



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication
serving SFSA steel casting industry Members

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July — 2010

Casteel Commentary

Business news outlets have engaged in a furious debate over whether the danger of inflation or deflation is more likely. The current low level of activity and low inflation numbers makes some argue for a Japanese style lost deflationary decade. The unprecedented actions of the Federal Reserve to provide liquidity and monetary easing have lead others to argue that we are in danger of a strong inflationary cycle that would threaten the value of the dollar in international markets. For our industry, the deflation of the 1980 through 2003 makes additional deflation unlikely. Most steel casting producers have taken long term steps to reduce costs and must get pricing for their product adequate for business viability. The lack of capacity and the need for investment and infrastructure makes our industry likely to prosper in the coming years once the current political and economic uncertainty is resolved.

Annual Meeting

The annual meeting is September 11-14, 2010 in Bar Harbor, Maine. This will be a valuable program and we want you to attend. Our business meeting program will offer the complete market forecast, business round table discussions, and other presentations relevant to our industry.

The meeting is at The Harborside Hotel, Spa & Marina. It is the premier resort in Bar Harbor, Maine. Nestled in downtown Bar Harbor, it is just moments away from Acadia National Park, one-of-a-kind antique shops, outdoor lobster shacks, and whale watching. The Harborside offers breathtaking views of Frenchman's Bay and ocean beyond. With the finest guest accommodations and unsurpassed hospitality, Harborside is the perfect destination. Meeting registration information is available on the SFSA website, or contact Kelly DiGiacomo (kdigiacom@sfsa.org).

Surveys

Thanks to all for participating in the various surveys we conduct for members. Everyone who participates gets the full set of responses. This is a great way for us to benefit from our Society. These surveys are generated from member inquiries. More recently we have had questions related to items or equipment to buy or sell. Feel free to submit any area or questions you have for us to survey.

Intellectual Property

SFSA's R&D is largely funded through the DoD. Development and deployment of this new technology in your foundry is critical for maintaining funding; however, it often raises the question - how do I protect this investment in my foundry? The National Defense Industry Association (NDIA) recently highlighted industry concerns regarding intellectual property protection issues when it comes to manufacturing defense components (www.ndia.org/ip). There are several safeguards in place; however, government employees do not always handle proprietary data properly. While there are legal means for recourse, this can be burdensome. Two tips for safeguarding your data: One, only provide technical details when it is a contracted deliverable. Two, implement a Non-Disclosure Agreement (NDA) when the discussion of process technology is required to facilitate the R&D. When it comes to patenting technology with government funding, typically the government will co-patent;

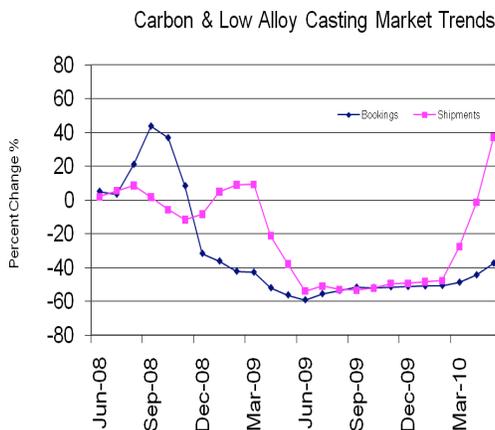
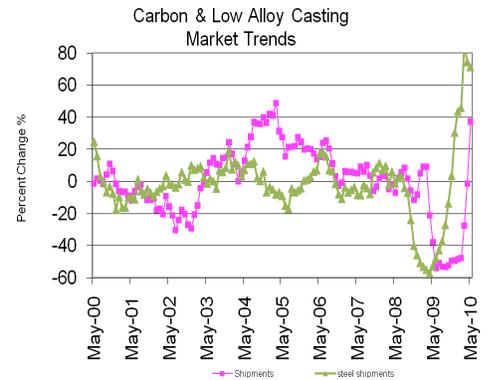
thus, they retain the right to use the patent for their product but not for commercial applications. If you have additional questions, please contact David Poweleit (poweleit@sfsa.org).

Directory of Steel Foundries

SFSA maintains the Directory of Steel Foundries on our website, at <http://www.sfsa.org/dir>. We urge all member companies to review their information in the Directory periodically and let us know if there are changes that need to be made; contact Rob Blair (blairr@sfsa.org). The Directory Information Form is attached to the PDF version of this newsletter. A listing of all SFSA member companies can be viewed at <http://www.sfsa.org/dir/bigsearch3.php3?sfsambrs=1&sortby=company>.

Market News

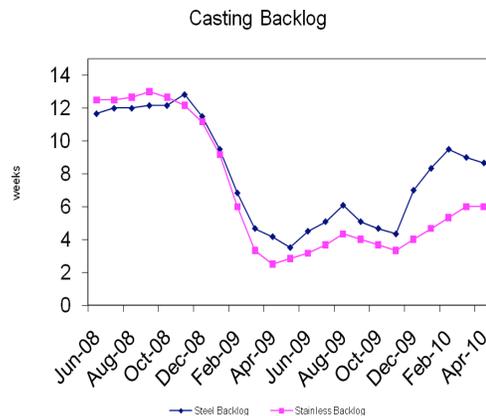
Shipments of castings have improved through the past couple months as expected. The graph of steel casting shipments and all steel product shipments show the recent trends. All steel products has been leading the steel casting market by about six months. Their demand bottomed out in March 2009, off over 50%. Steel casting shipment according to the SFSA trend cards bottomed out in April 2009 but remained at or below 50% through January 2010. As can be seen in the graph the steel casting industry likely improved through July and then may stabilize or see some downward volatility.



The trends for orders and shipments for steel castings show that shipments have improved more radically than orders. Undoubtedly the lack of inventory has lead buyers to delay orders until the castings are required and are not ordering to maintain an inventory for meeting their customer requirements. We can see these low inventory numbers in the reports published by the Department of Commerce Census data. For iron and steel foundries the inventory levels for the last three months are 20% less than the inventories for the past 12 months.

The backlog of castings has also fallen in recent months showing that while production levels have improved, orders are coming in at the last minute and are sensitive to the delivery timing.

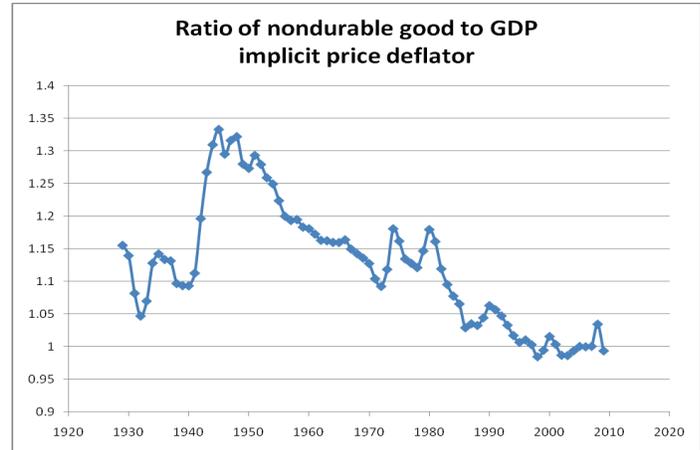
Iron and steel casting orders and shipments have slid in the Census data. This likely reflects the slowdown in automotive and housing due partially to the end of incentives for purchase. Steel production has continued to improve at the highest level for a year and a half. The steel industry is concerned about weakening demand and softening prices. There are some cut backs in steel production in an effort to control this pricing pressure. This is similar to the trend seen in Nondefense Capital Goods New Orders. All of this news supports the view that markets for steel castings are improving but that volatility will be larger than the improvement.



Full graphs are found in the PDF version of the newsletter.

Casteel Commentary

The future prosperity of the steel casting industry in the long term will depend on our actions over the next few years and on the public policies adopted by our lawmakers. We as an industry will need to recruit and equip a new generation of steel foundry leaders. We will need to develop and expand into new market applications like high performance parts for large power generation and infrastructure. We will need new processing technology that allows us to meet higher quality and performance goals. We need public policy makers to make it attractive to make steel castings in North America. We need a stable investment environment to make investing in our and our customers' capital-intensive industries attractive. We need environmental and safety regulations geared to improvement not enforcement and that does not export pollution and human suffering. We need investment in manufacturing science and engineering to provide the vital technology infrastructure for our future workforce and technology developments. Beyond ten years out, our future will depend largely but not solely on our ability to respond to these challenges.

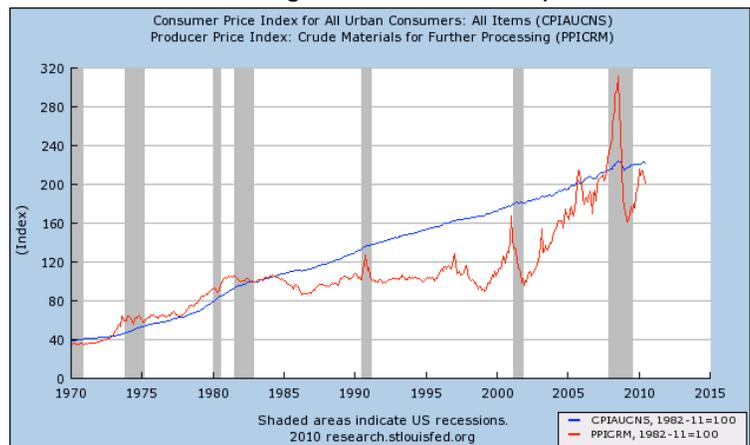


The near term challenge is the political and economic uncertainty that hinders investment and production vital to the demand for steel castings. The required investment in infrastructure, materials and energy production to meet the global requirements is clear. The lack of a stable and clear political and economic system in North America and the world makes the large investments required impossible. While there is an abundance of financial resources in the system, it is not being applied to these needed investments. While for the first half of the year, demand and production improved markedly for many steel foundries, the next twelve months have become increasingly uncertain as the stimulus and spending in federal programs is reduced and the private sector has not grown in demand sufficiently to clearly sustain the economic expansion. I expect that we will see a slower but continued expansion. For steel foundries I believe this means improving business but continued volatility. The volatility will exceed the improvement so it will make production planning and staffing decisions difficult. The larger debate about the direction and medium term outlook for the economy has focused on whether the economy is in danger of increasing inflation leading to eroding of investment values or likely to experience a long-term deflationary stagnation. I think for assets the picture can be clarified.

The graph shows the change in the consumer price index for all goods in contrast to the producer price index for crude materials for further processing. The index is set at 100 in 1982 and the graph includes the time period from 1970 through 2010. During the 1970's during inflation, crude materials had increases in prices that outstripped the consumer price index. For the next thirty years, crude materials were in a deflationary cycle and unable to match the change in the consumer price index.

You can clearly see the period of price stability from 1980 through 2003 when prices for most commodities and energy remained stable, losing value at the rate of inflation. The dramatic increases of pricing in the 2003 through 2007 are clear as the excess supply that had led to price stability had been reduced relative to demand. The inability to fully meet the demand for materials caused users to bid up the prices.

The other graph shows the ratio of the nondurable goods (stuff) to the GDP(everything) implicit price deflator.



This shows directly the relative value of stuff to everything else showing the decline expected. As manufacturers become more productive and efficient, the relative price of the stuff they make declines. While there is a gentle trend down in the data, this ratio declined from 1980 to 1998 by 20%. While the ratio has remained stable but volatile for the past ten years, it has not sustained an increase.

So for our industry, I expect to see the imbalance in supply and demand create significant upward pressure on prices discovering the lack of global capacity. The lack of return on investment due to over capacity for the last thirty years will lead to inadequate supply reflected in improved margins. For us at least after a long period of deflation already, increasing prices and demand will be the norm for the next period after the resolution of this period of uncertainty.

This is not necessarily reflective of the economy as a whole. During a period of continued mild inflation, our industry experienced relatively harsh deflationary pressures. The manufacturing sector is less than 15% of the economy. Deflation in healthcare costs or education expenses would overwhelm any changes in the cost of our manufactured goods.

So for the next 3 to 12 months, I expect slight market improvements overshadowed by volatility. I expect at the end of the period to see our business improve to be at near capacity. My expectation is that this near capacity period will extend for about a five year period. While the economy as a whole may see price stability, our industry will see improving prices. The period of deflation ending in 2004 makes additional deflation difficult to envision.

Raymond Monroe

JobshopLean2010 Conference

Lean and Flexibility Are Both Essential for High-Mix Low-Volume Manufacturing

I am pleased to announce that the JobshopLean2010 Conference will be held on September 7-9, 2010, at The Ohio State University, Columbus, OH. This niche conference is focused on adapting and extending Lean as an overarching strategy specifically targeting high-mix low-volume small-to-medium manufacturers. “JobshopLean” recognizes that, *while Waste Elimination must serve as a foundation*, a successful manufacturing strategy for a jobshop requires a different mindset, new methods and computer-aided tools to design a production system that is Flexible, Agile, Reconfigurable and Adaptable to business and operational conditions that an OEM like Toyota never has to deal with.

JobshopLean recognizes that it is the combination of PEOPLE, PROCESSES, SYSTEMS, STRATEGY and MANAGEMENT that makes any organization successful. Therefore, at this unique conference, you will:

- ◆ Observe (maybe participate in?) a unique interactive JobshopLean Simulation that teaches the nuts-and-bolts of various JobshopLean strategies that have been successfully implemented in jobshops by students and faculty at The Ohio State University
- ◆ Network with like-minded peers from academia and industry who have experiences to share, advice to give and questions that you may also want to have answered
- ◆ Hear from speakers who are themselves owners of jobshops and have successfully implemented Lean to thrive during the recession
- ◆ Learn from fellow high-mix low-volume manufacturers about successful strategies, pitfalls and surprises that they encountered on their company’s “Lean Journey”
- ◆ Attend a special presentation that describes an ongoing project to identify part families in the product mix of a jobshop, then leverage that knowledge to “See The Whole” and determine system-wide, not local, improvement opportunities
- ◆ Attend a session featuring presentations on “Technology Enablers for Jobshop Management”
- ◆ Attend a session devoted to “Leadership and Workforce Development in Small and Medium Enterprises”
- ◆ Attend a special presentation on “Scientific Management of a Jobshop” by a jobshop owner
- ◆ Watch the *Toast Kaizen* video and learn how to integrate “Lean Tools” with the powerful diagnostic charts and scheduling techniques that Industrial Engineers use for process improvement through waste elimination
- ◆ Participate in a closing 2-hour Open Forum discussion involving the entire group of conference attendees

Conference Homepage:

<http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean.htm>

Conference Agenda: http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean_files/schedule.htm

Speaker Bios: http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean_files/biographies.htm

Attendee Comments for JobshopLean2009 Conference:

http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean_files/attendee_comments.htm

Not interested in attending the conference this year?

Still, you may want to check out the “treasure trove” of information on JobshopLean that is posted at the conference website. Just click on the links provided below:

Why JobshopLean?

http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean_files/jobshoplean.htm

How JobshopLean?

http://www.ise.osu.edu/ISEFaculty/irani/jobshoplean_files/howjobshoplean.htm

The Registration Fee is \$450 per attendee for this 3-day conference. This fee entitles each attendee to all meals and refreshments, a copy of the CD containing all conference presentations released by the speakers for public dissemination and, of course, our wonderful Buckeye hospitality.

Group discounts are available!!!!

For individual companies:

- Group of 2-5 employees, the Registration Fee is \$375 per person.
- Group of 6-10 employees, the Registration Fee is \$300 per person.

For professional organizations (IIE, ASQ, PolymerOhio, APICS, Richland Manufacturing Coalition, NIST MEP's, SME, PMPA, Others?):

- Group of 10-20 members, the Registration Fee is \$350 per person.
- Group of 21+ members, the Registration Fee is \$250 person.

So don't let the economy discourage you from attending this conference. It will easily give you ideas on how to earn X50, maybe X100 times, the cost of the trip! ☺

Thank you.

Best regards,
Shahrukh Irani

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**STEEL FOUNDERS' SOCIETY OF AMERICA
BUSINESS REPORT**

SFSA Trend Cards (%-12 mos. Ago)	12 Mo Avg	3 Mo Avg	May	Apr
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Carbon & Low Alloy

Shipments	-28.2	37.3	67.8	30.0
Bookings	-48.3	-37.4	-29.4	-37.5
Backlog (wks)	7.0	8.0	7.5	8.0

High Alloy

Shipments	-40.3	0.7	6.5	25.0
Bookings	-53.9	-47.8	-41.9	-46.0
Backlog (wks)	4.8	6.0	6.0	6.0

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

Shipments	1,228.8	1,236.0	1,180	1,181
New Orders	1,241.3	1,267.0	1,188	1,230
Inventories	2,133.6	1,886.0	1,762	1,755

Nondefense Capital Goods (billion \$)

Shipments	58.1	61.4	62.5	62.4
New Orders	56.5	62.3	64.7	65.5
Inventories	132.5	128.0	126.4	125.4

**Nondefense Capital Goods
less Aircraft (billion \$)**

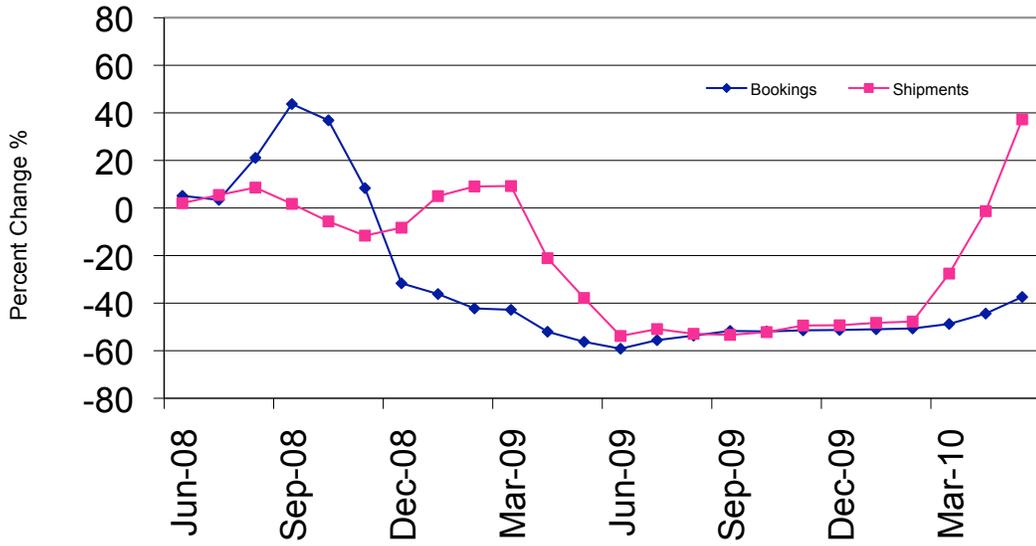
Shipments	54.2	57.8	59.2	58.4
New Orders	54.0	58.5	60.6	58.3
Inventories	97.5	97.4	98.7	98.0

Inventory/Orders		1.66	1.63	1.68
Inventory/Shipments		1.68	1.67	1.68
Orders/Shipments		1.01	1.02	1.00

American Iron and Steel Institute

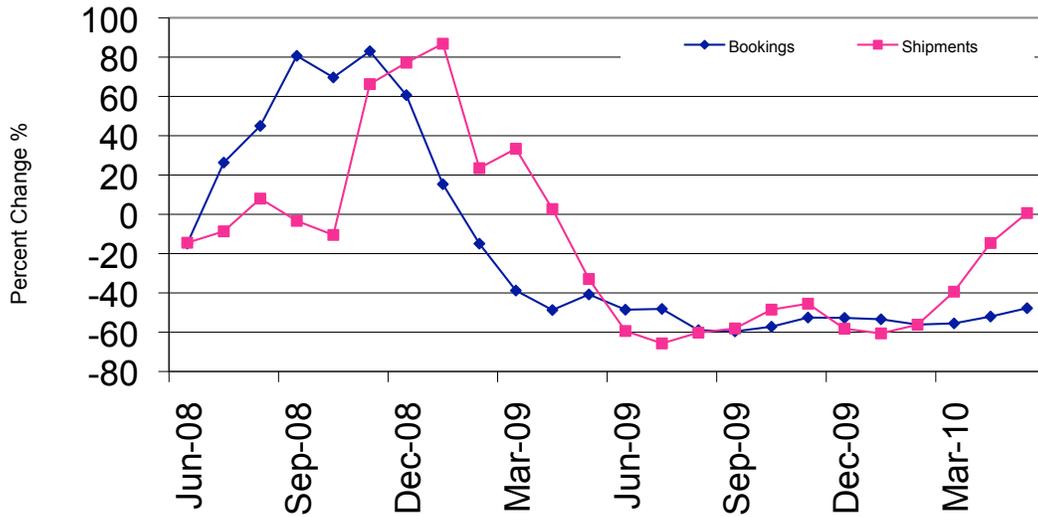
Raw Steel Shipments (million net tons)	6.2	7.4	7.3	7.1
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Carbon & Low Alloy Casting Market Trends



SFSA Postcards

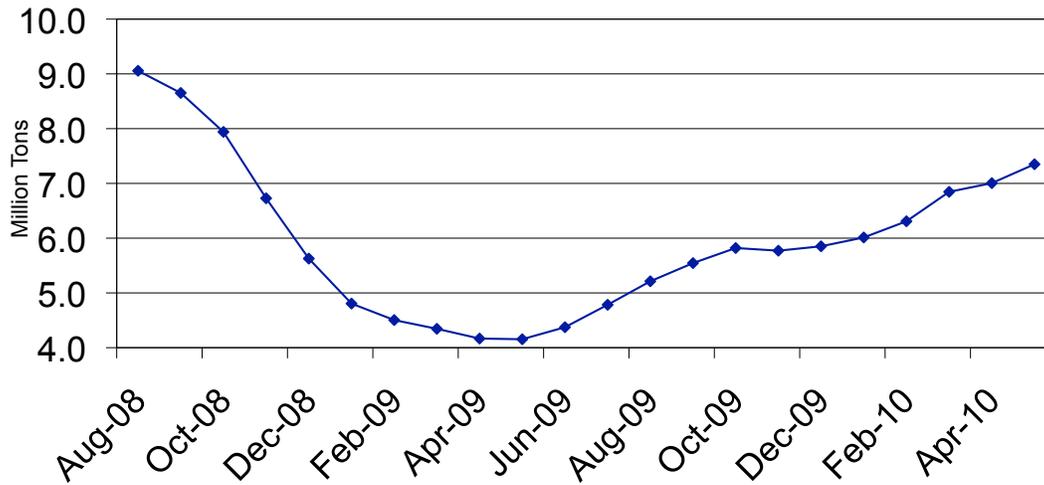
High Alloy Casting Market Trends



SFSA Postcards

Raw Steel Shipments

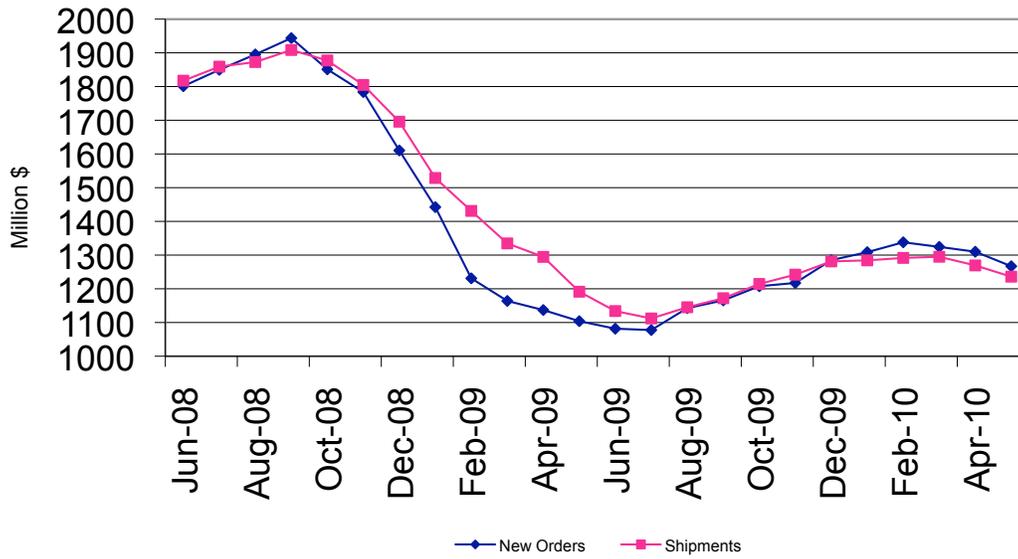
3 month average



AISI Data

Iron and Steel Castings

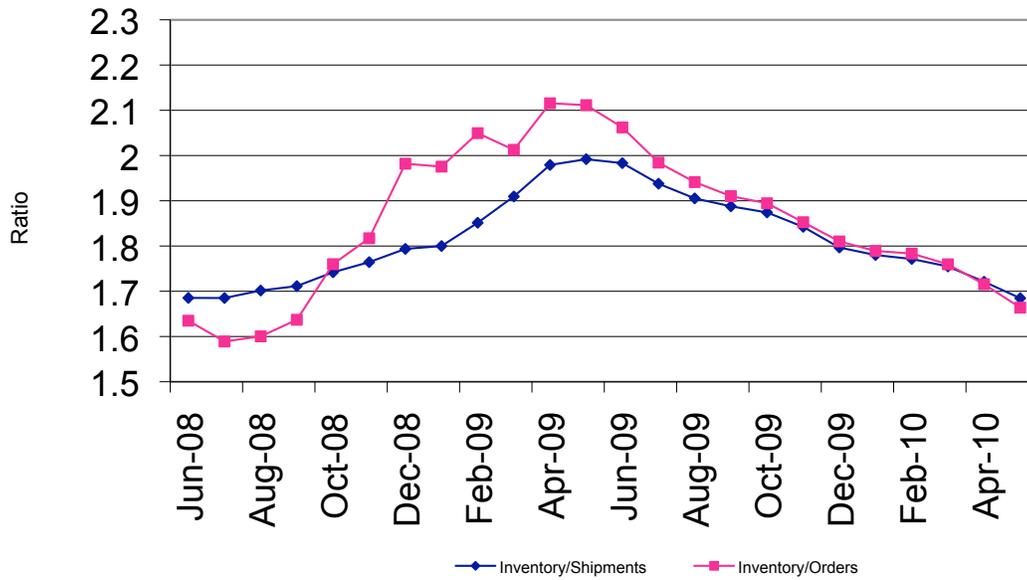
3 month average



SFSA

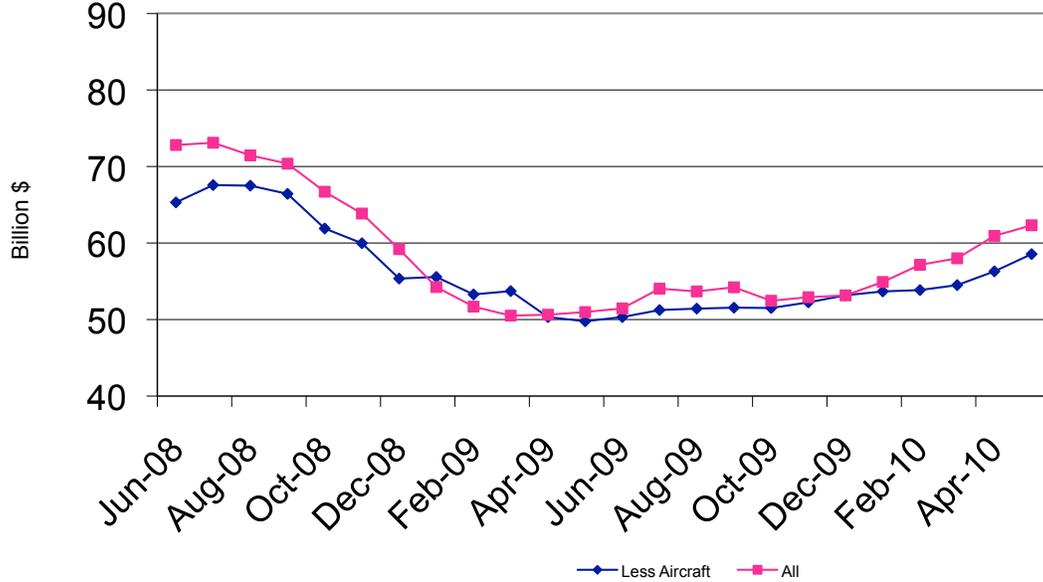
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Nondefense Capital Goods less Aircraft 3 month average



Department of Commerce

Nondefense Capital Goods New Orders 3 month average



Department of Commerce