



**The Durable Goods Report**

**September 2010**

Manufacturing Data Release of 9/2/2010 (July Preliminary)

Employment Data Release of 9/3/2010 (August Preliminary)

Retail Data Release of 9/14/2010 (August Advanced)

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

John E. Layden, Prevel Technology

## By the Numbers:

Prevel Technology - Durable Goods Summary			
	Current Mo	Prior Mo	Prior Yr
New Orders-Durable	193,012	192,327	176,526
12 month moving average	184,911		178,471
% Change from Prior Year	3.6%		
Unshipped Orders - Durable	802,786	803,897	819,234
% Change from Prior Year	-2.0%		
Value of Shipments - Durable	200,621	196,120	183,564
12 month moving average	191,556		191,987
% Change from Prior Year	-0.2%		
Inventory - Durables	311,129	309,396	304,403
% Change from Prior Year	2.2%		
Inv to shipments ratio - Durable	5.53	5.59	6.33
Growth Index - Durable New Ord	1.042	1.051	0.949
Growth Index - Durable Shipmts	1.031	1.033	0.930
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			

Monthly Rate of Change				
	This period	Last period	Change	Comments
GDP Q2 vs. Q1	14,575.0	14,446.4	0.9%	
Industrial Production (July)	2509.6	2466.0911	1.8%	
Capacity Utilization %	74.8	74.1	0.7	
Manufacturing % (July)	72.2	71.4	0.8	
Durable Goods % (July)	70.8	69.4	1.4	
Autos and Parts % (July)	73.3	62.4	10.9	
Machinery % (July)	73.5	72.6	0.9	
Durable Goods (\$ Mil Seasonally adjusted) July Data				
New orders	193,012	192,327	0.4%	
Shipments	200,621	196,120	2.3%	
Inventory	311,129	309,396	0.6%	
Unshipped Orders	802,786	803,897	-0.1%	828 bil 9/2008
Total Retail (\$ Mil SA) Aug data	324,365	322,897	0.5%	
Autos and Parts	62,025	62,433	-0.7%	
Gasoline	35,888	35,202	1.9%	
Core retail	226,452	225,262	0.5%	
Employment (000's SA) Aug Data				
Non-Farm	130,365	130,419	(54)	138 mil 1/2008
Goods Producing	18,031	17,994	37	
Manufacturing	11,706	11,672	34	13.7 mil 1/2008
Construction	5,592	5,596	(4)	
Durable Goods Mfg	7,199	7,166	33	9.1 mil 6/2006
Housing (000s of Units SA) July Data				
Single family starts	432	451	-4.2%	
Single family sales (new)	315	267	18.0%	
Single family for sale (new)	210	213	-1.4%	570 in 8/2006

**GDP:** Q2 GDP numbers were revised downward to 1.6% from 2.4%. A further downward revision is possible as more detail is compiled on the second quarter. The slowing growth rate is upsetting some of the statistical adjustment factors.

The economy is still not doing well, but most sectors show signs of a bottom rather than continued decline. This would suggest that the risk of a further decline or a double dip has faded. It also suggests that the recovery phase has started in a broad sense.

Some areas, including durable goods have been growing for a few months. Others are growing (see capital goods), but with some indication of a pause. The effects of government intervention have likely delayed necessary market corrections rather than causing major damage (except for the huge increase in the debt). Mortgage interventions seem mostly to have delayed the foreclosures rather than saved the homeowner from default. The pace of foreclosures is now picking up. Home purchase incentives time-shifted demand but did not increase the size of the market. Cash for clunkers did the same and further produced a shortage of used cars (and higher prices) at a time when consumers are trying to reduce spending.

A further stimulus is proposed in the form of “infrastructure investment.” This type of investment is generally viewed to be positive – you need to do it anyway. And it helps the overall economy to grow, right? Not necessarily. It is only a plus to the economy when the infrastructure is a constraint to economic growth. There is almost no example of that in the current economy.

China is an example of an economy overinvested in its infrastructure. Their GDP growth rate has been subsidized by investment in capacity that now sits idle. We have been warning for a year that the air will need to come out of the balloon.

This is an example where the macro-economic view is consistent with the micro-economic view. Building a bridge to nowhere is the same as building a new plant with no demand for the product it produces.

On the positive side, the threat of EU debt default seems to have passed. Largely unnoticed, the troubled debt was rolled over at very attractive rates. One less potential comparison to the 1930s.

**Energy:** We are awash in oil and gas (we have always been “awash” in coal). Oil inventory, proven reserves and estimated reserves (untested new discoveries) continues to build. And yet prices remain relatively high. Something is sustaining prices. One analysis claimed it was because investors were treating it like gold – a safe haven investment. Watch out for this one. Last time supplies spiked (1999 I think) the

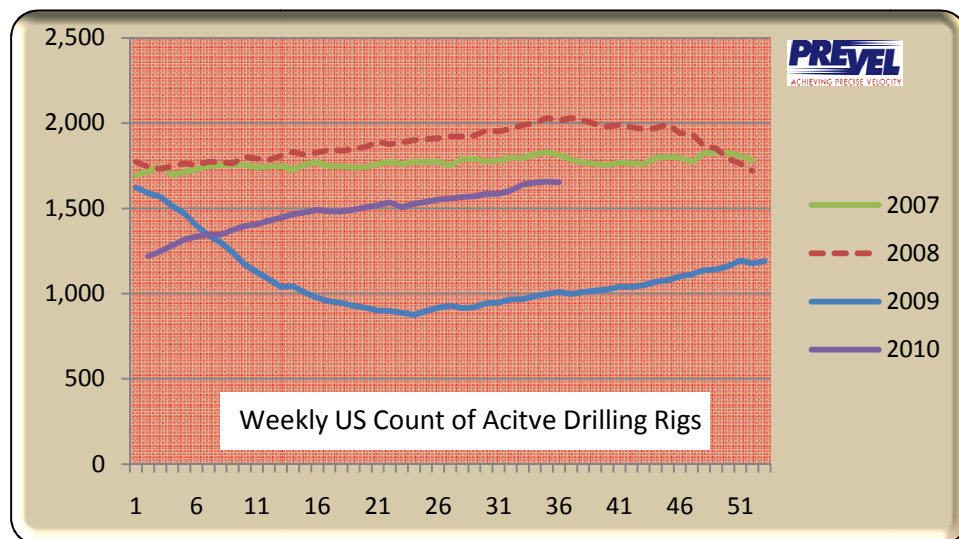
price of oil went to \$9 and was predicted to be heading for \$5 by Forbes pundits. The fallacy of “finite supply” and its implications leads to the outdated theory of “peak oil.”

Since the 1890s the believers in “peak oil” have argued that we will soon experience a decline in output, eventually leading to the exhaustion of oil and gas. The theory assumes there is only a fixed supply, originating with the organic remains of the Jurassic era. A large body of solid evidence argues to the contrary. The best signal is total amount of oil available in proven and estimated reserves. It continues to grow. Another indicator is the projected date of the peak. The timing of the peak has been “about 15 years from now” for the last 100 years.

Oil is not a fossil fuel in the traditional sense. It is being continually generated in the mantle of the Earth. But the peak oil myth continues to rank oil with gold in terms of finite supply. My guess is that it’s more closely aligned with tulip bulbs. When the oil speculators get a call from Cushing, OK (pipeline switching center) requesting instructions on where to put their oil, there will be a rush for the exits. Under similar circumstances several years ago, this process took about 120 days. The only practical resource constraint in the oil business is storage capacity.

Prices must decline, or production must decline, or both.

Expansion of active rotary rigs (Data courtesy of Baker Hughes) has stabilized. This is likely a response to the current demand/supply/inventory situation.



**Hybrid Vehicles:** Last month’s report noted that all hybrid vehicles had a higher cost of ownership than their gasoline or diesel counterparts. This sparked a number of questions on the roll of corporate and government subsidies on these numbers. A quick check shows that the study was based on published MSRP for the vehicle, which is the subsidized price. If the subsidies were removed, the excess cost of the hybrids would

be \$7,500 to \$15,000 worse than the study suggested. When you see someone driving a hybrid car, keep in mind that you are helping pay for their hobby.

Swiss study shows that deisel cars are cleaner than electric over the lifetime of the car.

<http://gas2.org/2010/09/02/diesels-cleaner-than-electrics-over-lifetime-says-one-study/>

**Taxes and Regulation:** Uncertainty over taxes, labor cost and regulation rank high on the list of issues with manufacturing CEOs. Promising to tax the rich might be good politics, but it's a sure way to dampen investment that might make someone rich (and in the process create a lot of jobs). On the political front, action to extend the Bush tax cuts seems unlikely at the moment, but raising taxes in a recession seems equally unlikely. If anything is to be done to raise taxes it will likely happen in a lame duck session.

The taxes on income at the top bracket don't seem to be the biggest problem. Capital gains tax increases seem especially troublesome, especially in light of the position of most EU countries. When queried on their capital gains tax rate the president of the Czech Republic responded: "We're not stupid. It's zero."

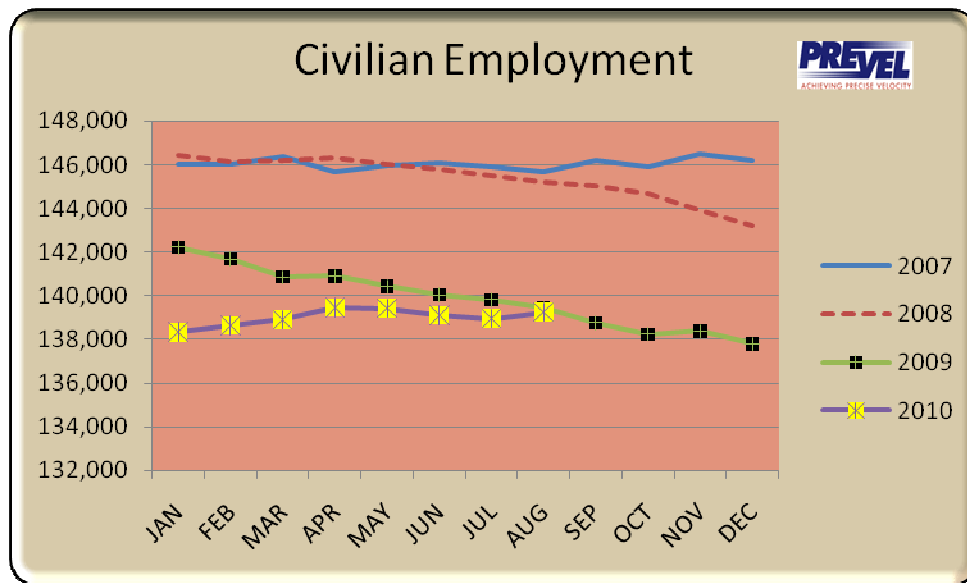
Major tax increases on energy companies will drive up the cost of all US manufacturers, and increase dependence on imported oil. It is estimated to eliminate 154,000 jobs in the energy sector, but it will drive at least that many more manufacturing jobs to low tax countries.

Health insurance costs are rising faster than before the law was passed. The more important issue seems to be availability and the potential of blowback from legislated coverage. The real source of the cost increases is not with the insurance companies. Hospital costs seem to be the biggest component. If you want to see the future of routine health care, check out the local clinics a CVS and Wal-Mart. This may be the way that costs are driven down at the point of delivery. The rest of the supply network is pretty efficient, except for the imbedded regulatory costs.

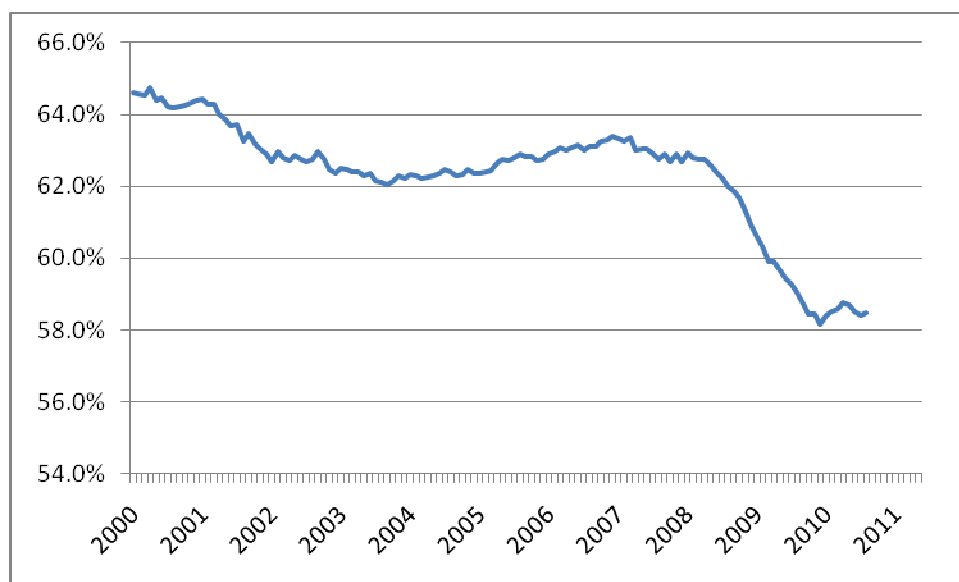
Carbon taxes are still being pushed despite the collapse of the environmental arguments originally used as justification. Some in the UN are now pushing for a World Environmental Summit with the goal of getting tax revenue to fund "global government." It seems unlikely that Congress could pass anything, but Rep Waxman (D. CA) promises to pursue the Cap and Trade bill next year. The only possibility of new legislation is in the lame duck session. The Senate is very unlikely to pass a bill in the next congress. And the house may change hands.

The serious risk may come from the EPA. They may enact regulatory reform based on their (scientifically unsupported) finding that CO2 is a pollutant. This finding was the subject of a formal objection from their own scientists. Overruled.

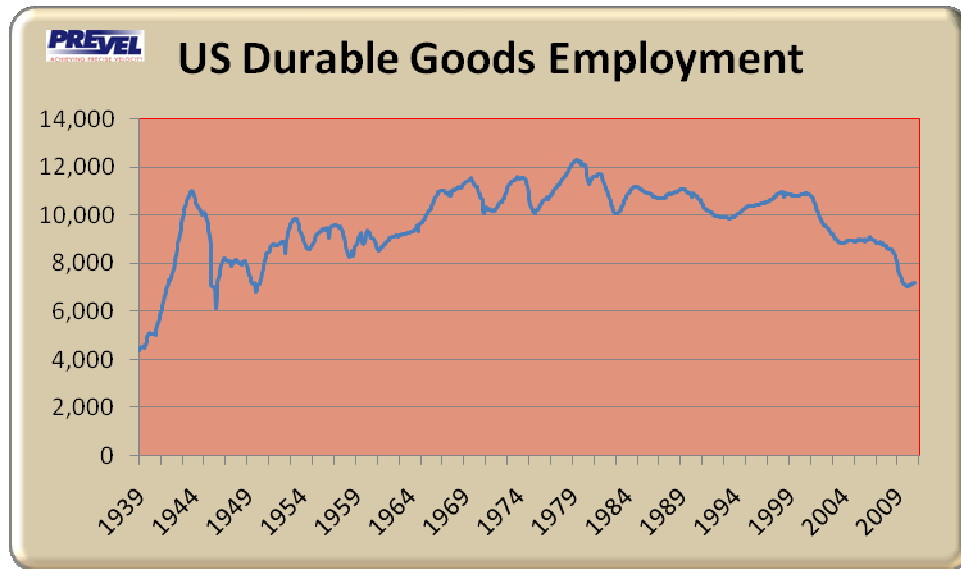
**Employment:** Employment declined by 54,000 for the second consecutive month. For the three months ended in August the economy shed 283,000 jobs, after 5 months of positive growth.



Civilian employment over 16 years of age is a key measure of the health of the economy. It currently stands about 7 million below the November, 2007 peak. It will take a long time to generate that many jobs, and the current economy is essentially at break-even.

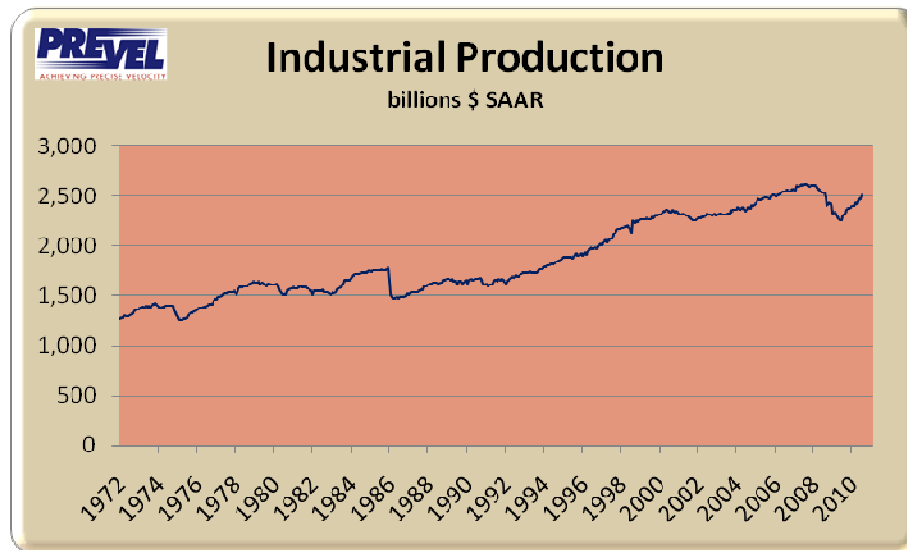


Labor force participation rate inched up a tenth of a point, but it's still at a record low level.



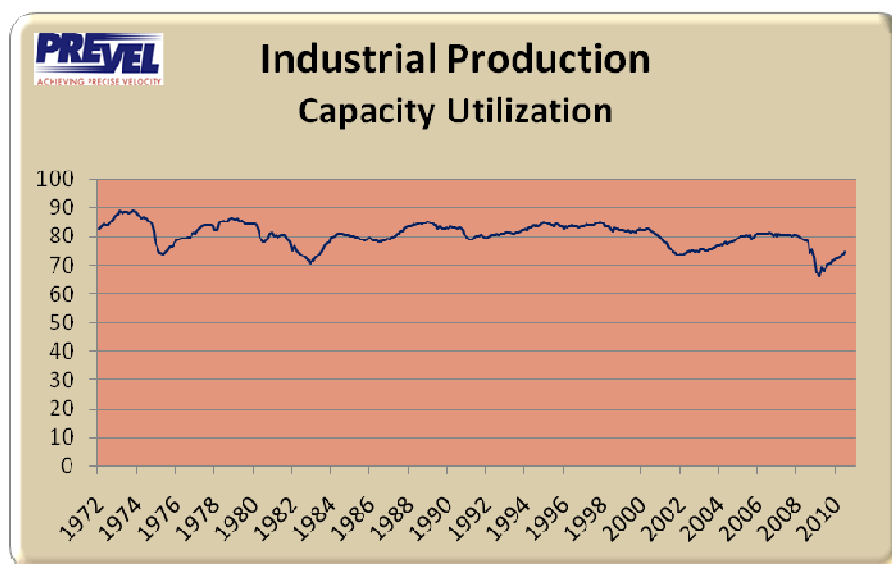
After seven consecutive months of employment growth in durable goods, the sector shed 24,000 jobs in August. Durable goods drives an average of 8 secondary jobs for every primary job in the sector, so it's the most effective job generator in the economy. The decline may be tied to the observation on the weak order/shipment ratio in July (see durable goods shipments below). Close attention here over the next few months.

## Summary and Sector Analysis



**Industrial Production** (excluding industrial supplies) increased by 1.8% in July after a revised -0.2% decline in June. The industrial economy continues to signal growth despite weakness in several of the sectors. The current level of 2.5 trillion remains below the 2.6 trillion level of November 2007.

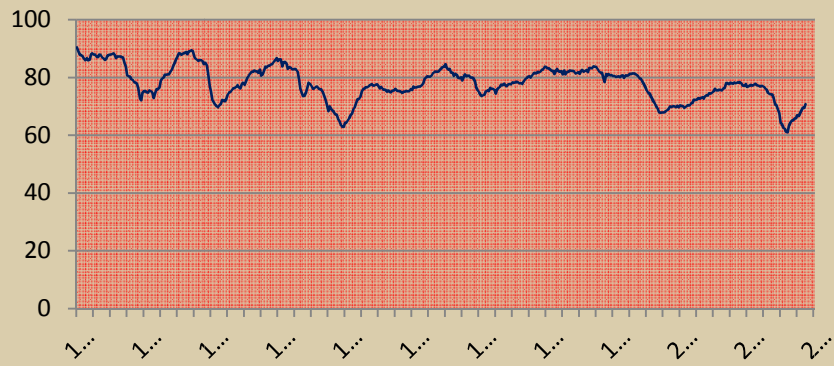
**Capacity Utilization:** Utilization of industrial capacity continues to recover with an increase to 74.8% in July. The steady improvement is an additional indication that there is not a second recession coming, even though the measure is still below the “magic” 80% level.



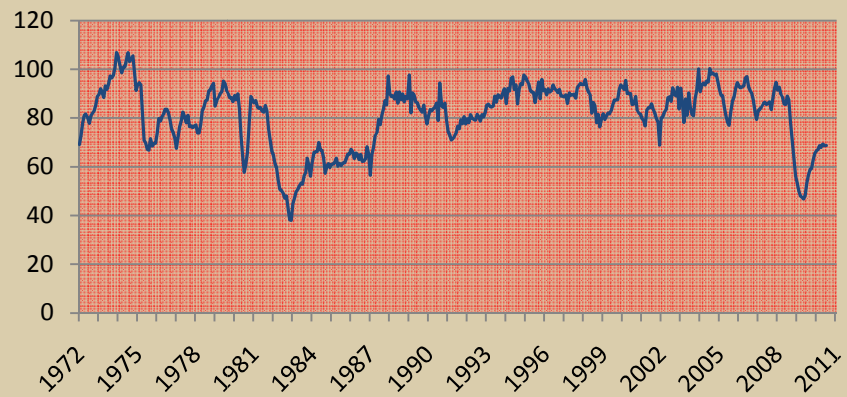




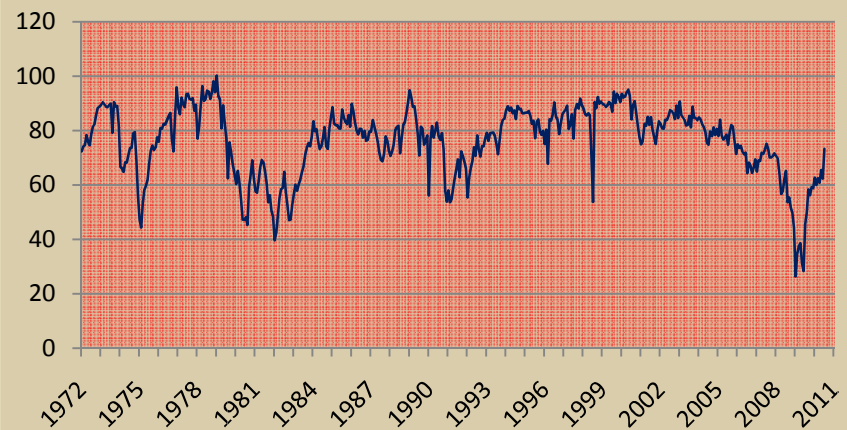
## Durable Goods Cap Util

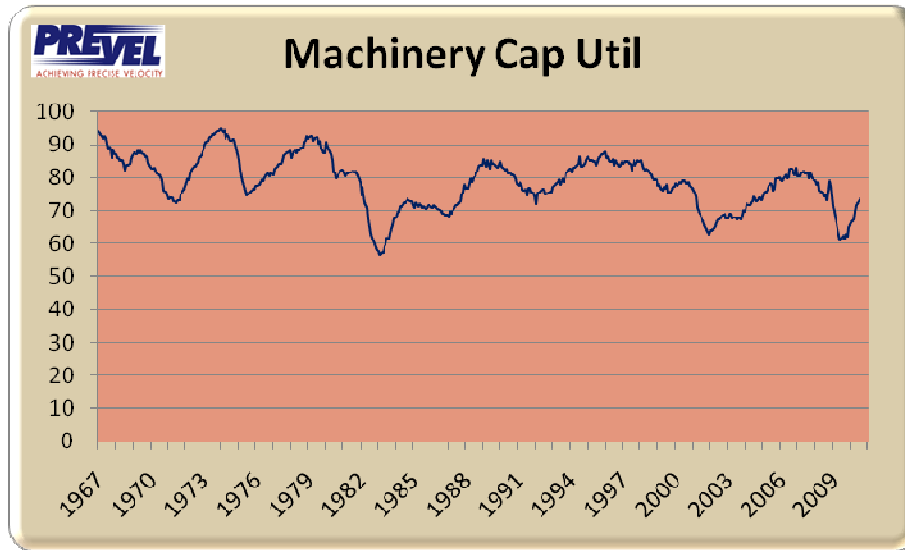


## Primary Metals Cap Util



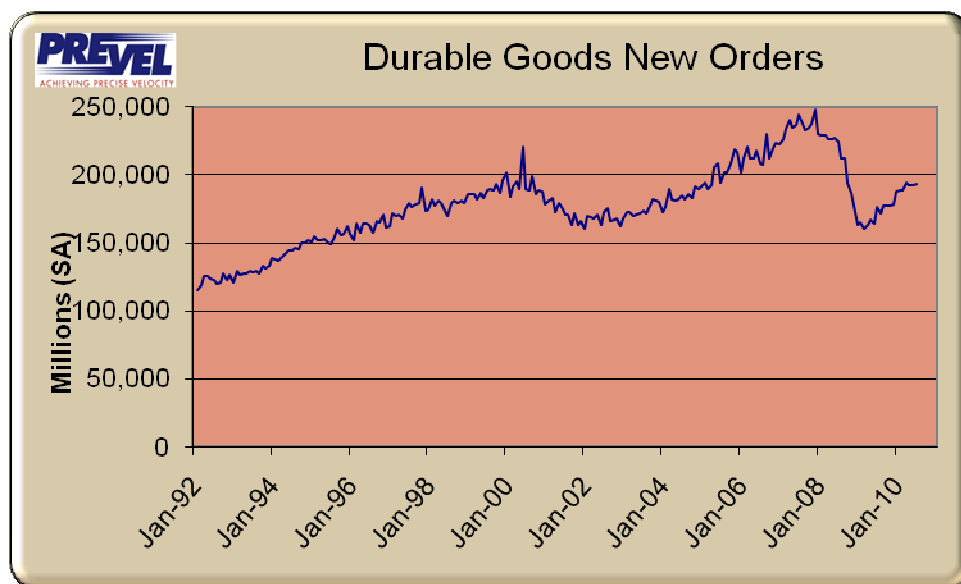
## Autos & Lt Trucks Cap Util



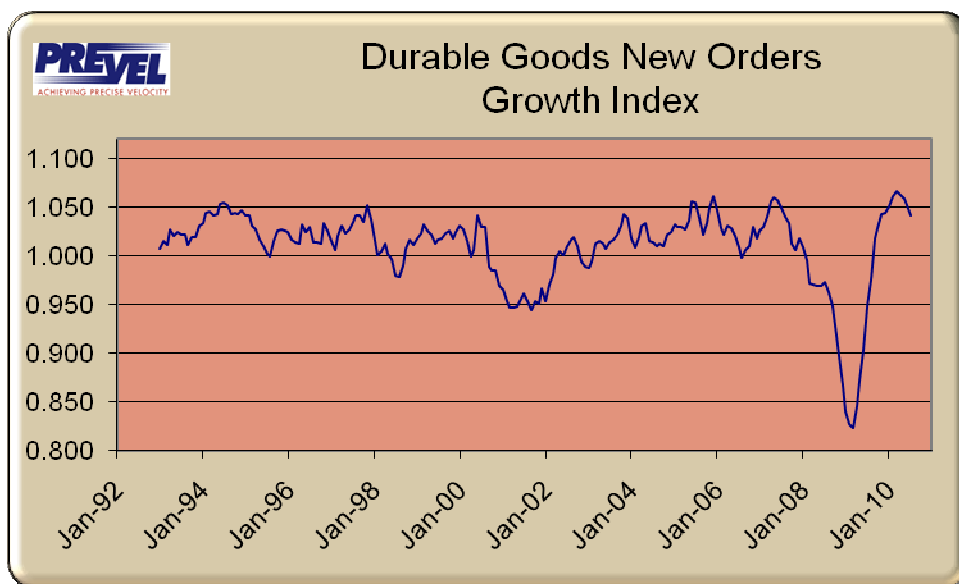
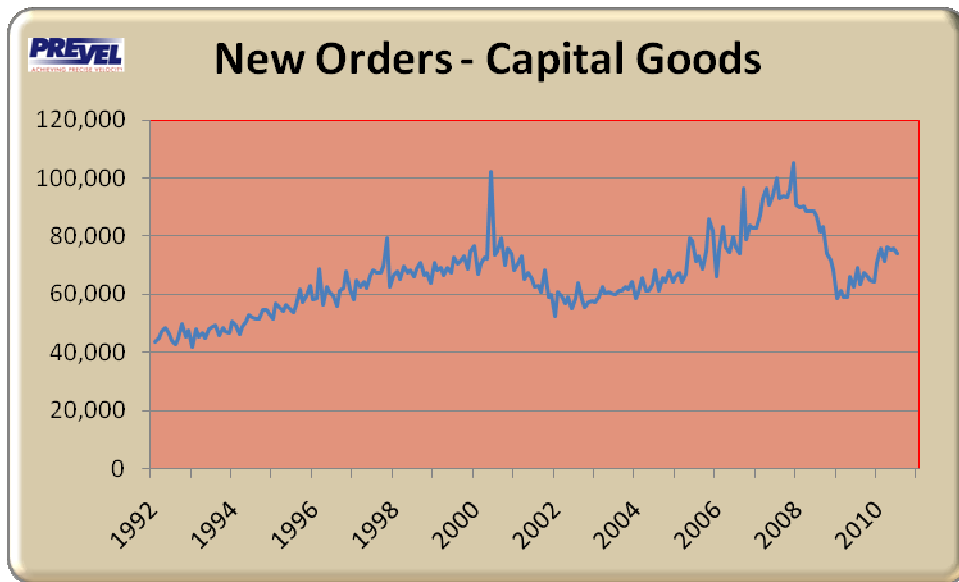


All of the major manufacturing sectors show the same pattern. The recovery in capacity utilization is as sharp as the recovery in the early 80s.

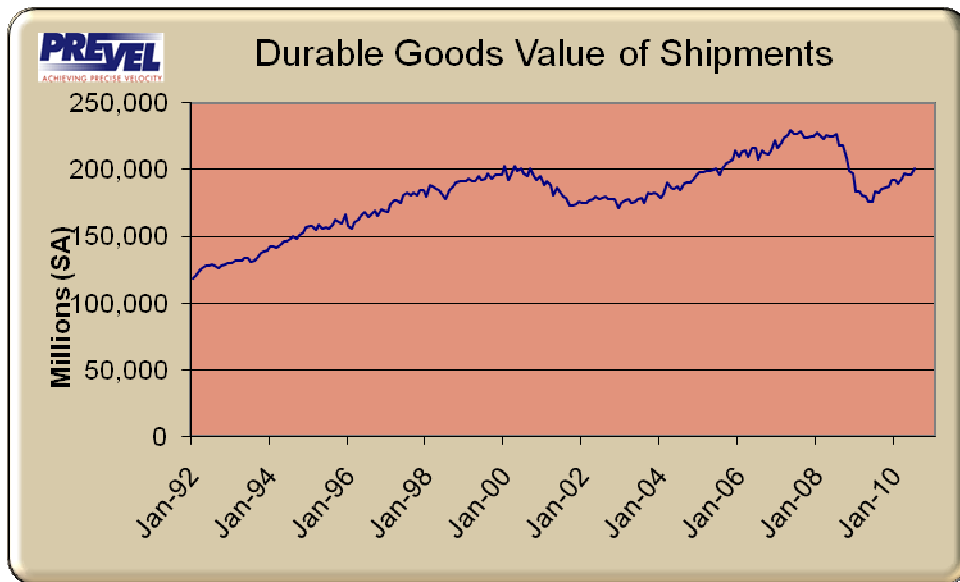
#### Durable Goods:



**New Orders:** New orders for durable goods increased by 0.4% in July after two consecutive months of decline. The three month period ending in July is negative by 0.5%. The recovery in durable goods orders seems to have stalled. A major part of this flat pattern is found in capital equipment. After several months of steady improvement, the growth of capital equipment has stalled.



**Durable Goods Growth Index (3mma/12mma):** The durable goods growth index for new orders has now clearly reversed, dropping below the 1.050 level for the first time in seven months. This measure of acceleration suggests that growth rates are slowing. But the current value is still solidly positive.

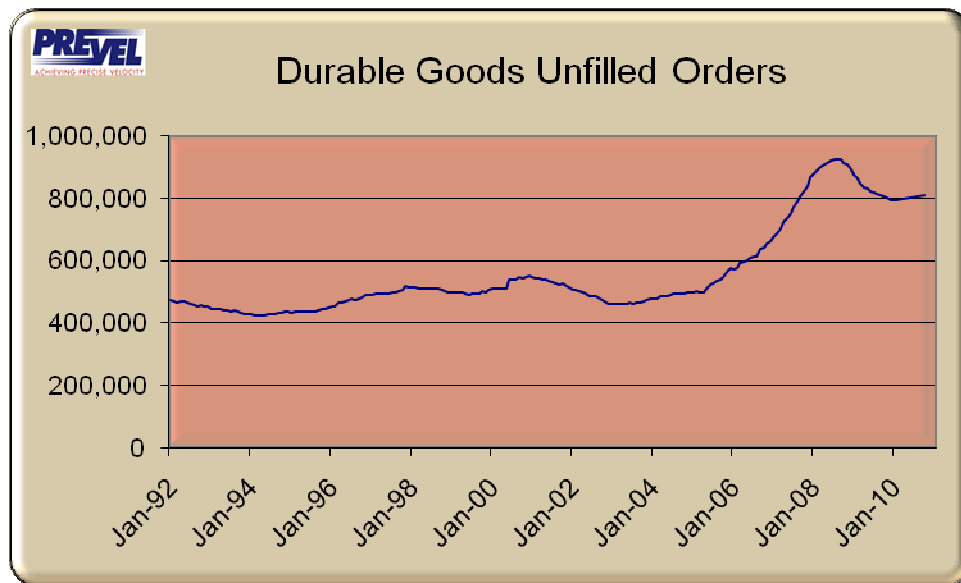


**Durable Goods Shipments:** Shipments continued to expand with an increase of 2.3% in July. The ratio of new orders to shipments stands at 96% suggesting some easing in production rates in the near term future.

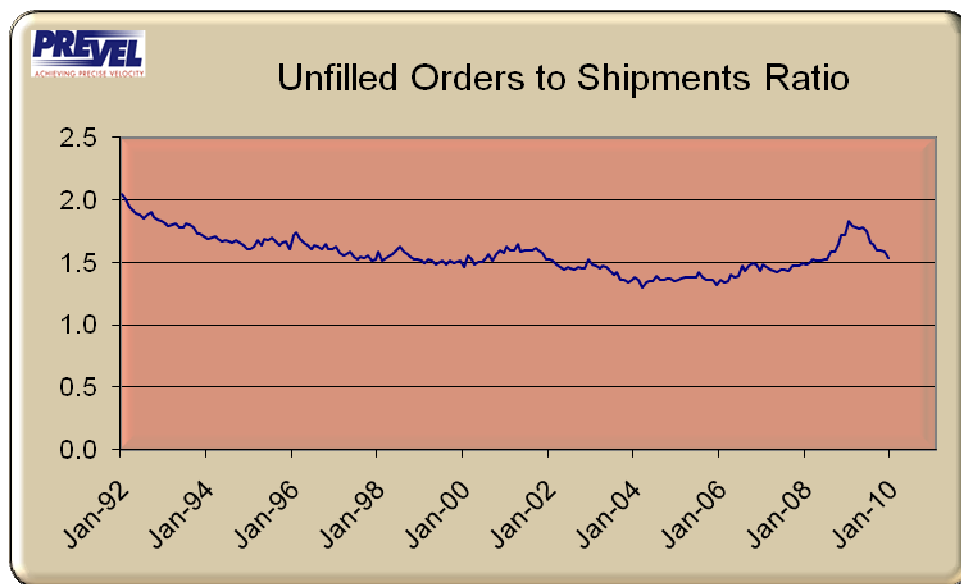


**Goods Exports** are surging, driven by the economic recovery in Europe and Asia.

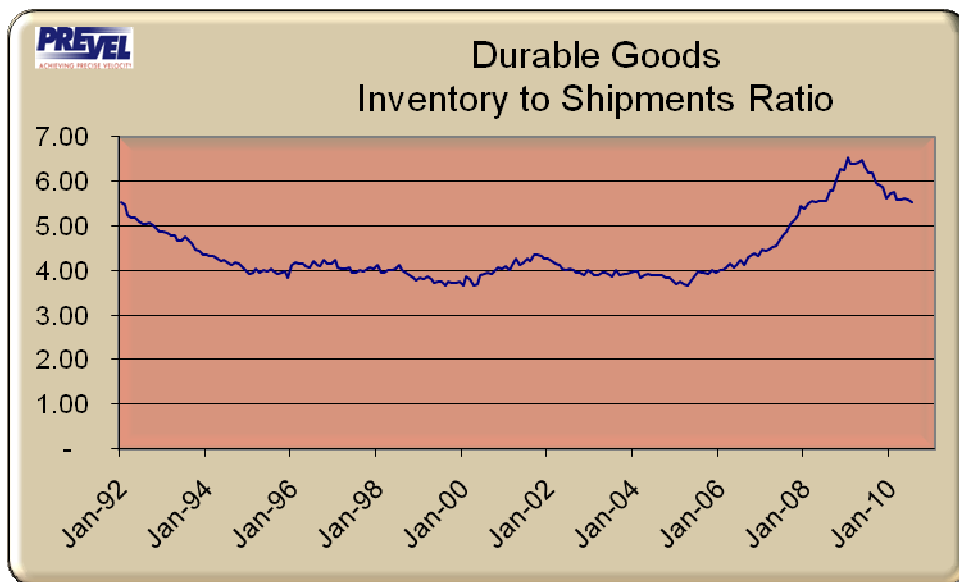
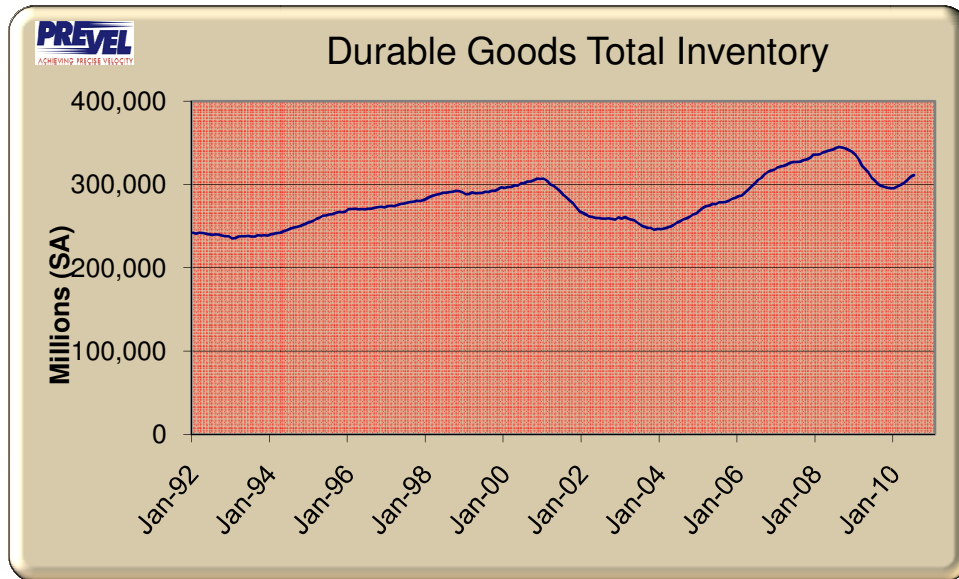
## Durable Goods Backlogs:



**Durable Goods Unfilled Orders:** Remained steady, (0.1% decline) in July.

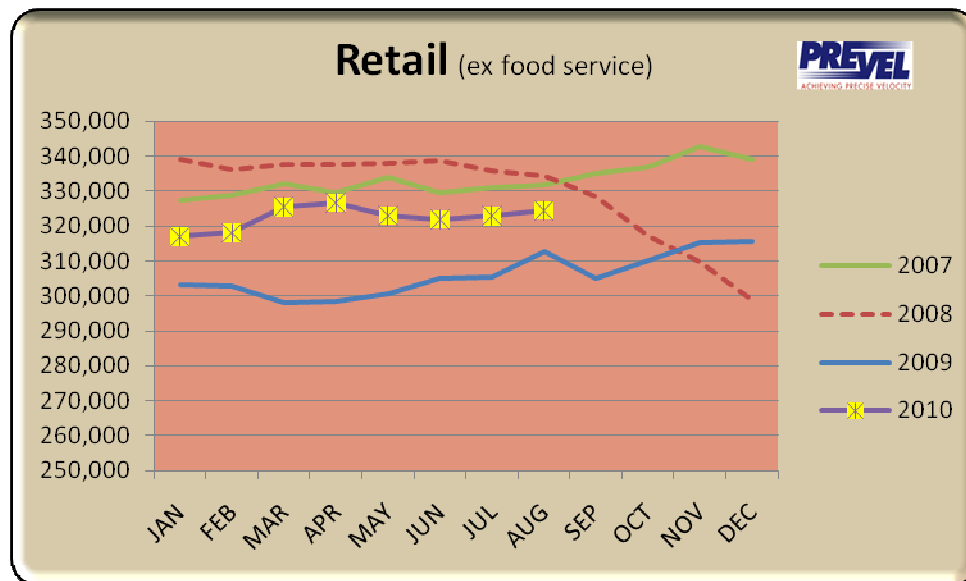


**Unfilled Orders to Shipments Ratio:** This indicator of delivery lead times continues to improve. Some early stage supply chain companies (steel and foundries) are stretching delivery promises. A continued improvement in orders and capacity utilization should soon provide the confidence necessary to expand production rates.

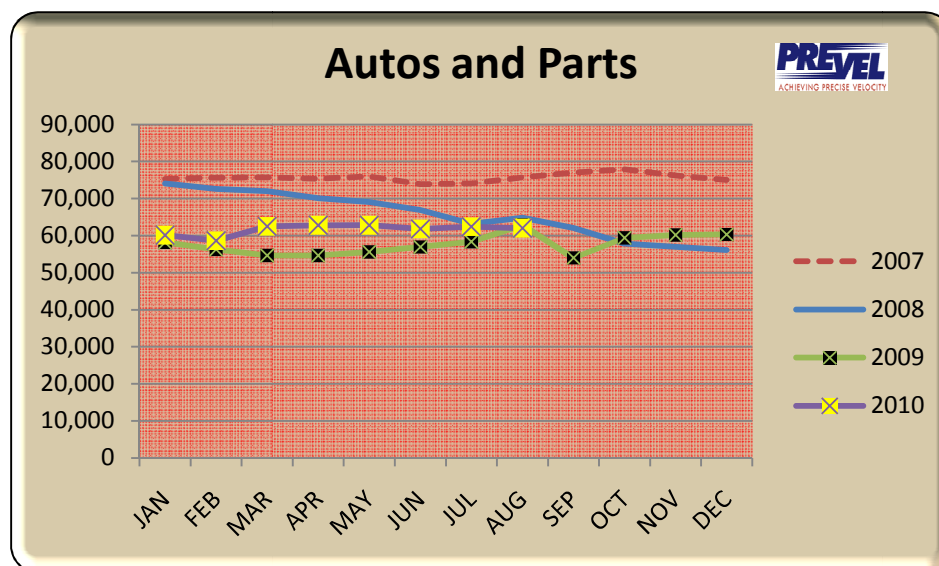


**Inventory** increased again in July, but the amount was reasonable given the level of shipments. The ratio of inventory to shipments continues to decline, although the absolute level is high by traditional standards. The claim that recent growth in orders has been a result of inventory restocking is refuted by this measure. Consumption of inventory in the form of shipments exceeds purchases.

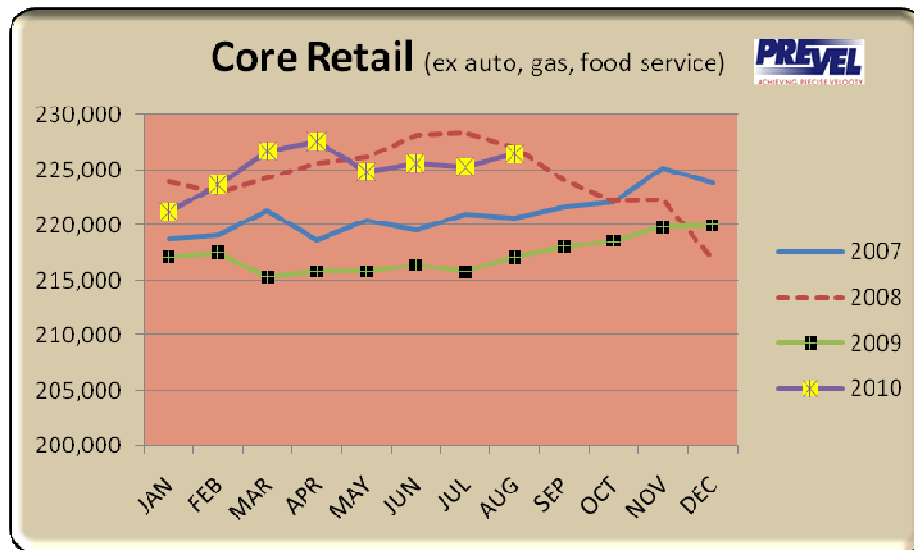
## Retail Data (August – Advanced Estimate)



**Retail Sales:** Retail increased modestly for a second month. Year over year comparisons remain strong. The early summer retrenchment seems to have been reversed. This is another argument against a double dip.



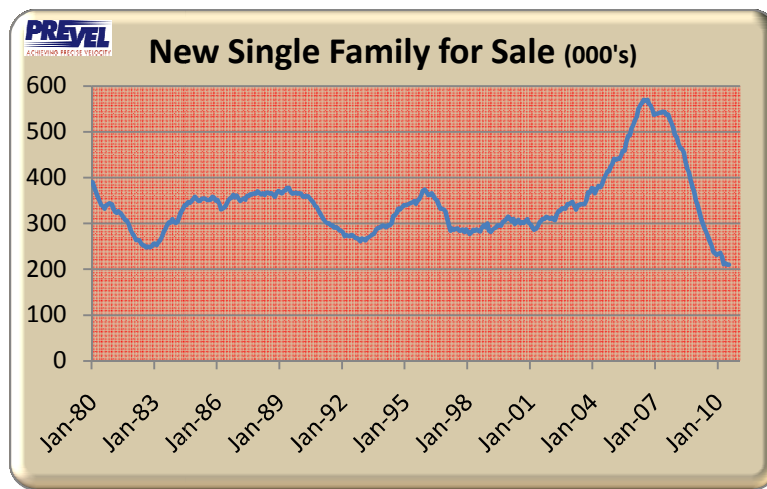
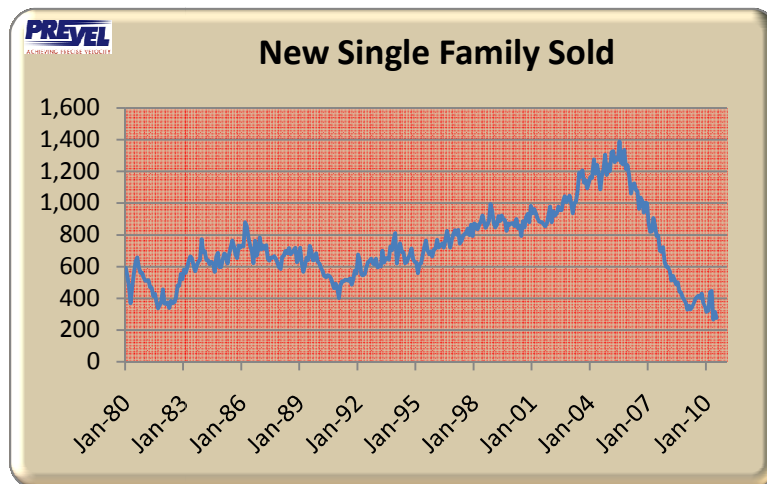
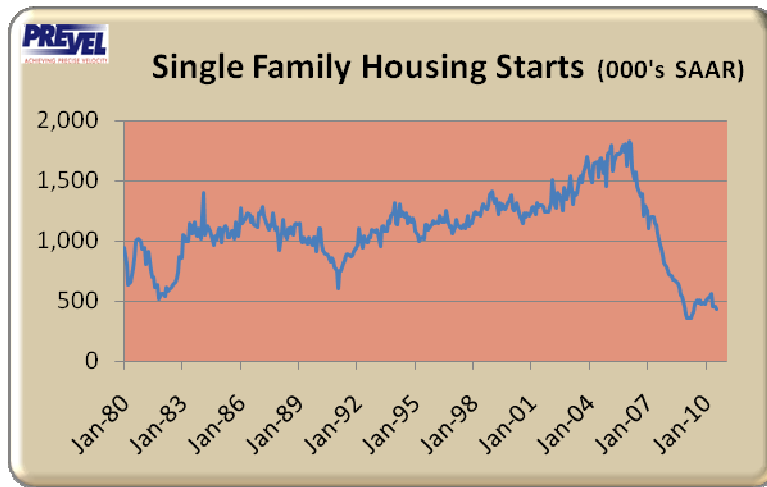
Activity in the **auto industry** declined slightly (0.7% decline). It looks like there is a new normal in the auto industry until something fundamental changes in the overall economy. Most likely this reflects the consumer view of their personal balance sheet battered by reduced home value.



**Core Retail Sales (excluding food service, autos, gas):** The August core retail performance improved slightly (0.5%) after a decline in July. The summer fade has started to move forward again. This may be a bump from back to school buying, but it is welcome all the same. The level of retail sales is approaching the record of mid-2008.



## Housing:



Housing activity remains depressed. Unsold inventory of new single family homes is at an all time low. The only explanation of the slow sales and starts is that the “phantom inventory” of homes in foreclosure is serving to satisfy the demand caused by new household formation. There are also a variety of subtle factors outside the standard measures that can also influence activity. One is the return of illegal immigrants to their home countries. Eventually this segment of the economy must gain some steam for the economy to thrive.

## About Prevel and The Durable Goods Report

Prevel Technology provides business consulting and information technology tools in support of high performance organizations. Our focus is on manufacturing and telecom, and through our business partners we support health care and other high-demand business environments.

The goal of the Prevel 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 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.

### About the Author:

John Layden serves as CEO of Prevel Technology, a management consulting and technology consulting firm serving manufacturing, distribution, and their supporting technologies. Prevel has developed a suite of high-performance real-time applications systems in support of their client industries.

Prior to launching Prevel, 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 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 advisory services of Prevel retain the practical, no-nonsense approach familiar to world class operating executives. His operating roles 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, Ball State University, and others. He can be reached at [jlayden@preveltech.com](mailto:jlayden@preveltech.com) or 317-842-6417.



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