned us that government deficits cannot continue to rise relative to GDP without limit, and I think he would argue even more forcefully that neither can private deficits rise without limit. Is it not strange that although many economists agree with Minsky's statements about government deficits, they do not recognize the dangers in private deficits? Minsky's writings on the importance of debt load structures (and his tripartite classification of financial positions as hedge, speculative, and Ponzi) should make analysts and policymakers even more concerned about private deficits that are already well above 5 percent of GDP than they were about the Reagan-Bush budget deficits that peaked in that range. I know of no reputable economic theory that concludes that growing private sector deficits are any more sustainable than are growing public sector deficits, and Minsky would have concluded that rising private sector deficits are far more risky!

What would Minsky recommend? As long as private spending continues at a robust pace, he would probably recommend that we do nothing today about the budget surplus. He would oppose any approaches that would limit fiscal policy to maintenance of a surplus. Rather, he would push toward recognition that tax cuts and public spending increases will be needed as soon as private spending falters. That recognition would imply that now is the time to begin discussing the types of tax cuts and spending programs to be put in place rather than rushing them through as the recession begins.

For the longer run, he would recommend relaxing the fiscal stance so that surpluses would be achieved only at high growth rates (in excess of the full employment rate of economic growth). For the shorter run, he would oppose monetary tightening, which would increase debt service ratios and push financial structures into speculative or Ponzi positions. He would support policies aimed at reducing the irrational exuberance of financial markets; in particular, he would insist that increased margin requirements on stock markets would be far more effective and narrowly targeted than are general interest rate hikes that have been the sole instrument of Fed policy to this point.

Most important, Minsky would try to shift the focus of policy formulation away from the belief that monetary policy alone can be used to fine-tune the economy and from the belief that fiscal policy should be geared toward running perpetual surpluses. In his view, such policies would be high-risk strategies with no strong theoretical foundation.

Acknowledgment

I would like to acknowledge the substantial debt I owe Wynne Godley for the insights that inspired this policy note.

References

Godley, Wynne. 1999. Seven Unsustainable Processes. Special Report. Annandale-on-Hudson, N.Y.:The Jerome Levy Economics Institute.

Minsky, Hyman P. 1986. Stabilizing an Unstable Economy. New Haven, Conn.: Yale University Press. Wray, L. Randall. 1989. "A Keynesian Presentation of the Relations among Government Deficits, Investment, Saving, and Growth." Journal of Economic Issues 23, no. 4: 977-1002.