REINVESTMENT ALERT

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U.S. Household Debt Levels Are Worrying No Matter How You Look at Them

There is growing concern about low-savings' rates and rising levels of debt in the U.S. This concern partly reflects concerns about the worst consequences of debt—high interest payments, missed credit payments, late mortgage payments, and home foreclosures—and a concern that a portion of the baby boom generation is reaching retirement age without sufficient retirement income.

While current debt levels are the subject of widespread debate, it is not easy to evaluate the seriousness of changes in debt levels. There are two main reasons for this difficulty. First, some debt has long-term positive outcomes because the debt is a necessary means to building assets. A reasonable amount of home mortgage debt to acquire a home in a neighborhood where home prices are appreciating, and debt used to pay college tuition are examples of productive debt. Another reason is that debt levels may or may not be troublesome depending on the levels of a family's assets. If a household's assets exceed its debt, or if a family's income is sufficient to pay off reasonably priced, productive debt, debt may not be a problem. So these two ratios, debt to assets and debt to income are useful tools for evaluating the impact of absolute amounts of debt.

Two other key considerations in analyzing debt and savings levels are the impact of where households are in their life cycles, and the impact of economic cycles. Younger families will save less than middle-aged families--although modest savings at an earlier age will produce much higher assets at retirement than high levels of savings in middle-age. In periods of economic downturn, in a phenomenon that may seem counter-intuitive, savings increase as families try to repair their balance sheets with their available income whereas in periods of economic growth savings often diminish. However, since the early 1980s, household saving rates in the U.S. have exhibited a strong downward trend in contrast to broadly steady savings rates in the 1960s and 1970s.[1]

This alert analyses a variety of measures of debt to provide an overall sense of changes in U.S. household debt levels and the impact of those changes on different groups of families.

Key Debt Measurement

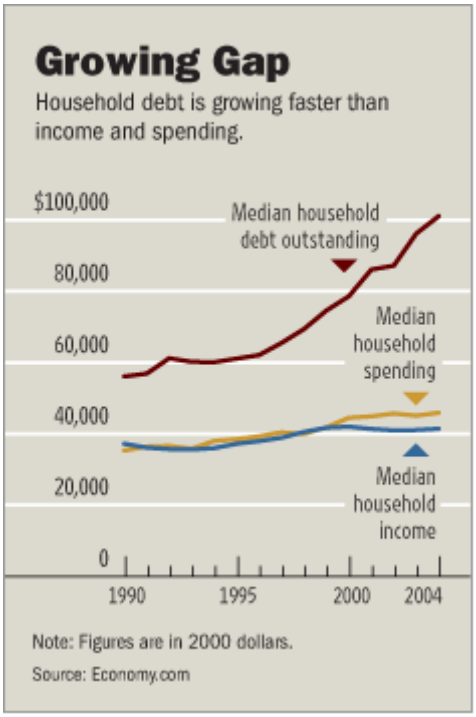
Debt to Income Ratios

If income rises faster than debt, rising debt levels might be of little concern. But, in fact, the trend has been in the opposite direction. Debt levels have been rising faster than income. Figure 1 illustrates changes in absolute measures of debt and income over ten years. It shows that while real median family

[1]Jean-Phillipe Cotis, Jonathean Coppel, and Luiz de Mello, Is the U.S. prone to "Over-Consumption"? Paper presented at the Federal Reserve Bank of Boston Economic Conference, Chatham, Mass.: June, 2004, p.6.

income[2] has been largely flat between 1990 and 2004, median household debt outstanding has been rising rapidly.

Figure 1: Trends in Median Household Debt, Spending, and Income: 1990-2004*



Source: Davis, Bob. "Lagging behind the wealthy, many use debt to catch up", The Wall Street Journal, May 17, 2005.

The next three tables place those absolute debt levels in context by converting them to ratios. Table 1 charts outstanding debt as a percent of disposable personal inome and as a percent of gross domestic product between 1979 and 2004. In 1979, household debt was about 71 percent of disposable income, while in 2004 that percent was 117 percent. The Washington Post reported in January 2006 that in the third quarter of 2005, that figure had reached 126 percent.[3]

It might be argued that the debt to income ratios give a misleading account of households' debt situation particularly in the 1990s because in that decade household assets, particularly home values, and the value of stock market investments were rising rapidly. As Table 2 shows, this asset growth contributed to a decline in the measurement of household debt as a percentage of assets in the 1990s, but once the market began to decline rapidly in 1999, the increased borrowing that occurred during the economic boom made household debt a significantly larger portion of household assets.

[2]Median family income is the income level at which half of U.S. families have incomes below the figure and half above. Real income is income adjusted for inflation. In Table 1, all the yearly figures are adjusted to be expressed in year 2000 dollars.

[3]Neil Henderson, As Economy Thrived Under Greeenspan, So Did Debt, Washington Post, Monday, January 23, 2006, s. A, p.1.

Table 1: Disposable Personal Income[4] and Household Debt[5] Measurements

	Disposable Personal Income (billions of dollars)	Outstanding Total Household Debt (billions of dollars)	Outstanding Debt as a Percentage of Disposable Personal Income
1979	1,794	1,277	71.2
1984	2,912	1,945	66.8
1989	4,022	3,330	82.8
1994	5,152	4,536	88.0
1999	6,695	6,398	95.6
2004	8,664	10,169	117.4

Source: "Flow of Funds Accounts of the United States: Historical Data." Statistical release, Federal Reserve Board, December 5, 2005. Available online at http://www.federalreserve.gov/releases/z1/Current/data.htm; outstanding household debt measurements available at http://www.federalreserve.gov/releases/z1/Current/z1r-2.pdf.

Table 2: Total Liabilities as a Percentage of Total Assets*

Year	Percentage
1994	25.1%
1995	23.6%
1996	22.7%
1997	21.1%
1998	20.7%
1999	19.7%
2000	22.2%
2001	25.0%
2002	29.5%
2003	28.4%
2004	29.3%

Source: Flow of Funds Accounts of the United States, Historical Data, Table L.100, Available at http://www.federalreserve._gov/releases/z1/Current/data.htm

*For Households and Non-Profit Organizations

From 1999-2004, household liabilities as a percentage of assets rose by nearly 10 percentage points, a dramatic change given that this measurement rose and declined very gradually during the previous 15 years. These percentages should be considered with two cautions in mind. They depend not only on absolute debt levels but also on asset levels, two major components of which are home values and the value of investments in e.g., the stock market. The rate of increase in home values has dropped significantly in most housing markets. If debt levels continue to rise and home values hold steady, debt levels as a percent of income will rise. If home values actually decline, that percent will increase more dramatically. After a period beginning in 1999 when the stock market began to decline steeply, stock

[4]For the Flow of Funds accounts, disposable income is defined as current income (including wage and salary income, net proprietors' income, transfer payments less social insurance, income from interest and dividends, and net rental income, and income earned from nonfarm noncorporate businesses, noncorporate farms, and nonprofit organizations) minus tax and nontax payments from governments.

[5]Household sector debt includes consumer credit and home mortgage debt.

prices have experienced an upward trend. But again, if stock market gains level out or even decline in the mid-term, the debt to asset ratio will increase.

Home Mortgage Debt

The level of personal assets that a family holds in home equity varies not only with home prices but also with the amount of equity extracted from a home in home equity loans. The level will also vary depending on how large down payments home owners made and the rate at which they pay off their mortgages. Over the last 25 years, U.S. homeowners have been taking an increasing amount of money out of their homes such that even in an era of large increases in property values, the percent of their homes' value that families actually own has been declining significantly. Table 3 shows that the percent of their homes that families owned on average declined from 67.3 percent in 1979 to 56.7 in 2004.

Table 3: Owner's Equity as a Percentage of Real Estate Value

Year	Percentage
1979	67.3%
1984	69.1%
1989	64.9%
1994	57.8%
1999	57.6%
2004	56.7%

Source: "Flow of Funds Accounts of the United States: Historical Data." Statistical release, Federal Reserve Board, December 5, 2005. Available online at http://www.federalreserve.gov/releases/z1/Current/data.htm

While much public attention has been paid to levels of credit card debt, mortgage debt has been responsible for an increasing percentage of additional liabilities in recent years. In 2000, net increases in nonfarm mortgage debt made up 44 percent of the increase in total net liabilities. The same percentage at the end of the third quarter of 2005 was 79 percent.[6]

The averages, of course, conceal large individual and group differences and these differences have been changing over time as stagnant wages for lower-income families and rising home values make it harder for those families to afford homes. Table 4 shows that the amount of debt that lower-income families have been taking on in order to acquire homes has been increasing rapidly and at much higher rates than for wealthier families. So, for example, the amount of mortgage debt of families in the bottom fifth of the income distribution increased in inflation adjusted dollars by 191 percent between 1989 and 2001 compared to an increase of about only 40 percent for families in the top ten percent of the income distribution:

[6]Flow of Funds Accounts, Federal Reserve Board, F.10 Deriviation of Measures of Personal Saving, December 8, 2005. Available at http://www.federalreserve.gov/releases/z1/Current/z1.pdf.

Table 4: Median Value of Mortgage Debt by Income Group

Income Percentile	1989	2001	%Change
Lowest 20%	$9.635	$28,000	191
20-39.9%	$17,894	$40,000	124
40-59.9%	$28,906	$56,109	94
60-79.9%	$50,929	$75,589	48
80-89.9%	$57,811	$90,958	57

Source: Survey of Consumer Finances, Baker, Alex, "Life and Debt: Why American Families are Borrowing to the Hilt", Century Foundation, 2004.

Some part of the increase in mortgage debt for lower-income families in this period is attributable to more flexible mortgage products including products with lower-down payments, subprime mortgages for the credit impaired that come with higher fees and interest rates, and products with adjustable interest rates and interest-only mortgages. These products have helped an increasing percentage of families enjoy the benefits of home-ownership and maintained home-ownership rates in very expensive housing markets. But the value of homeownership as an asset building tool depends on rising home values and a family's continued ability to make mortgage payments. An unsustainable mortgage, a predatory mortgage or the extraction of too much equity from a home will turn a potential asset into a financial burden.

In March 2005, the share of all mortgage applications that were for adjustable rate mortgages hit a record high of 37 percent. Interest-only mortgage products accounted for one-quarter of fixed-rate mortgages issued to borrowers who took out jumbo loans in the second half of 2005, up from less than 5 percent a year earlier.[7] In addition, lenders are now offering mortgages with introductory "teaser rates." As the interest rates on these mortgages adjust upwards, more homeowners may face unsustainable mortgage payments. Such mortgages in a steady or even gradually depreciating housing market can very quickly lead to a negative equity situation where home-owners' net equity in the house is a minus quantity thus putting them at great risk of foreclosure. Even in a rising housing market, some holders of these mortgages, which are often accompanied by low-down payments, will not have sufficient equity to pay for necessary home repairs.

About 69 percent of U.S. families are homeowners, a percent that has increased from about 64 percent in the last 15 years.[8] But that still leaves 30 percent of the population being renters and the make-up of renters' debt is very different in the absence of home mortgage payments. Renters' debt has also grown higher as a percent of income partly because, on average, renters have experienced less income growth since the early 1990s than have homeowners. Currently, renters' *financial obligations ratio* (FOR) (this ratio adds recurring financial obligations such as rent, auto leases, homeowner's insurance and property taxes to the measurement of debt service from consumer and other debt) is about two times the FOR for homeowners. Table 5 shows that while mortgage payments are by far the largest debt item for homeowners, credit card debt, auto loans, and student loans loom large for renters.

[7]Ruth Simon, "Lenders try to keep mortgage boom alive", Wall Street Journal, January 31, 2006, p. D1.

[8]U.S. Census Bureau, ''Housing Vacancies and Homeownership Historical Tables,'' table 14, http://www.census.gov/hhes/www/housing/hvs/historic/histt14.html.

Table 5: Distribution of the Debt of Homeowners and Renters by Loan Type, 1990-2002*

Type of Loan	Share of Debt Type Among Homeowners (Percent)	Share of Debt Type Among Renters (Percent)
Mortgage	82	N/A
Credit Card	7	40
Auto	7	35
RV and Marine	1	1
Mobile Home	1	N/A
Student	1	20
Personal	2	4

Source: Dynan, Karn, Kathleen Johnson, and Karen Pence, "Recent Changes to a Measure of U.S. Household Debt Service", Federal Reserve Bulletin, October 2003. Available at http://www.federalreserve.gov/pubs/bulletin/2003/1003lead.pdf

*Percentages are calculated separately for each year listed in the range and then averaged.

Credit Card and Consumer Debt

As Table 6 shows, credit card debt is the largest component of debt for renters and the second largest component (though a small fraction) of the debt of homeowners. Credit card debt can be measured in a variety of ways. In August 2005, U.S. households held $798 billion in revolving credit. This figure includes debt from credit cards issued by banks, and specialty cards such as gas and store-issued credit cards. A large majority of the nation's revolving credit, 83 percent, was from bank-issued credit cards, an amount of about $664 billion.[9]

The nationwide total reported above comes from industry sources and reports the actual total amount of credit card debt extended by credit card issuers. More detailed information relies on self-reported data collected in surveys. Survey data from the Survey of Consumer Finances (SCF), conducted by the Federal Reserve Board every three years show that between 1989 and 2001, average credit card balances increased in 2001 dollars from $2,696 to $4,126 an increase of 66 percent.[10] (A credit card balance is the amount left unpaid at the end of a billing cycle and is carried over into the next billing cycle.)

The 2004 survey reported an average balance in 2004 dollars of $5,100. [11] (Median credit card balances are lower than mean credit card balances so the recently released 2004 Survey of Consumer Finances shows the median balance for all families was $2,200 in that year.)

[9]http://www.cardweb.com/cardtrak/news/2005/october/11a.html

[10]Draut, Tamara. 2003. Borrowing to make ends meet: The Growth in Credit Card Debt in the 90s. Demos, USA.

[11]Brian K. Bucks, Arthur B. Kennickell, and Kevin B. Moore, "Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances", Federal Reserve Bulletin, 2006, p. A27.

Table 6: Average Credit Card Debt Among Families With Credit Card Debt (2001 dollars*)

Year	Dollars
1989	$2,697
1992	$2,991
1995	$3,454
1998	$4,486
2001	$4,126
2004	$5,100

Source: Calculations from the Survey of Consumer Finances, 1989, 1992, 1995, 1998, and 2001. Tamera Draut and Javier Silva, "Borrowing to Make Ends Meet: The Growth of Credit Card Debt in the '90s.", Demos: A Network for Ideas and Action, September 2003.

*The 2004 figure is from the recently released 2004 Survey of Consumer Finances and is in 2004 dollars

A Gallup Poll survey released in early 2004 reported the average outstanding balance among individual credit cardholders (as opposed to households which could have several cards and cardholders) of $3,815.[12] A household figure would give a higher number.

The same poll also surveyed the percentage of household income that goes solely to credit card payments, an important indicator of a family's ability to manage its credit card debt. The poll indicated that in 2004, families who had credit card debt and who earned less than $20,000 had total credit card debts amounting to 14.3 percent of their income (see Table 7). Families earning $40,000 a year or less also had credit card debts of over 10 percent of their income. In comparison, families earning over $100,000 annually had credit card debts of 2.3 percent of their income, according to the same poll.[13]

Table 7: Credit Card Debt as a Percent of Household Income for Households With Unpaid Balances, 2004

Household Income	Percentage
Less than $20,000	14.30%
$20,000 - $29,999	13.30%
$30,000 - $39,999	11.00%
$40,000 - $49,999	5.00%
$50,000 - $74,999	6.90%
$75,000 - $99,999	9.00%
$100,000 or more	2.3%

Source: Gallup Organization, "Average American Owes $2,900 in Credit Card Debt", April 6, 2004.

[12]Gallup Poll News Service, "Average American Owes $2,900 in Credit Card Debt," April 16, 2004.

[13]Plunkett, Travis B. 2005. "Examining the Current Legal and Regulatory Requirements and Industry Practices for Credit Card Issuers With Respect to Consumer Disclosures and Marketing Efforts." Testimony to the Committee on Banking, Housing and Urban Affairs of the United States Senate, Consumer Federation of America.

Additionally, a recent survey conducted by the Center for Responsible Lending and Demos, showed that low- and middle-income indebted households had an average credit card debt of $8,650.[14] The difference between levels of individual debt and household credit card debt and the difference between self-reported and industry reported levels is sharply illustrated by another set of figures. In 2003, Cardweb.com Inc., which tracks the debt and credit card industry, calculated that households with at least one credit card held average unpaid balances of $9,205 that year.[15] Given that 40 percent of cardholders pay off their balances in full every month[16], this means a much higher level of debt outstanding for cardholders who maintain balances. Table 8 summarizes these diverse measures of credit card debt.

Table 8: Diverse Measurements of Credit Card Debt

Year Data Collected	Definition of Debt	Original Source of Data	Published Source of Data	Amount of Credit Debt
2001	Mean family credit card debt for all families holding credit card debt	Self-report	Survey of Consumer Finance	$4,126
2003	Mean household credit card debt of families holding at least one credit card	Actual industry data	Card Web.com Inc., in Wall Street Journal, May. 2005	$9,205
2004	Median credit card debt for all families holding credit card debt	Self-report	Survey of Consumer Finance	$2,000
2004	Mean credit card debt for all families holding credit card debt	Self-report data	Survey of Consumer Finance	$5,100
2005	Mean debt of low- and middle-income families holding credit card debt	Self-report	Center for Responsible Lending and Demos	$8,650

These data suggest two conclusions about credit card debt. Data from the consistent source of the Survey of Consumer Finance show credit card balances in inflation adjusted dollars doubling between 1989 and 2004. Data from actual industry figures suggest that the Survey of Consumer Finance self-reported figures considerably underestimate actual credit card debt.

Conclusion

This close analysis of debt levels may seem to complicate unnecessarily a picture that can be summarized by some startling headlines. So, for example, a Wall Street Journal story of February 14, 2006, laid out the bleak fact that in 2005, in the aggregate, household spending exceeded after-tax income for the first time since the Great Depression making the savings rate negative. In contrast, in 1980, the household

[14]"The Plastic Safety Net: The Reality Behind Debt in America." Center for Responsible Lending & Demos, October 2005. Available at http://responsiblelending.org/pdfs/DEMOS-101205.pdf. To account for the holiday season, the survey excluded households who had credit card debt for less than three months.

[15]David, Bob. "Lagging behind the wealthy, many use debt to catch up", *The Wall Street Journal*, May 17, 2005, http://www.post-gazetter.com/pg/05137/506136.stm

[16] Westrich, Tim & Malcolm Bush. "Blindfolded Into Debt: A Comparison of Credit Card Costs and Conditions at Banks and Credit Unions", Woodstock Institute, July 2005.

savings rate was 10 percent of after-tax income.[17] The only way for households to spend more than they earn is to dip into existing savings or borrow.

But there are two important reasons for sketching out this more complicated picture. In the first place, some economists insist that the increase in assets more than balances the run up in debt. Our analysis suggests that the increase in debt is worrisome even taking into account the run-up in assets. The second reason is that economists who only look at aggregate levels of household debt and assets miss the fact that some very large groups within the aggregate are doing very badly and building up unsustainable debt levels. These groups include households in the bottom half of the income distribution who as we said earlier have the added problem that for most of the last 40 years their wages in inflation adjusted dollars have either been flat or declining. Another group are those households who have bought homes with mortgages that are extremely risky either because the mortgages involve very high fees and interest rates or because the mortgages are such that the home-owner is at high risk of moving into a negative equity situation.

Rising levels of household debt have other consequences. For the banking industry, zero savings rates reduces their cheapest source of funds, deposits in checking and savings accounts. This decline forces banks to rely on much more volitile wholesale funds.[18] Then there is the larger issue that the U.S. economy rests on three legs, households, corporations and the public sector. Federal government debt has exploded since the beginning of the Bush Administration meaning that two of the three sectors in the economy are increasingly in debt. The U.S. pays for this debt by borrowing from abroad, primarily from the central banks of Japan, China and India where savings rates are high. At some point, doubts about the sustainability of the U.S. economy may cause these banks to reduce their acquisition or even holdings of U.S. debt thus forcing a capital investment crisis which would have implications for all sectors of the economy.

While economists can explain much of the decrease in savings as a response to the long-lived bull market in stocks and housing together with falling nominal interest rates over the same period,[19] the consequences of current debt levels still remain dire for those households with particularly large debt levels compared with their income and assets, and for the economy as a whole.

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[17]Greg Ip, Report Plays Down Economic Woes: Bush Advisors Stay Upbeat Amid Record Trade Deficit, Low-Personal Saving Rate, The Wall Street Journal, February 14, 2006, s. A, p. 2.

[18]See Eugene A. Ludwig, "Pricing Isn't Key Funding Quality Measure," American Banker, March 17, 2006, p. 11.

[19]Kevin J. Lansing, Spendthrift Nation, Federal Reserve Bank of San Francisco Economic Letter, N. 2005-30, November 10, 2005, p. 2.