Muhlenkamp & Company, Inc.
Intelligent Investment Management

Consumer Spending

This essay was originally published in January 2003 with data through 2000. In 2007, the data have been updated through 2006 and additional charts added.

Consumer spending and consumer debt are often used as indicators of the health of the economy. If consumer spending is strong, the economy continues to grow. If consumer debt is under control, then the consumer spending is sustainable. In this essay, Ron takes a look at consumer spending over the last 55 years to gain perspective not only on the strength of the economy overall, but to evaluate changes in spending patterns over those 55 years. He then looks at consumer debt in terms of debt payments as a percentage of disposable income. In other words, how much of a burden are the debt payments in each household's budget? This debt burden indicates whether the level of consumer spending is sustainable.

I've been carrying Figure 8.1 in my briefcase for several years. Taken directly from the U.S. Bureau of Economic Analysis, the most recent edition lists Personal Consumption Expenditures (PCE) in the United States for the past 55 years. It then breaks down overall spending as a percentage of the total for broad categories of spending. We've added three lines near the top of the table.

First, we adjusted the PCE for inflation, bringing all numbers to year 2000 dollar values.

Next, we listed the U.S. population for each year.

Finally, we calculated PCE per capita.

Figure 8.1 Personal Consumption Expenditures (PCE): 1950-2005

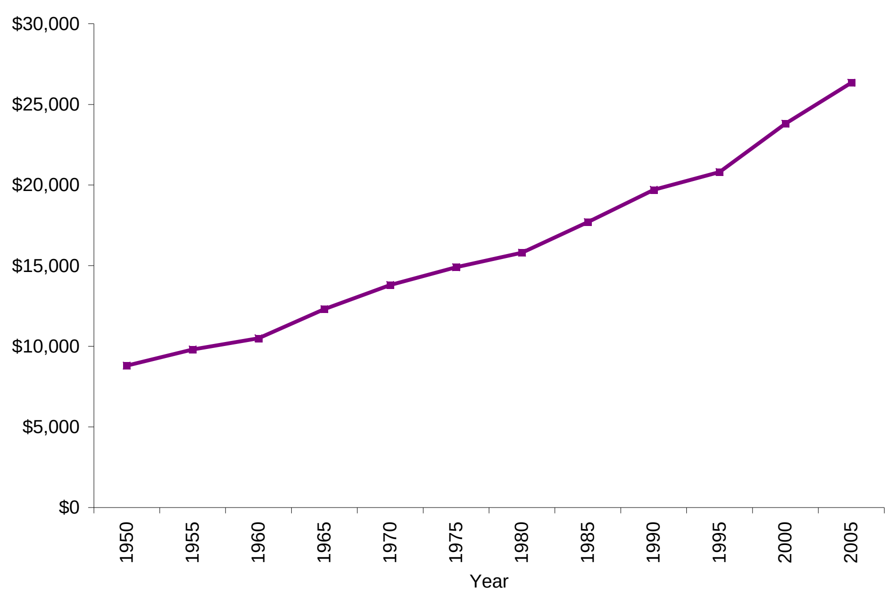
Personal Consumption Expenditures (PCE): 1950-2005

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005
Total PCE (Billions of Current $)	**$ 192.70**	**$ 259.00**	**$ 332.30**	**$ 444.30**	**$ 648.90**	**$ 1,030.30**	**$ 1,762.90**	**$ 2,712.60**	**$ 3,831.50**	**$ 4,969.00**	**$ 6,683.70**	**8,745.70**
Total PCE (Billions of 2000 $)	$1,336	$1,616	$1,876	$2,354	$2,798	$3,200	$3,576	$4,209	$4,907	$5,523	$6,684	$7,792
U.S. Population (Millions)	151	165	179	191	203	215	227	238	249	265	281	296
PCE per Capita (Thousands of 2000 $)	$8.8	$9.8	$10.5	$12.3	$13.8	$14.9	$15.8	$17.7	$19.7	$20.8	$23.8	$26.3
Consumer Spending (as % of PCE)												
Durable goods	**15.9%**	**15.0%**	**13.0%**	**14.2%**	**13.1%**	**13.0%**	**12.2%**	**13.4%**	**12.2%**	**11.9%**	**12.0%**	**11.7%**
Motor vehicles and parts	7.1%	6.8%	5.9%	6.7%	5.5%	5.3%	4.9%	6.5%	5.4%	5.0%	5.0%	5.1%
Furniture and household equipment	7.1%	6.3%	5.4%	5.6%	5.5%	5.3%	4.9%	4.7%	4.5%	4.5%	4.6%	4.3%
Other	1.7%	1.8%	1.7%	1.8%	2.1%	2.3%	2.3%	2.2%	2.3%	2.3%	2.4%	2.4%
Nondurable goods	**51.0%**	**48.1%**	**46.0%**	**43.1%**	**41.9%**	**40.8%**	**39.5%**	**34.2%**	**32.5%**	**30.1%**	**29.5%**	**29.3%**
Food	28.0%	26.5%	24.8%	22.7%	22.2%	21.7%	20.2%	17.2%	16.6%	15.2%	14.3%	13.9%
Clothing and shoes	10.2%	9.0%	8.1%	7.7%	7.4%	6.9%	6.1%	5.6%	5.3%	5.0%	4.7%	3.9%
Gasoline and oil	2.9%	3.3%	3.6%	3.3%	3.4%	3.9%	4.9%	3.6%	2.8%	2.3%	2.5%	3.3%
Fuel oil and coal	1.8%	1.5%	1.1%	1.0%	0.7%	0.8%	0.9%	0.5%	0.3%	0.3%	0.3%	0.3%
Other	8.2%	7.9%	8.3%	8.5%	8.3%	7.6%	7.4%	7.3%	7.4%	7.4%	7.8%	7.9%
Services	**33.1%**	**36.8%**	**41.0%**	**42.7%**	**45.0%**	**46.2%**	**48.4%**	**52.4%**	**55.3%**	**58.0%**	**58.5%**	**58.9%**
Housing	11.3%	13.3%	14.5%	14.7%	14.5%	14.3%	14.5%	15.0%	15.3%	14.9%	14.4%	14.7%
Household operation	4.9%	5.5%	6.1%	6.0%	5.8%	6.2%	6.5%	6.7%	5.9%	6.0%	5.8%	5.5%
Transportation	3.2%	3.3%	3.4%	3.3%	3.7%	3.5%	3.7%	3.7%	3.7%	4.0%	4.0%	3.7%
Medical care	3.7%	4.4%	5.3%	6.3%	7.8%	9.1%	10.3%	11.9%	14.1%	15.7%	14.8%	17.3%
Recreation	2.0%	2.0%	2.1%	2.2%	2.3%	2.5%	2.4%	2.8%	3.2%	3.5%	3.8%	4.1%
Personal Business	3.4%	3.9%	4.4%	4.7%	5.0%	5.2%	5.9%	6.9%	7.4%	8.2%	9.5%	7.5%
Other	4.5%	4.6%	5.2%	5.6%	5.9%	5.5%	5.2%	5.4%	5.7%	5.7%	6.2%	6.3%
Government Receipts from Social Insurance* (% of PCE)	**2.9%**	**3.5%**	**4.9%**	**5.3%**	**7.2%**	**8.7%**	**9.4%**	**10.4%**	**10.7%**	**10.7%**	**10.5%**	**9.9%**

* This percentage is based on the total dollars contributed to the Government by employers and employees for: Social Security; Medical Insurance; Unemployment; Worker's Compensation; etc. For more information, visit the web site Bureau of Economic Analysis: www.bea.gov. This data was taken from the following table: Table 2.3.5. *Personal Consumption Expenditures by Major Type of Product.*

We've also extracted the personal consumption expenditures data and plotted it in constant dollars on a per capita basis, as shown in Figure 8.2.

Figure 8.2 Personal Consumption Expenditures Per Capita, 1950-2005

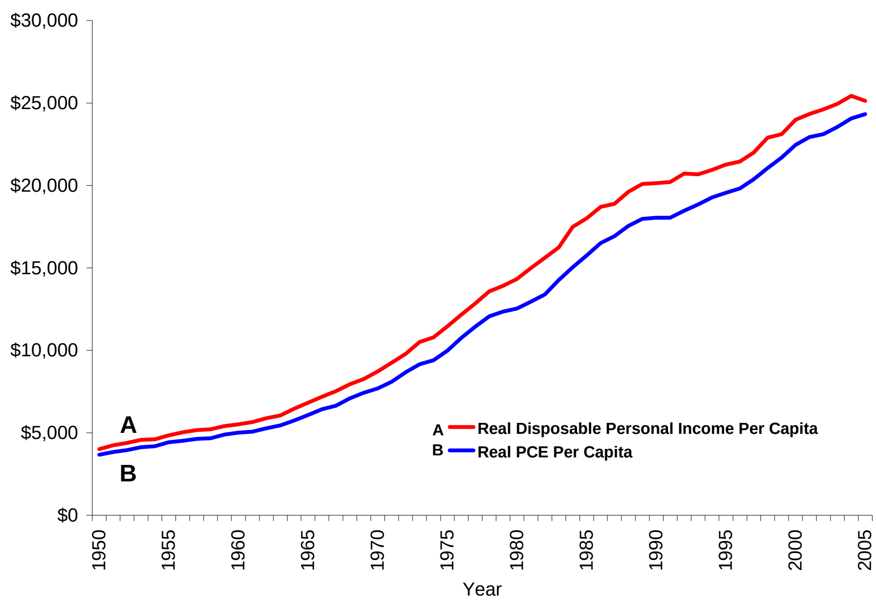


Note: ($ Base Year 2000)

The data tells me a number of things. The first thing is that the U.S. economy has experienced tremendous growth from 1950 to 2005. Personal spending went from less than $200 billion to over $8,700 billion ($8.7 trillion) in 55 years. That's a multiple of 45 times. When we adjust for inflation of 7.7 times, we're left with a growth in spending in real dollars of 5.8 times. When we adjust for population, personal consumption expenditure per capita multiplied 3 times. Net, we are 3 times as prosperous in 2005 as our grandparents were in 1950.

Now some people will say, "That's spending, that's not income." And that's true. So in Figure 8.3 we have shown personal disposable income alongside personal consumption expenditures.

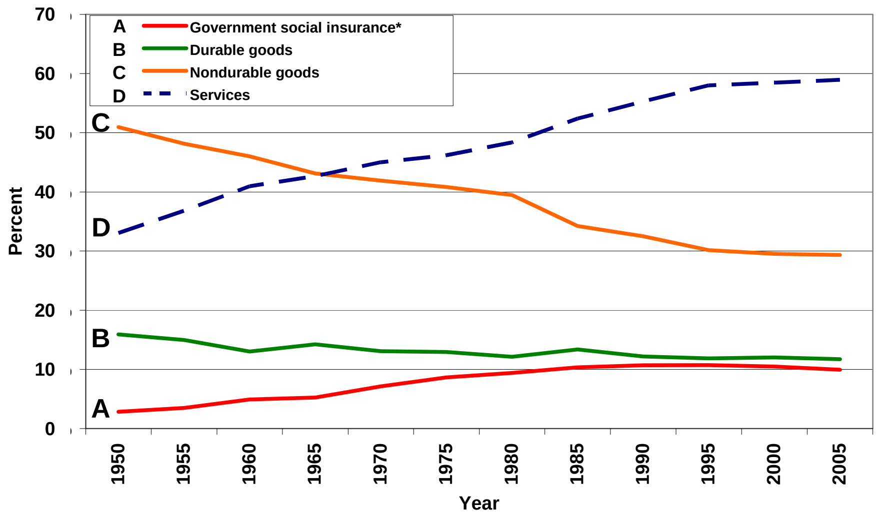
Figure 8.3 Real Personal Consumption Expenditures versus Real Disposable Personal Income, 1950-2005



Note: Real Disposable Personal Income Per Capita ($Base Year 1996)

So now let's break down the expenditure data into four categories: durable goods, nondurable goods, services and government social insurance (as shown in Figure 8.4). Since 1950, the percentage that is spent on durable goods is pretty steady, nondurable goods has gone down, services has gone up and government social insurance is up. We'll break each of those down in turn.

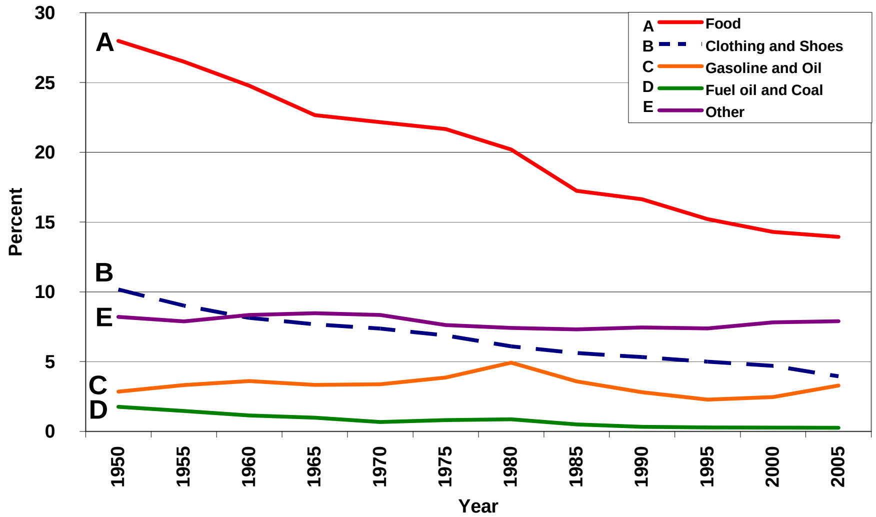
Figure 8.4 Personal Consumption Expenditures by Category (As a percentage of the whole)



**** This percentage is based on the total dollars contributed to the Government by employers and employees for: Social Security; Medical Insurance; Unemployment; Worker's Compensation; etc. For more information, visit the web site Bureau of Economic Analysis: www.bea.gov. This data was taken from the following table: Table 2.3.5; Personal Consumption Expenditures by Major Type of Product. Source: U.S. Bureau of Economic Analysis; www.bea.gov.***

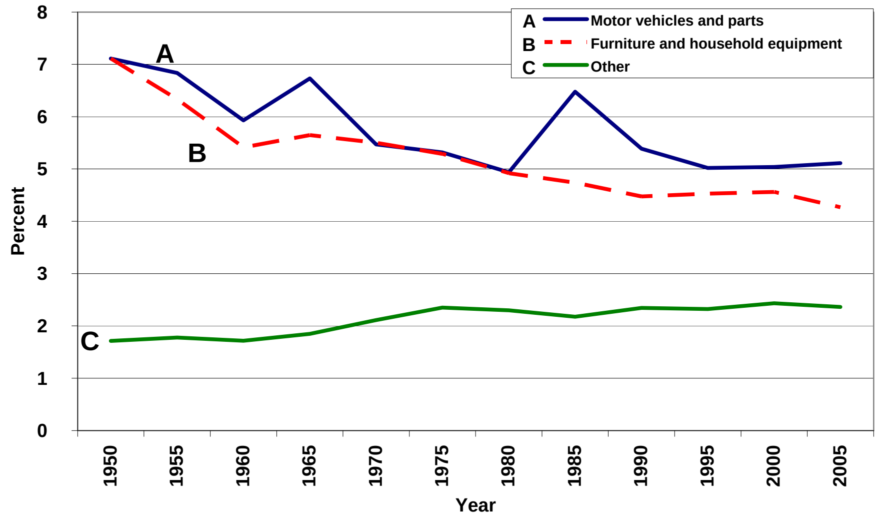
Let me start with nondurable goods, specifically food and clothing; (refer to Figure 8.5). To me, the interesting thing about food is that, try as we might, we can't consume much more of it per person than our grandparents did. So food consumption is relatively stable. Yet, the percentage of consumer disposable income spent on food has been cut in half (from 28% to 14%) in the past 50 years, despite the fact that half the money we currently spend on food is outside the home, and therefore includes preparation costs. Clothing has gone from 10% of our disposable income to 4%. And our wardrobes are bigger today than they were 50 years ago. If you doubt it, just compare the size of closets in an old house to the walk-in closets of today. Added together, food and clothing has gone from 38% of our budget in 1950 to just 18% in 2005. That's 20% of our budget that is available to us to spend on other things that wasn't available to our grandparents.

Figure 8.5 Personal Consumption Expenditures -- Nondurable Goods



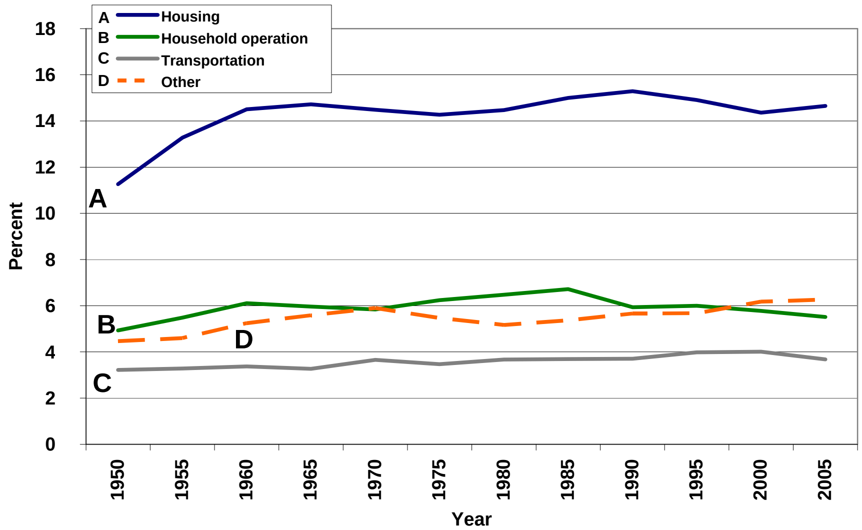
Looking at durable goods as shown in Figure 8.6, motor vehicles and parts went from 7% to 5% even though in 1950 the typical family had one car and in 2007 the typical family has two. (In fact, today we have more cars and small trucks than we have people with driver's licenses.) Furniture and household appliances has gone from 7% to 4%, despite our having more of each (to fill our larger houses) than our grandparents did.

Figure 8.6 Personal Consumption Expenditures -- Durable Goods



In services, housing has been stable (in percentage terms) since 1960, as shown in Figure 8.7. Today, however, new houses average over 2,000 square feet. In 1960, they averaged about 1,000 square feet. So our houses are twice the size, even though our families are smaller. Similarly, household operation and transportation have remained stable (as a percentage).

Figure 8.7 Personal Consumption Expenditures – Services (Housing, Household Operation, Transportation, and Other)



Four items in the family budget have grown dramatically over the last 50 years—all service items, as shown in Figure 8.8.

First is medical care, which has grown from 4% to 15%. The fact that medical care expenses have grown doesn't surprise anybody, but the degree of growth often does.

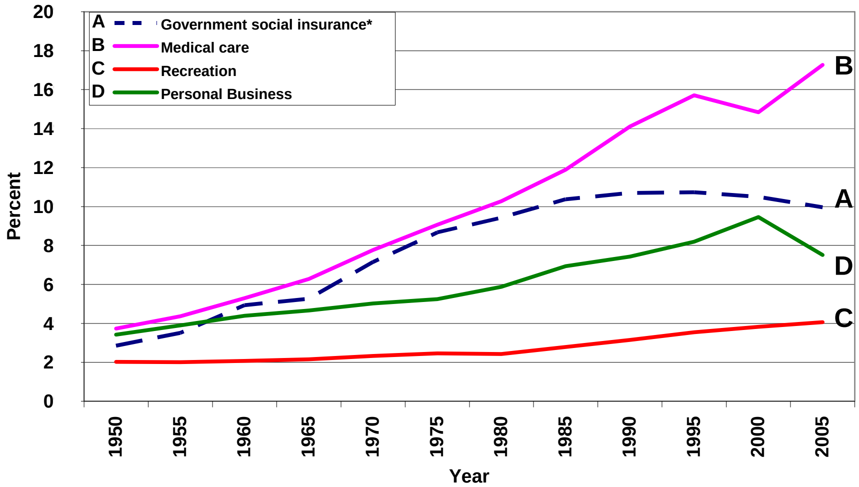
Second is recreation, which helps explain why Las Vegas is the fastest-growing city in the country.

Third is personal business, which is primarily personal financial business—think brokers and mutual funds growing on a base of banks and insurance companies. While I suspect that the year 2000 might have had an increment due to the Wall Street fad of the time, it's been a steady up-trend for 50 years.

The fourth item, which the government doesn't include in expenditures but which we've added, is Government Receipts from Social Insurance (including Social Security and Medicare)—which is up three and a half times from 1950 to 2005.

As an investor, these trends are intriguing. We tend to have a bias toward those areas where the long-term trends are up. But we're aware that it's also possible to make good money in the areas that are shrinking on a percentage basis. Think food stocks in the 1980s, or Wal-Mart since 1972.

Figure 8.8 Personal Consumption Expenditures -- Services (Government Social Insurance, Medical, Recreation, and Personal Business)

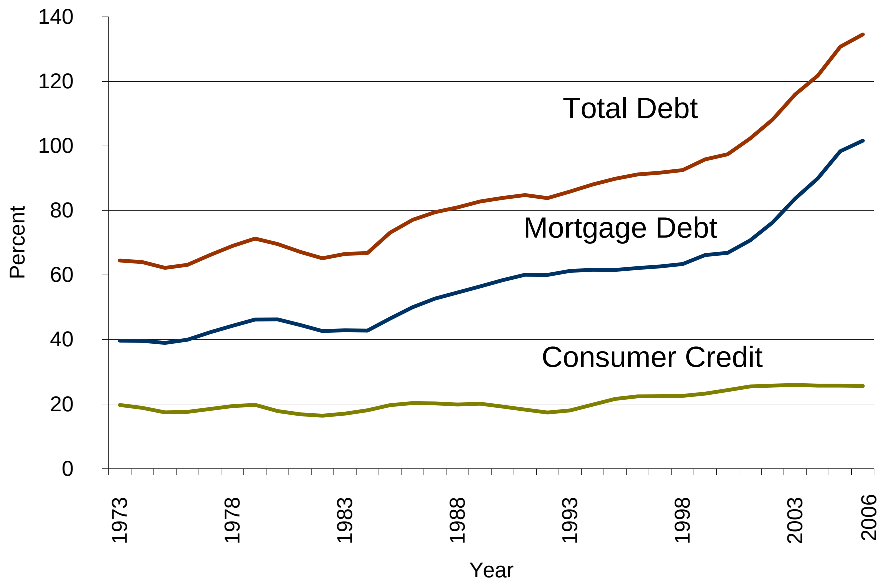


*** This percentage is based on the total dollars contributed to the Government by employers and employees for: Social Security; Medical Insurance; Unemployment; Worker's Compensation; etc. For more information, visit the web site Bureau of Economic Analysis: www.bea.gov. This data was taken from the following table: Table 2.3.5; Personal Consumption Expenditures by Major Type of Product. Source: U.S. Bureau of Economic Analysis; www.bea.gov.***

Consumer Debt

We're also hearing that the consumer is borrowed to the hilt, and therefore can't sustain the current level of spending. We often see charts (like Figure 8.9) showing growth in consumer debt to income. But such a chart comparing debt (a balance-sheet item) to income (an income-statement item) ignores any changes in interest rates. We think a more useful comparison is debt-to-assets, as shown in Figure 8.10. Note that the "Total Debt" line in Figure 8.9 is the same as the "Liabilities" line in Figure 8.10.

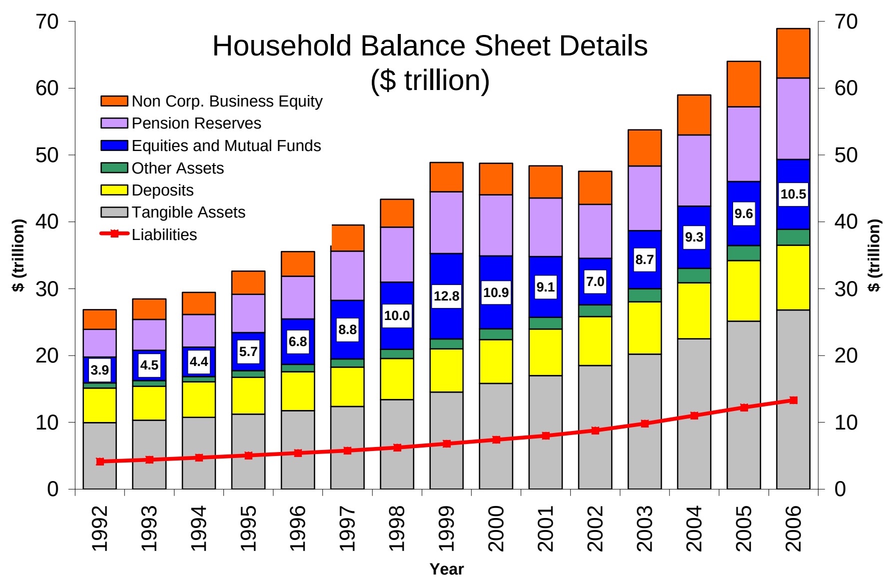
Figure 8.9 Household Debt as a Percentage of Disposable Personal Income



Source: Federal Reserve Bank.

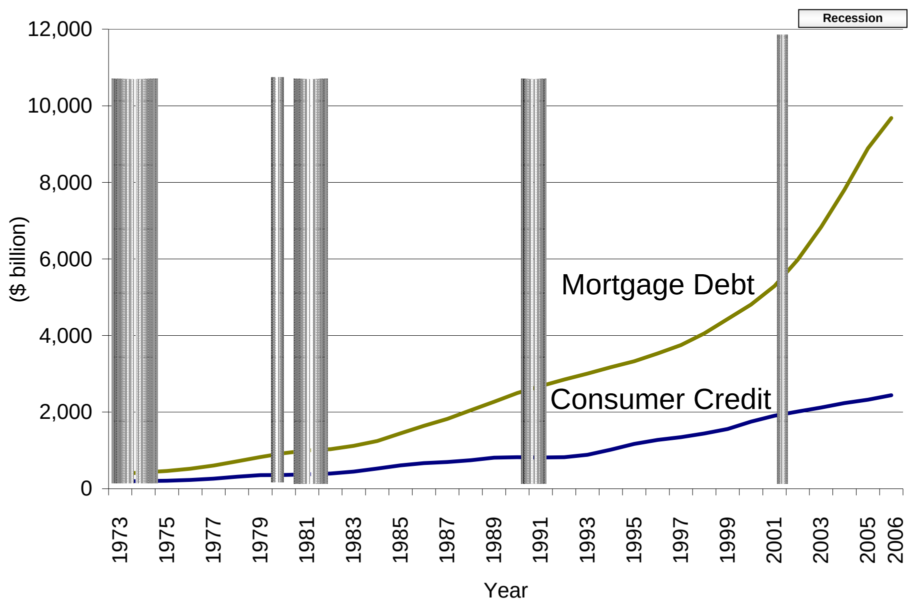
When we compare debt to assets, we find that the ratios have been on a gradually falling trend since WWII. In 1950, assets-to-debt were 4.5 times. In 2005, assets-to-debt is 5.5 times.

Figure 8.10 Household Balance Sheet Details



Source: Federal Reserve Bank.

Figure 8.11 Debt

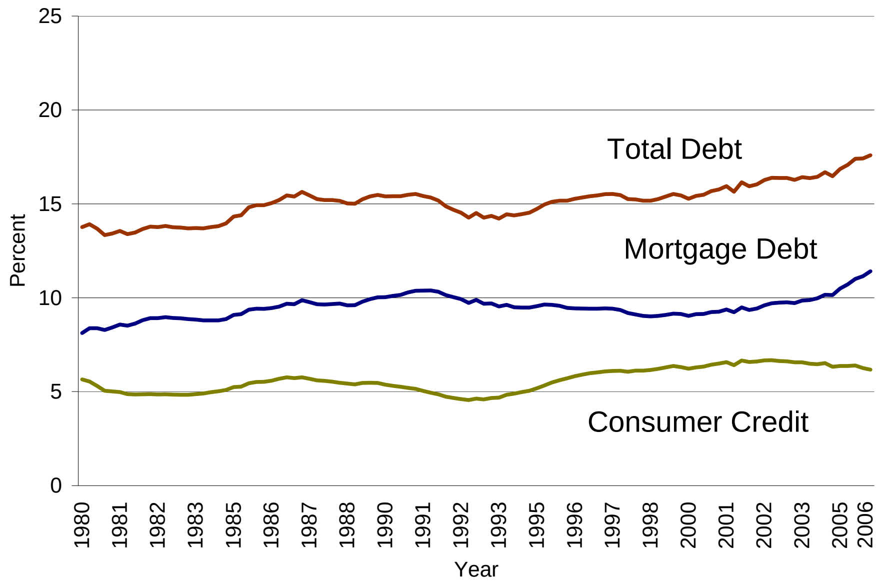


Source: Federal Reserve Bank

The debt of Figure 8.11 also looks scary, but it ignores the fact that interest rates on mortgages have been cut in half since 1980 and that incomes have gone up.

When the payments on this debt are compared to disposable income, you get Figure 8.12.

Figure 8.12 Household Debt Service Burden (Debt Payments / Disposable Income, %)



Source: Federal Reserve Bank

Because interest rates are now lower, the current debt levels are less burdensome to the consumer. The chart says the household debt service burden has ranged between 14% and 18% for 25 years. Some believe that interest rates can only go up from here (we don't), but most mortgages are fixed-rate, meaning the debt burden for most homeowners won't increase involuntarily even if mortgage rates do increase. (For information pertaining to adjustable rate mortgages (ARMs), see our essay "Why Interest Rates Won't "Go Back Up" Any Time Soon.")

Folks, the consumer is not tapped out.

Editor's Note

So let's review: We eat out more than our grandparents did, yet we spend half as much (as a percentage) on food. We have more clothes, but spend half as much (as a percentage) on clothes. We live in bigger houses, filled with more stuff, but our cost for housing (as a percentage) is stable, and we spend less (as a percentage) on durable goods. Our medical-care costs are growing, but we are living longer. Our recreation expenses are growing, which means we spend more of our money on play. In other words, in the United States not only is the consumer king, but the king continues to prosper.

For additional reading, visit the Muhlenkamp & Company website at

www.muhlenkamp.com or a retail bookstore to purchase a copy of

Ron's Road to Wealth: Insights for the Curious Investor

published by John Wiley & Sons; copyright 2007.