

The Durable Goods Report

July 2011 Report

Executive Summary of the US Economy

Manufacturing Data Release of 7/5/2011 (May Preliminary)

Employment Data Release of 7/8/2011 (June Preliminary)

Retail Data Release of 6/14/2011 (May Advanced)

Industrial Production Data Release of 6/15/2011 (May Advanced)

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

John E. Layden

The Durable Goods Report – A Service of Time Compression Strategies

By the Numbers

Durable Goods Key Measures			
May	Current Mo	Prior Mo	Prior Yr
New Orders-Durable	196,313	192,350	192,620
12 month moving average	195,461		181,206
% Change from Prior Year	7.9%		
Growth Index - Durable New Ord	0.999	0.988	1.058
Unshipped Orders - Durable	860,907	853,164	803,078
% Change from Prior Year	7.2%		
Value of Shipments - Durable	194,965	194,103	195,799
12 month moving average	197,515		188,457
% Change from Prior Year	4.8%		
Growth Index - Durable Shipmts	0.989	0.982	1.037
Inventory - Durables	356,140	351,488	305,591
% Change from Prior Year	16.5%		
Inv to shipments ratio - Durable	1.83	1.81	1.56
US Economy Key Measures			
	This period	Last period	Change
GDP Q1	15,010.3	14,871.4	0.9%
Industrial Production May Data	2,497.2	2,487.8	0.4%
Capacity Utilization % May Data	76.7	76.7	(0.0)
Manufacturing %	74.9	74.7	0.3
Durable Goods %	72.8	72.5	0.3
Primary Metals %	71.9	72.4	(0.4)
Autos and Parts %	61.6	62.6	(1.0)
Machinery %	78.8	77.5	1.3
Durable Goods (\$Mil SA) May Data			
New orders	196,313	192,350	2.1%
Shipments	194,965	194,103	0.4%
Inventory	356,140	351,488	1.3%
Unshipped Orders	860,907	853,164	0.9%
Retail ex Food Srv (\$Mil SA) May Data	346,417	347,607	-0.3%
Autos and Parts	65,158	67,109	-2.9%
Gasoline	45,164	45,039	0.3%
Core retail (ex auto, gas)	236,095	235,459	0.3%
Groceries	96,669	97,089	-0.4%
Employment (000's SA) June Data			
Civilian employed (Household Survey)	139,334	139,779	-445
Civilian not employed (HS)	100,155	99,534	621
Non-Farm (Establishment Survey)	131,017	130,999	18
Private (ES)	108,953	108,896	57
Government (fed, state, local) (ES)	22,064	22,103	-39
Goods Producing (ES)	18,006	18,002	4
Manufacturing (ES)	11,707	11,701	6
Construction (ES)	5,513	5,522	-9
Durable Goods Mfg (ES)	7,280	7,265	15
Housing (000s of Units SA) May Data			
Single family starts	419	404	3.7%
Single family sales (new)	319	326	-2.1%
Single family for sale (new)	166	175	-5.1%

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US Economy:

Q1 GDP was revised upward from 1.8% to 1.9% annual rate, still a significant reduction from Q4 growth of 3.1%. It remains far short of the 5-6% typical of prior recoveries and necessary to produce real employment growth. The inflation imbedded in these numbers probably exceeds the growth rate. Initial signals suggest that Q2 will remain weak.

Industrial Production

Industrial production increased by 0.4% in May after a decline of 1.4% in April. High energy costs, Japanese supply chain problems, increased regulation, and slowing consumer demand continue to suppress growth. Capacity utilization was flat overall, but autos and primary metals showed continued declines.

Retail:

Retail declined in May, with significant decline in autos. This might be influenced by parts shortages from Japan, but GM report surging inventories. Buyers are staying home. Core retail (excluding gas and autos) showed a slight increase, more likely inflation than real growth.

Employment:

Employment continues to rapidly lose ground. The number of employed increased by an anemic 18,000 jobs in June, based on the establishment survey. But the broader household survey showed a decline of 445,000 in the number of persons employed and an increase of 621,000 in the number of persons not working. See the "Employment" section for the gruesome details.

Durable Goods:

Durable goods orders showed a 2.1% increase, driven largely by aircraft orders. The growth index (3mma/12mma) at 0.999 does not indicate any growth in the recent past. A look at the long term chart shows that durable orders have been flat for a year.

Durable goods inventories continue to surge. The inventory to sales ratio has now matched the level of January 2009 as the economy spiraled into recession. Major red flag here.

Housing

Housing construction is still a major drag on the economy. The growth of the total number of housing units remains below population growth. This requires that

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household formations must decline, and that the number of adults per household increase. This is confirmed by census data in the September –March period.

New construction of single family homes remains weak and has the greatest impact on the economy.

Median home prices increased and now show clear signs that the bubble pricing has been largely wrung out of valuations. But the reduced equity keeps consumers cautious.

Critical Issues for Manufacturing Executives

The continued weakness in durable goods orders along with the surge in inventories should cause manufacturing executives to be more paranoid than normal. Get on top of production plans and cash positions. The first priority is to get inventories back in synch. Even in industries where growth is still visible, keep a close eye on trends in the order book. Signals of a retrenchment can emerge quickly and planning response needs to be equally rapid.

The current economic problems are rooted in the deterioration in personal balance sheets. When housing prices collapsed consumers lost a large part of their net worth. A corporate turnaround expert would advise correcting the balance sheet before returning to expansive strategies. Consumers did exactly that. They reduced consumption by cutting some discretionary spending (ironically, not food service). The biggest change was the decline in major purchases - auto and new homes. For autos this is equivalent of “running from inventory.” You can do it for a while, but it’s a one-time trick. The remaining miles (inventory) in the US vehicle fleet (an unknown and purely conceptual measure) will eventually run out. But Cuba offers an example of how long old cars can be kept on the road.

If you encounter softness in your order book, it is very likely a spillover effect of what’s happening in housing. It may be unrelated to anything you’re doing or not doing. First get supply chain flows stabilized, then think about compensating strategies. Don’t overlook the possibility that there might not be one.

Random Thoughts:

- The climate forecast of 1979 seems to be the only one tracking with reality. Summary: 30 years of warming followed by 30 years of cooling.
- The familiar 11 year sunspot cycle appears to be shutting down.
- American Astronomical Society: *"If we are right, this could be the last solar maximum we'll see for a few decades," Hill said. "That would affect everything from space exploration to Earth's climate."*
- AAS reports that three different solar forecasting models are all predicting dramatic reductions in solar activity over the next decade. The magnitude of the decline is comparable to the same event at the beginning of the Little Ice Age.
- How is it that pharmaceuticals get cheaper if we ship them to Canada and back? Could we do it twice?
- Canadians can't buy the cheap pharmaceuticals. They are sold only through a separate network of "Export-Only Pharmacies" where foreigners can get cheap drugs. Canadians pay the full price. One cancer drug was \$1,600 at the export-only pharmacy, \$8,500 in both the US and Canadian local-sale pharmacies. Importing the low-cost drug into the US is illegal.
- The Lady Gaga interview on 60 Minutes was interesting (it was a slow Sunday evening). It was rewarding to know that my lack of attention was fully warranted. Seems a lot like Madonna with less talent (if that's possible).
- Lady Gaga saw sales plummet after the 60 Minutes coverage. Might be the first time parents got a close look.
- Why does "climate science" need to include the word "science"? Physics, geology, biology, chemistry, etc. don't seem to feel the need to do that. My theory: it was once called climatology, but that kept getting confused with cosmetology and that requires a state license. No state requires a license to do climatology or astrology. Hmmm.
- The environmental community has a problem. They've yelled for decades that we should be using cleaner natural gas. Now we've discovered so much we can't use it all, the price is dropping and the environmentalists are about to get their wish. Suddenly the NYT is on a rampage against the fracking process that makes it all possible. They got all the facts wrong. Par for the course.
- In China 60% of high net worth individuals are emigrating or planning to emigrate.
- Diamond Offshore is moving its offshore drilling rig from the Gulf of Mexico to Vietnam.
- Total cost to comply with US government regulations: \$1.75 trillion per year.
- The German E. Coli deaths could have been prevented in two ways: Irradiation of vegetables or the use of genetically modified plants. Both are outlawed in Germany. Of course they could have used conventional farming techniques, but that wouldn't be organic.

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- A single German organic farm has now killed 10 times as many people as died at Fukushima.
- Global organic farm deaths in the last 5 years have killed more people than the entire history of nuclear power.
- Another mega field. This time in the Gulf of Mexico. The amazing oil industry has proven that it can find oil almost anywhere they want to look.
- In the 90s a mega-field discovery occurred every 3-5 years. Today the rate seems to be measured in weeks.
- Historian Victor Davis Hanson: “All this European turmoil raises a paradox. If dispirited Europeans are conceding that something is terribly wrong with their half-century-long experiment with socialism, unassimilated immigrants, cultural apologies, defense cuts and post-nationalism, why in the world is the Obama administration intent on adopting what Europeans are rejecting?”
- The Netherlands is scrapping its experiment with multiculturalism. Democracy, open immigration, multiculturalism: Pick any two.
- US unfunded liabilities for all entitlements exceed \$61 trillion. Annual global GDP is about \$75 trillion. Three observations:
 - o The entire world doesn't produce enough surplus wealth to bail this out
 - o Default in some form is inevitable (inflation is one form of default)
 - o Politics will require that we call it something else
- Dave Layden reports: In 1956 you could buy a gallon of gas for \$0.25. The quarter you used to pay for it was made of silver. Today that amount of silver is worth \$7 and would buy 2 gallons of gas. Ergo the price of gasoline has declined by half in 55 years.
- US manufacturers are sitting on \$2 trillion of cash. Why aren't they hiring? Because hiring isn't their goal. Manufacturers hire when orders demand more production. But the first alternative is to use automation to increase output without hiring. The unknown cost of new regulations and mandates has employers looking for any option.
- Canada, Australia and Germany had no stimulus program and their economies are roaring. Australian unemployment is steady at 4.9% (you read that right – 4.9%).
- The health care law is now being evaluated in detail. What they find isn't pretty. There are already price increases and shortages directly related to the new regulations. But there is a counter trend. Black market health care is emerging. Cash-only doctors and mini-clinics are emerging to deliver more of the services.
- There are reports that several ports currently configured to import LNG are being asked about the cost to convert to export LNG. The natural gas industry has found more gas than we can use.
- In the past two years (through March) 45% of new jobs created were in Texas.

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- California rate of business departures was 1 per week in 2009. In Q1 2011 it was 5.4 per week. Only large employers are counted in this survey. So much for the centrally planned Shangri-La.
- Dr. Brian Ahern has achieved 8 watts excess energy output for four days in what is called a LANR (Lattice Assisted Nuclear Reaction) or LENR (Low Energy Nuclear Reaction). Twenty five years ago this was called cold fusion. See “Energy” for details.
- UN IPCC busted: “We can get 80% of our energy from renewable sources.” The source for this claim was a Greenpeace employee. And the peer review process? He reviewed his own paper. Never revealed how to do it.
- UN IPCC busted: “...consensus is that Solar variability impact on climate change is minimal: A single scientist, Judith Lean, was their consensus.
- UN IPCC busted: Their new transparency policy will only apply to new initiatives.
- UN IPCC busted: The Sea Level Research Institute in Colorado has been adjusting the sea level data upward by 0.3 mm per year. They offer a complex and jargon-filled justification. That’s the equivalent of an extra year of increase every 5 years. Fortunately we have another source.
- The new satellite measurements from Envirostat show a decline of 20 mm in the past 15 months (reported here last month). The data gatekeepers are now being routinely exposed.
- U. S. Court of Appeals, Sixth Circuit struck down a Michigan law that proposed to outlaw discrimination or preferential treatment in college admissions or public employment. The court ruled that the law would “...burden racial minorities.” George Orwell would award honors to this court for finding that it was discriminatory to ban discrimination. Prediction: We haven’t heard the last of this.
- New EPA regulations will require power plant operators to shut down about 25% of their coal fired capacity to comply. That will produce an economic collapse greater than the Great Depression. But starting from the bottom of the Great Recession. Renaming this mess will be a challenge. Prediction: Congress will intervene.
- Pat Buchanan: “What school of economic thought -- Keynesian, Austrian, supply-side, or monetarist -- says raising taxes in a slumping economy is the recipe for a return to prosperity? There is no such school.”
- The tax increase noises from the administration, Senators and Representatives are the sounds of an utterly corrupt and bankrupt process. We would hope it is the death rattle of that process.

Energy:

There is an occasional challenge from DGR readers on alternate energy. It's usually in the form of "...isn't there any alternate energy you like?" The answer is a two part proposition. 1) There are no alternates currently available to like, and 2) there are some technologies currently in R&D stages that might work.

To be a viable alternate a process must have demonstrated thermodynamic net positive energy output and be ready for use. To date only hydrocarbon combustion or nuclear fission qualify. For various reasons, some legitimate, we don't like these technologies and would prefer something else. But none of the touted alternate energy sources (wind, solar, ethanol) have yet achieved thermodynamic break-even. Most never will. This means that the current debate about "jump starting" the economic process is irrelevant. They are not now and will not be net energy producers. It's not about economics, it's about wishful thinking and unicorns.

But there are a few new technologies worth watching. Hot fusion, cold fusion (we can't call it that, of course) and new concepts in bio energy are all making progress.

Electrical Power Generation

Electricity is used for stationary energy requirements. Transport energy will remain in the form of liquid hydrocarbons since there is no effective way to store significant amounts of electrical energy. Since it can't be stored, electricity production must respond on-demand. This means that the source must rapidly modulate output or must be centralized to level the load. Only power plants achieve these objectives. The question is how big should they be? There are three possible replacements for existing power plants:

- LFTR (Liquid fluoride thorium reactor) technology is a proven technology with attractive safety features and a nearly unlimited fuel supply. It has the advantage of scalability down to neighborhood size (probably not to single home size).
- Polywell fusion is making good progress, but will likely retain the large power plant footprint. The technology looks pretty complex. A commercial plant would likely match the complexity of uranium nukes.
- LENR (low energy nuclear reaction) or LANR (lattice assisted nuclear reaction) fusion reactor. This was called cold fusion 30 years ago, even though it doesn't seem to be cold or fusion when compared to big-hot fusion. Details of a commercial reactor are still unknown.

We've covered LFTR technology before and still believe this is the leader. The prototypes were fully operational in the 60s and 70s. They were by-passed in favor of uranium as a national policy. R&D was halted in the 70s. In 2010 a full scale

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commercial LFTR plant design was purchased by Aker Engineering of Norway from its UK developers. Aker has been shopping a proposal to build a LFTR, first in the US and then in China. Sounds like China will proceed. Aker wants to make Norway a major player in future energy by taking advantage of their huge reserves of thorium. The flaw in the Aker strategy is that the US and most other places on Earth also have huge reserves of thorium. Their advantage will need to come from getting the first commercial scale reactor running.

The LFTR design is amazingly simple and has been covered in previous DGR reports in some detail. It is completely fail safe and highly scalable. This might be the breakthrough that does for energy costs what fiber optic networks did for long distance charges. The cost of billing was about \$0.05 per minute. When the revenue per minute fell below the magic number we suddenly got bundled “unlimited” rate plans. Residential electricity it might show up as a surcharge on your water bill.

All attempts to convert solar energy to electricity have failed on three fronts:

1. No technology has demonstrated anything close to thermodynamic breakeven on a life-cycle basis. Wind and solar systems are large net consumers of energy.
2. Solar energy (including wind) is diffuse so generating electricity takes up huge land areas. Producing 20% of US electricity would require paving over Michigan or Georgia (you chose).
3. Solar energy (including wind) is intermittent. You still need the conventional power plants to deal with the times when the wind doesn't blow and the Sun doesn't shine. There is no practical large-scale storage technology available.

All of this supports looking to LFTRs as the future of electrical supply. The scalability factor would also eliminate the power grid, which has become a major vulnerability.

Of course there's the 47,000 year supply of thorium available in the US.

Many reasons to love LFTRs.

Sources of Liquid Hydrocarbons

Transportation fuel will continue to be liquid hydrocarbon due to the energy density. For the foreseeable future we will use gasoline and diesel fuels for transportation. Compressed natural gas (CNG) is possible, but on-board system complexity makes it a long shot for a long time.

Remember that a battery is not an energy source. In an electric car the battery replaces the gas tank (cost is about \$300) with lithium batteries (\$thousands). The fuel is actually coal in most locations. Coal is slightly more efficient than gasoline in terms of energy density, but not after the multiple conversions involved. The storage density of

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lithium-ion batteries is about 2 mega-Joules per Liter compared to gasoline 37 MJ/L and Diesel at 42 MJ/L. A chemical storage process might emerge but is probably more than 30 years away from deployment.

The next question is where do we get the liquid hydrocarbons? We are now finding massive new oil fields at a record pace. This gives the lie to peak oil theory once again. For all practical purposes, oil is unlimited. The most likely interpretation of current science is that it is being generated continuously in the mantle of the earth.

The problem with oil is that we are not finding any more \$10 oil. The need to drill deeper and use more expensive technology means that the marginal well-head extraction cost will probably remain at or above \$50. This would imply a market price of \$60-70 per bbl. We may see a wild ride in the short term, but the long term average will be controlled by marginal extraction cost. So a new source of liquid hydrocarbons would be attractive, and bio-fuel might deliver it.

Most bio-fuel initiatives suffer some of the same deficiencies as solar electricity. They involve multiple conversions. Sunlight grows corn (starch) which is converted to sugar which is fermented to alcohol. This process takes 1.3 to 1.6 units of energy to produce a unit of alcohol energy. More atmospheric CO₂ would help this process, but the current atmospheric levels are far below the 2500 ppm optimum for corn. The multi-stage conversion is a deal-breaker regardless of how efficient each stage gets (unless you find a way to violate the laws of thermodynamics, in which case the universe will explode).

One method to produce liquid hydrocarbons is to use a solar-algae process. It solves several problems in a single stroke. It eliminates the multi-step conversion problem and in a single conversion delivers concentrated, storable hydrocarbon energy.

There are two prototype technologies currently in use. One is to grow the algae in an open pond. Most of the algae-oil prototypes use pond systems in some form. But an open pond has several drawbacks. First, it takes lots of land. Second, open ponds get “infected” in a very few weeks. Third, temperature control is difficult (to an engineer “difficult” is spelled \$). It seems that algae don’t like direct sunlight and are picky about temperature.

A different approach comes from Algaeon, Inc (full disclosure: I’ve accepted an advisory board appointment with Algaeon). Their bio reactor approach grows the algae in a vertical, translucent tube. The patent-pending process keeps the temperature controlled, allows scalability to large farms, and protects against infection. Minimum post processing will be important to keep net energy yield high. As an added benefit, the process is a concentrated CO₂ consumer, for those concerned about this issue.

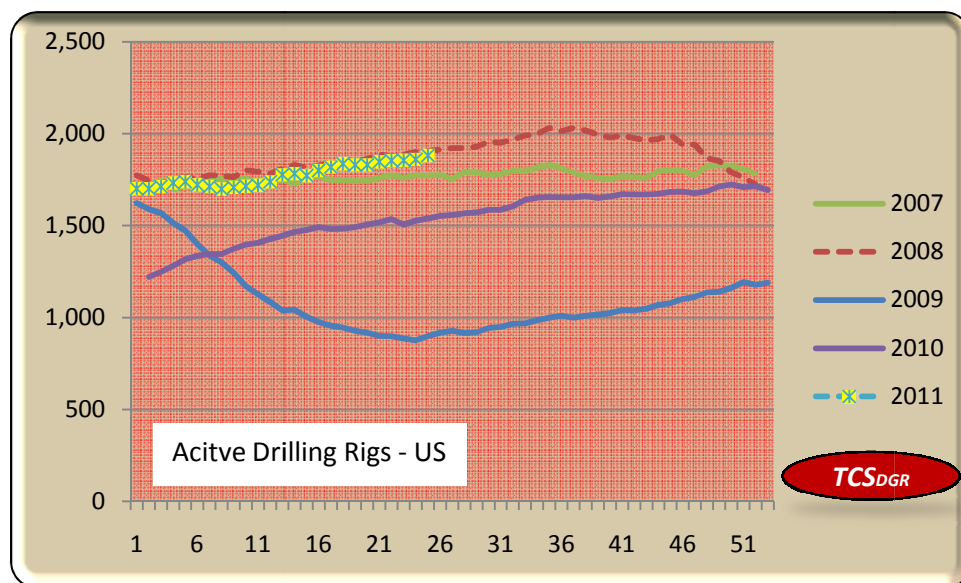
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Algaeon still faces a concentrated engineering effort, but the basic research is done and proven. Preliminary evaluation as a farm crop suggests a favorable comparison to ethanol-inflated cash crops.

Oil will remain king of this domain while a substitute emerges. And the economy will continue to be flogged with the price fluctuations inherent with all parts of the economy where government distorts the normal workings of the market. The only reason for long delays in getting new oil supplies to market is the intervention of multiple government agencies. Most new oil development can deliver within six to 18 months. But Shell is still waiting for permits to drill in Alaska on a lease they paid for 5 years ago. The lease is for 10 years, so the clock is running out. There are no new issues with these permits. The only barrier is the anti-hydrocarbon attitude to be found in all of the permitting agencies.

We will continue to see increases in oil prices until more production comes to market. Then the dam will break producing an oversupply and falling prices. As the substitutes come to market the only signal that matters will be the marginal well-head extraction cost compared to final production cost for substitutes.

In the meantime drillers continue to develop existing leases at a record rate.



Employment:

Employment continues to deteriorate. While a job increase of 18,000 was reported based on the establishment survey, the broader household survey showed a dramatic decline of 445,000. The household survey picks up the effects in the critical small business sector where most jobs are created in a growing economy. This does not bode well for a recovery.

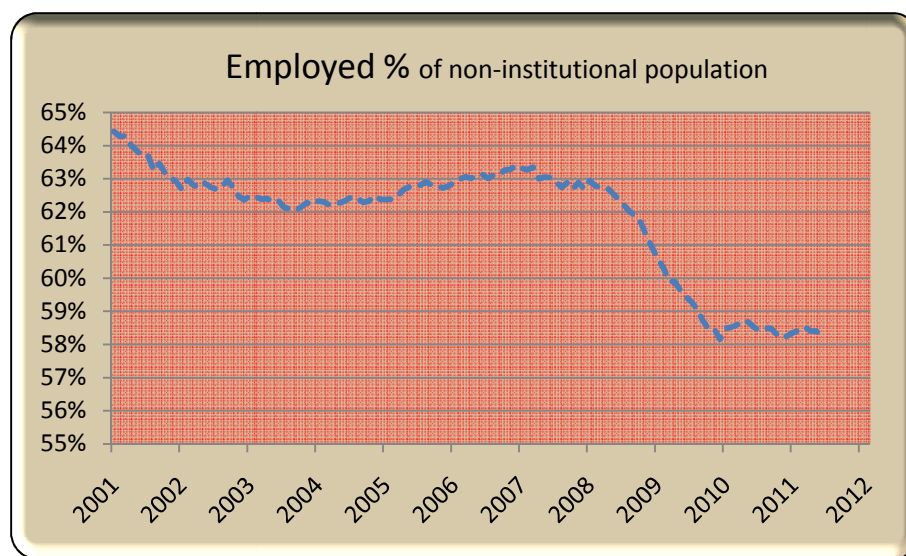
The unemployment rate officially showed an increase from 9.1% to 9.2%. This again understates the problem. The portion of the working age population who are not working increased from 41.6% to 41.8%. This is up from 37% in 2007.

The real issue is that the number of people not employed increased by 621,000 in June and for the first time ever has exceeded 100,000,000.

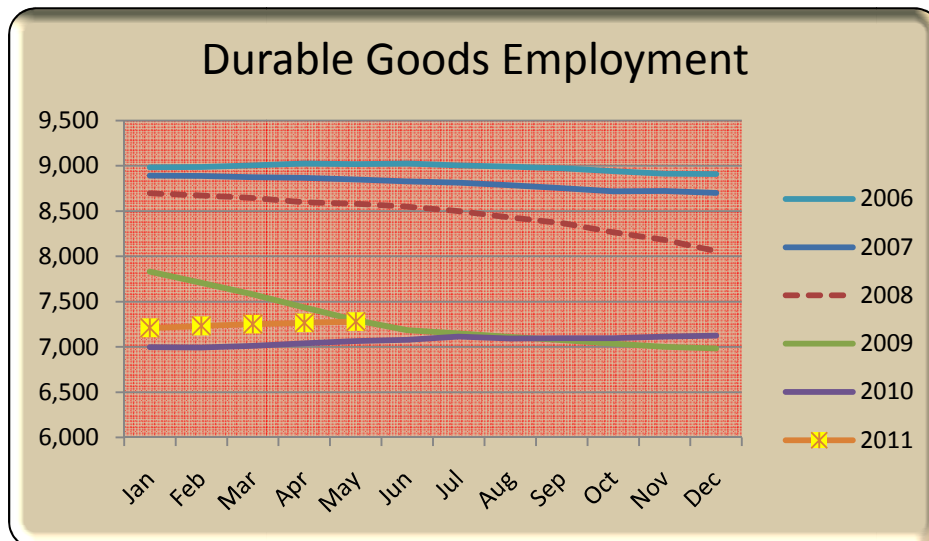
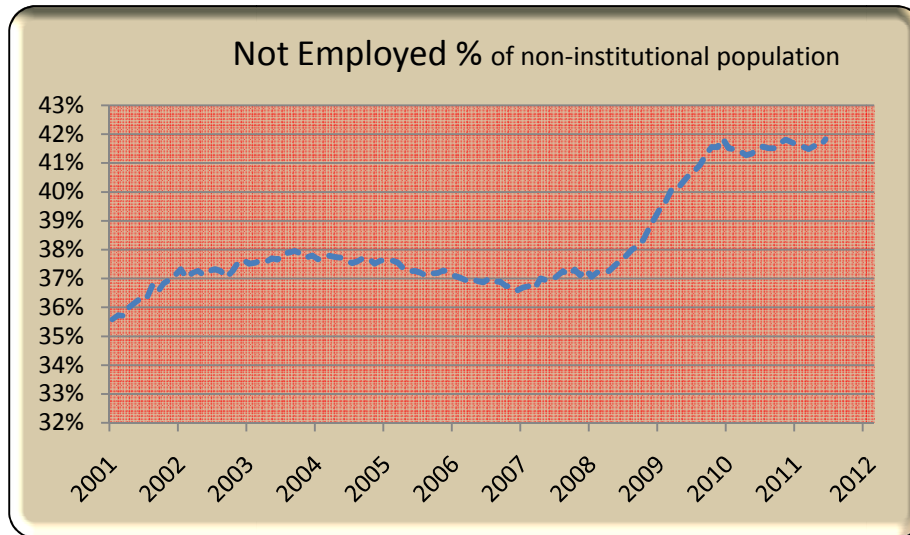
In the past 12 months the number employed increased by 242,000. The number not employed increased by 1,557,000. The net is negative by 1,315,000. This economy is upside down by more than 6X.

In the past 90 days the number employed decreased by 530,000. The number not employed increased by 1,019,000. The net is negative by 1,549,000. The trend is getting worse at a serious rate.

Durable employment increased by 15,000 in June, but the entire goods producing sector only increased by 4,000. This may signal the beginning of the inventory correction showing up in support industries to durable goods.



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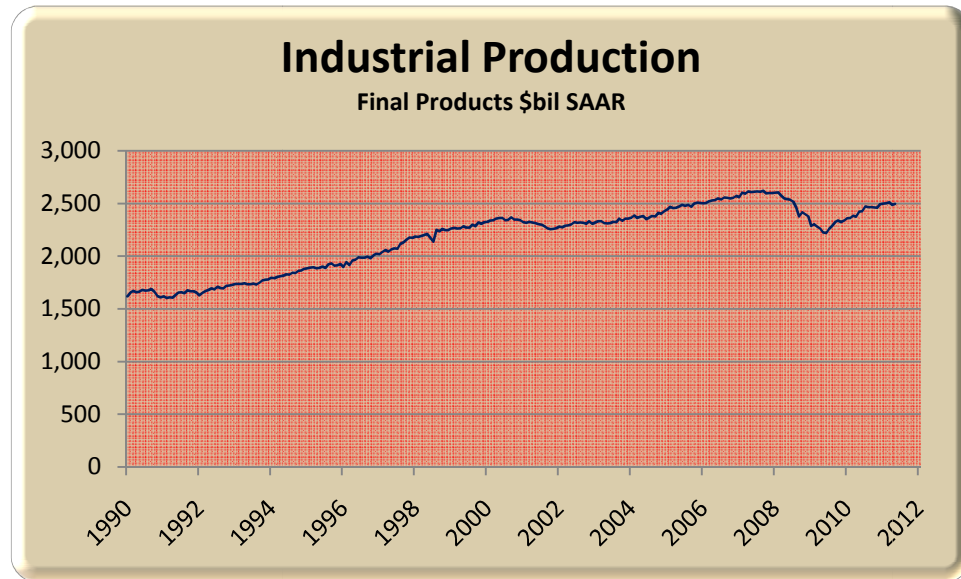
Sector Detail

GDP: US GDP 2011Q1 growth rate was revised to 1.9% SAAR (0.9% Q/Q; 3.9% Y/Y), down from 3.1% SAAR in Q4. The current debate seems to center on whether the economy has entered a new recession. It is increasingly likely that we have.

Gross Domestic Product				
Year	Qtr	GDP \$b (SAAR)	Chg from Prior Pd	Chg from Prior Year
2008	1	14,328.4	0.3%	3.9%
2008	2	14,471.8	1.0%	3.3%
2008	3	14,484.9	0.1%	2.3%
2008	4	14,191.2	-2.0%	-0.7%
2009	1	14,049.7	-1.0%	-1.9%
2009	2	14,034.5	-0.1%	-3.0%
2009	3	14,114.7	0.6%	-2.6%
2009	4	14,277.3	1.2%	0.6%
2010	1	14,446.4	1.2%	2.8%
2010	2	14,578.7	0.9%	3.9%
2010	3	14,745.1	1.1%	4.5%
2010	4	14,871.4	0.9%	4.2%
2011	1	15,010.3	0.9%	3.9%

Industrial Production (excluding industrial supplies like energy)

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	2502.3	0.1%	6.0%
2011	3	2512.7	0.4%	5.4%
2011	4	2487.8	-1.0%	4.8%
2011	5	2497.2	0.4%	3.1%



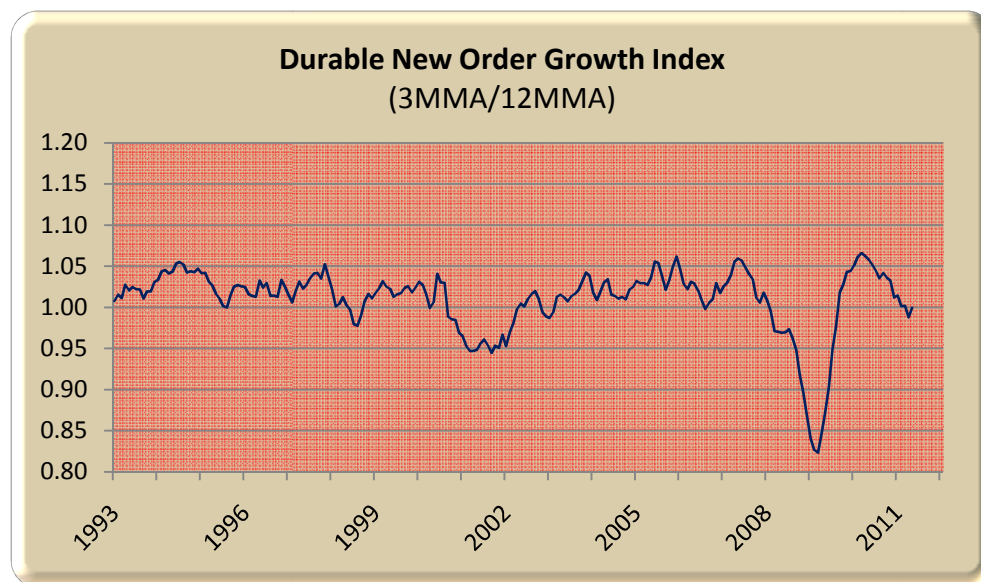
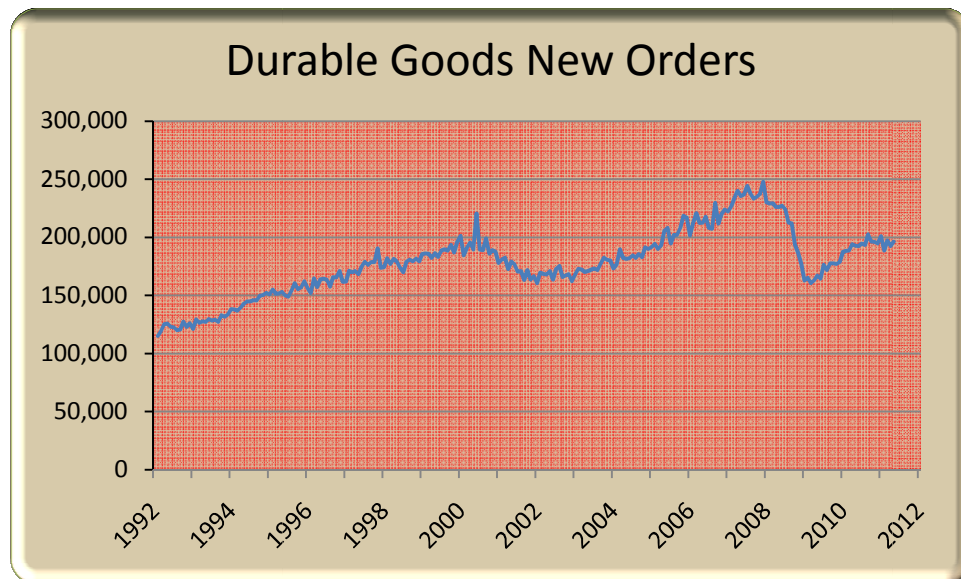
Industrial production (excluding energy) increased by 0.4% in April. Auto production declined again and likely shows that consumers are still sitting on their wallets. The overall level shows flat performance for the past nine months.

Capacity Utilization (May data):

Capacity utilization for industrial production remained unchanged at 76.7%. Manufacturing increased (+0.2 to 74.9%), durable goods increased (+0.3 to 72.8%), primary metals declined (-0.4 to 71.9%), and autos declined (-1.0 to 61.6%). Machinery increased (+1.3 to 78.8%).

The Durable Goods Sector (May Preliminary Data):

New Orders: Durable new orders increased by 2.1% to \$196.3 billion. Leading the increase was a surge in commercial aircraft orders. This may have included the first round of orders for the new USAF refueling tanker.

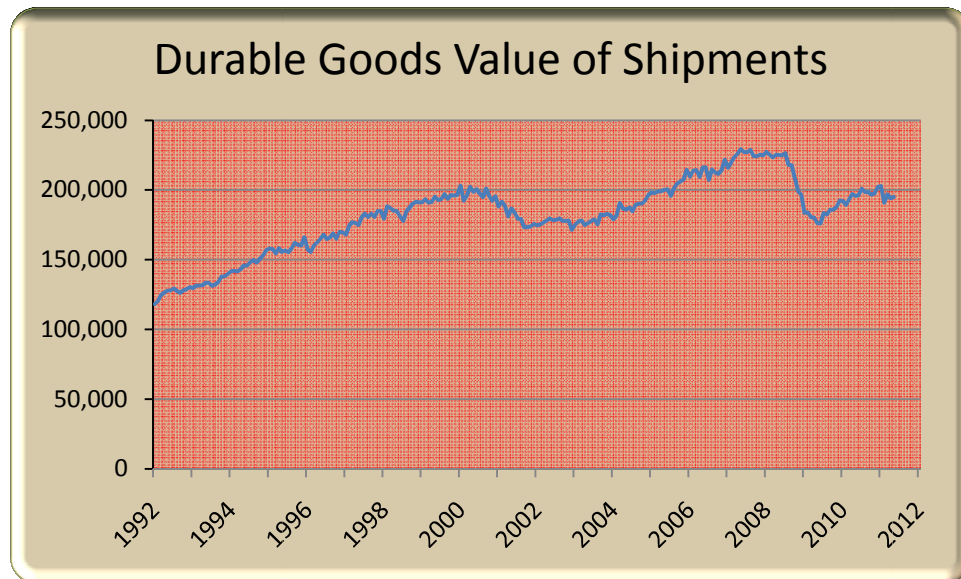


The new order growth index (3mma/12mma) improved to neutral (0.999) after last month's large drop. Excluding aircraft orders the signal was still contraction for the second month.

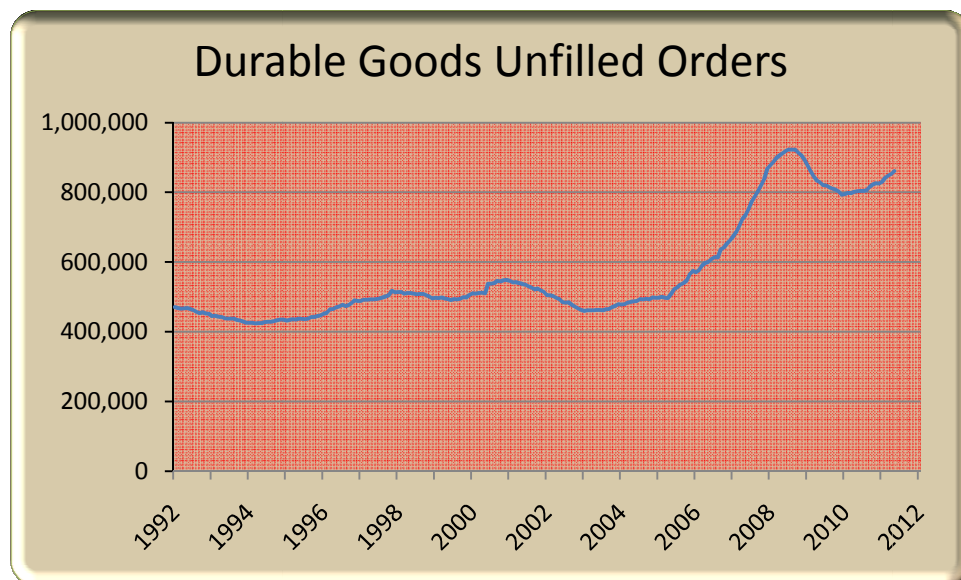
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Shipments increased 0.4% to \$194.9 billion. Unfilled orders would seem to support higher production rates, but manufacturers seem unconvinced. Production rates and shipments continue to track with new order receipts.

Foundry operators continue to quote long lead times despite nine months of strong orders. The reluctance to expand production schedules or physical capacity continues.

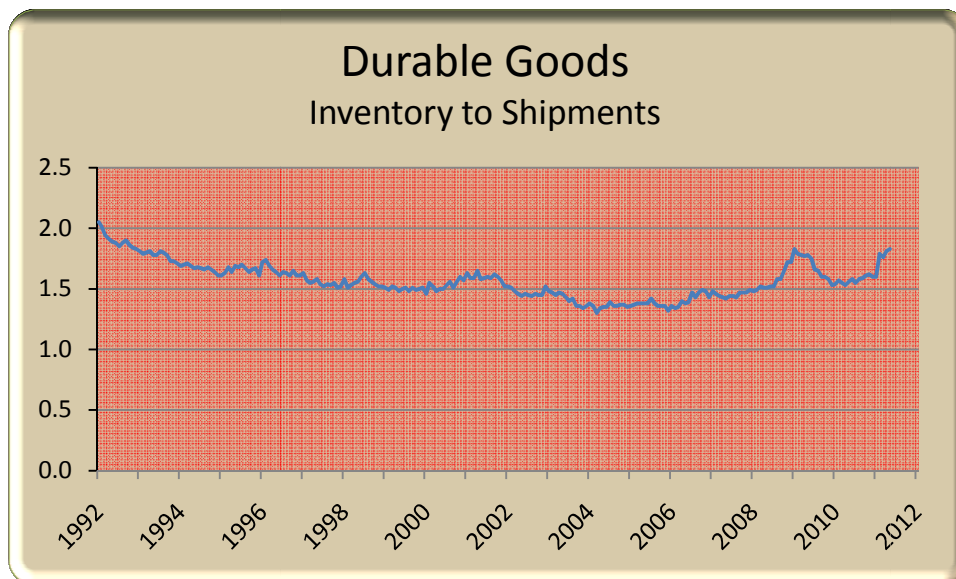
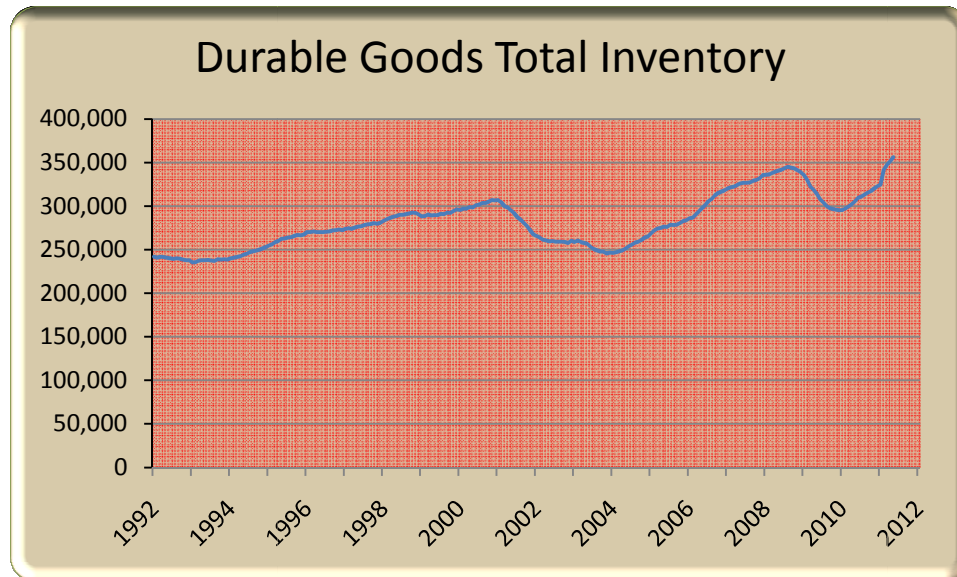


Unfilled Orders increased by 0.9% to \$861 billion. This represents 6.1 months of backlog at current shipment rates, well above the 3.8 months typical in 2005.



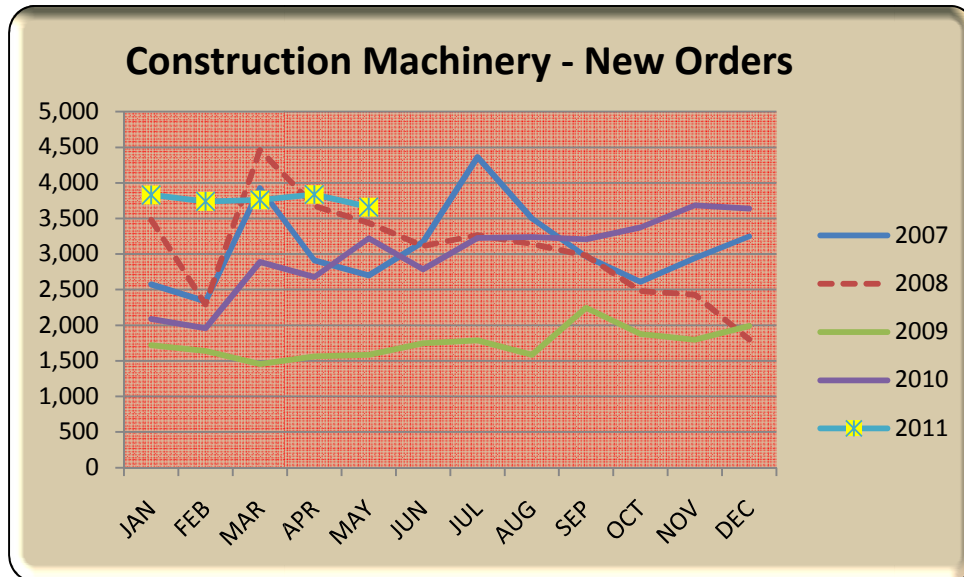
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Inventory climbed by 0.9% to \$356.1 billion. Current inventories are now at the highest level since the current measurements were started in 1992. The inventory to shipments ratio continues to climb. The inventory to shipments ratio continues to climb. The current value of 1.83 matches the level of January 2009 as we entered the recession. This is a very ominous sign for durable goods output. This level of inventory requires a correction. It is likely to signal a pending pull back of orders in the upstream supply chain.

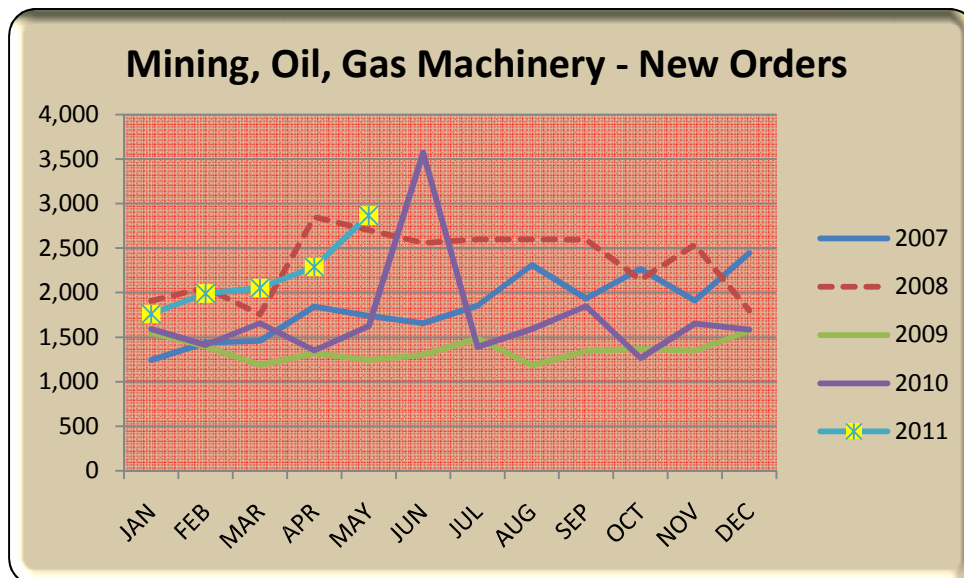


Key durable goods sub sectors:

Construction machinery new orders decreased by 4.6% to \$3.7 billion. Book to Bill ratio declined to 1.03. This warrants some attention. If the Asian and South American market growth slows the strong performance of this sector will fade.

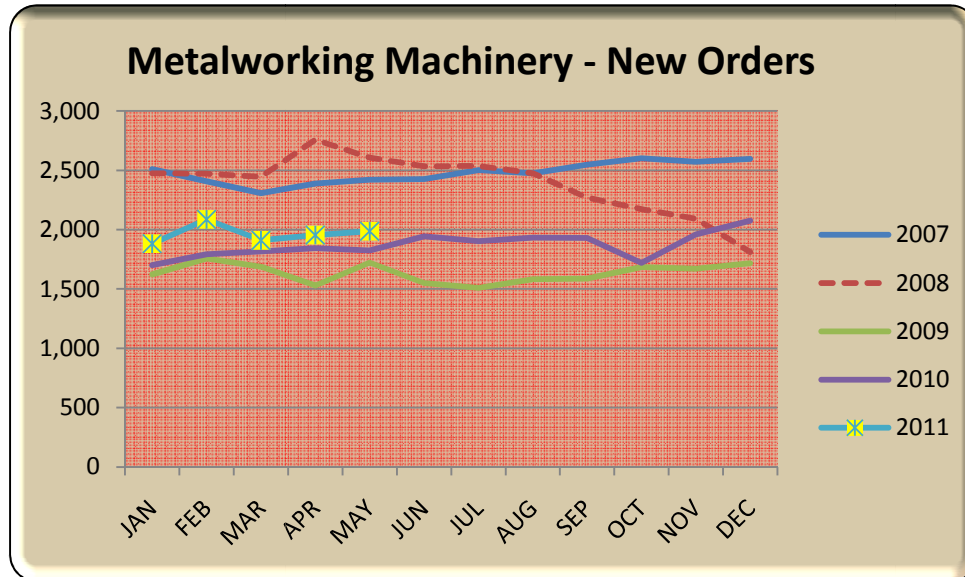


Mining, oil and gas machinery new orders surged by 25.3% to \$2.9 billion. Book to bill ratio stands at a strong 1.68. Current oil prices in the \$100 range have encouraged more drilling and new drilling rigs. Also check the active drilling rig chart and the Energy section for likely scenarios.

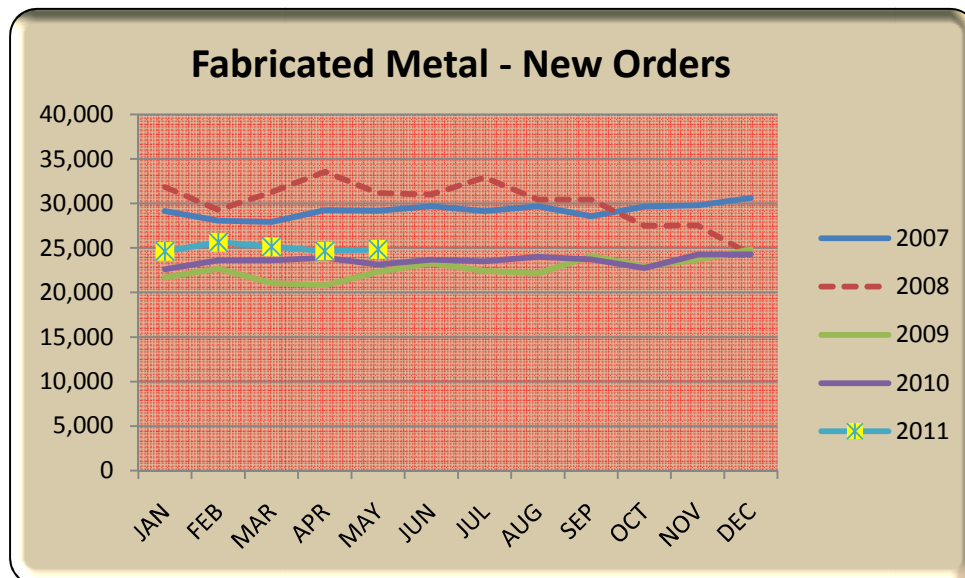


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Metalworking machinery new orders increased by 1.6% to \$2.0 billion. Book to bill ratio is slightly positive at 1.04.

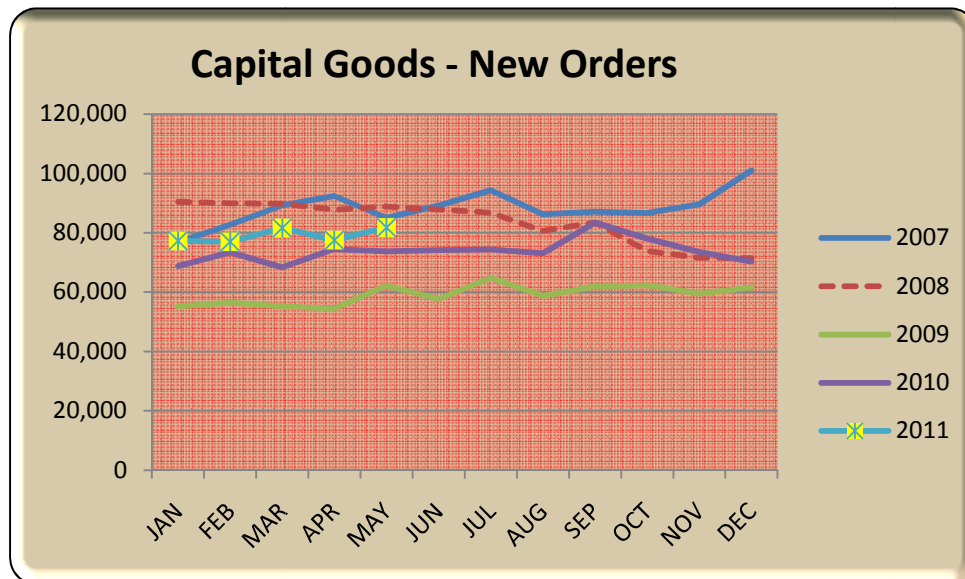


Fabricated metal new orders declined 0.8% to \$25.8 billion. Book to bill ratio is neutral at 1.01.



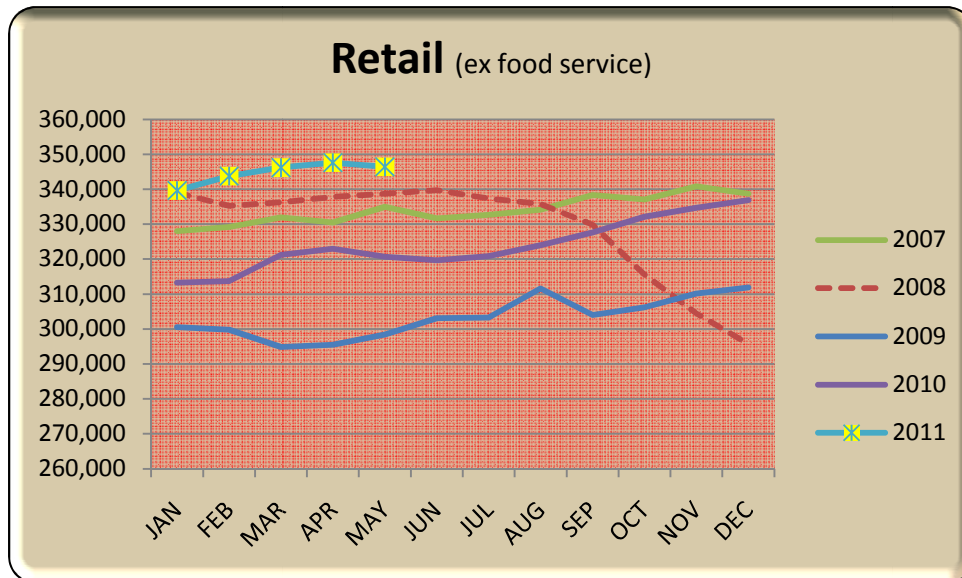
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Capital goods increased by 5.5% to \$81.8 billion. Book to bill ratio is slightly positive at 1.09.

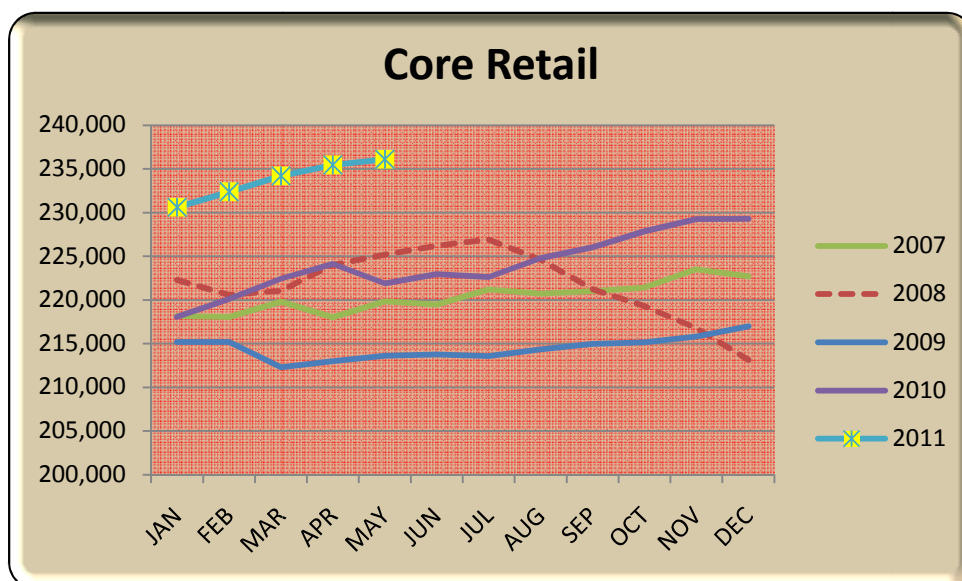


Retail Data (May Advanced Release)

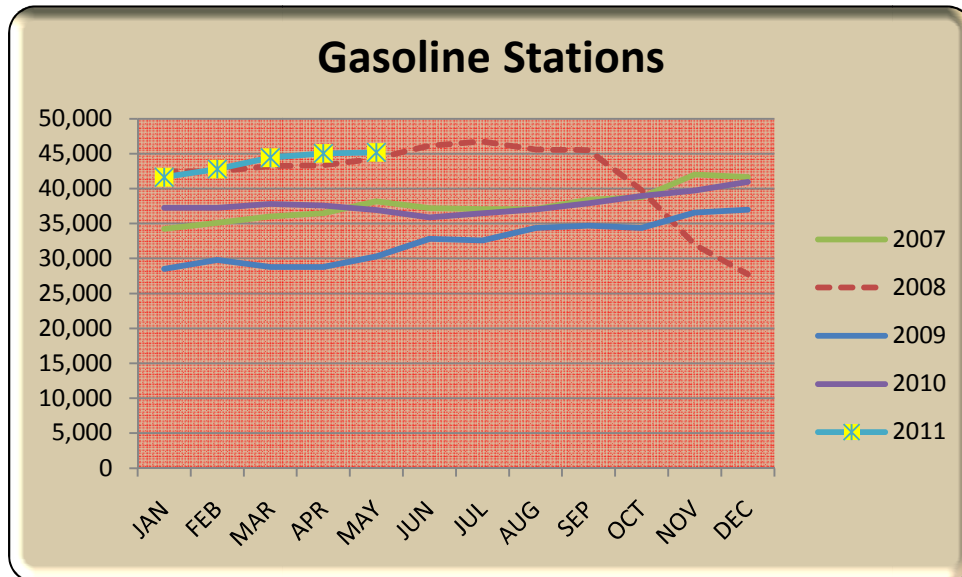
Retail Sales (excluding food service) Declined by (0.3%) to \$346.4 billion in May. The decline was led by a decline in auto sales. The loss of net worth due to housing price declines plus the high cost of gasoline are causing continued retrenchment on the part of consumers.



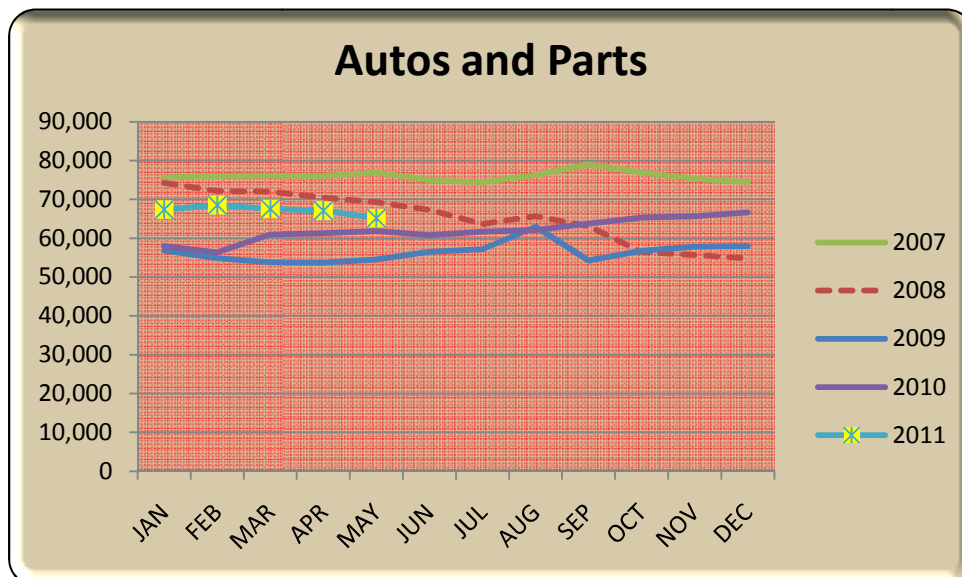
Core retail (excludes food service, gasoline, autos and parts) increased 0.5% to \$236.1 billion. Given any of the estimates of inflation, this is probably a decline in physical activity.



Gasoline sales increased 1.4% in May and now stand 22% above May 2010. The cost of gasoline remains a drag on retail spending.

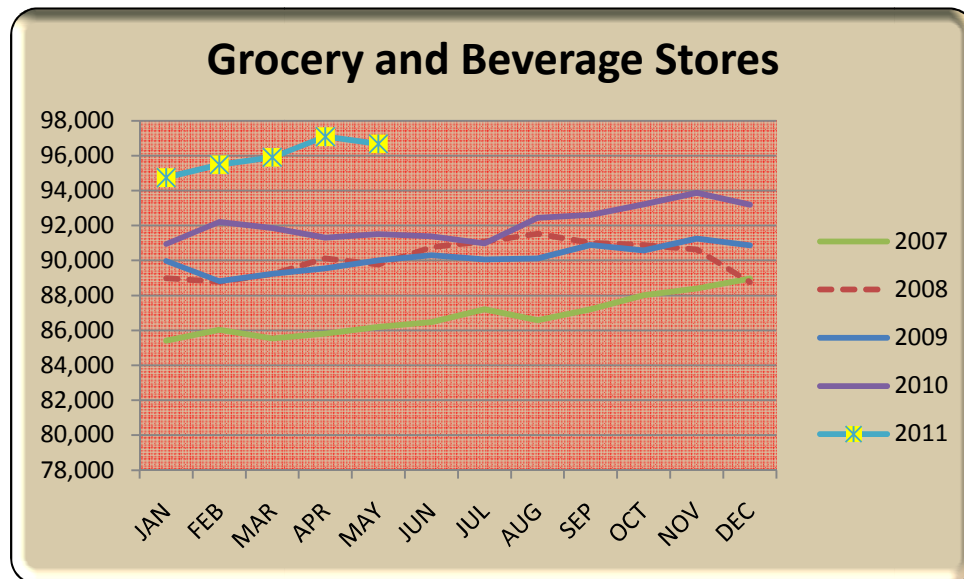


Auto sales declined for the third consecutive month. The 2.9% decline in May ran the losing streak to 5% total. Supply problems from Japan hit the Japanese based suppliers, but that doesn't explain the tough sledding for the North American based manufacturers. With buyers staying home, the prospects for the economy are not optimistic. GM looks to be in the worst shape. They currently have 122 days of inventory in the retail supply chain, about double what Ford has in place. This looks like more than a supply chain problem.



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Grocery and Beverage stores sales declined 0.4% in April, to \$96.7 billion. This is 5.6% above May 2010.



Housing (April Data):

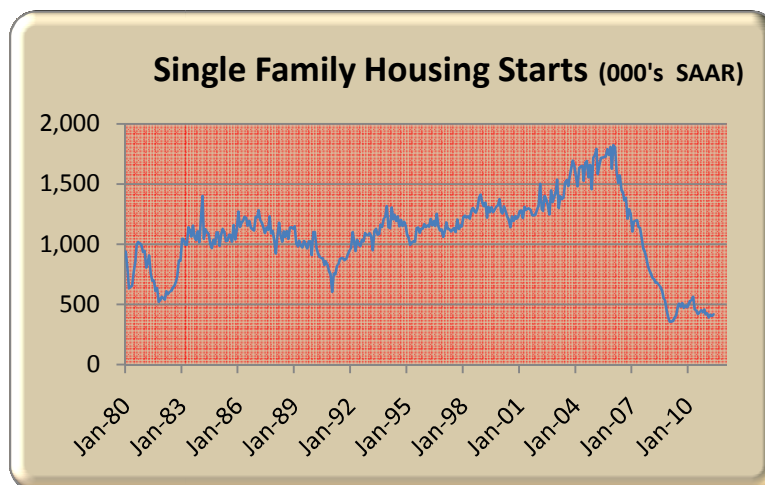
Housing remains weak despite occasional upticks. The loss of value has reverberated across the entire economy. As the bubble in housing prices collapsed, personal balance sheets took a hit. As a practical move, individuals reduced consumption to rebuild net worth. Until this process is complete the economy will not fully recover.

The focus of how much the tighter qualification requirements hit the market turned out to be the wrong question. The current economy has kept even qualified buyers sitting on their hands. People feel less wealthy with their largest asset under pricing pressure.

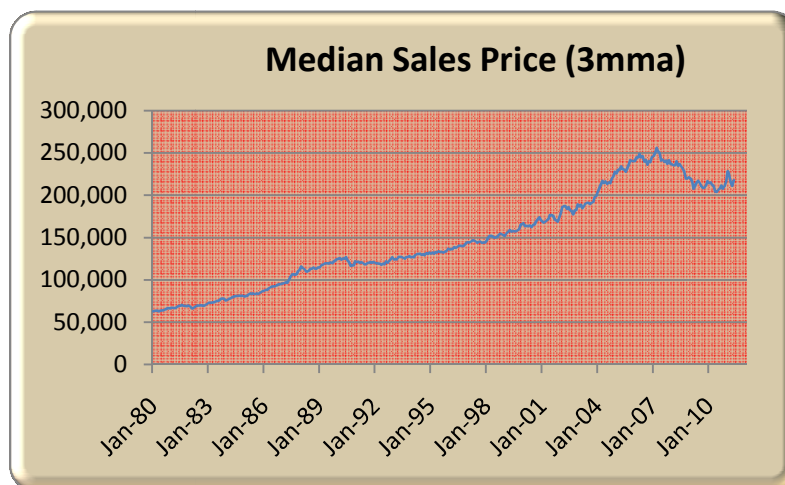
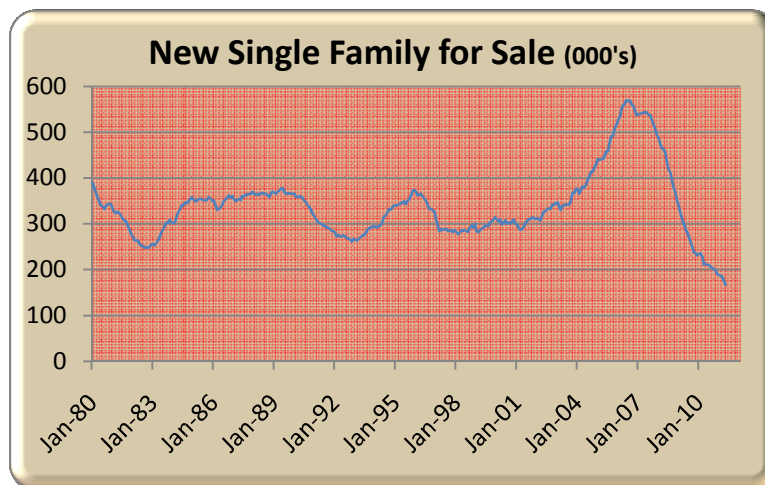
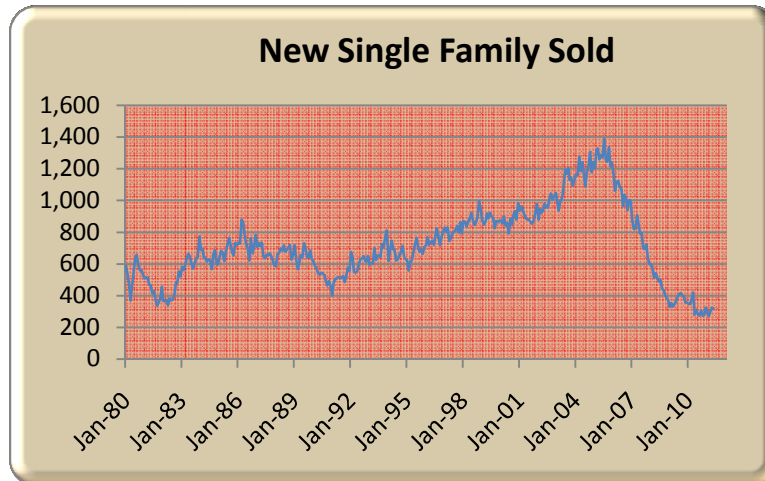
Attempts by government agencies to soften the blow have made the problem worse. Many homeowners who responded to government incentives and bought more house than they would have normally considered are still in those houses. Slowing the transition has delayed the recovery.

As a sign of the trend, single family housing starts as a % of total housing unit construction fell from 81% during 2006 to 76% in the last 12 months. There is a trend back to apartments for many families, and this will have a positive impact on the economy once the shift is completed. Families struggling to support an excessive mortgage do not support the more productive segments of the economy.

There is still no indication of how much more adjustment is required to get back to a “natural” balance in housing. But the positive signal is that the bubble pricing has been wrung out of the market (see median sales price chart below).



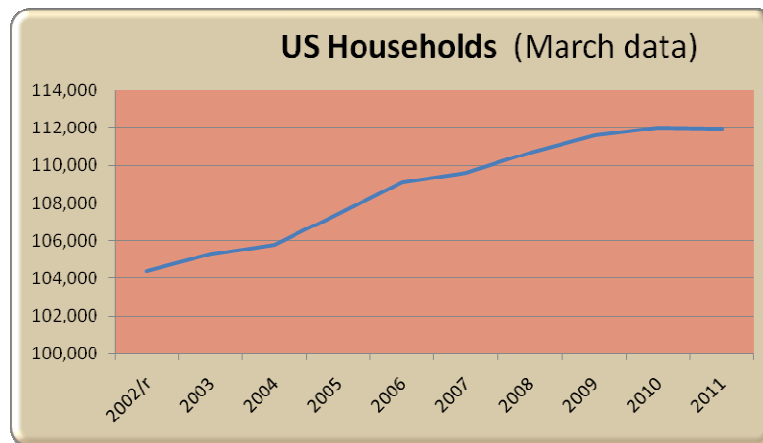
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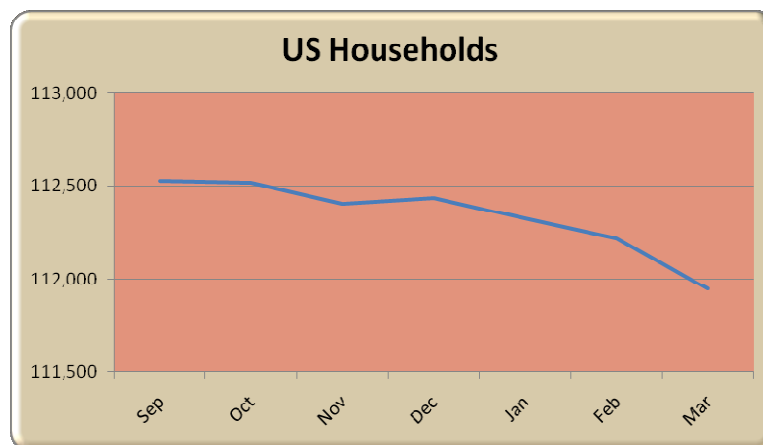
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New Household Formations: For several years the DGR has raised the question of how the depressed levels of housing construction could support a normal level of household formation. We now have some added insight. For the first time since WWII the count of total households in the US is declining. The charts below show a clear pattern. The exploded detail since September is most dramatic.

Total US Households



Exploded View Sept - Mar



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 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

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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

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