

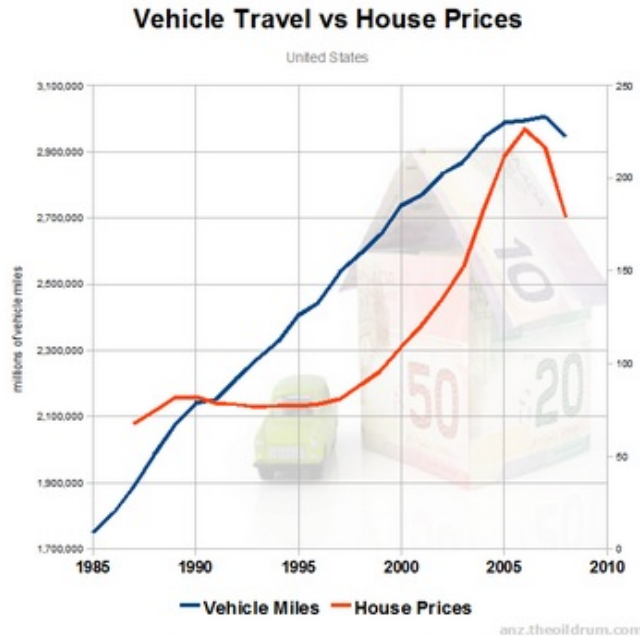


## Oil, House Prices, Credit? Three parts of the same story

Posted by [Phil Hart](#) on October 27, 2008 - 9:50am in [The Oil Drum: Australia/New Zealand](#)

Topic: [Demand/Consumption](#)

Tags: [credit](#), [oil prices](#), [original](#) [[list all tags](#)]

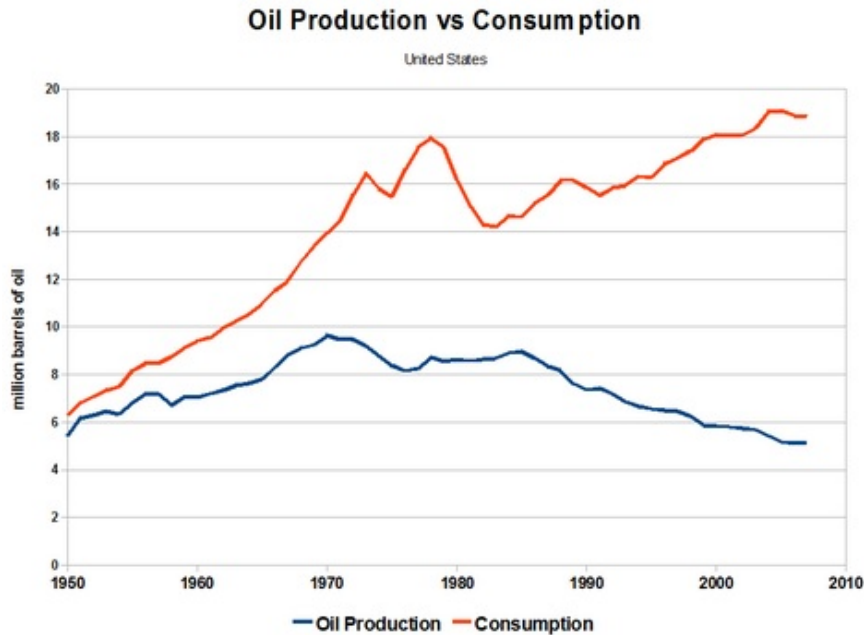


The long forgotten 'oil crisis' of just a few months ago has been replaced by a full blown 'credit crisis' - related events that represent the unravelling of half a century of unsustainable trends in oil consumption and debt. These two ingredients have been used in a special 'compound growth formula' to finance the construction of suburbia and fuel the (un)happy residents on their long journey to work and home again via the shopping mall, so they could spend more than their earnings on stuff to put beside the TV and inside the microwave oven.

Environmentalists have tried to teach economists a thing or two about sustainability over recent years, largely without success. However, even within the narrow world view of economists, the trends in credit growth could be clearly seen to be unsustainable (unless your name is Alan 'I made a mistake' Greenspan). That oil consumption could not grow forever comes as no surprise to a global community aware of 'peak oil', but the inevitability of oil depletion will remain hidden from economists; lost as it will be in a crisis of their own making.

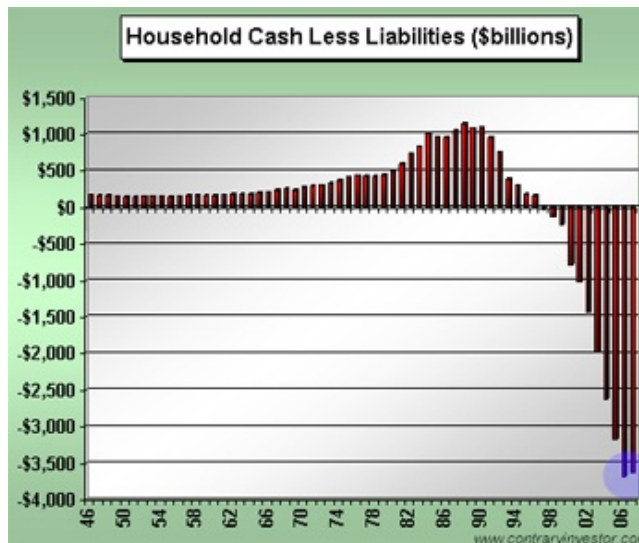
## The Growing Gap: Oil Imports

This is a global crisis, but the US dollar is our global currency, so the story centers on that country. Exhibit A is the growing gap since 1950 between domestic oil production in the United States and oil consumption.



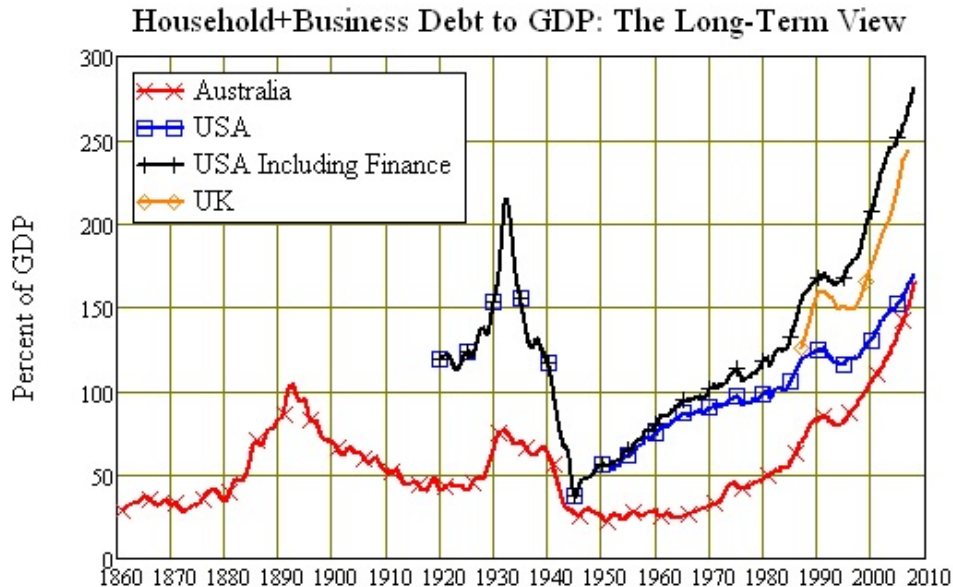
Source: [Energy Information Administration](http://www.eia.doe.gov)  
 Click to enlarge.

In theory of course, it is possible to produce many other 'real things' to export to the rest of the world to earn those oil imports. For three decades, the United States did that quite successfully. Oil was relatively cheap and booming domestic industries had lots to export. Eventually though, manufacturing moved overseas to developing nations where it could be done more 'efficiently'. Instead of developing other 'real things', the United States turned to credit and the power of its US dollar hegemony to keep the consumer economy ticking. Based on this next chart, I suggest that the descent into a 'fake things' economy began around 1990 when household net worth started to decline.



## Credit: The Long Term View

Exhibit B is an even more remarkable and longer term view of the role of credit in the economy of the United States, Britain and Australia. The world has been on an incredible credit ride since as far back as 1950. The steep climb over the last ten years screams 'jump' and indeed that is what we have just done.



For those of you asking the obvious question about what happened in Australia back in 1890, there is this paper from the Reserve Bank of Australia: [Two Depressions, One Banking Collapse](#). The current crisis looks far more like the 1890's than the 1930's, although I find such distant historical parallels hard to comprehend at the best of times. The end of the [gold standard](#) in 1971 is also an important part of this story - a monetary system backed by gold could not have permitted such a rapid rise in fake wealth. An even more fundamental change to our system of currency may be needed to get us out of this mess and reach a true state of enlightenment and sustainability.

## The link between Oil and Credit

The explanation below for how trends in oil consumption and credit are linked is taken from the ASPO USA [Peak Oil Review: 20 October 2008](#). (You can [subscribe](#) to their weekly newsletter for free).

### **Commentary: Peak Oil and the Current Economic Opportunity** **Richard E Vodra, CFP**

The run-up to Peak Oil was a major factor in the current economic crisis, and the changes emerging from the crisis may help us deal better with the challenges of the coming decade.

The financial problems that emerged in the summer of 2007 led to the collapse of Bear Stearns in March, the nationalization of Fannie Mae and Freddie Mac, and a cascade of subsequent events, policies, and impacts that continues as this is being written. The nature of the crisis started from the fact that the large financial institutions – banks, hedge funds, pension funds, and such – have created and used a lot of securities that are either mispriced or hard to value. They've taken a lot of home loans that are "sub-prime" (the borrowers had little income or wealth compared to the loan size; there was too much loan-to-value; future payments would be beyond the borrowers' ability to pay, etc), put them together into large packages (mortgage-backed securities, or MBS), secured high ratings for the bonds (higher than the component loans justified), and sold them to domestic and foreign lenders/investors looking for high, secure yields.

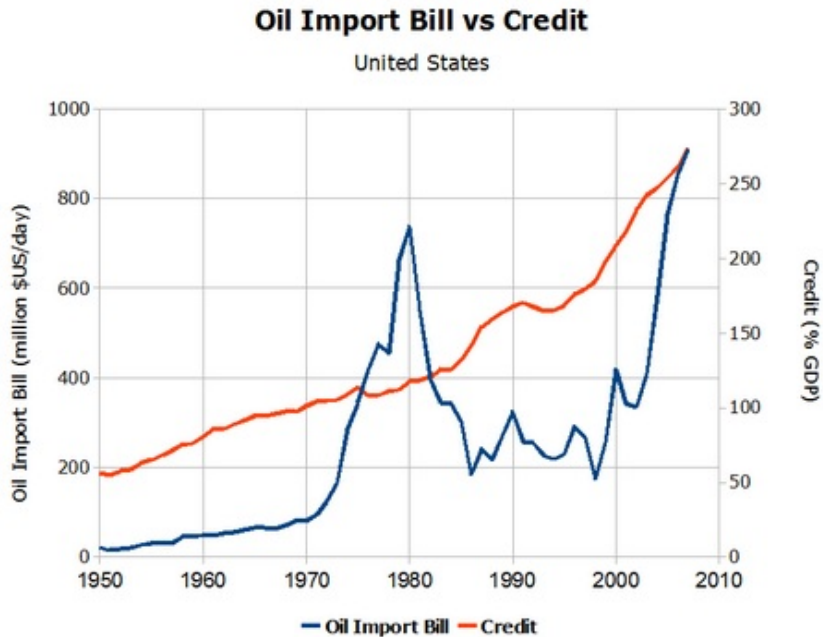
At the same time, another industry was created selling “insurance” on whether these or other loans might default, and the resulting “credit default swaps” were unregulated. As long as the system worked, it worked well – as long as we kept clapping, Tinkerbell lived. The models used by the regulators, the rating agencies, and the borrowers and lenders assumed that the past records of defaults would continue. The old patterns failed, and now no one knows how much anything is worth or how big the losses will be.

I attempted to link high oil prices with the housing finance craze and early stockmarket wobbles back in [August 2007](#). However, the links go back much further than just the last few years.

Yet while all these financial instruments were being created, there were plenty of voices pointing out that American home prices would peak in 2005 or so, and that the quality of loans was declining rapidly. According to the October 15, 2008, Washington Post, subprime mortgages made up 8.0 to 8.6% of all mortgages from 2001 to 2003, but 18.5 to 20.1% from 2004 to 2006. The dollar value of subprime MBS rose from \$121 billion in 2002 to \$401 billion in 2004 and about \$500 billion in 2005 and 2006. Why the big jump in junk?

**The US balance of payments deficit has grown rapidly during this decade, and one of the big drivers of that has been the rising cost of imported oil and other petroleum products.** In 2002 we spent \$102 billion importing oil, but that figure rose to \$300 billion in 2006, and to \$328 billion last year. Those imports (along with Jim Kunstler’s salad shooters and all the other things we buy) had to be financed, to the tune of \$2 billion a day by last year. We convinced the Chinese, Japanese, and many others that our MBS were safe because they were sorta guaranteed (wink, wink) by Freddie Mac and Fannie Mae. We needed the oil, so we needed product to sell to finance our “addiction.” Our suppliers wanted bonds, the government deficit wasn’t large enough, so we created an endless supply of MBS to sell.

After reading this, I had to try and plot the relative scale of the growth in credit against the oil import bill (import volume times average price for each year). The resulting chart shows that the pace of credit growth has two broad periods which match the corresponding change in the oil import bill.



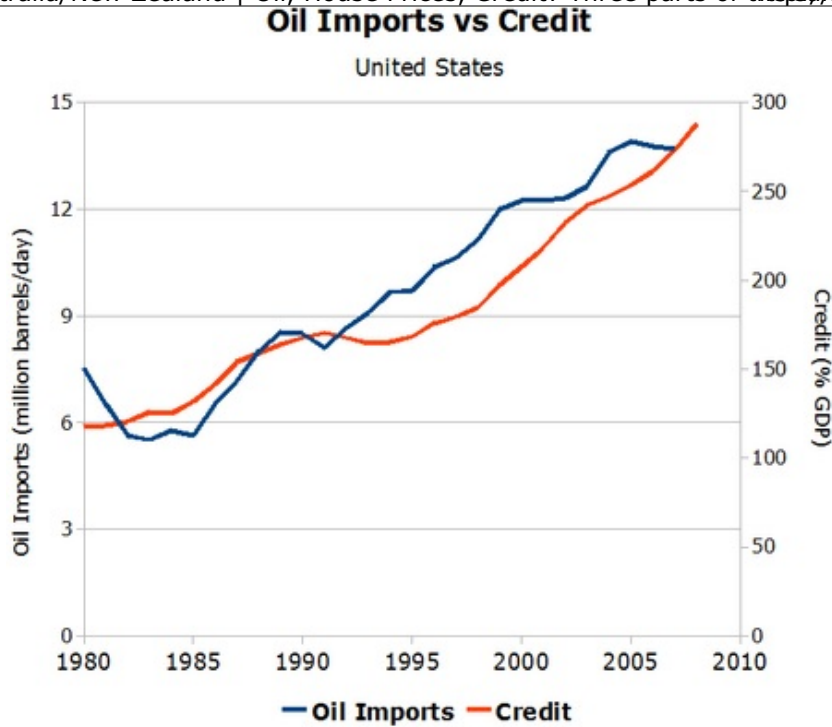
Source: [Energy Information Administration](#)  
and Steve Keen at [www.debtdeflation.com](http://www.debtdeflation.com)  
[Click to enlarge.](#)

- Moderate credit growth in the 1950's and 60's matched the early days of slowly expanding oil imports into the United States.
- The twin oil crises of the 1970s made for a volatile oil import bill, but credit growth slowed as the economy was hit by the supply shock.
- After a recovery in the late 80's, both trends then declined during the recession of the early 1990's.
- Demonstrating the link that Richard describes above, both the U.S. oil import bill and debt (credit) have grown explosively over the last ten years.

There's little doubt that the credit curve is going to nosedive now, and for a short while at least the oil import bill may do the same.

Historically though, credit cycles change much more slowly than oil prices, the volatility of which shows up in the oil import bill particularly in the 1970's but also in the short price slump of 2000/2001. In that sense, credit growth is a heavily smoothed trend of the oil import bill - relatively steady for several decades but rising sharply over the last ten years to fund an increasing volume of increasingly expensive oil imports.

Credit growth is actually more closely correlated with the volume of oil imports, rather than the oil bill. This presumably reflects the fact that credit is expanding to match the growth in the total economy, rather than just oil prices. So oil imports are here a proxy for economic growth, which has been substantially funded by credit (debt). Both lines are zero scaled, so the proportional change in credit and oil imports has been very similar over the period since 1980.

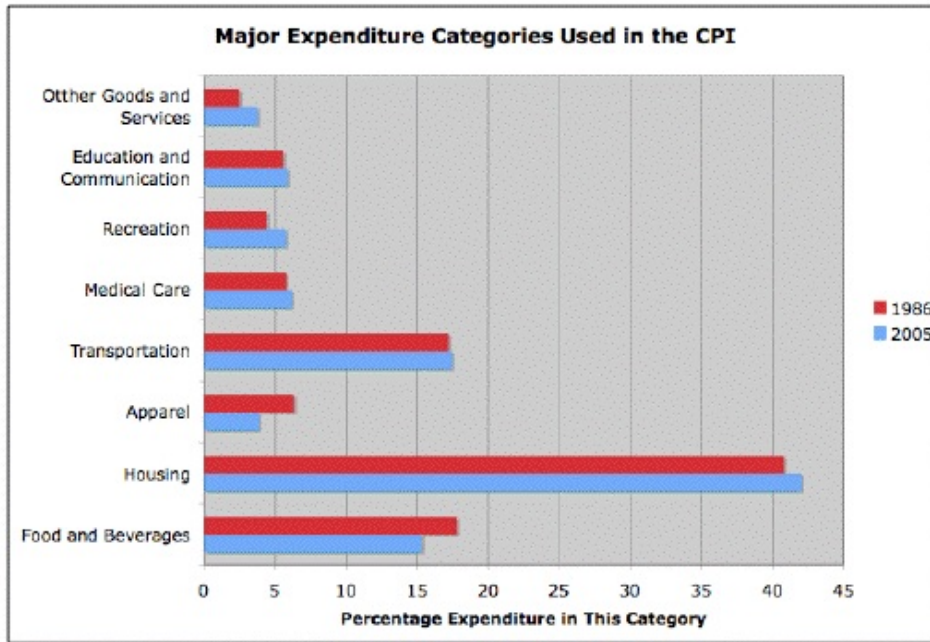


## Is the Economy Less Sensitive to an Oil Shock?

As the oil price hit \$40 all the way back in 2004, warnings were sounded of economic trouble ahead. Instead, measures of GDP continued to increase leading Alan Greenspan and other 'enlightened' economists to the conclusion that our economies were less dependent on oil than they used to be and thus less vulnerable to another oil shock.

Stuart Staniford debated that point here on [The Oil Drum back in 2005](#). His conclusion at the time was that **"The only reason current events have had far less impact on the economy than the events of the 1970s is that there has been no reduction in supply!** By contrast, past oil shocks involved real 7%-10% reductions in oil supply. However, if the current tightness persists [...] the economy will be no more oil proof now than it was in the 70s".

Score 1 (of many) to Stuart. Score 0 (again) to Alan ["I'm Shocked"](#) Greenspan.



Far from being less dependent on oil now, the economy actually suffers the same disease affecting the rest of the financial sector - it is heavily leveraged. We can now turn 1 unit of oil into 2 units of economic growth, which is great on the way up. The trouble is that when oil production declines, the leverage unwinds and we get two units of economic pain for each unit of oil production decline.

*Richard concludes..*

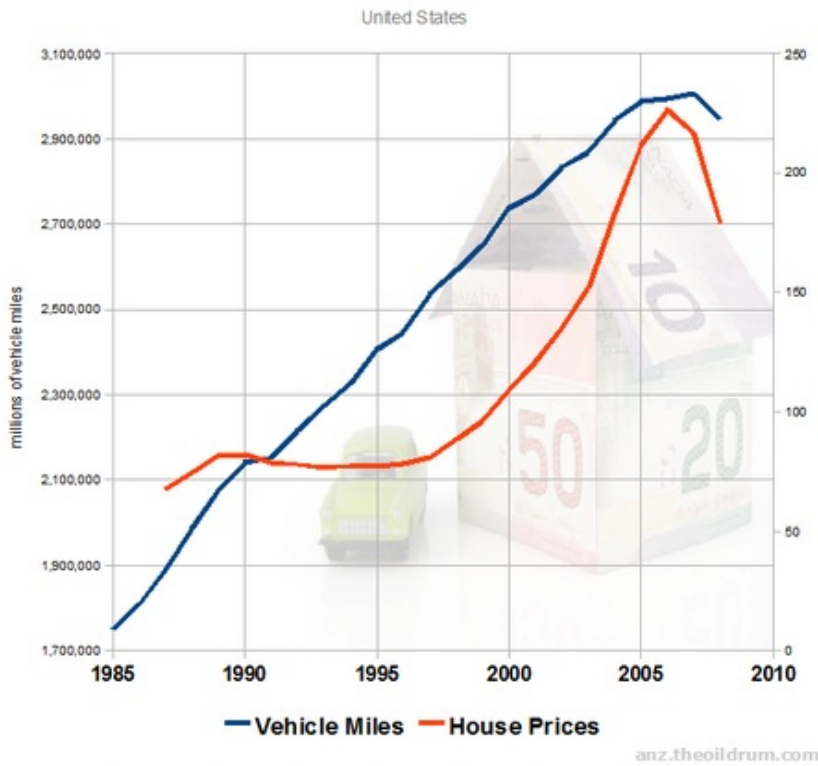
Nobody – the government, the American people, the Wall Street crowd, mortgage brokers, home builders – wanted to take away the punch bowl, or look too closely at what was being produced. Rising oil import volumes multiplied by rising prices contributed to the crisis we are now experiencing.

So the housing bubble was being used to create securities ([Collateralized Debt Obligations](#)) which could be sold overseas to finance the oil import bill to keep building more houses. On the back of this, credit was expanding everywhere. The private equity boom pushing sharemarket prices further up was just another side effect of cheap credit. The risks were seen as low and just to be sure the losses were insured as well (with 'good as gold' AAA ratings to prove it).

It all worked fine until it didn't. Isn't that the economic definition of sustainable?

As oil prices started to bite, the new housing being built in distant suburbs and even more remote 'exurbs' became less viable for commuters. Once house prices started to unwind (who would have thought it could happen everywhere at once?) the game was up, but it was always only a matter of time. The United States (and now the rest of the world) could no longer find willing buyers for their 'assets' and so the global financial system could no longer expand credit to the world's consumers.

## Vehicle Travel vs House Prices



[Source: US Department of Traffic: Traffic Volume Trends](#)  
and [Case-Shiller Composite Housing Index](#).

[Click to enlarge.](#)

Global oil supplies have been all but flat for the last three years. With China and the oil producing countries still increasing their share of the pie, first the poorest and then even OECD nations were forced to reduce their consumption the only way the market knows - higher prices.

So consumers started driving less because global oil supply simply could not meet everyone's expectations. Next the value of their house fell. Finally they found the bank wouldn't (couldn't) lend them anymore money, so they stopped shopping as well. That was the last straw, as there is nothing that strikes fear into the heart of an economist more than the sight of a consumer who has stopped shopping.

**Oil, House Prices, Credit? It's all part of the same story.**

You can contact the author at [www.philhart.com](http://www.philhart.com)



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).