



Surviving The Garrote Of Low Priced Imports Squeezing USA Wire Producers: New Administration Brings New Hope

Presentation at the:



by: Becky E. Hites, President February 21, 2017

A Garrote? Seriously?!? Sensationalism? Or A Fight For Survival?





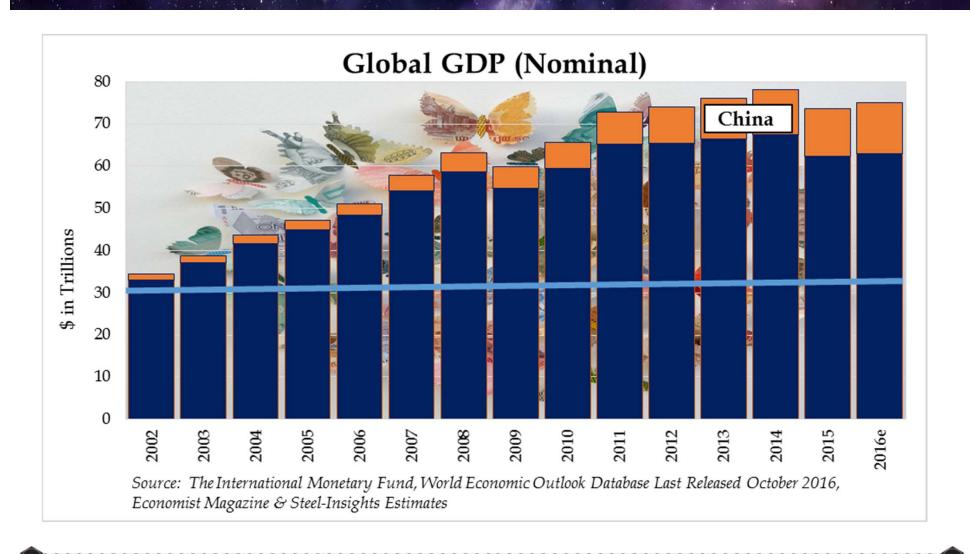
"Apocalypse Now?" Economist Magazine Jan 26 2017 Trade Has Been A Decade Long Discussion So What's Changed Now?

- Rules of engagement: America, China and the risk of a trade war... *Jan 28, 2017*
- Apocalypse now: Winners and losers in a China-America trade war... *Jan 26, 2017*
- Jaw jaw: How Trump can press China without resorting to a trade war... Welcome to the topsyturvy new politics of trade. *Jan 26, 2017*
- America and the world: Trade, at what price? *Apr* 2, 2016
- The China trade syndrome. Europe's next big globalization row will be over trade with China. *Oct* 4, 2007





World GDP Growth Stalled In 2015 On A Current Dollar Basis, Which Left Everyone Scrambling To Find A Market



World Economies Were Growing In Sync Until 2008 And Again In 2011; In 2015, Only North America And China Posted Growth; Global Economy Has Doubled Since 2000



GDP (Nominal) By Region

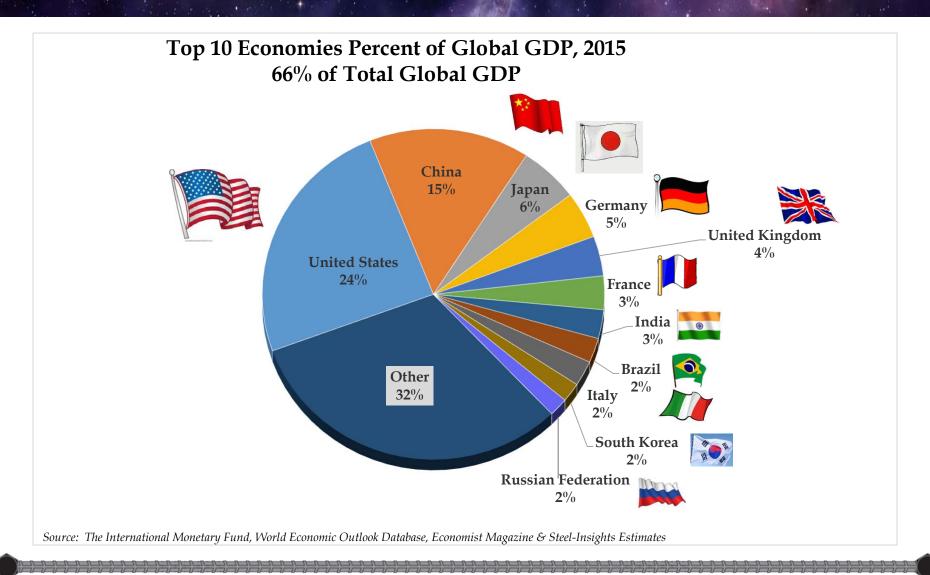
(\$ in Trillions)

	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016e
World	33.3	38.7	43.6	47.2	51.2	57.8	63.3	59.9	65.6	72.8	74.1	76.1	78.0	73.6	75.0
North America	11.7	13.1	14.1	15.1	16.1	17.0	17.4	16.7	17.6	18.5	19.2	19.8	20.5	20.7	21.0
European Union	8.8	11.9	13.7	14.3	15.3	17.7	19.1	17.1	17.0	18.4	17.3	18.0	18.6	16.3	16.4
China	1.2	1.7	2.0	2.3	2.8	3.5	4.6	5.1	6.1	7.5	8.6	9.6	10.6	11.2	11.9
East Asia & Pacific Sans China	6.9	6.9	7.6	7.9	8.0	8.6	9.3	9.3	10.7	11.8	12.1	11.3	11.0	10.3	10.4
Latin America & Caribbean	2.3	2.1	2.4	2.9	3.4	4.0	4.6	4.3	5.2	6.1	6.1	6.2	6.0	5.2	5.1
Europe & Central Asia	0.7	1.1	1.4	1.8	2.2	2.8	3.4	2.7	3.2	3.8	4.0	4.2	3.9	2.9	2.8
MENA	0.9	1.1	1.3	1.5	1.8	2.1	2.6	2.4	2.7	3.2	3.3	3.4	3.5	3.1	3.1
South Asia	0.6	0.8	0.9	1.1	1.2	1.5	1.6	1.7	2.1	2.3	2.3	2.4	2.6	2.5	2.3
Other	0.0	0.2	0.4	0.4	0.4	0.6	0.7	0.8	1.0	1.2	1.3	1.3	1.4	1.4	1.8
Arab World	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.1	2.4	2.8	2.9	3.0	3.0	2.7	2.7
Growth Rates															
World	3.0%	12.4%	12.6%	8.3%	8.3%	12.9%	9.5%	-5.3%	9.5%	10.9%	1.8%	2.7%	2.6%	-5.7%	1.9%
North America	7.3%	5.1%	7.3%	7.5%	6.7%	5.3%	2.3%	-3.9%	5.7%	4.8%	3.7%	3.3%	3.5%	1.2%	1.4%
European Union	-7.0%	21.7%	15.5%	4.6%	6.7%	15.7%	7.9%	-10.6%	-0.3%	8.0%	-5.8%	4.2%	3.2%	-12.3%	0.9%
China	10.6%	13.1%	17.6%	17.4%	20.1%	28.7%	28.9%	11.1%	19.6%	24.0%	13.9%	12.4%	9.6%	5.9%	6.7%
East Asia & Pacific Sans China	28.7%	9.9%	10.4%	3.7%	2.1%	7.0%	8.2%	-0.4%	15.2%	11.0%	2.6%	-6.9%	-2.4%	-6.6%	1.3%
Latin America & Caribbean (all income levels)	9.1%	2.8%	14.9%	21.0%	17.4%	17.9%	15.8%	-7.4%	23.0%	16.0%	0.4%	1.3%	-2.3%	-13.2%	-3.3%
Europe & Central Asia (all income levels)	11.5%	25.9%	31.7%	26.0%	22.6%	28.9%	23.2%	-21.7%	19.2%	18.3%	4.5%	4.6%	-6.4%	-25.1%	-3.8%
MENA	10.8%	12.1%	18.0%	20.5%	17.1%	18.4%	24.8%	-10.4%	16.4%	16.7%	2.2%	3.3%	2.2%	-11.1%	0.8%
South Asia	4.0%	16.7%	16.0%	14.6%	14.3%	26.7%	1.7%	9.9%	22.7%	9.1%	0.8%	2.6%	9.6%	-5.0%	-5.0%
Arab World	10.0%	13.4%	19.7%	22.4%	18.2%	18.8%	24.8%	-10.8%	16.7%	17.2%	2.3%	2.2%	1.7%	-11.6%	0.8%

Source: The International Monetary Fund, World Economic Outlook Database, October 2016, Economist Magazine & Steel-Insights Estimates

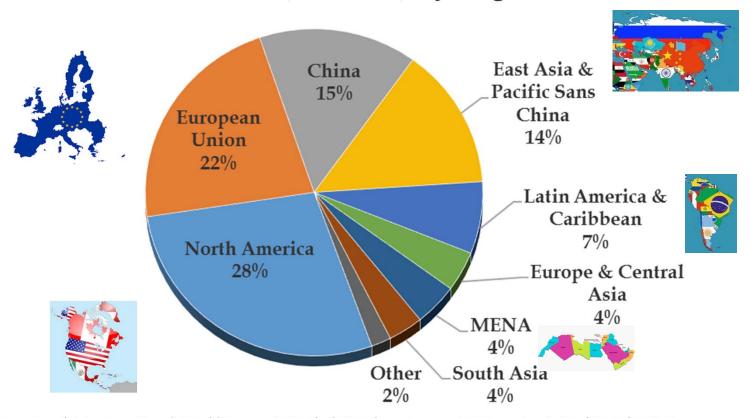


Top 10 Economies Represent Two-Thirds Of Global GDP; In 2015, South Korea Displaced Russia In The Top 10



The Developed World (North America and Europe) Accounts For About Half Of The Global Economy; Down From 61% In 2000

Global GDP (Nominal) by Region, 2015



Source: The International Monetary Fund, World Economic Outlook Database, Economist Magazine & Steel-Insights Estimates



Global Economic Growth Remains Vulnerable Even At the Low 2%-2.5% Level



- Global GDP growth from 2012-2014 ranged from 1.8-2.7%. The October 2016 data revision from the IMF showed the world economy DOWN 5.7% in 2015 on a current US dollar basis.
- The world is still vulnerable to a slowdown which would approach a flat performance.



- The global banking system has been shored up since the 2008 meltdown, but is still not resilient. George Soros, prominent global hawk, now warns that the European banking system is facing a 2008 potential melt-down scenario.
- Oil, which funds many developing economies, remains priced at low levels with a deep "bench" of available projects.



The upcoming French election (FREXIT), Greece's debt issues, implementing BREXIT, the migration crisis, and the emissions scandal are just some of the economic distractions in Europe.

Dramatic actions by President Trump have created uncertainty around historically predictable relationships. All of the USA trade relationships are back on the table.



Lower Cost Fossil Fuel Energy Is Being Used To Offset Higher Alternative Energy Sources To Insure A Cleaner Environment In The Future Rather Than Priming The Economic Pump



• Oil has now been in global oversupply for 10 quarters starting Q3 2014 – the longest period in my adult lifetime. Bloomberg, June 16, 2015



• Pope Francis has entered the clean environment fray with an "encyclical" calling for more action to halt climate change.



Renewable energy generation could overtake coal in 15
year. Financial Times, June 14, 2015



Between now and 2040, expecting \$3.7 trillion in solar energy capital investments. Bloomberg Business, June 23, 2015



OPEC's Top Producer Is Turning to Wind and Solar Power. "Renewable energy is not a luxury anymore," Mario Maratheftis, chief economist at Standard Chartered Plc Bloomberg Markets, February 13, 2017

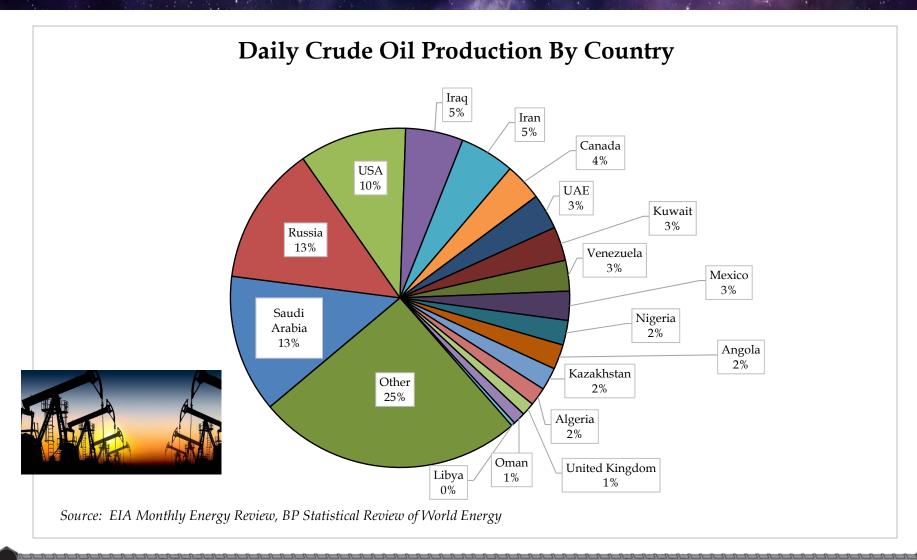


Recent OPEC Production Reduction Efforts Providing A Floor To Oil Prices, But Will Remain Vulnerable Until Iran's Production Becomes Re-Integrated Into The Global Supply And Global Economic Growth Solidifies

- OPEC re-emerged as a price control force when it negotiated voluntary production cuts among it members and others in Nov 2016 that have held and have resulted in 20% higher oil prices since that time.
- USA shale gas discoveries at the beginning of the century resulted in the USA being a net exporter of refined products in 2011, and the third largest producer of crude oil in 2014.
- In the summer of 2008 to reintroduce financial risk to oil development projects, the lead global exporter Saudi Arabia drove the price down from \$144 per barrel to the mid-\$30s per barrel by year end.
- As a happy co-incidence, the budget for ISIS was impacted due to lower funding from Russia, the second largest exporter of oil. A recent press report references sales of ISIS controlled Syrian oil & gas back to Syria as the largest source of funds for ISIS. Fortune, Jan 20, 2017
- With the trade embargo lifted against Iran, it also has capacity of 1.5-2.0 million barrels a day that is being integrated into the supply stream. It's been a slow ramp-up due to old technology (which will be upgraded) and banking challenges. (The Iranian Central Bank is now opening branches in Munich, Germany- reported the first week of September, 2016.)



The Top Six Countries Produce Half Of The Global Crude Oil Supply - USA Now 10%



Global Crude Steel Production In 2016 Was 1.6 Billion Tonnes, Up 0.7%; The USA Represents 4.8% Of Total

Crude Steel Production by Region (Million Metric Tonnes)														
	1995	2000	2005	2010	2014	2015	2016	2017e	2018e	2005-10	2010-15	2015-16	2016-17e	2017-18e
EU-28	189.7	192.3	195.7	172.9	169.3	166.1	162.3	162.5	164.0	-2.4 %	-0.8%	-2.3%	0.1%	0.9%
Russia	51.6	59.1	66.1	66.9	71.5	70.9	70.8	71.0	71.6	0.2%	1.2%	-0.1%	0.3%	0.8%
Ukraine	22.3	31.8	38.6	33.4	27.2	23.0	24.2	24.5	25.3	-2.9%	-7.2 %	5.5%	1.0%	3.5%
Other CIS	0.0	7.6	8.5	7.8	7.4	7.7	7.4	7.5	7.7	-1.5%	-0.4%	-4.0 %	1.0%	3.4%
Turkey	13.2	14.3	21.0	29.1	34.0	31.5	33.2	34.0	34.9	6.8%	1.6%	5.2%	2.5%	2.7%
Other Europe	94.5	117.9	138.1	141.9	144.1	137.2	139.8	141.6	144.3	0.5%	-0.7 %	1.9%	1.3%	1.9%
NAFTA	122.7	135.4	127.6	111.6	121.2	110.9	111.0	113.3	115.3	-2.7 %	-0.1%	0.0%	2.1%	1.7%
USA		101.8	94.9	80.5	88.2	78.8	78.6	80.4	82.0	-3.2%	-0.4%	-0.3%	2.3%	2.0%
South America	34.6	39.1	45.5	43.9	45.0	43.7	39.1	40.0	41.1	-0.7 %	-0.1%	-10.6 %	2.4%	2.7%
Middle East	8.1	10.8	15.3	20.0	30.0	28.6	30.7	30.9	31.3	5.6%	7.4%	7.2%	0.8%	1.3%
Africa	13.7	13.8	18.0	16.6	15.0	13.4	12.8	12.3	12.0	-1.5%	-4.2 %	-5.0 %	-3.6%	-2.4%
China	95.4	128.5	355.8	638.7	822.8	798.8	808.4	804.3	799.5	12.4%	4.6%	1.2%	-0.5%	-0.6%
Japan	101.6	106.4	112.5	109.6	110.7	105.2	104.8	104.6	104.3	-0.5%	-0.8%	-0.4%	-0.2%	-0.2%
India	22.0	26.9	45.8	69.0	87.3	89.0	95.6	99.9	105.3	8.5%	5.2%	7.4%	4.5%	5.4%
South Korea	36.8	43.1	47.8	58.9	71.0	69.7	68.6	67.4	66.7	4.3%	3.4%	-1.6 %	-1.7 %	-1.0%
Other Asia	23.8	26.9	37.3	42.2	48.0	47.1	48.1	48.1	48.8	2.5%	2.2%	2.0%	0.1%	1.4%
Oceania	9.3	7.8	8.6	8.1	5.5	5.7	5.8	6.0	6.1	-1.2%	-6.8 %	2.1%	3.2%	1.8%
Total Global	752	849	1,148	1,433	1,670	1,615	1,627	1,631	1,639	4.5%	2.4%	0.7%	0.3%	0.5%
Developed World	509	544	565	528	538	512	510	515	520	-1.4 %	-0.6%	-0.2%	0.8%	1.1%
Developing World	244	305	583	905	1,132	1,104	1,116	1,116	1,119	9.2%	4.0%	1.1%	0.0%	0.2%
Developed % of Total	68%	64%	49%	37%	32%	32%	31%	32%	32%					
Developing % of Total	32%	36%	51%	63%	68%	68%	69 %	68%	68%					

Total is a sum of EU-28, Other Europe, NAFTA, South America, Middle East, Africa, China, Japan, India, South Korea, Other Asia & Oceania Developed World is Europe (EU-28 plus Oher Europe less Other CIS), NAFTA & Japan

Source: World Steel Association, China Iron and Steel Association & Steel-Insights Estimates

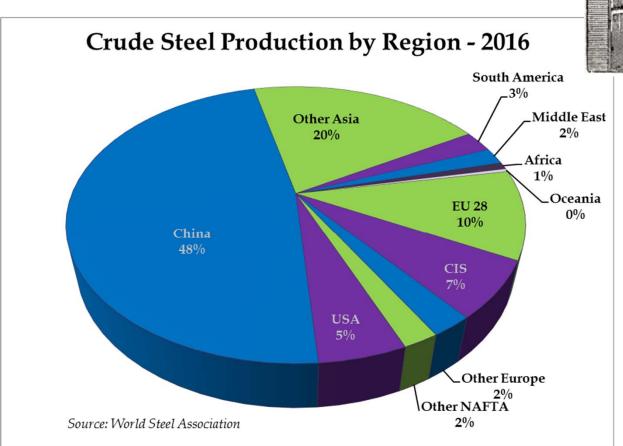


Steel Market Highlights

- Steel is oversupplied, both in the developing and developed worlds.
- The OECD (Organization for Economic Co-operation and Development) estimates the overcapacity at 600 million tonnes, or 30% of 2016 production.
- Pricing globally has been driven by low raw material costs and "cheap" foreign offerings typical of market troughs.
- Coal prices rose dramatically starting in August 2016 due to an unexpected Chinese shortage of jobs and resources have been moved away from that industry. Iron ore prices firmed in November 2016.
- Finished product prices are up 25-100% from the early 2016 lows. Demand is "ok" but not superb.



Colonial Model Of Supply No Longer Holds True As Two-Thirds Of Global Crude Steel Production Is In The Developing World Countries







The Top 20 Steel Producing Companies Account For About Half Of The Global Production. Chinese Companies Represent 45% Of The Top 20 Production. The List Includes Only One USA Based Producer - Nucor.

20 Largest Steel-Producing Companies, 2015

(Million Metric Tonnes, Crude Steel Output)

Rank	Tonnes		Rank	Tonnes	
1	97.1	ArcelorMittal	11	25.8	Wuhan Steel Group
2	47.8	Hesteel Group	12	21.7	Shandong Steel Group
3	46.4	Nippon Steel & Sumitomo Metal Corp	13	20.5	HYUNDAI Steel
4	42.0	POSCO	14	19.6	Nucor Corp
5	34.9	Baosteel Group	15	18.8	Maanshan Steel
6	34.2	Shagang Group	16	17.3	ThyssenKrupp
7	32.5	Ansteel Group	17	17.0	Gerdau
8	29.8	JFE Steel Corp	18	16.3	Tianjin Bohai Steel
9	28.6	Shougang Group	19	16.1	NLMK
10	26.3	Tata Steel Group	20	15.1	Jianlong Group
Top	607.8				

Note: Chinese steel mills represent 45% of the top 20 for 276 million tonnes.

Source: World Steel Association



China Continues To Export At About A Net 103 Million Tonne Annual Rate; 52 Million Tonnes Of Long Products

China Steel Net Exports

(Million Metric Tonnes)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
China														
Imports	43.2	33.2	27.3	19.1	17.2	15.6	22.4	17.2	16.3	14.2	14.8	14.9	13.2	12.9
Exports	8.2	20.1	27.4	51.7	66.4	56.3	24.0	41.6	47.9	54.8	61.5	92.9	111.6	115.6
Net Exports	(35.0)	(13.1)	0.1	32.6	49.2	40.7	1.6	24.5	31.6	40.6	46.8	78.0	98.4	102.6
Imports Long Products	2.8	2.8	2.3	2.0	1.6	1.5	1.7	2.0	1.8	1.5	1.7	1.8	1.6	-
Exports Long Products	3.1	5.7	7.7	15.1	23.6	18.5	5.5	9.2	11.6	17.6	23.5	38.3	52.4	-
Net Exports Long	0.4	2.8	5.5	13.1	21.9	17.0	3.8	7.2	9.8	16.0	21.8	36.5	50.8	-
Imports Flat Products	33.3	25.1	22.5	15.5	14.3	12.7	15.3	13.9	13.2	11.7	11.9	12.1	10.8	-
Exports Flat Products	1.8	5.8	8.5	20.4	28.3	28.8	11.8	24.8	26.6	27.0	27.6	43.7	48.5	-
Net Exports Flat	(31.4)	(19.3)	(14.0)	4.8	14.0	16.1	(3.4)	10.9	13.4	15.3	15.8	31.6	37.7	-
Imports Tubulars	1.1	1.3	1.1	1.0	0.7	1.0	0.7	0.5	0.6	0.5	0.5	0.5	0.4	-
Exports Tubulars	1.4	2.1	3.5	6.5	7.3	7.2	6.3	7.3	9.4	9.9	10.1	10.5	10.3	-
Net Exports Tubulars	0.3	0.7	2.4	5.5	6.6	6.2	5.6	6.7	8.8	9.5	9.6	10.0	9.9	-

Source: World Steel Association, Bloomberg and Steel-Insights Estimates





China Is Taking Increased Steps Toward Becoming A Global Trade Partner

- President Xi Jinping attended the World Economic Forum (WEF) in Davos in January 2017, the first Chinese president to ever participate.
- China believes that the road to greater prosperity is increasing trade. "Trade is a human right", Jack Ma, Alibaba, September 2016
- China is seeking to expand its global influence and has chosen economics through the revival of the "Silk Route" trade corridor and an increased military presence in the South China Sea.
- At the WEF, the Asian Infrastructure Investment Bank was launched as a proposed alternative to the US based World Bank.
- China wants the RMB added to the global trade currency basket and the International Monetary Fund (IMF) has moved forward on those efforts.
- One of the criteria to being added is being a significant participant in global trade, so there's a strong incentive to keep exports high.
- China also wants most favored nation trading status with the WTO which is being aggressively fought by steelmakers and politicians in the West.
- "It's not that other countries steal jobs from you guys (the USA). It's your strategy. Distribute the money and things in a proper way." Jack Ma, Davos



China Joining The World Trade Organization 15 Years Ago Was A Game Changer – While It Likely Won't Happen Soon, Eventually China Will Obtain Market Economy Status

- There were 5 criteria at the time China joined the WTO that it was stipulated if they were met, China would be upgraded to market economy status at the 15 year anniversary of its joining the WTO (which occurred Dec 2016). The criteria were:

 WORLD TRADE ORGANIZATION
 - Elimination of barter trade
 - Government non-intervention over resource allocation & enterprise decisions
 - Transparent corporate governance
 - Property law and bankruptcy reform
 - Establishing an independent financial sector
- The jury is still out on whether these criteria have been met. For sure, steel producers in North America think not.



China Is Capitalistic, Except When It Isn't; It Took The USA Several Decades To Reduce Its Steelmaking Overcapacity

13th 5-Year Plan (2016-2020) makes it a priority to improve the environment and have the RMB included as a reserve currency.

The Steel Industry and improving the environment are conflicting priorities.

"Your turn to give back."

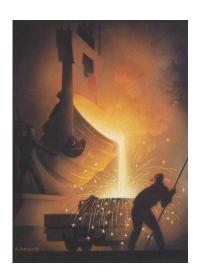
- Policy enforcement get more aggressive in the second half and last year of the 5-Year Plan. Before the Olympics in 2008, they shut the power plants down to improve air quality. It's a Command Economy.
- China produced 800 million tonnes of steel in 2016 from an estimated capacity of 1.13 billion tonnes for a 71% utilization rate.
- Steelmaking overcapacity in China is 430 million tonnes or over 4.5x the entire USA production for 2016.
- The Chinese steel industry reduced 2016 capacity by 45 million tonnes (4%), in line with the published target. It also removed 35 steel mills from the approved list that allows them access to funding according to one press report, perhaps signally increased attention to reductions.



China Isn't The Only Country Providing Support To Its Steel Industry

This is not meant to be an all inclusive list, but rather just some instances:

- Russia provides secured loans funding, low cost natural gas
- Italy Ilva restructuring
- United Kingdom Port Talbot debt restructuring
- Germany Saltzgitter
- Canada Hamilton Works



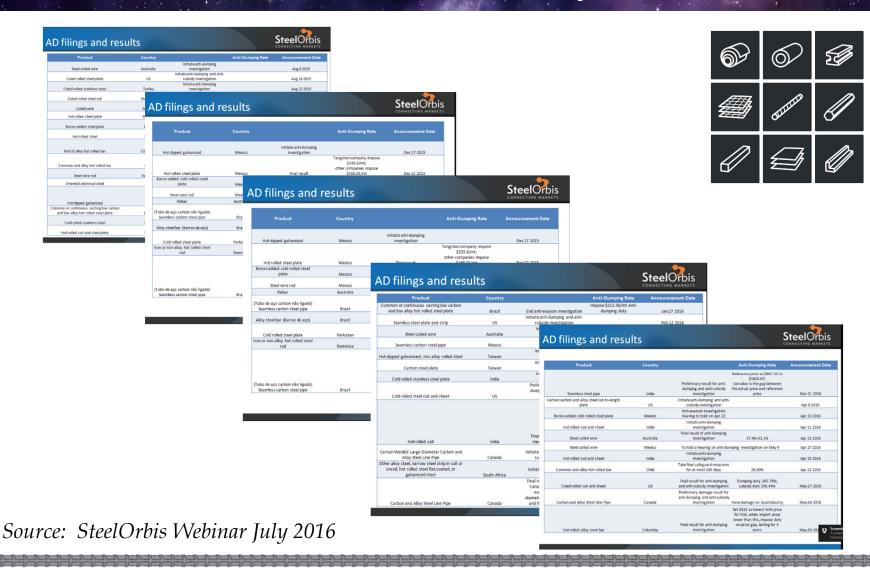


The Likely Protracted Global Oversupply Has Also Translated Into A Move Away From Globalization To Mercantilism And Consolidation Within The Industry

- In the USA, Severstal exited the market and sold assets to AK Steel and Steel Dynamics. *July* 2014
- In the UK, Sahaviriya exited the market seeking to sell the Teesside assets. September 2015
- In the UK, Tata exited the long products market and sold assets to a financial investor. May 2016
- In the UK, Tata seeks to sell or restructure its remaining assets at Port Talbot.
- In Canada, US Steel seeks to sell its Hamilton Works and Essar Algoma is in bankruptcy.
- In Italy, the government is seeking to find a new owner of the Ilva assets.
- In Germany, the government would prefer ThyssenKrupp invest in Saltzgitter rather than Port Talbot.
- In Mexico, AHMSA is working to come out of bankruptcy after a decade.
- In Ohio, the shuttered Mingo Junction plant is being restarted by a group from India with financial backing from the Middle East.
- Old assets are never off the market until they get dismantled and scrapped.



Trade Actions Have Been Taken All Around The World And In Almost Every Product



The USA Has A Trade Challenge

Incoming Commerce Secretary Wilbur Ross On Trade: President Trump And His Business Oriented Cabinet Have A Different Philosophy On Global Relationships

• I am not anti-trade. I am pro-trade. But <u>I am pro-sensible trade</u>; not trade that is detrimental to the American worker and to the domestic manufacturing base.



- We should not put up with malicious trading activities, state-owned enterprises, or subsidized production.
- China is the most protectionist country of the very large countries. They talk more about free trade than they actually practice. We'd like to level the playing field.
- I think the president-elect has done a wonderful job preconditioning some of the other countries with whom we will be negotiating that change is coming.

Source: Senate confirmation hearing, January 18, 2017



The USA Has A Business Tax Challenge

New White House National Trade Council Leader Peter Navarro Comments On Unfair Trading Policies At The World Trade Organization (WTO)

- Under WTO rules, any foreign company that manufactures domestically and exports goods to America (or elsewhere) receives a rebate on the VAT it has paid. This turns the VAT into an implicit export subsidy.
- At the same time, the VAT is imposed on all goods that are imported and consumed domestically so a product exported to a VAT country is subject to the VAT. This turns the VAT into an implicit tariff on US exporters over and above the US corporate income taxes they must pay.
- <u>Under the WTO system, American corporations suffer a "triple whammy":</u> foreign exports into the US market get VAT relief, US exports into foreign markets must pay the VAT, and US exporters get no relief on any US income taxes paid.
- The practical effect of the WTO's unequal treatment of America's income tax system is to give our major trading partners a 15% to 25% unfair tax advantage in international transactions. As a result, US corporations are moving their factories offshore and then exporting their products back to the US and to the rest of the world.
- Mr. Trump has brought attention to a complex problem with our poorlynegotiated trade agreements and he has now proven to be a catalyst to spur bipartisan change.

Source: STATEMENT OF PETER NAVARRO ON TRUMP LEADERSHIP ON TRADE, Trump Economic Advisor, September 28, 2016



The USA Has A Jobs Challenge

The Impact Of Poor Trade Deals Have Been A Loss of 70,000 Factories And Over 5 Million Manufacturing Jobs - Wilbur Ross & Peter Navarro

- ...the self-inflicted negative impacts from poorly negotiated trade deals and the failure to enforce them. These bad deals include, most notably, NAFTA, China's entry into the World Trade Organization in 2001, and, most recently, Hillary Clinton's debilitating 2012 U.S.-Korea Free Trade Agreement.
- In 2012, then Secretary of State Hillary Clinton promised that the "cutting edge" South Korean deal would create 70,000 new jobs. Instead, the <u>US has lost 95,000 jobs and America's trade deficit with South Korea has roughly doubled.</u>
 Moreover, workers in the U.S. auto industry, particularly in states such as Michigan, Ohio, and Indiana, have been hard hit.
- Donald Trump has pledged to renegotiate every one of America's bad trade deals according to the principles of the Trump Trade Doctrine. The Trump Trade Doctrine states that any new or renegotiated deal must increase the GDP growth rate, decrease the trade deficit, and strengthen the U.S. manufacturing base.
- Collectively, the Clintons' bad trade deals have helped shutter over 70,000 American factories, destroyed over 5 million manufacturing jobs, prevented any real growth in the average median household income, and cut our historic growth rate of 3.5 percent almost in half.

Source: White Paper: Policies For The Next Administration-Part Two: Trade by Wilbur Ross & Peter Navarro, October 2016

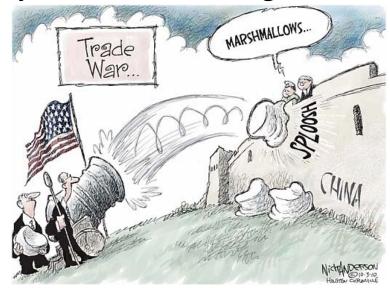


The Trade War Isn't Coming; It's Been Ongoing For Years And We've Been Losing - We Need A More Effective Strategy

To those alarmists who insist Trump's trade policies will ignite a trade war, we say we are already engaged in a trade war — a war in which the American government has surrendered before even engaging. Unfair trade practices and policies of our competitors are simply overlooked or ignored.

As a well-documented result, America has already lost tens of thousands of factories, millions of jobs, and trillions in wages and tax revenues.

Source: White Paper: Policies For The Next Administration-Part Two: Trade by Wilbur Ross & Peter Navarro, October 2016



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Steel Is Having A Identity Crisis

Protectionist Measures Are Being Taken By Most Countries To Ensure Their Steel Industries Survive

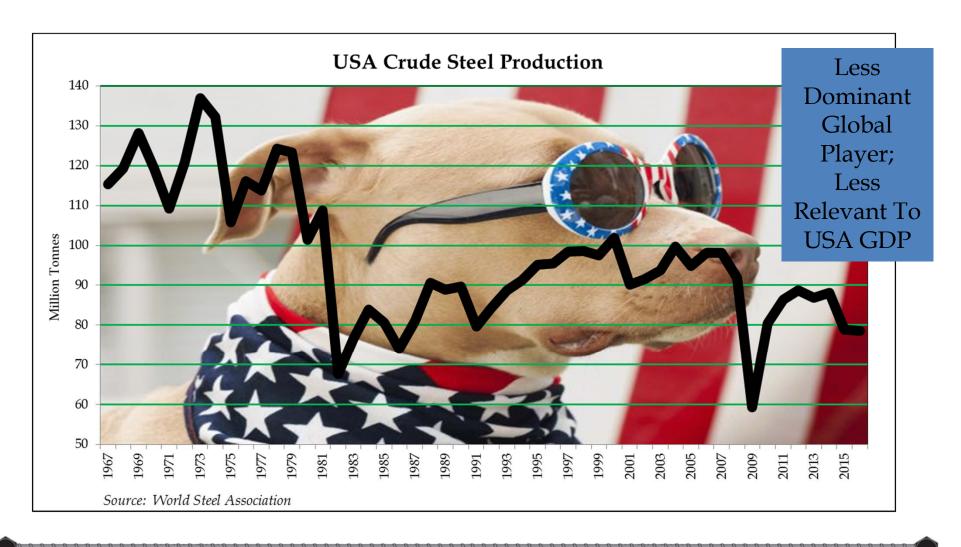
- The steel industry formerly was critical to developed world countries' economies, but doesn't enjoy that status so much anymore.
- Around the globe, the steel industry doesn't rate the highest priority in global political discussions and has been relegated to alternative (and arguably less effective) measures to protect its interests. For instance, in the USA, it's a higher political priority to discourage countries from becoming a nuclear power compared to limiting their steel exports. (Note: South Korea always seems to get a pass in steel trade decisions.)
- Plus, a strong US dollar puts US steel producers at a cost disadvantage. (*Note: The US dollar is often referred to as the cleanest shirt in the laundry.*)



• The USA steel industry isn't the global power house it was post WWII.



The USA Steel Industry Represented 26% Of Global Steel Production In 1965; Today It's Below 5%; USA Crude Steel Production Peaked In The 1970s



Industry Still In Distress With 2016 Overall Capacity Utilization Below 70%; EAF Producers Q4 Year Over Year Gains Up 15%; Integrated Mills Finishing Lines Strong 2H 2016 Running Full

USA Top 5 Steel Producer Shipments, Capacity & Utilization

(Thousand Tons)

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2016	Annual Capacity	16 Estimated Utilization
Integrated Mills AK Steel ArcelorMittal NAFTA US Steel	1,751 6,023 4,101	1,812 6,220 3,895	1,871 6,196 3,850	1,656 5,051 3,700	7,089 23,490 15,545	1,658 6,023 3,591	1,556 6,001 3,887	1,426 5,914 3,743	1,412 5,525 3,768	6,052 23,462 14,989	11,507 36,493 25,908	53 % 66 % 58 %
Subtotal % of Total	11,874 64%	11,927 62%	11,917 62%	10,406 63%	46,124 63%	11,272 59%	11,443 58%	11,083 60%	10,705 60%	44,503 59%	73,908	61%
Mini-Mills Nucor Steel Dynamics Subtotal % of Total	4,887 1,816 6,703 36%	5,348 2,079 7,427 38%	5,166 2,031 7,197 38%	4,459 1,778 6,237 37%	19,860 7,704 27,564 37%	5,647 2,122 7,769 41%	5,930 2,291 8,221 42%	5,213 2,104 7,317 40%	5,151 2,041 7,192 40%	21,941 8,558 30,499 41%	26,700 11,000 37,700	82% 78%
Top 5 Producers Total Total Shipments Year-to-Year Change Top 5 % of Total	18,577 21,959 -7.9% 85%	19,353 22,021 -11.7% 88%	19,114 22,183 -12.5% 86%	16,643 20,384 -15.5% 82%	73,688 90,683 -11.7% 81%	19,041 21,348 -2.8% 89%	19,665 22,670 2.9% 87%	18,400 21,665 -2.3% 85%	17,897 20,730 1.7% 86%	75,002 89,583 -1.2% 84%	111,608	67%

(Note: Quarterly industry shipments from AISI, full year includes unreported shipments from the energy and other markets).

Source: Company Reports, AISI, Stitt Consultancy, Preston Publishing & Steel-Insights Estimates













Over 50 Million Tons Of NAFTA Integrated Steelmaking Capacity Has Been Eliminated Since 1990

NAFTA Steel Industry Crude Steelmaking Capacity Closures (Million Tons)

	# Of	Blast	Melt
Decade	Furnaces	Furnace	Shop
1990-1999	15	14.6	16.1
2000-2009	16	18.9	20.7
2010-2015	8	14.5	16.0
Subtotal	39	48.0	52.8



Idled Capacity Not Permanently Closed

2015 4 8.0 8.8

Source: Company Reports, Market Sources & Steel-Insights Estimates



US Mills Regained Market Share In 2016 Due To Increased Trade Law Enforcement Efforts; But Demand Was Weak As Consumption Declined 5.5%

USA Steel Consumption / Shipment Outlook

(Million Net Tons)

									US Mill				
			Sł	nipment	ts			Plus	Imported	Less	Apparent	N	Market
	Q1	Q2	Q3	Q4	Non-AISI	Total	% Chg	Imports	Semis	Exports	Consumption	% Chg	Share
1983	15.1	17.0	16.7	18.4		67.2		17.2	0.0	1.2	83.2		80.7%
1985	18.0	19.5	17.6	17.8		72.8	-0.1%	24.3	2.3	0.9	93.9	-3.0%	77.5%
1990	21.0	22.1	21.2	20.8		85.0	1.0%	17.2	2.3	4.6	95.3	0.6%	89.2%
1995	24.8	24.5	24.0	24.2		97.5	2.5%	24.5	5.2	7.1	109.7	-3.4%	88.8%
1998	27.3	27.2	24.9	23.0		102.4	-2.4%	41.5	4.5	5.5	133.9	6.8%	76.5%
1999	24.1	25.6	26.1	27.4		103.2	0.8%	35.7	6.7	5.4	126.8	-5.3%	81.4%
2000	28.7	28.6	27.3	24.9	0.9	110.5	7.0%	39.0	6.8	6.6	136.0	7.2%	81.2%
2001	24.8	25.8	24.8	23.3	1.7	100.3	-9.2%	31.2	5.5	6.2	119.8	<i>-</i> 11.9%	83.7%
2002	23.6	25.8	25.4	24.1	1.4	100.4	0.1%	33.6	8.2	6.0	119.8	-0.1%	83.8%
2003	25.6	26.1	26.1	26.8	2.6	107.2	6.7%	23.8	4.8	8.2	118.0	-1.5%	90.8%
2004	28.2	28.0	27.9	26.8	1.6	112.6	5.0%	36.6	7.2	7.9	134.1	13.6%	84.0%
2005	26.7	25.2	25.3	26.0	3.0	106.2	-5.6%	32.1	6.9	9.4	122.1	-8.9%	87.0%
2006	27.7	28.8	27.8	24.3	2.8	111.4	4.8%	47.0	9.3	9.7	139.3	14.2%	79.9%
2007	26.3	26.9	26.5	26.4	2.7	108.8	-2.3%	35.8	6.6	11.1	126.9	-8.9%	85.8%
2008	27.6	27.5	26.0	16.9	3.2	101.1	-7.0%	36.9	5.9	13.5	118.7	-6.5%	85.2%
2009	13.0	13.1	16.6	17.6	2.9	63.2	-37.5%	17.7	2.0	9.3	69.6	-41.3%	90.8%
2010	20.5	21.7	20.8	20.3	2.3	85.7	35.5%	25.2	5.0	11.9	94.0	34.9%	91.2%
2011	22.5	22.3	23.7	23.4	2.2	94.1	9.8%	30.2	6.6	13.5	104.1	10.8%	90.3%
2012	25.4	24.7	23.5	22.3	2.5	98.4	4.7%	35.9	7.6	13.7	113.0	8.5%	87.1%
2013	23.6	23.8	24.5	23.5	3.4	98.8	0.4%	34.2	7.3	12.7	113.1	0.1%	87.4%
2014	23.9	24.9	25.3	24.1	4.5	102.7	3.9%	47.6	10.5	12.0	127.7	12.9%	80.4%
2015	22.0	22.0	22.2	20.4	4.1	90.7	-11.7%	42.0	7.3	10.0	115.4	-9.6%	78.6%
2016	21.3	22.7	21.7	20.7	3.2	89.6	-1.2%	35.4	6.7	9.3	109.1	-5.5%	82.1%
2017e	22.3	23.8	22.7	21.8	3.5	94.1	5.0%	32.8	7.5	9.1	110.2	1.1%	85.4%

Source: AISI, Stitt Consultancy, Preston Publishing & Steel-Insights Estimates



USA Apparent Steel Consumption Was Up In November And December, But Not Enough To Pull The Year Into Positive Territory

USA Steel Apparent Consumption by Product

_		August			October		N	ovember		D	ecember		YTD		
-	2015	2016	% Chg	2015	2016	% Chg	2015	2016	% Chg	2015	2016	% Chg	2015	2016	% Ch
Apparent Consumption															
Hot Rolled	2,101	2,010	-4.4%	2,018	1,670	-17.2%	1,663	1,705	2.5%	1,785	1,868	4.7%	23,453	23,040	-1.8
Cold Rolled	1,023	1,167	14.1%	963	1,049	9.0%	821	1,051	28.0%	877	1,015	15.8%	11,706	12,490	6.7
Galvanized Hot Dip	1,554	1,558	0.3%	1,408	1,518	7.8%	1,261	1,404	11.4%	1,238	1,410	13.9%	17,050	17,587	3.1
Galvanized Electrolytic	83	70	-15.0%	99	68	-30.9%	83	68	-18.6%	75	58	-21.9%	964	852	-11.6
All Other Metallic Coated	198	210	6.0%	232	203	-12.4%	182	179	-1.9%	157	202	28.7%	2,298	2,335	1.6
Electrical Sheet & Strip	(4)	0	-104.0%	(9)	(4)	-56.7%	(8)	1	-111.7%	(5)	3	-151.7%	(65)	(19)	-70.5
Hot Rolled Strip	(1)	(3)	104.2%	(3)	(1)	-62.9%	(3)	1	-118.2%	(2)	(3)	6.6%	(22)	(20)	-9.8
Cold Rolled Strip	30	30	0.9%	32	30	-6.0%	26	27	2.2%	36	33	-7.3%	387	362	-6.5
Subtotal Sheet	4.983	5,042	1.2%	4,740	4,535	-4.3%	4,024	4,434	10.2%	4,159	4,587	10.3%	55,770	56,627	1.5
Cut Length Plate	495	508	2.7%	447	430	-3.7%	433	425	-1.7%	476	464	-2.5%	6,436	6,034	-6.2
Coiled Plate	327	229	-30.1%	304	213	-29.8%	294	206	-29.8%	335	221	-34.0%	4,245	2,664	-37.3
Subtotal Plate	822	737	-10.4%	750	643	-14.3%	727	632	-13.1%	810	685	-15.5%	10,681	8,697	-18.6
Black Plate	17	8	-52.5%	12	4	-65.5%	25	7	-72.5%	6	11	75.3%	168	144	-14.0
Tin Plate	157	176	12.3%	153	148	-3.6%	107	147	37.3%	155	169	8.9%	1,889	1,882	-0.4
Tin Free Steel	45	44	-3.5%	37	38	2.9%	40	44	10.1%	31	33	6.4%	504	466	-7.5
Tin Coated Sheet	43 7	8	16.6%	7	7	-0.7%	6	6	-1.3%	6	8	46.2%	81	88	8.4
	226	236	4.4%	209	196		178	204		198	221				
Subtotal Tin Related						-5.9%			14.6%			11.6%	2,642	2,580	-2.3
Ingot and Steel for Castings	16	15	-0.9%	20	18	-8.2%	20	15	-27.2%	19	14	-26.5%	220	202	-7.9
Blooms, Slab & Billet	608	694	14.2%	812	462	-43.1%	529	692	30.8%	321	565	75.9%	7,684	6,837	-11.0
Subtotal Semi-Finished	623	710	13.9%	832	480	-42.3%	549	707	28.7%	340	579	70.1%	7,904	7,040	-10.9
Hot Rolled Bar	450	396	-11.9%	471	376	-20.2%	432	389	-10.1%	426	413	-3.0%	5,599	4,854	-13.3
Light Shapes	176	189	7.0%	168	185	10.4%	148	188	26.9%	160	214	34.3%	2,065	2,128	3.1
Reinforcing Bar	707	757	7.0%	769	633	-17.8%	605	655	8.3%	586	700	19.5%	8,080	8,465	4.8
Cold Finished Bar	100	100	0.2%	113	96	-14.7%	104	91	-11.9%	95	92	-2.7%	1,307	1,159	-11.4
Alloy Bar (included above)	111	122	9.3%	119	113	-4.7%	120	114	-5.2%	111	120	7.8%	1,580	1,349	-14.6
Subtotal Bar	1,434	1,442	0.6%	1,520	1,290	-15.2%	1,289	1,323	2.7%	1,266	1,419	12.1%	18,631	17,954	-3.6
Structural Shapes (over 3")	529	591	11.7%	563	581	3.3%	485	557	14.8%	509	564	10.9%	6,180	6,699	8.4
Steel Piling	4	3	-25.3%	9	11	26.0%	11	1	-91.5%	15	11	-23.5%	117	69	-40.7
Subtotal Shapes & Piling	533	594	11.4%	571	592	3.6%	497	558	12.4%	524	576	10.0%	6,297	6,769	7.5
Standard Pipe	113	95	-15.2%	103	104	0.7%	100	102	1.6%	83	100	20.0%	1,398	1,193	-14.6
Oil Country Goods	183	177	-3.3%	145	245	68.9%	156	219	40.4%	110	273	148.4%	3,221	2,051	-36.3
Line Pipe	192	154	-19.5%	176	123	-29.7%	148	124	-15.9%	129	165	28.3%	2,904	1,792	-38.3
Mechanical Tubing	77	83	7.8%	77	79	3.2%	69	79	14.4%	64	72	12.3%	1,034	947	-8.4
Pressure Tubing	8	6	-28.4%	6	6	1.8%	6	4	-28.9%	6	5	-12.6%	96	65	-32.7
Stainless Pipe & Tubing	8	9	14.8%	8	8	-2.9%	8	11	45.8%	10	9	-9.3%	115	108	-5.4
Nonclassified Pipe & Tubing	(28)	(25)	-8.0%	(27)	(22)	-18.2%	(27)	(21)	-21.1%	(22)	(21)	-6.1%	(357)	(286)	-19.9
Structural Pipe & Tubing	25	24	-5.0%	17	29	68.6%	36	39	7.1%	14	39	176.3%	291	364	25.3
Pipe For Piling	1	3	134.2%	(1)	3	-523.5%	0	2	NMF	(0)	0	NMF	15	17	16.1
Subtotal Pipe & Tube	579	526	-9.2%	505	576	14.0%	496	558	12.6%	393	642	63.3%	8,716	6,252	-28.3
Wire Rod	309	299	-3.3%	320	274	-14.3%	225	227	0.9%	289	261	-9.9%	3,582	3,193	-10.9
Wire-Drawn	92	93	0.9%	97	97	0.2%	86	89	3.5%	81	87	7.3%	1,130	1,132	0.2
Subtotal Wire	401	392	-2.3%	417	371	-10.9%	310	315	1.6%	370	348	-6.1%	4,712	4,326	-8.2
Rail - Standard	71	392 97	36.5%	103	88	-10.9%	104	51	-50.8%	90	67	-6.1%	1,225	928	-8.2
Rail - Other	2	(10)	-629.3%	0	(10)	-2564.0%	2	(2)	-208.3%	(2)	0	-106.9%	12	(7)	-159.5
Railroad Accessories	19	14	-25.9%	16	15	-4.7%	16	17	2.9%	13	16	23.6%	221	178	-19.4
Subtotal Rail	92	102	10.4%	119	92	-22.7%	122	66	-46.0%	100	83	-17.6%	1,458	1,099	-24.6
Tool Steel	12	7	-44.0%	9	5	-45.6%	8	4	-54.1%	9	6	-34.7%	126	77	-38.7
TOTAL	9,705	9,786	0.8%	9,673	8,780	-9.2%	8.199	8,801	7.3%	8,169	9,145	11.9%	116.937	111,420	-4.7

Source: AISI



US Steel Apparent Consumption Is Positive For About Over One-Fourth Of The Product Categories; Including 0.2% In Wire Drawn, A Late Year Reversal

USA Steel Apparent Consumption By Product

(Year-To-Date Through December 2016)

Negative Demand	
Hot Rolled	-1.8%
Galvanized Electrolytic	-11.6%
Hot Rolled Strip	-9.8%
Cold Rolled Strip	-6.5%
Electrical Sheet & Strip	-70.5%
Cut Length Plate	-6.2%
Coiled Plate	-37.3%
Subtotal Plate	-18.6%
Black Plate	-14.0%
Tin Plate	-0.4%
Tin Free Steel	-7.5%
Subtotal Tin Related	-2.3%
Ingot and Steel for Castings	-7.9%
Blooms, Slab & Billet	-11.0%
Subtotal Semi-Finished	-10.9%
Hot Rolled Bar	-13.3%
Cold Finished Bar	-11.4%
Alloy Bar (included above)	-14.6%
Subtotal Bar	-3.6%
Steel Piling	-40.7%
Standard Pipe	-14.6%
Oil Country Goods	-36.3%
Line Pipe	-38.3%
Mechanical Tubing	-8.4%
Pressure Tubing	-32.7%
Stainless Pipe & Tubing	-5.4%
Nonclassified Pipe & Tubing	-19.9%
Subtotal Pipe & Tube	-28.3%
Wire Rod	-10.9%
Subtotal Wire	-8.2%
Rail - Standard	-24.2%
Rail - Other	-159.5%
Railroad Accessories	-19.4%
Subtotal Rail	-24.6%
Tool Steel	-38.7%
TOTAL	-4.7%

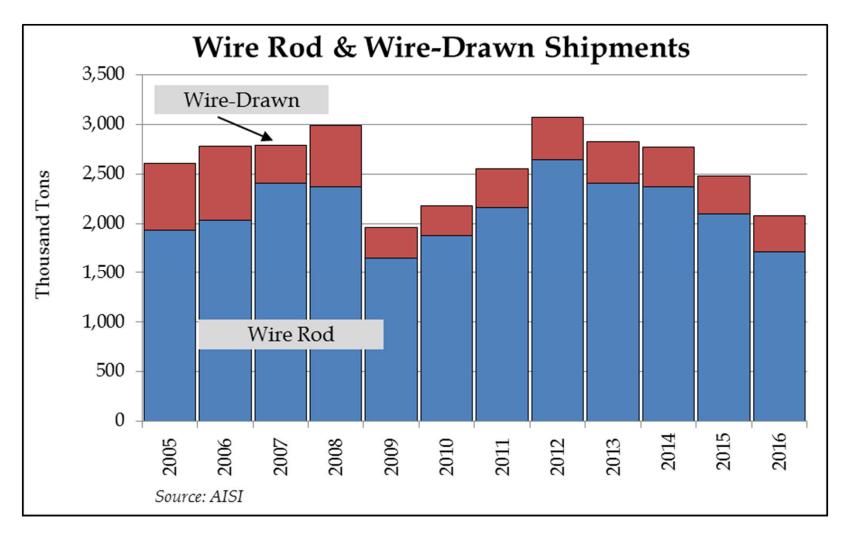
Positive Demand	
Cold Rolled	6.7%
Galvanized Hot Dip	3.1%
All Other Metallic Coated	1.6%
Subtotal Sheet	1.5%
Tin Coated Sheet	8.4%
Light Shapes	3.1%
Reinforcing Bar	4.8%
Structural Shapes (over 3")	8.4%
Subtotal Shapes & Piling	7.5%
Structural Pipe & Tubing	25.3%
Pipe For Piling	16.1%
Wire-Drawn	0.2%
Percent Positive	26.3%



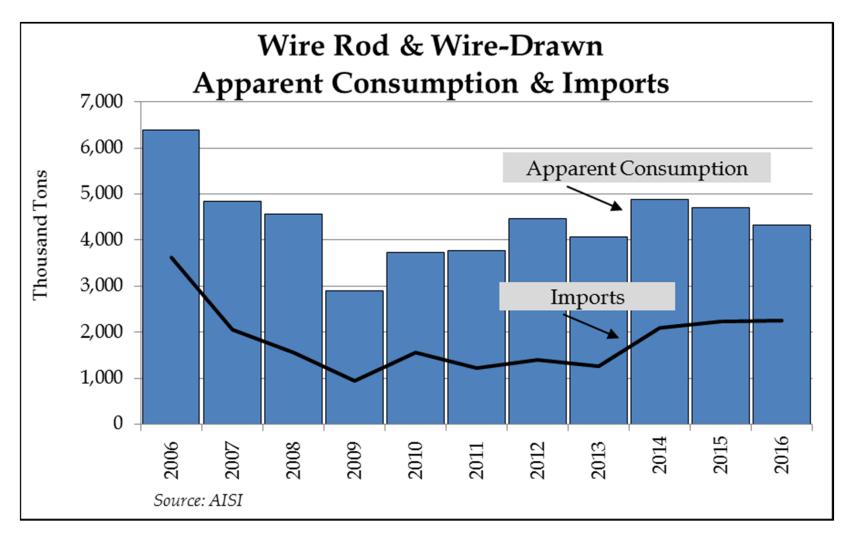
Source: AISI & Steel-Insights, LLC Analysis



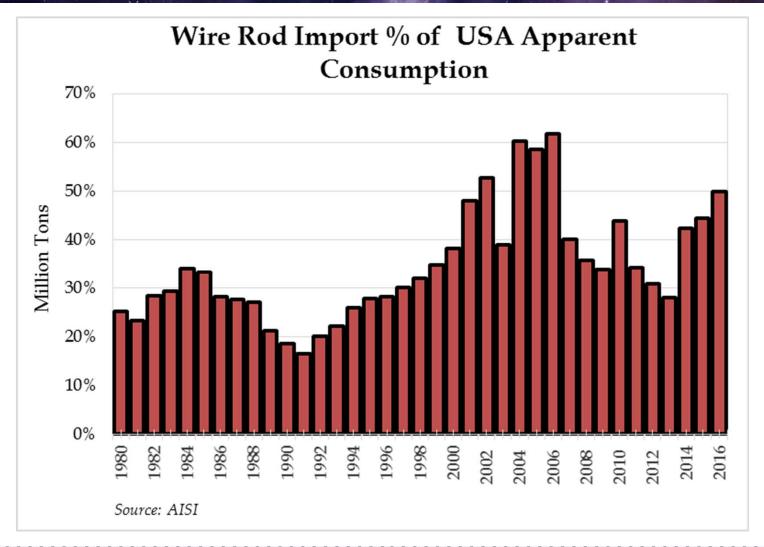
Wire Rod & Wire-Drawn US Mills Fully Participated In The Post 2008 Market Rebound To 2012 But Since Have Been Losing Significant Market Share



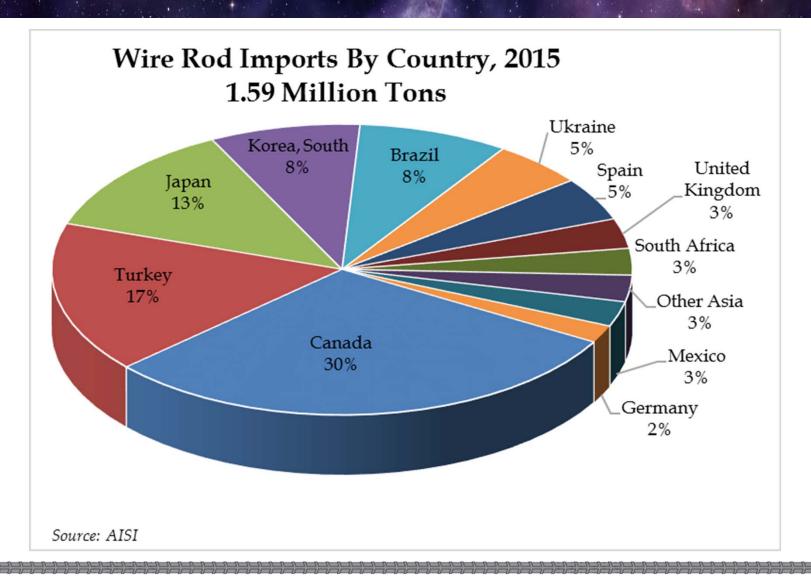
Apparent Consumption Of Wire Rod & Wire-Drawn Products Dropped 8% In 2016 On Top Of A 3.4% Decline In 2015; Imports Remained Flat, Gaining Market Share



Wire Rod Imports As A Percent Of Total Apparent Consumption Have Surged In The Past Three Years And Now Account For 50% Of The Market



Wire Rod USA 2015 Imports Came 73% From Top Five Countries: Canada, Turkey, Japan, South Korea And Brazil



Canada, Turkey And Japan Have Been In The Top 5 Countries Exporting Wire Rod To The USA For Over A Decade

USA Wire Rod Imports by Country

(Thousand Net Tons)

	2000		2005		2006		2010		2015	
	Net Tons	Share								
Canada	548	18.4%	315	12.6%	323	10.6%	447	33.9%	460	28.9%
Turkey	na	na	357	14.3%	251	8.2%	189	14.4%	258	16.2%
Japan	177	6.0%	112	4.5%	108	3.6%	123	9.3%	192	12.1%
Korea, South	7	0.2%	7	0.3%	8	0.3%	17	1.3%	129	8.1%
Brazil	280	9.4%	158	6.3%	150	4.9%	129	9.8%	129	8.1%
Ukraine	368	12.4%	1	0.0%	-	0.0%	-	0.0%	79	5.0%
Spain	38	1.3%	48	1.9%	62	2.0%	37	2.8%	74	4.7%
United Kingdom	61	2.1%	62	2.5%	52	1.7%	61	4.7%	51	3.2%
South Africa	75	2.5%	59	2.4%	69	2.3%	28	2.1%	46	2.9%
Other Asia	122	4.1%	65	2.6%	119	3.9%	0	0.0%	45	2.8%
Mexico	160	5.4%	11	0.4%	4	0.1%	121	9.2%	43	2.7%
Germany	122	4.1%	215	8.6%	101	3.3%	19	1.4%	30	1.9%
Taiwan	21	0.7%	15	0.6%	25	0.8%	9	0.7%	12	0.8%
China	10	0.3%	690	27.5%	1,358	44.6%	13	1.0%	11	0.7%
Venezuela	85	2.9%	79	3.1%	23	0.7%	11	0.9%	-	0.0%
Total	2,971	100.0%	2,506	100.0%	3,046	100.0%	1,318	100.0%	1,590	100.0%



One-Third Of 2015's Wire Rod Imports Entered Through The Port Of New Orleans; One-Fifth Through Detroit

USA 2015 Wire Rod Product Imports by Top Ten Ports

(Thousand Net Tons)

1.	New Orleans	562	35%
2.	Detroit	321	20%
3.	Ogdensburg (NY)	126	8%
4.	Charleston	107	7%
5.	Houston-Galveston	85	5%
6.	Tampa	73	5%
7.	Mobile	68	4%
8.	Philadelphia	39	2%
9.	Savannah	39	2%
10.	Laredo	38	2%
	Total Top 10	1,459	92%



The Gulf Coast In 2014 Once Again Displaced The Great Lakes As The Entry Point For The Highest Volume Of Wire Rod Imports; Great Lakes Had The Highest Volumes In 2009, 2011-2013

Wire Rod Imports By USA Region

(Thousand Net Tons)

	2011		2012	2	2013		
	Tons	Share	Tons	Share	Tons	Share	
Great Lakes-Canadian Border	429.7	42.3%	440.5	40.2%	433.1	49.3%	
Gulf Coast-Mexican Border	370.3	36.5%	404.8	36.9%	247.6	28.2%	
Atlantic Coast	209.1	20.6%	234.9	21.4%	179.2	20.4%	
Pacific Coast	4.2	0.4%	12.9	1.2%	18.3	2.1%	
Offshore	1.7	0.2%	3.4	0.3%	0.4	0.0%	
Total	1,015.1		1,096.4		878.6		
	2014	4	2015	5			
	Tons	Share	Tons	Share			
Gulf Coast-Mexican Border	695.2	42.8%	757.4	47.6%			
Great Lakes-Canadian Border	488.9	30.1%	518.3	32.6%			
Atlantic Coast	360.1	22.2%	282.6	17.8%			
Pacific Coast	77.9	4.8%	28.3	1.8%			
Offshore	2.7	0.2%	3.5	0.2%			
Total	1,624.8		1,590.1				



The Port Of New Orleans Wire Rod Import Volumes Have More Than Doubled In The Past 5 Years But Remain Less Than Half Of The 2006 High

Wire Rod Imports Through Gulf Coast Ports And Over The Mexican Border

(Thousand Net Tons)

	1998		2000)	2006		
	Tons	Share	Tons	Share	Tons	Share	
New Orleans	535.8	57.5%	817.4	60.6%	1,095.3	63.7%	
Houston-Galveston	296.9	31.9%	409.3	30.3%	396.2	23.0%	
Mobile	54.3	5.8%	65.7	4.9%	188.0	10.9%	
Laredo	8.6	0.9%	17.8	1.3%	4.3	0.3%	
Port Arthur	36.0	3.9%	39.2	2.9%	35.9	2.1%	
Total	931.6		1,349.5		1,719.7		
	2009	9	2014	<u> </u>	2015	5	
	Tons	9 Share	2014 Tons	Share	2015 Tons	Share	
New Orleans	-						
New Orleans Houston-Galveston	Tons	Share	Tons	Share	Tons	Share	
	Tons 171.4	Share 66.1%	Tons 508.6	Share 73.2%	Tons 561.8	Share 74.2%	
Houston-Galveston	Tons 171.4 26.1	Share 66.1% 10.1%	Tons 508.6 121.6	73.2% 17.5%	Tons 561.8 84.9	Share 74.2% 11.2%	
Houston-Galveston Mobile	Tons 171.4 26.1 38.2	Share 66.1% 10.1% 14.8%	Tons 508.6 121.6 47.4	73.2% 17.5% 6.8%	Tons 561.8 84.9 68.0	74.2% 11.2% 9.0%	



Northern Border Wire Rod Imports Come In Primarily Through Detroit And Ogdensburg, NY

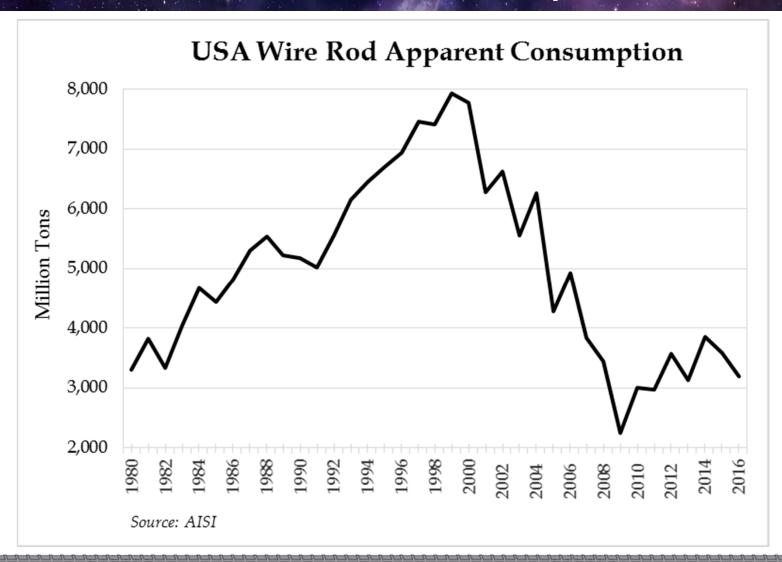
Wire Rod Imports Through Great Lakes Ports And Over The Canadian Border

(Thousand Net Tons)

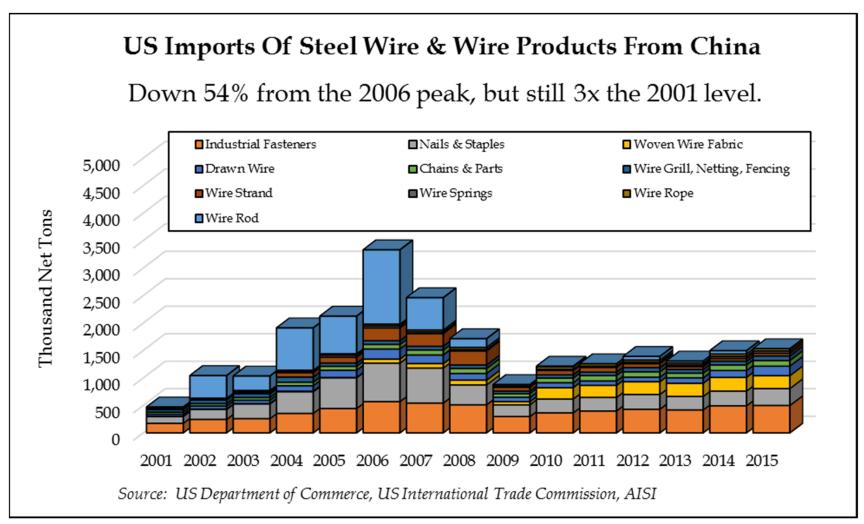
	1998		2002		2005		2012		2015	
	Tons	Share								
Detroit	190.4	35.4%	342.4	41.9%	197.2	58.9%	286.0	64.9%	321.5	62.0%
Ogdensburg	104.9	19.5%	100.0	12.2%	71.3	21.3%	104.9	23.8%	126.4	24.4%
Buffalo	103.1	19.1%	106.2	13.0%	38.5	11.5%	13.0	2.9%	15.2	2.9%
Cleveland	90.4	16.8%	137.4	16.8%	7.4	2.2%	20.4	4.6%	34.4	6.6%
St. Albans	27.3	5.1%	10.8	1.3%	9.4	2.8%	1.8	0.4%	2.5	0.5%
Chicago	8.3	1.5%	109.1	13.4%	10.3	3.1%	12.8	2.9%	17.9	3.5%
Milwaukee	13.8	2.6%	-	0.0%	-	0.0%	-	0.0%	_	0.0%
St. Louis	-	0.0%	10.5	1.3%	0.0	0.0%	0.7	0.2%	0.0	0.0%
Portland	0.1	0.0%	0.5	0.1%	0.2	0.1%	0.7	0.2%	0.2	0.0%
Total	538.3		816.9		334.6		440.5		518.3	



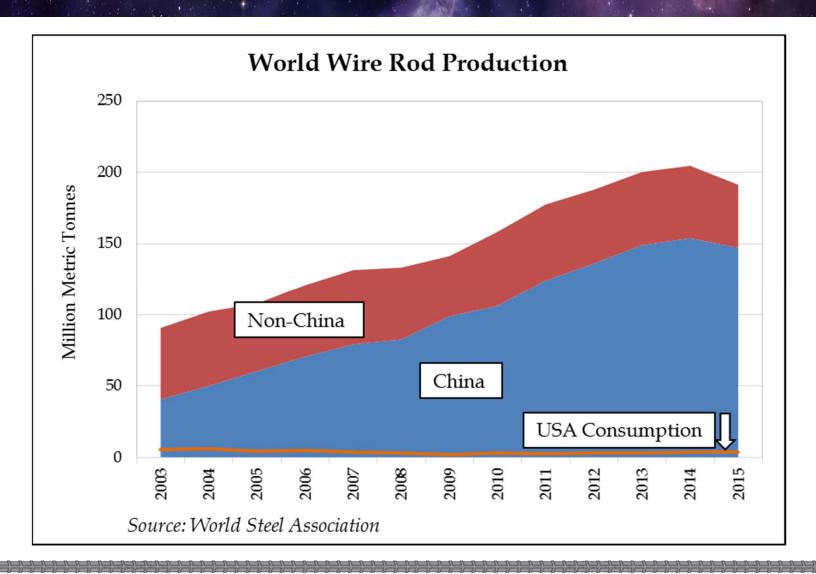
Wire Rod Consumption In The USA Remains Only 40% Of The 1999 Industry Peak



Manufacture Of Many Products Made From Wire Rod Have Migrated Offshore; An Increase Of A Million Tons From China Alone In 2015 Compared To 2001

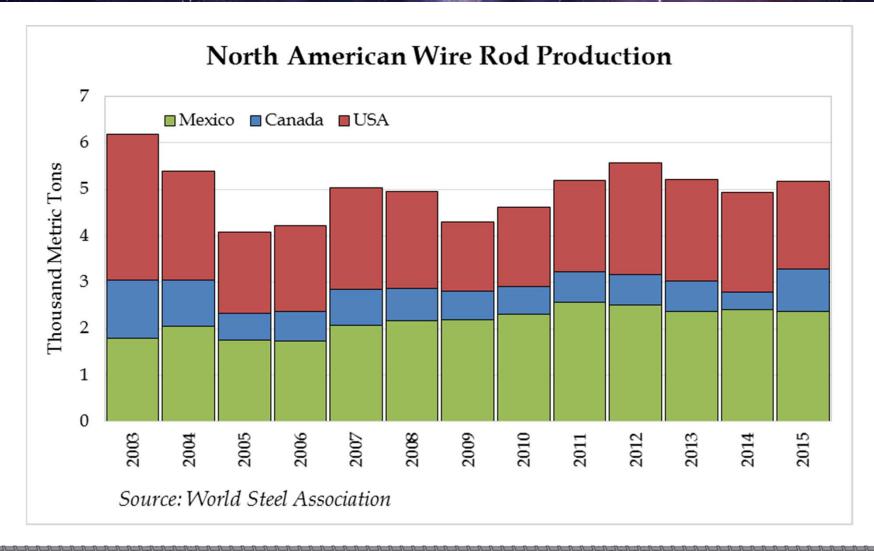


The USA Wire Rod Market Is Just A Drop In The Global Bucket; While Very Important To Us; Truly Irrelevant Globally

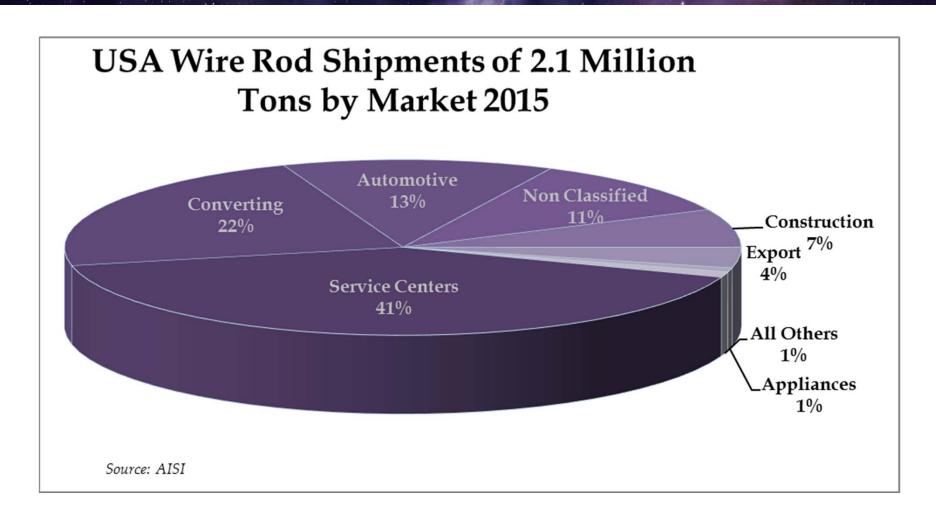




Canadian Wire Rod Production Seems Tied To The USA Market: While Mexican Production Has Been Growing Independent Of The USA



USA Wire Rod Shipments By Market: Service Centers 41%, Converting 22%, Auto 13%



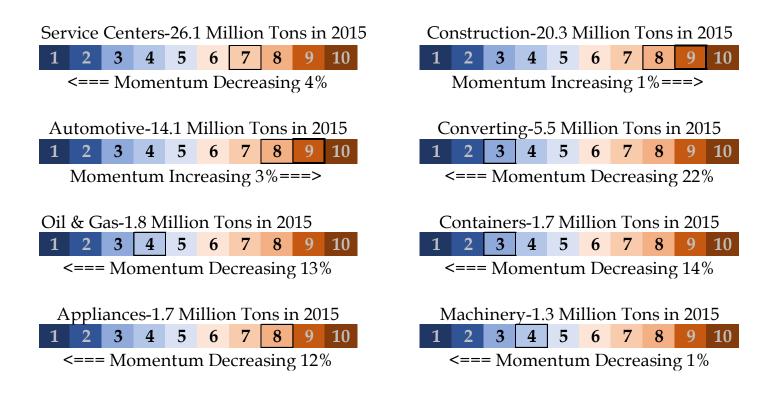
US Steel Use End Market Momentum Was Positive In Only Two Markets Through The First Half Of 2016 (Latest Data)

Steel Use End Markets Momentum Through Q2 2016

CODE KEY

1 2 3 4 5 6 7 8 9 10

With 1 being the weakest and 10 the strongest

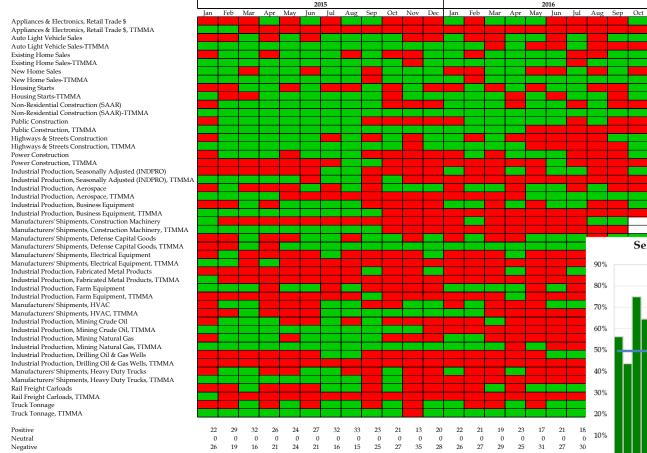


Source: AISI & Steel-Insights, LLC Analysis



End Market Economic Indicators Rebounded In October 2016

Select USA Economic End Market Indicators Heat Map-Month to Month Change



Select Economic End Market Indicators Heat Map -90% 50% 40% 30% 35 30 $46\% \quad 60\% \quad 67\% \quad 55\% \quad 50\% \quad 56\% \quad 67\% \quad 69\% \quad 48\% \quad 44\% \quad 27\% \quad 42\% \quad 46\% \quad 44\% \quad 40\% \quad 48\% \quad 35\% \quad 44\% \quad 38\% \quad 44\% \quad 40\% \quad 48\% \quad 35\% \quad 44\% \quad 38\% \quad 44\% \quad 40\% \quad 48\% \quad 35\% \quad 44\% \quad 38\% \quad 44\% \quad 40\% \quad 48\% \quad 35\% \quad 44\% \quad 38\% \quad 44\% \quad 40\% \quad 48\% \quad 35\% \quad 44\% \quad 38\% \quad 44\% \quad 40\% \quad 48\% \quad 44\% \quad 40\% \quad 40\%$ | Jan. |

Code: red=down; green=up; grey=sideways; white=no new data yet Source: Industry Sources & Steel-Insights, LLC analysis



Source: Steel-Insights, LLC analysis

% Positive

% Positive

Economic End Market Trailing Twelve Month Trends Shifted To Green From Red In December 2016

USA Economic End Market Momentum - December 2016

	Month-to-Month			TTMMA		
Consumer Spending						
Appliances & Electronics	1	up	month	13	down	months
Automotive	2	up	months	3	down	months
Housing-New	1	down	month	8	up	months
Housing-Existing	2	up	months	3	up	months
Construction						
Non-Residential	2	down	months	39	up	months
Public	2	down	months	7	down	months
Highway & Streets	2	up	months	1	up	month
Power	1	up	month	4	down	months
Manufacturing/Durable Goods						
Industrial Production	1	up	month	14	down	months
Aerospace	2	down	months	6	up	months
Business Equipment	1	up	month	13	down	months
Construction Machinery	2	up	months	12	down	months
Defense	2	up	months	2	down	months
Electrical Equipment	2	up	months	17	down	months
Fabricated Metal Product	2	up	months	21	down	months
Farm Equipment	1	down	month	1	up	month
HVAC	1	down	month	7	down	months
Mining Crude Oil	2	down	months	11	down	months
Mining Natural Gas	1	up	month	3	down	months
Oil & Gas Wells	5	up	months	22	down	months
Heavy Duty Trucks	1	up	month	11	down	months
Rail Freight Carloads	1	down	month	20	down	months
Truck Tonnage	2	down	months	1	down	month

Source: FRED, US Census Bureau, the Federal Reserve System & the US Bureau of Transportation Statistics



US Leading Economic Indicators Improved In The Fall Of 2016

Select Leading & Other Economic Indicators Heat Map-Month to Month Change

AIA Architecture Billings Index (ABI) Auto Light Vehicle Sales Auto Light Vehicle Sales-TTMMA Auto Production Auto Production-TTMMA

Consumer Confidence Index®, The Conference Board Consumer Confidence Index[®], The Conference Board, TTMMA Housing Starts

Housing Starts-TTMMA

Industrial Production, Seasonally Adjusted (INDPRO)

Industrial Production, Manufacturing, Not-Seasonally Adjusted Interest Rates, 10-Year Treasuries

Machine Tool Orders

Machine Tool Orders-TTMMA

Manufacurers Sales

Manufacurers Sales-TTMMA

Natural Gas Prices, Henry Hub

New Orders, Durable Goods, Electrican & Appliance New Orders, Durable Goods, Electrican & Appliance-TTMMA Non-Defence Capital Goods Orders, Excluding Aircraft Non-Defence Capital Goods Orders, Excluding Aircraft-TTMMA Non-Residential Construction (SAAR) Non-Residential Construction (SAAR)-TTMMA Oil Prices, Brent Crude, Europe Oil Prices, West Texas Intermediate, Oklahoma Personal Consumption Expenditures Durable Goods Personal Consumption Expenditures Durable Goods-TTMMA The University of Michican Index of Consumer Sentiment The University of Michican Index of Consumer Sentiment, TTMMA US Trade Weighted Dollar Index

Positive Neutral Negative

US Trade Weighted Dollar Index-TTMMA % Positive Code: red=down; green=up; grey=sideways; white=no new data yet Source: Industry Sources & Steel-Insights, LLC analysis

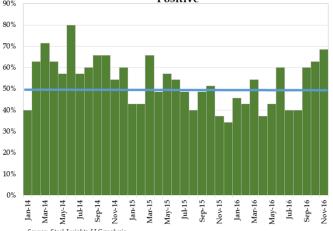


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17

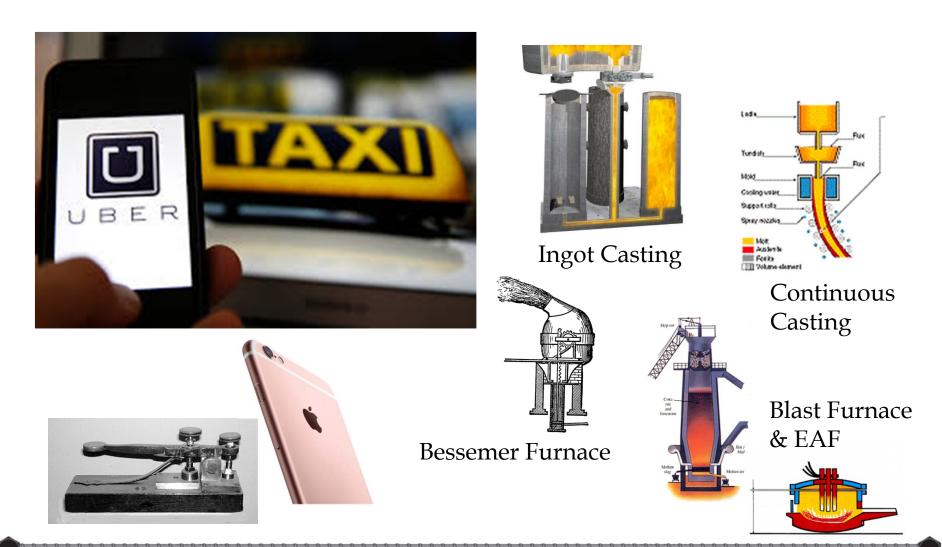
51% 37%

23





The World Changes; The Only Way to "Win" Is To Anticipate and Adapt - Critical Resources of the Past Can Become Irrelevant to the Future



Steel-Insights, LLC - "Seeing" What Others Don't

Managing Effectively Through Tumultuous Times

Steel-Insights, LLC was formed in 2012 to assist executive management teams navigate the challenging markets by more effectively managing the abundant resources available today and harnessing those resources to explore thought provoking and penetrating issues in order to magnify the pivotal decisions required for the long-term success of their companies in arguably tough industries that must survive challenging cycles.

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- Tailored Strategies
- Capital Investment Support
- Market Intelligence Gathering
- End Market Profiling
- Production Analysis
- Price Forecasting
- Cost & Profitability Analysis
- Macro & Micro Economic Work
- Negotiation Support
- Capital Market Advisory
- Global Networks Of Contacts



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