

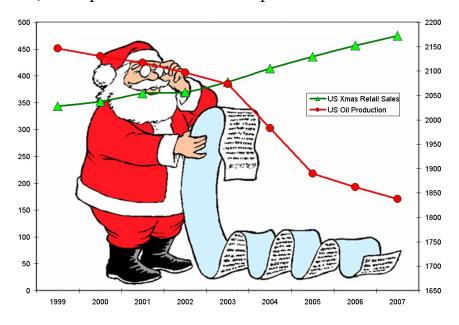
#### The Oil of Christmas Future....

Posted by Nate Hagens on December 25, 2007 - 5:21pm

Topic: Demand/Consumption

Tags: christmas, retail, shopping, solar-powered reindeer sleigh [list all tags]

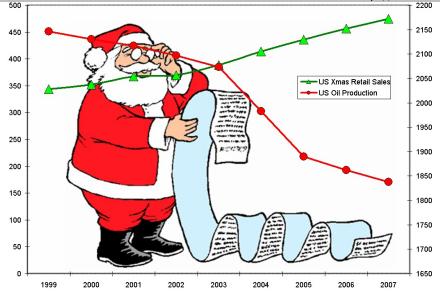
In the last 9 years, holiday retail sales have increased 50% to \$475 billion, a decent chunk of a \$13 trillion total GDP. As we've discussed (in detail!) here over the past 2 years, oil is the lifeblood of our transportation system, and thus our economy. Below is a short Christmas post showing the trend of holiday sales, US oil production and US oil imports.



#### THE OIL OF CHRISTMAS PAST

US Holiday retail sales in Billions \$ (left scale) (Source 1999-2006, Source 2007 estimate-National Retail Federation) plotted vs US domestic crude oil production (right scale) (1999 thru 9/2007 then extrapolated - Source - EIA) Click to enlarge

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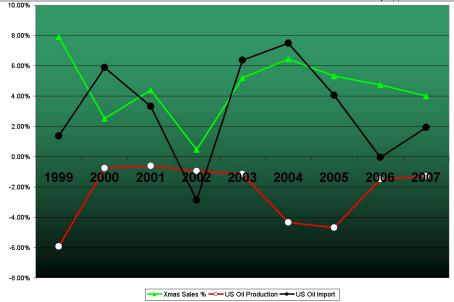


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This year, the <u>neuro-marketers</u> have spun their evolutionary algorithm-tripping magic yet again, as estimates for holiday retail sales are for a record \$470 billion dollars. What are we really buying with that sum? Christmas has seemingly become a cultural routine with a bit of <u>'unexpected reward'</u> at the apex, followed by a gradual let down. At least in US, it at times is reminiscent of a milder version of a Las Vegas air junket - on the way there everyone is happy and giddy and social and on the way back they are sleepy and crabby and poorer. This post is not advocating a dismantling of Christmas, though I must admit, Bill Mckibben's book, <u>"Hundred Dollar Holiday"</u> had an impact on me <u>--"Enough"</u> wasn't too shabby either - (IMO, Bill is a national treasure - we would do well to follow his inspired thoughts). In fact this post isn't advocating anything. I wanted to see the stats, which in retrospect are rather obvious, but may be lost amidst the holiday glitz and eggnog: United States christmas sales (and GDP for that matter) are a function of the oil we import, not the oil we produce. This should be no surprise - lets look at the numbers:

### The Oil of Christmas Past

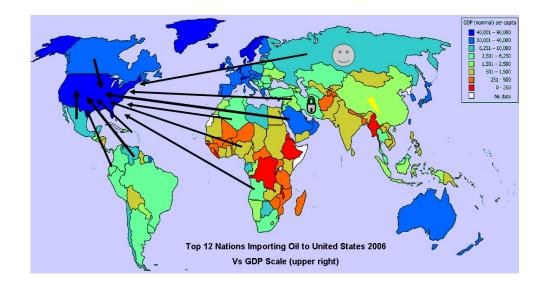


Annual % increase or decrease for holiday retail sales, US domestic oil production and US oil imports- Sources <u>National Retail Federation</u> and - <u>EIA</u>

## Click to enlarge

The above graphic shows the annual % increase in holiday retail sales in green, and (in red) that domestic oil production has declined for 8 years in a row (as frequent TOD readers know, its been declining since 1971). It also shows the annual % increase in US oil imports (in black) has increased every year except 2002 and has gone from 3.9 billion barrels in 1999 to 5.1 billion barrels this year. US Christmas sales have increased in each and every year, so its rather self-evident that they are negatively correlated with domestic US production (r^2 of -.76). These sales (or purchases) are however, correlated with US oil imports (r^2 of .42). Just for perspective....

## The Oil of Christmas Present



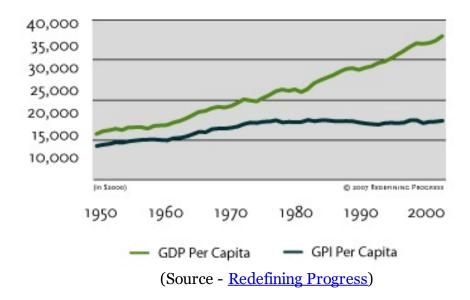
Oil Import Source - <u>EIA</u>, Source for <u>GDP data</u>

## Click to enlarge

The above graphic shows the top 11 countries where we import oil. As of 2006, these countries comprised over 80% of our imports of over 5 billion barrels of crude oil compared to US production of 1.8 billion barrels. In order, Canada-17.2%, Mexico-12.4%, Saudi Arabia-10.7%, Venezuela 10.35%, Nigeria-8.1%, Algeria-4.8%, Iraq-4.1%, Angola-3.9%, Russia-2.7%, Virgin Islands-2.4% and Ecuador-2.0%. These countries are all lower than the US in terms of GDP. Our christmas gifts are the transmutation of our trading dollars for oil. We use the energy embodied in oil to leverage our system. (quick math: one barrel of oil costs \$90 and has the latent joules of 25,000 man hours of labor, which at \$20 per hour is \$500,000. No wonder we want to import as much as we can!!!) (Note: The oil import arrows, weighted by barrel, have a trajectory ending in Waterloo, Iowa)

But lest we forget, GDP is not the neatly packaged summary stat of success some would like it to be. The nation of Bhutan, already has subsituted <u>Gross National Happiness</u>, as their national goal. <u>Redefining Progress</u>, and other institutions are working on different metrics of progress, like the Genuine Progress Indicator, which subtract things from GDP, like crime, pollution and long term environmental damage, in order to get a truer assessment of 'progress'.

# Gross Production vs. Genuine Progress, 1950-2004



# The Oil of Christmas Future

Christmas means many things to many people. At its core it used to be about religion, and to many its still about family and family traditions. I do miss my family who are spending Christmas, 'American Style', in North Carolina without me, but I don't miss the consumer froth. I am alone with my dog, snow-shoeing, some books and theoildrum, to be complemented by the arrival of my girlfriend tomorrow. This is the first year in 41 on the planet where I did not 'participate' in retail Christmas by buying a single gift. As a recovering Catholic and former large purveyor of things novel, unique and destined to wind up on entropy pile within 18 months, I have scaled back on both giving and receiving in recent holiday seasons. This year - nada - my only gift will be to my girlfriend, and that is not something I purchased.

As we consider the landscape for Christmas of the future, I hope we have the foresight and

courage to care not only about 2008 and 2009 but also about 2028 and 2039, and the implications of our decisions for the children, animals and ecosystem dwellers not present in our policy and boardroom discussions. At some point, at the highest levels, we have to address **what** we get our energy **for**, and not blindly assume that demand is a natural law that increases at a 45 degree angle. Perhaps some consilience of the scientific disciplines might converge on an 'ends' goal closer to:

(B+U)/N, where B is basic needs, U is unexpected reward (novelty, excitement, etc) and N is entropy.

Or some such. Right now its '<u>Utility</u>', with a denominator of dollars. And as my friend Jay is fond of saying, "Utility is just a 500lb woman eating another pie".

Please join us at theoildrum in 2008 as we provide a forum for facts, analysis and discussion about energy, and its role in our future. Where will the oil come from for the Christmas gifts of the future? Or will gifts be made with wind or corncobs or stranded gas? Perhaps we will change the definition of 'gifts' or require no gifts at all. Stay tuned.

And Happy Holidays...

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