



# The Master Resource Report

An educational service of [Ravenna Capital Management](#)

Volume 6, Issue 36, Sept. 16, 2011

RCM Master Resource Index **12,756.92**

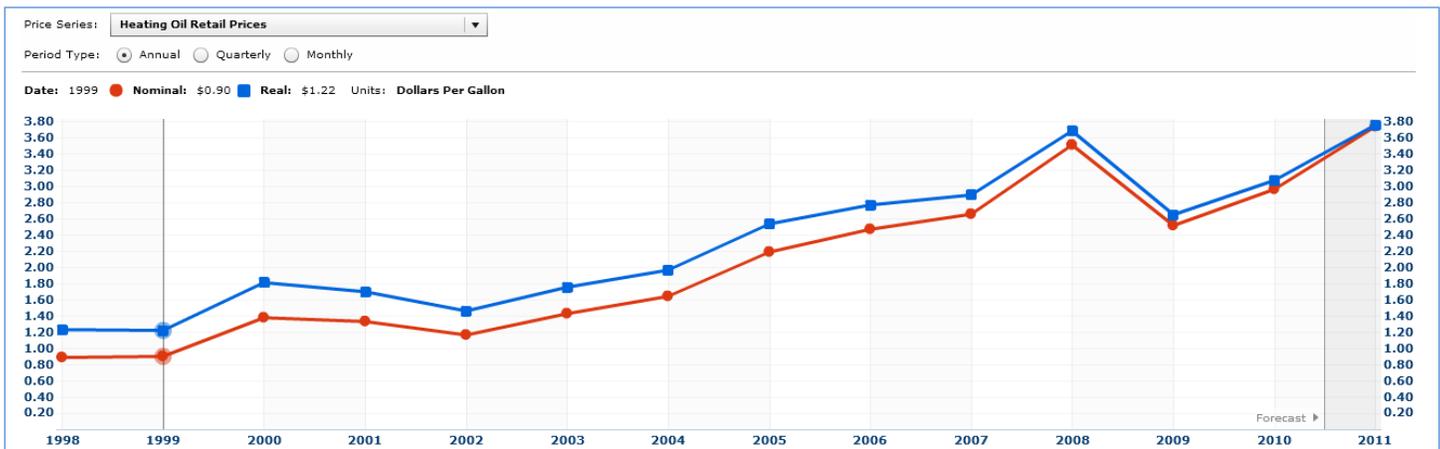
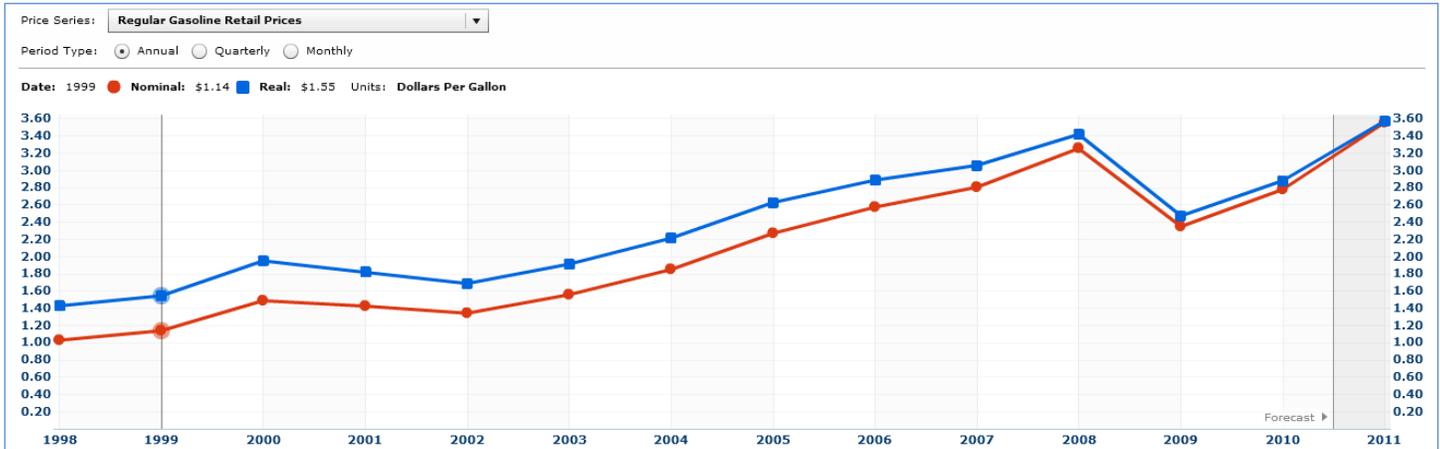


## Household incomes and fuel prices.

According to the [U.S. Census Bureau report released on Tuesday](#) the real median household income in the U.S. peaked in 1999 at \$53,252. Real median household income had fallen back to \$49,445 in 2010, a 2.3 percent decline from 2009 and 7.1 percent below the 1999 peak.

1999 was an interesting year to have had the peak inflation adjusted real median household income in the U.S. That was also the year that oil briefly sold for only \$10 per barrel as well as the year the UK had its peak oil production. It was also just one year after the lowest inflation adjusted price of imported oil ever in the U.S. In 1998 imported oil's nominal price was \$12.07 per barrel or \$16.73 per barrel when expressed in August 2011 real terms.

Below are two graphs from the [EIA](#) that illustrate the real and nominal prices for regular gasoline and home heating oil. The blue line reflects the real inflation adjusted price and the red indicates the non-inflation adjusted nominal price.



Could the U.S. economy have been in a better spot than to have its peak in household income coincide with the all-time low in the real cost of fuel? Why not buy a big SUV and a home miles and miles from where you work, the fuel cost you nothing and your income was the highest it had ever been and climbing. Of course the world was already changing but it was going to take a few years before the consequences would be felt. Soon inflation and the cost of energy would work their black magic on the U.S. economy.

Over the next decade home heating oil climbed from a real \$1.22/gallon in 1999 to \$3.75/g in August of this year. Even more important for a much broader number of U.S. households was the jump in gasoline prices from a 1999 real price of \$1.99/gallon to \$3.64 paid last month.

So as household incomes declined in real terms over the 1999 to 2010 period the cost of petroleum based energy exploded upward. This makes it hard to understand why economists and policy makers find it so difficult to face the fact that the cost of energy was a major contributor to the economic mess the nation finds itself in today. Could it be because there is very little they can do about it?

Consumers don't think in real inflation adjusted terms, they think in nominal dollar terms and that clearly was not any better. For them gasoline was about a dollar in 1999 and diesel cost business less than regular gasoline. These consumers know something was wrong but they can't identify it or understand it. The reality is they will never see the 1999 relationship between income and energy again despite all the promises that will be made during the election campaign ahead.

*[\[For a different look at household incomes and rural incomes in particular look back at the January 7, 2011 issue of this report.\]](#)*

### **The world's largest oil producer needs what oil price..!**

Sometimes when reading an article a comment jumps out that has implications beyond the item being covered. In this week's Economist just such a comment was made about the price of oil Russia needs to balance its budget. No it is not the \$90-100 range that is often quoted for Saudi Arabia.

*[“During Mr Putin's rule the share of oil and gas in Russia's export revenues has gone up from half to two-thirds. This increase is almost entirely due to higher prices rather than growing production. The budget depends on them. Five years ago Russia needed \\$50-a-barrel oil in order to balance its budget. Next year the price will have to be \\$120 to meet its spending obligations.”](#)*

That is right, if the Economist estimate is correct Russia will need an oil price that is more than \$13 per barrel above the average 2011 year-to-date EIA all countries on price (*see last week's web posting for a graph*). Considering that Russia is currently the world's largest producer of oil its need for a higher oil price may be more important than what Saudi Arabia needs to balance its budget. After all since Russia seems unable to raise production it sure can't make for any price decline by increasing volume.

The Economist article did acknowledge how important this oil price is to Russia but it didn't draw the more important conclusion it should have from a global perspective. If Russia and Saudi Arabia, the number one and two producers in the world need a price near or above \$100 per barrel it means that oil will be priced close to that level. Therefore if you feel compelled to be wrong and predict the future price of oil you won't be catastrophically wrong if their needs provide your starting point. Remember though you still will be wrong, guaranteed.

### **So when is a no growth plan good news?**

Only in an industry like the airline industry would an announcement of no growth or possible contraction be considered good news. *[“Major U.S. airlines outlined plans Tuesday to trim domestic flying next year in an effort to keep a recent run of fare increases on track, though executives said demand remained robust.”](#)* Given the airline industry's history of shooting itself in the foot with too much capacity it was no surprise the Wall Street Journal article reported that airline stocks rose on the news.

The WSJ article also mentioned that the industry's financial performance was helped substantially by a *[“...\\$70 million sales boost as they kept funds designated for airline ticket-taxes during the shutdown of the Federal Aviation Administration.”](#)*

The key point remains that there is no demand growth to support industry expansion. Mass market air travel consumers are being squeezed by increasing fuel cost (reflected in ticket prices and additional fees) and the realities of the economy. In a another WSJ article it was reported the *[“...income of the typical American family—long the envy of much of the world—has dropped for the third year in a row and is now roughly where it was in 1996 when adjusted for inflation.”](#)*

These are the folks who must fill the back of the plane and their world is going the wrong way compared to fuel costs being passed through by the airlines. This is just one more example of the relationship of household incomes to energy costs discussed above and why the world has changed permanently.

The fact the airlines are waking up to their new market realities may say a lot about the air travel industry of the future. It will be a fight for fewer customers who can afford to pay the higher prices ahead. Mass market air travel simply contracts.

### **Two more good news, bad news items**

If you are buying PV power this is good news; if you are trying to make money manufacturing PV power this is not good news. Bloomberg reported the price trend for solar PV continues down. [“Solar modules have declined 1.3 percent to \\$1.12 a watt since last week...”](#)

If you are an auto manufacturer trying to bring the price of PHEV’s and EV’s down this is good news. However, if your company is trying to make money manufacturing vehicle batteries this is probably not such good news. [“Producers of electric-car batteries such as LG Chem Ltd. \(051910\) and Johnson Controls Inc. \(JCI\) are building new plants at such a pace that capacity will grow to almost double automakers’ demand, a Bloomberg New Energy Finance report shows.”](#)

Clearly these are going to be a very tough areas to make money as an investor. There will be winners and losers as the transportation industry shifts to electrification. Just as there will be in the power generation industry as renewables contribute more and more to the supply. Who they will be, that is the hard question to answer.

### **That loud sucking sound is Japan.**

According to the [EIA in 2009 Japan](#) imported an average of 4.261 million barrels per day of oil. Last month [according to Bloomberg](#) the island nation imported an impressive 939,110 kiloliters (5.91 million barrels, don’t ask why they used kiloliters) per day. That is an increase of 31% over the nation’s 2009 average daily levels. The power sector is increasing its use of crude to compensate for the closure of nuclear power plants following the earthquake and tsunami.

[“Of the 54 reactors in the country, 41 units were idled because of the meltdown after the March 11 earthquake and tsunami, maintenance and other upsets at the end of August, according to data compiled by Bloomberg News.”](#)

### **Bike sharing**

A BBC article last week started with this opening line. [“Bike sharing is on the verge of becoming an integral part of public transportation in cities across the globe.”](#) That possibility quickly piqued my bike loving interest.

I first experienced a bike sharing scheme on a trip to Copenhagen in 1998. The picture of my two sons on the right shows them riding thru [Copenhagen](#) on the ubiquitous City Bikes. We were even fortunate enough to stay at a bed & breakfast owned by one of the prime movers involved in establishing the scheme.



The BBC article indicated that there are nearly 300 bike sharing schemes around the world with more on the way. It gave some brief description of the plans that range from Paris and Mumbai, India to Hangzhou, China. In London the usage of the Barclays Cycle Hire which has been in operation just over a year has hit 24,000 users a day.

This led to second article on the BBC that indicated in London [“...Hertz became the first major rental car company to offer e-bikes, stocking a dozen at its Marble Arch location”](#).

It appears that cities will be seeing more bikes on the road in the near future. So does your town or city’s have laws that support or hinder these changes? For that matter it probably hasn’t even crossed their auto centric minds.

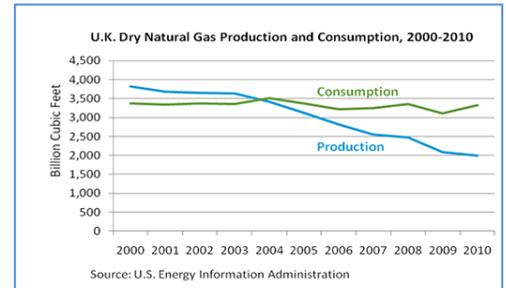
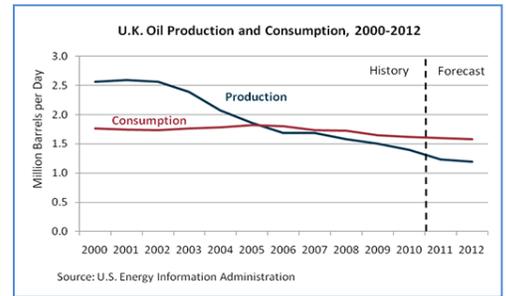
## UK's North Sea oil

In 1999 the UK was ranked in the top ten oil exporting countries in the world. Six years later in 2005 ([EIA graph on the right](#)) the UK became a net importer of oil. Despite the steep climb in the price of oil there has been no meaningful production response and it seems there never will be.

[“UK oil production fell below 1 million barrels per day \(bpd\) for only the second time in more than 30 years this summer as maintenance exacerbated a decline in output from depleted North Sea oilfields.”](#)

The second graph also from the [EIA](#) illustrates the same situation for natural gas. The only important difference being that the UK became a net importer of natural gas in 2004, a year ahead of oil.

Since the UK is an island it presents an interesting experiment in how Peak Oil may play out in the decade ahead. So far the consumption response has been muted. How long that remains true will be an important benchmark for other net importers to note.



## Soccer is the “Great Game”. But this is really stupid...!!

[New York Times: “Qatar has hired some of the world’s top architects to design 12 open-air, grass-field stadiums that will be kept below 81 degrees by pumping cool air through vents. The temperature will be well below the 86-degree mark at which FIFA’s medical committee says players become fatigued after 51 minutes of play.”](#)

[As part of its \\$42.9 billion World Cup development plan, the country also will build an air-conditioned transit system to whisk fans to the stadiums. Fan zones and training sites have yet to be designed, but authorities have promised they will be cooled, too — discounting suggestions to put them underground or indoors.”](#)

The NYT article says [“...organizers are betting innovative stadium designs and cutting-edge cooling systems can keep players and fans comfortable in a country where summertime temperatures often soar above 110 degrees.”](#)

What the organizers have available to them is a supply of abundant and nearly free energy from fossil fuels. This kind of energy extravaganza may prove in hindsight to be a clear example of the peaking of the petroleum age that began 150 years ago.

## Low cost natural gas to high value diesel

[“Johannesburg-based Sasol Ltd. said it will study the feasibility of building a “gas-to-liquids complex” in Calcasieu Parish. Sasol said the plant would be the first in the country to employ the technology, which converts gas into liquid fuels.”](#)

This \$10 billion project is predicated on natural gas remaining cheap relative to crude. [“At about \\$4 per million British Thermal Units, the energy content in US natural gas is priced at the equivalent of about \\$24 per barrel of oil, meaning that gas is about a fifth of the cost of internationally traded crude oil, such as Brent.”](#) Given the number of inventive ideas for using natural gas to make the U.S. “Energy Independent” it seems very unlikely it will remain this cheap even if the magic of shale gas plays out as hyped.

This also speaks to the global value of diesel fuel and the ability of a location in Louisiana to export into the global market. Sasol must also believe that crude will remain high and supplied constrained. Sounds like they get Peak Oil doesn’t it.

Sasol probably won’t be going it alone on this one, after all the total market value of the company is about \$28 billion. They will probably need a partner if they decide to do the full development. An interesting question is who might it be?

## **Brent crude remains above \$110 per barrel. What gives?**

While everyone traditionally focuses on demand when discussing oil prices in the current environment it yields a confusing and incorrect conclusion. The price of oil should be going down if the forecasts of economic activity are correct. Instead the Brent benchmark is holding well above \$110 per barrel and briefly was trading above \$115 on Thursday.

*“The IEA's explanation is that despite the drops in demand, consumption continues to outpace supply. Demand last year was 1.4 million bpd higher than supply, the agency reported, and in the first half of this year it was 500,000 bpd higher.”*

Bloomberg had these two comments from the IEA report that related to the supply side of the equation.

- *“OPEC’s 12 members collectively bolstered production by 165,000 barrels a day last month, led by increases in Saudi Arabia and Nigeria. That still left OPEC crude supply below the estimated level of demand for that oil this quarter, estimated at 31.3 million barrels a day...”*
- *“Lower production caused oil stockpiles in developed nations to fall below their five-year average for the first time since 2008...”*

In a peak oil world supply may become the driver of price trends. Supply will begin to shape demand as compared to demand pulling supply up with higher prices as seen in the past. The dynamics of the oil market in the decades ahead could prove to be very different than in the past.

***“The human capacity to convince oneself of something one wants to think true is virtually bottomless.”***

*~ American Lion: Andrew Jackson in the White House – Jon Meacham, 2008*

If you would like to **subscribe** to the mailing list, please [click here](#). *Put **subscribe** in the subject entry.*

To **remove** your name from the mailing list, please [click here](#). *Put **unsubscribe** in the subject entry.*

Questions or comments? E-mail me at [jim.hansen@kmsfinancial.com](mailto:jim.hansen@kmsfinancial.com) or call 206-363-7868 toll free 888-216-4800

### *Disclaimer*

*This publication is dedicated to the education of readers and is an information service only. While the editor is licensed to offer investments and investment advice, through KMS Financial Services, Inc. the information provided herein is not to be construed as an offer to buy or sell securities of any kind, is the opinion of the author and not endorsed by KMS Financial Services, Inc. It is possible at this or some subsequent date, the editor and/or affiliated parties may own, buy or sell securities discussed in this newsletter, or based upon information provided in the newsletter, or contrary to information provided in this newsletter. The information provided has been obtained from sources deemed reliable but is not guaranteed as to accuracy or completeness. We make every effort to provide timely information, but cannot guarantee specific delivery times due to factors beyond our control.*