



The Durable Goods Report

October 2009 Data

Source Data: US Census Bureau

Preliminary Data Release of 12/4/2009

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Highlights:

- **Industrial Production:** DOWN to \$2.713 trillion from \$2.723 trillion (-0.4%) from prior month.
- **Capacity Utilization:**
 - Manufacturing: FLAT at 67.6%.
 - Durable goods manufacturing: DOWN to 61.1% from 61.2% prior month.
 - Iron and steel: UP to 60.0% from 54.7% prior month
 - Motor Vehicles and Parts: DOWN to 51.5% from 52.1.
 - Machinery: UP to 56.8% from 56.6%
- **Durable Goods:**
 - New orders: DOWN to \$ 166.6 billion from \$167.6 billion from prior month (-0.6%). Twelve month moving average 22% BELOW prior year.
 - Shipments FLAT at \$174.1 billion. Twelve month moving average 16% BELOW prior year.
 - Unfilled Orders DOWN to \$730.8 billion from \$733.7 billion (-0.4%).
 - Inventory: DOWN to \$303.1 billion from \$304.1 billion (-0.4%).
 - Inventory to Shipments ratio: DOWN to 1.74 from 1.75 prior month.
- **Retail :**
 - Total retail (excl. food service): UP to \$309.1 billion from \$304.8 billion (-1.7%).
 - Autos and Parts: UP to \$59.0 billion from \$55.0 billion (+7.4%).
 - Gasoline: FLAT at \$31.5 billion.
 - Core retail (Excl. food service, gas, autos and parts): UP to \$218.6 billion from \$218.4 billion (+0.1%). DOWN 1.4% from prior year.
- **Housing:**
 - New Single Family Homes (seasonally adjusted annual rate):
 - Starts: DOWN to 476,000 from 511,000 (-6.8%)
 - Sold UP to 430,000 from 405,000 (+6.2%)
 - For Sale: DOWN to 239,000 from 251,000 units (-4.8%).
 - Median Price (3MMA): UP to \$209,034 from \$208,334. Off 5% vs. last year.

By the Numbers:

Prevel Technology - Durable Goods & Retail Summary				
	Oct-09	Sep-09	Oct-08	12 Mo Max
New Orders-Durable	166,627	167,587	188,534	181,047
12 month moving average	165,314	167,139	212,279	
% Change from Prior Year	-22.1%			
Unshipped Orders - Durable	730,827	733,747	820,672	
% Change from Prior Year	-10.9%			
Value of Shipments - Durable	174,143	174,130	201,119	192,772
12 month moving average	176,602	178,850	211,210	
% Change from Prior Year	-16.4%			
Inventory - Durables	303,139	304,122	341,168	
% Change from Prior Year	-11.1%			
Retail Sales	309,094	304,849	317,198	334,273
12 month moving average	304,689		335,406	
% Change from Prior Year	-9.2%			
Inv to shipments ratio - Durable	1.74	1.75	1.70	
Growth Index - Durable New Ord	1.005	0.997	0.943	
Growth Index - Durable Shipmts	0.981	0.968	0.975	
Growth Index - Retail	1.014	1.007	0.974	
1. Preliminary release data (~5 wks after the end of the period).				
2. Seasonally Adjusted, millions				
3. Prevel Growth Index = 3MMA / 12MMA				
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Summary and Analysis

Overview of the US Economy

US GDP growth in Q3 was revised downward from 3.5% to 2.8% (annual rate). The actual value of the Q to Q growth was about \$75 billion (0.5%) rather than the \$150 billion from the first estimate. This suggests that a large part of the growth was from stimulus funding. The adjusted durable goods component of GDP showed growth of almost \$100 billion in the quarter on \$3.29 trillion (3.1%).

Year	Qtr	GDP \$b (SAAR)	Chg from Prior Pd	Chg from Prior Year
2007	4	14,031.2	0.6%	4.9%
2008	1	14,373.9	2.4%	6.4%
2008	2	14,497.8	0.9%	5.5%
2008	3	14,546.7	0.3%	4.3%
2008	4	14,347.3	-1.4%	2.3%
2009	1	14,178.0	-1.2%	-1.4%
2009	2	14,151.2	-0.2%	-2.4%
2009	3	14,226.3	0.5%	-2.2%

The predicted Keynesian effects are still invisible. It is still too soon to estimate the multiplier effect from the stimulus, but it is clear that it is far below the 4:1 achieved by the private sector or the 8:1 achieved by the durable goods sector.

There is an interesting comparison between private investment and government investment in infrastructure. When private investors put money into an infrastructure investment, it is expected to produce results in very short order. Those are the only investments made. When government makes the same investment it is for the purpose of creating jobs, increasing the GDP or both. Both China and the US are making the later type of investment. In both countries the industrial infrastructure is currently underutilized. Government investment generates jobs and GDP growth during the construction of the infrastructure, but when the construction jobs are done, nothing happens because the new resources sit idle. There is no ongoing multiplier effect.

The Chinese steel industry is a good example. Currently operating below 70% utilization, China is about to embark on a 25% expansion in capacity. This will increase GDP, but will not change the real industrial output since there is no demand for the output. In China this is happening across a wide range of industrial and public works projects.

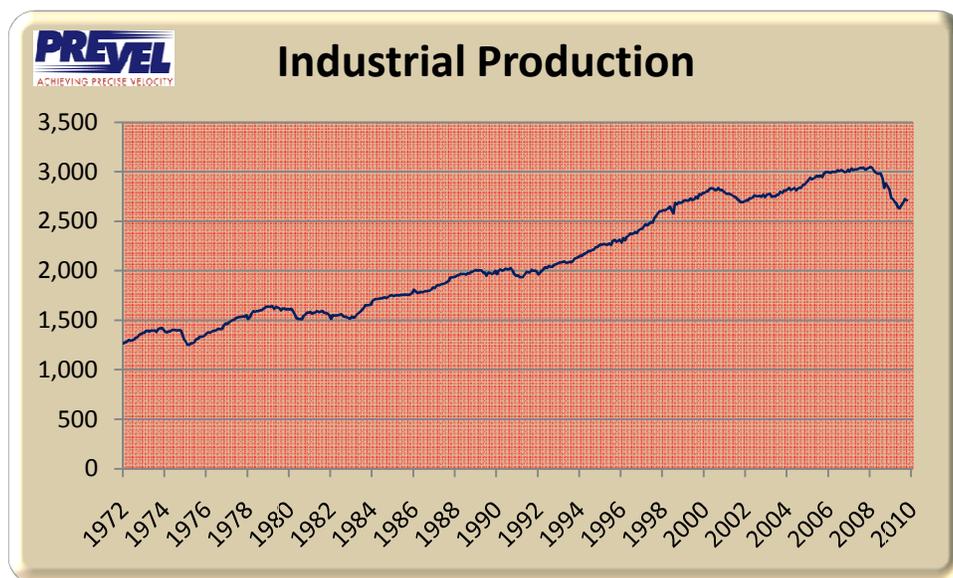
In the US the outcome is a little different because most of the stimulus jobs are in the public sector. These jobs can sometimes have a long term positive effect on the

economy (as with teachers), but it doesn't "prime the pump" in the same way that an increase in point-of-use demand will. These are very strong arguments for letting the private sector make the very diverse decisions on potentially productive investments. The political implications are currently overriding the economic arguments.

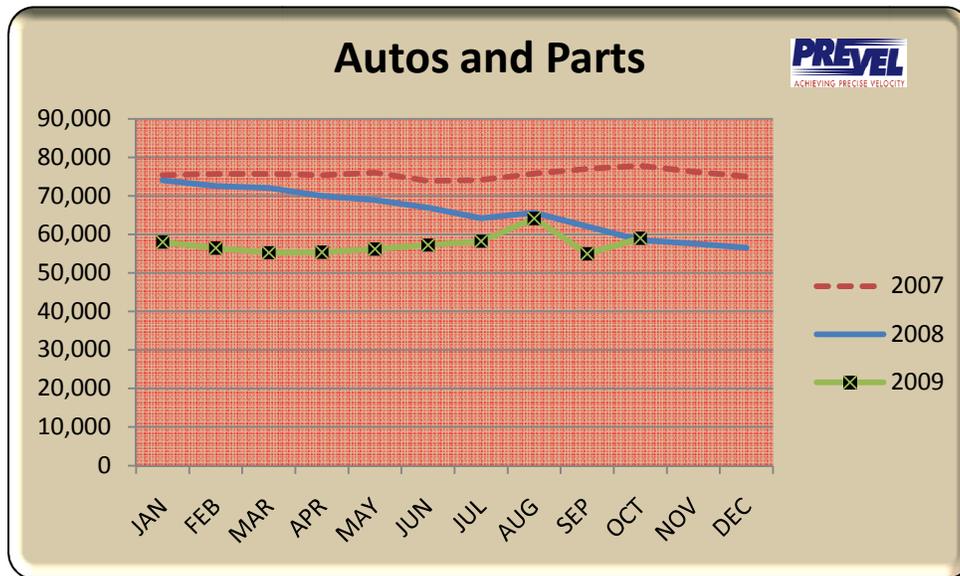
Industrial Production dropped by 0.4% in October after three months of positive growth.

Year	Mo	Ind Prod - Value of Prod	Chg from Prior Pd	Chg from Prior Year
2008	10	2,880.7	1.5%	-4.6%
2008	11	2,854.2	-0.9%	-5.8%
2008	12	2,825.0	-1.0%	-7.0%
2009	1	2,733.6	-3.2%	-10.3%
2009	2	2,723.3	-0.4%	-10.4%
2009	3	2,695.0	-1.0%	-10.6%
2009	4	2,678.5	-0.6%	-10.5%
2009	5	2,640.9	-1.4%	-11.4%
2009	6	2,632.3	-0.3%	-11.7%
2009	7	2,659.4	1.0%	-10.8%
2009	8	2,691.9	1.2%	-8.1%
2009	9	2,722.9	1.2%	-4.1%
2009	10	2,712.7	-0.4%	-5.8%

The early signals of October retrenchment discussed last month have proven accurate. The remaining question is whether this is now a stalled recovery or just normal noise. Data from the internals in durable goods suggest a weak recovery at best. Close watch on the Christmas season retail and the housing start activity should provide clearer signals over the next few months.



Auto Industry sales now show the net effect of the Cash for Clunkers program to be essentially zero. The small spurt in August was reversed in September and October sales have now returned to the long term trend. That trend is slightly positive from the low point in May. A potential positive sign is the reported uptick in auto loan applications.



Durable goods new orders declined \$1 billion in October. Shipments remained flat. The backlog of unfilled orders dropped by \$3 billion, while inventory dropped by \$1 billion. The slight improvements in September were reversed in October. The declines occurred across the board in all capital goods segments except autos, which showed a slight increase.

The recovery of the US GDP will depend on the recovery of durable goods, but so far the data show only a stable bottom. The pattern of this recovery looks early similar to the recovery of 2003 (before the tax cuts).

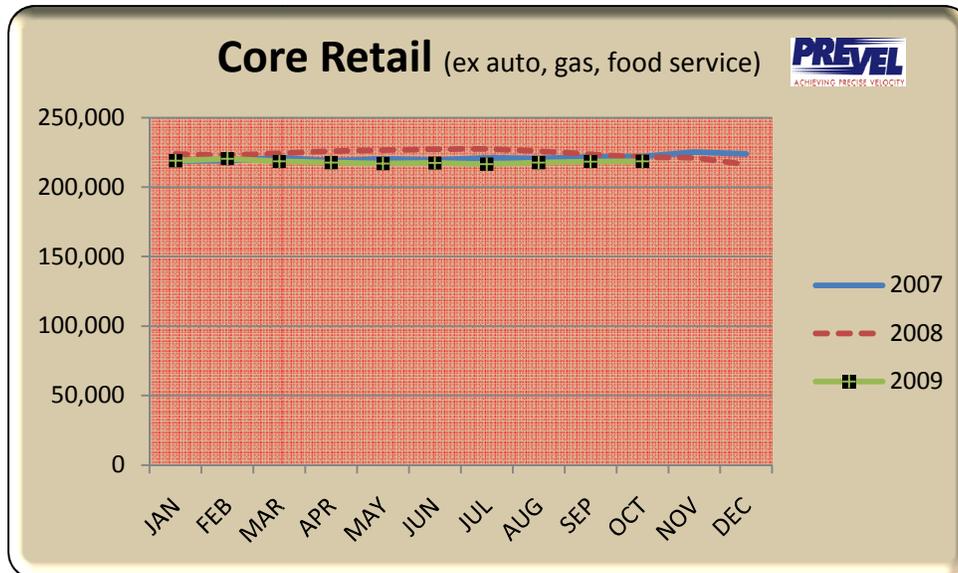


Housing industry numbers reversed in October after some mixed positive results in the prior month. Total starts and single family starts both declined, probably in response to the drop in sales in the prior month. Single family sales increased and the inventory of new, unsold single-family homes declined again. Current inventory has dropped from 12.4 months of supply to 6.7 months since January – levels not seen since mid 2006. The absolute level of unsold inventory hasn't been this low since the early 90s.

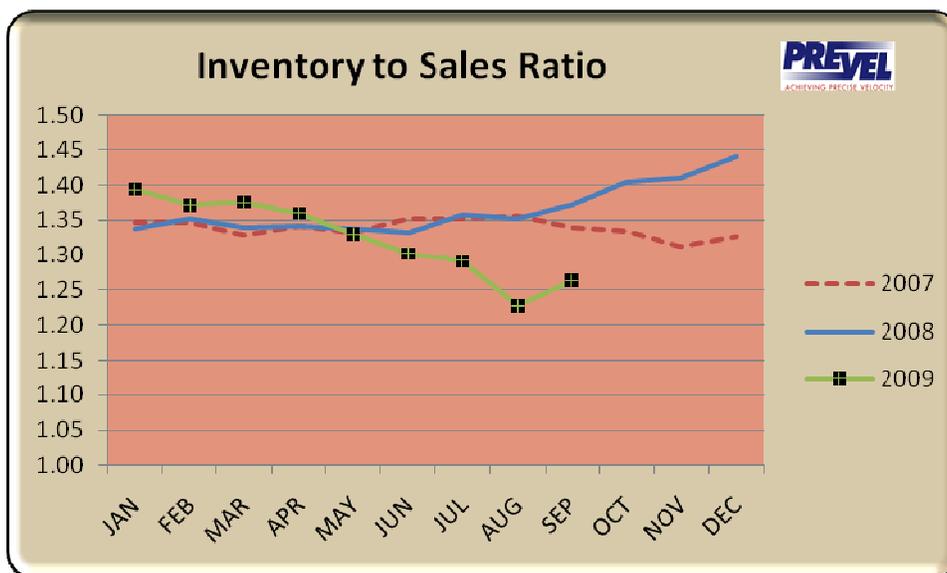
The currently depressed sales rate (31% below last year's already depressed levels) is not sufficient to support the 800,000 new households being formed this year. The probable explanation is that the household formation estimates from Census are in error. The number of people living with parents, and net migration numbers are strictly estimates and are difficult to calibrate until there is a new census next year.

There seems to be a ready supply of mortgage financing for those who qualify. But the tighter standards have reduced the pool of potential buyers. The attempt in Congress to once again reduce lending standards ("hair-of-the-dog" stories come to mind) are misguided, as are the attempts to try to restructure existing mortgages. The best move for people in a home they can't afford is to get into a home or apartment that they can afford. Delaying that event seems compassionate. It is neither compassionate nor helpful to the economy.

Retail performance remains flat despite the brief furor in the financial markets over what appeared to be a positive report. The analysis of core retail is about as close to a definition of "flat" as we might need. Core retail is defined as excluding autos, parts, gasoline and food service. October sales increased 0.1% and now stand 1.4% below last year.



For manufacturers that sell their goods through retail there is some good news. Retail inventories hit an all time low in September, measured against the sales levels. The slight uptick in October reflects the beginning of delivery of seasonal goods for the Christmas season.



Employment continues to erode, especially in the critical durable goods industries. November employment numbers reported only 11,000 jobs were lost. The internals were less optimistic. The goods-producing sector lost 69,000 jobs and durable goods lost 33,000. Because the durable sector has such a high leverage factor for jobs a recovery here is critical for the overall employment picture. The good news is that the difference seems to be in the temporary worker category. Temporary firms saw placements increase by 52,000 in November, larger than the surge that signaled the manufacturing recovery of 2003.

As we have warned before, the unemployment number(s) are unreliable. The drop in unemployment in November was mostly due to discouraged workers dropping out of the labor force. In most cases the way to avoid the potential distortions and misinterpretations is to look at the absolute values used to compute the rate. The employment number is based on a household survey and is considered to be the most accurate number to track.

Business Insider reported that there is also an unresolved discrepancy in the sum of the sectors compared to the total. They believe that there will be a major correction next month showing greater job loss than the initial 11,000 report.

Health Care Legislation: For manufacturers the key question is the effect on competitiveness and the ability to control costs. In a major downturn the critical element is the speed with which adjustments can be made. Speed of response will be seriously compromised by both the House and Senate bills. Flexibility in the content of a company health care option would be dictated from Washington. A proposal to allow entry into the Medicare system at age 55 is sure to result in a large tax increase.

The summaries of the Senate bill now confirm that the details are worse than you've heard. It is a monster bill (over 2,000 pages) and potentially a monstrosity as well. The Cato institute estimates its true cost at \$6 trillion and. It will worsen the problems of the health care industry, patients, doctors and the US economy. None of the so-called crisis issues will be improved. The elements most offensive to conservatives (Republican and Democrat) remain in the bill as of this writing. The most obvious is the panel of government bureaucrats with power to decide what care is appropriate. The administrative decisions are exempted from review by the courts. If a private insurance company panel makes a decision we believe to be offensive we can sue the insurance company or switch companies. Neither of these options is available with the government panel. Doctors are not allowed to provide procedures not approved by the panel. It is a felony for the doctor to allow the patient to pay for additional procedures outside the system (this is one of the really offensive policies of the current Medicare system).

It is still possible that the final bill will be revised enough to become less offensive to the economy and especially to mid-size manufacturing. The odds seem slim since there is a general mindset in Washington that there is a "crisis" and that politicians need to "do something." From this starting point the horse trading begins to assemble a majority. That's when it begins to look like sausage.

The critical economic impact is the resulting debt + taxes dragging on the economy. If the nation becomes less competitive as a result, manufacturers will be sailing into headwinds. More important will be the re-alignment that occurs when the winners are the politically connected rather than the innovative or productive. This has a long term corrosive effect on the economy.

Cap and Trade and the Environment: There have been dramatic changes in the past month. The fate of cap and trade legislation looks to be on shaky ground. The EPA has threatened to use CO2 regulation as a weapon if the Congress fails to pass the bill. But this tactic may backfire. Congress may prefer to let it go that way rather than face action on a hugely unpopular

bill that will have major negative consequences for the US economy. The world has become much more complicated for manufacturing companies.

For manufacturers with “Green” agendas, there are now risks for getting on the wrong side of the issue, with no clear indication of which side will be wrong a year from now. The green movement in Europe has started to see a backlash.

Manufacturers under pressure for green initiatives from government, customers or corporate HQ, should focus on activities with clear and measureable benefits to the company. That means an emphasis on efficiency. Wherever possible avoid the popular efforts that don’t improve business returns. These are the ones most likely to reverse position and become liability in the future. The role of carbon in the green debate is the most obvious challenge.

The best positioning is the use of carbon as a surrogate for efficiency. This approach has the benefit of transcending fads and political shifts. The carbon balance method has been in common use for many decades. The method takes the form of a complete carbon input-output analysis for the business. This quickly identifies the opportunities for cost reduction (usually in the waste product/by product streams). The approach is especially useful where chemical conversion is the primary process or where significant energy consumption is involved. Using this focus will avoid the potential boomerang paths associated with the rapidly evolving politics of CO2.

Now to the recent events causing the turmoil.

1. The EPA declared this week that CO2 is a pollutant, against all evidence and the internal objections of their own scientists. They now propose to regulate all sources of CO2 emissions, which include all manufacturing, agriculture, plant and animal life.
2. This week has seen the assembly of the “climate elite” in Copenhagen. The leak of the “Danish text” draft proposal has produced turmoil among the developing countries, whose purpose was to organize a wealth transfer from rich nations to developing nations.
3. The Hadley Climate Research Unit (CRU) at East Anglia University in the UK suffered an internal leak of 170 GB of climate data, computer programs and emails exposing a widespread manipulation of the land based temperature data. The CRU adjusted data is the source for the UN Intergovernmental Panel on Climate Change (IPCC). Early analysis of the computer programs shows that their climate data is probably unreliable.
4. On December 8th a list of 140 climate scientists challenged the UN to produce any evidence of any human impact on climate, specifically the 9 claims of the most recent UN report.
5. On December 8th an analysis of the temperature record for “Darwin Zero Station” was published. The analysis reverse engineered the UN temperature adjustments for the station (presumably from CRU). It is now called the “smoking gun” report. A cooling

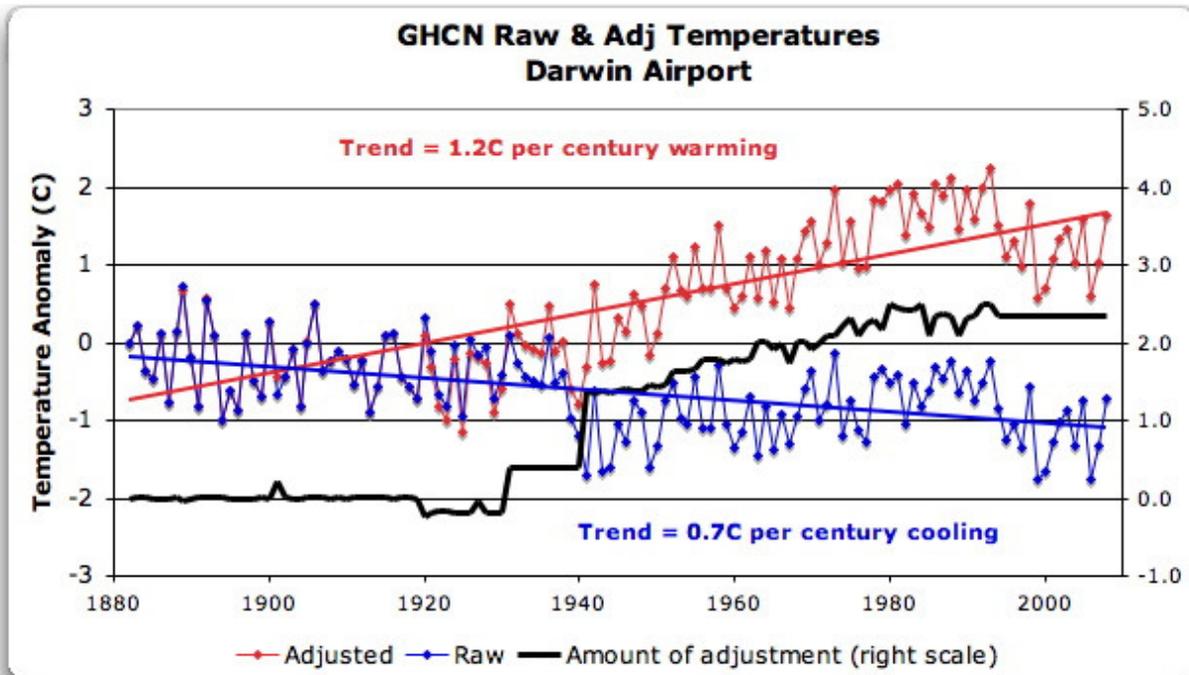
trend of -0.7C was reversed to a warming trend of $+1.2\text{C}$ by the adjustments. All of the warming of the last century was introduced in the adjustments.

6. On December 9th a You Tube video surfaced from a sixth grader (with help from his scientist father) showing that all warming in the US in the past century occurred in cities with population of more than 150,000. Smaller cities located from 20 to 60 miles from these cities showed constant temperatures for the century. This refutes the claim from the CRU and NASA that the Urban Heat Island effect is non-existent or negligible. Unlike their more sophisticated peers, they published their sources for raw data, sampling specification and analysis method so others can replicate their experiment. Check it out here:

http://www.youtube.com/watch?v=F_G-SdAN04&feature=player_embedded#

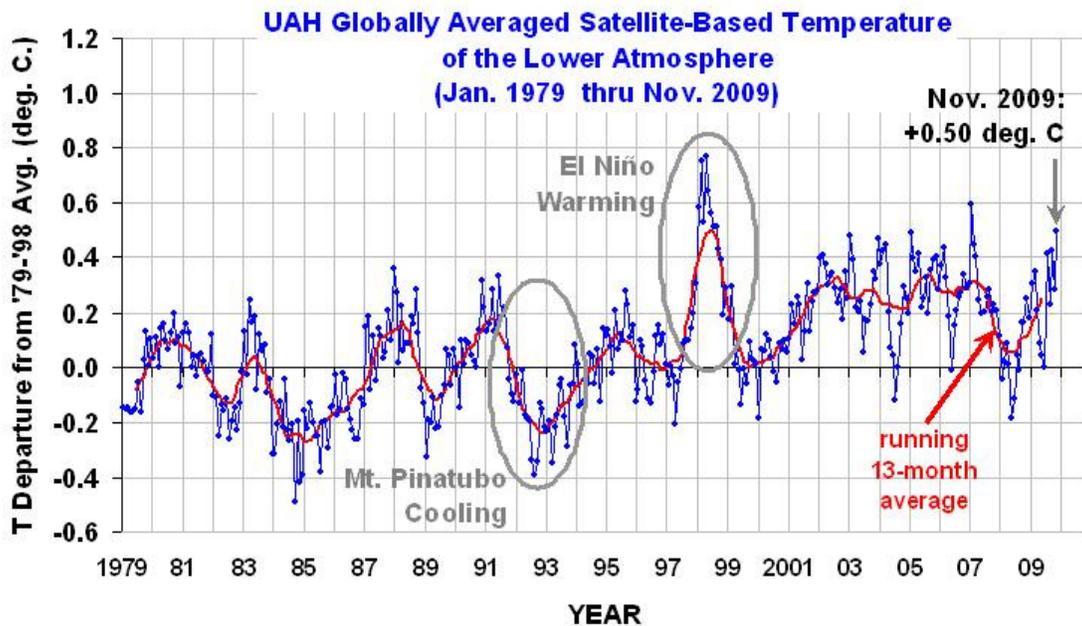
All of the controversy surrounding the land based temperature measurements is about the adjustment process. These efforts attempt to produce a single “homogenized” record of temperature, supposedly compensating for site duration and urban heat island effects. The video in 6 above shows clearly that the goal is wrong. In manufacturing statistical process control (SPC) this is a statistical error called “mixture.” It occurs when two independent processes are analyzed as a single data set and it always compromises the analysis. Symptoms of mixture are immediate cause for a process alarm condition.

Some of the adjustments seem to be more than simple fuzzy math. The Darwin Zero analysis (#5 above) falls into this category. Here’s the chart of how the record was adjusted by the UN IPCC:



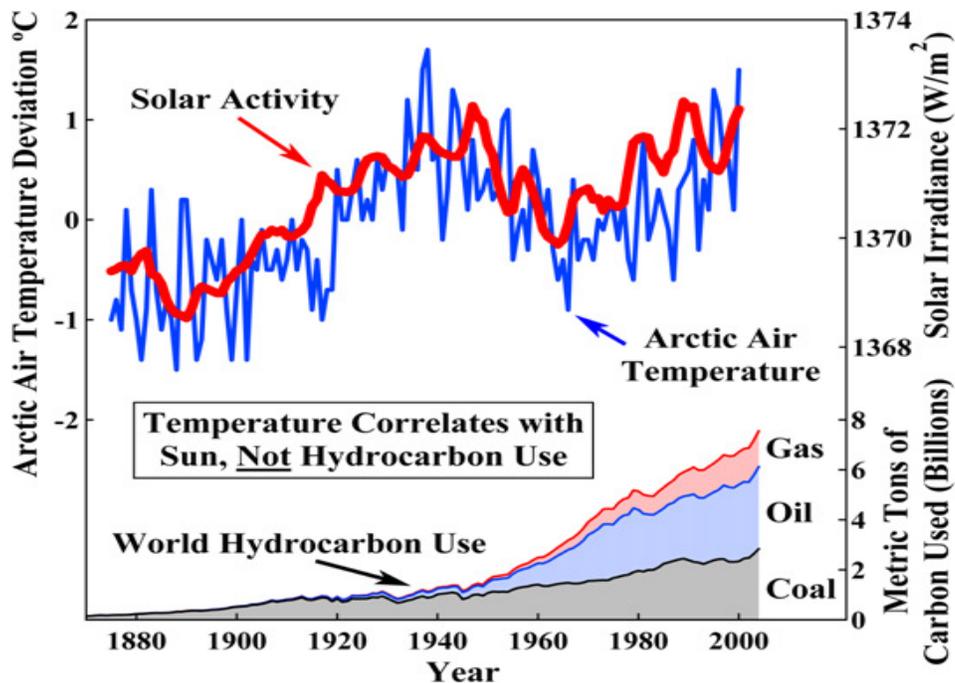
A clear cooling trend over the 130 years becomes a warming trend after “adjustment.” The total swing is 1.9 degrees C. Temperatures before 1940 were adjusted down and after 1940 were adjusted up. The analysis was done by Willis Eschenbach and published at www.wattsupwiththat.com.

In the end the land based temperature record will always be inadequate to the task. The Earth’s surface is primarily water and the inconsistent land-based site history and quality may never be overcome. It is too susceptible to confusing climate (the total energy in the biosphere) with weather (the distribution of that energy). The satellite record gets around the major issues, and we now have 30 year record.



The El Niño pattern is clearly visible in this record, and shows the beginning of the next cycle occurring now. There is too little data in this series to reliably describe a long term trend, but it is clearly not increasing exponentially.

The most obvious correlation with temperature is not to CO₂, but to Solar output. Note in the chart below that the temperature used is in the Arctic. This clearly avoids the heat island effect, and does not seem to be influenced by El Niño.



The primary reason for the extensive coverage of this subject is the potential for an extended cooling period based on the current level of solar activity. This is an unintended consequence of all the attention on “global warming” and temperature records. The last time this happened in the 1970s it resulted in a 3 year period of disrupted winter business operations over much of the northern 2/3 of the country. I worked in manufacturing at the time and we were losing 3 days a month to a shutdown of inbound and outbound freight. The economic impact was very serious. The most likely timing for the return of these problems is at the end of the current El Nino cycle.

Almost everyone can name the source of this quote:

“In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the [military-industrial complex](#). “

It is from President Eisenhower’s farewell address.

Almost no one can identify the source of the following quote:

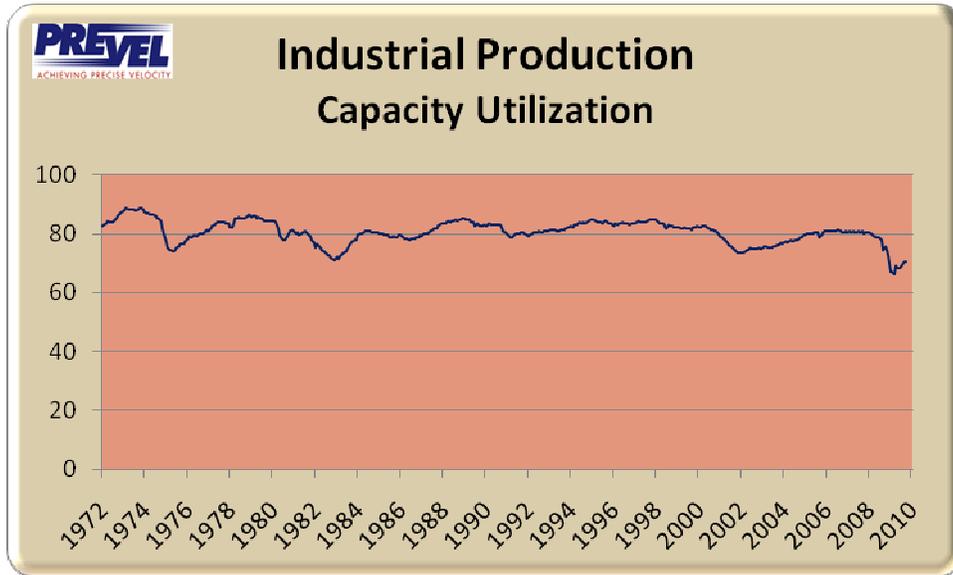
“Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.”

It comes from the same address, three paragraphs later. We have been victimized by the scientific-technological elite. Our universities and government agencies are talking in an echo chamber, telling each other what they want to hear. Those that don’t repeat the party line don’t get funded.

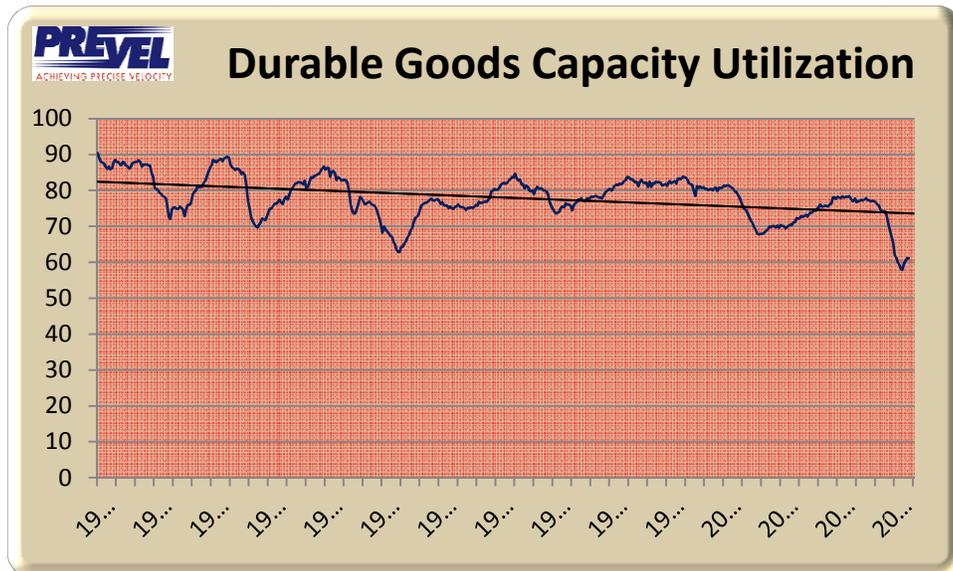
The most difficult problem in science is to avoid fooling yourself. It seems that it is also true in politics.

Industrial Production and Capacity Utilization

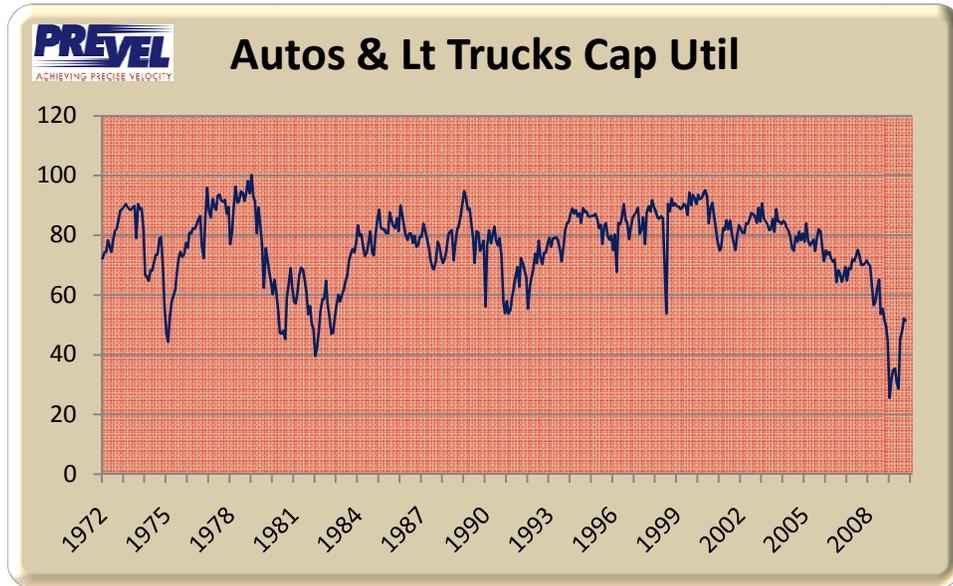
Capacity utilization for industrial production increased to 70.7% in October.



Capacity utilization in durable goods decreased to 61.1% in October

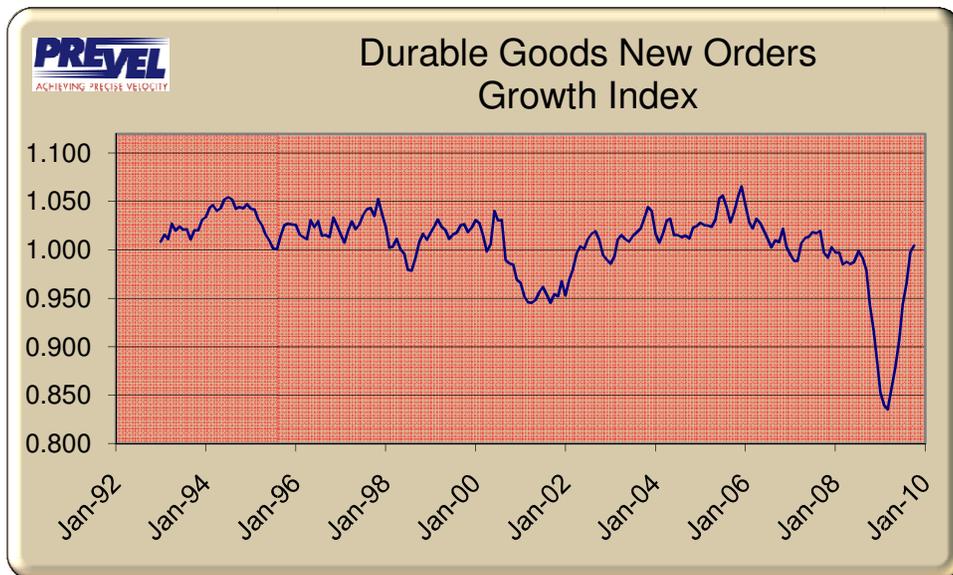


Auto and light truck capacity utilization increased to 51.5% in October.



Durable Goods

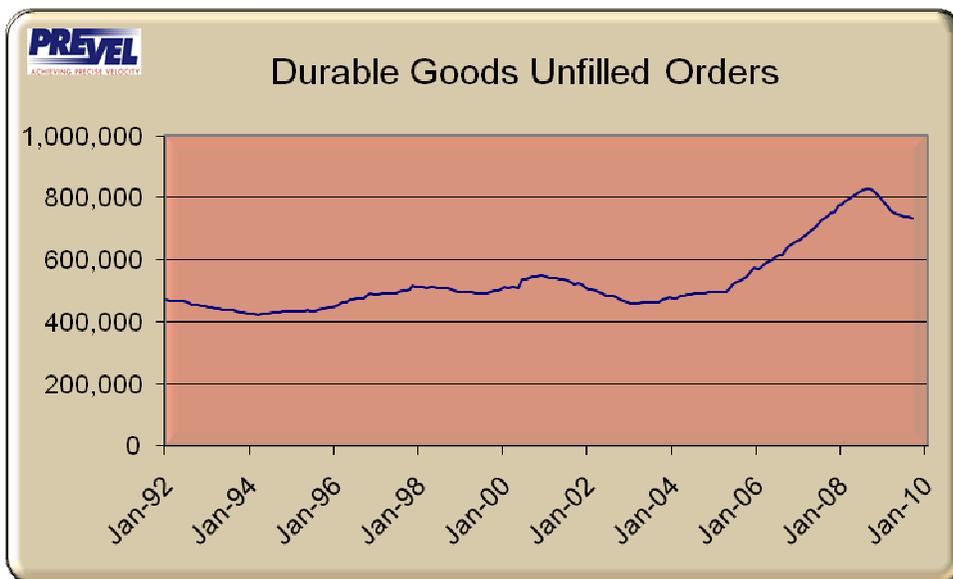
The growth index, a measure of acceleration, increased to 1.005. First time above 1.0 since December 2007.



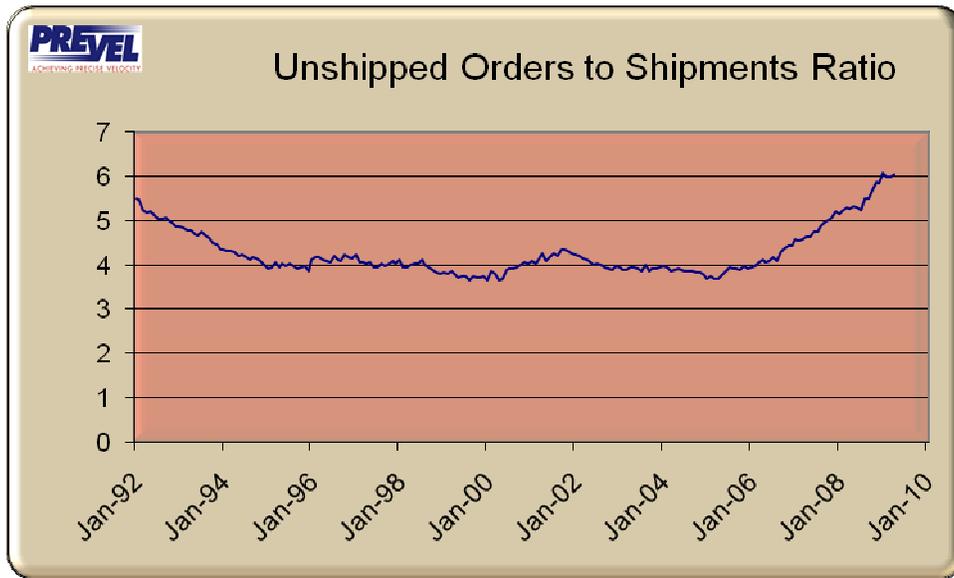
Inventory continued to decline.



Unfilled orders declined by \$3 billion.



Unfilled orders to shipments ratio is a measure of order velocity. The measure increased slightly to 5.8 months. This measure remains well above the traditional value of 4 months.

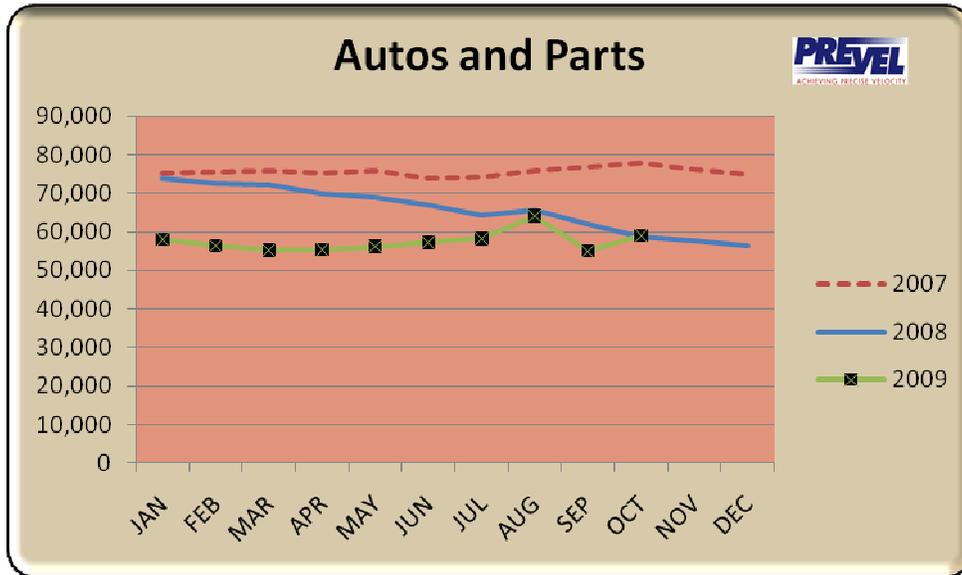


Retail:

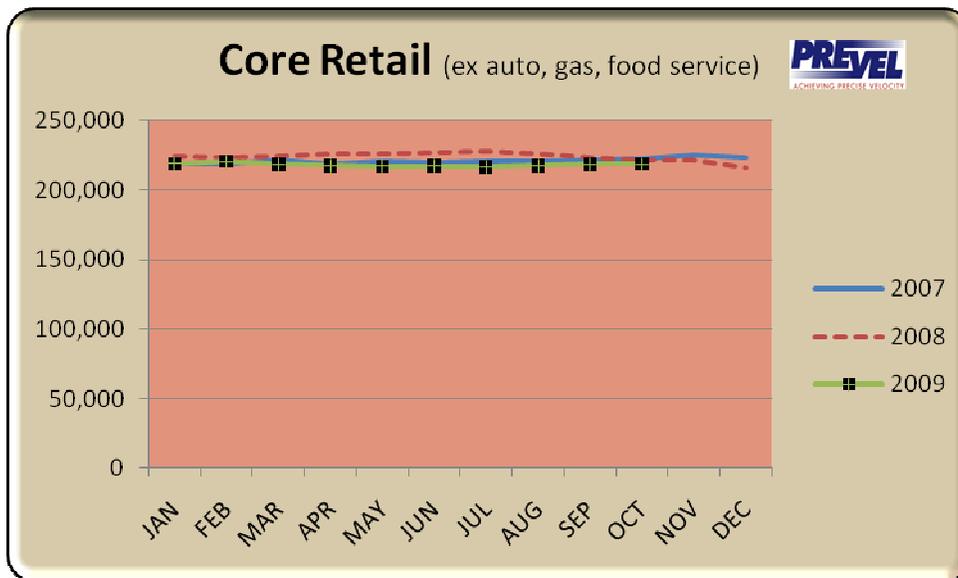
Retail sales increased slightly in October.



Auto and parts sales returned to the pre-stimulus trend. Net effect of cash for clunkers was 0.

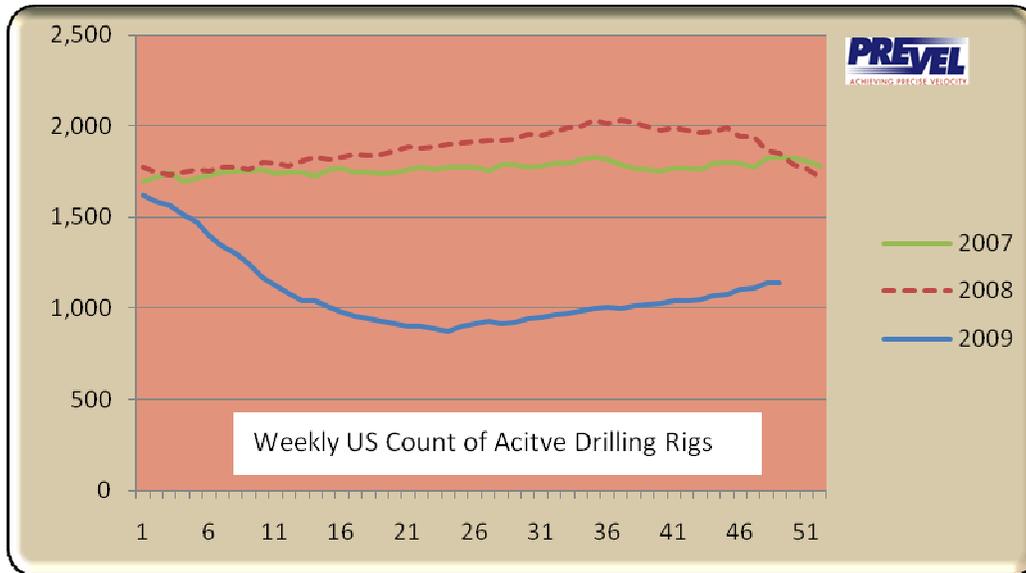


Core retail (excl. autos, gas, food service) declined 0.1% in October.



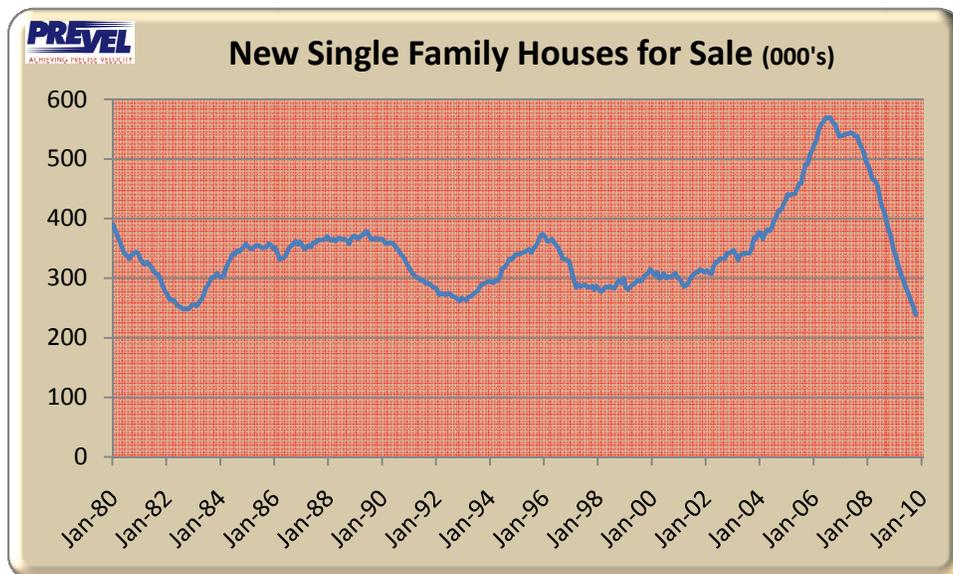
Energy Production:

Rig counts continue a gradual recovery.

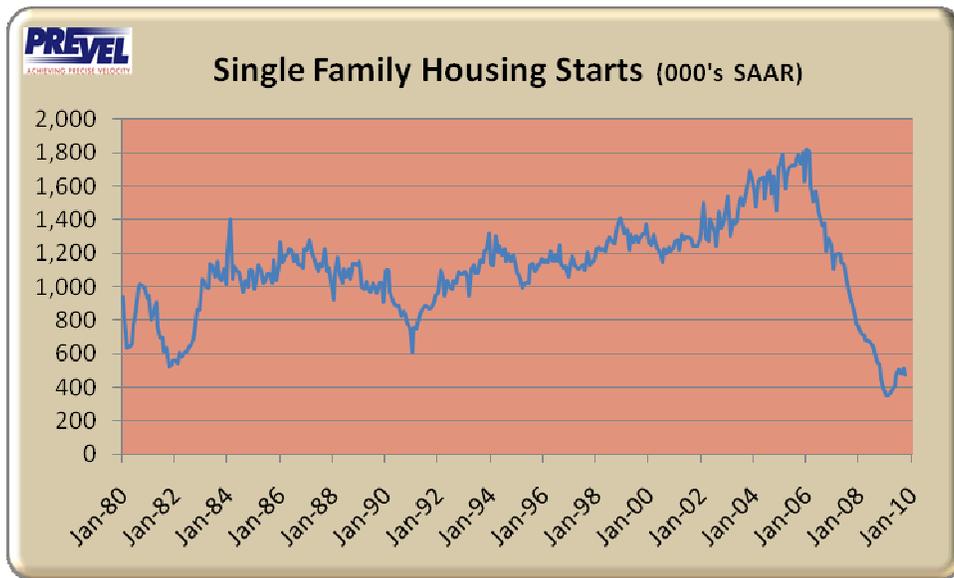


Housing:

The number of unsold new single family houses declined to a record low of 239,000 units.



Single family housing starts declined slightly in October.



About Prevel and The Durable Goods Report

Prevel Consulting supports manufacturing transitions to High Velocity Manufacturing. Prevel Technology delivers software applications and custom solutions in support of data driven decisions, real-time operations and rapid response business metrics, all key components of High Velocity Manufacturing.

The goal of the Prevel DGR 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 the current state. The analysis of historical patterns provides a necessary framework for understanding plausible scenarios. Since a high percentage of durable goods go through retail, this analysis offers a leading indicator of future durable goods activity.

Prevel uses source data from the US Census Bureau, Bureau of Labor Statistics, 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, available 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.

A similar analysis is available for many industry sub-sectors. Contact Prevel for details about this subscription based service.

Technical Note: The "Prevel 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.



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