

Dangerous Trends: The Growth of Debt in the U.S. Economy

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Executive Summary

The sharp reversal in the budget situation under the Bush administration, from record surpluses to near record deficits, has received a great deal of attention from the media and the general public. However, two other forms of debt – household debt and foreign debt – have also been rising at an unsustainable pace. The trends in these other forms of debt have gone largely unnoticed, even though the implications for the long-term health of the economy are at least as serious as a continued sharp rise in government debt.

The paper notes that:

- the ratio of household debt to disposable income reached a record of 108.3 percent at the end of 2003. This rise was driven primarily by surging mortgage debt, but the ratio of consumer debt (mostly credit card debt and car loans) to disposable income was also at near record levels;
- if the household debt continues to grow at the same rate in the next presidential administration as it has since 2000, it will reach 152.0 percent of disposable income by the end of 2009;
- the cost of servicing this debt – which is already at near record levels relative to income – will increase substantially in the near future, both because of continuing increases in the debt, and higher interest rates, which are a virtual certainty. This will almost certainly push bankruptcy rates, which are already at historically high levels, to new records;
- the country's net foreign indebtedness is rising to unprecedented levels as the dollar remains seriously over-valued in international financial markets. This over-valuation effectively places a tax on U.S. exports and subsidizes imports into the United States, leading to record trade deficits;
- at the end of 2003, the net foreign indebtedness of the United States stood at \$2.4 trillion dollars. If the trade deficit remains constant as a share of GDP, net foreign indebtedness will rise to over \$7 trillion by the end of 2009, an amount equal to \$24,000 for every person in the United States;
- Measured relative to GDP, foreign indebtedness stood at 22.1 percent at the end of 2003. If the current path continues, it will hit 48.0 percent by the end of 2009, a level of indebtedness far greater than any industrialized country has ever experienced.
- While the dollar originally became over-valued largely because foreign investors bought into the stock bubble, its value is currently being sustained by foreign central banks. The dollar will only stay at its current levels as long as these banks consider it to be in their interest to keep the dollar at a high value relative to their own currencies.

Introduction

While the sharp reversal in the budget situation during the Bush administration has received a great deal of attention, the growth of household debt and foreign debt, both of which present comparable risks to the U.S. economy, have gone largely unnoticed. Both household and foreign debt have been rising at a pace that is clearly unsustainable for any significant period of time. The longer these forms of debt continue on their current growth path, the greater will be the damage to the economy. This paper describes the growth in household and foreign debt and projects their levels at the end of the next presidential administration, assuming the current pace of borrowing continues. It also discusses the costs associated with reversing this unsustainable course.

Household Debt

The low rate of household savings in the United States has been a major concern among economists since at least the eighties. While the United States had a low savings rate by international standards even then, the situation has gotten much worse in the last twenty years. Savings as a share of disposable income averaged more than 10 percent at the beginning of the eighties. It declined to less than 5.0 percent by the middle of the nineties, and has averaged just over 2.0 percent in the last five years. This decline in savings has occurred during a period in which demographic factors should have led to a substantial rise in the savings rate, as the baby boomers were in their peak earning years. With the front wave of baby boomers now retiring, demographic trends will be putting downward pressure on the savings rate in future years.

There are many factors that contributed to this decline in savings. A major cause of the decline in savings was the wealth effect associated first with the stock bubble in the nineties and more recently with the current housing bubble. The illusory wealth created by these bubbles led millions of families to reduce their savings and/or borrow, because they assumed that stocks and/or housing would maintain bubble-inflated values (Baker 2002, 2000, Dynan and Maki, 2001, Maki and Palumbo, 2001).

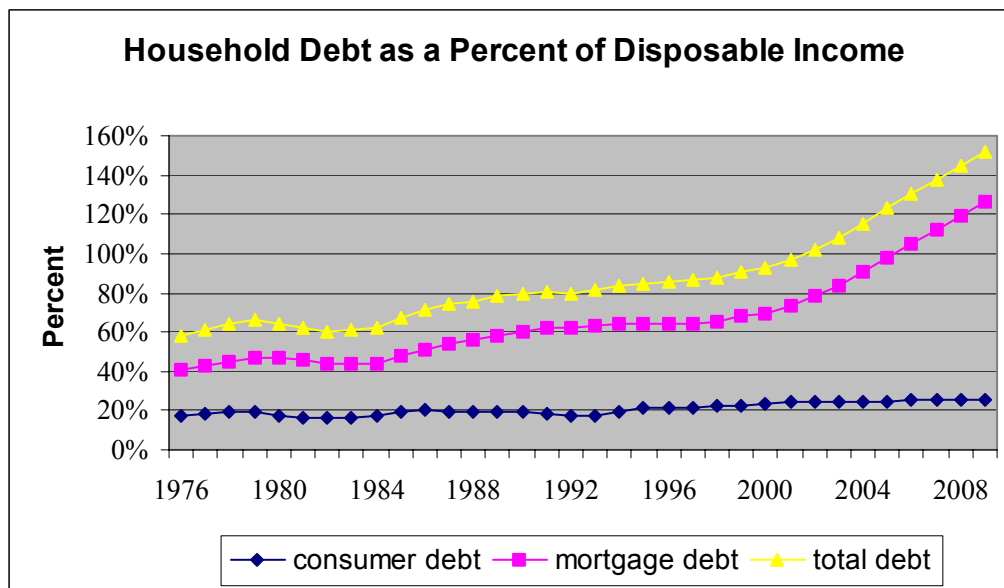
The other big factor leading to reduced savings and rising debt has been the weak wage growth experienced by most of the work force for the last two decades. Primarily as a result of increasing wage inequality, there has been little or no real wage growth at most points along the wage distribution for the past two decades.² (The late nineties boom was an exception in this respect; for the first time since the early seventies workers at all points along the wage distribution saw rising real wages from 1996 to 2001 (Bernstein and Baker, 2004).) As a result of stagnant or declining real wages, many families have been forced to go into debt to meet necessary expenses.

This combination of bubble-induced wealth effects and declining wage income has led to record levels of borrowing. The combined level of mortgage debt and

² Mishel, Bernstein, and Boushey, 2003, table 2.6.

consumer debt stood at a record 108.3 percent of disposable income at the end of 2003. This ratio of debt to income is almost 16 full percentage points above the 2000 level, which was already a record. Figure 1 shows the growth in the ratio of consumer debt and mortgage debt to disposable income from 1976 to the end of 2003. It also projects out the growth rate of the last three years (measured as a share of disposable income) through the end of 2009. As can be seen, the growth path shows the ratio of household debt to disposable income rising to 152.0% by the end of 2009.

Figure 1



Source: Bureau of Economic Analysis and Federal Reserve Board, see appendix.

While the ratio of debt to income is clearly far above prior peaks, and is rapidly headed higher, many analysts have noted that debt service payments are not especially onerous, due to fact that current interest rates are unusually low. While low interest rates have ameliorated the burden of the debt, it is worth noting that the Federal Reserve Board's financial obligations ratio, which measures the ratio of debt payments and debt-like payments (e.g. car leases and rent) to disposable income already stood at near record levels at the beginning of 2004. This ratio of 18.1 percent was exceeded only by the slightly higher ratios earlier in the current business cycle.

However, the ratio of debt payments to income is almost certain to rise, even if debt burdens do not rise, due to the fact that interest rates will almost certainly be considerably higher in the near future. Virtually all analysts predict that interest rates will return to more normal levels by 2005. For example, the Congressional Budget Office (CBO) predicts that interest rates on ten-year government bonds will average 5.5 percent in 2005 (CBO 2004, table 2-1). This would imply an increase in long-term interest rates of close to 1.5 percentage points from current levels. CBO predicts that short-term rates will

average 3.0 percent, which would imply an increase in shorter-term rates that apply on credit card debt or car loans of close to 2.0 percentage points from current levels.

Since this short-term debt is mostly incurred in the form of variable rate loans, consumers will feel any rise in short-term rates quickly in the form of higher interest rates. If the average interest rate on consumer debt increased by 2 percentage points, it would raise the financial obligations ratio by almost 0.5 percentage points.

Mortgage debt is mostly fixed rate, although a large and rising percentage of mortgage debt is in the form of variable rate mortgages. Even fixed rate mortgage debt turns over relatively quickly. Approximately 9.0 percent of existing homes are sold every year, which means that after five years close to 40 percent of homes will have been sold (assuming some homes are sold twice).³ If mortgage interest rates rise by an average of 1.5 percentage points on 40 percent of existing mortgage debt, this would also raise the financial obligations ratio by approximately 0.5 percentage points. In short, the virtually inevitable increase in interest rates will push debt service obligations to new records, even if households stopped increasing their debt-to-income ratios.

But the impact of rising debt burdens is likely to be more important in raising the financial obligations ratio than higher interest rates. If the ratio of household debt to disposable income actually rises by 44 percentage points by 2009, as it would on its current path, this would raise the financial obligations ratio by almost 3.0 full percentage points, even with a 6.0 percent interest rate. Obviously, the impact of a rising debt burden will be even greater if it is accompanied by a further rise interest rates.

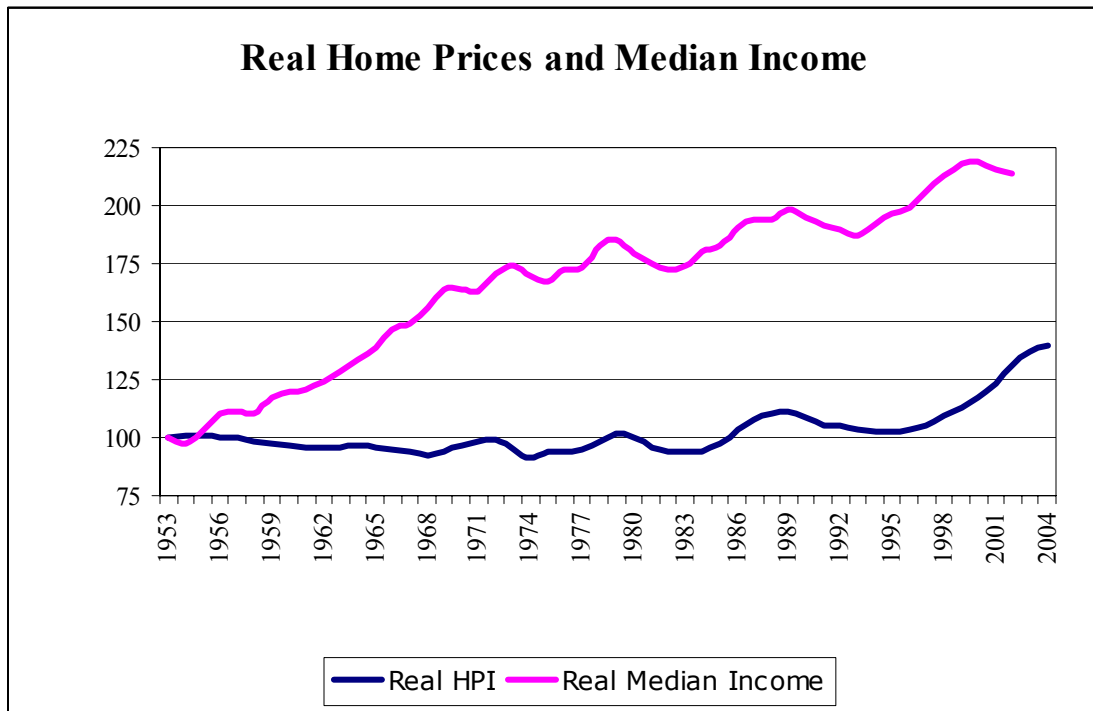
Of course any substantial rise in mortgage interest rates is virtually certain to crash the housing bubble, which has been the basis of much recent borrowing. This housing bubble has led to an unprecedented run-up in home prices. Over the post-World War II era, home prices had largely risen in step with the overall rate of inflation. Only in the past nine years have home prices substantially outpaced the general rate of inflation (Baker, 2004). The argument that this run-up can be explained by fundamentals – a shortage of housing relative to demand – is easily refuted by the fact that there has been no comparable run-up in rental prices. The rise in rental prices has only slightly exceeded the overall rate of inflation over this period, and in the last year and a half, rents have actually fallen behind the overall rate of inflation.

Figure 2 shows the path of real family income and real home sale prices. As can be seen, from 1953 until 1995 home prices moved almost exactly in step with the overall rate of inflation. Real median family income is included to correct a common misperception that home prices rise in step with family income. While it is reasonable to expect that if a family's income rises by 20 percent then it will spend approximately 20 percent more on housing, it is not reasonable to expect that it will spend 20 percent more *on the same*

³ This calculation is based on the recent sales rate of existing homes of 6.7 million, compared to an inventory of owner-occupied units of 73.4 million (Census Bureau, Housing Vacancy Survey, Second Quarter 2004, table 4).

house. The indexes used in figure 1 are showing the real increase in the price of the same homes through time; they do not reflect price increases attributable to families buying better homes. Since 1995, house prices have increased by more than 35 percent in real terms.

Figure 2



Source: BLS, Census Bureau, OFHEO, and author's calculations; see appendix.

Of course, the collapse of the housing bubble, like the collapse of the stock bubble, will pose serious problems for the economy and will almost certainly lead to another recession. Home construction will likely fall off by 40 percent or more, and the borrowing based on housing wealth will grind to a halt. While this will slow or reverse the run-up in household debt, it will not be a good period for the economy. However, as long as the bubble persists, the level of indebtedness will increase, making the inevitable adjustment ever more painful.

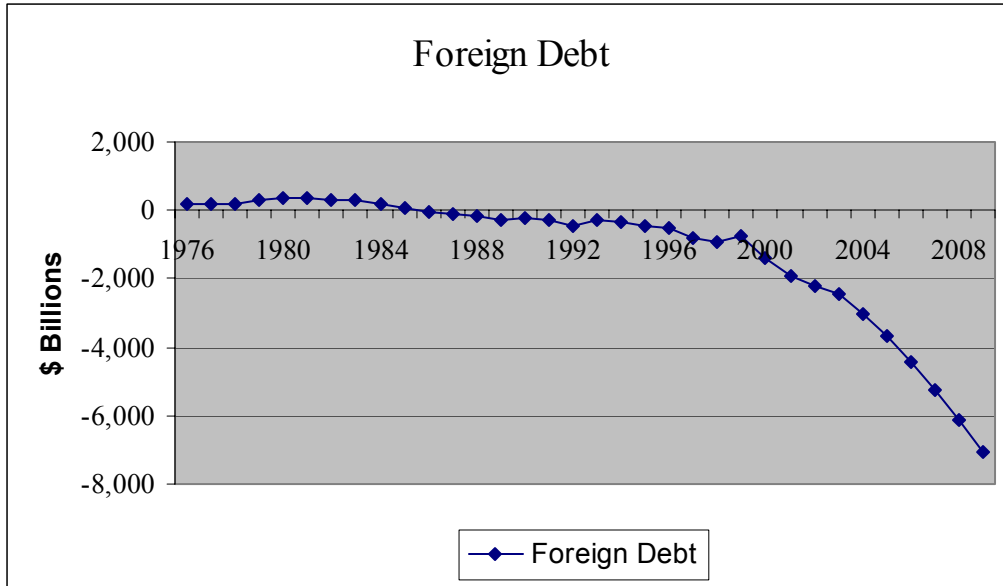
Foreign Debt

The household debt situation is further complicated by the fact that the United States is also running up foreign debt at a record pace. This is the result of the fact that an over-valued dollar has made U.S. goods and services uncompetitive in international markets. The real value of the dollar is at least 15 percent above its mid-nineties level relative to U.S. trading partners. This over-valuation is equivalent to imposing a 15 percent fine on manufacturers for all the items that they export, and giving consumers a 15 percent subsidy on all items purchased from abroad. With the price of the dollar set at such an uncompetitive level relative to other currencies, it is not surprising that the United States is experiencing a large and growing trade deficit.

In the second quarter of 2004, the trade deficit hit \$599.6 billion, a record 5.1 percent of GDP. A deficit of this magnitude clearly cannot be sustained for long. It depends on foreign countries willingness to increase their holdings of U.S. financial assets (stocks, bonds, and treasury notes) by this amount – effectively meaning that the United States must sell off its assets at a \$600 billion annual rate. Given the enormous size of its economy, the U.S. can sell off assets at this rate for two or three years, but it will begin to run out of assets after a period of time. Furthermore, if the trade deficit remains constant relative to GDP, the annual burden of financing it will increase, since it is necessary to cover the interest and dividend payments on assets sold in prior years.

Figure 3 shows the growth of foreign indebtedness measured in dollar terms since 1976 and projects the current growth path forward to 2009. As can be seen, the United States enjoyed a modest positive net asset position – it was a net international creditor – until the mid-eighties. The foreign borrowing associated with the large trade deficits of the period eventually exceeded the value of foreign assets that the United States had accumulated in prior decades. The debt grew at a modest pace in the early nineties, with the pace quickening with the run-up in the dollar in 1997, and rising still more rapidly

Figure 3

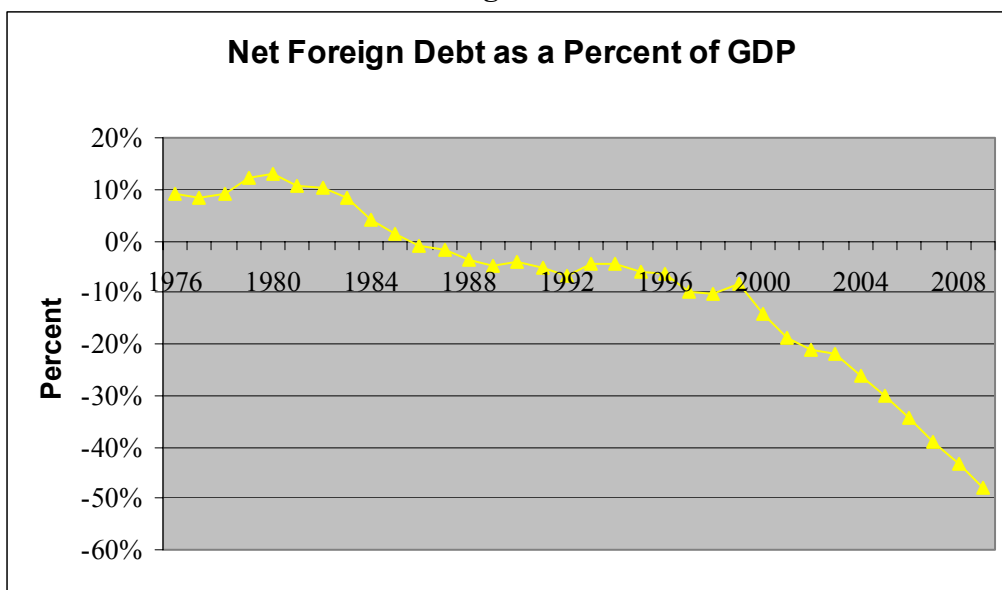


Source: Bureau of Economic Analysis, see appendix.

after 2000. On the current path, the net indebtedness of the United States will exceed \$7 trillion by the end of the next presidential administration in 2009. This means that the interest, dividends, or profits generated domestically by \$7 trillion (approximately \$24,000 per person) of assets will be paid to other countries, rather than to people living in the United States.

Figure 4 shows the same path of growing indebtedness, but expresses it relative to GDP, which gives a clearer perspective. As can be seen, the United States position as a creditor peaked in the late seventies, when it had a net asset position of more than 10 percent of GDP. The ratio of foreign debt to GDP increased substantially in the late nineties, but the pace of growth accelerated sharply at the end of the decade. If the current path continues, the net foreign debt of the United States will be almost half the size of the economy by the end of the next presidential term, an unprecedented level of indebtedness for an industrialized country.

Figure 4



Source: Bureau of Economic Analysis, see appendix.

While the main source of the trade deficit and the resulting debt build-up is the over-valuation of the dollar, the dynamics of this over-valuation have changed in the last few years. When the dollar originally experienced a sharp run-up in the late nineties, it was driven by foreign private investors, many of whom got caught up in the same irrational exuberance surrounding the stock market as U.S. investors. However, private investors have sharply cut back their purchases of U.S. assets in the last three years. At present, the major purchasers of dollar assets are foreign central banks – primarily the central banks of Japan, China, and India – all of whom are explicitly pursuing policies of keeping the dollar high against their currencies.

Trade deficits of the size that the United States has maintained in recent years are not sustainable regardless of their origin (an exception would be if the United States were experiencing extraordinary growth, like the 7 percent to 10 percent growth rates China has averaged over the last decade), but the role of central banks in supporting the current deficit means that the future course of the U.S. trade deficit will depend on the political decisions by these foreign central banks, not the economic calculus of investors. When they decide that it is no longer in their interest to prop up the dollar relative to their own currencies, the dollar will likely take a sharp plunge, until it falls to a value at which investors are willing to hold it.

This drop in the dollar will be associated with a sharp rise in import prices, since it will cost more dollars to buy the same goods. Higher import prices, in turn, will cause higher inflation and a drop in living standards. Higher inflation will also likely lead to higher interest rates, especially if the Federal Reserve Board deliberately raises rates in order to contain inflation. Such a rise in interest rates will almost certainly lead to a bursting of

the housing bubble, if oversupply had not already begun to bring housing prices back down to earth. The collapse of the housing bubble will lead to a sharp falloff of construction and the end of the housing-wealth-driven consumption noted earlier, which almost certainly means a second recession.

In short, the current paths of household and foreign debt are unsustainable trends. In the short-run, this borrowing has sustained the modest economic recovery that the country has experienced since 2001. However, this path cannot continue for long. If current borrowing patterns even persist through the next presidential administration, both forms of debt would reach implausibly high levels. The inevitable adjustment process to a sustainable growth path will involve higher inflation and a drop in living standards, and almost certainly another recession.

Appendix

Figure 1 uses year-end data on consumer debt from the Federal Reserve Board (http://www.federalreserve.gov/releases/g19/hist/cc_hist_sa.txt) and data on mortgage debt from Federal Reserve Board's Flow of Fund Accounts, table L.217, line 7. Data on disposable income is taken from the Bureau of Economic Analysis, National Income and Product Accounts, table 2.1, line 26. It is assumed that both consumer debt and mortgage debt continue to rise by the same percentage of disposable income in each of the years from 2004 through 2009 as they did in the years from 2000 to 2003.

Figure 2 uses the Census Bureau's series on real median family income. It uses the home ownership component of the Bureau of Labor Statistics consumer price index to measure the change in house prices for years prior to 1976 and it uses the Office of Federal Housing Enterprise Oversight's House Price Index to measure changes in house prices in the years after 1976. Both series are deflated by the CPI-URS, or the CPI-UX1 for years before 1978.

Figure 3 takes data on net foreign debt data from "International Investment Position of the United States by Yearend, 1976-2003," Table 2, line 1 (www.bea.gov/beatdi/intinv03_t2.xls). It is assumed that the trade deficit stays constant as a share of GDP at the ratio reached in the second quarter of 2004 (5.1 percent) and that debt accumulated in years after 2003 earns a 5.5 percent nominal return. The calculations conservatively assume that higher rates of return on foreign assets of U.S. residents will offset the earnings on the net debt accumulated for years prior to 2004. The economy is assumed to grow at the rate projected in CBO 2004 (table 2-1).

Figure 4 expresses the data in figure 3 as a share of GDP.

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