



The Durable Goods Report

August 2010

Manufacturing Data Release of 8/3/2010 (June Preliminary)

Employment Data Release of 8/6/2010 (July Preliminary)

Retail Data Release of 8/13/2010 (July 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 & Retail Summary			
	Current Mo	Prior Mo	Prior Yr
New Orders-Durable	190,351	192,620	164,345
12 month moving average	183,373		182,442
% Change from Prior Year	0.5%		
Unshipped Orders - Durable	802,792	803,078	820,690
% Change from Prior Year	-2.2%		
Value of Shipments - Durable	195,123	195,799	175,996
12 month moving average	190,051		195,570
% Change from Prior Year	-2.8%		
Inventory - Durables	308,824	305,591	307,985
% Change from Prior Year	0.3%		
Retail Sales (July data)	323,328	321,908	305,299
12 month moving average	317,838		308,459
% Change from Prior Year	3.0%		
Inv to shipments ratio - Durable	5.60	5.61	6.33
Growth Index - Durable New Ord	1.049	1.058	0.903
Growth Index - Durable Shipmts	1.031	1.037	0.907
Growth Index - Retail (July)	1.015	1.024	0.984
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	14,592.4	14,453.8	1.0%	
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 % (June)	69.9	68.7	1.2	
Autos and Parts % (June)	60.8	57.5	3.3	
Machinery % (June)	71.7	70.1	1.5	
Durable Goods (\$ Mil Seasonally adjusted) June Data				
New orders	190,351	192,620	-1.2%	
Shipments	195,123	195,799	-0.3%	
Inventory	308,824	305,591	1.1%	
Unshipped Orders	802,792	803,078	0.0%	828 bil 9/2008
Total Retail (\$ Mil SA) July data	323,328	321,908	0.4%	
Autos and Parts	62,987	61,994	1.6%	
Gasoline	35,348	34,563	2.3%	
Core retail	224,993	225,351	-0.2%	
Employment (000's SA) July Data				
Non-Farm	130,242	130,373	(131)	138 mil 1/2008
Goods Producing	18,023	17,990	33	
Manufacturing	11,717	11,681	36	13.7 mil 1/2008
Construction	5,573	5,584	(11)	
Durable Goods Mfg	7,210	7,174	36	9.1 mil 6/2006
Housing (000s of Units SA) July Data				
Single family starts	432	451	-4.2%	
Single family sales (new)	330	267	23.6%	
Single family for sale (new)	210	213	-1.4%	570 in 8/2006

GDP: Q2 GDP numbers came in at a relatively anemic level of 2.4% seasonally adjusted annual rate. Subsequent revisions will likely be downward, based on the internal details of the sectors. This report spurred further speculation that we may be slipping into a double dip recession. The more appropriate question is whether we ever got out of the first one. It is possible that the brief period of growth was fueled mostly by government stimulus money which was focused on supporting government jobs (mostly teachers).

The primary effect of government intervention in markets is to keep capital invested in the wrong place. The positive effect of recessions is to push investment capital out of inefficient uses and into more productive activities. Bailouts take money from productive people and businesses and put it into unproductive people and businesses in an attempt to prevent this natural process. The stated goal is to “save jobs” but it really doesn’t do that. If GM had closed, Ford, Toyota, et. al. would have produced the vehicles. If the Chevy needed 2000 hours of labor and the Ford needed 1800 hours of labor, the only jobs saved were those due to the inefficiency of the Chevy production process or labor agreement (all hypothetical, of course). These jobs add no value if the cars are comparable.

The curiosity is that the current administration is repeating all of the Hoover/FDR economic errors for the period 1930-1940. Government spending, restrictive tariffs, increased regulation to punish the “greedy”, and expanded banking regulation (there are a few small exceptions).

Just like in the 30s it isn’t working. Government spending during that period prolonged and exacerbated the recession into the Great Depression. For those who believe that WWII solved the growth problem, think again. WWII created massive debt and the production jobs produced mostly durable goods that were destroyed or scrapped, rather than put to use in productive enterprise. The dramatic recovery in the US economy came after the war when government spending was dramatically cut and debt repaid. It was extended by the Kennedy tax cuts of 1962 and lasted through most of the 60s.

Globally the only economies that are currently thriving are those not dependent on government spending. This is further emphasized by the reports from China that suggest cutbacks in infrastructure investment, resulting in a slowing economy. This has been the foundation of the Chinese growth for two decades. It survived for this long only because of the high savings rate of the Chinese people.

Consider the following effects of “financial reform” legislation:

1. From Der Spiegel: CHANGE: Running For The Door: German Giants Flee Wall Street. “With expensive accounting rules, an increased threat of litigation and hundreds of millions of dollars in fines for some firms, the once prestigious New York Stock Exchange and other American markets have become unattractive to

Germany's biggest companies. Daimler and Deutsche Telekom have fled this year and the few remaining are likely to follow."

<http://www.spiegel.de/international/business/0,1518,706321,00.html>

Saturday, July 24, 2010

2. From Reuters: What's odd about this scenario?

German business confidence is soaring while U.S. consumer sentiment sinks.

Britain's second-quarter economic growth was almost twice as fast as expected, the strongest in four years.

Meanwhile, economists have steadily marked down forecasts for Friday's U.S. gross domestic product report.

<http://www.reuters.com/article/idUSTRE66O1P420100725>

The German economy is now growing more than 6%. They have steadily refused to add more stimulus to the economy, trusting instead to their business leaders to resolve their own problems.

Canada's economy has now replaced all the jobs lost in the recession. They had no stimulus spending or government intervention to save jobs. They also have no bank failures and no 3% down mortgages.

Connect the dots.

Taxes: Business taxes in the US are now the highest in the world. The debate on creative new tax strategies is once again misplaced. The tax system is absolutely Byzantine, the better to hide it from view. No business executive that I know understands it except at the most rudimentary level. Experts are unable to figure this thing out.

There are a few simple truths. Taxes of any kind damage the economy. The only question is to what degree the taxes are warranted by the "common good." Most of what is done in the name of the common good actually produces a net negative, but delivers uncommon good to the politician. When the effect of government on the economy directly and indirectly produces 15 million unemployed (an equal number underemployed), we are long past the time when this debate mattered.

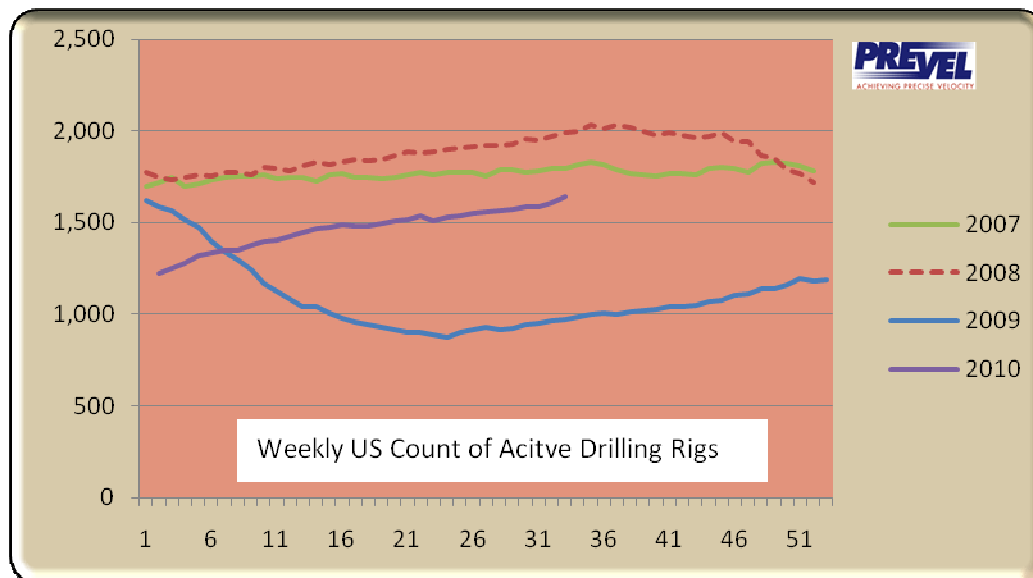
The problem with the US economy is with government spending, regulation, and intervention in markets, not deficits. If it were only about deficit spending we could fix it

The only way out of the current US fiscal mess is to generate a huge spurt of growth. This requires that more money stay in the private economy where it can be invested in new ideas and productive enterprise. The cost of regulation is a part of the hidden taxation. The requirement for business to report all spending over \$600 on a 1099 tax form is the most recent fiasco.

Does anyone actually believe that this will reduce cost or deliver any service? If so, you are lying to yourself, which is a much more serious problem than lying to me.



Energy: Despite the government interventions restricting drilling, the rotary rig count from Baker Hughes continues to increase. Offshore rigs in the Gulf also increased from 17 to 20. The industry once again proves its resourcefulness.



There are many more crude oil tankers being put into service despite flat demand worldwide. The speculation is that the Saudis are trying to store oil to hold it off the market and support prices. This probably isn't true. If true it won't work. The crude oil supply chain has too little storage capacity for it to work for very long. Expect prices to drop.

North Dakota (Baaken Oil Field) set a new production record last month.

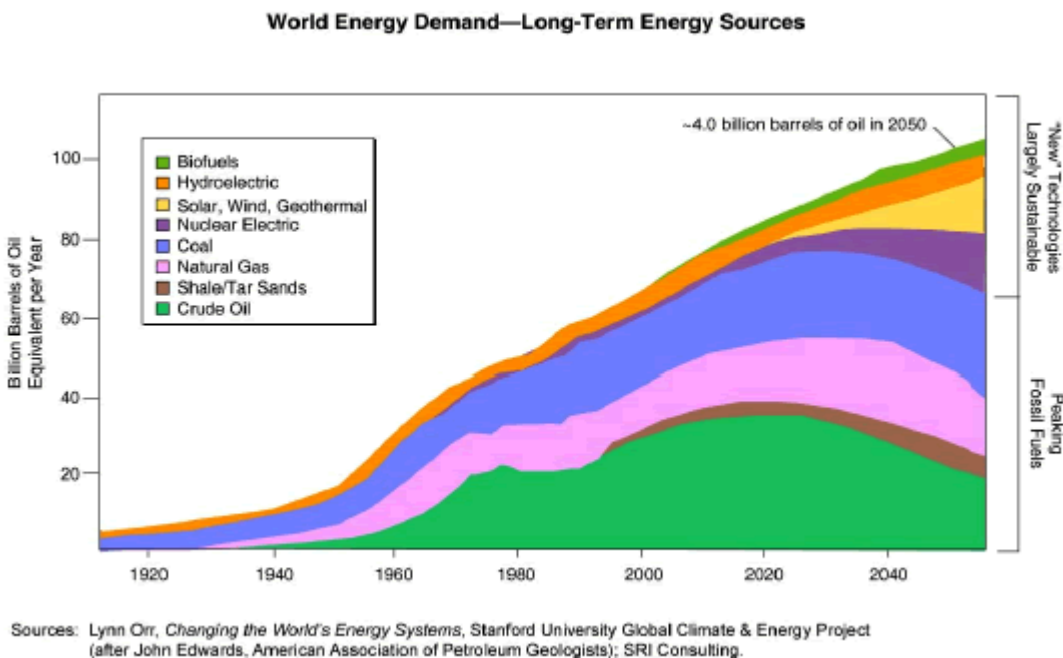
The following chart from the Stanford and SRI predicts relative contribution from energy sources through 2050. It shows what's wrong with our current energy philosophy. It predicts solar, wind and geothermal growing to about 10% by 2050, even though these technologies are not net producers of energy. Biofuels grow to about 2% despite the fact that we could get more energy by burning the biology rather than converting it.

The study shows peak oil in about 2025 (it's been 15 years away for the past 50 years), and declining natural gas after 2040. There is modest growth in nuclear power.

None of this is remotely practical. Oil, natural gas, coal and nuclear are the only realistic sources of energy for the US economy over the next 100 years. If some scientific breakthrough were to happen today that delivered a new prime energy source, it would take 30 years to grow to measureable proportions and 100 years to become significant.

At the moment there is no such technology. The most likely in the next 10 years is polywell fusion. Wind, solar and biofuels will never get to thermodynamic breakeven (this means that they are hobbies, not serious energy supplies). The proponents of ethanol and other biofuels should be indicted for fraud or worse. The only effect is to run up food costs with devastating effects on the world's poor. If the "Brazil Miracle" (ethanol from sugar cane) is such a good idea, why are they drilling in the Atlantic in their newly discovered (and huge) offshore fields?

I keep waiting for the man from La Mancha to come riding over the hill with Sancho Panza to slay the windmill dragons.



Consider this:

Y2Kyoto: Fools And Their Money

[Vancouver Sun:](#)

[BCAA spokesman Trace Acres] said a Honda Civic hybrid cost only \$290 more to operate over five years compared to its gas equivalent, whereas the Toyota Prius cost \$1,718 more to operate than its gas equivalent, the Toyota Matrix. Over a five-year period, the cost to own and operate a Honda Insight was \$38,326, a Toyota Prius cost \$40,324 and the Honda Civic Hybrid cost \$42,664.

Still, signs of progress. One model (out of 16 tested] has been found to produce actual cost savings over its gasoline powered equivalent!

The [Mercedes-Benz S400] cost \$145,262 to buy and drive over five years, compared to the S450 gasoline model, which cost \$150,622.

Because they sell it for less. It's being subsidized more than the others.

Global Warming: There is still an attempt in the US media (possibly in congress) to sell the idea of cap and trade legislation. It is still without any scientific merit.

The reporting over the past couple of months has been about record high temperatures. US, Europe and Russia have seen the most coverage. What's missing is any kind of serious analysis. A few examples will help.

In the US there have been relatively high temperatures east of the Mississippi river. Above average temperatures, but not records, have been widely reported. But the West has seen a different story. Record and near record cold has been reported along the entire west coast. Fully 2/3 of the continental US have experienced below average and some areas are far below average (San Diego is the coldest in 50 years).

The same applies to Russia. About 2/3 of Russia is below average or far below average, even though the area from Moscow west has been warmer than normal.

At the same time there has been a devastating cold wave in South America. Maybe you missed the headlines...oh, wait. There weren't any.

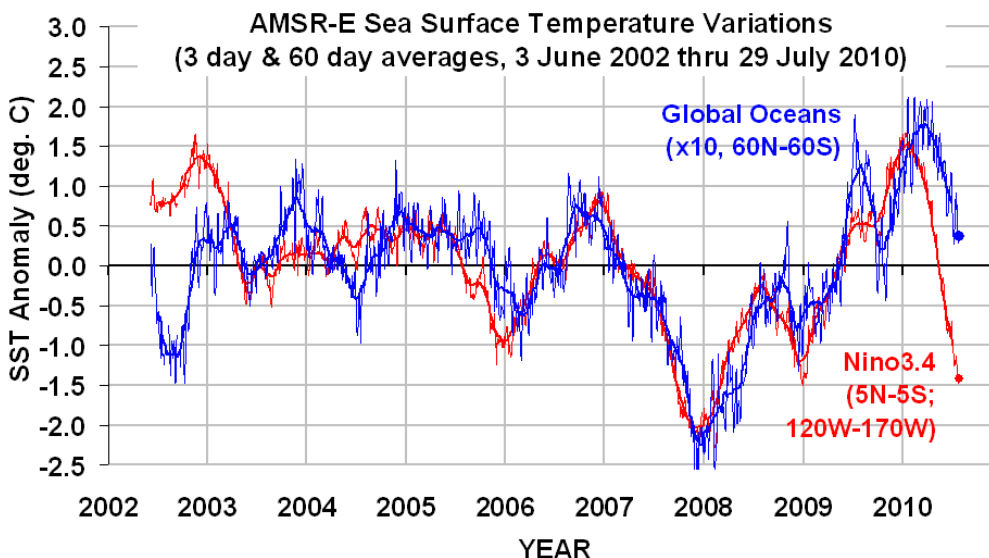
- Six million fish killed by the cold in Bolivia
- Bolivia had the first ever full week with temperatures below -5C.
- Tens of thousands of cattle die in Argentina
- Four hundred people have died from the cold in Peru.
- Antarctica set an all time record low temperature (-50.2C on July 19).
- Arctic has the coldest summer ever recorded.
- Arctic has about average sea ice area, but over 70% exceeds two meters thick (vs. less than 50% recently).
- All time record sea ice extent in the Antarctic.

A recent AP article claimed global warming has caused 17 countries to report record high temperatures in the past 6 months. The article repeated the recent observation that the first 6 months of 2010 set a record high in the US, and ignored the observation that the 12 months ended in June was a near record low. Reality is a bit different.

National boundaries are never a useful measure of record highs. Boundaries move over time and new countries are sometimes formed. Further, if there are 200 nations, steady climate conditions and normal weather variation, how many record highs would you expect on average? In the first year of measurement you should get 200. It would decline slowly after that depending on the magnitude of the normal weather variation.

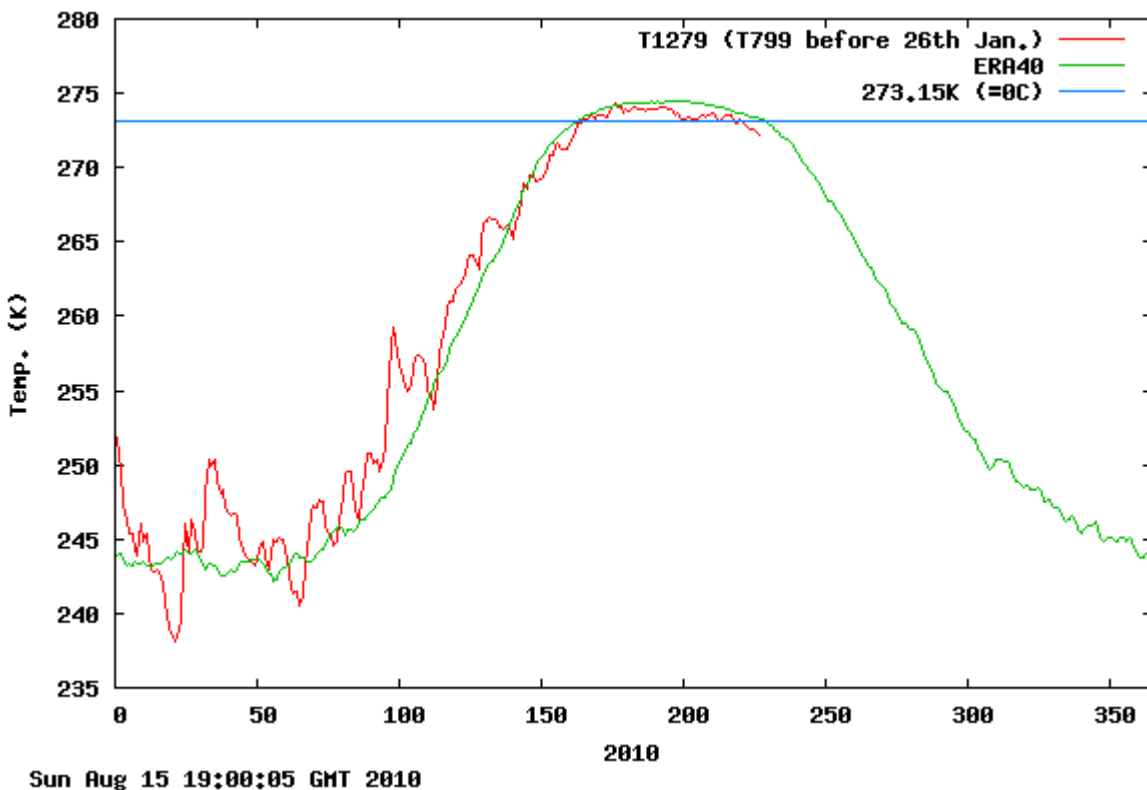
That's why continental records are the more common method. Anthony Watts (wattsupwiththat.com) calculated that in steady state we should see 4 continental high records per year. The last continental record high was set in 1972 (Antarctica where continuous measurement only started in the late 50s). Excluding Antarctica, it was in the 1930s. We should be seeing more frequent examples at steady state. This suggests (but doesn't prove) climate cooling.

We've just finished a cyclical el Nino event. So our temperatures have been elevated from the average. The cooling cycle (la Nina) has started and it looks like a big one. Equatorial sea temperatures (red line) are a good predictor of global average sea surface temperature (blue line). This chart from NASA's Aqua Satellite tells the story (thanks to Dr. Roy Spencer for the compilation).



The following chart from the Danish Meteorological Institute shows the daily temperature in the Arctic. Arctic summer (above 80 degrees north, above freezing) is normally about 90 days long, but they got cheated this year. Temperatures dropped to

freezing about mid-summer, and it looks like it's now over for good. This is now the coldest summer ever recorded in the Arctic.



There is increasing evidence that we are now in a thirty year cooling cycle. If you're involved in weather sensitive production, be ready for cooler and wetter weather.

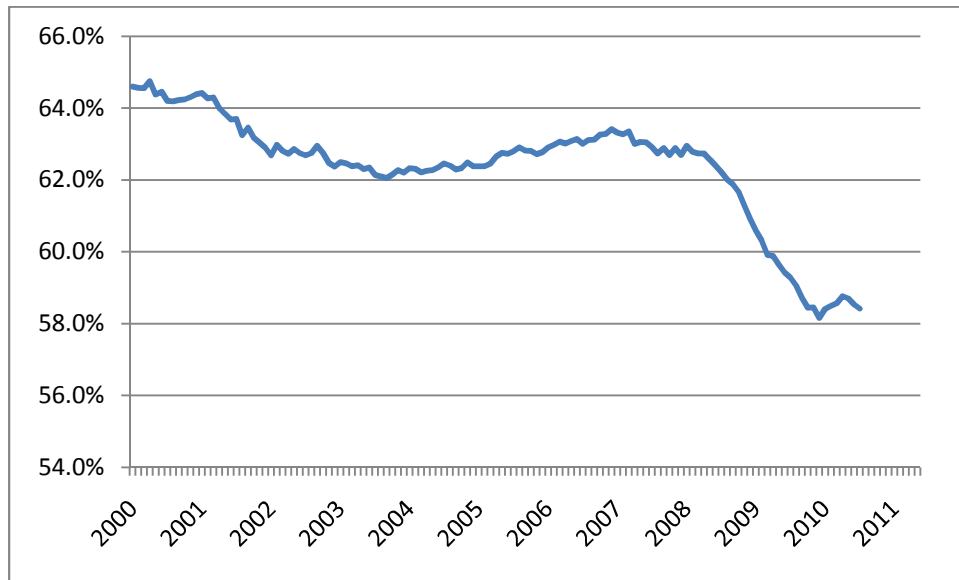
Employment: The picture remains spotty in the latest monthly report. The overall trend is down with a July loss of 131,000 jobs. Reduction of census jobs was partly responsible.

Private sector jobs grew modestly. Durable goods added 36,000 jobs after a revised loss of 5,000 in June.

Stated unemployment remained at 9.5% but the measure is being routinely challenged due to the number of discouraged workers. The deficiencies of the current unemployment rate are well known and widely discussed. But what measure is better?

Consider this as an alternate measure: The non institutional population of the US was 237,890,000 last month. Civilian over 16 and employed population was 138,960,000. The % employed was 58.4%. Here's the history of the measure since 2000. The dramatic collapse happened in late 2008 as advertised, but the problems really started

in January 2007. It also shows that we are nowhere near a real recovery. Since 1/2007 the population has grown by 7.2 million while employment has declined by 7.1 million. In the past few months we have begun to slip backwards.



Manufacturing employment peaked in 1979 at 19.6 million. It has since declined from two causes: 1) productivity improvement and 2) outsourcing. For the most part the outsourcing has been local. GM outsourced its IT operations to EDS in the late 1980s which caused a decline of manufacturing jobs and an increase of service jobs overnight. But everyone reported to the same office on Monday morning. Total jobs remained unchanged. Productivity improvements actually eliminate jobs.

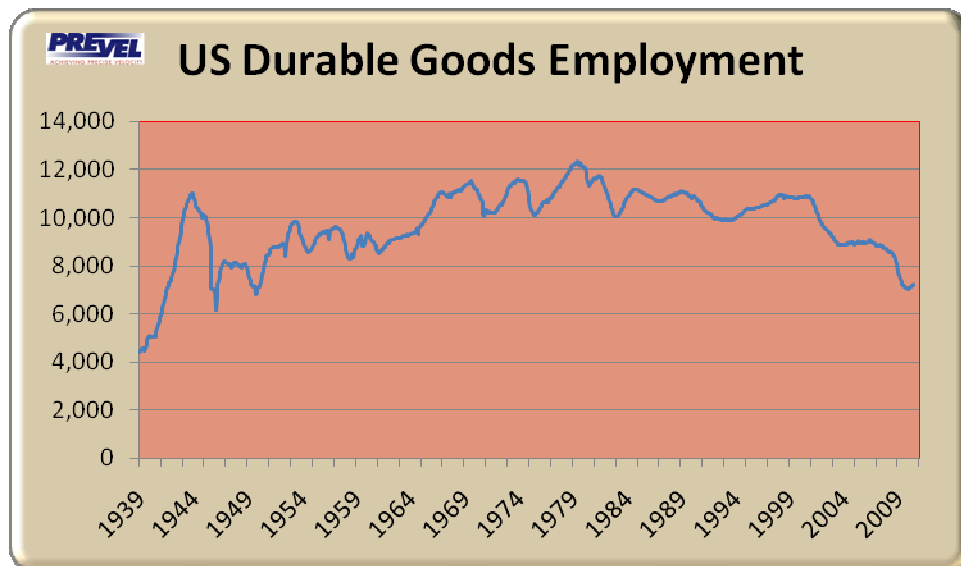
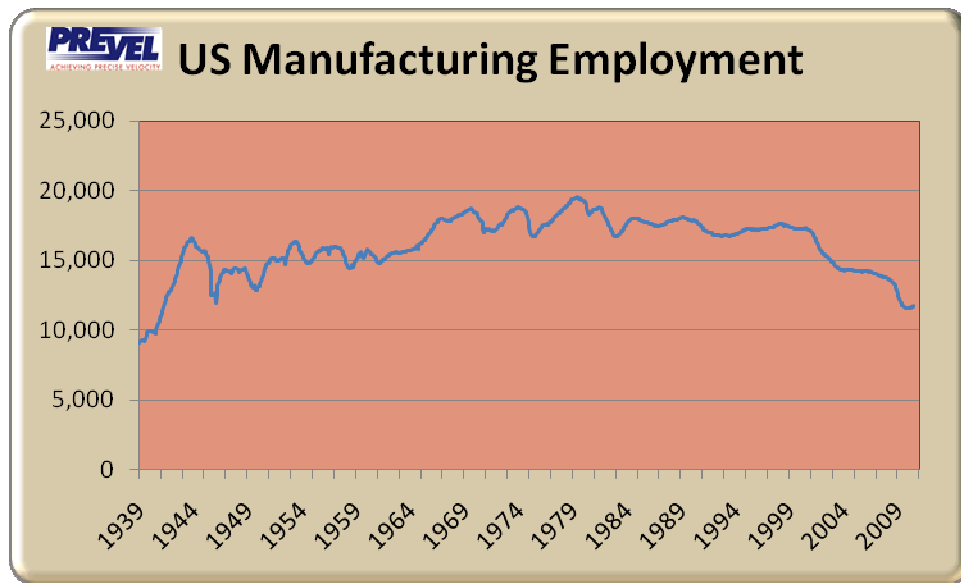
The complaints about sending manufacturing offshore are largely unjustified. Look at the period from 1994 to 2000. The reversal of the downward trend in jobs was a direct result of NAFTA, which was supposed to shift manufacturing jobs to Mexico. In fact there was a surge in jobs both the US and Mexico, just as the economists had predicted. The vast majority of the job reduction since 1979 didn't move, they were just eliminated. At the same time our industrial production increased. That's what productivity looks like.

The question of lost jobs from productivity improvement presumes that the alternative is not to lose the jobs and simply have lower productivity or slower productivity growth. That's a false choice.

The options are 1) grow productivity rapidly or 2) stand by while someone else grows productivity rapidly. In the former case people are put out of work and thrown into a thriving economy to find something else to do. In the latter case people are put out of

work when companies fail from foreign competition so the workers are put out of work and thrown into a failing economy to find something else to do.

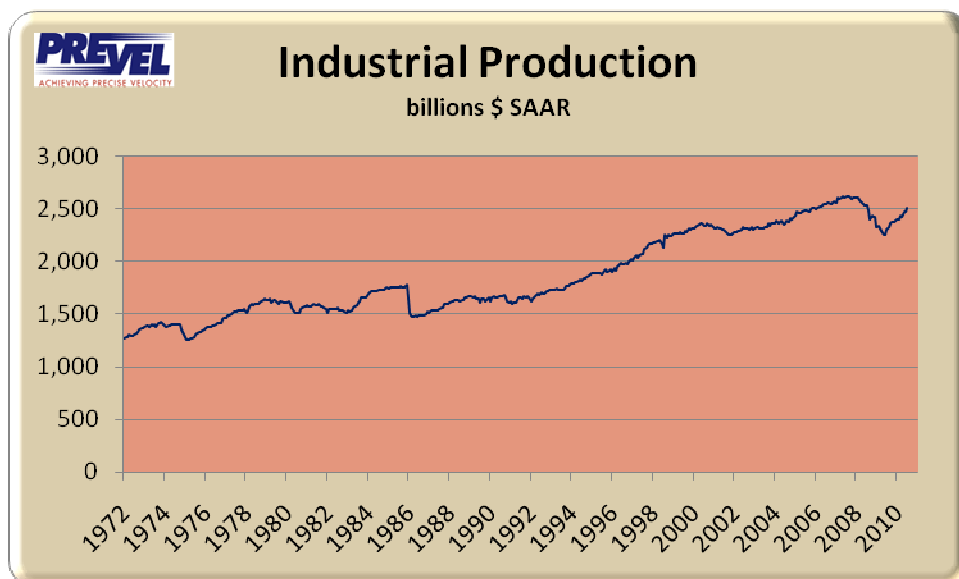
Over the last 10,000 years (since the introduction of agriculture) these have been the only choices.



Summary and Sector Analysis

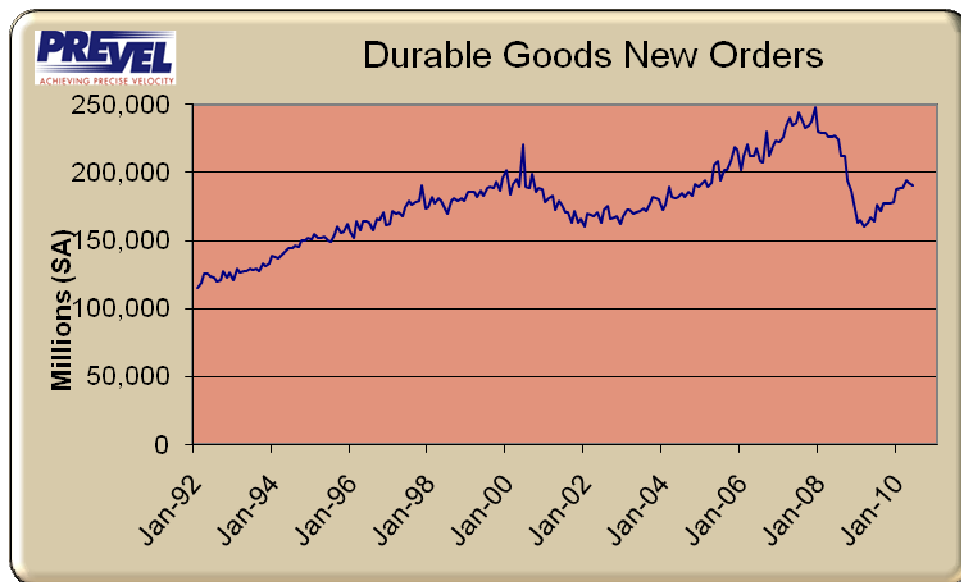
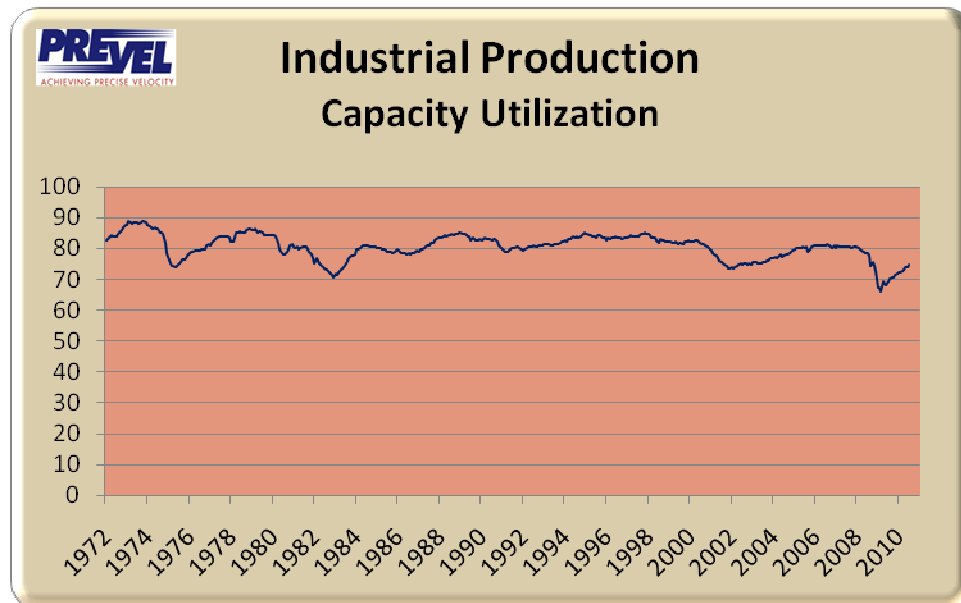
Industrial Production (excluding industrial supplies) increased by 1.8% in July after a revised -0.2% decline in June. This is the only indicator in positive territory in the economic statistics currently available. The fact that we are 9.2% above 2009 is scant consolation since 2009 was a complete train wreck. We still have a bit to go to get back to the \$2.6 trillion peak.

Industrial Production \$b SAAR				
Year	Mo	Ind Prod - Value of Prod	Chg from Prior Pd	Chg from Prior Year
2009	5	2,257.3	-1.6%	-11.2%
2009	6	2,249.1	-0.4%	-11.3%
2009	7	2,297.3	2.1%	-9.3%
2009	8	2,328.4	1.4%	-6.2%
2009	9	2,364.4	1.5%	-1.3%
2009	10	2,377.5	0.6%	-2.5%
2009	11	2,369.6	-0.3%	-2.3%
2009	12	2,380.9	0.5%	-1.7%
2010	1	2,401.7	0.9%	3.2%
2010	2	2,399.2	-0.1%	2.6%
2010	3	2,429.8	1.3%	5.0%
2010	4	2,419.7	-0.4%	5.5%
2010	5	2,470.8	2.1%	9.5%
2010	6	2,466.1	-0.2%	9.6%
2010	7	2,509.6	1.8%	9.2%



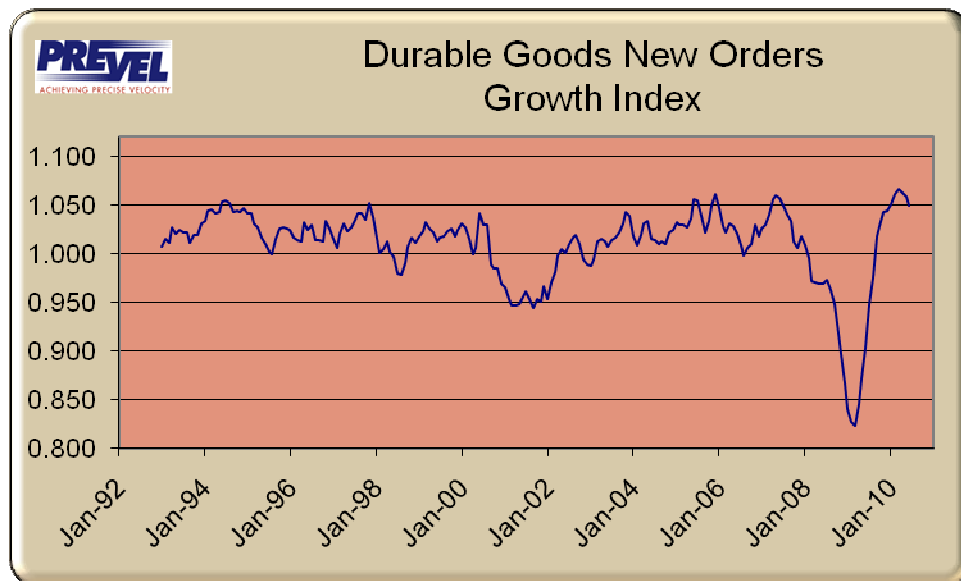
Capacity Utilization:

Industrial production capacity utilization increased to 74.8% from 74.1% in June. This measure remains well below the 80% level that is considered the trigger point for new investment in plant and equipment. The auto industry recovery was an important component.

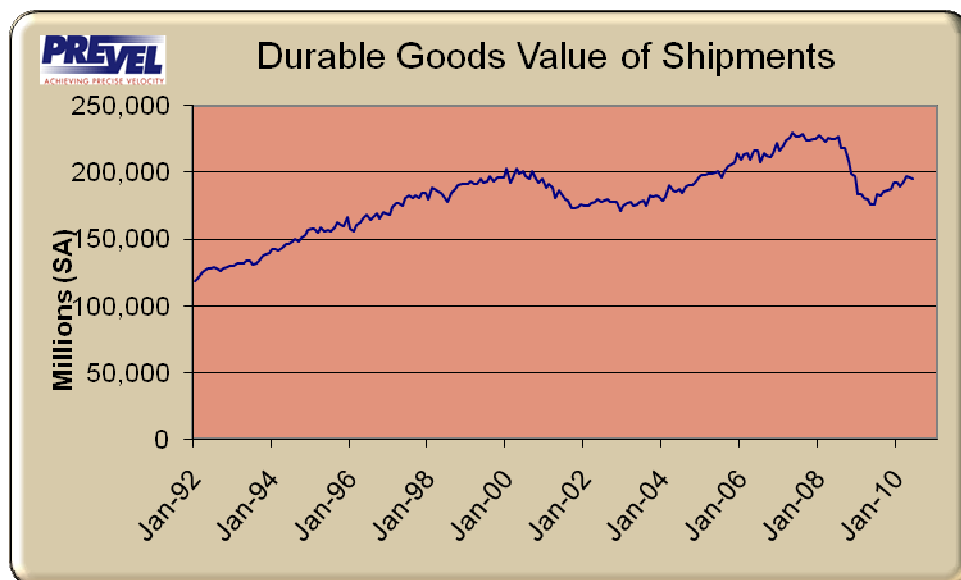


Durable Goods New Orders: For the second consecutive month durable goods new orders declined, this time by 1.2%. The causes of this reversal include the weakening economy, but some of the problem is structural in the supply chain. Nissan lost 15,000 units of production because their supply chain could not respond to their earlier

increases in demand. Their demand pattern may have been tied to Toyota's travails more than a general recovery in consumer demand. (see the retail charts).



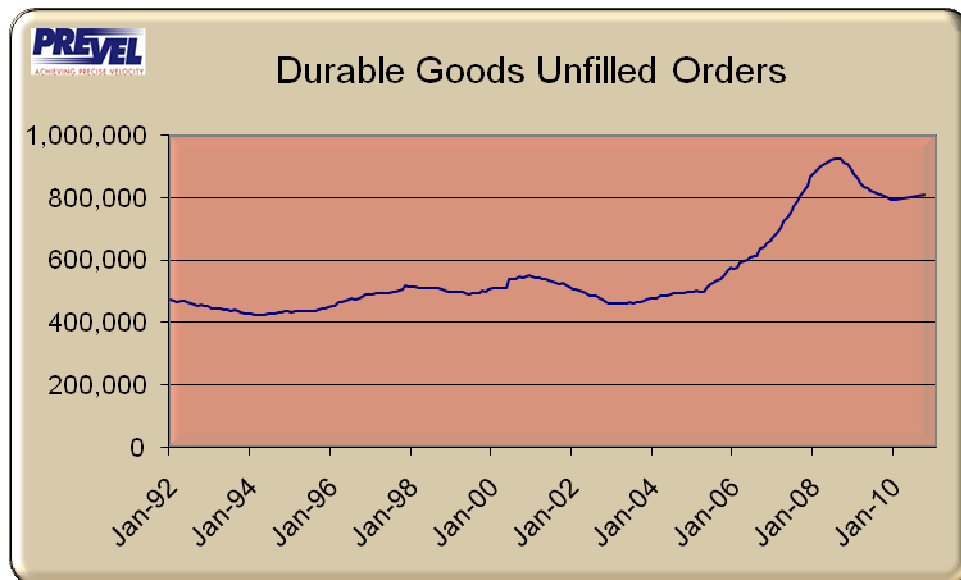
Durable Goods Growth Index (3mma/12mma): This measure of the acceleration rate of new orders has now declined for three consecutive months. This trend is a serious indicator of a slowing growth rate. The positive news is that the value of the indicator is still high by comparative standards.



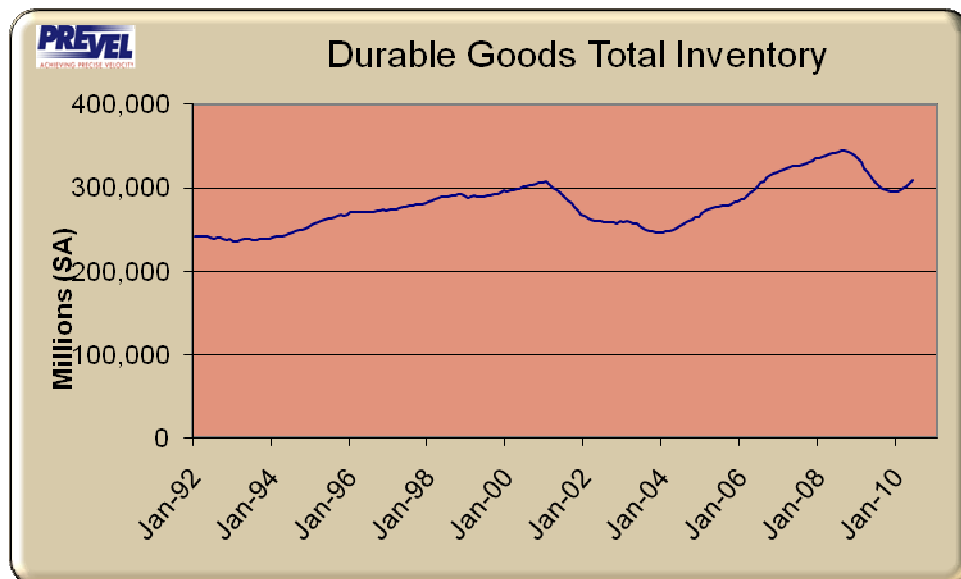
Durable Goods Shipments: Shipments declined by 0.35%, the second month in a row of modest decline. The book to bill ratio is at 97.8% suggesting a possible further

reduction in production levels. At the very least there is no sign of pressure for increases in production rates.

Backlogs:



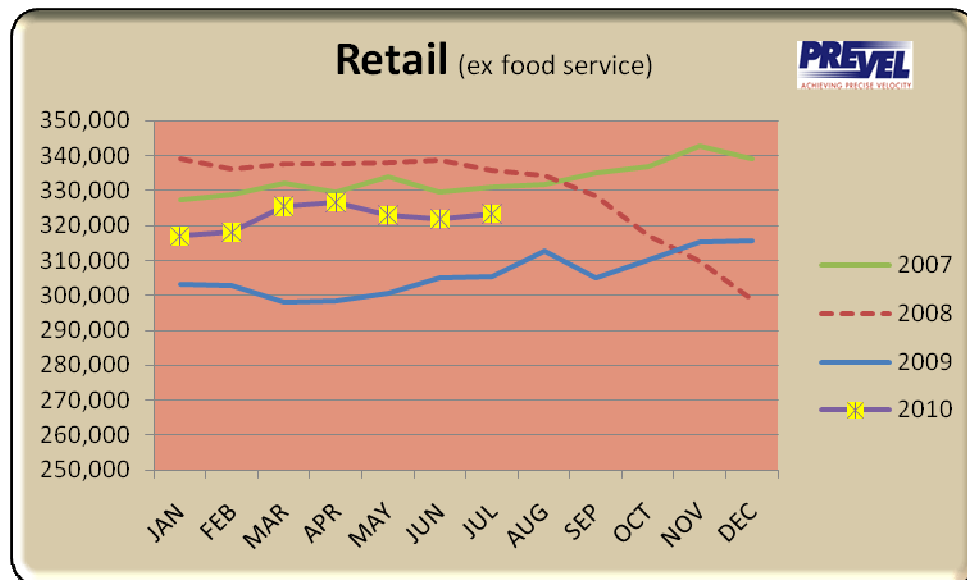
Durable Goods Unfilled Orders: Remained steady at approximately \$800 billion. Not much happening here.



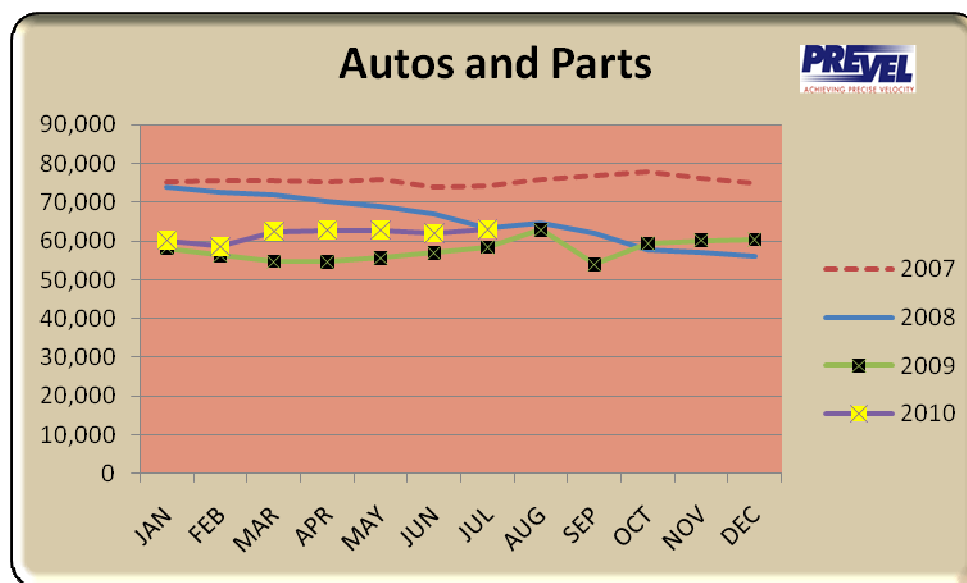
Inventories increased by 1% for the third consecutive month. This is a potentially serious issue. If the new orders in the supply chain have been depending on inventory build, it will reverse rather quickly. For next month we will update the analysis of

inventory by stage of production to see if this is a potential stall or just additional friction in the supply chain.

Retail Data (July)

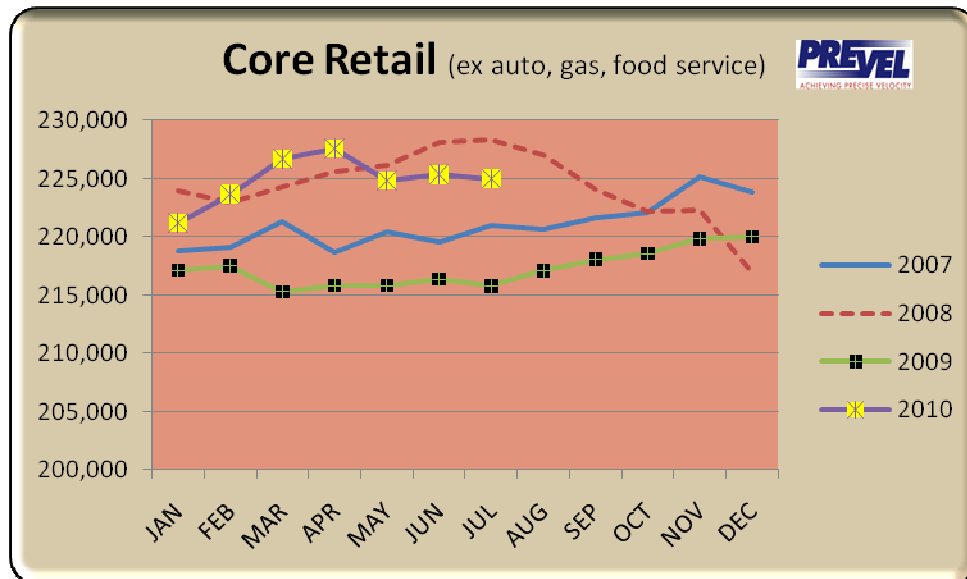


Retail Sales: Retail increased modestly after two consecutive months of decline. The current level of consumer sentiment doesn't offer much expectation of major growth in the near term. What looked like a recovery in the early part of the year has now faded.



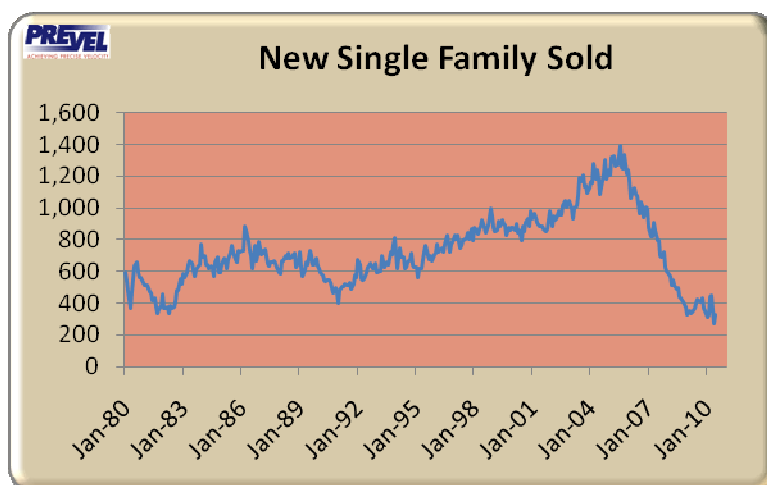
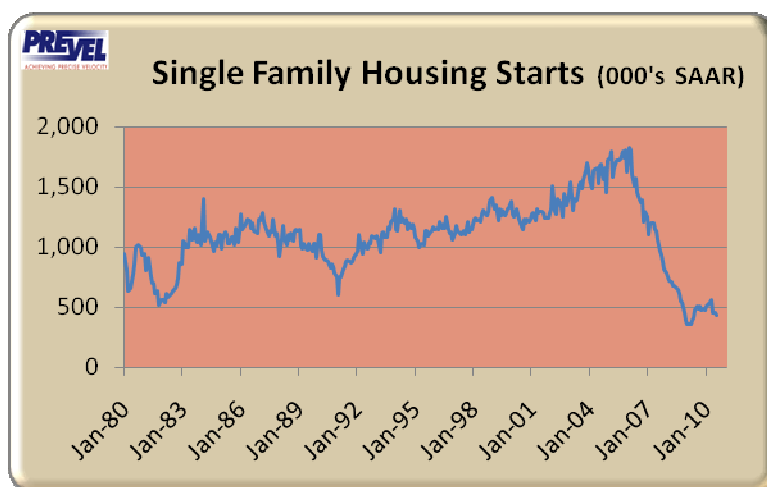
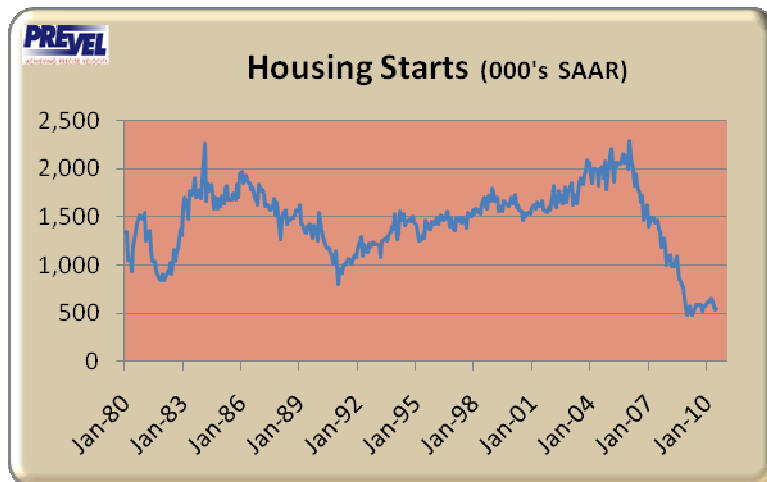
Activity in the **auto industry** showed a weak improvement. It looks like there is a new normal in the auto industry until something fundamental changes in the overall

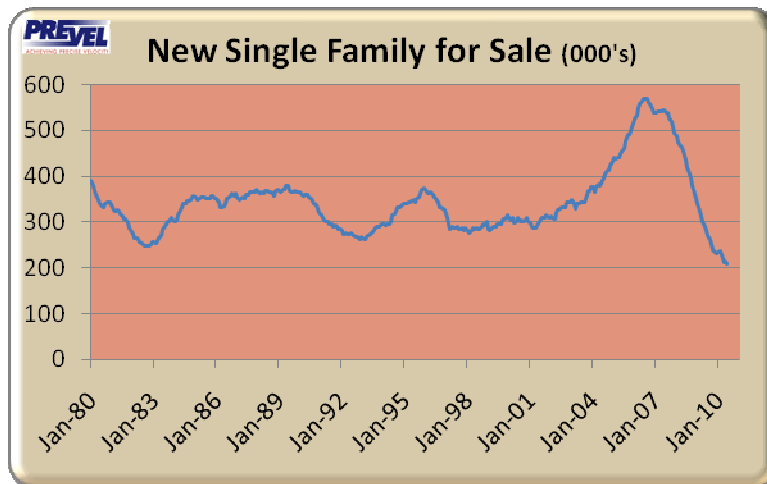
economy. Most likely this reflects the consumer view of their personal balance sheet battered by reduced home value.



Core Retail Sales (excluding food service, autos, gas): The July core retail performance declined slightly. It appears that the chances of a robust recovery have faded.

Housing: Still no sign of any improvement by any measure in the housing industry. The current levels of activity remain below what is required for the long term. Two factors seem to be extending the current below normal levels. First is the decline in home ownership rate now trending downward. Second is the elimination of the upgrade market, which saw a steady stream of McMansion construction. Ultimately we will need to be much closer to 1 million units per year rather than the current half million. The excess inventory has been consumed. All that remains is for the home ownership rate to stabilize and for consumer confidence to recover. Not a small order.





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 or 317-842-6417.



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