DEBT AND SPENDING

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T. S. Coleman PhD
tcoleman@closemountain.com

Household debt and net worth figures for the 3rd quarter of 2009 were released on December 10th, and personal income and savings rates on November 25th.

- Household debt in the US continues to fall
  - Household debt has been falling as a percent of disposable personal income since the first quarter of 2008, and in nominal terms since the second quarter. This is a big turn-around from the later 1990s and early 2000s when debt rose consistently.
- Net worth in the 2nd and 3rd quarters rose, both in nominal terms and relative to income
- The savings rate continues to rise: on a quarterly basis it has risen from 1.2% in 2008:I to 4.5% for 2009:III. This is a huge change – the highest savings rate since 1998.
- Unfortunately the increase in savings rate is due to lower taxes not lower spending. My fear is that this may be storing up problems for the future – eventually taxes will revert and households will have to adjust spending downwards.

The debt and savings numbers should all be good news for the recovery of the economy. Much of the recent recession was about households adjusting spending, debt, and savings to reduce debt and increase savings rates. Lower debt and higher savings rates means that at least some of this adjustment has occurred and that any recovery is more likely to be sustainable.

The story behind the savings rate, however, is not good news. All the increase in the savings rate has resulted from lower taxes rather than lower spending. In other words, the government has lowered taxes to increase income (which has gone towards savings) rather than households lowering spending (to increase savings).

My fear is that the current recovery is storing up problems for the future. Households have not substantially adjusted spending lower in response to the recent recession. Government taxes as percent of income will have to rise in the future, and households will have to adjust eventually.

BACKGROUND

Details on Recent Movements in Spending and the Savings Rate

Table 1 shows both definitions of the savings rate (discussed below), together with a decomposition for the personal income version. The savings rate jumped in 2008:II but that was due largely to the (temporary) tax rebates during summer 2008. The Savings Rate (PI) jumped by 2.0 percentage points, of which 1.8 were due to falling taxes and 0.2 due to falling spending. Overall since the low of 2008:I the savings rate has rise by 3.0 percentage points (as percent of personal income, after rounding). Of this 3.0 point change, 3.6 points were due to falling taxes and -0.6 points due to spending – in other words spending as a percent of personal income has actually rose and subtracted from the change in the savings rate.

Table 1 – Savings Rate and Decomposition for 1st Quarter 2008 – 3rd Quarter 2009

	I 08	II 08	III08	IV08	I09	II09	III09
Sav Rate DPI	1.2%	3.4%	2.2%	3.8%	3.7%	5.4%	4.5%
Sav Rate PI	1.0%	3.0%	1.9%	3.3%	3.4%	4.9%	4.1%
PersOut/PI	86.3%	86.2%	86.4%	84.9%	86.7%	86.1%	86.9%
Tax/PI	12.6%	10.8%	11.7%	11.7%	9.9%	9.0%	9.0%
Ch due to PersOut	-0.2%	0.2%	-0.2%	1.5%	-1.8%	0.6%	-0.9%
Ch due to Tax	0.0%	1.8%	-0.9%	0.0%	1.8%	0.9%	0.0%
%PI (simple rate)	0.3%	1.2%	-0.1%	-0.4%	-2.3%	0.8%	0.3%
%PersOut (somple)	0.6%	1.0%	0.2%	-2.1%	-0.3%	0.1%	1.3%

Source: Bureau of Economic Analysis and Calculations

Economists commonly consider the "savings rate," which is the difference between current income and spending – the excess of income left after spending and taxes are accounted for. The definition is:

Savings Rate = (Disposable Personal Income – Personal Outlays) / Disp Pers Inc .

(This "savings rate" is not exactly the savings one usually thinks of, but rather a definition of the excess of income over spending in the aggregate economy. One could equally well talk of the "spending rate" – Outlays / Income – which is just one minus the savings rate.)

It is useful to decompose the rise in the savings rate in order to understand it a little more. To do so it is useful to consider savings as a percent of total personal income. Basically,

Disposable Personal Income = Personal Income – Personal Current Taxes
Savings = Disposable Personal Income – Personal Outlays

The standard definition of the savings rate is savings divided by Disposable Income:

Savings Rate (DPI) = (Disposable Personal Income – Personal Outlays) / Disp Pers Inc

= 1 – Personal Outlays / Disp Pers Inc

We can, however, define a savings rate divided by personal income that is only slightly different:

Savings Rate (PI) = (Personal Income – Personal Current Taxes – Personal Outlays) / Pers Inc

= 1 – Pers Curr Taxes / Pers Inc – Pers Out / Pers Inc

Since DPI and PI differ only by Pers Curr Taxes, which has monthly changes that are not large relative to the level of DPI and PI, the two measures will be very much the same. The advantage of the second is that we can decompose changes in that savings rate into changes due to taxes and that due to changes due to outlays (spending).

Household Debt

During the 2000s households took on increased levels of debt, primarily mortgage debt, and since the early 1980s the savings rate has fallen. There was always a likelihood that these trends would reverse and households would pay down debt by slowing spending (increasing the savings rate). The financial crisis has been the trigger starting this process of household de-leveraging. In turn the de-leveraging and the lower spending associated with the higher savings rate has ensured that the financial crisis results in a severe recession.

The 1st quarter of 2009 is the second quarter running that nominal debt has actually decreased; 2008 Q4 and 2009 Q1 are the only two quarters nominal debt has fallen since at least 1952. Debt as a percent of income is below the high of 2007/2008 (128% vs. 133%). This is a dramatic reversal from preceding years, where household debt and leverage grew substantially. We are now in an environment where households are decreasing their level of debt relative to income. At the same time, however, household net worth is falling faster and the level of debt relative to wealth is rising. This means that household de-leveraging is likely to continue for some time and the savings rate is likely to continue higher. I expect that the slow-down in consumer spending will continue over the next six to twelve months until debt is reduced somewhat and the savings rate is at levels closer to 10% than the current 7%. The recession will likely be severe and continue through 2009.

- Leverage in the US household sector, particularly mortgage debt, increased dramatically during the early part of this decade. Figure 1 shows total household debt as a ratio to income. During the 1990s debt grew by 1.2% per year while from 2000 to 2007 it grew at 5.2% per year, with 93% due to mortgage debt.[1]

- Since the 1st quarter of 2008 household debt as percent of income has declined, again seen in figure 1. Most notably, the decrease is largely due to falling mortgage debt.

- During this decade spending has increased, to almost 100% of disposable income. This means that the savings rate (income less spending divided by spending) has been at close to

[1] "Debt" refers to household debt outstanding as a percent of income. (Disposable Personal Income is used even though tax rebates somewhat distort the figures for 2nd quarter 2008.) Household debt is from the Federal Reserve's *Flow of Funds Accounts of the United States* and disposable personal income (DPI) is from the Bureau of Economic Analysis. Debt as percent of DPI grew by 1.19% per year (compounded) over the decade of the 1990s, with 62% of the growth attributable to mortgage debt. From 2000 to 2007 the growth was 45.19% per year, with 93% attributable to mortgage debt.

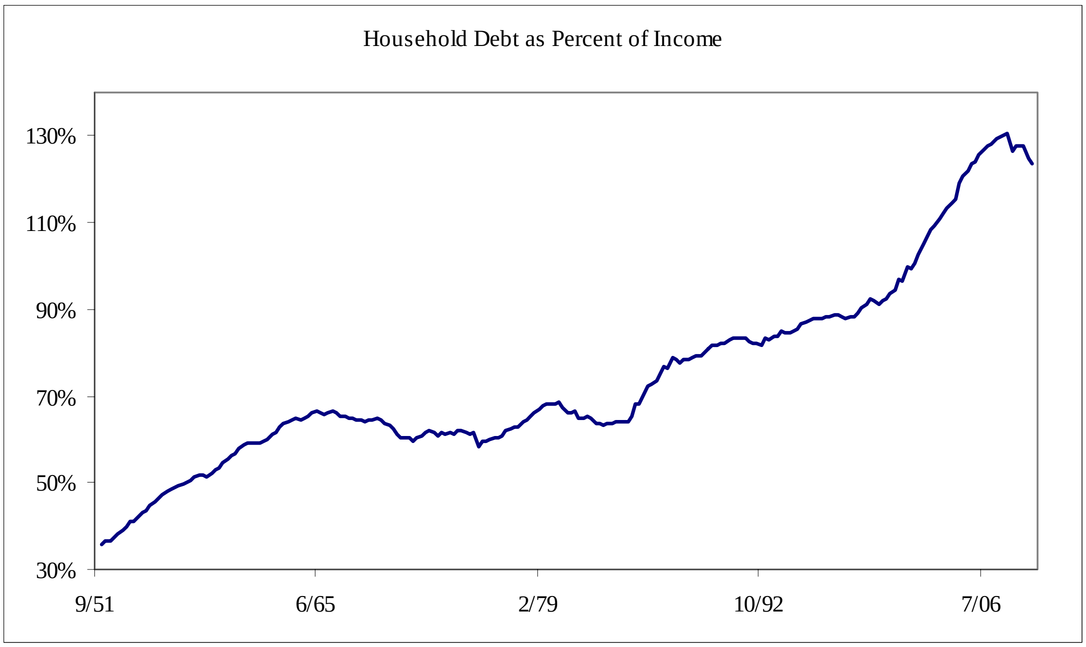
zero, as seen in figure 2. This is likely related to the increase in debt, but in any case has left households with little cushion in terms of current income.[2]

- The slower growth in household debt has likely been partly a result of households walking away from bad (mortgage) debts; a hypothesis consistent with the substantial losses on mortgage debt suffered in the financial system.

- Household net worth and assets are also falling, as shown in figure 3. This will likely also put downward pressure on household spending.

- The decrease in spending has had a serious impact on US economic growth, since consumer spending has been a major engine of GDP growth. For the period 2000-2006 GDP grew at 2.40% per year, with consumer spending contributing 2.05% (or 85%) of that. This is high by historical standards, and any fall in spending translates directly to lower GDP growth.

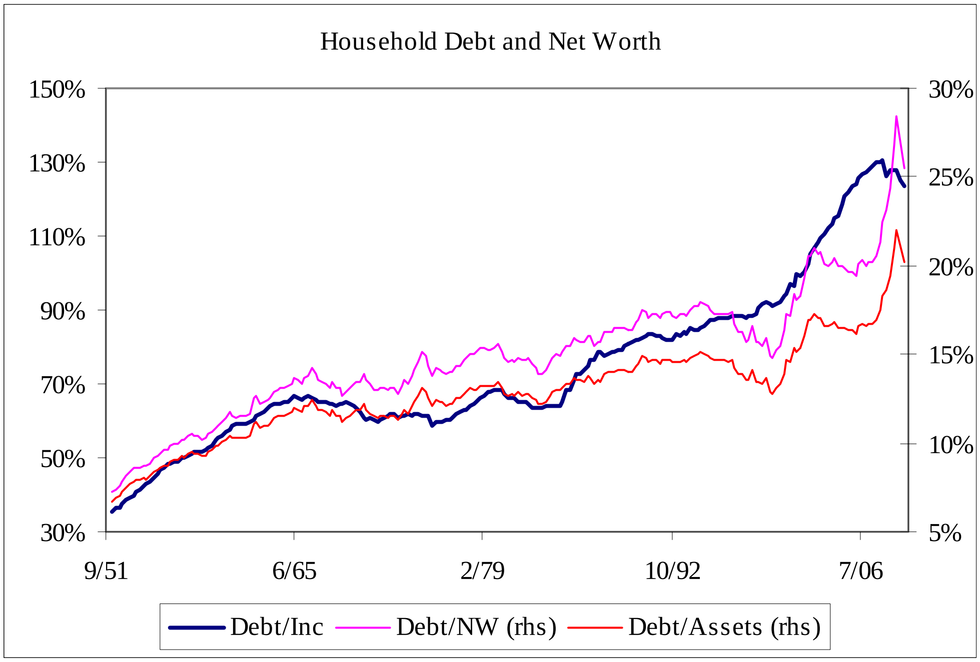
Figure 1a – Household Debt – With 2009 Q3 data



Household debt is from the Federal Reserve Board's quarterly Flow of Funds. Personal Income is Disposable Personal Income from the Bureau of Economic Analysis

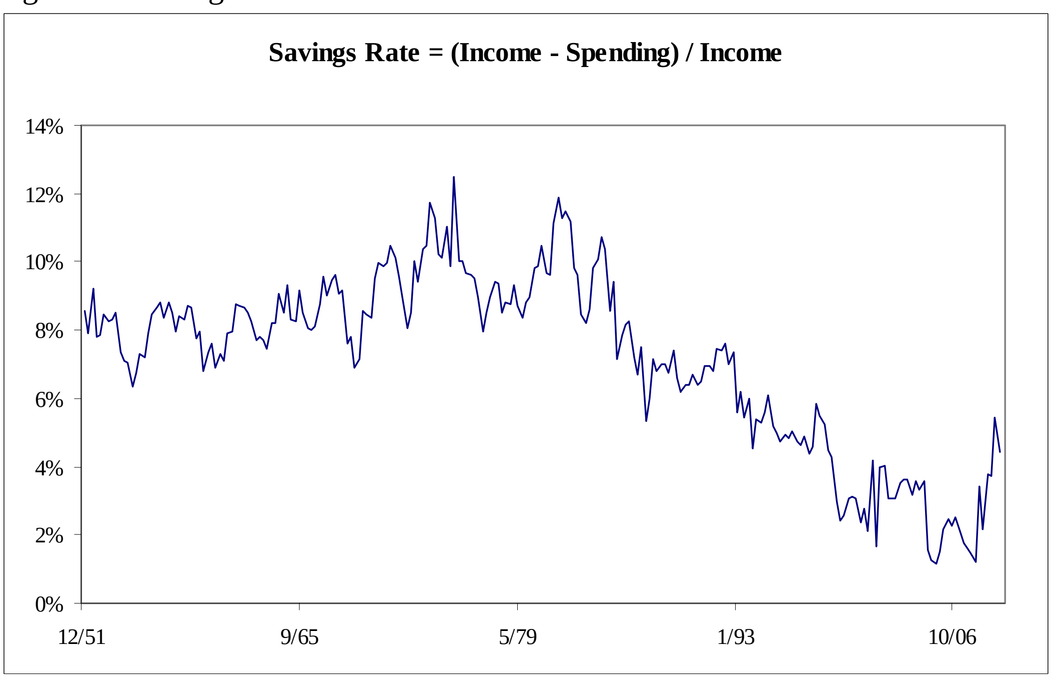
[2] The rise in 2nd quarter 2008 is due to tax rebates from the economic stimulus package, while the higher savings rate for 2008 Q4 and 2009 Q1 are due to lower spending and lower taxes. For April and May 2009 the savings rate has continued to rise, to 6.9% for May.

Figure 1b – Househodl Debt, Net Worth, and Assets



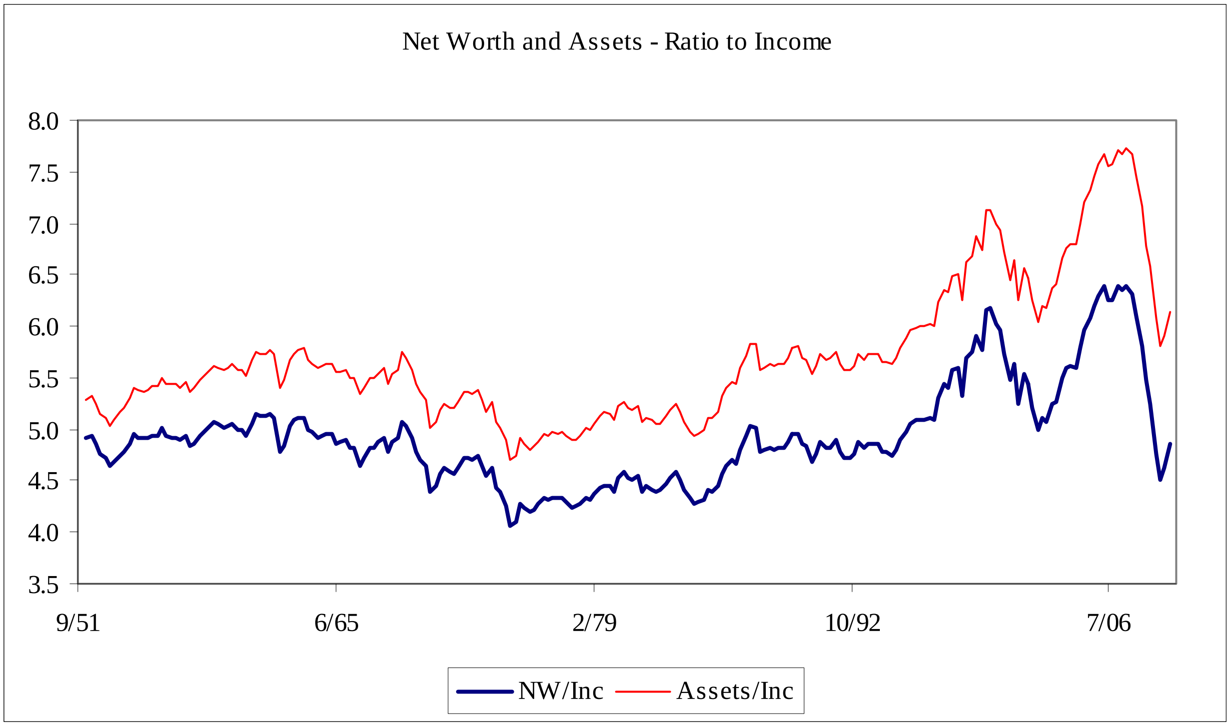
Income is Disposable Personal Income. Data from the Federal Reserve Board's quarterly Flow of Funds and the Bureau of Economic Analysis

Figure 2 – Savings Rate



Source – Bureau of Economic Analysis – Income is Disposable Personal Income

Figure 3 – Net Worth and Assets



Source – Federal Reserve's quarterly Flow of Funds