The Durable Goods Report

November 2011

Executive Summary of the US Economy

Manufacturing Data Release of 11/3/2011 (September Preliminary)

Employment Data Release of 11/4/2011 (October Preliminary)

Retail Data Release of 10/14/2011 (September Advanced)

Industrial Production Data Release of 10/15/2011 (September Advanced)

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

John E. Layden

By the Numbers

Durable Goods Key Measures			
	Current Mo	Prior Mo	Prior Yr
New Orders-Durable	201,030	202,215	202,576
12 month moving average	196,825		188,914
% Change from Prior Year	4.2%		
Growth Index - Durable New Ord	1.025	1.012	1.042
Unshipped Orders - Durable	886,263	878,731	816,371
% Change from Prior Year	8.6%		
Value of Shipments - Durable	200,205	201,505	198,431
12 month moving average	198,049		193,986
% Change from Prior Year	2.1%		
Growth Index - Durable Shipmts	1.015	1.011	1.027
Inventory - Durables	365,646	365,291	315,405
% Change from Prior Year	15.9%		
Inv to shipments ratio - Durable	1.83	1.81	1.59

US Economy Key Measures			
	This period	Last period	Change
GDP Q3	15,198.6	15,012.8	1.2%
Industrial Production Sept Data	2,564.0	2,555.3	0.3%
Capacity Utilization % Sept Data	77.4	77.3	0.1
Manufacturing %	75.7	75.5	0.2
Durable Goods %	74.3	74.0	0.3
Primary Metals %	73.6	73.8	(0.2)
Autos and Parts %	65.1	64.8	0.3
Machinery %	79.5	79.9	(0.3)
Durable Goods ($Mil SA) Sept Data			
New orders	201,030	202,215	-0.6%
Shipments	200,205	201,505	-0.6%
Inventory	365,646	365,291	0.1%
Unshipped Orders	886,263	878,731	0.9%
Retail ex Food Srv ($Mil SA) Sept Data	353,826	349,905	1.1%
Autos and Parts	68,793	66,371	3.6%
Gasoline	45,681	45,124	1.2%
Core retail (ex auto, gas)	239,352	238,410	0.4%
Groceries	97,931	98,210	-0.3%
Employment (000's SA) Oct Data			
Civilian employed (Household Survey)	140,302	140,025	277
Civilian not employed (HS)	99,967	100,046	-79
Non-Farm (Establishment Survey)	131,516	131,436	80
Private (ES)	109,537	109,433	104
Government (fed, state, local) (ES)	21,979	22,003	-24
Goods Producing (ES)	18,094	18,104	-10
Manufacturing (ES)	11,759	11,754	5
Construction (ES)	5,525	5,545	-20
Durable Goods Mfg (ES)	7,321	7,310	11
Housing (000s of Units SA) Sept Data			
Total housing starts	658	571	15.2%
Single family starts	425	417	1.9%
Single family sales (new)	313	296	5.7%
Single family for sale (new)	163	162	0.6%

US Economy:

Industrial Production

Industrial production increased 0.3% in September and is now 4% above the same period last year.

Retail:

Retail sales increased 1.1% in September to a record $353.8 billion.

Employment:

The survey of employers showed an increase of 80,000 jobs in October. The household survey showed stronger results for a third month. Total employed increased by 277,000 in the month while total not employed declined by 79,000.

Durable goods employment increased by 11,000 after two months of declines. Still 1.7 million below the peak at the end of 2006.

Durable Goods:

Durable goods new orders decreased by 0.6% in September. Inventory positions continue to deteriorate relative to shipments.

Housing

No relief for new housing construction. Starts and sales increased in September, but the numbers are still so low that it makes little difference. Review the charts to get the best overview of this market.

Random Thoughts:

- Exposing climate change foolishness is no longer any fun. A Berkley climate project (BEST) headed by Dr. Robert Muller put out a press release saying that climate change was real and skeptics should give up. Within 48 hours a co-author, De. Judith Curry put out a separate press release saying their analysis showed no such thing, and actually supported the notion that there has been no warming in 13 years. Within 72 hours an independent analysis of the same data exposed flaws in their method of data handling.
- But just when you think the world has figured out the scam we get this: Henry Waxman (D. CA): 'We cannot repeal the laws of nature. If we continue to do nothing, the floods, wildfires, heat waves and extreme weather that have wreaked havoc across our nation - at a cost of tens of billions of dollars annually - will increase and intensify. And future generations will never understand why we squandered our shrinking opportunity to protect the planet."
- Between 1996 and 2010 there were 146,000 jobs created in the law profession. In that same period there were 614,000 law grads. Hmmm.
- Availability of critical drugs is now at crisis levels. Chemo drugs get the most attention. The shortage has been caused by a series of regulations that make many drugs unprofitable, and make it difficult to balance production capacity. The Obama administration has launched an investigation of the industry. Did I hear that right? Are they really going to investigate themselves? Oh, wait. If course not. The purpose of these investigations is to find the optimal way to blame the victim of the regulation for its predictable consequences.
- Niall Ferguson has a great presentation on the TED website. He describes the six "killer apps" of prosperity and shows how they caused the dominance of Western economies and culture. He describes how the "killer apps" can be "downloaded" by anyone. Asia is starting to do so. The six are:
    - Competition
    - The Scientific Revolution
    - Property Rights
    - Modern Medicine
    - Consumerism
    - Work Ethic

  He also asks the haunting question on whether a nation or group of nations can delete the apps as seems to be happening in the EU and even the US.

- The Keystone pipeline decision will be delayed until after the election. That means the pipeline is dead. Canada is now looking to China as the customer for the Alberta oil. China is actively helping Canada figure out how to best exploit the resource. The

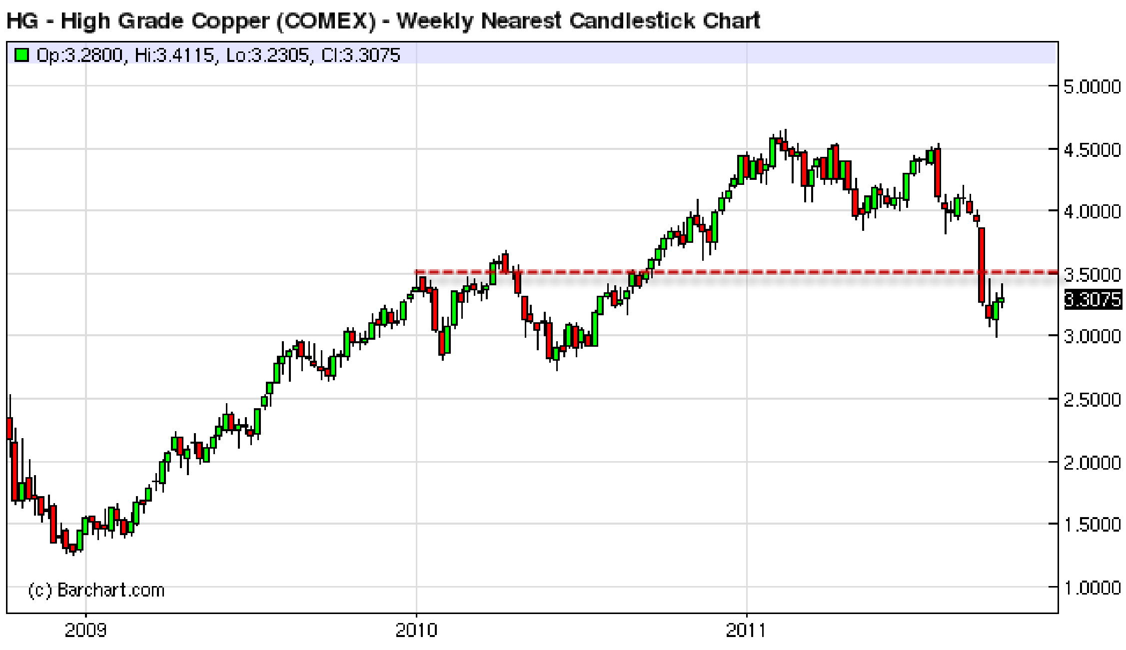
US has dithered for half a decade and tried to pass laws to outlaw the use of the oil on the grounds it was too hard to process and produced pollution in the process.

- Anadarko has announced a new oil field in Colorado that may challenge the Baaken (ND) and Eagle Ford (TX). One billion barrels plus puts it on the list of super mega fields.
- We hear that we should have another stimulus to "put the teachers back in the classrooms." But are there any cases where kids don't get taught due to a lack of teachers? I don't hear of a single example of that happening.
- "Rebuild infrastructure" is another code word for pork. The only case where infrastructure investment is productive is where existing infrastructure is a constraint. That would include coal fired power plants. Holding your breath is not advised.
- Green groups say there's just too much poop on top of Mount Everest, not to mention trash and even corpses. Eco Himal is asking the Nepalese government to put port-a-potties on the famous peak, which they say has become fouled by generations of climbers who leave deposits that can last forever given the climate. This was from NBC-New York, not the Onion. Honest. How would you get a p-a-p to work in those temperatures? Do they have a company ready to service the units?
- *WaPo* Fact Checker Grudgingly Admits: Republicans Right to Say 70% of Those Hit by Millionaire Surtax Would be Small Business Owners.
- When people protest that 20% of A own 80% of B, they're complaining about arithmetic. In any natural (random) distribution, the bell shaped curve produces an inevitable 80/20 cumulative distribution. Are they complaining that arithmetic is unfair to them? Are they seeking some remedy or relief such as the repeal the laws of arithmetic? The scary thing is that there are so many college grads and profs are involved is this ridiculous debate.
- Whenever the distribution is distorted, as in the 80/5 distortion in tax contributions, it's because laws and regulations have distorted the natural tendency of markets.
- 80/20 might seem unfair, but any attempt to fix it makes it worse. As soon as humans get involved in manipiulating anything, insiders begin to take advantage of the distortions.
- China meltdown is now in progress. The wealth explosion was driven by escalating property values. Values have now declined by 30% and some are predicting 50%. Manufacturing is also starting to retrench. One city near Shanghai has had 90 manufacturing executives disappear. Three have attempted suicide. The cause is said to be the common practice of underground loans at extreme rates that were dependent on continued high growth.
- An economics professor at a prominent Chinese university has listed the five reasons the Chinese economy is a house of carde:
    - Total Chinese debt (province plus national) is $3 trillion and government owned enterprises add another $16 trillion.

  - The official inflation rate of 6.2% is actually 16%.
  - Serious excess capacity in the economy with consumers accounting for only 30% of GDP.
  - Official GDP growth rate of 9% is fabricated. The actual rate is negative 10%. More than 70% of 2010 GDP was investment in unneeded infrastructure which is already over capacity.

His conclusion: meltdown very soon.

- Telegraph (UK): "Also last night, the chairman of the supervisory board of China Investment Corporation, the country's sovereign wealth fund, put further distance between China and the Euro-zone bail-out, saying that Europe's bloated welfare state meant that people did not work hard enough."
- President Obama accused Americans of being soft and lazy for the past couple of decades. One writer compared this to the inevitable stage two of all socialist economies. When high tax rates cause a decline in output, the elites blame the proletariat for not working hard enough to produce the wealth needed for redistribution. The most famous example of this failed philosophy is the Soviet Union of the 1920s and 1930s. The EU will follow soon.
- Copper prices have begun to respond to the declining demand in China and the rest of Asia.



- Blaming bankers for the debt crisis sounds a lot like blaming bakers for obesity.
- For those who still believe that "small, targeted or hidden taxes" don't harm the economy, check out the following chart. It shows the full impact of the Reagan tax cuts. The only failure of the Regan era was the failure to reign in the spending of Congress.

1980 Taxes Paid on Income Over $200 Thousand

	1980 Returns	1980 Taxable Income	1980 Income Tax Paid
$200k - $500k	99,971	$22,696,007	$11,089,114
$500k -$1 Mill	12,397	$6,512,424	$3,613,195
$1 Mill-plus	4,389	$7,013,225	$4,301,111
Total	116,757	$36,221,656	$19,003,420

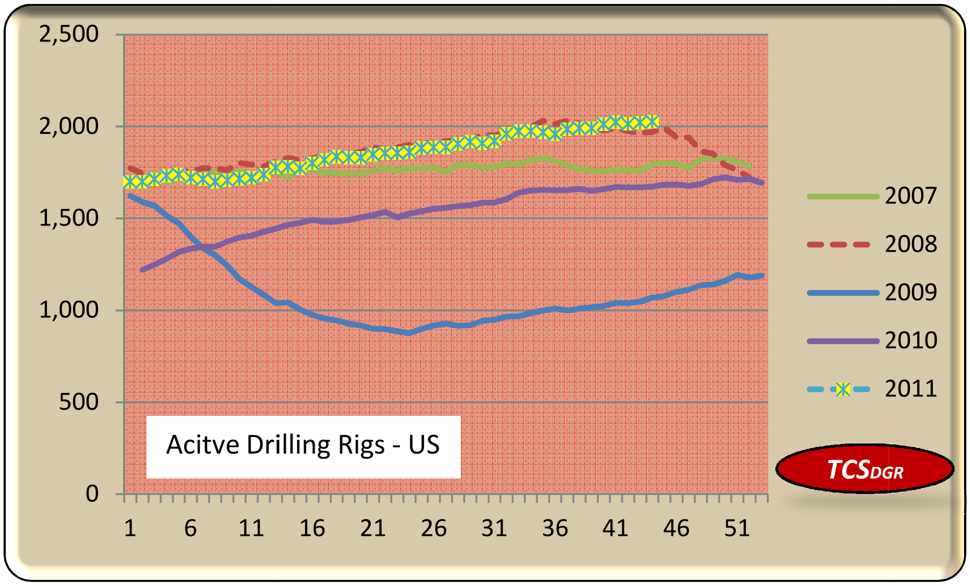
1988 Taxes Paid on Income Over $200 Thousand

	1988 Returns	1988 Taxable income	1988 Income Tax Paid
$200k - $500k	547,239	$134,655,949	$38,446,620
$500k -$1 Mill	114,562	$67,552,225	$19,040,602
$1 Mill-plus	61,896	$150,744,777	$42,254,821
Total	723,697	$352,952,951	$99,742,043

- The problem with the taxation debate is that the two sides are talking about different things. The left wants “fairness” in terms of how much high income earners should be allowed to keep (envy is the motivator). The right wants to focus on maximizing government revenue (greed is the motivator). Both arguments are fair game. But the left gets off the rails when they argue that raising tax rates is needed to balance the budget. The opposite is true. It has been true throughout human history. The left should know this if they have any connection to history. If that’s true the entire argument is simply a political play to the envy of the poorly informed and innumerate part of the population.

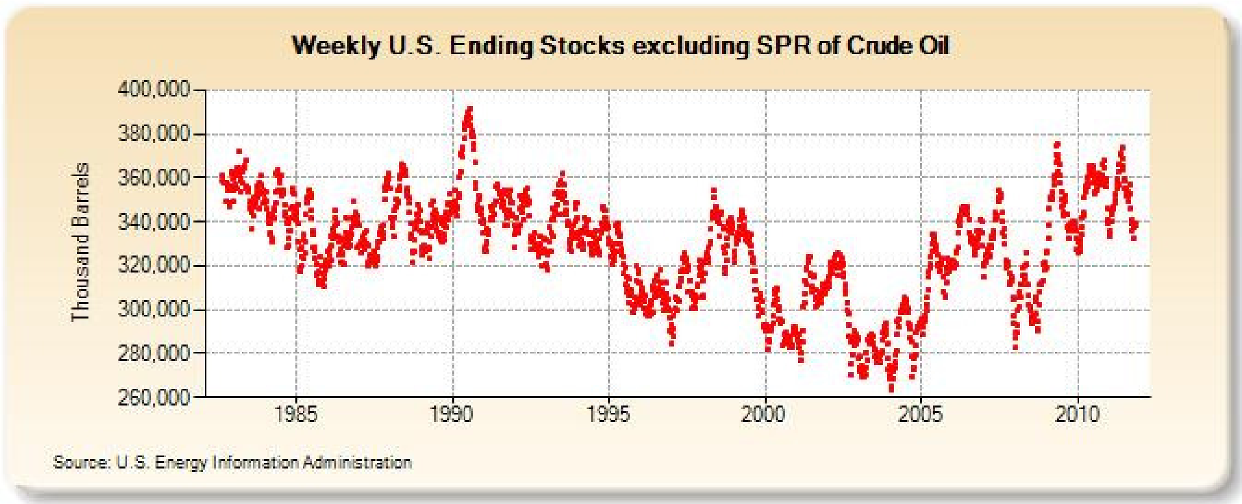
Energy:

Drilling activity in the US continues to match the record pace of 2008. The US progress in developing domestic energy resources has been impressive. But the overall picture is less bright.



The failure to approve the Keystone pipeline probably means that the Canadian oil sands production will go to China. Mixing politics with energy policy is a deadly cocktail. Energy is the most fundamental resource required for a modern industrial economy. It is the history of true capitalism that it is solely responsible for rescuing humanity from a life that is short, brutish and dominated by poverty. We will rapidly return there without sufficient energy. Much of the bureaucracy of the current administration is dedicated to eliminating the imaginary threats of an energy intensive society. And this bureaucracy transcends administrations. Its power has been growing since the 70s.

Crude oil inventory declined again and now stands 20 million barrels below the same period last year.



Employment:

> Note: The Bureau of Labor Statistics conducts two surveys on employment. The first is the Establishment Survey of Payroll Employment. The second is the Household Survey or Population Survey. The Payroll survey collects data from large employers and is the basis of the job growth press release. The Household survey is a very large sample of the entire population and is the basis for the unemployment rate press release. The Durable Goods Report places primary emphasis on the Household Survey as the most accurate picture. Industry employment breakdowns come from the Establishment Survey.

The Establishment Survey reports a gain of 80,000 jobs in October. Durable goods employment increased by 11,000. Government employment declined by 24,000.

The Household Survey again showed more positive news. This is the third month in a row that the two surveys have sent conflicting signals. The number employed increased by 277,000 against the increase in the employable population of 198,000. This resulted in a decrease in those not employed of 79,000. (second table below).

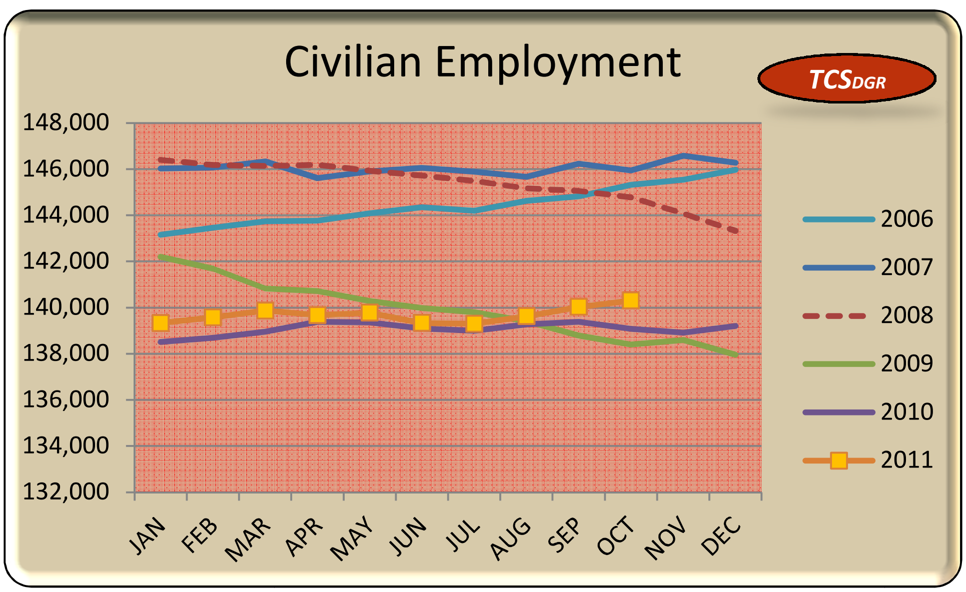
This is positive news. The most likely explanation is that benefits have finally run out for about half the unemployed. The biggest drop was in the long term unemployed. This is a direct repeat of the pattern of the late 1970s. Seems that we've failed to pass these lessons between generations. If this supposition is correct it's clear that government doesn't create jobs, but that individuals create their own jobs when the government quits trying to help.

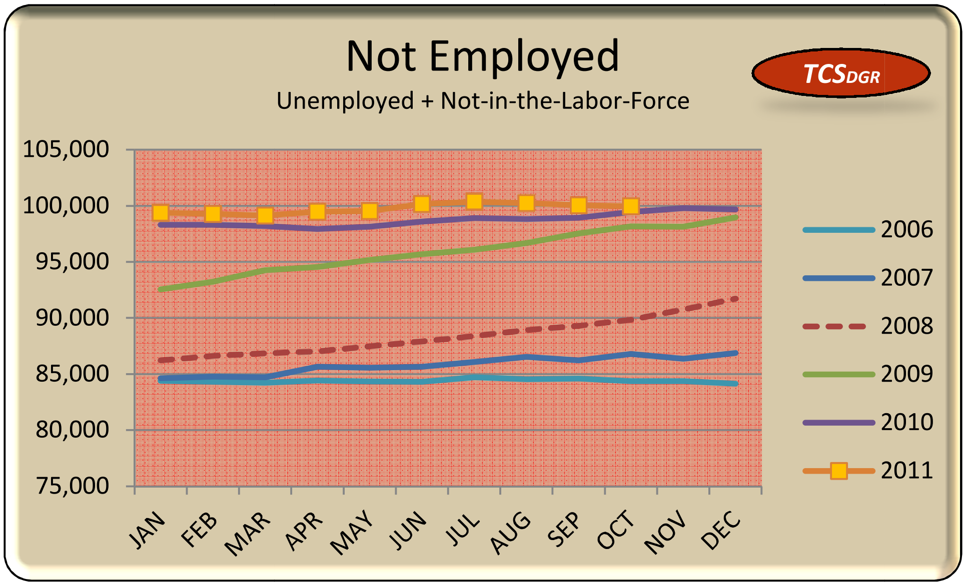
The recent trend of the Household Survey suggests that the risk of a double dip recession has declined. But in the context of the last 12 months the persons not employed actually higher by 521,000. And compared to January 2007 the number not employed is now 15.2 million higher.

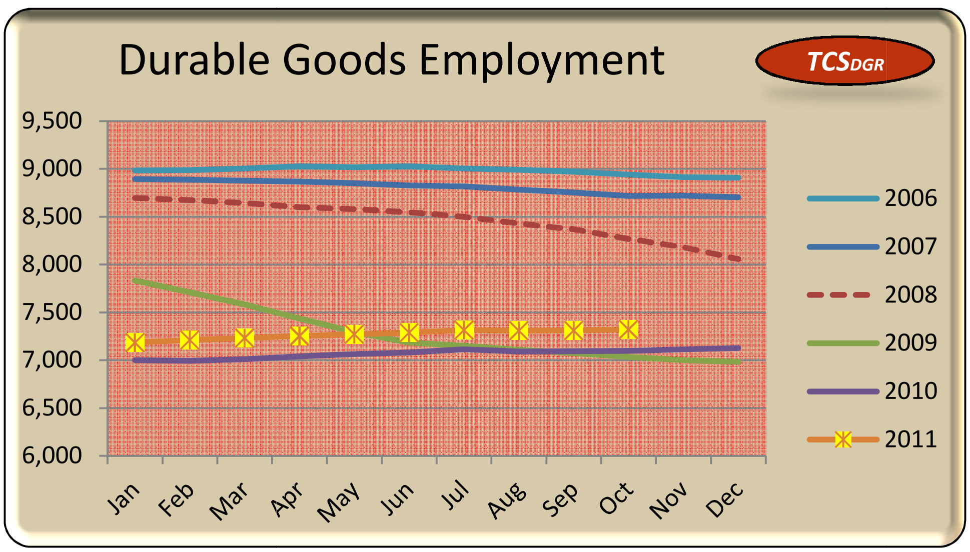
October (000's)	This Month	3 Months Ago	12 Months ago	Jan-07
Employed	140,302	139,296	139,084	146,066
Not Employed	99,967	100,375	99,446	84,768
Total Pop	240,269	239,671	238,530	238,851
Total non-institutional population over 16				

Change in Number (000's)	vs. Prior month	From 3 Months Ago	From 12 Months Ago	From 1/1/2007
Employed	277	1,006	1,218	(5,764)
Not Employed	(79)	(408)	521	15,199
Total Pop	198	598	1,739	1,418

% of Population	This Month	3 Months Ago	12 Months ago	Jan-07
Employed	58.4%	58.1%	58.3%	61.2%
Not Employed	41.6%	41.9%	41.7%	35.5%







Durable goods employment increased 11,000 and is barely positive for the year. The total employment of 7.3 million is 1.7 million below the peak in late 2006 (shortly after the election).

Sector Detail

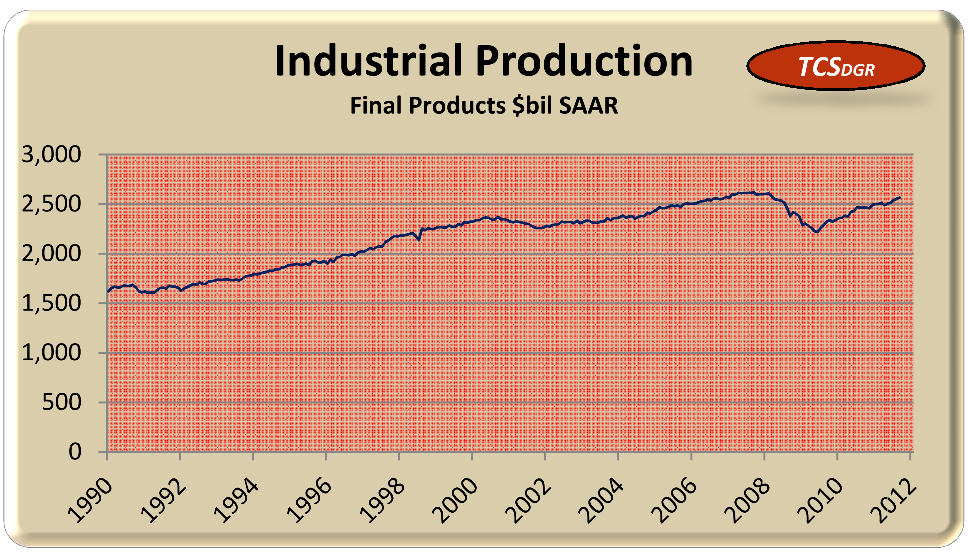
GDP: US GDP 2011Q3 growth rate was reported at 2.5% SAAR (1.2% Q/Q, 4.1% Y/Y). This compares to 1% SAAR for Q2 and 0.4% SAAR for Q1.

Gross Domestic Product				
Year	Qtr	GDP $b (SAAR)	Chg from Prior Pd	Chg from Prior Year
2008	1	14,273.9	-0.1%	3.5%
2008	2	14,415.5	1.0%	2.9%
2008	3	14,395.1	-0.1%	1.7%
2008	4	14,081.7	-2.2%	-1.5%
2009	1	13,893.7	-1.3%	-2.7%
2009	2	13,854.1	-0.3%	-3.9%
2009	3	13,920.5	0.5%	-3.3%
2009	4	14,087.4	1.2%	0.0%
2010	1	14,277.9	1.4%	2.8%
2010	2	14,467.8	1.3%	4.4%
2010	3	14,605.5	1.0%	4.9%
2010	4	14,755.0	1.0%	4.7%
2011	1	14,867.8	0.8%	4.1%
2011	2	15,012.8	1.0%	3.8%
2011	3	15,198.6	1.2%	4.1%

The positive GDP performance is added evidence that the risk of a double dip recession has eased. However three factors bear a close watch. These include the EU financial situation, China's economic meltdown, and the effect of floods in Thailand on automotive and electronic supply chains.

Industrial Production (excluding industrial supplies like energy) increased by 0.3% in September. We are now 4.0% above the same period last year.

Industrial Production - final products $b SAAR				
Year	Mo	Ind Prod - Value of Prod	Chg from Prior Pd	Chg from Prior Year
2010	1	2359.3	0.8%	3.2%
2010	2	2361.5	0.1%	2.5%
2010	3	2383.6	0.9%	4.5%
2010	4	2374.4	-0.4%	4.9%
2010	5	2422.8	2.0%	8.8%
2010	6	2428.2	0.2%	9.4%
2010	7	2470.9	1.8%	9.4%
2010	8	2464.9	-0.2%	7.8%
2010	9	2465.2	0.0%	6.0%
2010	10	2463.7	-0.1%	5.4%
2010	11	2459.5	-0.2%	5.8%
2010	12	2493.1	1.4%	6.6%
2011	1	2499.7	0.3%	5.9%
2011	2	2501.2	0.1%	5.9%
2011	3	2512.6	0.5%	5.4%
2011	4	2486.6	-1.0%	4.7%
2011	5	2508.0	0.9%	3.5%
2011	6	2514.0	0.2%	3.5%
2011	7	2540.5	1.1%	2.8%
2011	8	2555.3	0.6%	3.7%
2011	9	2564.0	0.3%	4.0%



Growth of this indicator has slowed over the past three months. And the current level remains well below the late 2006 peak.

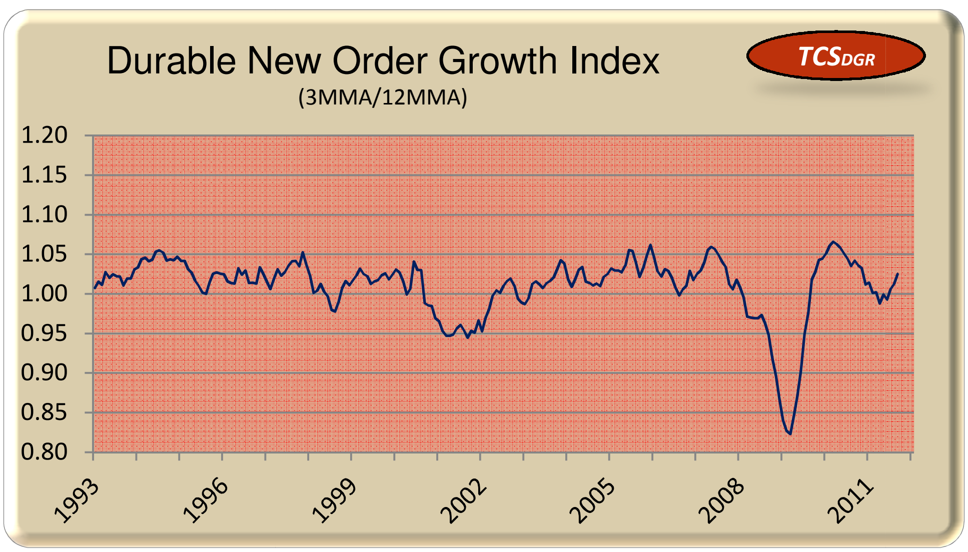
Capacity Utilization (September data): Capacity utilization for industrial production increased 0.1% in September to 77.4%. Utilization has been essentially flat for three months.

Durable manufacturing was up 0.3. Primary metals decreased 0.2, autos increased 0.3, machinery decreased 0.1. A pretty bland performance across the board, but mostly positive.

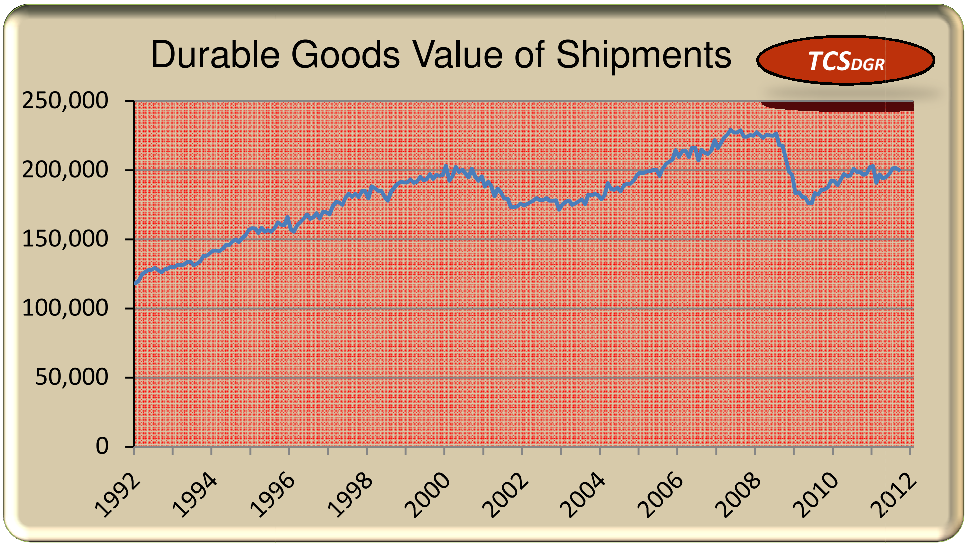
Capacity Utilization %							
Year	Month	Ind Prod	Mfg	Durable	Primary Metals	Auto	Mach-inery
2009	1	71.3	67.0	64.4	53.3	35.8	71.3
2009	2	70.7	67.0	63.9	50.1	40.3	69.8
2009	3	69.6	66.0	62.6	48.0	41.3	66.1
2009	4	69.0	65.7	62.2	47.5	41.8	64.4
2009	5	68.3	65.3	61.2	46.8	37.9	62.7
2009	6	68.2	65.2	61.0	48.3	36.7	61.1
2009	7	69.1	66.5	63.2	53.3	46.6	61.2
2009	8	70.0	67.5	64.3	56.6	49.3	62.4
2009	9	70.5	68.1	65.1	58.7	54.0	61.4
2009	10	70.7	68.2	65.1	59.4	53.6	63.0
2009	11	71.1	68.9	65.8	62.9	55.3	62.3
2009	12	71.6	69.1	65.9	65.5	55.8	65.0
2010	1	71.9	69.0	64.7	65.0	57.1	64.8
2010	2	72.2	69.3	64.9	66.5	55.9	65.3
2010	3	72.8	70.1	66.0	68.8	57.7	65.6
2010	4	73.2	70.9	67.0	68.2	57.2	68.1
2010	5	74.3	71.8	68.3	68.8	60.7	69.8
2010	6	74.5	71.9	68.4	68.7	60.1	70.9
2010	7	75.3	72.6	69.6	66.3	65.7	71.0
2010	8	75.5	72.8	69.4	66.4	61.6	71.1
2010	9	75.7	73.0	69.7	66.9	62.3	71.5
2010	10	75.7	73.3	70.2	66.5	62.8	72.7
2010	11	75.8	73.4	70.5	68.4	60.5	73.8
2010	12	76.8	74.2	71.1	71.2	60.7	76.1
2011	1	76.9	74.7	72.3	72.3	63.0	79.0
2011	2	76.5	74.8	72.8	71.5	65.2	78.8
2011	3	77.0	75.3	73.3	73.4	67.1	78.0
2011	4	76.6	74.8	72.6	73.0	62.5	77.5
2011	5	76.7	74.9	72.9	72.4	62.1	78.7
2011	6	76.6	74.8	72.9	71.3	61.4	79.9
2011	7	77.4	75.3	73.5	72.4	64.0	79.5
2011	8	77.3	75.5	74.0	73.8	64.8	79.4
2011	9	77.4	75.7	74.3	73.6	65.1	79.5

The Durable Goods Sector (September Preliminary Data):

New Orders: Durable new orders decreased by 0.6% to $201 billion. The new order growth index continued to improve at 1.025. The growth index continues to push off concerns about a second dip recession, but with only modest conviction.



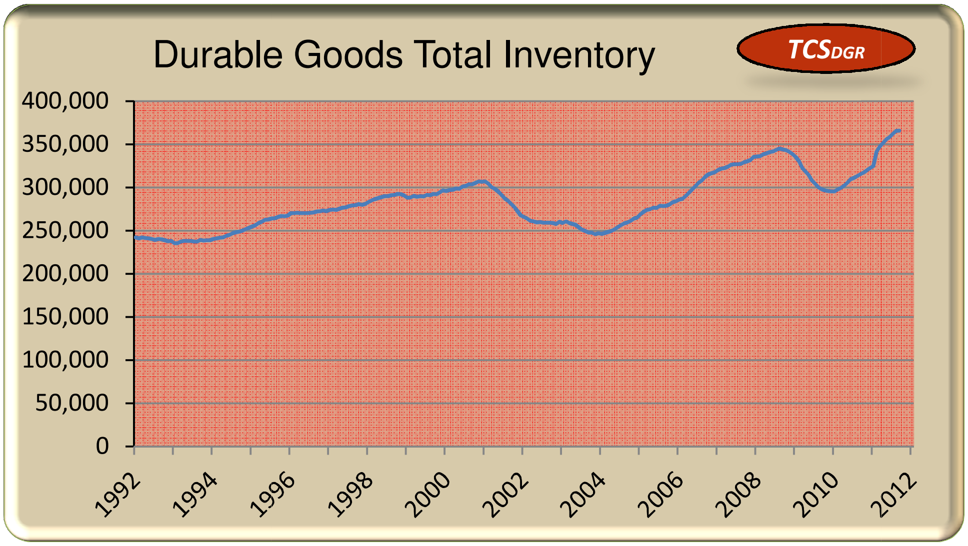
Shipments decreased 0.6% to $20.2 billion. Book to bill ratio remains at 1.00.



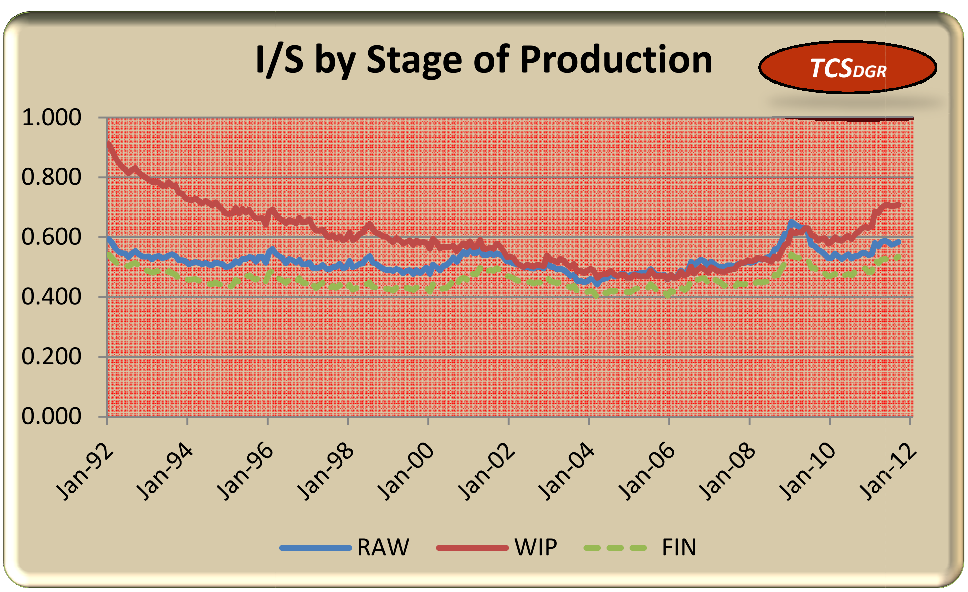
Unfilled Orders increased by 0.9% to $886.3 billion and continue at relatively high levels. This represents 6.1 months average lead time.

Inventory positions continue to degrade. Total inventory increased by 0.1% to $365.6 billion. Inventory to shipments ratios climbed to 1.83. This level approximately matches the position at the height of the collapse into recession in 2009.

The biggest surge is in WIP inventory suggesting a broad based loss of factory velocity. Supply chains seem relatively stable in September which leaves a possible shift in mix from high velocity products (vacuum cleaners) to low velocity products (aircraft) as a possible explanation.

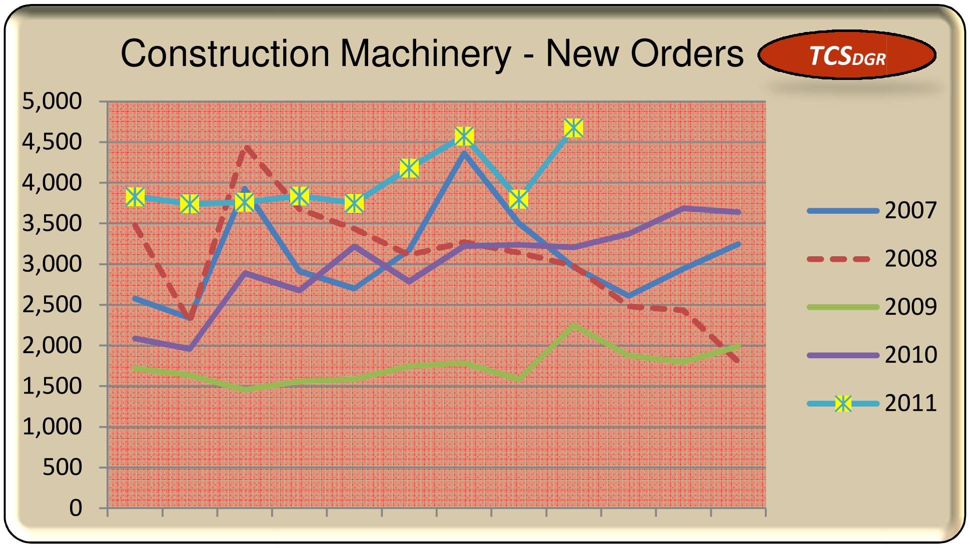

Durable Goods Total Inventory
TCSDGR
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012


Durable Goods
Inventory to Shipments
TCSDGR
2.5
2.0
1.5
1.0
0.5
0.0
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012

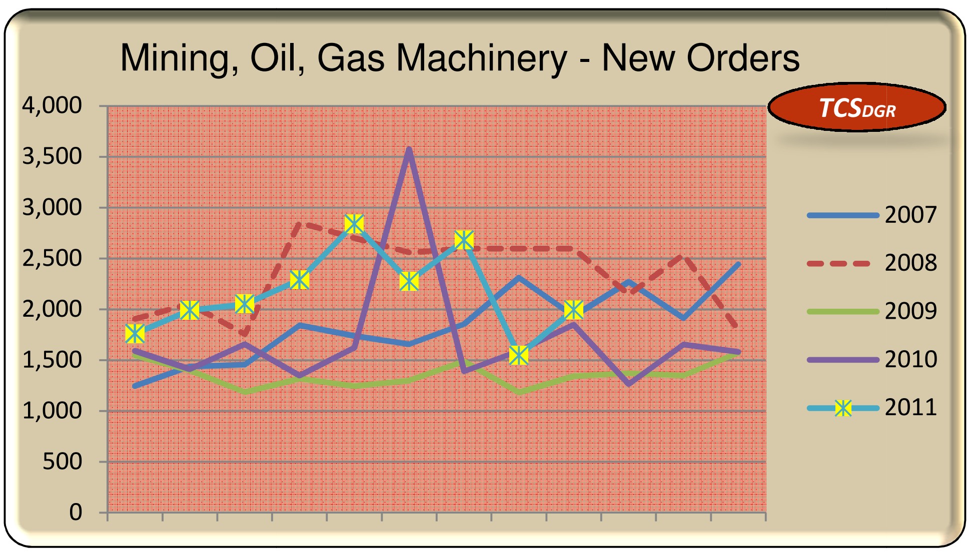

I/S by Stage of Production
TCSDGR
1.000
0.800
0.600
0.400
0.200
0.000
Jan-92
Jan-94
Jan-96
Jan-98
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
RAW
WIP
FIN

Key durable goods sub sectors:

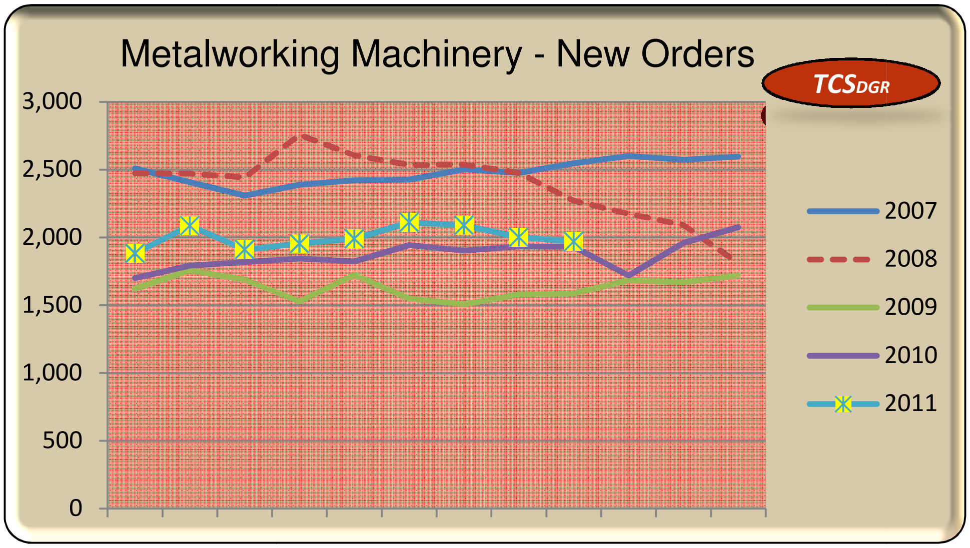
Construction machinery new orders increased 23% to $4.7 billion, erasing the 17% drop in the prior month. Book to Bill ratio increased to 1.06 (long term average 1.02). China continues to slow. Europe and Latin America may be the drivers. CAT announced a new US factory to supply small and mid-sized machines to the EU as semi-finished components to improve customer deliveries.



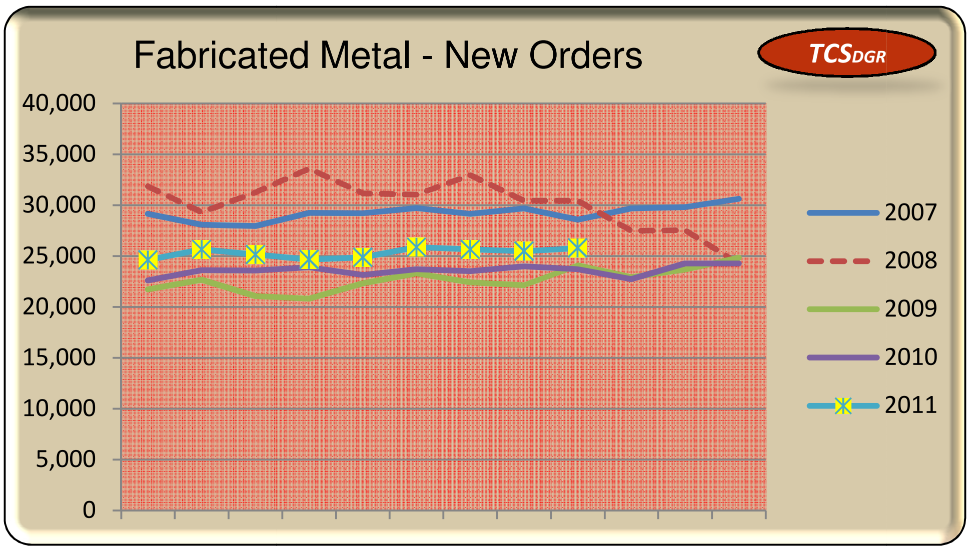
Mining, oil and gas machinery new orders increased by 29% to $2 billion. Book to bill ratio increased to 1.17 (long term average = 1.03). Unfilled orders increased 2.3% to just under $13.2 billion.



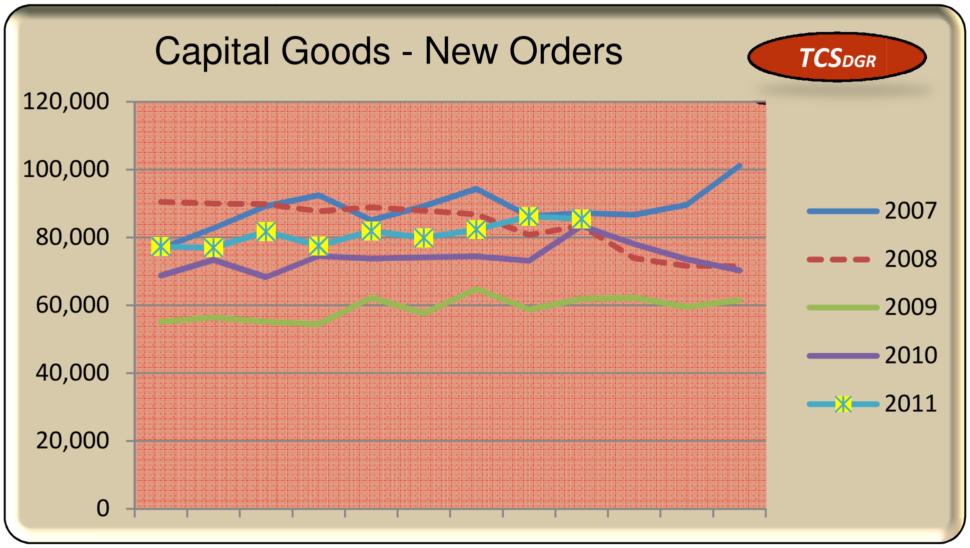
Metalworking machinery orders decreased by 1.6% to $2 billion. Book to bill ratio remained stable at 1.03 (long term average = 1.00). Now three months of a general decline in the sector.



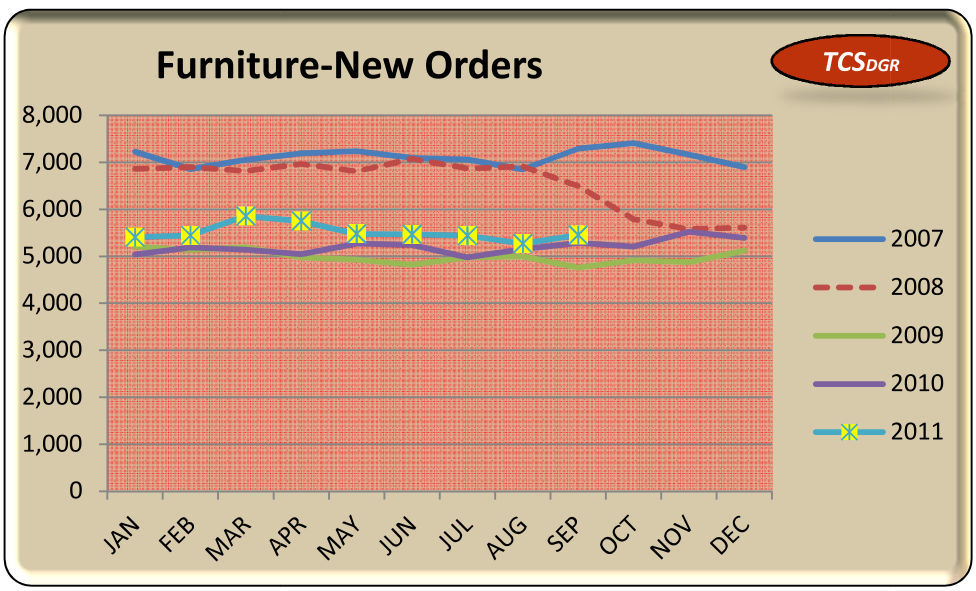
Fabricated metal new orders decreased 1.2% to $25.8 billion. Book to bill ratio is slightly positive at 1.02 (long term average = 1.00).



Capital goods decreased by 0.8% to $85.5 billion. Book to bill ratio is strongly positive at 1.09 (long term average = 1.01). Manufacturers continue some investment in productivity improvement.

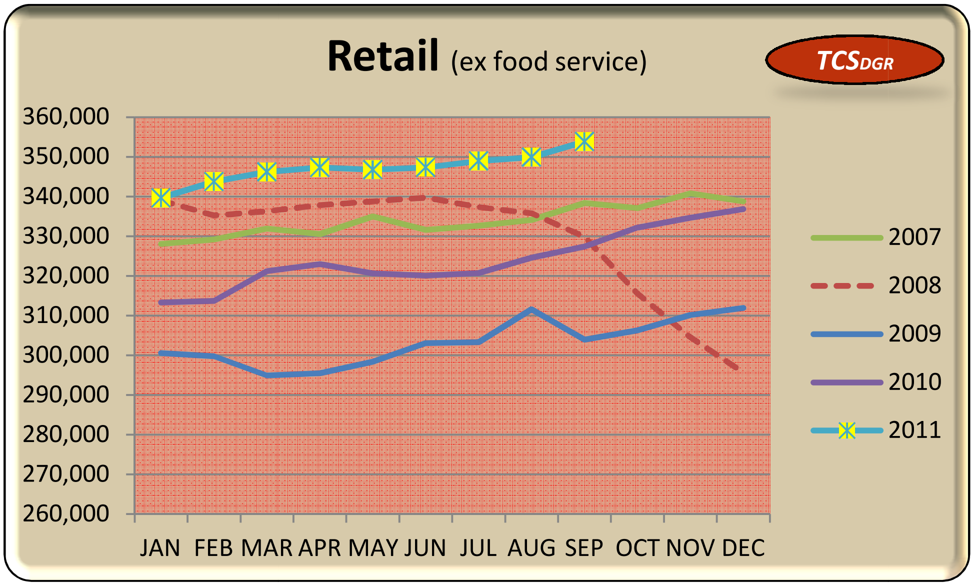


Furniture: New orders increased 3.5% to $5.5 billion, recovering a comparable decline from the prior month. The Growth index of 0.98 suggests weak near term performance.

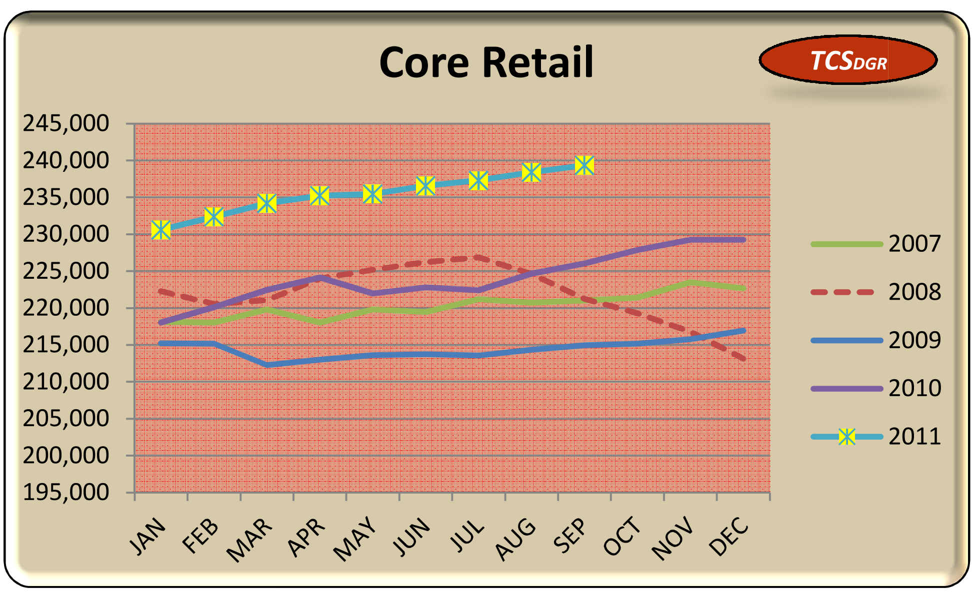


Retail Data (September Advanced Release)

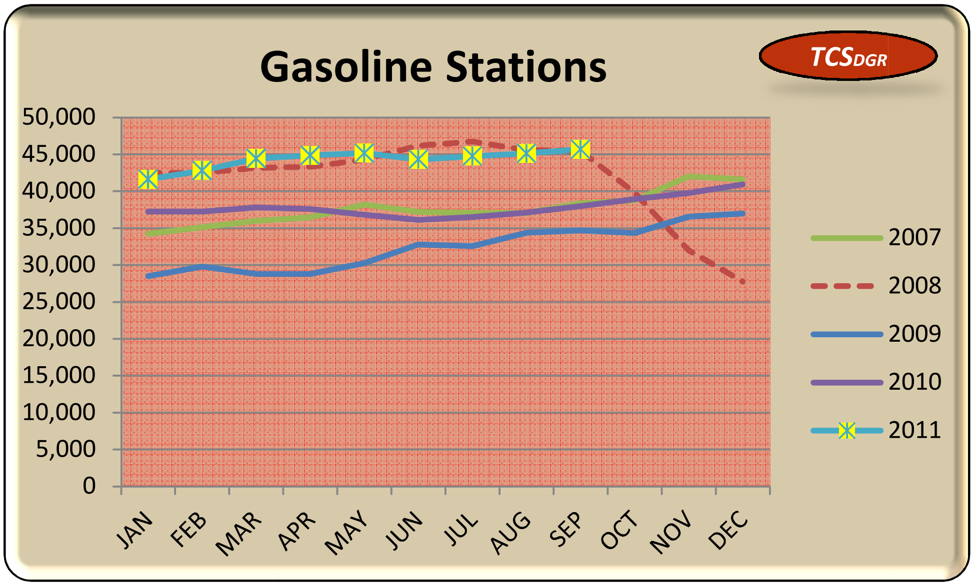
Retail Sales (excluding food service) increased 1.1% to $395.5 billion in September, another new record. Retail sales remain strong by any measure, regardless of the debate on the inflation component.



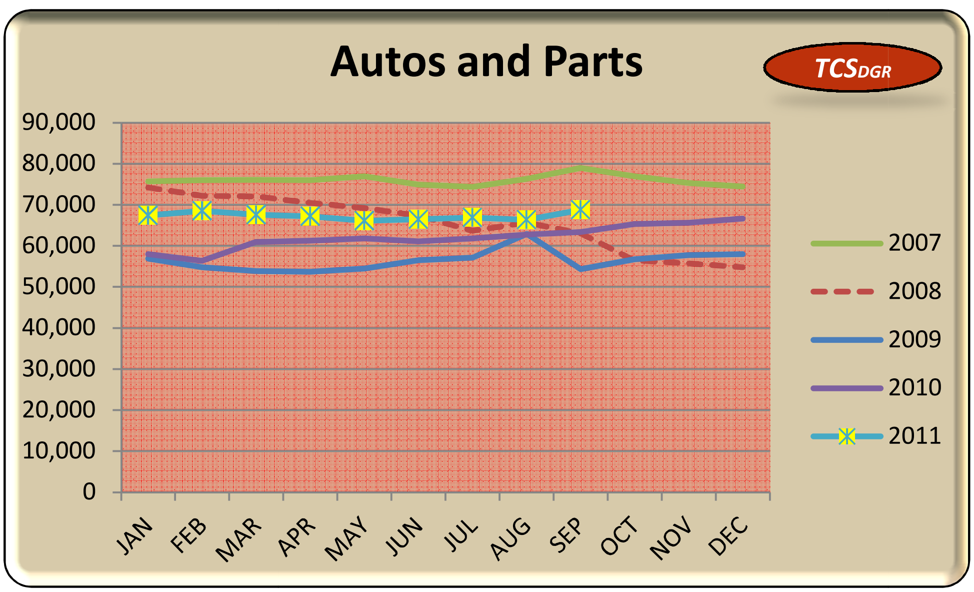
Core retail (excludes food service, gasoline, autos and parts) increased 0.4% to $239.4 billion. Gas prices remained stable with the auto component making a significant contribution.



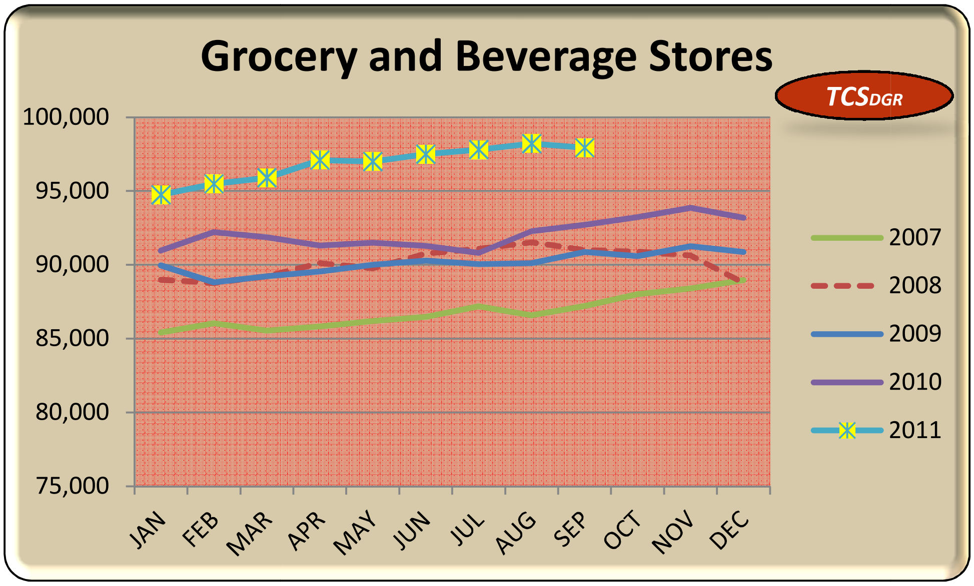
Gasoline sales increased 1.2% in September to $45.7 billion. This is almost all related to increased unit volume. Retail (and the entire economy) would clearly benefit from less diversion of money to gas, but at least it isn't dragging the sector further down.



Auto sales increased of 3.6% to $68.8 billion in September and now stand 8.5% above last year.



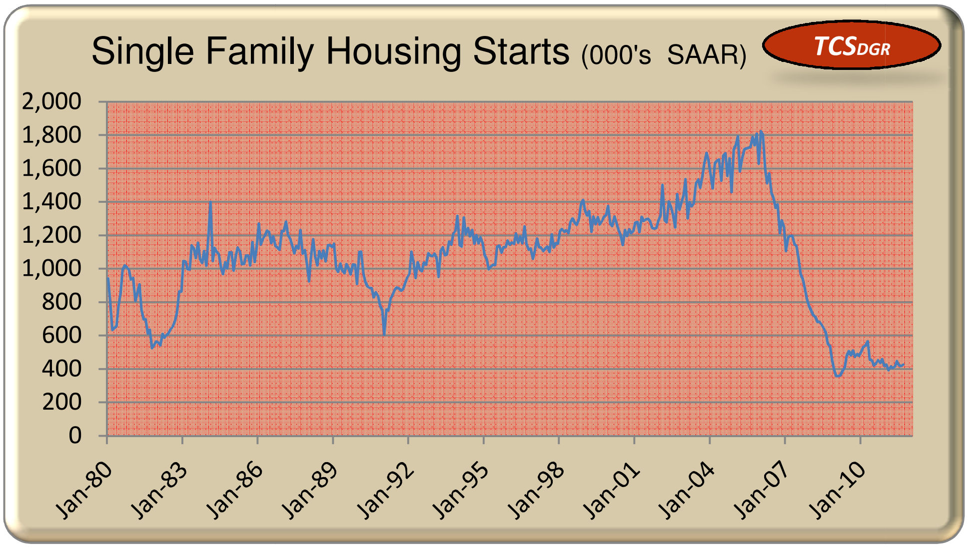
Grocery and Beverage stores sales increased 0.3% in July to $97.9 billion (5.6% above September of last year).

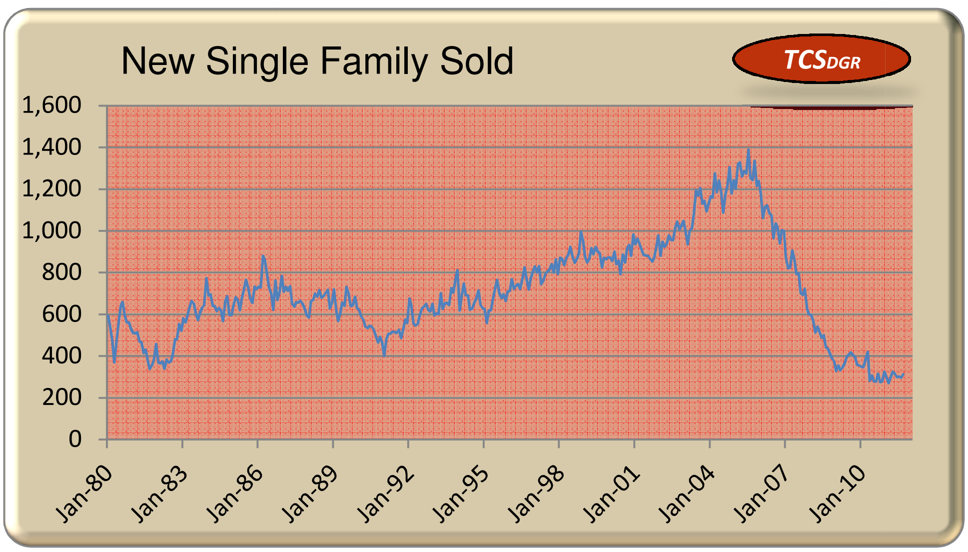

Grocery and Beverage Stores
TCSDGR
100,000
95,000
90,000
85,000
80,000
75,000
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
2007
2008
2009
2010
2011

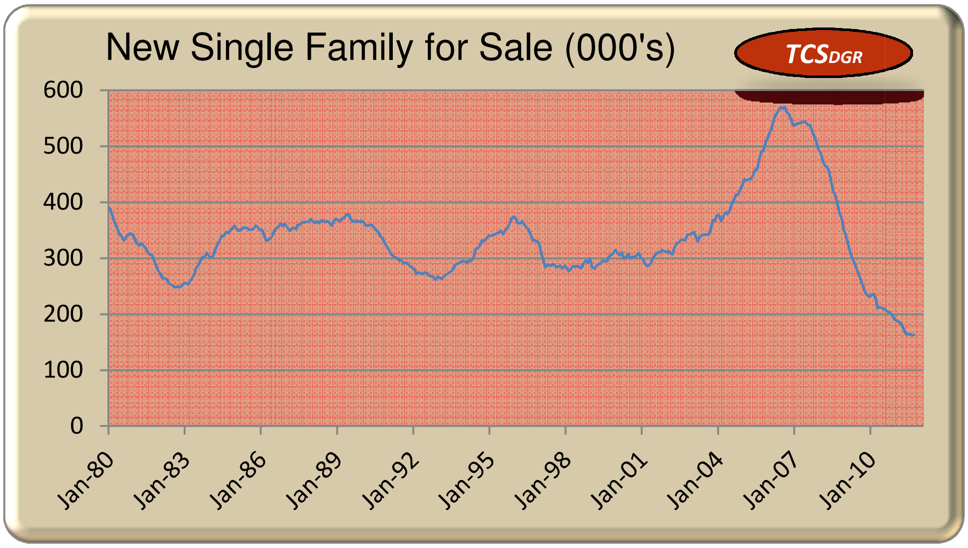
Housing (September Data):

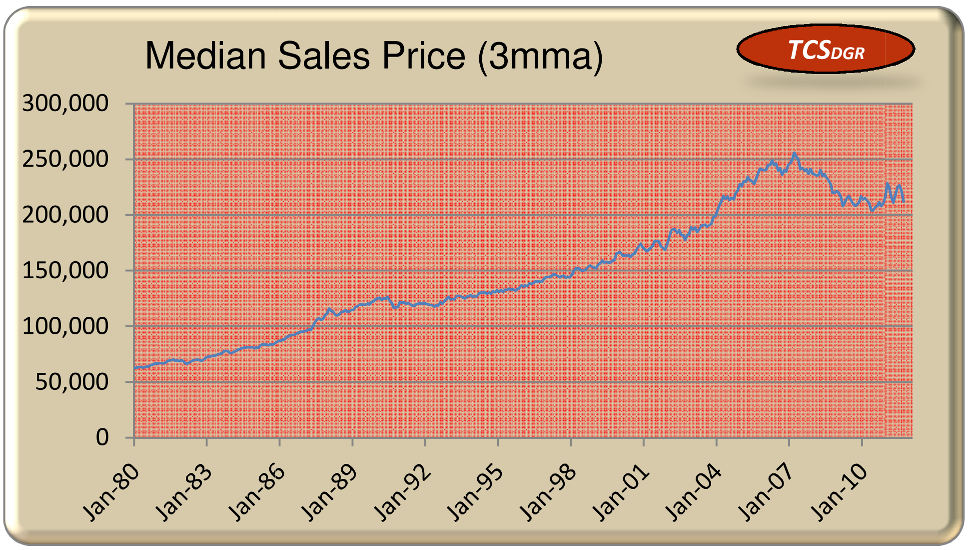
Housing sector remained weak. Single family starts increased 1.9% to 425,000. New single family sales increased by 5.7% to 313,000 units. Inventory of unsold new single family homes remained at record low of 163,000.

The median sale price (3mma) declined slightly to $211,800.






New Single Family for Sale (000's)
TCSDGR
600
500
400
300
200
100
0
Jan-80
Jan-83
Jan-86
Jan-89
Jan-92
Jan-95
Jan-98
Jan-01
Jan-04
Jan-07
Jan-10


Median Sales Price (3mma)
TCSDGR
300,000
250,000
200,000
150,000
100,000
50,000
0
Jan-80
Jan-83
Jan-86
Jan-89
Jan-92
Jan-95
Jan-98
Jan-01
Jan-04
Jan-07
Jan-10

About Time Compression Strategies and the Durable Goods Report

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

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

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

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

About the Author:

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

Prior to launching TCS, Layden’s career included 22 years’ in manufacturing and another 20 years in enterprise software. Most recently he has served as VP of Supply Chain Management for SAP and VP of Supply Chain Market Development for Frontstep, Inc. He served as President of Pritsker Corporation, an early innovator in discrete event simulation and advanced planning and scheduling fields. He negotiated the Pritsker acquisition by Frontstep. He was a founder and CEO of Automated Technology Associates, Inc., a leader in the development of real-time quality control systems and factory management applications.

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

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

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

Prior to his tenure in manufacturing software, Layden spent 20 years as an engineer, operating executive and board member with three Fortune 200 manufacturing companies. The TCS advisory services retain the practical, no-nonsense approach familiar to world class operating executives. His operating roles 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 317-842-6417 jlayden@timecompressionstrategies.com

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