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# Will US consumer debt reduction cripple the recovery?

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# Will US consumer debt reduction cripple the recovery?

The US consumer's seven-year borrowing binge has ended, and the economic hangover is painful. Millions of Americans have started paying down the debt they amassed during the bygone days of easy credit and bubbling home values. And with joblessness rising and the economic outlook uncertain, many are also borrowing less and saving more. While this new financial sobriety makes sense for individual households, the collective result has been a large drop in personal spending—a major reason for the sharp GDP contraction that began last year. Looking ahead, one key question for the economy is: How can US households dig out of debt without further cutting consumption and crippling a US and global recovery?

A first step toward finding an answer is to examine the forces behind the growth of US household debt in recent years and the reversal now under way. Between 2000 and 2007, US households led a national borrowing binge, nearly doubling their outstanding debt to $13.8 trillion. The pace was faster than the growth of their incomes, their spending, or the nation's GDP. The amount of US household debt amassed by 2007 was unprecedented whether measured in nominal terms, as a share of GDP (98 percent), or as a ratio of liabilities to disposable income (138 percent). But as the global financial and economic crisis worsened at the end of last year, a shift occurred: US households for the first time since World War II reduced their debt outstanding.

We show that the hit to consumption from continued household debt reduction, or "deleveraging," will depend on whether it is accompanied by personal income growth. If household incomes stagnate, each percentage point reduction in the debt-to-income ratio will require nearly one percentage point more personal savings. And each extra point in the saving rate translates into more than $100 billion less spending—a serious potential drag on economic growth. But with rising incomes, households can reduce their debt burden without having to trim consumption as much.

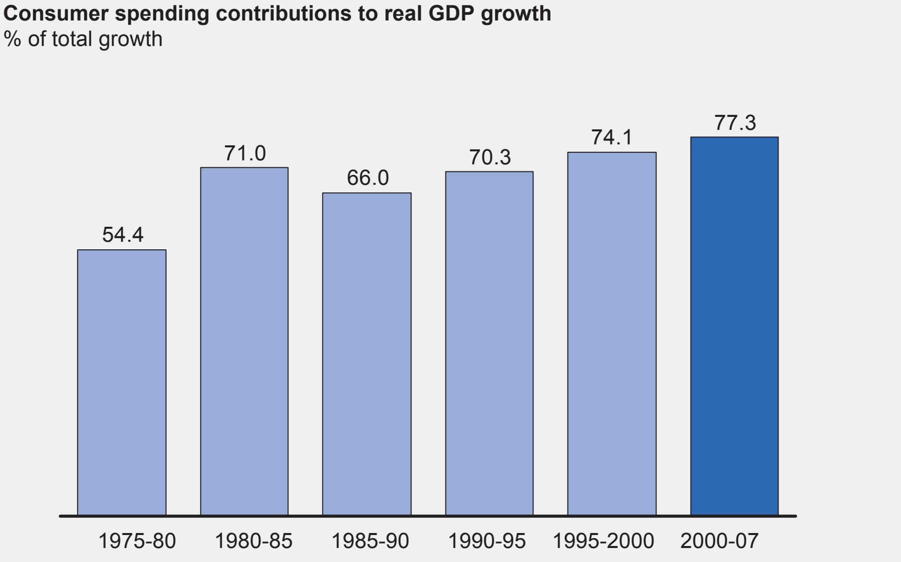
Policy makers cannot assume income growth will pick up once GDP rebounds. On the contrary, average US household incomes, adjusted for inflation, have barely budged since 2000. And incomes are unlikely to pick up significantly in the short term, amid the financial crisis and economic recession. In this paper, we do not offer prescriptions for reviving income growth—a problem that has bedeviled policy makers for years. Rather, we show how the US economy became hooked on credit-fueled consumption, assess the magnitude of potential consumer deleveraging, and examine how income growth could ease the pain of withdrawal.

## The rise of US consumer debt

Any change in US consumer behavior could have profound implications for the US and global economies. Over the past decade, rising US household spending has served as the main engine of US economic growth. From 2000 to 2007, US annual personal consumption grew by 44 percent, from $6.9 trillion to $9.9 trillion—faster than either GDP or household income. Consumption accounted for 77 percent of real US GDP growth during this period—high by comparison with both US and international experience (Exhibit 1).

Exhibit 1

## Consumer spending is the main engine of US economic growth




Source: US Bureau of Economic Analysis; McKinsey Global Institute analysis

The US consumers' spendthrift ways have fueled global economic growth as well. The United States has accounted for one-third of the total growth in global private consumption since 1990. From 2000 to 2007, US imports grew from an amount equal to 15 percent of US GDP to 17 percent, boosting aggregate global demand by $937 billion, in nominal terms. Moreover, US consumer spending boosts global economic activity in ways that are not measured. For example, companies in Germany might hire workers and invest in factories that export machines to China for the manufacture of exports to the United States. Korea, Taiwan, and other Asian countries produce components that are exported to China, where they are assembled into products exported to US consumers. All these activities create jobs, increase consumption, and boost economic growth in the supplying countries.

Powering the US spending spree through 2007 were three strong stimulants: a surge in household borrowing, a decline in saving, and a rapid appreciation of assets.

Household borrowing rose along with incomes for decades. But after 2000, interest rates fell well below their long-term average because of the combination of US monetary policy and rising foreign purchases of US government bonds by Asian governments and oil exporters.[1] When low rates were combined with looser lending standards, consumer borrowing soared. From 2000 through 2007, the ratio of household debt to disposable income shot up from 101 percent to 138 percent—as much in seven years as in the previous quarter century (Exhibit 2). Even with low interest rates, the ratio of household debt service payments to income rose to a record high.

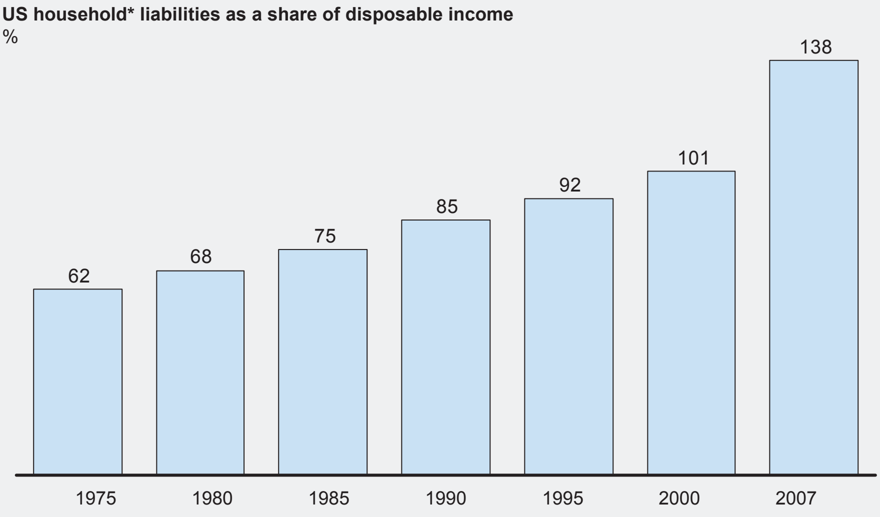
Most of this borrowing fueled consumption. For instance, from 2003 through the third quarter of 2008, US households extracted $2.3 trillion of equity from their homes in the form of home equity loans and cash-out refinancings (Exhibit 3). Nearly 40 percent of this—$897 billion, an amount bigger than the recently approved US government stimulus package—went directly to finance home improvement or personal consumption. And much of the remaining 60 percent of extracted

1 See "The new power brokers: How oil, Asia, hedge funds, and private equity are shaping global capital markets," McKinsey Global Institute, October 2007, available at www.mckinsey.com/mgi/.

cash was used to pay down credit card debt, auto loans, and other liabilities, thus financing consumption indirectly. The money not spent on consumption was invested, helping fuel gains in stock markets and other financial assets.

Exhibit 2

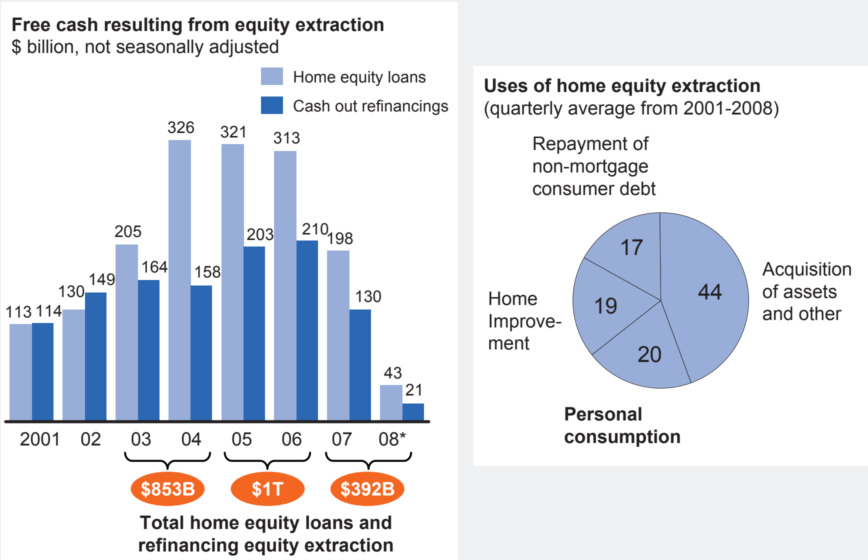
**Household debt-to-income ratio has grown as much since 2000 as it had over the previous 25 years**




* Includes nonprofit institutions.
Source: Federal Reserve; McKinsey Global Institute analysis

Exhibit 3

**Home equity loans and cash-out refinancings provided consumers with $2.3 trillion of financing since 2003**



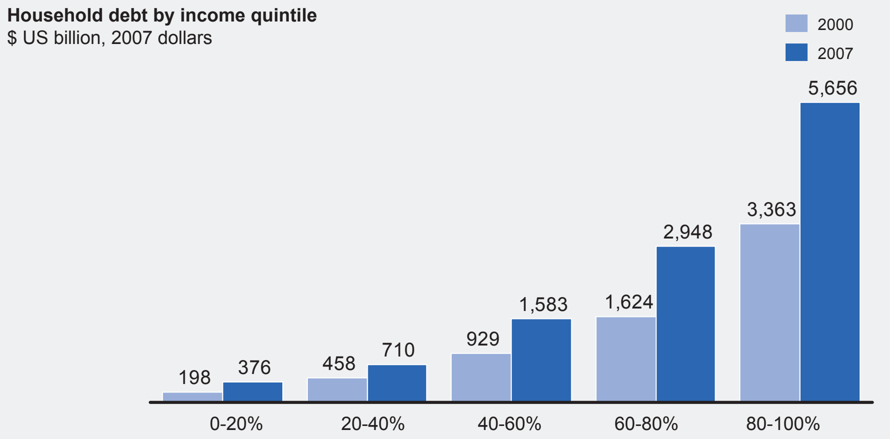

* YTD through the third quarter.
Source: Federal Reserve via Haver Analytics; McKinsey Global Institute analysis

One way to examine the sources of US consumer debt growth is to look at households by income. When we break down household credit growth by income quintiles, we see that the lowest fifth of households almost doubled their borrowing from 2000 through 2007: The total value of their outstanding debt rose by 90 percent (Exhibit 4). But in absolute terms, the total borrowing by low-income households is relatively small; the lowest fifth accounted for just 4 percent of the total growth in all household debt during this period. Even when we look at the bottom two-fifths of households, they collectively accounted for less than 10 percent of the total growth.

High-income households, in contrast, can and do borrow much bigger sums. It's no surprise that the wealthy feel more of a "wealth effect" from rising values of big homes and retirement accounts. The top fifth of households accounted for nearly half the total growth in all household debt during this period.

**Exhibit 4**

**The top income quintile accounted for half of the increase in debt**



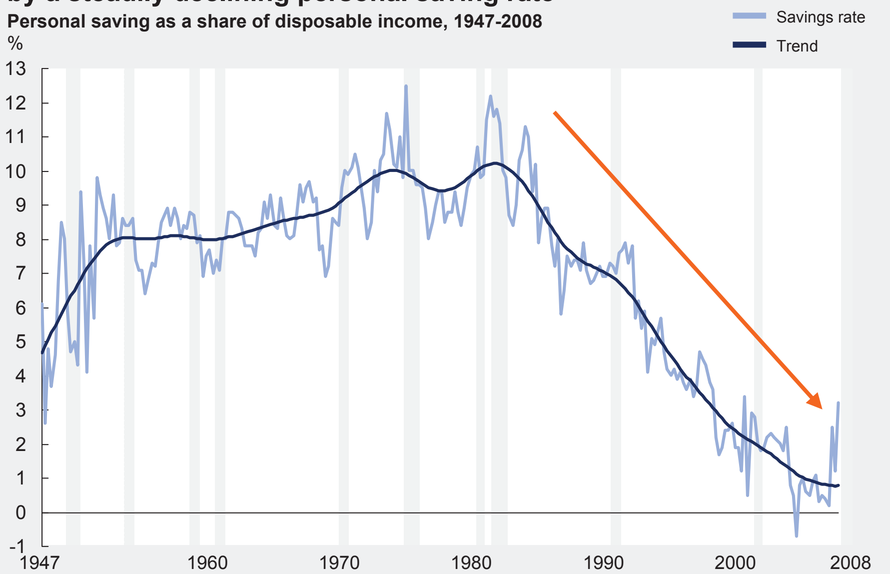

| | 0-20% | 20-40% | 40-60% | 60-80% | 80-100% |
|---|---|---|---|---|---|
| **Percentage change** | 90 | 55 | 70 | 82 | 68 |
| **Contribution to overall growth, %** | 4 | 5 | 14 | 28 | 49 |

Source: Federal Reserve Survey of Consumer Finances; McKinsey Global Institute analysis

Meanwhile, consumers also spent more because they were saving less of their disposable income. The US personal saving rate has fallen steadily in recent decades, from 12.2 percent in 1981 to 2.3 percent in 2000 (Exhibit 5). But in part because of the surge in borrowing, the saving rate fell through the floor in recent years, to a low of -0.7 percent in 2005—meaning that households spent more than their after-tax income. To put it in perspective, all else being equal, if consumers saved at the same rate as in 1980, they would have spent roughly $1 trillion less in 2007 alone.

**Exhibit 5**

**US consumption growth has been accompanied by a steadily declining personal saving rate**




Source: US Bureau of Economic Analysis; McKinsey Global Institute analysis; National Bureau of Economic Research

Households were able to borrow more and save less in part because of the "wealth effect" of rapid appreciation of their home values and investment portfolios. Household wealth increased by nearly $27 trillion between 2000 and 2007, of which more than two-thirds was due to rising values of homes, equities, and other financial assets. The remaining third of the gain came from households putting more money into mutual funds, 401(k) plans, or other saving vehicles.

Economists differ over exactly how rising wealth affects consumption. But many would agree that generally, for every $1 increase in wealth, consumers tend to spend around 5 cents more. By this formula, roughly one-third of US consumption growth after 2000 was spurred by rising wealth. But the effect was likely greater in the recent period than in the past because homeowners could so easily tap the growing equity in their homes through cash-out refinancing, home equity loans and lines of credit, and other loans using the home as collateral—turning their homes into virtual ATMs.

## The financial crisis has now thrown this process into reverse

The US consumer is now struggling with the mirror image of the trends we've described. Household wealth is shrinking as home values, stock prices, and the value of many other investments keep tumbling. Easy credit has been replaced by tighter lending standards, lower borrowing limits on credit cards, and canceled home equity lines of credit. Unemployment is climbing, lowering household income for millions of Americans. Not surprisingly, consumer spending is declining at an accelerating pace, while the saving rate is rising.

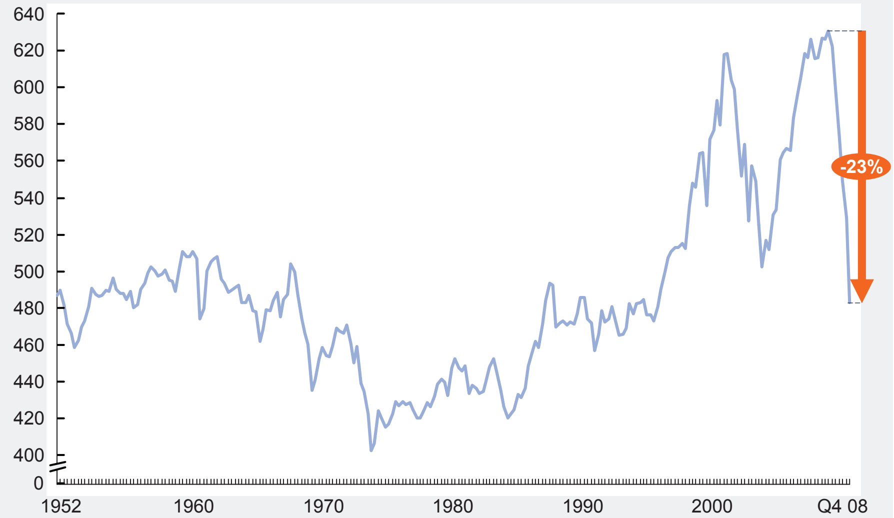
When we look at these developments separately, we see first that household wealth has eroded sharply by several measures. By the end of 2008, the value of US household net worth had declined by about $12.9 trillion from its peak in 2007—a drop of 23 percent after adjusting for inflation. This is a greater real decline than during the Great Depression of 1929 to 1933, when falling wealth was accompanied by deflation of prices. Today, if we look at US household net worth relative to income, we see it has fallen by 23 percent, erasing all gains since the mid-1990s (Exhibit 6).

Exhibit 6

**Household net worth relative to income has fallen to the level of the mid-1990s**

**US household net worth relative to disposable income**

%




Source: Federal Reserve; McKinsey Global Institute analysis

The loss of household wealth is more devastating than in previous recessions because asset values are falling across the board. In contrast, during the dot-com bust of 2000, equity market declines were huge but were offset by rapidly appreciating home values.

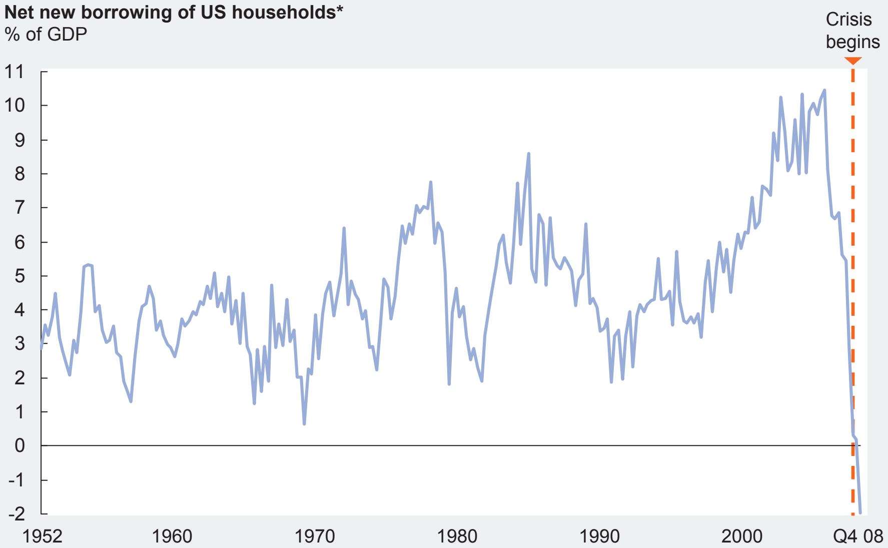
At the same time, the credit crunch and recession have caused many US employers to cut jobs, hours, and pay. The US economy shed 4.4 million jobs from December 2007, when the recession began, through February 2009. Disposable personal income dropped 8.5 percent in annualized real terms in the third quarter of 2008 but rose slightly in the fourth quarter.

Until recently, households could use credit to smooth out consumption through the ups and downs of the job market. Not anymore. Banks, battered by mounting credit losses and plunging equity prices, have tightened lending standards for consumers and businesses. Net new borrowing by households has fallen sharply from its peak in the second quarter of 2006 and turned negative in the fourth quarter of 2008 (Exhibit 7). In other words, for the first time since World War II, total household debt outstanding fell rather than rose. It is unclear how much of this debt reduction is voluntary and how much is involuntary. Part reflects lower demand for credit (as fewer people are buying cars and houses), while part is the result of the tighter supply. Either way, consumers are reducing their debt burdens—deleveraging.

**Exhibit 7**

**Household net new borrowing has turned negative for the first time in the postwar period**

**Net new borrowing of US households***
% of GDP




* Includes households and nonprofits.
Source: Federal Reserve via Haver Analytics; McKinsey Global Institute analysis

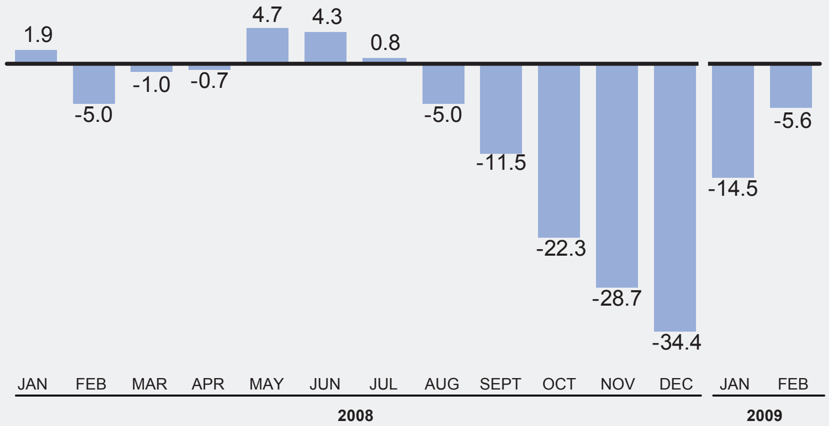
With the confluence of plummeting wealth, jobs, and credit, consumer confidence is at a 41-year low. Even those with jobs fear for their future. Many households are using their cash to pay down credit cards rather than buy new goods. Others are putting money away for a rainy day.

As a result, US consumer spending is plunging. Spending fell at a 3.8 percent annual rate in the third quarter of 2008 and at a 4.3 percent rate in the fourth quarter, a primary reason the economy contracted. Retail sales plummeted in 2008 at the fastest rate and by the largest amount in the post-World War II period (Exhibit 8). Autos and consumer durables have been hard-hit, as have all forms of discretionary spending. High-end retailers have been affected severely as consumers shift to discounters. The decline of consumer demand has now rippled through the supply chain to affect manufacturing and other industries. The flip side of falling consumption has been a rise in the personal saving rate to 5 percent in January 2009, its highest level since 1995.

Exhibit 8

**The United States has entered a consumer-led recession, with 2008 posting the largest annual contraction in retail sales since WW II**

**Retail sales – including food service**
3-month annualized growth rate, nominal terms



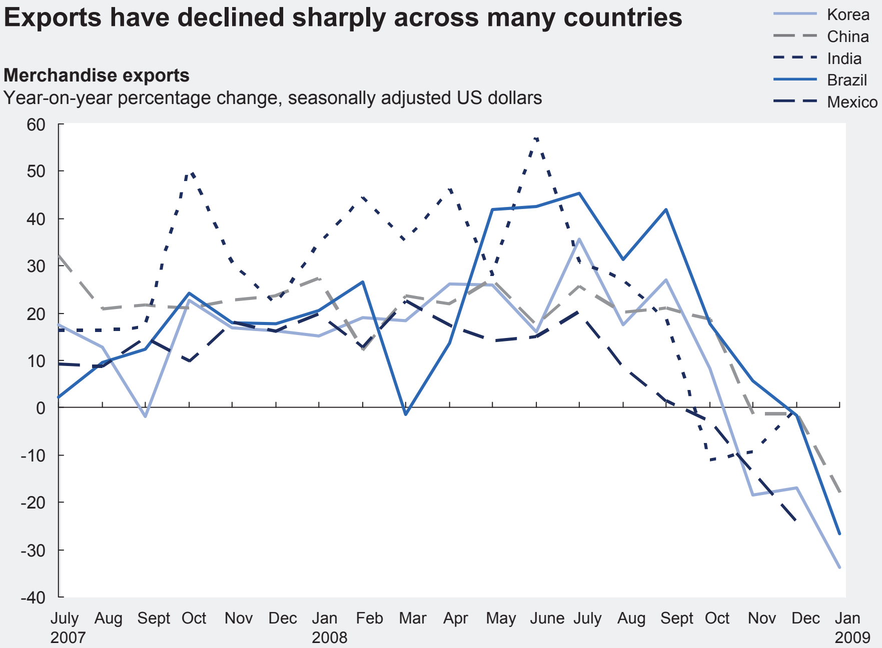

Source: US Census Bureau

The whole world is reeling from the effects of a more frugal US consumer. US demand for imports has dried up, contributing to a plunge in global trade. In some Asian countries, such as Korea, Taiwan, and Singapore, exports are down as much as 35 percent year-on-year (Exhibit 9).

Exhibit 9

**Exports have declined sharply across many countries**

**Merchandise exports**
Year-on-year percentage change, seasonally adjusted US dollars




Source: Haver Analytics; McKinsey Global Institute analysis

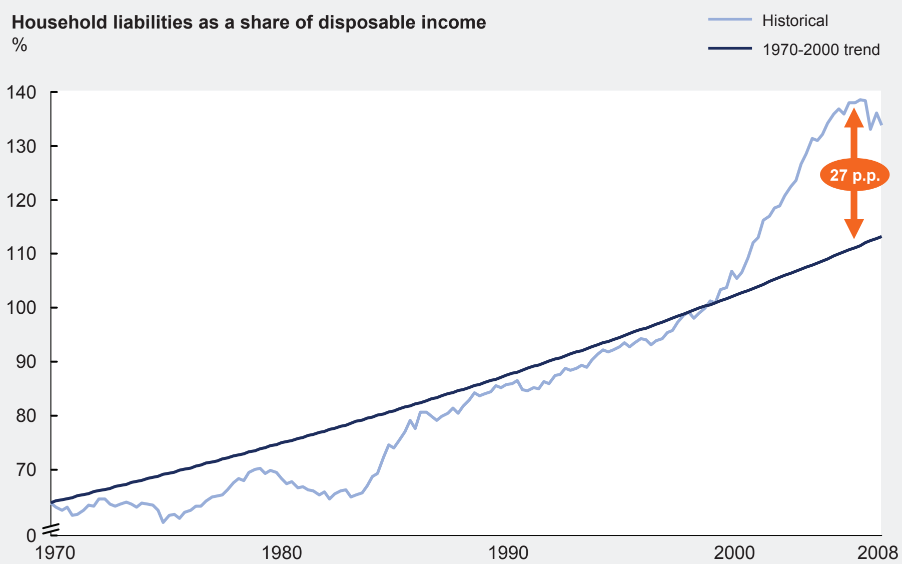
The fall in consumer spending is hurting the US and world economy right now, but some adjustment is necessary to produce more balance in the long run. For a decade or more, the US current account deficit grew larger, reflecting a gap between saving and investment by households, businesses, and government. By 2007, the deficit reached 5.3 percent of GDP and required most of the world's surplus capital to fund it.[2] The crisis has thrown this situation into reverse, causing the US current account deficit to decline to an estimated 4.7 percent of GDP.

## Will consumer deleveraging sink the recovery?

Two key questions for the economy going forward are how US household leverage will decline, and what effect it will have on consumer spending. The potential magnitude is startling: by 2007, the household debt-to-income ratio was 27 percentage points above where it would have been had it kept to its long-term trend, a difference worth some $2.8 trillion (Exhibit 10).

Exhibit 10

**The rise in household leverage since 2000 raises concern about potential household deleveraging in the years ahead**




Source: US Bureau of Economic Analysis; McKinsey Global Institute analysis

History offers little guidance on how household deleveraging will play out, as the combined forces of unprecedented levels of consumer indebtedness, loss of wealth, and frozen credit markets have created the worst economic crisis since the Great Depression. Although there are many differences between now and then, the Depression is instructive as a point of comparison. Between 1930 and 1935, household liabilities fell by one-third (Exhibit 11). A large portion of this may have been defaults; one academic paper estimates that nearly half of the urban households with mortgages were in default by the beginning of 1934.[3] Something similar is happening today as home foreclosures rise: Federal Reserve data show that US household debt outstanding fell in the fourth quarter of 2008, in large part because the value of outstanding mortgages declined.

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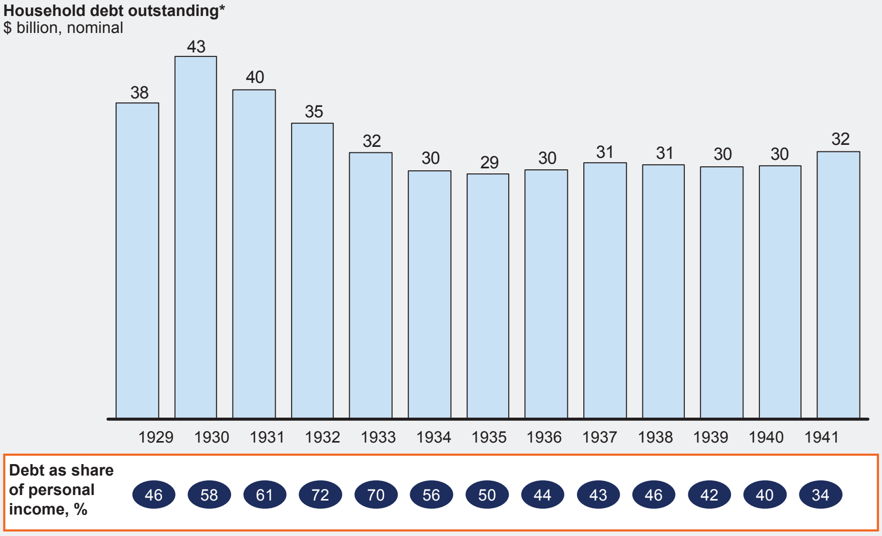
2 See "The US imbalancing act: Can the current account deficit continue?," McKinsey Global Institute, June 2007, available at www.mckinsey.com/mgi/.

3 See David C. Wheelock, "The federal response to home mortgage distress: Lessons from the Great Depression," *Federal Reserve Bank of St. Louis Review*, May/June 2008.

Exhibit 11

**The last significant period of deleveraging by households occurred during the Great Depression, when household debt fell by one-third**




* Household debt was estimated at beginning of year values; see Mishkin (1978) for methodology.
Source: Frederic S. Mishkin. "The household balance sheet and the Great Depression." Journal of Economic History, Vol. 38, No. 4, December 1978; US Bureau of Economic Analysis; McKinsey Global Institute analysis

Looking ahead, MGI has developed four potential scenarios for the global economy, each with customized, proprietary GDP projections. The authors find that in a recessionary scenario, in which the household saving rate reaches 8 percent, US households' leverage could recede to its 2000 levels within five years.

The economic impact of such deleveraging will depend on whether incomes grow. Without income growth, consumers can save more only by spending less. This would feed a downward spiral in which falling demand causes businesses to cut jobs, causing consumption to fall further, and so on.

If incomes stagnate, as they have for most US households since 2000, each percentage point reduction in the debt-to-income ratio would require nearly one percentage point more in the personal saving rate. And each extra point in the saving rate translates into more than $100 billion less spending.

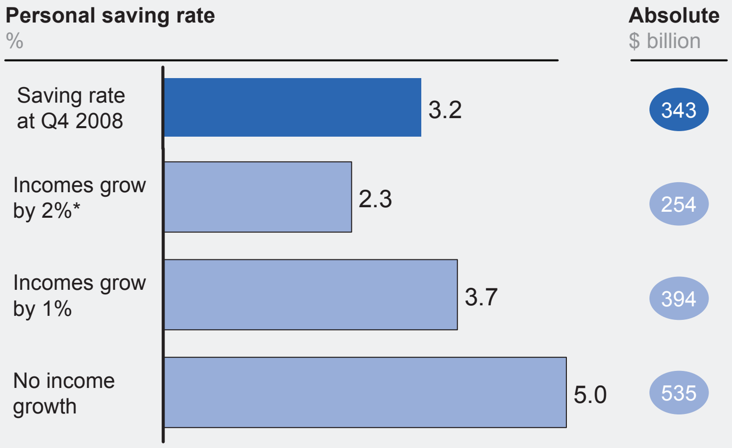
But with rising incomes, households can reduce their debt burden without having to trim consumption by as much. For example, if incomes grow by 2 percent per year, households could reduce their debt-to-income ratio by five percentage points with a personal saving rate of just 2.3 percent. This would require a spending reduction of $254 billion per year, all else being equal. If incomes do not grow, the same reduction in household leverage would require more than twice as much saving, translating into $535 billion less consumption (Exhibit 12).

Other factors could influence the effects of deleveraging as well. If it were to occur rapidly, over a shorter number of years, that could entail a sharper drop in consumption. But if households reduce their debts more gradually, the spending pullback could be milder. Finally, the inflationary environment will have an impact: Because debt outstanding is fixed in nominal terms, higher inflation would hasten and ease the deleveraging process. Conversely, as we saw during the Depression, deflation would cause debt burdens to grow heavier, making deleveraging more difficult for US households and the economy.

Exhibit 12

**For households to reduce their debt relative to income by 5 percentage points, household saving will need to range between 2.3% and 5%**

**Saving required to reduce the household debt-to-income ratio by 5 percentage points over 1 year**




* An external forecasting firm, Macroeconomic Advisers, forecasts 2.1% nominal income growth ove Q3 2008 – Q3 2009, according to their December 26th forecast..

Source: US Bureau of Economic Analysis; McKinsey Global Institute analysis

But the bottom line is this: Given that the US household debt-to-income ratio rose to 27 percentage points above its long-term trend, it is easy to see how consumer deleveraging could result in hundreds of billions of dollars worth of foregone consumption in coming years.

* * *

The US credit bubble has burst, and the economic damage is extensive. In the immediate term, US policy makers are right to focus on stabilizing the banking system and stimulating GDP growth. But in the medium term, over the next three to five years, they must also seek measures to boost broad-based growth in personal incomes. This will mean crafting the right mix of policies to generate both job growth and productivity gains. If these efforts fail, the restraints on consumer spending could cripple any recovery. But if they succeed, the result would be a healthier US and global economy.

## About the authors

Martin N. Baily is a senior adviser to McKinsey & Company and to the McKinsey Global Institute, and served as chairman of the Council of Economic Advisers during the Clinton administration (1999-2001). Susan Lund is a senior fellow of the McKinsey Global Institute, where Charles Atkins is a research analyst.

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