

The Durable Goods Report

February 2013

Executive Summary of US Economic Activity



Manufacturing Data Release of 2/4/2013 (December Preliminary)

Employment Data Release of 2/4/2013 (January Preliminary)

Retail Data Release of 1/15/2013 (December Advanced)

Industrial Production Data Release of 1/16/2013 (December Advanced)

Housing Data Release of 1/17/2013 (December Advanced)

Source Data: US Census Bureau, US Bureau of Labor Statistics, US Department of Commerce, Energy Information Administration, Federal Reserve Board, Baker Hughes

John E. Layden

The Durable Goods Report – A Service of Time Compression Strategies

By the Numbers

| Durable Goods Key Measures | | | |
|--------------------------------------|-------------|-------------|----------|
| | Current Mo | Prior Mo | Prior Yr |
| New Orders-Durable | 229,984 | 220,556 | 230,392 |
| 12 month moving average | 218,813 | | 210,834 |
| % Change from Prior Year | 3.8% | | |
| Growth Index - Durable New Orders | 1.020 | 1.000 | 1.046 |
| | | | |
| Unshipped Orders - Durable | 991,736 | 983,846 | 969,434 |
| % Change from Prior Year | 2.3% | | |
| | | | |
| Value of Shipments - Durable | 230,080 | 227,497 | 207,200 |
| | | | |
| Inventory - Durables | 374,476 | 374,554 | 358,105 |
| % Change from Prior Year | 4.6% | | |
| Inv to shipments ratio - Durable | 1.63 | 1.65 | 1.63 |
| US Economy Key Measures | | | |
| | This period | Last period | Change |
| GDP 2012 Q4 (current \$) | 15,829.0 | 15,811.0 | 0.1% |
| Industrial Production | 2,585.8 | 2,582.1 | 0.1% |
| Capacity Utilization % | 78.8 | 78.7 | 0.1 |
| Manufacturing % | 78.0 | 77.5 | 0.5 |
| Durable Goods % | 77.8 | 77.2 | 0.6 |
| Primary Metals % | 75.7 | 73.6 | 2.1 |
| Autos and Parts % | 79.0 | 77.4 | 1.7 |
| Machinery % | 81.7 | 81.4 | 0.2 |
| Durable Goods (\$Mil SA) | | | |
| New orders | 229,984 | 220,556 | 4.3% |
| Shipments | 230,080 | 227,497 | 1.1% |
| Inventory | 374,476 | 374,554 | 0.0% |
| Unshipped Orders | 991,736 | 983,846 | 0.8% |
| Retail ex Food Service (\$Mil SA) | 370,115 | 368,546 | 0.4% |
| Autos and Parts | 78,082 | 76,836 | 1.6% |
| Gasoline | 45,031 | 45,785 | -1.6% |
| Core retail (ex auto, gas) | 247,002 | 245,925 | 0.4% |
| Employment (000's SA) | | | |
| Civilian employed (Household Survey) | 143,322 | 143,305 | 17 |
| % of potential workforce (HS) | 58.6% | 58.6% | -0.1% |
| Civilian not employed (HS) | 101,341 | 101,045 | 296 |
| Non-Farm (Establishment Survey) | 134,825 | 134,668 | 157 |
| Private (ES) | 112,961 | 112,795 | 166 |
| Government (fed, state, local) (ES) | 21,864 | 21,873 | -9 |
| Goods Producing (ES) | 18,544 | 18,508 | 36 |
| Manufacturing (ES) | 11,950 | 11,946 | 4 |
| Construction (ES) | 5,731 | 5,703 | 28 |
| Durable Goods Mfg (ES) | 7,494 | 7,491 | 3 |
| Housing (000s of Units SA) | | | |
| Total housing starts | 954 | 851 | 12.1% |
| Single family starts | 616 | 570 | 8.1% |
| Single family sales (new) | 369 | 398 | -7.3% |
| Single family for sale (new) | 151 | 149 | 1.3% |

The Durable Goods Report – A Service of Time Compression Strategies

US Economy – Quick Look:

US GDP

Q4 GDP first estimate reported as 0.1% (1.4% QtQ, 4.3% YtY). The more widely reported “chained dollar” report showed -0.1%.

Industrial Production

Industrial production excluding industrial supplies increased 0.1%. Now stands 2.4% above last year’s same month.

Durable Goods

New orders for durable goods increased 4.3%% to \$230 billion. Growth index increased to 1.020.

Retail:

Retail sales (ex food service) increased 0.4% to \$370 billion.

Employment:

Household survey shows: Employed: +17,000. Not employed: +296,000. % Employed 58.6%. Establishment survey showed a gain of 157,000 jobs Working-age population increased by 313,000. Durable goods employment increased 3,000.

Housing:

Total starts: +12.0% to 954,000. Single family starts: 8.1% to 616,000. Single family sales: -7.3% to 369,000. Median value: \$244,300 (3mma).

Random Thoughts, Stray Data and Rants:

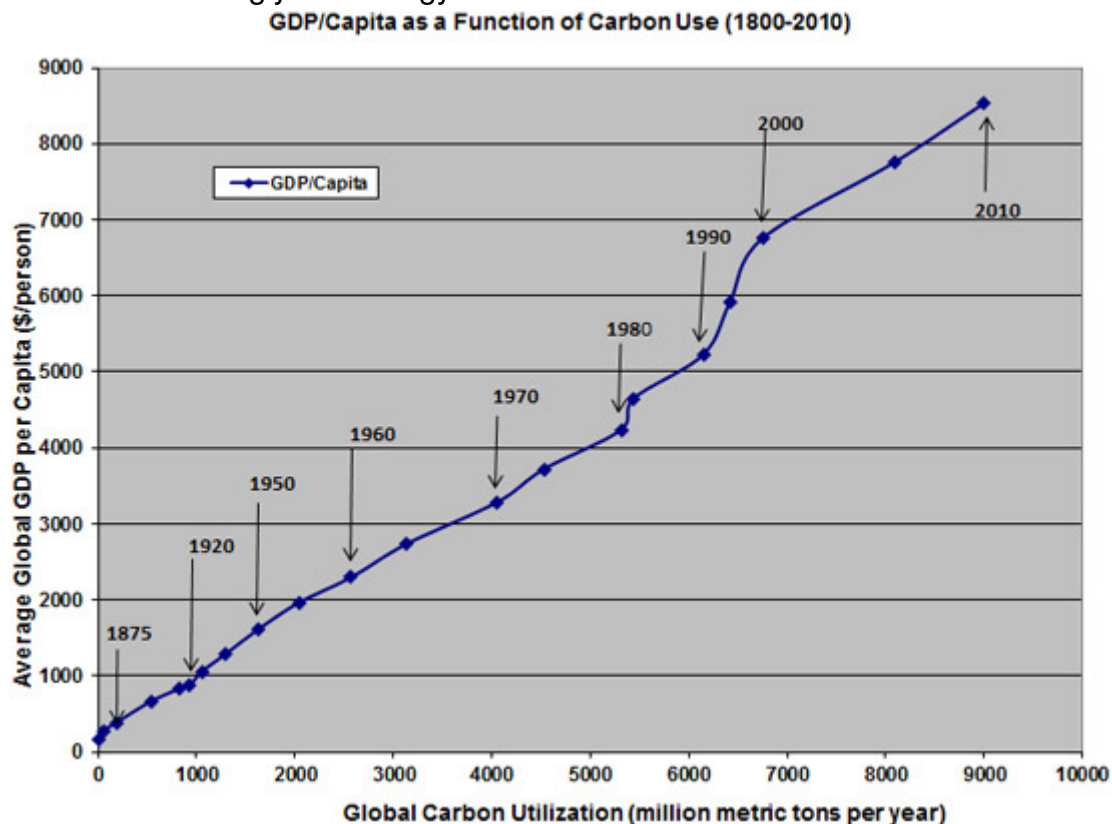
Economy

- Monetary authorities are in a real competition to see who can print more money, keep interest rates lowest.
- The “Sustainable Development” movement continues to push for ideas with the unintended consequence of reducing living standards, especially for the poor. There seems to be an aversion to everything that has eliminated more poverty than any other idea – free markets and limited government. It’s a fact. Industrial economies use oil, trees, land, water, labor, minerals and much more. But there’s a deeper story:
 - o Nothing is sustainable long term. Extrapolate from now and everything gets depleted someday.
 - o But nothing ever runs out. Lumber was an early export of the American Colonies. But we have more trees now than in 1700. Why is that?
People with a profit motive always husband resources wisely.
- “The Stone Age didn’t end from a shortage of stones. The Age of Oil will end long before the world runs out of oil.” Saudi Oil Minister. (NYT “The Breaking Point, Aug 21, 2005)
 - o The success of free markets depends on an equally free pricing mechanism with no government distortion.
- The error originates with the work of Thomas Malthus in the late 18th century. He did very creative work in the area of demographics. But then tried to forecast future conditions and got it horribly wrong.
- I’m really bored with the forecasts of Malthus. His concepts of shortage and overpopulation have led to the entire socialist movement. In 1798 he published “Principle of Population” putting forth the premise that population growth would always outstrip food production and thus be self-limiting through famine. His concepts led to the basic worldview that population growth is the root of all shortage and needs to be regulated by wise policies (thus central government and elite planners).
- The 20th century saw socialist governments kill 170 million of their own citizens in the quest to “Do the right thing.” It’s always justified by a quest for the greater good.
- Adam Smith’s “Wealth of Nations” was published in 1776 (at 900 pages, a tough read). It made the opposite argument. Wealth was derived from free markets where a natural and efficient division of labor emerged from the individual pursuit

The Durable Goods Report – A Service of Time Compression Strategies

of self-interest. (His attempt to use the concepts for policy prescriptions in the last chapters were equally flawed).

- Not many have heard of Smith's earlier work, "Theory of Moral Sentiments" published in 1759 (also a tough read). It analyzed the psychology of moral behavior and set the moral foundation for free markets. As the first modern economist he established economics as the study of psychology and moral behavior.
- After its demonstrated 100% failure rate, why does socialism still emerge as the primary dialog of modern government? I believe it springs from two parallel mechanisms:
 - o Free markets are unmanageable. They behave chaotically. They produce unexpected results, bankrupt businesses and put people out of work. This is abhorrent to utopians who fear change. It is also abhorrent to technocrats who want to exert control (always for the good, of course).
 - o Politicians have learned to accumulate power by pandering to the fear of change. In the past 20 years this has become a high art, with specialized arguments for multiple fear-constituencies being merged into a political message.
- The challenge in this situation is to understand what the core drivers are, and to find a way to take advantage of that knowledge.
- It looks increasingly like energy.



The Durable Goods Report – A Service of Time Compression Strategies

- *Fig. 1 Average global GDP per capita as a function of carbon use, 1800 to 2010. GDP in 2010 dollars.*
- What is the driver of per capita GDP? This chart shows a correlation to carbon based energy. It suggests (doesn't prove) it is a fundamental driver.
- Technology can be a driver to the extent that it improves the velocity of commerce. New technologies generating new consumer demand is a much smaller factor. Technology that it improves the quality of simple transactions has a very small impact. MP3 was really nice. But the ability to deliver goods electronically was what improved the velocity of commerce.
- The steam locomotive caused a huge leap by improving the velocity of commerce and compressing time. Trans-continental transport went from 3 months to three days.
- The 1990s build-out of the fiber optic internet was a step change in the velocity of commerce.
- But the big and consistent driver over the long haul is energy.
- This connects two ideas:
 - o All business costs are labor cost: either your labor cost or the labor cost of your supplier delivered to you as "material cost." Iron ore is free except for the labor to extract it. Capital is free except for the labor invested in accumulating it.
 - o Labor cost is reduced by the use of energy. It's a labor multiplier.
- Pay attention to the later discussion on energy.

- If you're a Facebook investor you should be alert to one thing. Mark Zuckerberg controls 57% of the voting shares, controls board selection and gains greater control anytime someone with voting shares sells (they convert to non-voting). When you're sitting in a poker game and you don't know who the pigeon is, you're the pigeon.

Energy: *this critical commodity drives much of the cost of durable goods. More importantly it is a key driver of wealth, surplus wealth and demand. Used as a labor multiplier it reduces cost.*

- Oil production in 2012 increased by 780,000 bbls/day. Largest increase in history of records going back to 1859 (WSJ).
- The proponents of peak oil are revising their arguments. They now make the case that "conventional oil" peaked just as predicted, but "unconventional oil" has delayed the end of the world as we know it for a few years. The definition of unconventional keeps shifting. First it was tar sand oil until they learned how to efficiently produce it. Then it was oil from deep wells until they learned how to go

The Durable Goods Report – A Service of Time Compression Strategies

deep efficiently. Then it was fracking oil. All we're missing is the soap box and the cries of "Repent for the end is nigh."

- The peak oil argument all the way back to M. King Hubbard at Shell in the 70s has been an exercise in silly math. Anyone still on that bandwagon is likely in denial or delusional. We are awash in carbon energy. And there is a massive accumulation of real scientific evidence that the secondary effects are positive.
- The current trajectory puts the US on track for energy self-sufficiency in less than a decade.
- Canada, Israel and Australia share our good fortune.

- CEO at Nissan: Giving up on the electric car because of its limited range. No technical solution in sight. It was 100 years ago that engineers gave up on the electric car because it only had a 40 mile range with no technical solution in sight.
- We have never been a fan of Lithium batteries. Refuse to own a car that uses one. Don't much like it in my laptop. Always removed it when flying my own plane.
- They're very dangerous as a fire hazard.
- Now Boeing is learning why they're such a bad idea. They saved a little weight and not the 787 fleet is grounded.

- **Government:** *"Government is the great fiction through which everybody endeavors to live at the expense of everybody else." F. Bastiat.*

- Discretionary spending has increased 14% in the past year. Now a 5% cut via the sequester is "scary – potentially devastating."
- Obamacare will result in the loss of employer health insurance for 7 million (CBO).
- Obamacare is reported to be producing a shortage of doctors. The administration's solution is to redefine some treatments to be performed by nurses and others.
- Obamacare insurance: Cheapest family insurance plan that meets government standards will be \$20,000 (family). Until the "Affordable Care Act" you could buy major medical insurance for \$5,000 (\$8,000 family). Looks like this program will no longer be legal because it doesn't meet the minimum government standard.
- As predicted here three years ago, national health care is resulting in shortages, increasing prices and declining service.

The Durable Goods Report – A Service of Time Compression Strategies

- Dr. Ben Carson's epic speech at the Washington Prayer Breakfast – you gotta see this:

<https://www.youtube.com/watch?v=vyyHegP255g>

- Why has the Department of Homeland Security stockpiled 1.6 billion rounds of ammunition? Conspiracy theories abound. Here's an interesting theory from *George Turner*:

“Ammunition has some wonderful accounting properties. It costs a lot of money to purchase, can be resold with trivial ease and virtually no traceability, and it's an “anonymously consumable” item. The shortfall between the amount purchased and current inventory is whatever was expended on the shooting range, with no way to verify the consumption.

It can be traded to other agencies and departments who have shortfalls, sold on the international black market, sold on the above-board international market, or sold back to wholesalers with a wink and a nod.”

- Donald Sensing agrees with Turner that it's money laundering. But the purpose is more sinister. Funnel untraceable money to the DNC:
<http://senseofevents.blogspot.com/2013/02/why-is-dhs-buying-billions-of-rounds-of.html>
- Either way it's enough ammo to fight the Iraq war at peak intensity for 30 years.
- And the company that won the latest bid had only been in existence for 5 days.
- Two other theories, that they're getting ready for insurrection from the right or that they're trying to regulate guns by creating a shortage of ammo don't look to credible.
- Of course the DHS has said that anyone that is skeptical of big, central government and believes in the Constitution and honors individual responsibility should be monitored as a potential domestic terrorist. Hmmm. Check, check, check.
- A non-violent revolution has started in the US.
 - o Two thirds of gun owners in NY say they will not comply with the new gun law.
 - o The NYC cigarette tax is paid on 60% of cigarettes; 40% are black market.
 - o After a city council member tried to get a citizen thrown out for carrying a gun, 160 citizens showed up for the next meeting, most armed.
 - o States are increasingly deciding to override the federal positions they consider unconstitutional.
 - o Any elected official who fears armed citizens needs to ask themselves a more basic question. What are they doing that warrants fear of citizens?

The Durable Goods Report – A Service of Time Compression Strategies

- Increasing signs of economic activity going underground to avoid taxes. In the late 70s it was estimated at 25%, but how would anyone know?
- Both Democrats and Republicans believe that an immigration bill can help them with the Latino vote. One of them must be wrong. I'm betting it's the Republicans.
- Since the Democrats and the press will blast the Republicans regardless of what they do, they might as well do the right thing (of course they will first exhaust all other possibilities).
- Phil Mikelson was blasted when he said that he might need to move out of California due to his 62% personal tax rate. Accused of hate speech. Now a simple statement of fact is hate speech! What the hell is wrong with stating a simple fact?
- In a meeting with the CEO of a 200 employee company almost 20 years ago I was astounded that he did not realize that he was paying over 60% tax on his personal income, inflated by S-corp status.
- The White House Jobs Council has been disbanded. If a tree falls in the forest...
- CHICAGO (CBS) – A teenage girl—an honor student who had just performed at President Obama's inaugural—was gunned down Tuesday afternoon in the Kenwood neighborhood, just blocks from the high school she attended.
- Update on quoted gun stats:
 - Last month's DGR report of 4,000 crimes per day prevented by armed civilians, challenged by 3 readers. After further review the numbers from various studies show 3,800 to 6,800. The University of South Florida study is the most rigorous in documenting methods and sources. USF concluded the number was about 6,800 per day.
 - Got another objection to the comments on guns: "...surely we can make our schools gun free like we did with airplanes after 9/11."
 - Sorry, but the reverse is true:
 - Schools have been gun free for decades. That's what makes them popular with any nut intent on mass murder.
 - Airplanes were gun free before 9/11. That's why box cutters were so effective. We put guns on the planes after 9/11 and the rash of hijackings stopped.
 - The NRA got one thing right. We only have one known defense against these attacks and it isn't the police. Most police departments quote response time to 911 calls as 10-20 minutes. There is no practical way that number will be reduced substantially.

The Durable Goods Report – A Service of Time Compression Strategies

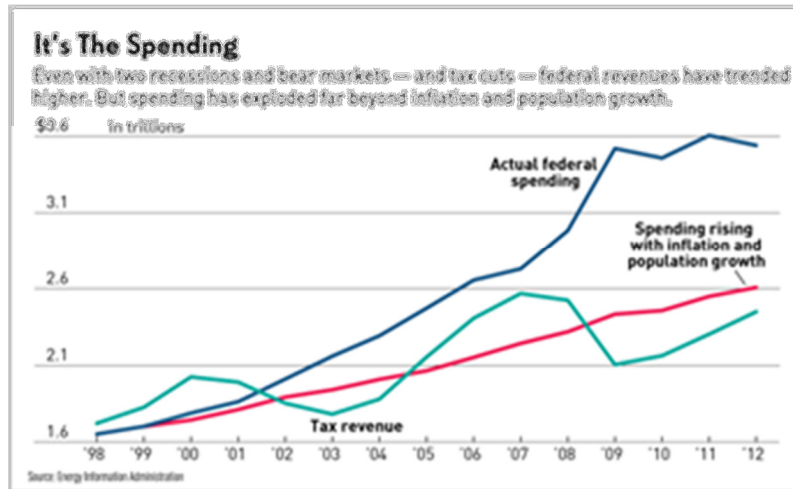
- The rate of all violent crime (not just gun crime) is higher in every country where guns are banned or seriously restricted.
 - Of the 100 most populous nations the US is number one in private gun ownership. Number 98 in total violent crime.
- There are three compelling arguments for open access to weapons:
 - Practical: It's the only thing that has been clearly demonstrated to work. Everything now proposed has demonstrated to be ineffective or worse.
 - Moral: the right to self-defense is unqualified in Western civilization. The responsibility to use force to protect other innocents is also a part of Christian teaching (From St. Augustine to John Paul II).
 - Legal: "...shall not be infringed." seems pretty clear. But the case goes all the way back to the Magna Carta.
- Well-regulated militia: <http://www.thedailybell.com/28672/Anthony-Wile-Edwin-Vieira-on>

This interview and related book makes the well-researched argument that the purpose of the second amendment is an individual right, but closely coupled with the responsibility to serve in a state militia. It is one purpose of a state militia to contain rogue elected officials including the federal officials.

- For decades the US Congress and state legislatures have been making more and more things criminal. There was a comic strip when I was a kid called "There Ought to be a Law." It was a spoof on stupid things that people do. Somehow we came to believe that writing a law could overcome stupidity and bad manners. Utter folly. How did prohibition work out for you?
- Glenn Reynolds, UT law professor, writes about this trend in "Due Process When Everything is Criminal" :
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2203713
- Nathan Haddad was arrested in DC for having 5 empty 30 round magazines secured in the trunk of his car. Charged with a felony and could get up to 35 years in prison. And David Gregory flashes one on NBC after the police told them not to, gets a pass. Guess laws are for the little people. And scary military vets. And right wing extremists who believe in the Constitution or something.
- There's only one political/economic process and legal framework proven to reduce poverty and generate well-being. It's where no one is allowed to tell anyone else how to define the pursuit of happiness. Coupled with free markets it's the most powerful force for good ever seen on Earth.

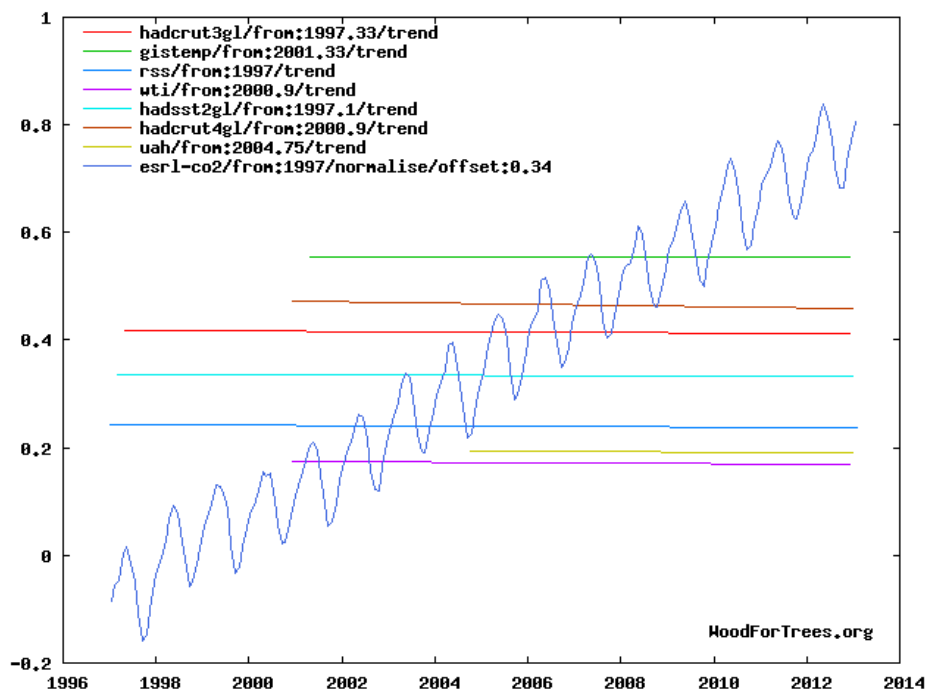
The Durable Goods Report – A Service of Time Compression Strategies

- That structure is deftly defined in the US Constitution.
- Bloomberg declined comment.
- Nancy Pelosi says there's no spending problem. Really?



Climate is the scare argument being used to justify higher taxes and regulation. The effect on energy cost and operating costs for durable goods are dramatic.

- Tell me again how CO2 causes global warming? The chart below shows the length of time over which the slope of the global mean temperature has been zero (flat) at 2 sigma significance. The blue line shows CO2 concentrations.



- Here's the source article:
<http://wattsupwiththat.com/2013/02/10/has-global-warming-stalled/#more-79260>

- Discussions on the original CO2 greenhouse effect experiment in 1909 by physicist Dr. R. W. Wood. Two good articles; two different opinions. I lean heavily to the second one from Eschenbach.

<http://www2.ljworld.com/weblogs/science-becoming-religion/>

<http://wattsupwiththat.com/2013/02/06/the-r-w-wood-experiment/>

The Corruption of the Language Department

- George Orwell is best known for his popular book “1984.” But he was a prolific writer against tyranny and pointed out that it was always dependent on the ability of the elites to redefine and corrupt the meaning of the language. Hence this new department where we can collect modern examples. To make this list the phrase only needs to be intentionally misleading, mathematically impossible, or oxymoronic.
 - o “...post- industrial economy”: Means that math and science was too hard and my self-esteem coach told me that soon no one would need them any more. Sorry, your coach was happy-talking you. There’s no such thing as the “Post-industrial economy.” Only failed economies.
 - o “Obstructionist” is anyone who refuses to cave in and do it my way.
 - o “Fair and Balanced”: means talking heads concurrently reciting opposing talking points no matter how unbalanced. (thanks to Rollie in Austin)
 - o “Security”: now means the absence of civil rights (thanks to Rollie in Austin).
 - o “It’s for the Children”: Nothing that involves government debt is a positive for the children. It’s a cover story for stealing their future before they can vote against the idea.
 - o Affordable housing: I don’t know about you, but I’ve always lived in an affordable house. When this term is used by politicians it means government subsidized housing. That means you pay for someone else’s mortgage. Giving free stuff to voters.
 - o “We’re all in this together” means “it’s not my fault.”
 - o Sharing (when used by a politician) means they covet your money.
 - o Fair share: would that mean everyone paying the same %? Guess not.
 - o Social Justice: I thought justice was a matter of law. Silly me.
 - o Targeted tax cuts: The real issue is that someone besides the market gets to pick winners. Taxpayers are always the losers.
 - o Living wage: You deserve a good wage even if you don’t produce that much value. In that case your job goes away and you no longer receive the embarrassment of a low wage.
- We’ll keep the list growing as we get time.

The Durable Goods Report – A Service of Time Compression Strategies

US GDP

GDP first estimate for Q4 growth rate reported at -0.1% (chained \$). Based on current \$ it comes in at 0.1% (3.3% YtY). DGR tracks the current \$ since no one really knows how to measure inflation in general.

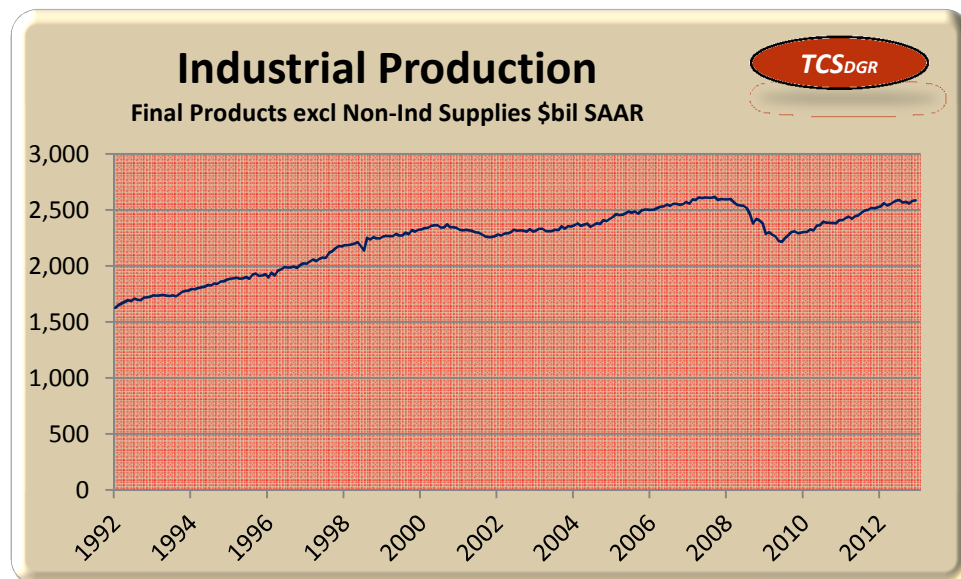
| Gross Domestic Product | | | | |
|------------------------|-----|-------------------|----------------------|------------------------|
| Year | Qtr | GDP \$b (SAAR) | Chg from Prior Pd | Chg from Prior Year |
| 2008 | 1 | 14,273.9 | 0.1% | 3.7% |
| 2008 | 2 | 14,415.5 | 1.0% | 3.1% |
| 2008 | 3 | 14,395.1 | -0.1% | 1.9% |
| 2008 | 4 | 14,081.7 | -2.2% | -1.2% |
| 2009 | 1 | 13,893.7 | -1.3% | -2.7% |
| 2009 | 2 | 13,854.1 | -0.3% | -3.9% |
| 2009 | 3 | 13,920.5 | 0.5% | -3.3% |
| 2009 | 4 | 14,087.4 | 1.2% | 0.0% |
| 2010 | 1 | 14,270.3 | 1.3% | 2.7% |
| 2010 | 2 | 14,413.5 | 1.0% | 4.0% |
| 2010 | 3 | 14,576.0 | 1.1% | 4.7% |
| 2010 | 4 | 14,735.9 | 1.1% | 4.6% |
| 2011 | 1 | 14,814.9 | 0.5% | 3.8% |
| 2011 | 2 | 15,003.6 | 1.3% | 4.1% |
| 2011 | 3 | 15,163.2 | 1.1% | 4.0% |
| 2011 | 4 | 15,321.0 | 1.0% | 4.0% |
| 2012 | 1 | 15,478.3 | 1.0% | 4.5% |
| 2012 | 2 | 15,585.6 | 0.7% | 3.9% |
| 2012 | 3 | 15,811.0 | 1.4% | 4.3% |
| 2012 | 4 | 15,829.0 | 0.1% | 3.3% |

Industrial Production (excluding industrial supplies)

Industrial production increased 0.1% in December after a 1.0% increase in November. The year to year comparison is now 2.4% above the same month prior year. Less than estimates of inflation and far below the 5% or so needed to drive job growth.

The Durable Goods Report – A Service of Time Compression Strategies

| Industrial Production - final products \$b SAAR | | | | |
|---|----|--------------------------|-------------------|---------------------|
| Year | Mo | Ind Prod - Value of Prod | Chg from Prior Pd | Chg from Prior Year |
| 2011 | 1 | 2,410.4 | 0.1% | 4.6% |
| 2011 | 2 | 2,425.1 | 0.6% | 5.2% |
| 2011 | 3 | 2,442.0 | 0.7% | 5.0% |
| 2011 | 4 | 2,420.8 | -0.9% | 4.4% |
| 2011 | 5 | 2,444.1 | 1.0% | 3.5% |
| 2011 | 6 | 2,451.9 | 0.3% | 3.8% |
| 2011 | 7 | 2,474.8 | 0.9% | 3.4% |
| 2011 | 8 | 2,494.5 | 0.8% | 4.6% |
| 2011 | 9 | 2,500.4 | 0.2% | 4.8% |
| 2011 | 10 | 2,516.5 | 0.6% | 5.6% |
| 2011 | 11 | 2,516.2 | 0.0% | 5.7% |
| 2011 | 12 | 2,524.4 | 0.3% | 4.8% |
| 2012 | 1 | 2,532.7 | 0.3% | 5.1% |
| 2012 | 2 | 2,560.8 | 1.1% | 5.6% |
| 2012 | 3 | 2,541.9 | -0.7% | 4.1% |
| 2012 | 4 | 2,553.3 | 0.4% | 5.5% |
| 2012 | 5 | 2,568.9 | 0.6% | 5.1% |
| 2012 | 6 | 2,582.6 | 0.5% | 5.3% |
| 2012 | 7 | 2,588.5 | 0.2% | 4.6% |
| 2012 | 8 | 2,567.8 | -0.8% | 2.9% |
| 2012 | 9 | 2,571.5 | 0.1% | 2.8% |
| 2012 | 10 | 2,556.7 | -0.6% | 1.6% |
| 2012 | 11 | 2,582.1 | 1.0% | 2.6% |
| 2012 | 12 | 2,585.8 | 0.1% | 2.4% |



The Durable Goods Report – A Service of Time Compression Strategies

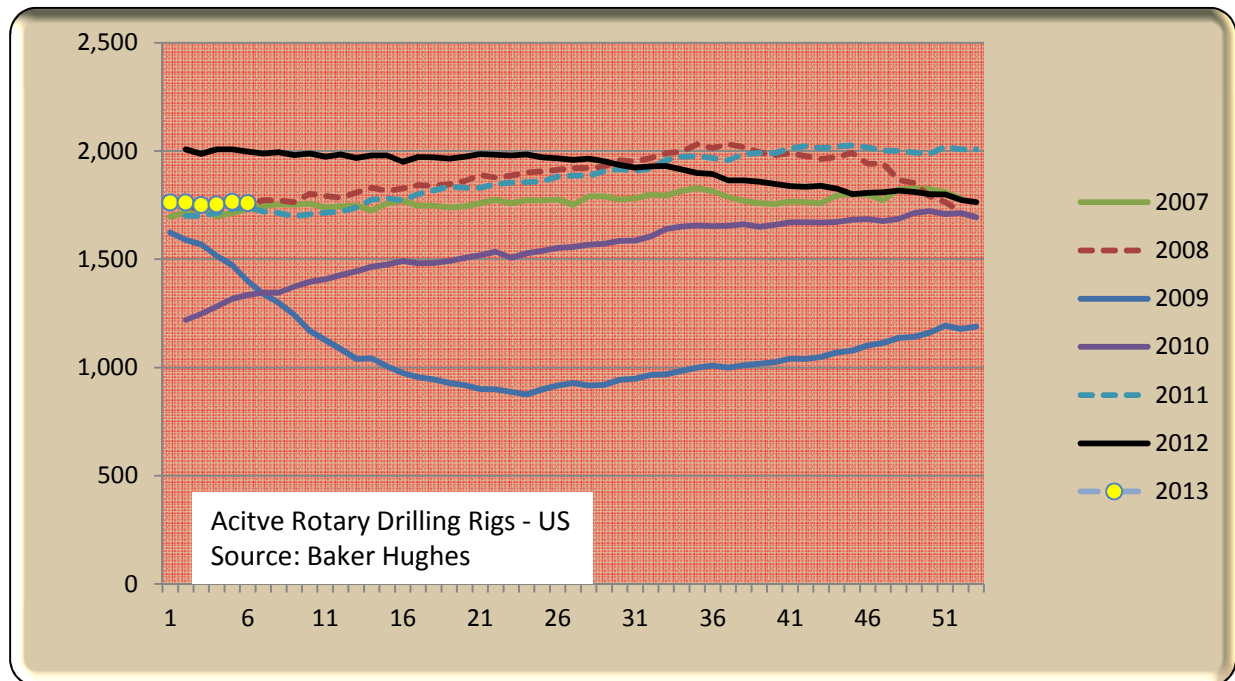
Capacity Utilization:

Capacity utilization (below) increased 0.1 points. All major sectors increased in December. Manufacturing +0.5; Durable + 0.6; Primary metals +2.1; auto +1.6; machinery +0.3. Overall the utilization rates are about back to where they were a year ago. Likely still some component of demand from hurricane recovery in autos.

| Capacity Utilization % | | | | | | | |
|------------------------|-------|----------|------|---------|----------------|------|-----------|
| Year | Month | Ind Prod | Mfg | Durable | Primary Metals | Auto | Machinery |
| 2010 | 1 | 70.8 | 78.0 | 76.6 | 75.8 | 81.9 | 63.6 |
| 2010 | 2 | 71.3 | 77.6 | 77.1 | 78.1 | 82.3 | 63.4 |
| 2010 | 3 | 71.9 | 77.3 | 77.7 | 79.7 | 81.9 | 64.2 |
| 2010 | 4 | 72.4 | 76.5 | 78.4 | 79.5 | 82.3 | 65.5 |
| 2010 | 5 | 73.7 | 76.1 | 78.1 | 81.0 | 82.9 | 66.5 |
| 2010 | 6 | 73.9 | 75.7 | 78.2 | 81.3 | 82.5 | 67.7 |
| 2010 | 7 | 74.5 | 75.0 | 78.1 | 84.7 | 82.0 | 67.6 |
| 2010 | 8 | 74.8 | 74.0 | 77.8 | 82.9 | 84.7 | 69.1 |
| 2010 | 9 | 75.2 | 71.5 | 78.0 | 83.9 | 83.3 | 69.5 |
| 2010 | 10 | 74.9 | 71.1 | 77.9 | 84.6 | 85.6 | 69.7 |
| 2010 | 11 | 75.2 | 69.6 | 78.5 | 84.8 | 84.8 | 70.0 |
| 2010 | 12 | 76.0 | 67.4 | 78.6 | 83.6 | 84.2 | 68.6 |
| 2011 | 1 | 76.1 | 65.6 | 78.4 | 82.8 | 85.8 | 68.7 |
| 2011 | 2 | 75.9 | 65.7 | 78.3 | 82.3 | 84.8 | 69.9 |
| 2011 | 3 | 76.5 | 64.6 | 78.1 | 82.1 | 84.7 | 70.2 |
| 2011 | 4 | 76.1 | 64.3 | 77.1 | 79.9 | 85.5 | 68.5 |
| 2011 | 5 | 76.3 | 63.7 | 76.7 | 78.0 | 85.2 | 68.8 |
| 2011 | 6 | 76.3 | 63.6 | 76.6 | 75.9 | 83.9 | 68.5 |
| 2011 | 7 | 77.0 | 64.6 | 75.5 | 75.0 | 79.0 | 68.0 |
| 2011 | 8 | 77.1 | 65.4 | 74.3 | 77.6 | 80.6 | 68.4 |
| 2011 | 9 | 77.2 | 66.1 | 71.7 | 78.8 | 81.3 | 68.5 |
| 2011 | 10 | 77.6 | 66.2 | 69.8 | 78.7 | 79.0 | 67.6 |
| 2011 | 11 | 77.7 | 67.0 | 67.9 | 80.6 | 75.2 | 70.2 |
| 2011 | 12 | 78.3 | 67.3 | 65.8 | 80.6 | 72.5 | 69.8 |
| 2012 | 1 | 78.7 | 78.0 | 77.0 | 77.5 | 74.6 | 83.9 |
| 2012 | 2 | 79.0 | 78.6 | 77.9 | 78.1 | 75.0 | 85.0 |
| 2012 | 3 | 78.4 | 77.9 | 77.5 | 75.3 | 75.5 | 85.8 |
| 2012 | 4 | 79.0 | 78.4 | 78.3 | 76.9 | 77.5 | 85.9 |
| 2012 | 5 | 78.9 | 77.8 | 77.7 | 75.4 | 76.3 | 85.3 |
| 2012 | 6 | 78.8 | 78.0 | 78.0 | 72.9 | 77.5 | 87.1 |
| 2012 | 7 | 79.2 | 78.2 | 78.0 | 74.7 | 78.2 | 84.0 |
| 2012 | 8 | 78.3 | 77.4 | 76.8 | 74.5 | 75.2 | 82.8 |
| 2012 | 9 | 78.4 | 77.3 | 76.4 | 70.8 | 73.8 | 82.6 |
| 2012 | 10 | 78.0 | 76.7 | 75.8 | 70.3 | 73.4 | 80.4 |
| 2012 | 11 | 78.7 | 77.5 | 77.2 | 73.6 | 77.4 | 81.4 |
| 2012 | 12 | 78.8 | 78.0 | 77.8 | 75.7 | 79.0 | 81.7 |
| Year | Month | Ind Prod | Mfg | Durable | Primary Metals | Auto | Machinery |

Energy:

Drilling activity looks to have stabilized at year end levels. The weak global economic activity is resulting lower demand and reduced activity across the board. Gas rigs continue to account for about 24% of the total.



Energy Density measured by Heat of Combustion

The following energy density analysis is repeated from prior reports to address the continued stream of questions on the viability of various liquid fuels. Before you write about your latest wonder-scheme, check out these numbers.

The table below tells the story of energy concentration of various fuel sources, measured in energy per unit weight (mega-joules per kilogram) and energy per unit volume (mega-joules per liter). In the process of searching for an alternate energy source it's important to understand the handling characteristics, and these two measures provide an easy way to rank the options.

For the space shuttle the most important consideration is weight. Putting anything into orbit means picking a fight with gravity. Hydrogen has the highest energy concentration per unit weight by far compared to any other fluid source. But its energy per unit volume (mega-joules per liter) is terrible. To take advantage of the low weight engineers are

The Durable Goods Report – A Service of Time Compression Strategies

willing to go to technical extremes (pressure, refrigeration) to condense the hydrogen gas to a liquid.

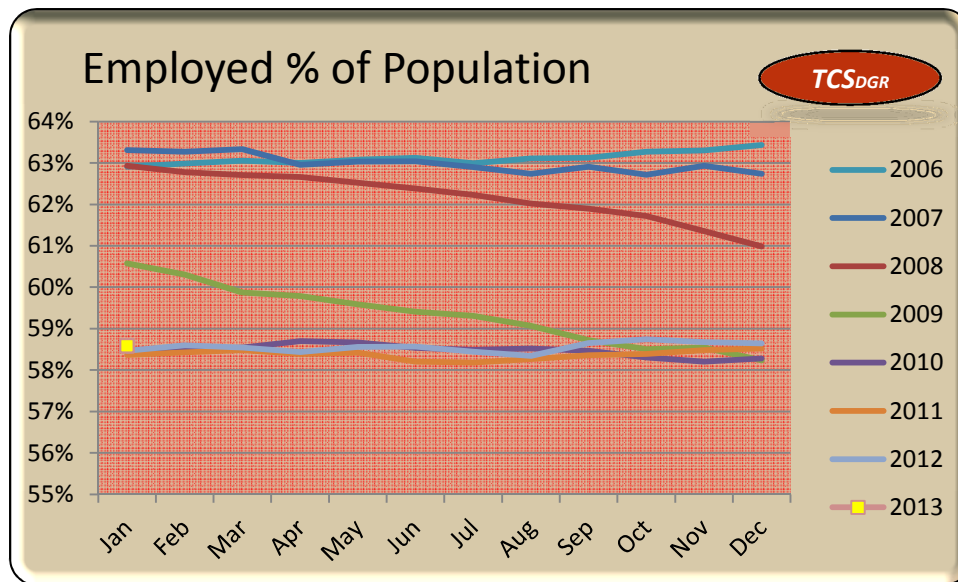
On the other hand, coal is the most concentrated per unit of volume, so it is efficient to transport it by rail.

For autos and trucks the ideal is pretty much where we ended up a century ago (gasoline and diesel). If you were going to invent the perfect energy source for transportation it would look like gasoline. But propane isn't too bad. A modest amount of pressure will keep it liquid and it's been a big business for 50 years. Methane is harder, but still viable.

Batteries are not a source of energy. They replace the fuel tank as a storage device. But we included them to give you an idea of what a really bad idea an electric vehicle is.

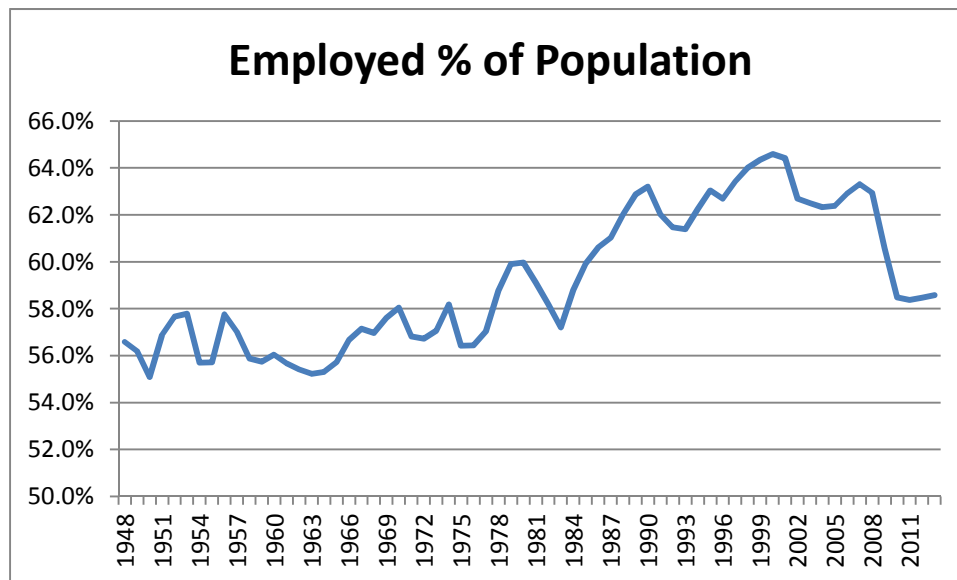
| Heat of Combustion | | |
|---------------------------------------|-------|------|
| | MJ/KG | MJ/L |
| Hydrogen | 143 | 0.01 |
| Methane, CH ₄ | 56 | 0.04 |
| Ethane, C ₂ H ₆ | 52 | 29.7 |
| Propane C ₃ H ₈ | 50 | 29.2 |
| Butane C ₄ H ₁₀ | 50 | 30.0 |
| Gasoline | 47 | 34.0 |
| 100LL AvGas | 47 | 34.0 |
| Jet fuel - Kerosene | 47 | 38.0 |
| Diesel | 46 | 39.0 |
| Paraffin Wax | 46 | |
| Kerosene | 46 | 36.0 |
| Pentane | 45 | 28.2 |
| Body fat metabolism | 38 | 35.0 |
| Gasahol e85 | 33 | 26.0 |
| Coal, Anthracite | 32 | 72.0 |
| Ethanol | 31 | 24.0 |
| Wood | 22 | |
| Methanol | 20 | 18.0 |
| Carb metabolism | 17 | 26.0 |
| Coal, Lignite | 15 | |
| Peat - damp | 6 | |
| Battery Lithium Ion | 0.72 | 2.20 |
| Battery, NiMH | 0.25 | 0.50 |
| Battery, NiCd | 0.14 | 1.08 |
| Battery, Lead Acid | 0.14 | 0.36 |

Employment:



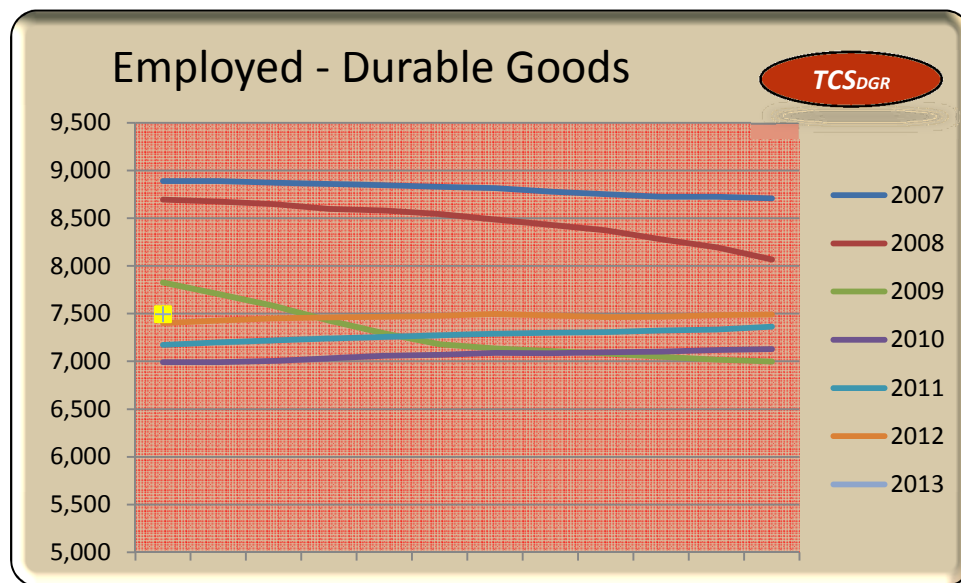
The employed % of the non-institutional population was at 58.6% in January, stagnant since the beginning of the recession in late 2008. The unemployment rate increased (7.8% to 7.9%) for the second straight month. The number not employed surged 296,000 to a record 101,341.

The establishment survey showed 157,000 new jobs in January. The household survey showed 17,000 more employed. It doesn't matter which number you favor. Neither is remotely adequate when the working age population grew by 313,000.



January Employed % since 1948

The long term history (above) of the employed % shows the situation more dramatically. Stuck at the bottom of the current recession.



Durable goods employment increased 3,000 in January. December was revised downward to a growth of 8,000. The growth of employment in durable goods has been weak through the so-called recovery even as durable output increased. Q4 productivity declined about 2%, but the general trend has been higher productivity through investment in automation.

Especially hard hit is the small business segment. The median size of a corporate enterprise in the US is 5 people. Half of employment and 80% of employment growth are driven from these small businesses. They also introduce a disproportionate share of innovation. The regulatory burden is especially hard there. At one small software company the total payroll admin expense is over 25% of payroll. This is breathing new life into the professional employment organizations (PEOs). But long term it's not a good solution. It's another patch.

Sector Detail

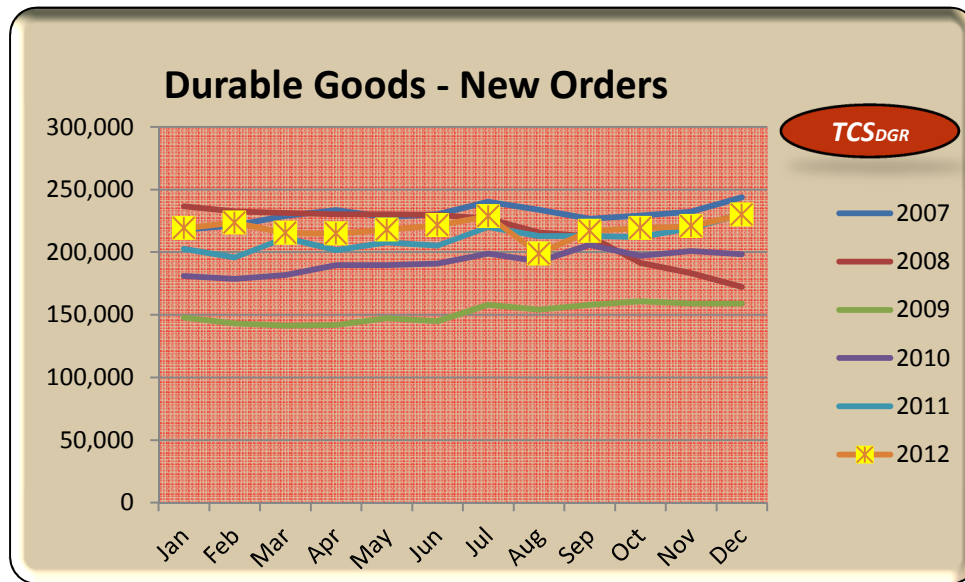
The Durable Goods Sector:

New Orders: Durable new orders increased 4.3% to \$230 billion in December. Aircraft sales surged in both commercial and defense. Boeing orders were down from 120 (Dec to 2 (Jan). Looks like a one-time spike.

The Durable Goods Report – A Service of Time Compression Strategies

The new order growth index improved from 1.000 to 1.020 (slow growth). Last year's comparable number was 1.050. Inventory to shipments ratio continued a gradual improvement to 1.63.

The Book to Bill ratio improved to 1.000 (order=shipments).

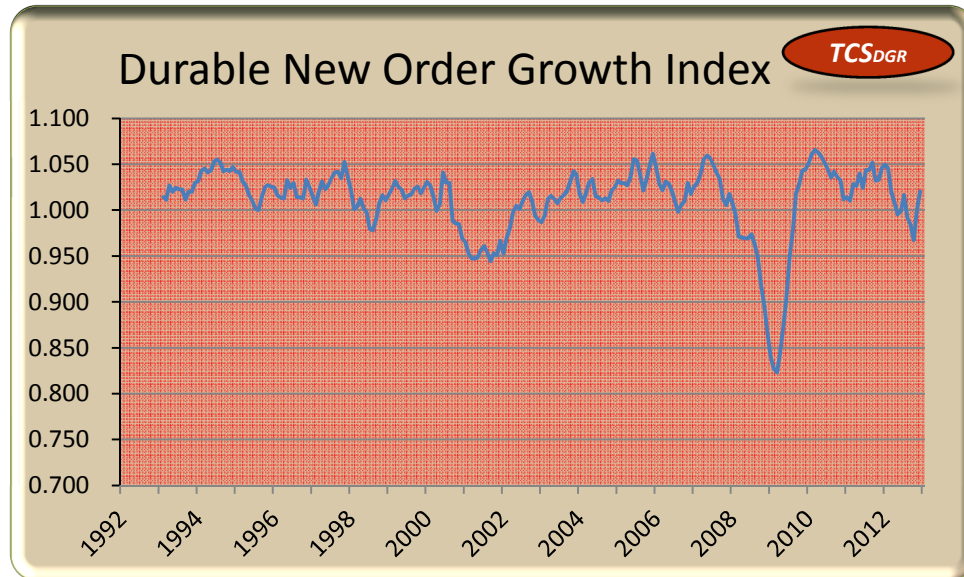


The long term chart below provides added perspective.

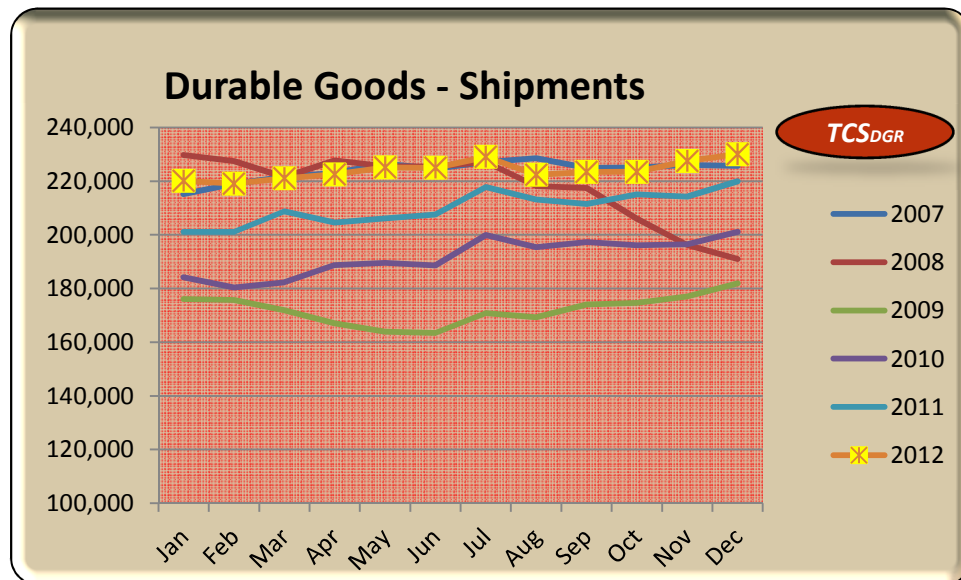


Growth Index for new orders (3mma/12mma = slope of the order curve) signaled slow growth at 1.020 after poor performance through most of last year. From a peak of 1.050 in January, 2012 it had dropped to 0.966 in October.

The Durable Goods Report – A Service of Time Compression Strategies



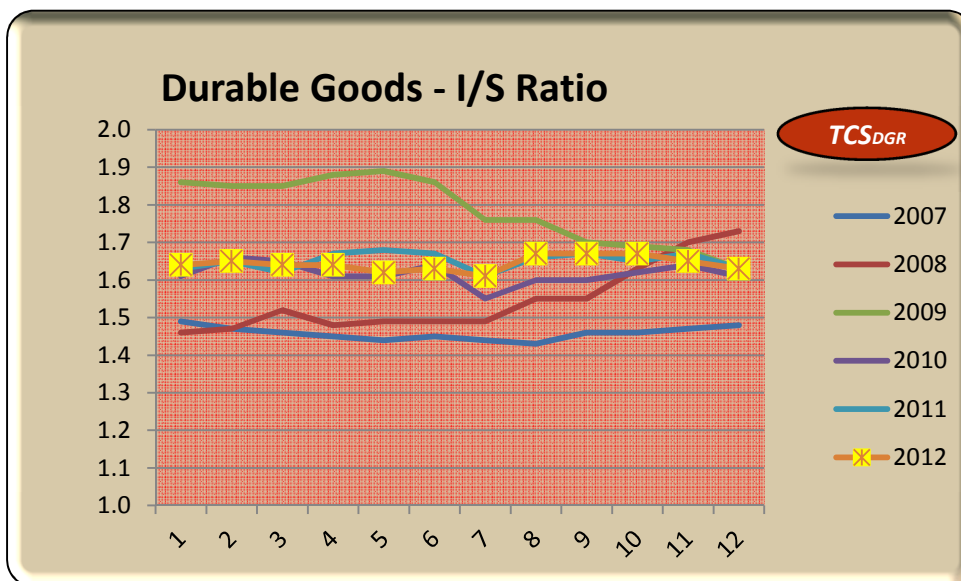
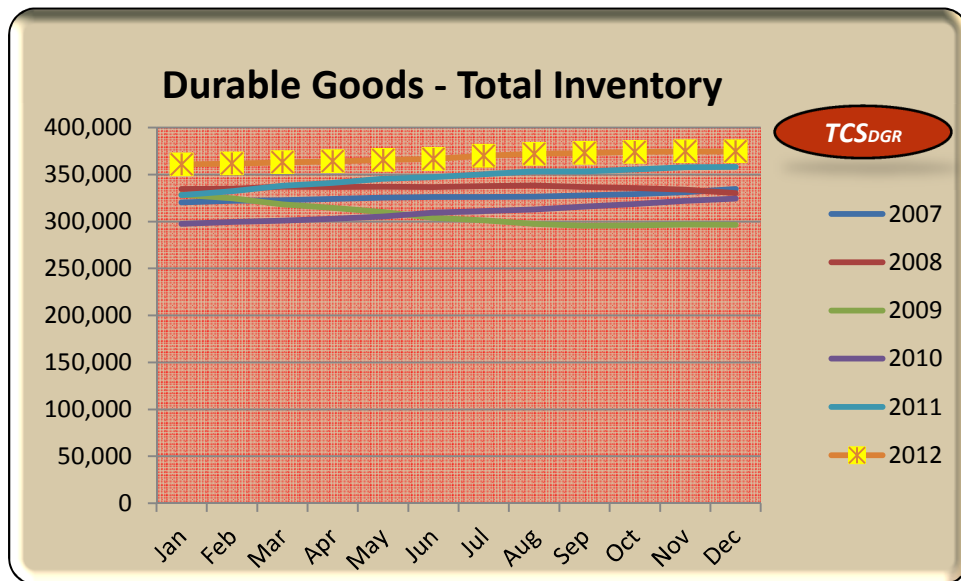
Shipments increased 1.1% to \$230 billion. This is in balance with December orders, but could be a one-time spike.



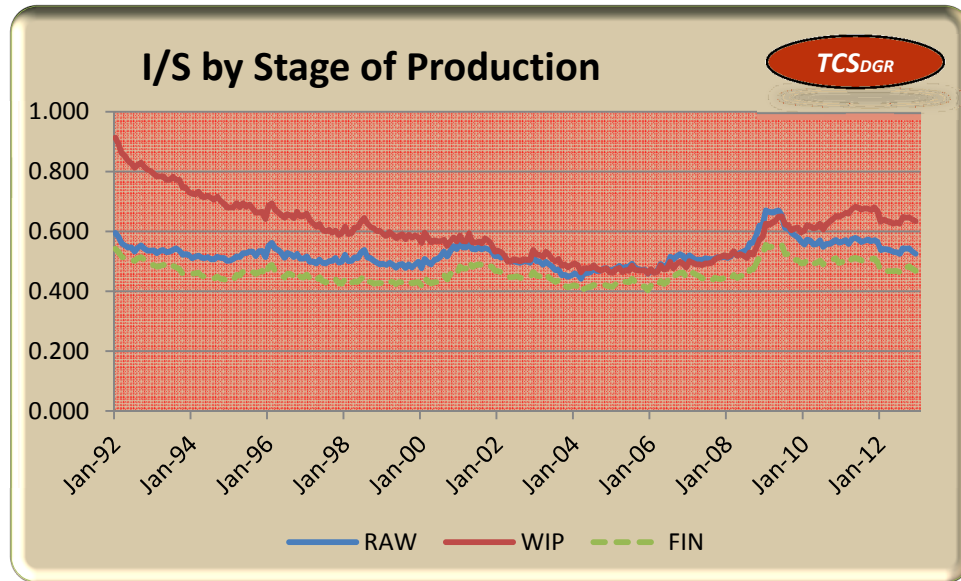
Unfilled Orders increased 0.8% to \$992 billion. Inconsistent with book to bill. It could be a measurement fluke (not all industries report unshipped orders). Still, expect adjustments in future months. Ultimately your own order book is the only one that matters.

The Durable Goods Report – A Service of Time Compression Strategies

Inventory: Total inventory was flat at \$374 billion, ending a chain of record highs. Inventory to shipments ratio declined modestly to 1.63.



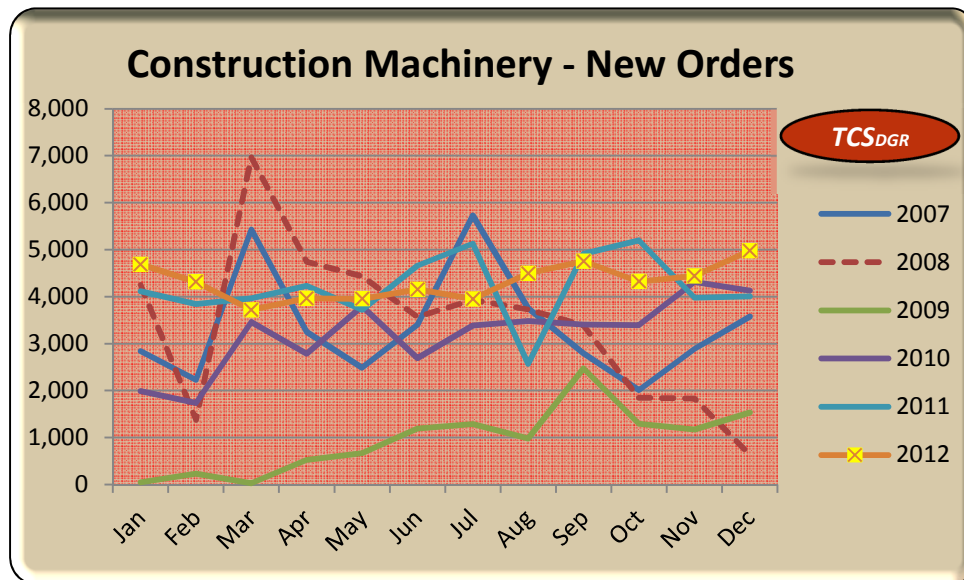
The Durable Goods Report – A Service of Time Compression Strategies



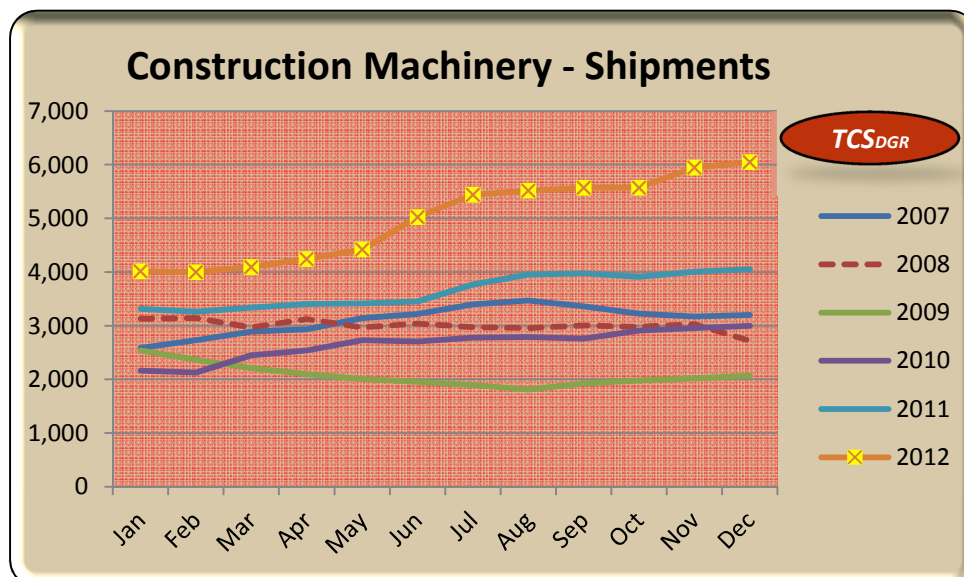
The I/S ratio by stage of production (a DGR exclusive) improved slightly. The response to the drop in orders last spring was timely and it shows in the good job of inventory containment.

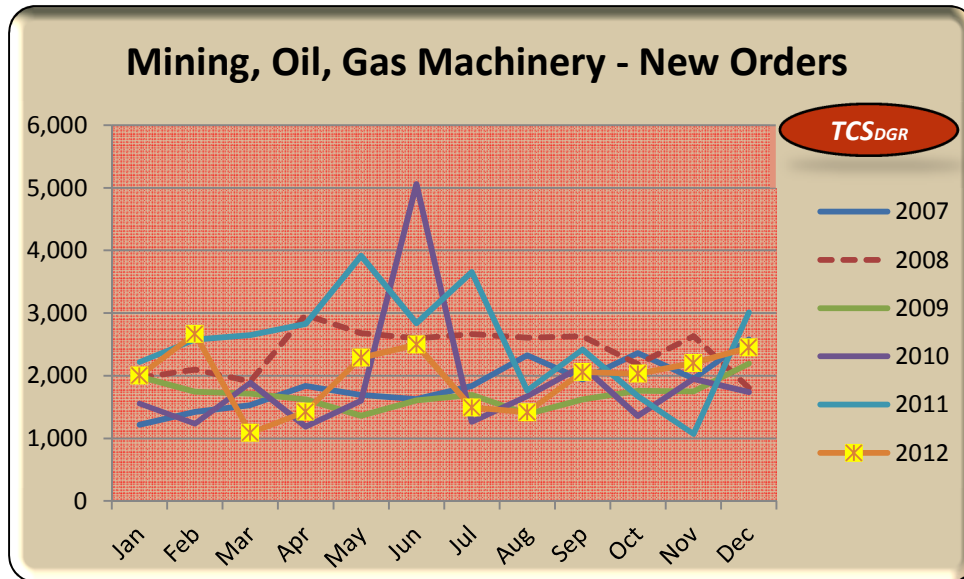
Order velocity could still use some work, which is why TCS delivers systems focused on this key metric. All improvement in value creation is driven by velocity. Top performing companies are moving away from the accounting-centered operations model and driving improvements with visibility, velocity, synchronization of the workforce and supply chain. Get that right and the finances take care of themselves.

Durable goods sub sectors:



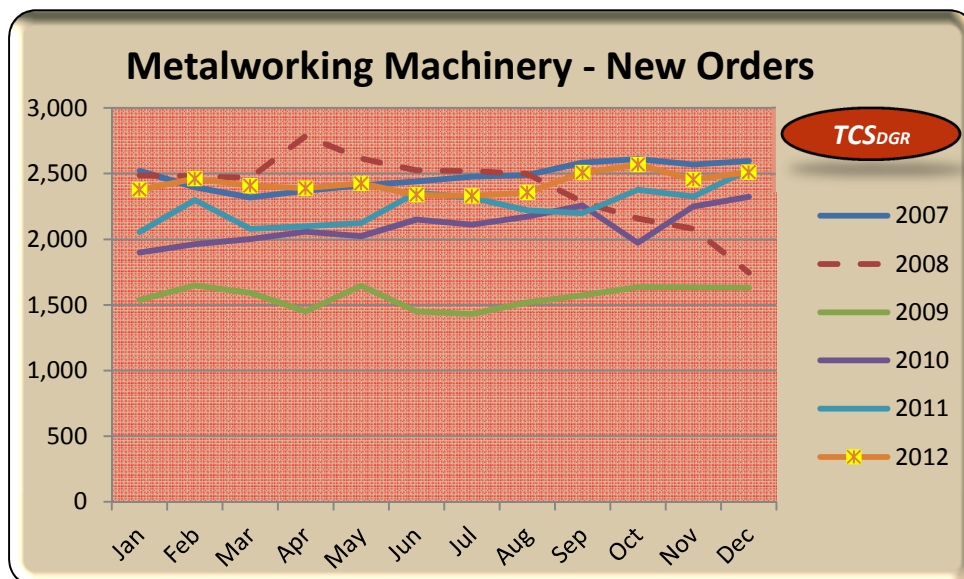
Construction machinery new orders increased by 12.2% to \$5 billion the second month of solid gains. Shipments increased 1.7% to 6 billion. Book to Bill ratio remains upside down at 0.82 (long term average 1.01). Unfilled orders declined from \$28 billion a year ago to \$19 billion today. Not sure what this signals, but Cat is advising suppliers to ramp up. Still looks like a cause for concern.





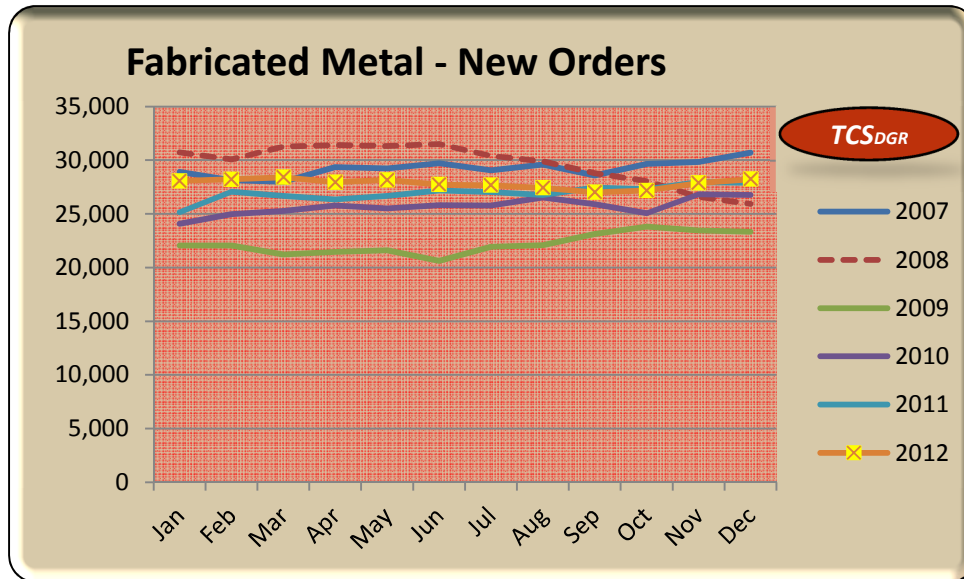
Mining, oil and gas machinery new orders increased 11.2% to \$2.4 billion. Book to bill ratio climbed to 1.23. (long term average = 1.03). Caution needed since the number of rigs actually in service is not strong.

Metalworking machinery new orders increased 2.3% to \$2.5 billion. Book to bill ratio increased to 1.04 (long term average = 1.00).

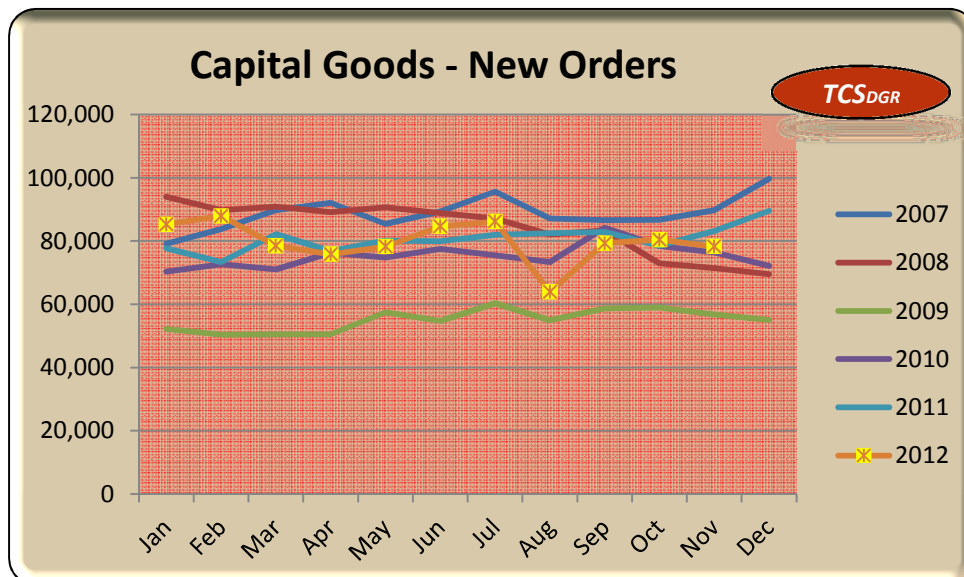


Fabricated metal new orders increased 1.3% to \$28.2 billion. Book to bill ratio climbed to 1.04 (long term average = 1.00).

The Durable Goods Report – A Service of Time Compression Strategies

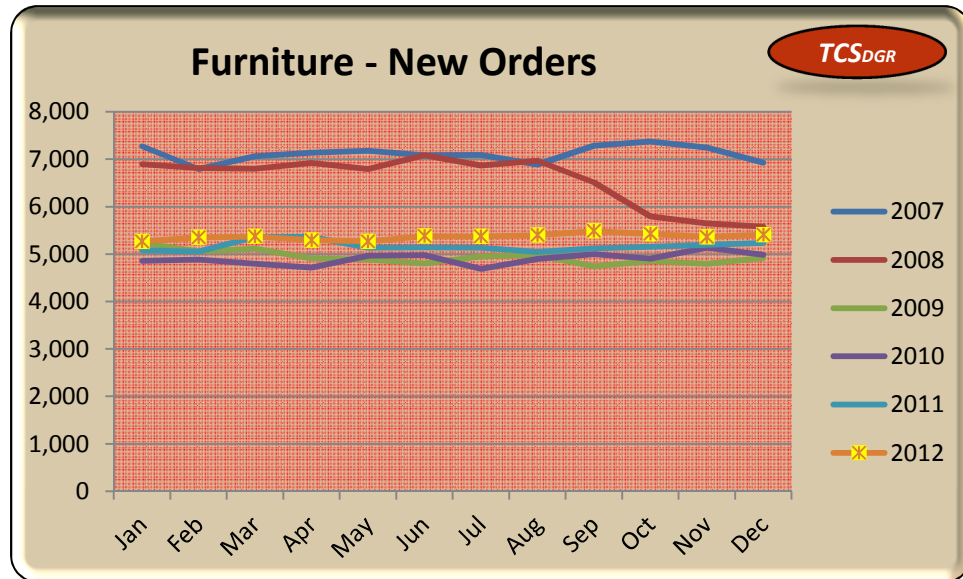


Capital goods decreased by 13.9% to \$90 billion. Book to bill ratio was flat at 1.11 (long term average = 1.01). The year-end spike in aircraft transactions drove what will likely prove to be a one-time blip.



Furniture: New orders increased 0.8% to \$5.4 billion. The book to bill ratio remained steady at 1.00.

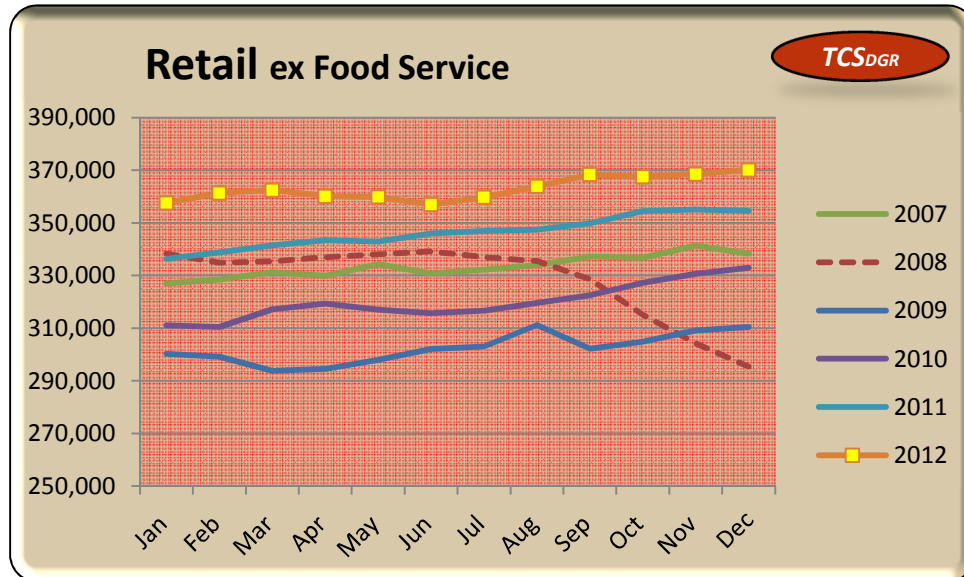
The Durable Goods Report – A Service of Time Compression Strategies



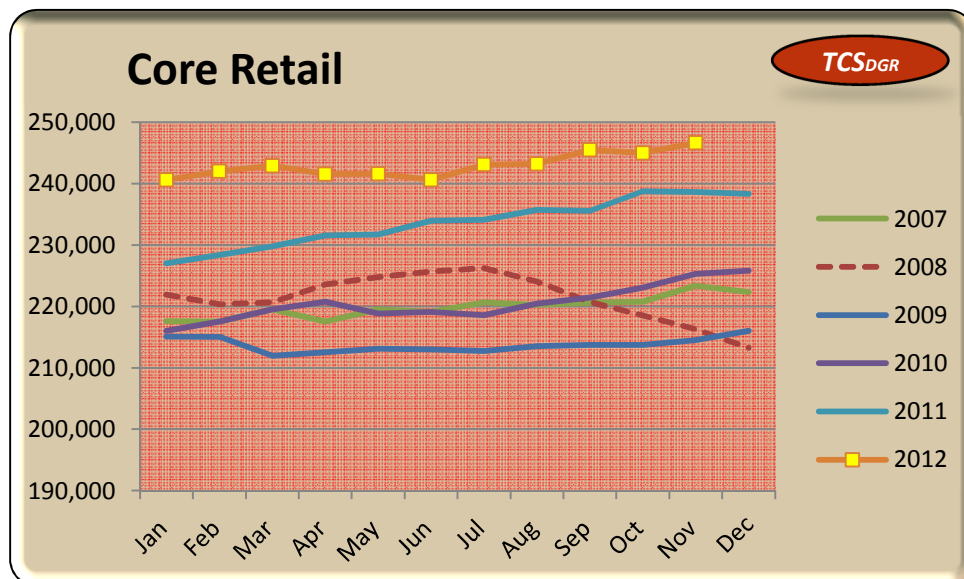
The Durable Goods Report – A Service of Time Compression Strategies

Retail Data (Advanced Release)

Retail Sales (excluding food service) increased 0.4% to \$370 billion. About equal to inflation.

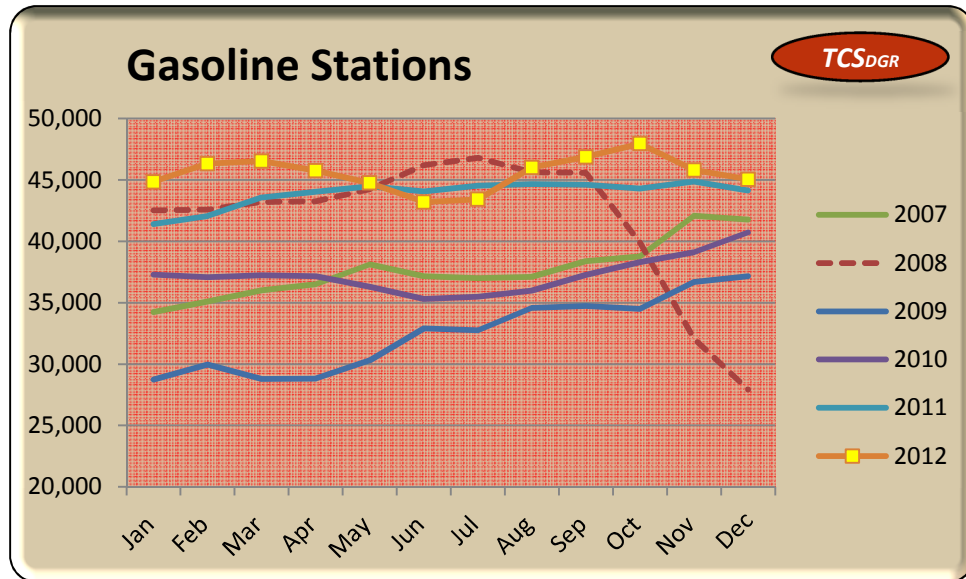


Core retail (excludes food service, gasoline, autos and parts) decreased 0.4% to \$247 billion.

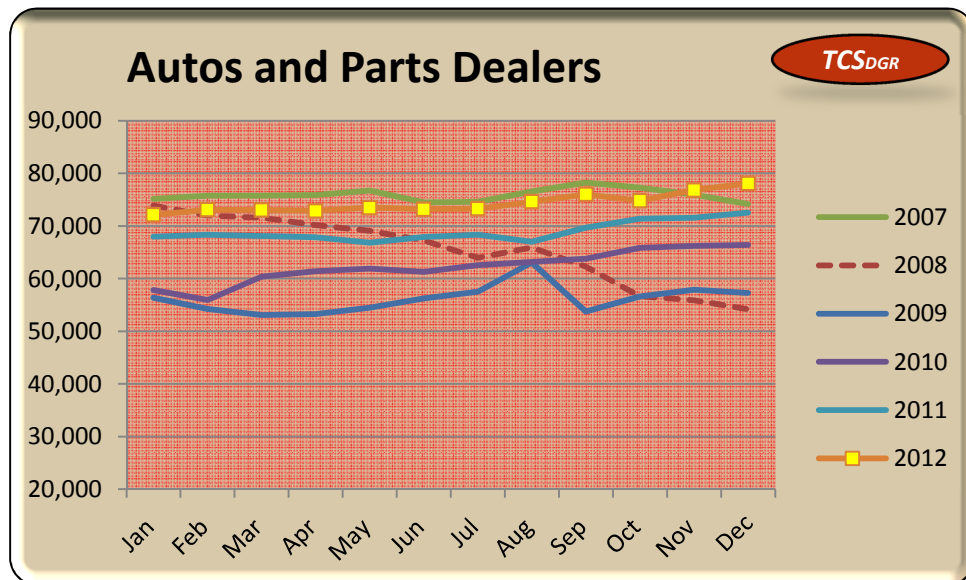


Gasoline sales decreased 1.6% to \$45 billion.

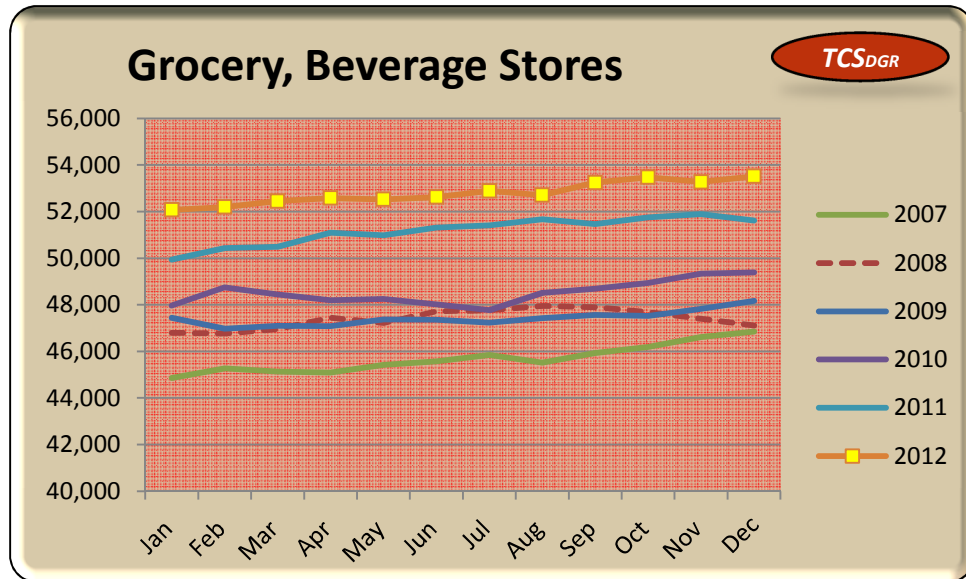
The Durable Goods Report – A Service of Time Compression Strategies



Auto sales increased 1.6% to \$78 billion. Sector now appears to be operating at “normal” rates.



Grocery and Beverage stores sales increased 0.4% to \$53.5 billion. Grocery stands about 3.7% above prior year, about double population growth.

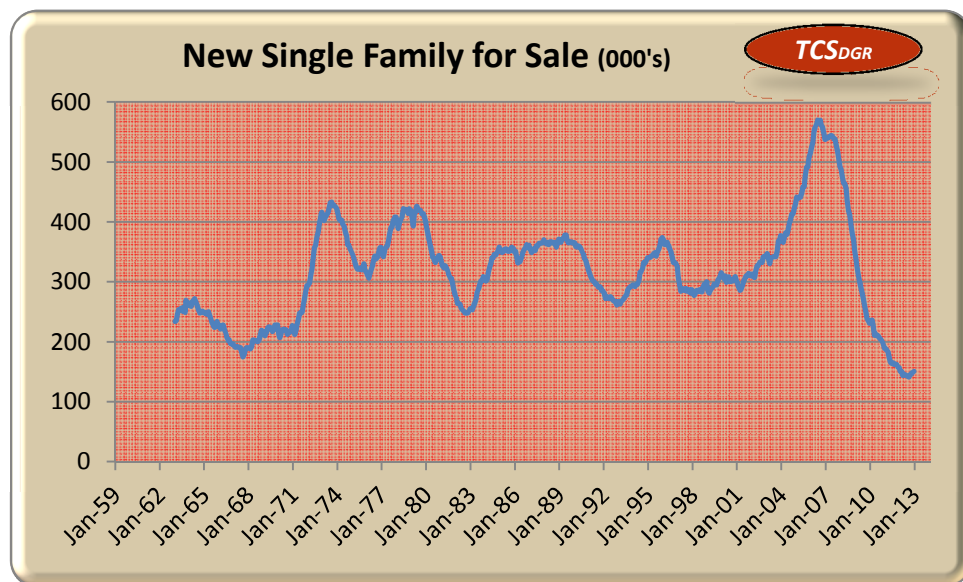


Housing:

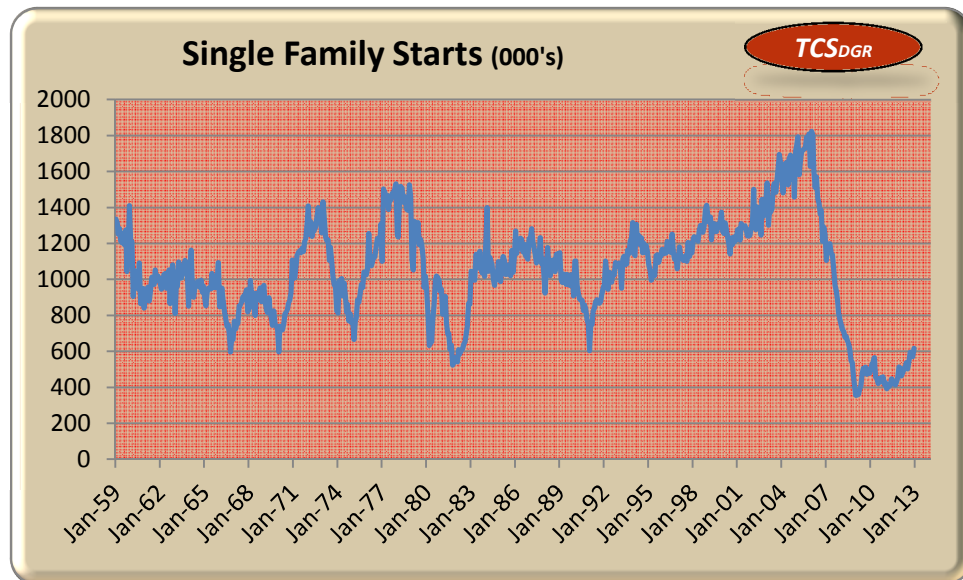
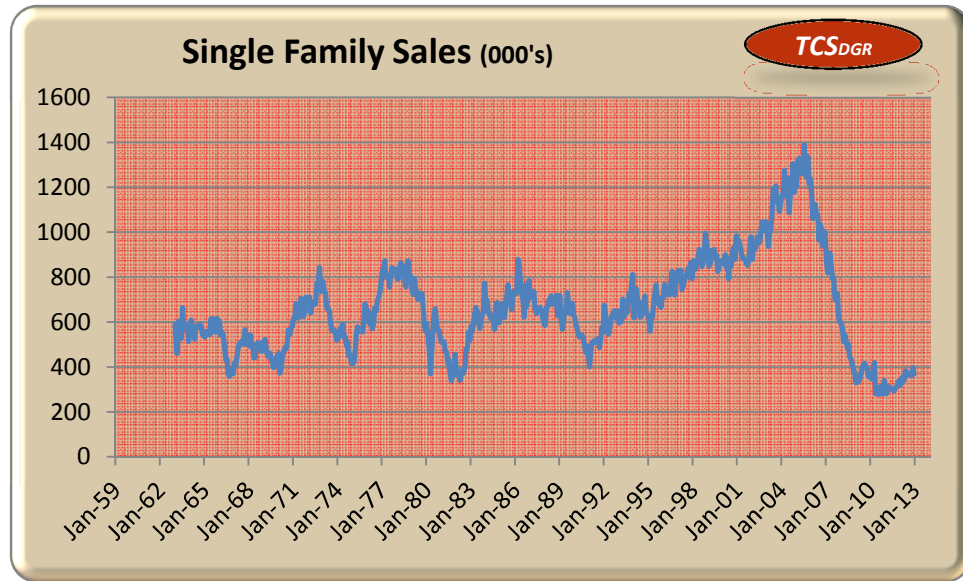
Single family starts increased 12.1% to 616,000. New single family sales decreased 7.3% to 369,000 units. Inventory of unsold new single family homes increased slightly to 151,000. It looks like the plunge in single family inventory (peaked in January 2007) has finally reversed.

Median sales price (3MMA) increased 0.9% to 244,300, and remained 15% above last year. Note the slope of the median value chart and compare it to the slope just prior to the collapse.

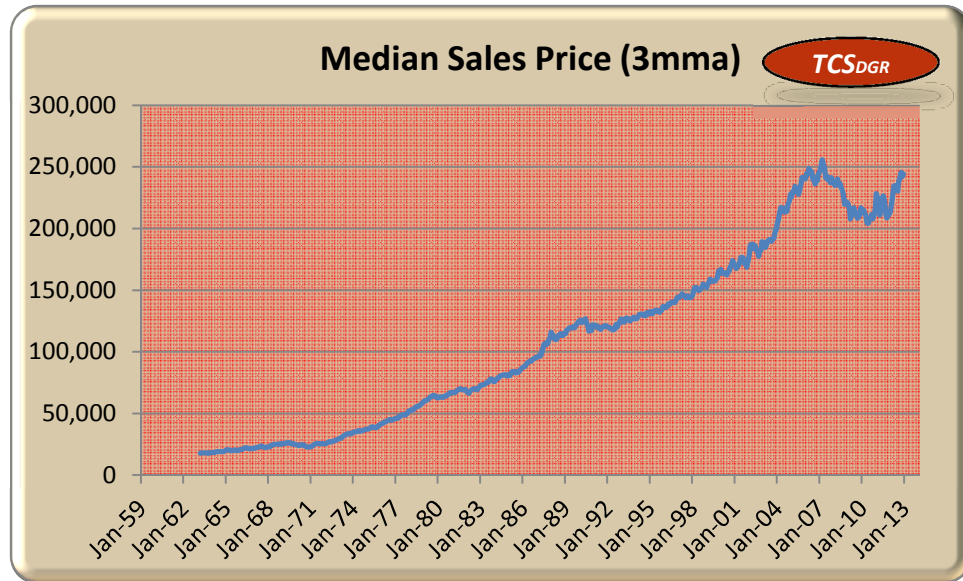
The single family share of starts remains at 66%, well below the long term average.



The Durable Goods Report – A Service of Time Compression Strategies



The Durable Goods Report – A Service of Time Compression Strategies



About Time Compression Strategies and the Durable Goods Report

TCS provides business consulting and information technology support to high performance organizations. Our focus is on manufacturing and telecom. Through our business partners we support health care, energy and other rapid-response business sectors.

The goal of the Durable Goods Report is to offer context for the published monthly statistics on durable goods manufacturing in the US. The analysis is historical in nature, and includes no forecasts beyond what may be obvious from current conditions. The analysis of historical patterns provides a necessary framework for understanding plausible scenarios. Since a high percentage of durable goods go through retail, this sector serves as a leading indicator of future durable goods activity.

The Durable Goods Report uses source data from the US Census Bureau, Bureau of Labor Statistics, Energy Information Administration, and the Federal Reserve. Rig count data source is the Baker Hughes Corp. For data sourced from the US government, the “preliminary” publication is used wherever possible. The preliminary release occurs about 5 weeks after the end of the period. An earlier publication (advanced release) is available about 3 weeks after the end of the period, but is often subject to substantial revisions, and is not considered adequately reliable for growth trend analysis. Wherever the advanced release is used it is noted. Tracking reports are available for several durable goods sub sub-sectors. Contact TCS for details about this subscription based service.

Technical Note: The “TCS Growth Index” is measured as the ratio of the 3 month moving average divided by the 12 month moving average. This removes some of the natural noise in the industry data, but also results in a slight response lag. An index value greater than 1.000 is a sign of recent growth.

About the Author:

John Layden serves as CEO of Time Compression Strategies Corp (TCS), a management consulting and information technology company serving manufacturing, distribution, and their supporting technologies. He also serves as Chairman of Temporal Dynamics, Inc. (TDI), the developer of the patented Ancelus high performance database. TCS has developed a suite of high-performance real-time applications systems in support of their client industries.

Prior to launching TCS, Layden’s career included 22 years’ in manufacturing and another 20 years in enterprise software. Most recently he has served as VP of Supply Chain Management for SAP and VP of Supply Chain Market Development for

The Durable Goods Report – A Service of Time Compression Strategies

Frontstep, Inc. He served as President of Pritsker Corporation, an early innovator in discrete event simulation and advanced planning and scheduling fields. He negotiated the Pritsker acquisition by Frontstep. He was a founder and CEO of Automated Technology Associates, Inc., a leader in the development of real-time quality control systems and factory management applications.

Layden has authored over 40 articles and papers on both the theory and practice of manufacturing and supply chain operations. He was described by one editor as one of the “founding fathers” of the advanced planning and scheduling (APS) industry. He also authored the supply chain chapter in Maynard’s Industrial Engineers Handbook. He speaks worldwide on the subject of world class operating strategies. He has been the keynote speaker at numerous conferences including the Automation Hall of Fame Awards.

As a software company CEO, Layden delivered to market the first real-time advanced planning and scheduling system; the first real-time SPC system; and the first real-time, fourth-normal-form database system. He is the originator of the Return on Capacity modeling process for analysis and improvement of supply chain profitability and delivery performance.

As a key partner to Motorola, Layden developed the quality control concepts that became the Six Sigma Initiative. He introduced the same concepts to GE and the Cadillac Division of General Motors. These initiatives contributed to the Malcom Baldrige awards won by Motorola and Cadillac, and to the highly publicized Six Sigma program at GE. He introduced the Six Sigma concepts to software development and delivered the only application software release to meet these exacting quality standards. Layden holds three patents and is the only American to hold a Japanese patent in quality control.

Prior to his tenure in manufacturing software, Layden spent 20 years as an engineer, operating executive and board member with three Fortune 200 manufacturing companies. The TCS advisory services retain the practical, no-nonsense approach familiar to world class operating executives. His operating roles in manufacturing included plant manager, director of business planning, and VP of Supply Chain Management.

Layden currently serves on 3 boards, and advises several high-tech startup companies.

Mr. Layden holds a BS degree from Purdue University in Electrical Engineering and an MBA from the University of Wisconsin-Milwaukee (Executive Program). He is active with the Purdue University President’s Council, and has served as a guest lecturer in the MBA programs of Villanova University, Columbia University, New York University, Indiana University, Ball State University, and others.

The Durable Goods Report – A Service of Time Compression Strategies

Time Compression Strategies Corp

www.tcsdb.com

317-842-6417

jlayden@tcsdb.com