



**The Durable Goods Report**

**August 2009 Data**

Source Data: US Census Bureau

Preliminary Data Release of 10/2/2009

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## Highlights:

- **Industrial Production:** UP to \$2.689 trillion from \$2.661 trillion (+1%) from prior month.
- **Capacity Utilization:**
  - Manufacturing: UP to 66.7% from 66.2% prior month.
  - Durable goods manufacturing: UP to 60.1% from 59.7% prior month.
  - Iron and steel: UP to 47.4% from 47.0% prior month
  - Auto and light truck: UP to 45.8% from 40.9% prior month.
  - Machinery: DOWN to 57.2% from 56.6%
- **Durable Goods:**
  - New orders: DOWN to \$ 164.1 billion from \$168.5 billion from prior month (-2.6%). Twelve month moving average 21% BELOW prior year.
  - Shipments DOWN to \$171.3 billion from \$173.7 billion (-1.4%) from prior month. Twelve month moving average 15% BELOW prior year.
  - Unfilled Orders DOWN to \$736.8 billion from \$739.9 billion (-0.4%).
  - Inventory: DOWN to \$308.4 billion from \$3112.9 billion (-1.4%).
  - Inventory to Shipments ratio: UNCHANGED at 1.8.
- **Retail :**
  - Total retail (excl. food service): UP to \$313.2 billion from \$304.2 billion (+3%).
    - Autos and Parts: UP to \$64.2 billion from \$58.1 billion (+11%).
    - Gasoline: UP to \$31.2 billion from \$29.7 billion (+5%)
  - Core retail (Excl. food service, gas, autos and parts): UP to \$217.7 billion from \$216.3 billion (+0.6%). DOWN 3.6% from prior year.
- **Housing:**
  - Inventory- new single family: DOWN to 261,000 from 271,000 units (-3.7%). 27<sup>th</sup> consecutive monthly decline.
  - Median Sales Price: DOWN to \$210,000 from \$214,000. 9% below prior year (3MMA). Median price of homes under \$400,000 remains 4% below prior year
  - Housing Starts: Total starts UP to 598,000 from 589,000; Single family starts DOWN to 479,000 from 494,000. (seasonally adjusted annual rate)

## By the Numbers:

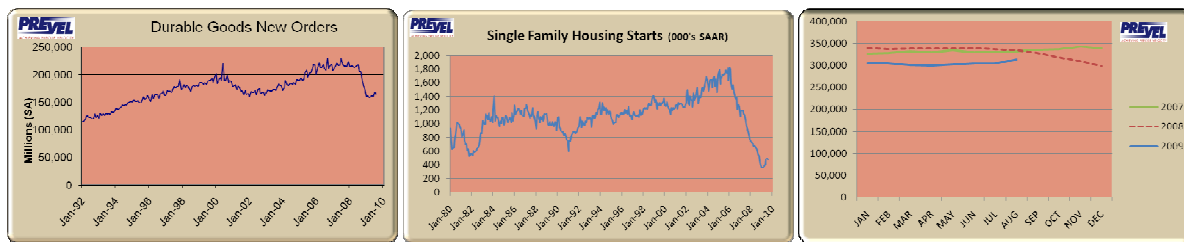
Prevel Technology - Durable Goods & Retail Summary				Best Last 12 Mos.	
	Aug-09	Jul-09	Aug-08	Value	Month
New Orders-Durable	164,142	168,512	206,084	206,084	Aug-08
12 month moving average	170,358	173,853	215,357		
% Change from Prior Year	-20.9%				
Unshipped Orders - Durable	736,805	739,922	826,529		
% Change from Prior Year	-10.9%				
Value of Shipments - Durable	171,296	173,744	208,339	208,339	Aug-08
12 month moving average	181,688	184,775	212,572		
% Change from Prior Year	-14.5%				
Inventory - Durables	308,353	312,884	339,033		
% Change from Prior Year	-9.0%				
Retail Sales	313,192	-	334,273	334,273	Aug-08
12 month moving average	307,335		337,599		
% Change from Prior Year	-9.0%				
Inv to shipments ratio - Durable	1.80	1.80	1.55		
Growth Index - Durable New Ord	0.966	0.943	0.992		
Growth Index - Durable Shipmts	0.945	0.924	1.002		
Growth Index - Retail	1.000	0.982	0.996		
1. Preliminary release data (~5 wks after the end of the period).					
2. Seasonally Adjusted, millions					
3. Prevel Growth Index = 3MMA / 12MMA				John Layden	317-842-6417

# Summary and Analysis

## Overview of the US Economy

The economy continued its flat performance in August. About half of the July surge in durable new orders was reversed in August. In capital goods it was 75%. The short version – stable at the bottom with only minor signs of improvement. Some economists are now predicting very robust growth in Q3, but the durable goods manufacturing sector doesn't provide supporting evidence. Alan Greenspan probably has it right. This will be a long and slow recovery.

The following charts show the performance of the three key economic sectors that must show robust growth for a strong economy: Durable goods new orders, single family housing starts, and retail sales. The point of the small format is to illustrate that you don't need to read the detail to see that the talk of a recovery is overly optimistic. (If you insist the full size charts are included later in the report). We always have warned on the attention to the month-to-month comparisons for reasons that are obvious in the charts. When your stocks go down by 90% and back up by 100% you are not 10% ahead. It just shows you can see daylight from the bottom of a well.



The Cash for Clunkers program produced an increase of \$6 billion in auto sales in August, and resulted in a slight increase at retail. But it should have produced \$15 billion if all of the \$3 billion spent had leveraged incremental new demand. Preliminary numbers for September now show a decline to about 9 million units, about the same as the auto industry's worst month in February.

With 700,000 clunkers removed from the rolling stock of autos, dealers are now desperate to find used cars. Dealers are offering thousands above blue book. My daughter drove to a dealer to get tires rotated and was chased into the service bay by multiple sales people asking if she wanted to trade. More unintended consequences. No one anticipated this in Washington? They seem to have been thinking that new car production would displace the missing clunkers. But the people who buy clunkers aren't in the market for a new car. Those hurt most by the shortage are at the lower end of the income scale.

The stimulus funding has now reached about 20% deployed (but not necessarily spent) with a heavy emphasis on construction projects. In September the construction and manufacturing industries lost 50,000 to 70,000 jobs each. It now appears that the folly of "government stimulus" has been proven again. Job losses were slower, but there were still losses. There is

growing evidence (which we'll track in future months) that the stimulus has retarded the recovery from the great recession.

The level of US debt, current and projected, has become a serious concern to both US economists and to the major buyers of US debt. The Chinese have begun to diversify away from US sovereign debt and for the first time were recently net sellers. The Fed has begun to issue shorter term notes because of the weak demand for long term issues. Oil producing nations discuss (and deny the discussions) an alternative currency to replace the dollar for oil transactions. The current Social Security, Medicare and Medicaid programs are projected at \$100 trillion in unfunded liability and Congress is debating bills that will increase spending. Economists debate the potential for rampant inflation or deflation.

The only prior time when we had this high a level of debt (as a % of GDP) was at the end of WWII. In a few years after the end of the war, President Truman and a Democrat controlled Congress retired most of the debt as US manufacturers returned to making cars and refrigerators. In the present case it isn't clear how the annual sea of red ink can be curtailed. As more tax and regulatory burdens are added to the productive sectors of the economy, those segments will produce less wealth.

For most of the past decade the complaints against offshore manufacturing were largely mythical. It simply wasn't happening in any great volume. Manufacturing jobs were mostly being lost to productivity improvement, not offshoring. In the first 6 years of NAFTA the great sucking sound was silent as manufacturing jobs grew explosively in all three NAFTA countries. In the period 1997-2002 the US saw a decline of 9% of manufacturing employment while China lost 15% of its manufacturing workforce. All industrial nations lost jobs while global, US and Chinese industrial production increased. That's what productivity does. But today the situation is reversed. The US is tied with Japan for the highest level of business taxation. Regulation is now being expanded at an unprecedented rate. There is more serious discussion of offshore production than I have ever heard.

Industrial production increased 1.0% in August, or about \$29 billion, and the second consecutive month in positive territory. The major driver was the surge in autos related to the restart of idled plants and the one-time surge in auto sales. Consumer durables increased \$12 billion, consumer non-durable increased \$10 billion, equipment increased \$5 billion and non-industrial supplies including energy increased \$2 billion. Given the performance in durable goods orders discussed below it is unlikely that this performance will continue. It is probably a reasonably secure signal of an end to the deterioration.

Durable goods new orders decreased 2.6% and shipments decreased by 1.4%. Both numbers reversed the positive performance in July. The excess of shipments over orders remained under 5% suggesting only modest pressure to make dramatic adjustments in production levels. Note that a spread of about 3% is normal, since the value of shipments includes shipping expense but the value of new orders do not. Many of the subsectors are running in neutral territory (3-5% excess shipments), but construction machinery shipped 22% above orders over the past 3 months and 36% in August. Heavy machinery leads the list of industries likely to see more cuts.

Total durable goods inventory declined 1.4% or \$4.5 billion. The inventory to sales ratio remained flat at 1.8. While inventory will continue to decline there is no signal that additional dramatic cuts are needed. The potential cash flow disaster has been avoided by responding within a couple of months of the change in orders. Unlike the similar situation in 2000 where the manufacturing response was delayed by 9 months and thus needed to be more dramatic. A critical precept of the High Velocity Management philosophy is the need for rapid decision making.

Housing starts remain weak. Single family inventory of unsold houses is at the lowest level in 20 years and has plummeted 37% year to date. Since the 2006 peak of 570,000 units the inventory has declined by 46%. Single family starts have not yet begun to recover significantly, but at some point this must change. With total starts at annual rates below 600,000 and household formations at 800,000 to 1 million, there must eventually be a housing shortage. The current delay in the recovery is a result of the modest decline in the home ownership rate. This was appropriate as those families who were overextended due to home ownership return to rental housing. Unfortunately the current Congress views this situation as a negative. There is discussion on an expansion of the Community Reinvestment Act which caused the sub-prime meltdown in the first place.

Export shipments of goods increased slightly in August to \$86.8 billion. Goods exports bottomed at \$80 billion in April and have steadily increased since then. Imports of goods declined slightly to 128.7 billion in August, up \$10 billion since May. The goods-only balance of trade was negative by \$41.9 billion in August compared to negative \$72 billion in August 2008. Services export/import in August was \$41/\$30 billion for a positive \$11 billion contribution.

None of this suggests that the employment picture will improve anytime soon. Productivity improvements and government actions have combined to prevent a near-term recovery in employment. The dramatic drop in durable production levels has pushed executives to aggressively look for ways to cut both direct and indirect expense with the result that productivity soared by 6.6% in Q2. Remaining profitable at the lower output levels is the “new normal.” It will become apparent when a serious recovery begins that much of the productivity improvement is permanent, so the jobs won’t come back in a recovery. Adding to this new reality, the discussion in Congress of the new health care mandates, energy taxes, higher minimum wage and higher taxes on “the rich” have all combined to encourage manufacturing executives to find a way to avoid hiring. Hardest hit was the 16-19 year old category where 300,000 jobs were lost in the two months after the July increase in the minimum wage.

Retail sales increased 3% in August led by the 11% increase in autos sales. As indicated earlier in the discussion of autos, this gain will be dampened or reverse in the September numbers. Core retail increased 0.6% and now stands about 3.6% below last year.

Consumers continue to save and pay down debt at unprecedented rates. Any attempt to use “pump priming” or “stimulus spending” by government to get the economy going will fail in this environment. The markets (consumers) aren’t in a mood to be stimulated. Government stimulus will have the same effect in the current recession that it has had every other time it has been tried since WWII. It will delay the recovery by slowing the pace of “weeding out”, it will

distort markets by trying to salvage businesses that are broke or “broken”, it will divert government spending away from legitimate investment in infrastructure, and it will take money away from the productive sectors of the economy that could use it to generate real growth and jobs if we were only smart enough to leave it there.

**Health Care Legislation:** The health care bills in Congress are moving away from all of the stated objectives - lower cost and broader availability. Government mandated full coverage insurance assures overuse of the system and thus higher costs. When it's free we will demand more of it. The bills fail to address tort reform (at least at the moment). The coverage in all bills remains less than complete.

There can never be a reduction in cost as long as the consumer is protected from the consequences of consumption decisions. This isn't health care reform or insurance reform, its welfare.

The clear solution was outlined by Milton Friedman 20 years ago. The most important aspect of the health insurance transaction is to break the connection between employment and health insurance. If individuals were free to make their own choices about what program to buy, they would only buy what was important to them. Each individual would make a decision on the value of a high deductible vs. low deductible coverage, and that same individual would pay the cost associated with the decision. The result would be a predicted drop in the cost of insurance from \$12,000 to about \$3,000 as consumers begin to pass up the expensive first dollar coverage plans. There would still be an important role for government in defining a standardized baseline major medical plan that all insurance companies would be required to offer. There also needs to be some method to manage something like an assigned risk pool for people with pre existing conditions. Needless to say the insurance companies, labor unions and many other industry insiders are not in favor of this plan.

The massive move to dismantle the current system, either by fiat or by nudging, will make our current system much worse. Fortunately the facts are getting out about the content of these bills, so we're beginning to see what they're proposing. Most small businesses in our survey think the most likely outcome is to drop their current plans and let the government do it. That is probably short sighted. If everyone does that the cost of the government tax for providing it will soar.

The universal failure of central systems is that they are central systems. The US is a nation of 300 million people with 400 million opinions. There can never be a single system that works for everyone. So let everyone make their own decision. We need 300 million health care plans and only a free and competitive market can deliver that. The problems in the current system are rooted in the clumsy attempts of the government to regulate an economic structure that is smarter than the regulators.

**Cap and Trade and the Environment:** Cap and trade worries most manufacturing CEOs, and it should worry all. With the exception of a few large and well connected corporations, manufacturing will be negatively affected. Success will be based more on political connections than skill. Homeowners should be concerned as well. The current draft bill contains a provision

that an existing home could not be sold without upgrade to current energy and water efficiency standards. This program is being pushed, according to Rep. Henry Waxman, because experts who know more than he does (like the UN IPCC), say it is urgent. None of this makes any factual sense.

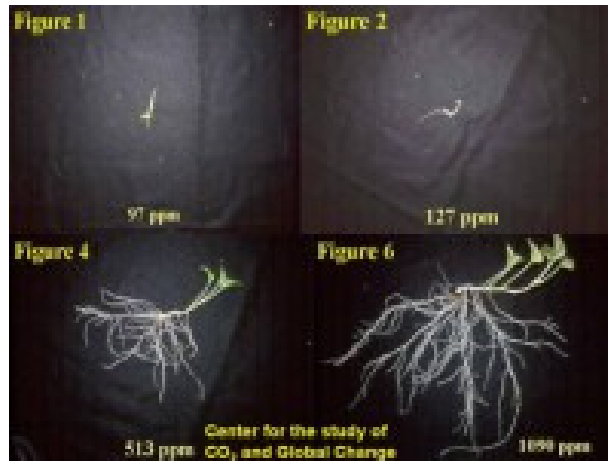
The problem with water efficiency standards is that the solution doesn't fit the problem. The Earth isn't short of water. Las Vegas and Los Angeles are short of water. If you build a large city in the desert, you might expect to have a water problem. So how does it help to conserve water in a wet part of the country? Water saved in the Midwest with efficient appliances doesn't become available to Los Angeles.

Now we have news that the UN Intergovernmental Panel on Climate Change may have participated in fraud in concealing data and studies that directly refute their position. Several US government agencies also seem to have been making unwarranted "adjustments" to the historical data that just happen to support the Anthropogenic Global Warming theories. But there has been a consistent pattern of refusing to make the source data available for peer review. In one case a freedom of information request to the Climate Research Unit of East Anglia University (UK) for access to source data was met first with two years of stalling, then an announcement that the original data had been destroyed due to lack of storage space.

At the IPCC the famous "hockey stick curve" that showed a dramatic increase in temperature in the later decades of the 20<sup>th</sup> century had source data finally revealed after years of resistance. The chart (already shown to use a faulty statistical technique) was based on Siberian tree ring samples from only 12 trees. So far this story would only be an example of bad science. But now the entire scam has collapsed. When a legitimate analysis was applied to the entire data set (hundreds of samples) the result according to one scientist was "flatter than road kill" (a scientific term?) over the past century. The 12 trees were clearly hand selected to produce the desired result, and the demand for full disclosure was resisted for years for obvious reasons. Even ignoring the solid science that questions tree rings as temperature surrogates, how could this have survived even modest lay scrutiny? On October 5<sup>th</sup> the UN quietly, and without comment, removed the often quoted graph from their report.

We have made these points before, but it is useful to emphasize the real science again. The Earth is currently deficient in CO<sub>2</sub>. Our recent level of about 250 to 380 parts per million is a record low over the past 600 million years. Further this deficiency threatens plant life on which all life depends. The following pictures from Dr. Willie Soon (Harvard Astrophysicist) show the effect of enriching atmospheric CO<sub>2</sub> on plant growth. The four samples from the Center for the Study of CO<sub>2</sub> and Global Change are for concentrations of 97, 127, 513, and 1090 parts per million of CO<sub>2</sub>. There is no known effect on humans from concentrations as high as 8,000 ppm. Reducing CO<sub>2</sub> below current levels would reduce crop output and result in famine.





It's a good thing that reducing CO<sub>2</sub> in the atmosphere remains impossible for humans (at least for the moment). But that isn't stopping the EPA from attempting to save us from this beneficial trace gas. Ms. Lisa Jackson, EPA Administrator has announced that the EPA has now made a formal "endangerment finding" on CO<sub>2</sub> which will allow the EPA to regulate all industry. This finding is issued only after the suppression of internal scientific objections, violating the EPA's own process requirements. "Political Science" has a new meaning.

President Obama in his recent UN speech repeated three key points.

- "More powerful storms and floods threaten every continent."
- "Rising sea levels threaten every coastline."
- "More frequent drought and crop failures breed hunger and conflict in places where hunger and conflict already thrive."

All three points are taken from Al Gore's movie. All three points are factually false. The power and frequency of storms has declined. Sea levels have been rising at the rate of 7 inches per century since the end of the last ice age 8,000 years ago, but the rate has slowed in the past 50 years. The final point on drought is scientifically illogical. A warmed Earth would evaporate more sea water which would produce more rain and reduce drought. But the critical observation is the measured analysis of the past 1,100 years of drought that show that they occur at times of maximum solar activity and minimum CO<sub>2</sub> concentration.

**Energy:** There is no crisis related to human use of hydrocarbon fuel. Supplies are large and growing, although "proven" reserves do not yet reflect the spectacular finds of the past decade. The finds don't become part of proven reserves until someone develops the field. Natural gas finds, combined with new extraction technology have reduced our imports of LNG to near zero. While no one is finding any more \$10 oil, there's plenty available at \$50 to \$70. The Brazilian offshore find is currently estimated at 100 billion barrels and will transform that nation into a global superpower.

The push for solar and wind energy is purely political, and many friends of Congress stand to profit greatly. These technologies are not energy sources, they are net energy consumers. Congress cannot pass a law that changes thermodynamics. Neither technology is likely to ever be successful although subsidies can hide the reality for a while. Nor has any serious plan been put forward on how to deliver on-demand power from these unpredictable sources. These are hobbies, not serious energy sources. Even T. Boone Pickens has dropped his windmill plan. He couldn't make it work even with \$9 billion of government subsidies.

If you want to see what currently available "alternative energy" looks like take a look at a nuclear power plant. It is the only alternative to hydrocarbon combustion or hydroelectric generation. Ironically the fast breeder reactor, invented in the US, has yet to be deployed here.

If you want to see what the future may look like, do a search on "polywell fusion." The new developments in the nuclear field are headed in the direction of smaller, distributed sources. This game makes the "smart grid" initiatives look curious, if it weren't for the politically connected companies pushing the agenda.

In the near term the concept of higher efficiency and distributed sourcing is available today. Check out I-Power Energy Systems, LLC ([ipoweres.com](http://ipoweres.com)). They combine efficient and clean local power generation driven by natural gas or sewage gas by products (30% efficient) with exhaust heat recovery and reuse (combined efficiency of 80% to 90%). While current systems target large institutions, smaller units are inevitable with a potential home unit for electricity, heating and cooling remaining technical feasible.

There are many technologies being pushed naively as alternate energy. Most aren't even energy sources at all:

- Fuel cells (where do you get the hydrogen? How much energy does that take?)
- Efficient battery technology (where do you get the electricity?)

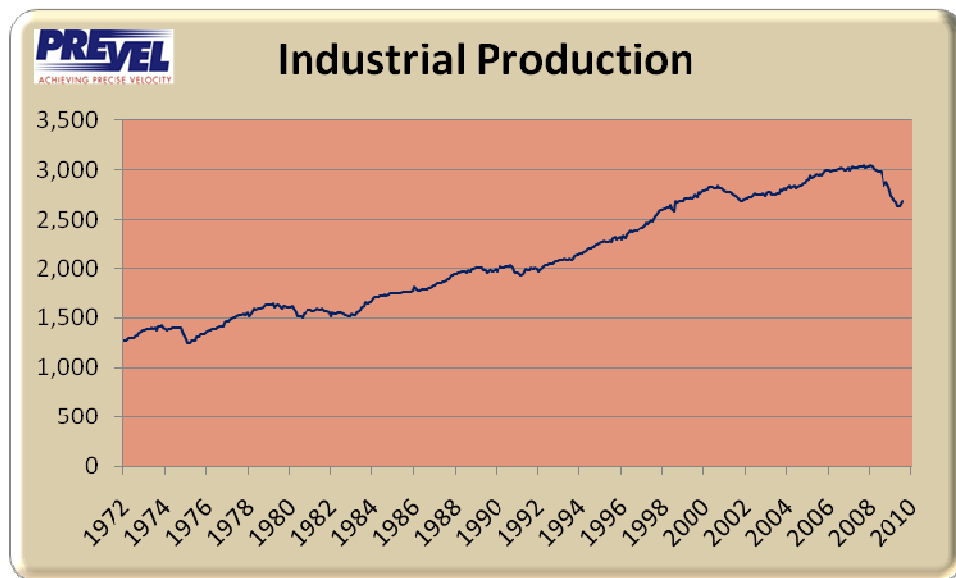
Some of these ideas have the potential of relocating pollution sources to a more controllable site (auto exhaust to a power plant), but auto exhaust emission has been reduced to the point where it is almost doesn't matter. In most cases it's just a replacement for a gas tank. The energy density of gasoline is hard to beat. Even modern batteries are a poor second. The GM electric car recently announced 200+ MPG based on the EPA standards. When the deficient EPA methods were replaced with an appropriate calculation, the number came in below 20 MPG. This heavy two seat car costing over \$40,000, it will remain a curiosity.

Over the past few centuries we have converted from wood to coal to oil to natural gas as the efficient example of energy conversion. In the process we have gone from a carbon to hydrogen ratio of 10:1 to 4:1 to 1:4. In the transition to a hydrogen economy we have achieved a 40 fold improvement without government help. Methane (CH<sub>4</sub>) at a ratio of 1:4 may be the end of the trail. It takes more energy to break it down to pure hydrogen that you can get back by burning the hydrogen.

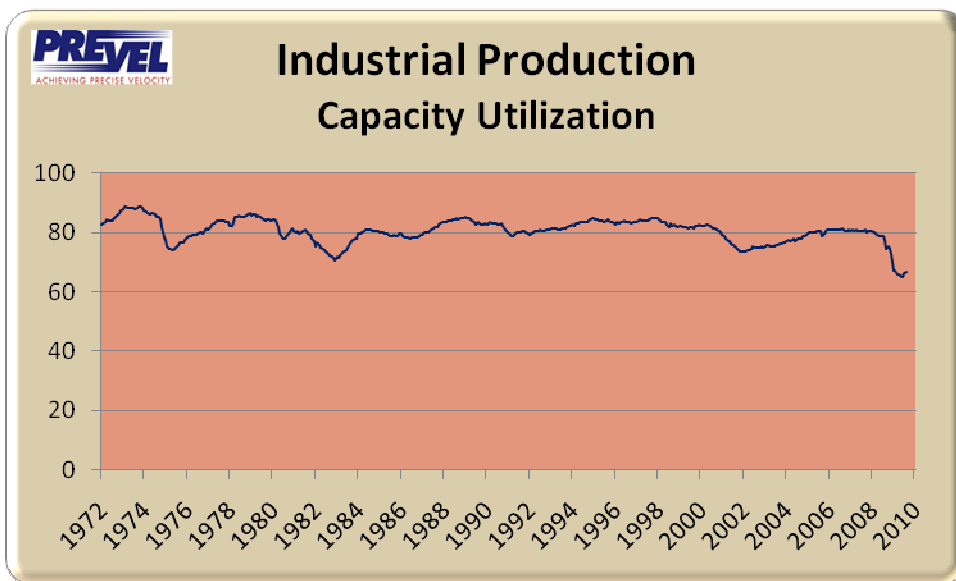
The argument for “green jobs” is also specious. A study of European job creation from subsidized windmill development showed a net loss of 2.2 jobs for each green job created in the windmill business.

Policy making at the federal level seems to be completely disconnected from facts and reality, both economic and scientific. How this could happen leads to bizarre conspiracy theories. But it remains to be shown how any group as disorganized as the political parties or the houses of Congress could create or maintain a real conspiracy.

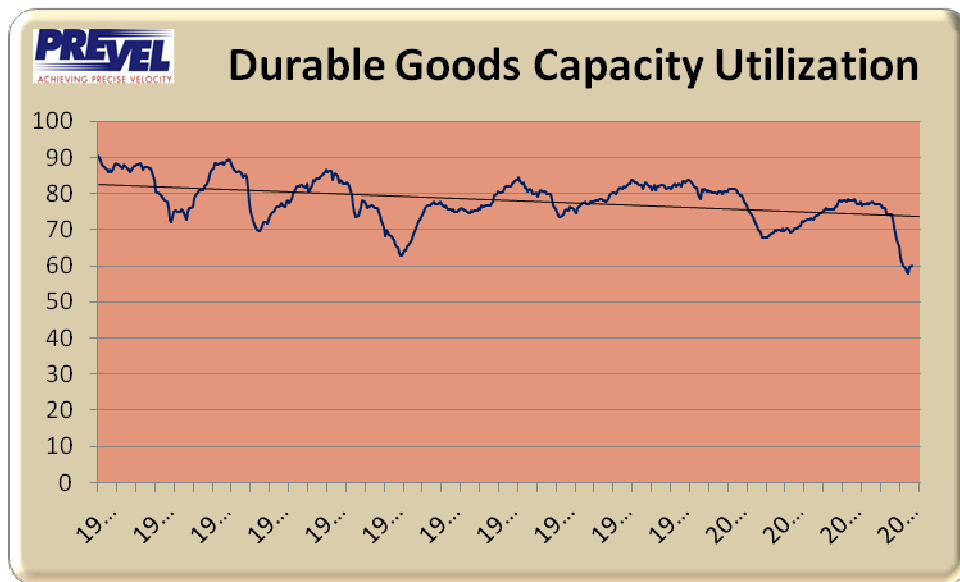
## Industrial Production and Capacity Utilization



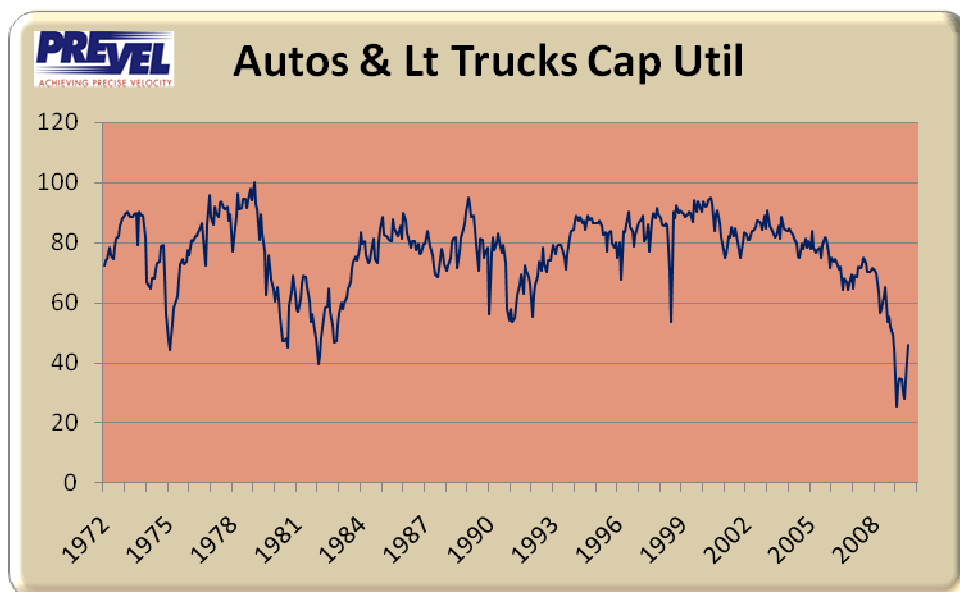
Industrial production rose 1% or \$28 billion due in large part to the restart of the idled auto manufacturing plants.



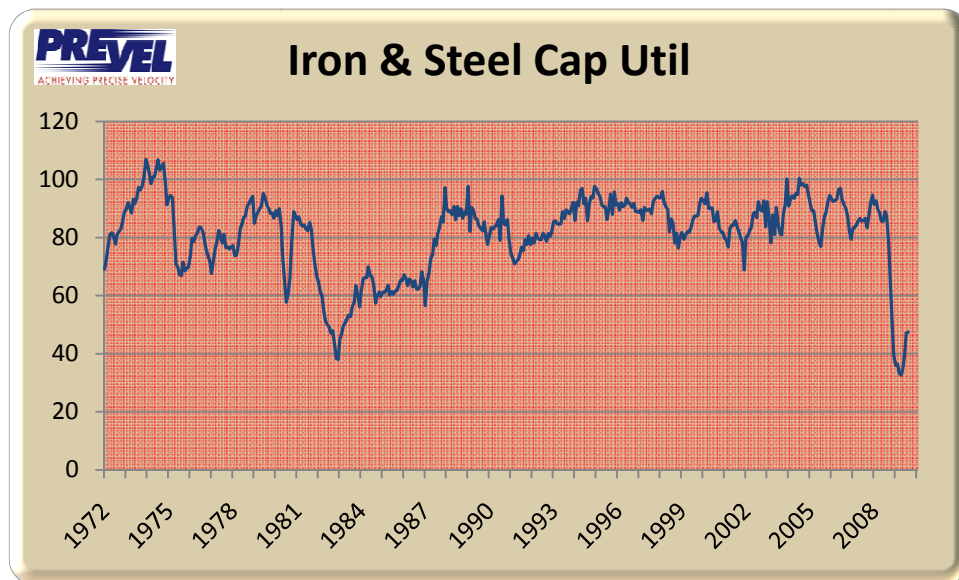
Capacity utilization for industrial production increased 0.4 points to 66.5% in August.



Capacity utilization in durable goods increased by 0.4 points to 60.1% in August. It's a long way back to the trend line.

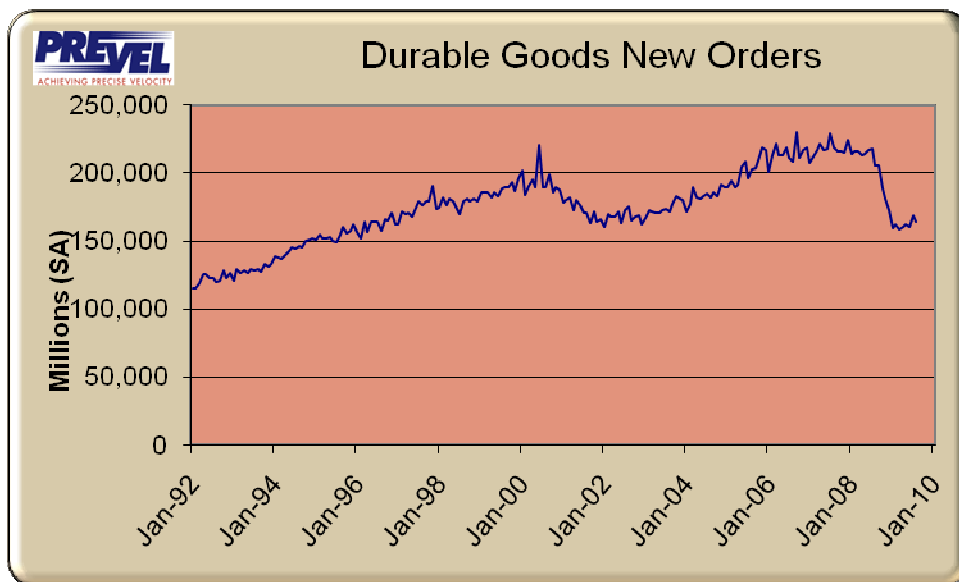


Auto industry capacity utilization increased 5 points to 45.8% in August as assembly plants came back into production.

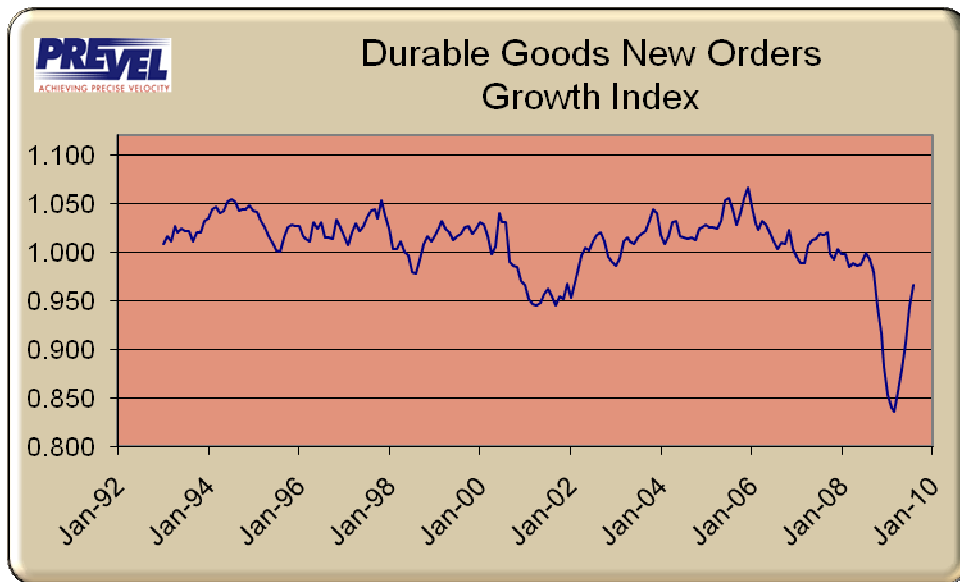


The steel industry was flat at 47.4%.

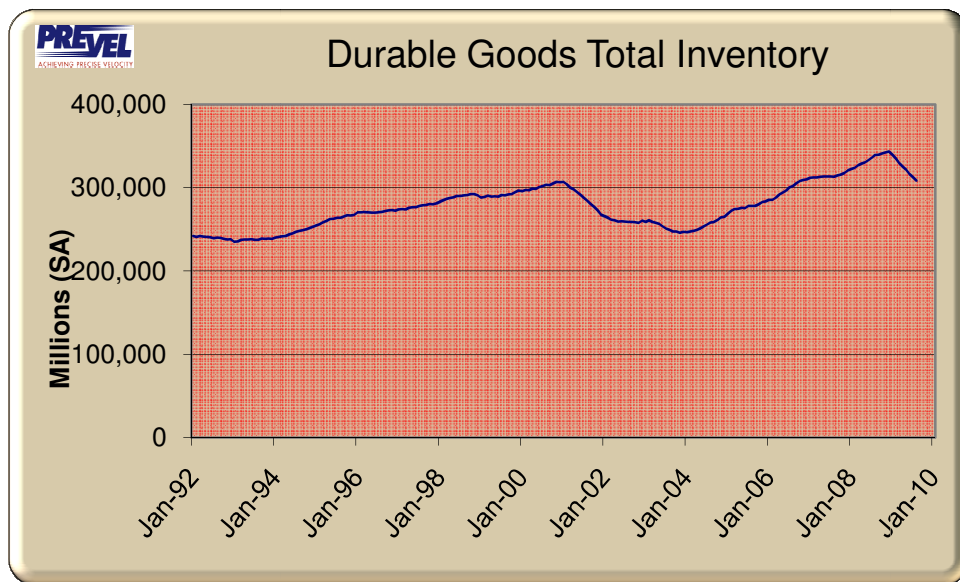
## Durable Goods



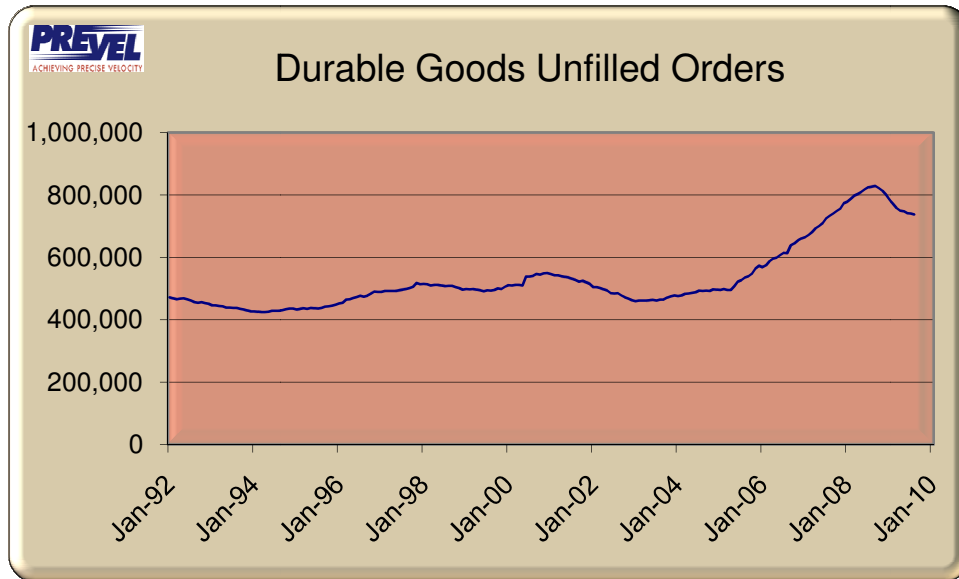
New orders for durable goods declined 2.6% or \$4.4 billion.



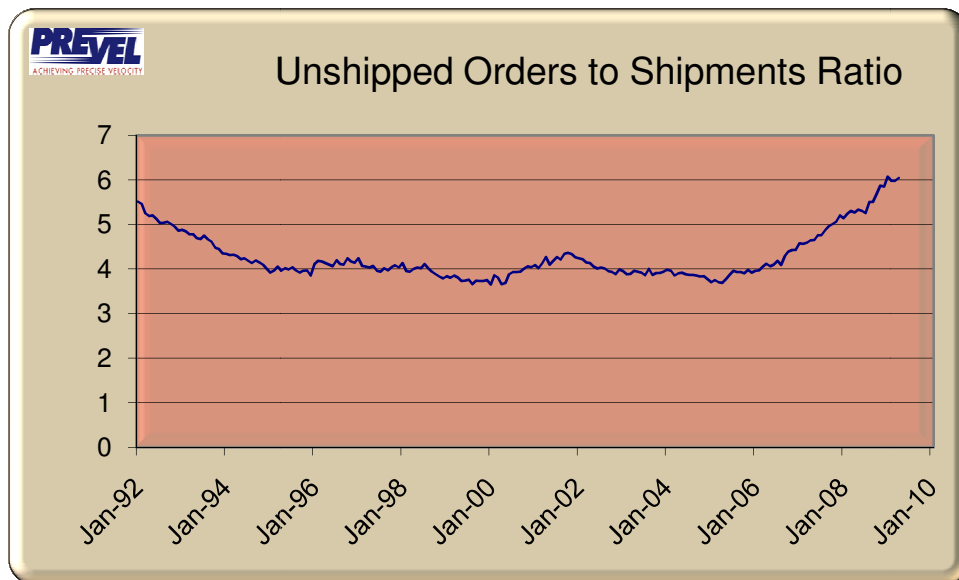
The growth index, a measure of acceleration, increased for the third month to .966. It needs to achieve a value above 1.000 to signal a return to growth.



Inventory continued to decline, and the inventory to shipments ratio remained flat. There will probably be more cuts in inventory ahead, but at a slowing pace.



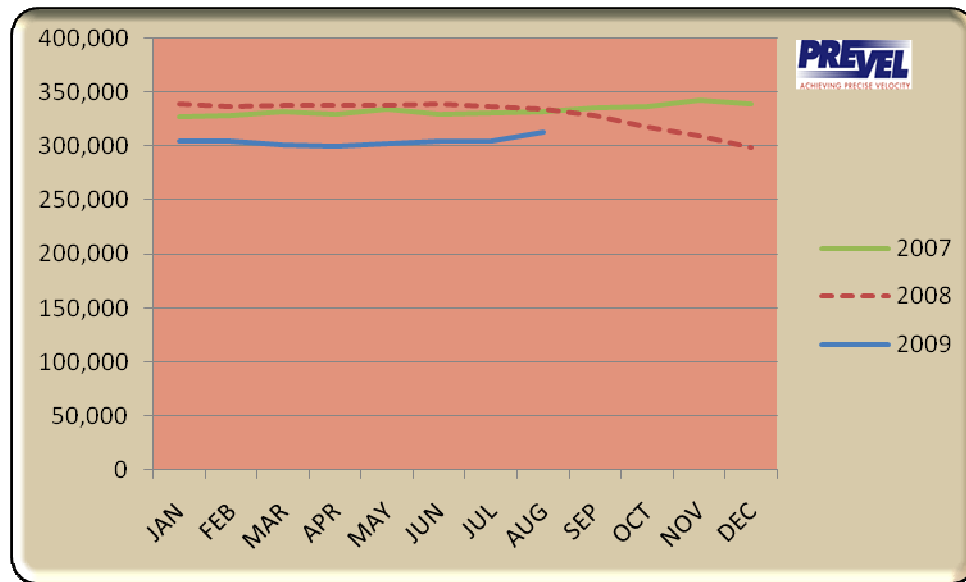
Unfilled orders declined for the eleventh consecutive month by 0.4% or \$3.1 billion. The rate of decline has slowed in the past three months.



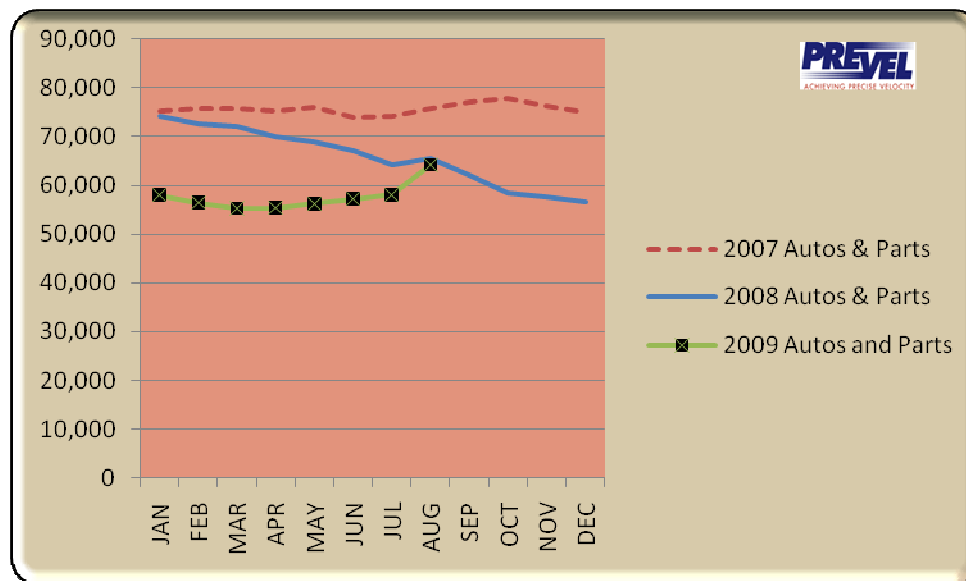
Unfilled orders to shipments ratio is a measure of order velocity. The measure remains stable and implies an average lead time of 6 months at current production rates. This measure is essentially unchanged in seven months.



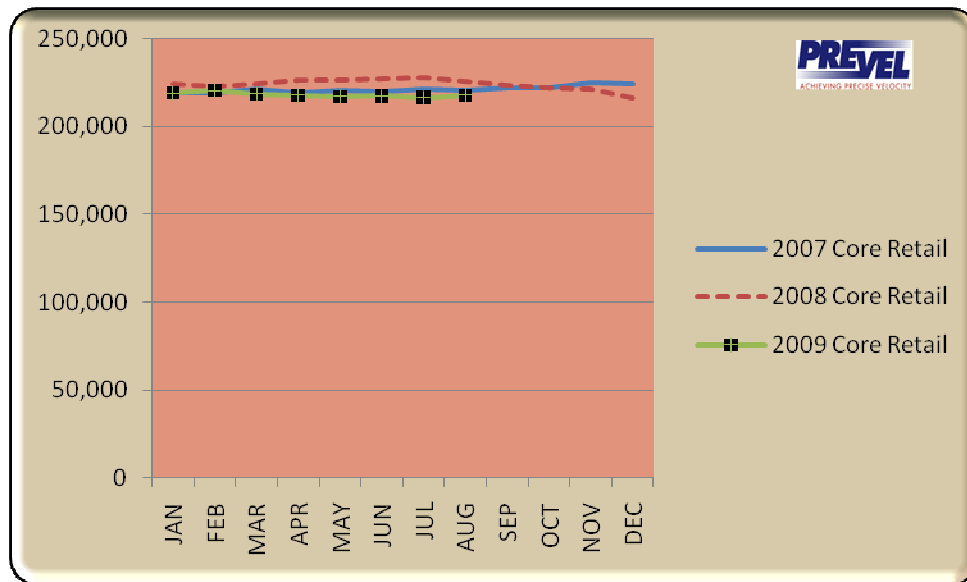
## Retail:



Retail sales increased in August due largely to the surge in auto sales.

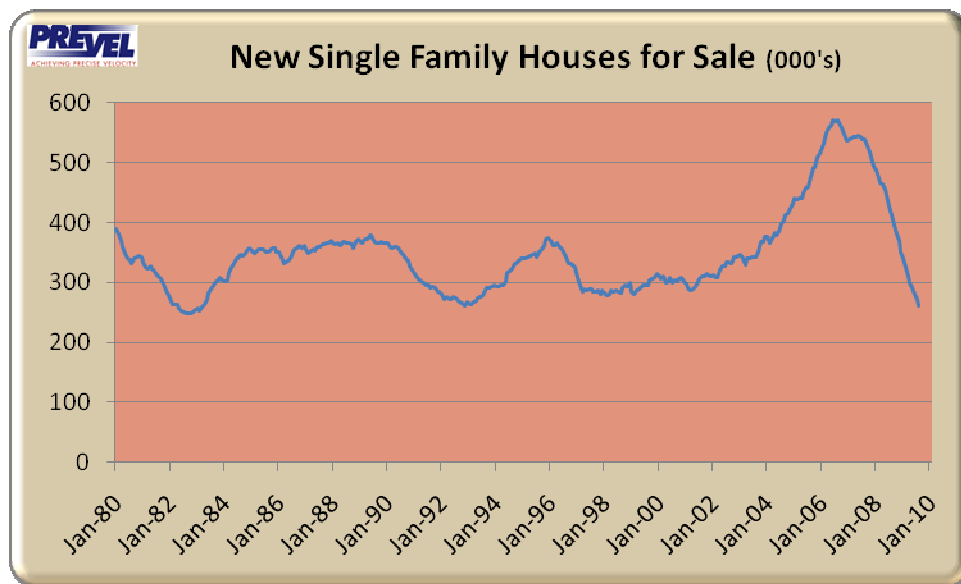


Auto and parts sales increased by \$6 billion in August.

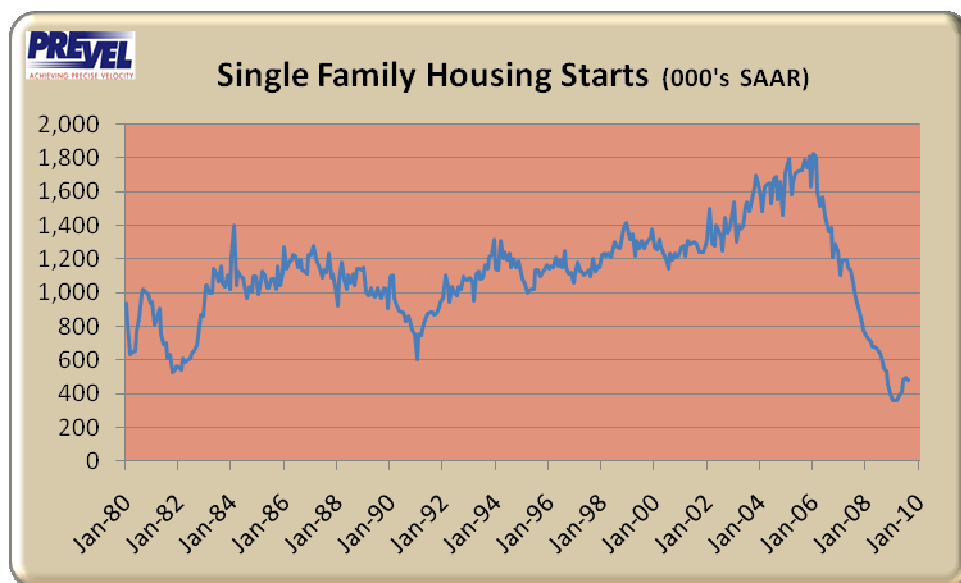


Core retail (excl. autos, gas, food service) increased by 0.6% in August. The measure remains 3.6% below last year.

## Housing:



The inventory selloff of new single family houses continued for the 27th consecutive month, ending the month at 261,000 units.



Single family housing starts declined slightly in August. Was this a possible side effect of the cash for clunkers program? Hmm.

## 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 business response metrics.

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.



[www.prevelconsult.com](http://www.prevelconsult.com)

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