



Global Investment Research

The Goldman Sachs Group, Inc.

# MVTTC 2019 Commodity Trade Update: Steel, coal, ags, aluminum

February 2019

Justine Fisher

Goldman, Sachs & Co.

+1-212-357-6711

justine.fisher@gs.com

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## The high water mark on global growth is behind us

- Deceleration in the US and China
- Solid growth in other developed (DM) economies
- Emerging market (EM) rebound

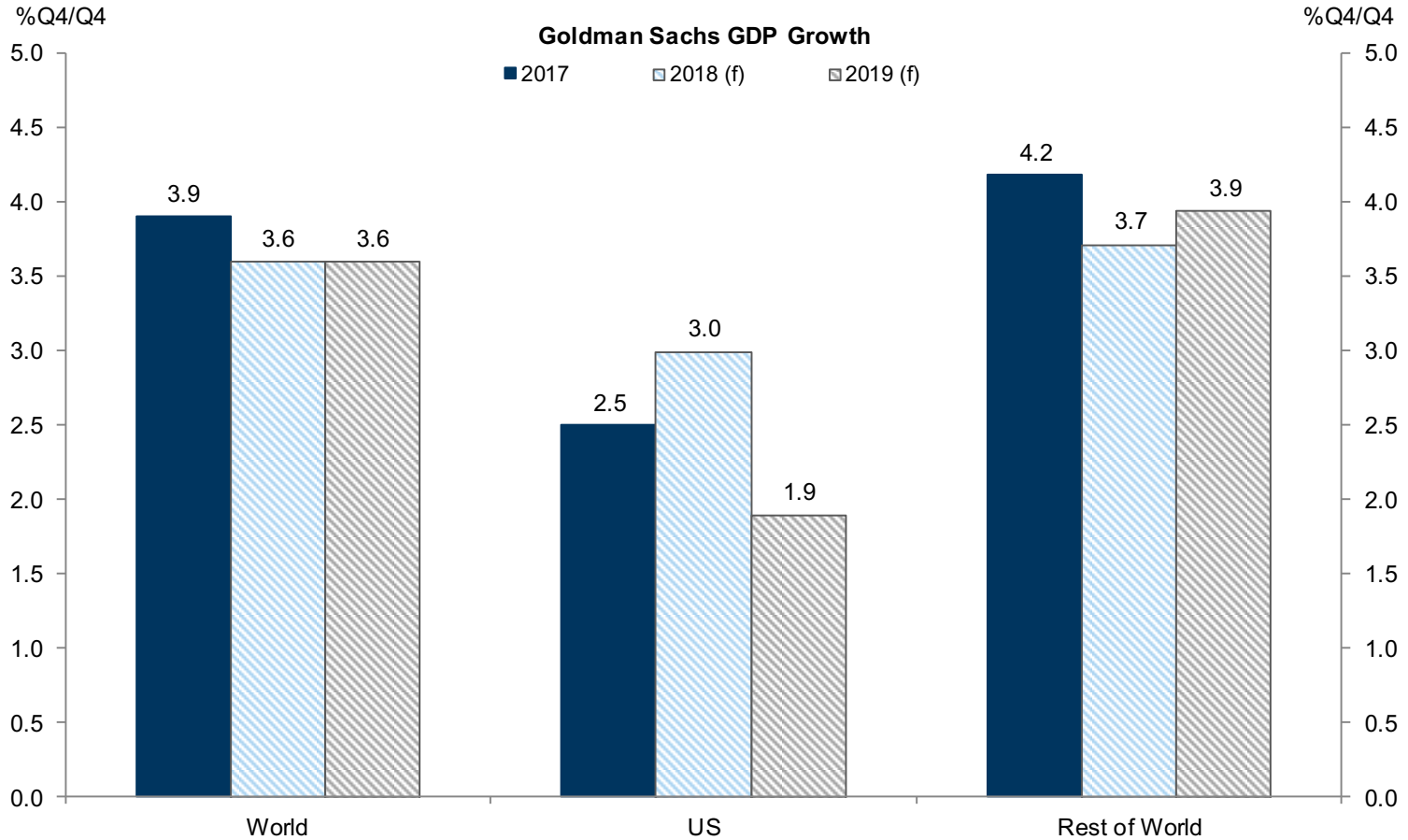
Real GDP Growth								
Percent Change yoy	2016	2017	2018 (f)		2019 (f)		2020 (f)	
			GS	Cons*	GS	Cons*	GS	Cons*
US	1.6	2.2	2.9	2.9	2.4	2.5	2.0	1.9
Japan	1.0	1.9	0.7	0.7	0.8	0.9	0.7	0.5
Euro Area	1.9	2.5	1.8	1.9	1.2	1.4	1.6	1.5
Germany	2.2	2.5	1.5	1.5	1.1	1.3	1.6	1.5
France	1.1	2.3	1.5	1.5	1.3	1.3	1.6	1.4
Italy	1.0	1.6	0.8	0.9	0.1	0.5	1.1	0.9
Spain	3.3	3.0	2.5	2.5	2.3	2.2	2.2	1.9
UK	1.8	1.7	1.3	1.4	1.5	1.4	1.4	1.6
China	6.7	6.8	6.6	6.6	6.2	6.2	6.1	6.0
India**	7.9	6.3	7.5	7.2	7.3	7.3	7.9	-
Russia	-0.2	1.5	1.9	2.3	1.9	1.5	2.8	1.7
Brazil	-3.5	1.1	1.2	1.3	2.6	2.5	3.0	2.5
<b>Developed Markets</b>	<b>1.7</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>1.9</b>	<b>2.0</b>	<b>1.8</b>	<b>1.7</b>
<b>Emerging Markets</b>	<b>4.5</b>	<b>5.1</b>	<b>5.1</b>	<b>5.1</b>	<b>4.9</b>	<b>4.8</b>	<b>5.3</b>	<b>5.0</b>
<b>World</b>	<b>3.1</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.5</b>	<b>3.5</b>	<b>3.8</b>	<b>3.5</b>

\* Bloomberg consensus forecasts as of February.

\*\* Bloomberg consensus fiscal year basis

Source: Bloomberg, Goldman Sachs Global Investment Research.

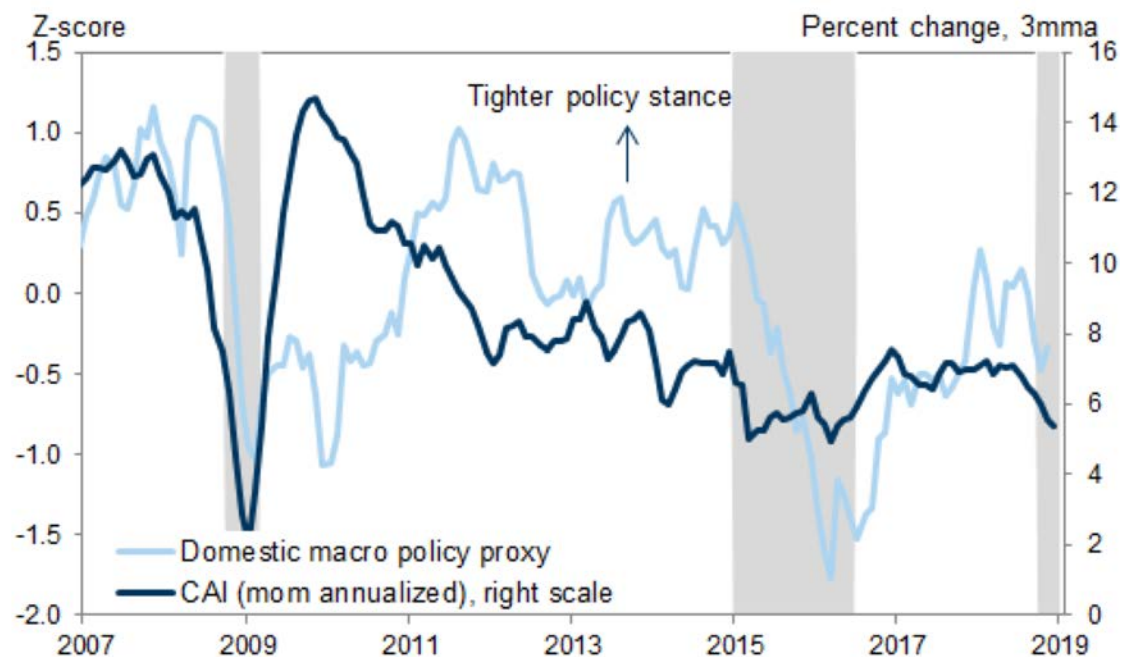
## Rotation in global growth away from the US



GS economists view <6% growth as “intolerably low” for the government

Our economists expect the Chinese government to intervene as needed

- Tax policy, infrastructure spending are key, region-specific relaxation on property restrictions, RRR cuts



## Tensions have diminished, not disappeared

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### China tariff deadline extended from March 1

- GS expects a short, 1-2 month extension
- Talks making progress, but unclear whether sufficient common ground reached
- Even if leaders reach an agreement at March meeting in Florida, GS expects some recently-imposed tariffs to remain in place as an enforcement mechanism until certain commitments have been met.

### Autos

- GS sees a 40% chance of broader tariffs on EU and/or Japan
- Rather, expect an incremental solution (i.e., on a subset of autos)
- White House may be using the threat to achieve concessions
- Considerations around the financial market reaction to tariffs
- Political benefits of auto tariffs might not outweigh the political risks

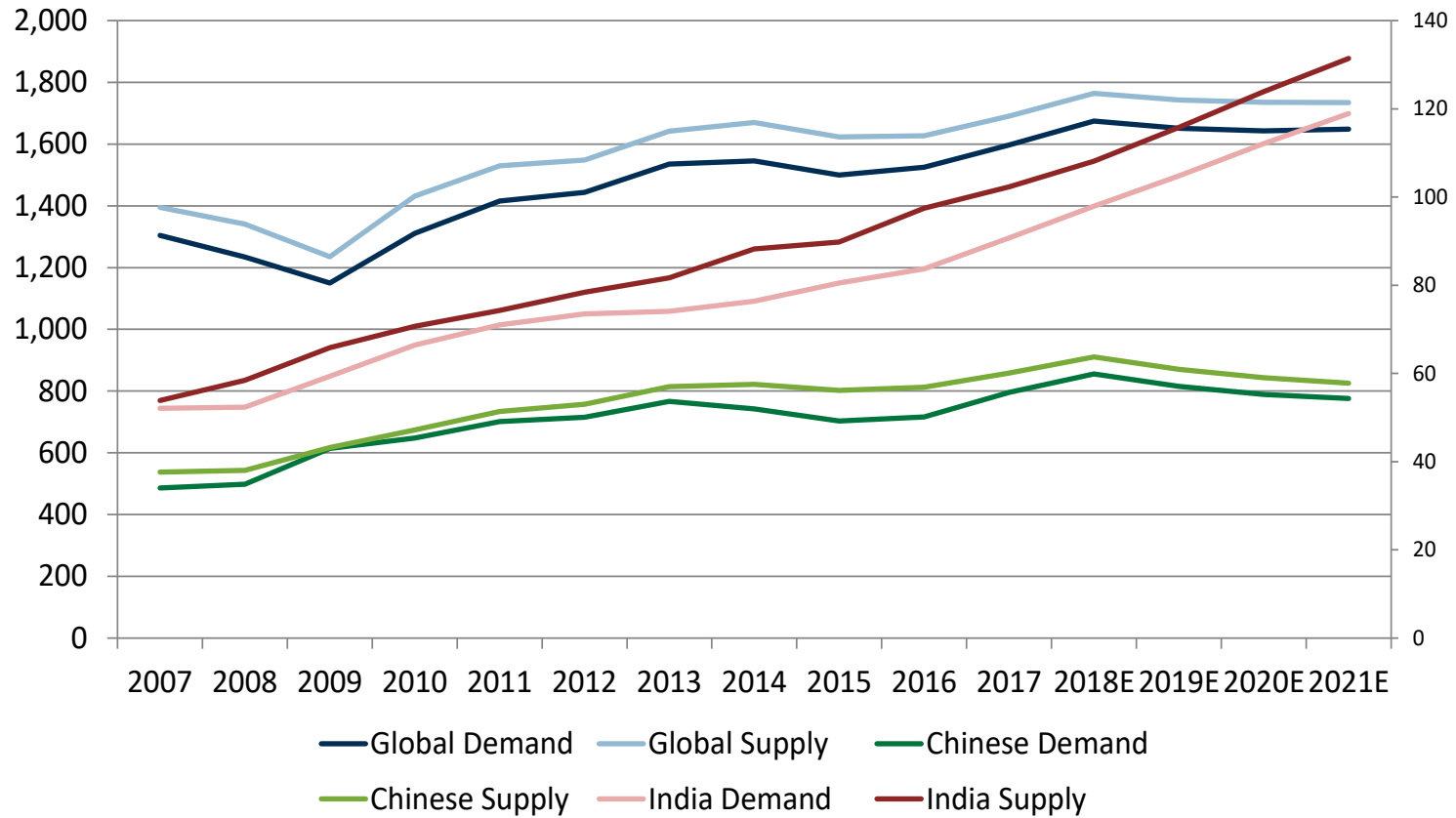
# Steel markets

Flattish global demand, higher US production

# Global Steel Market

Global market flattish as China shrinks, India grows

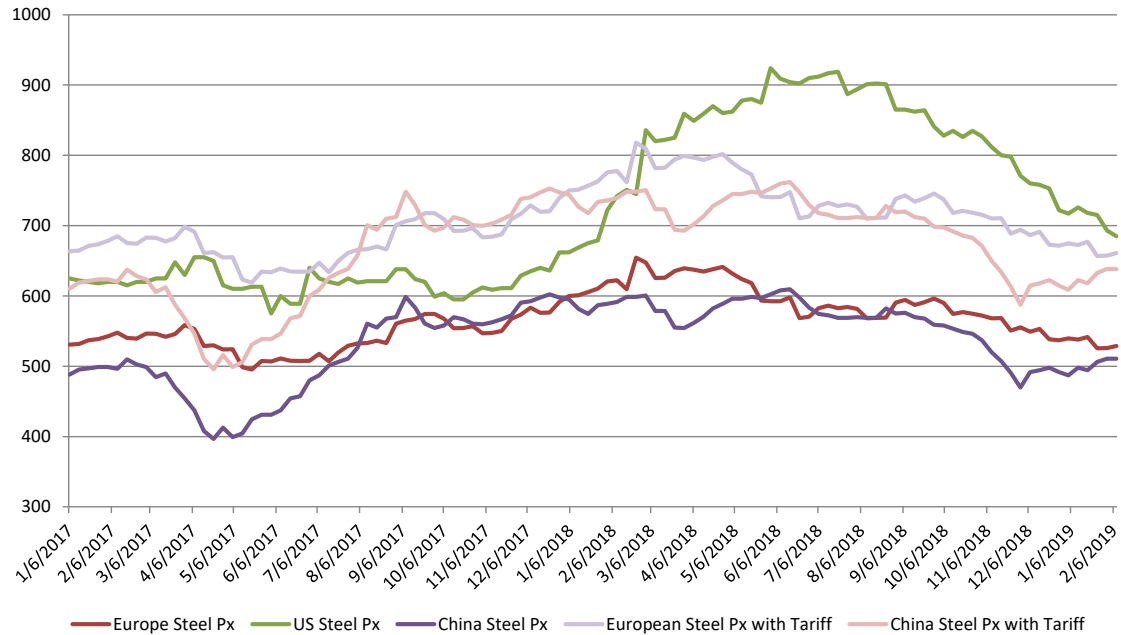
Global Steel Supply/Demand (metric tonnes)



# US Steel Market

Tariffs and lower US prices are discouraging imports

US Steel Prices v. global (\$/ton)



<b>SE Asia HRC price/tonne</b>	<b>\$528</b>	<b>Europe HRC price/tonne</b>	<b>\$560</b>
convert to short tons	\$479	convert to short tons	\$508
add 25% tariff	\$599	add 25% tariff	\$635
add transport costs and trader margin	\$80	add transport costs and trader margin	\$70
Landed cost of Chinese HRC	\$679	Landed cost of European HRC	\$705
US Domestic Midwest Price	\$675	US Domestic Midwest Price	\$675
Difference	(\$4)	Difference	(\$30)



New US supply additions are primarily EAF capacity

Mixed impact on imports (Fairfield positive for billet imports, JSW Baytown negative for slab imports)

Company	Mill/Location	Capacity (tons)
<b>2019</b>		
US Steel	Granite City	2.8
JSW	Mingo Junction	1.7
CMC	Durant	0.4
Nucor	Missouri	0.4
<b>TOTAL</b>		<b>6.2</b>
<b>2020</b>		
JSW	Baytown	1.0
Nucor	Florida	0.4
Big River	Osceola	1.6
US Steel	Fairfield	1.6
<b>TOTAL</b>		<b>4.6</b>
<b>2021+/PROPOSED</b>		
Steel Dynamics	TBD	3.0
JSW	Ohio	1.5
Nucor	Gallatin (Kentucky)	1.4
Nucor	TBD	1.2
Bluescope	Ohio	0.6
Republic Steel	Ohio	1.2
<b>TOTAL</b>		<b>8.9</b>

# US Steel Market

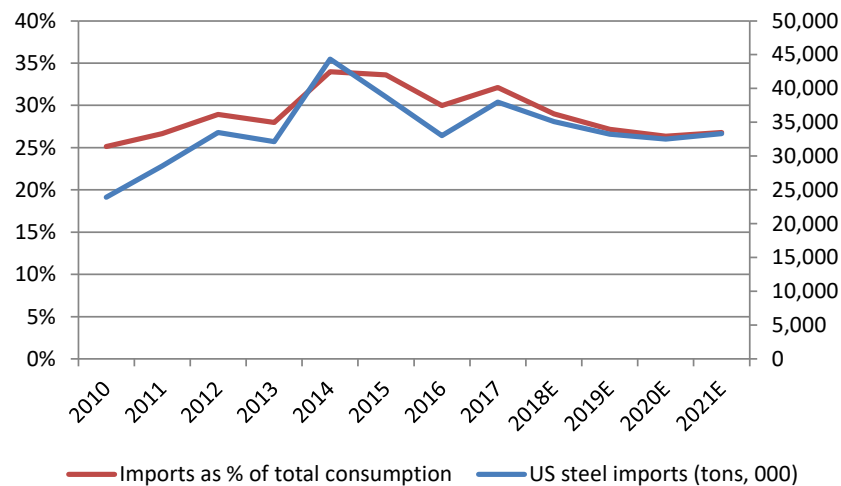
New US production likely to cannibalize high-cost domestic tons

US steel imports have ranged from 25-35% of demand for the last several years

Economics still make sense for some imports (i.e., California slab)

New US production (mainly EAF) should cannibalize higher-cost BOF production

Positive for scrap market and, depending on pricing, scrap imports



# Aluminum markets

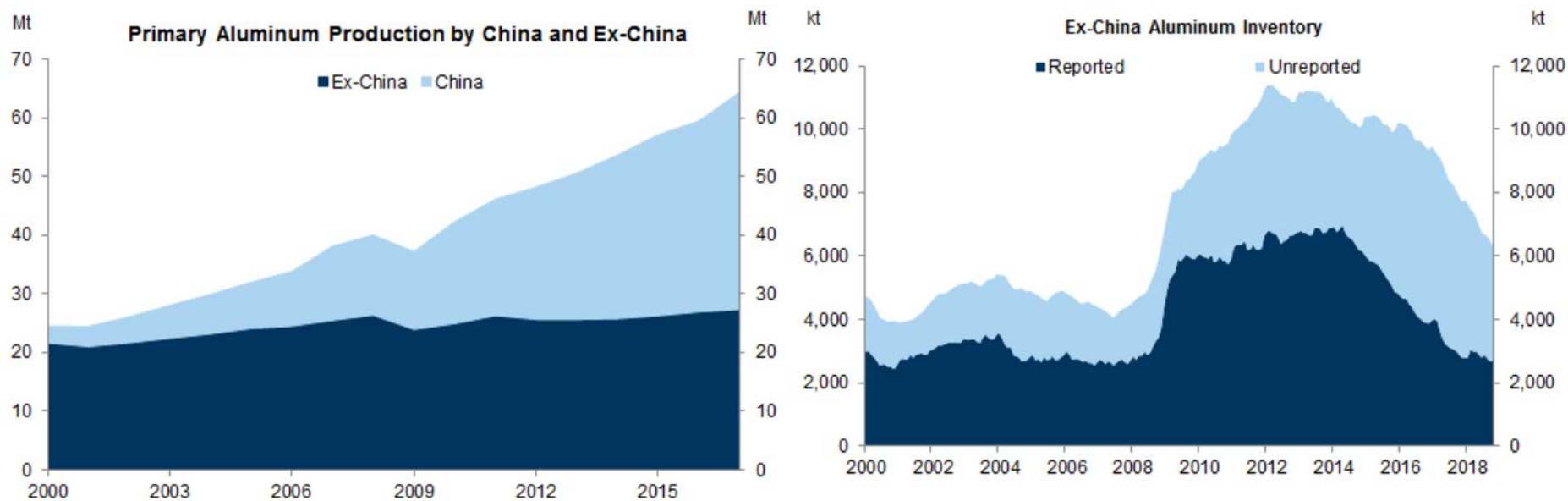
US will have to keep importing despite 232

# Chinese supply dominates

Ex-China should remain in a deficit

We expect 6mtpa of new capacity in China over the next five years despite strict government controls

Guanxi, Yunnan and Inner Mongolia have low income per capita and low costs, and are less affected by air pollution than Beijing-Tianjin-Hebei



# US will still need to import despite tariffs

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US imports to continue, as the US needs the aluminum (232 exemptions prove that)

We have seen some smelter restart announcements, but they are a small percentage of US consumption

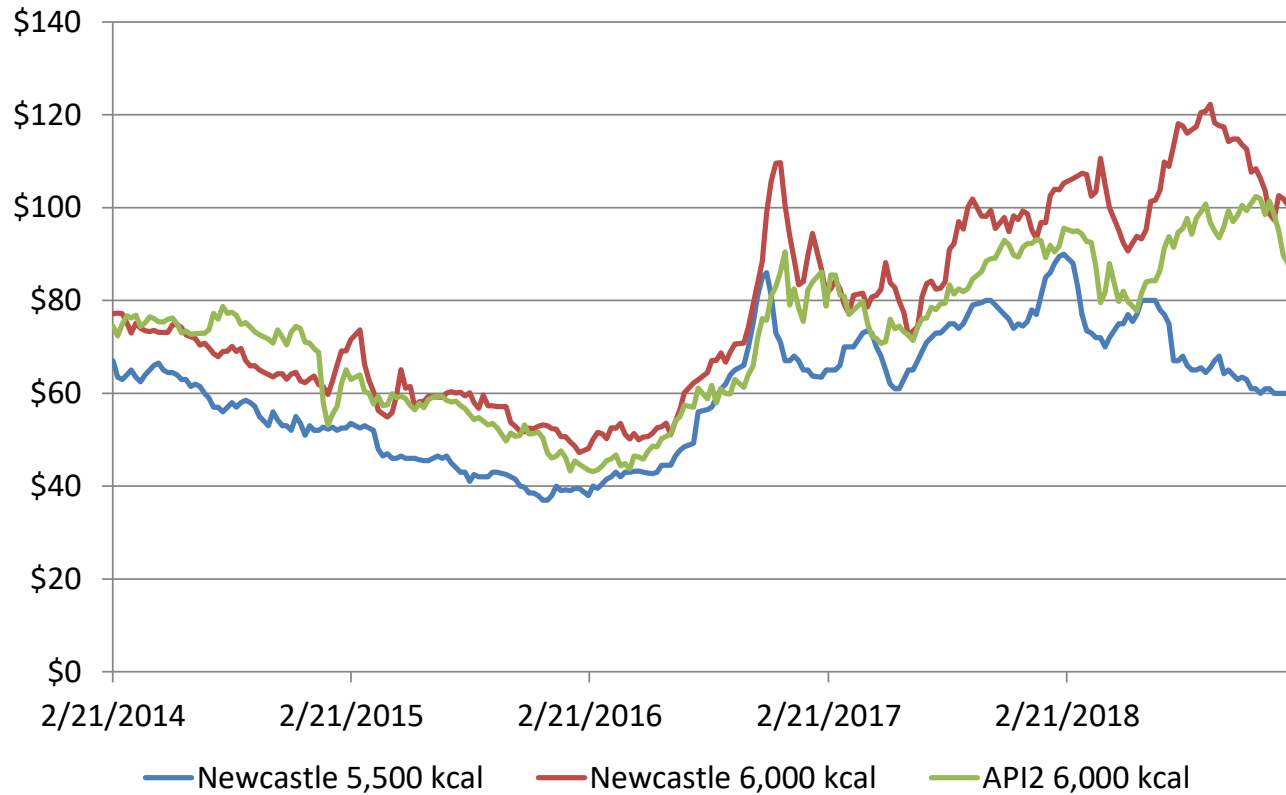
- US consumes ~5.7mt of primary aluminum per year
- Imports are ~80% of that
- Warrick, Mag 7, Hawesville restarts total ~200kt

# Coal markets

Pockets of opportunity amid secular decline

# Global seaborne thermal coal trade

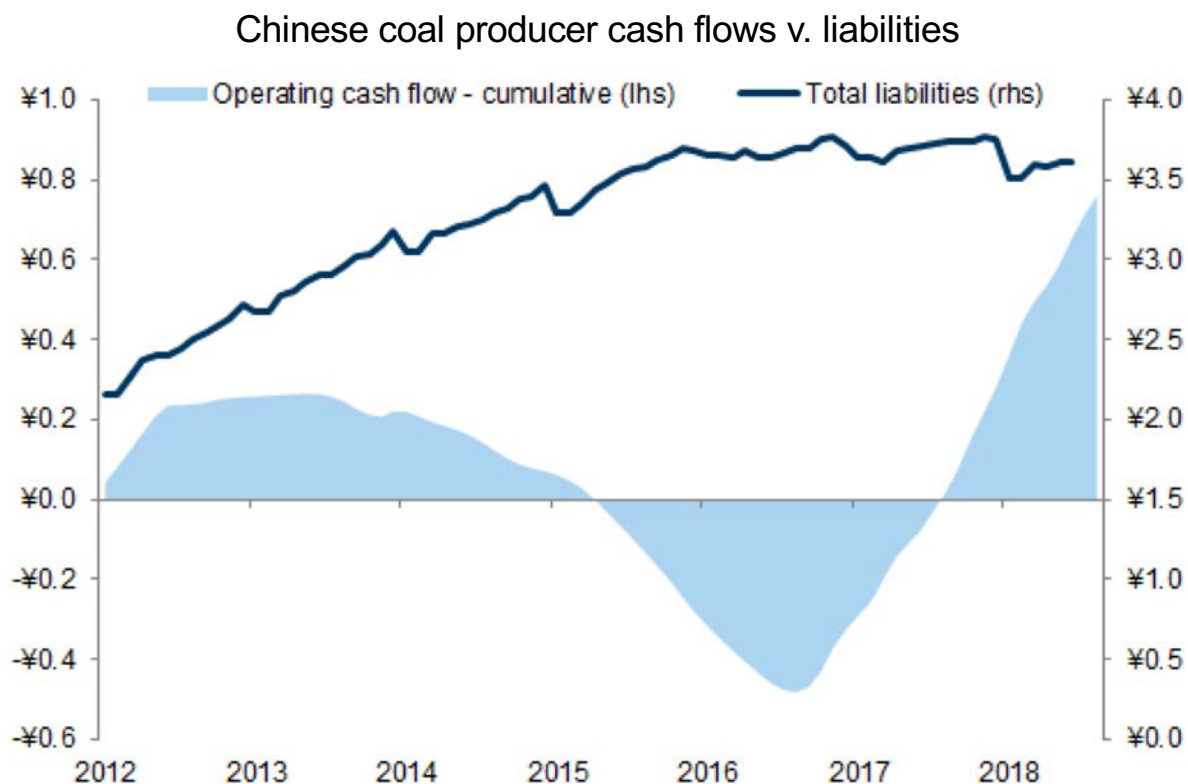
Market tighter than expected; high-CV coal at a premium



# Why has the market been relatively tight?

## (1) China wants to keep coal companies solvent

- Chinese producers need higher prices to pay down debt, manage liabilities
- Import restrictions necessary to keep the deleveraging process on track
- We calculate that China will need to aid domestic producers through 2020



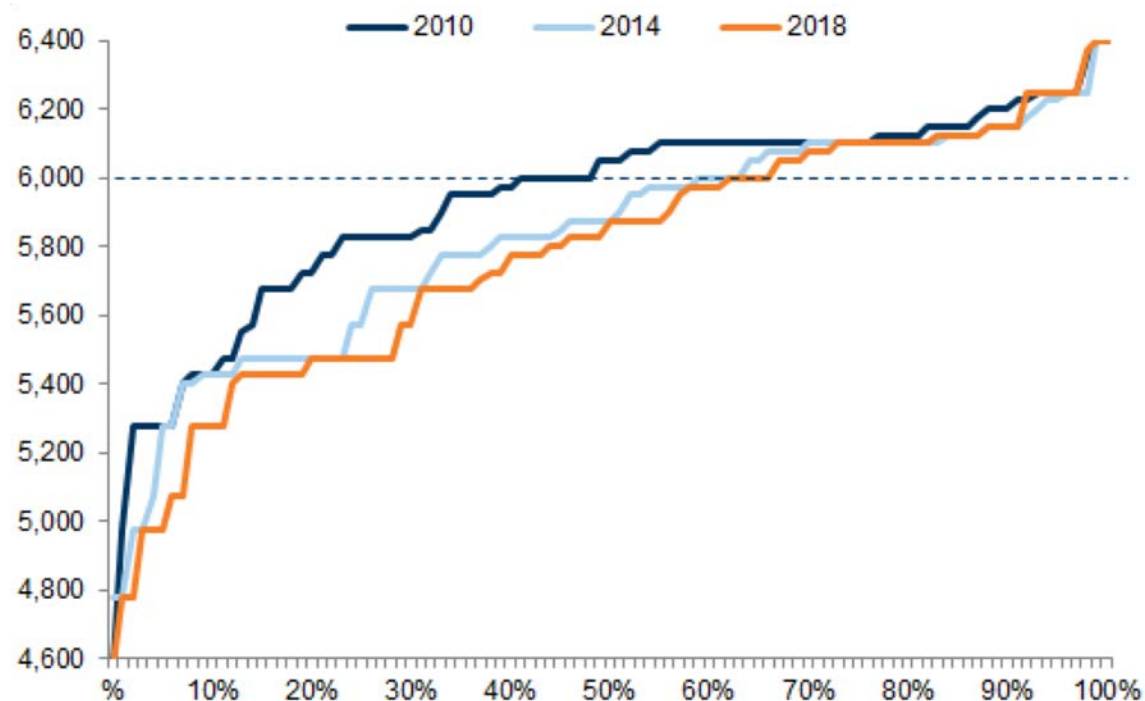


# Why has the market been relatively tight?

## (2) Long-term surpluses create near-term shortages

- Minimal new coal investment due to negative long-term outlook
- Low spare capacity, especially for high-CV coal

Australian exports are skewing towards lower-CV coal



# The global balance: Choppy N-T, tepid L-T

Southeast Asia is a pocket of growth amid secular decline

GS 2019E/2020E API2 price forecasts: \$89/\$78/tonne

Long-term price remains \$60/tonne

Thermal Coal Supply/Demand															
	2017			2018E				2019E				2020E			
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Thermal coal imports</b>															
India	37.7	30.8	40.3	40.3	40.4	39.0	38.0	42.1	43.2	37.5	39.7	41.8	42.9	37.2	39.5
China	45.8	49.9	47.3	57.4	50.0	45.0	47.0	43.3	45.4	48.4	47.9	38.6	40.5	43.2	42.7
Japan	29.6	32.5	33.8	32.0	28.4	31.0	31.0	30.8	26.7	30.8	31.1	30.3	26.3	30.3	30.6
South Korea	26.8	31.6	26.8	29.0	28.5	28.0	27.0	29.0	27.5	30.3	28.8	28.9	27.4	30.2	28.7
Taiwan	16.2	15.6	13.2	12.7	15.5	14.5	14.5	15.2	17.0	16.5	15.4	15.2	17.0	16.5	15.3
Mal-Phil-Thai-Viet	20.5	20.7	20.3	22.2	27.2	25.5	26.0	26.5	29.0	29.4	28.1	29.4	32.1	32.5	31.0
Bangladesh-Pakistan	3.5	2.9	4.1	4.3	4.5	4.4	4.6	5.8	5.6	5.1	6.5	7.0	6.9	6.2	7.9
other	9.2	8.4	9.3	9.0	9.2	8.7	8.7	9.0	8.9	8.2	8.9	9.3	9.1	8.5	9.2
Total Pacific	189.4	192.3	195.1	206.9	203.7	196.1	196.8	201.8	203.4	206.2	206.3	200.5	202.2	204.6	204.9
Europe	21.5	25.6	25.8	25.2	20.6	23.0	22.0	23.2	18.4	20.7	21.5	22.0	17.5	19.6	20.4
Turkey	5.7	8.8	10.1	7.4	6.9	8.0	9.0	8.1	7.0	8.5	10.4	8.6	7.4	9.0	11.0
Middle East + Africa	4.8	6.6	5.0	5.6	5.9	6.0	6.0	5.2	5.7	7.2	5.8	5.4	6.0	7.5	6.0
Americas	4.2	4.8	3.6	3.2	4.3	3.5	3.5	3.6	3.8	4.2	3.4	3.4	3.5	3.9	3.2
Total Atlantic	36.3	45.8	44.4	41.3	37.7	40.5	40.5	40.2	34.9	40.5	41.2	39.5	34.4	40.0	40.7
<b>Global demand</b>	225.7	238.1	239.5	248.2	241.3	236.6	237.3	242.0	238.3	246.8	247.5	240.0	236.6	244.6	245.6
yoy growth	6.2%	2.3%	0.4%	7.8%	6.9%	-0.6%	-0.9%	-2.5%	-1.3%	4.3%	4.3%	-0.8%	-0.7%	-0.9%	-0.8%
<b>Thermal coal exports</b>															
Indonesia	91.1	97.3	103.0	103.4	101.5	95.0	93.0	97.6	94.3	98.5	103.6	95.3	92.2	96.2	101.2
Australia	48.7	52.5	50.5	47.9	51.7	51.0	52.0	50.6	50.0	54.0	52.9	51.0	50.4	54.5	53.4
Russia	35.8	37.9	36.5	35.2	38.7	38.0	37.0	36.5	39.8	42.5	40.1	37.2	40.5	43.3	40.9
Colombia	20.4	20.5	19.3	21.0	19.3	21.0	21.5	20.3	19.8	20.6	20.6	20.9	20.4	21.2	21.2
South Africa	20.6	19.8	22.0	20.0	19.1	19.0	19.0	18.2	18.2	18.8	20.9	18.2	18.2	18.8	20.9
US	5.8	7.3	11.3	10.2	11.5	11.5	12.0	12.7	11.2	10.6	11.8	11.0	10.3	9.4	9.2
other	4.8	4.9	5.5	5.4	5.0	3.0	3.0	2.8	2.7	2.6	2.9	3.1	3.0	2.8	3.1
Total	227.2	240.3	248.2	243.1	246.8	238.5	237.5	238.6	236.0	247.5	252.8	236.8	235.0	246.2	249.9
<b>Pacific deficit</b>	31.1	23.0	22.2	37.0	30.2	30.5	32.6	34.6	38.6	32.1	29.0	34.7	38.5	31.6	29.1
<b>Average CV - kcal NAR</b>	5,384	5,380	5,375	5,371	5,366	5,361	5,356	5,352	5,347	5,342	5,338	5,334	5,330	5,326	5,322

# Global seaborne met coal trade

Growth in India drives strong 2019

GS 2019E/2020E Hard Coking Coal price forecasts: \$168/\$150/tonne  
Long-term price anchored at \$135/tonne

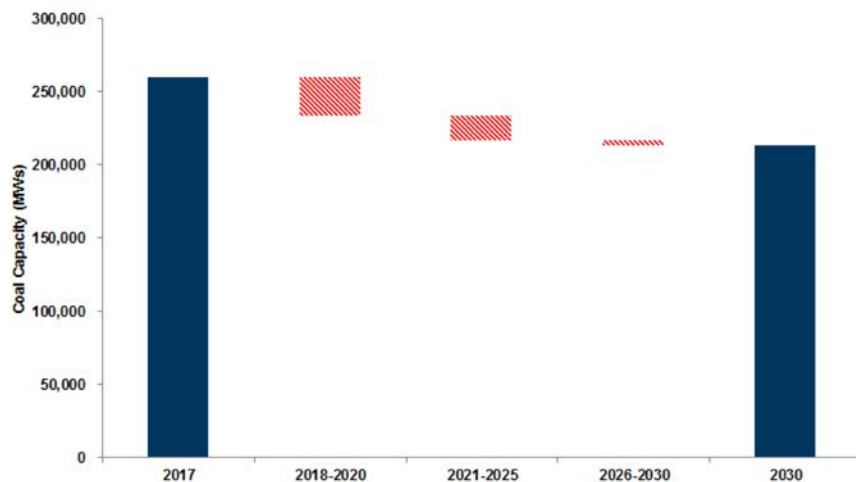
Metallurgical Coal Supply/Demand									
Million tonnes	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
<b>Metallurgical coal exports</b>									
Australia	186	186	190	173	183	193	198	199	200
United States	52	39	35	53	62	63	53	52	52
Canada	31	28	28	29	29	30	32	33	33
Russia	14	12	16	24	20	22	26	27	29
Mozambique	3	4	5	8	7	10	12	16	17
other seaborne	12	12	12	13	14	15	17	19	19
Total	299	282	286	300	315	332	338	346	349
<b>Metallurgical coal imports</b>									
China	62	39	41	47	55	60	55	50	45
Japan	64	64	62	64	64	65	64	64	64
Korea	34	35	34	33	35	36	37	37	38
India	48	50	55	57	61	66	71	78	85
OECD Europe	52	52	51	51	51	54	55	56	58
Brazil	19	20	19	21	23	24	26	26	26
RoW	21	22	22	25	24	26	28	31	32
Total	299	281	284	298	312	330	335	342	347
yoy %	6.1%	-6.0%	1.0%	4.8%	4.6%	5.8%	1.6%	1.9%	1.6%

# US Coal Market

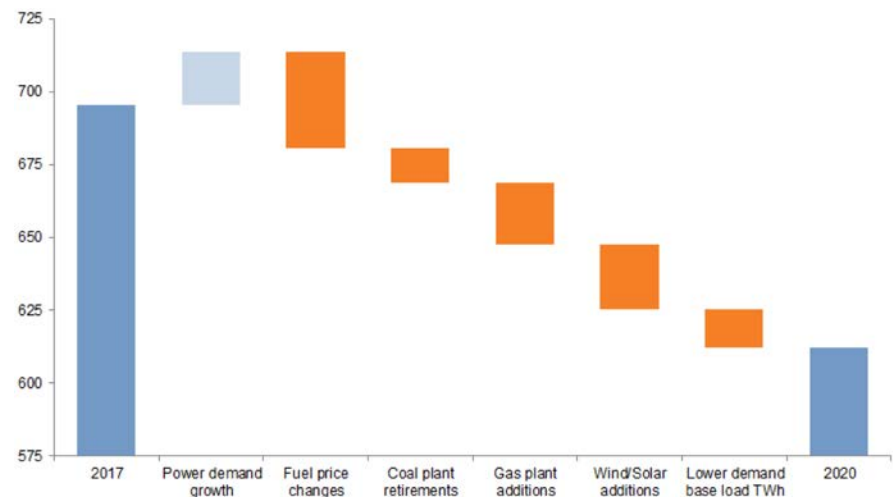
The outlook for domestic thermal coal is muted

## Thermal should continue to face pressure from retirements

US coal fired retirements to drive an 18% reduction in capacity by 2030



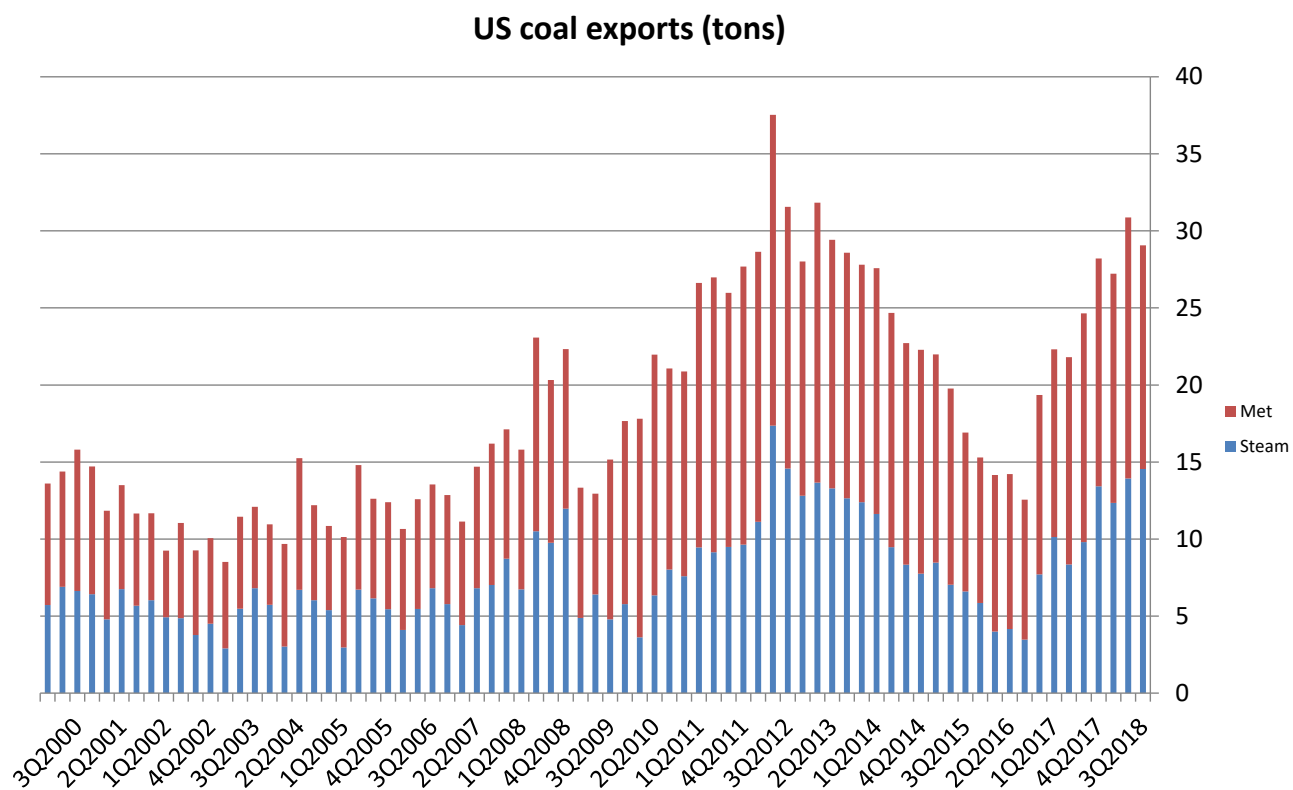
But demand trends, gas prices, and renewables adoption are also headwinds



# US Coal Market

US exporters have taken advantage of a strong market

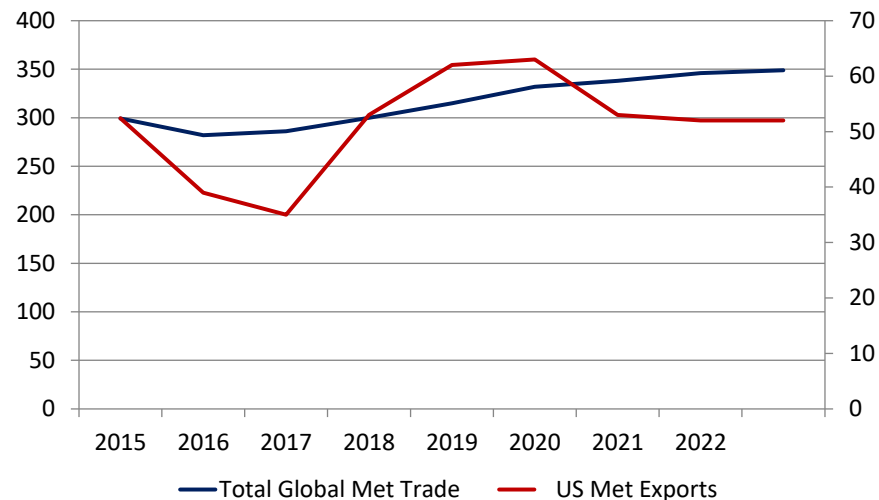
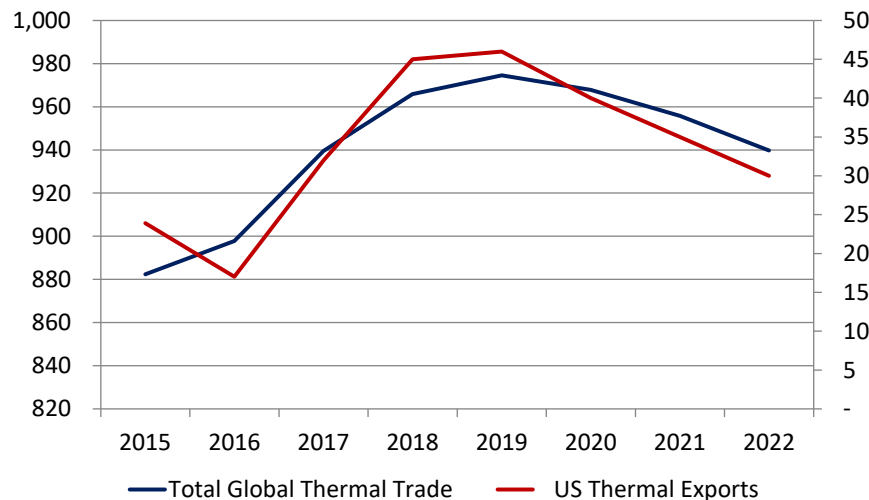
- Domestic met coal demand challenged by growing EAF capacity
- Exports should remain the bright spot for US met producers



# US Export Outlook

The US remains a swing export supplier

- Our coal is still not the cheapest and easiest to get to the global market
- More opportunity for met exports than for thermal exports

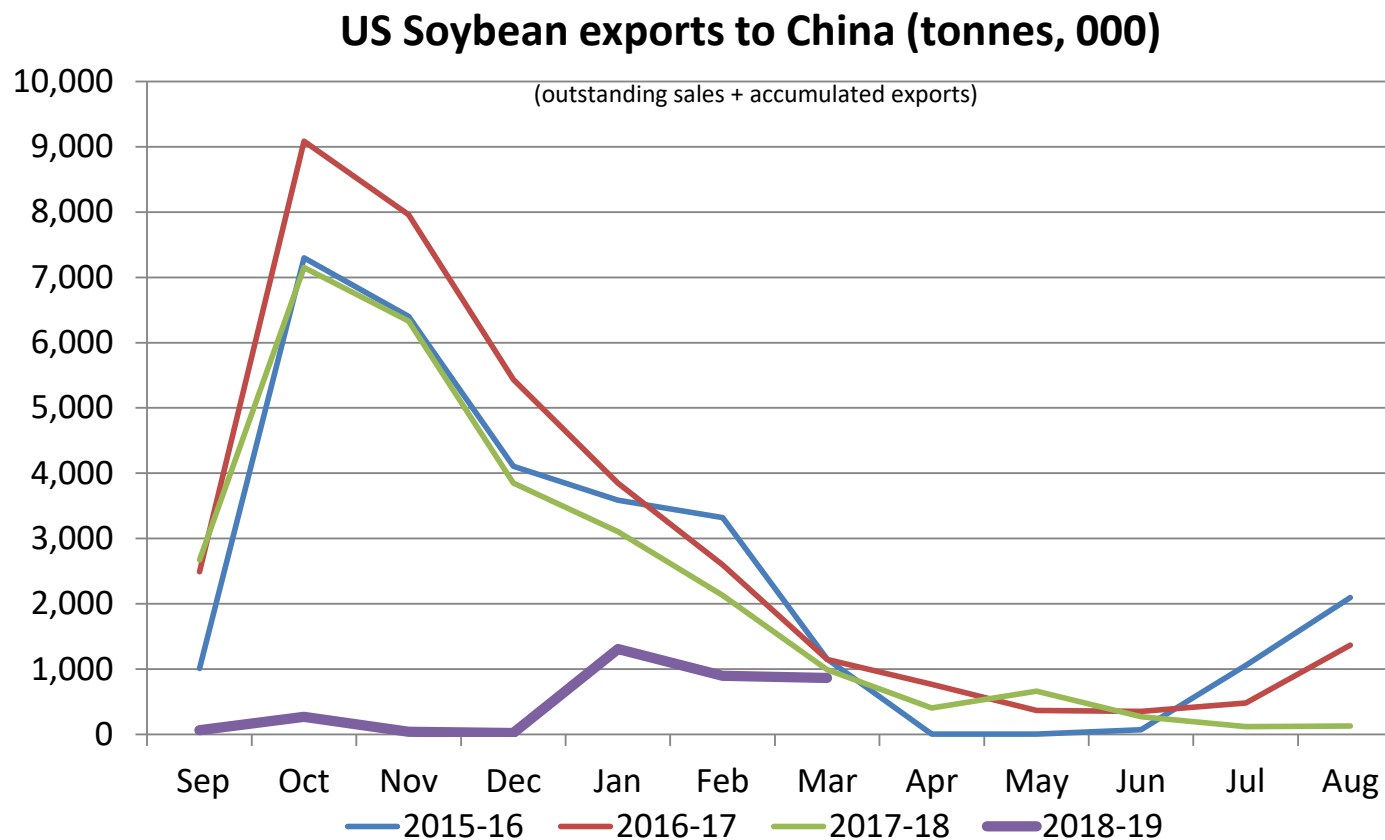


# Agriculture markets

Political uncertainty still to weight on the market

# Agricultural

US soybean exports to China down ~87% for the 18/19 crop marketing year

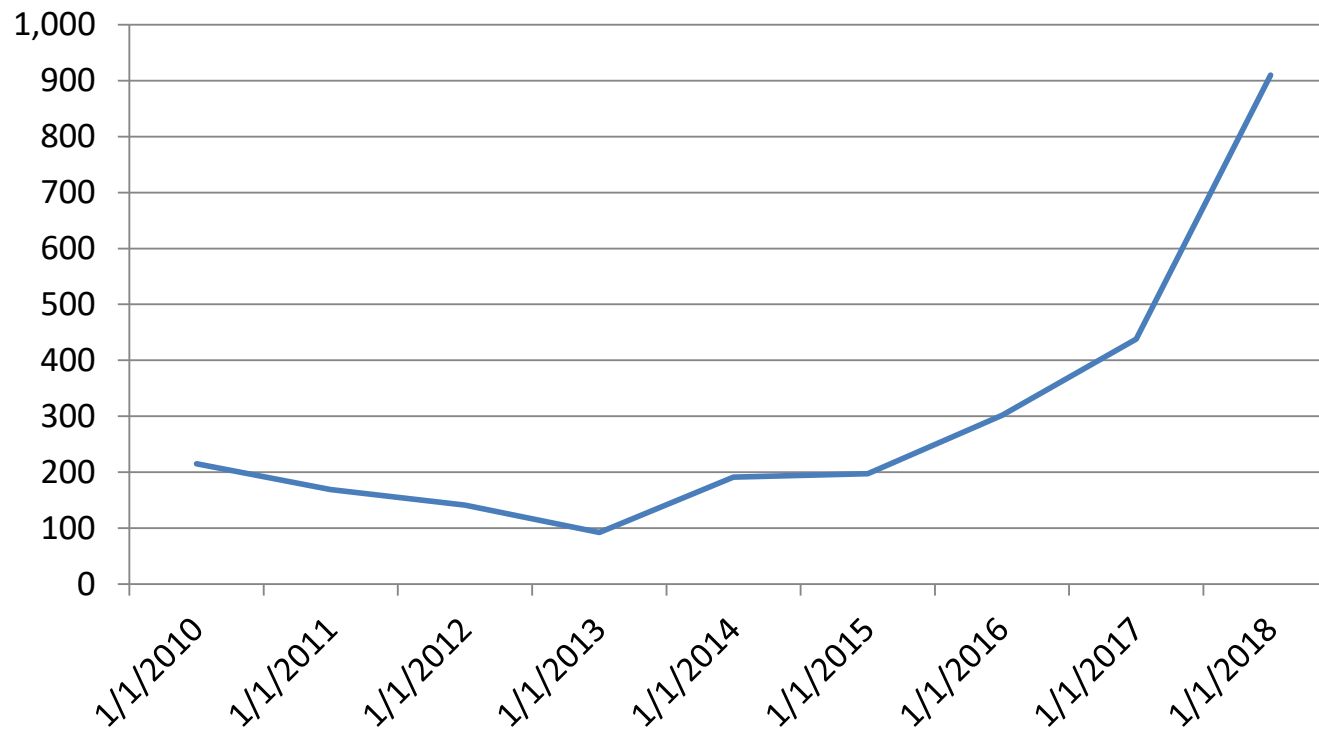




# Agricultural

US soybean inventories have more than doubled from Dec 17 to Dec 18

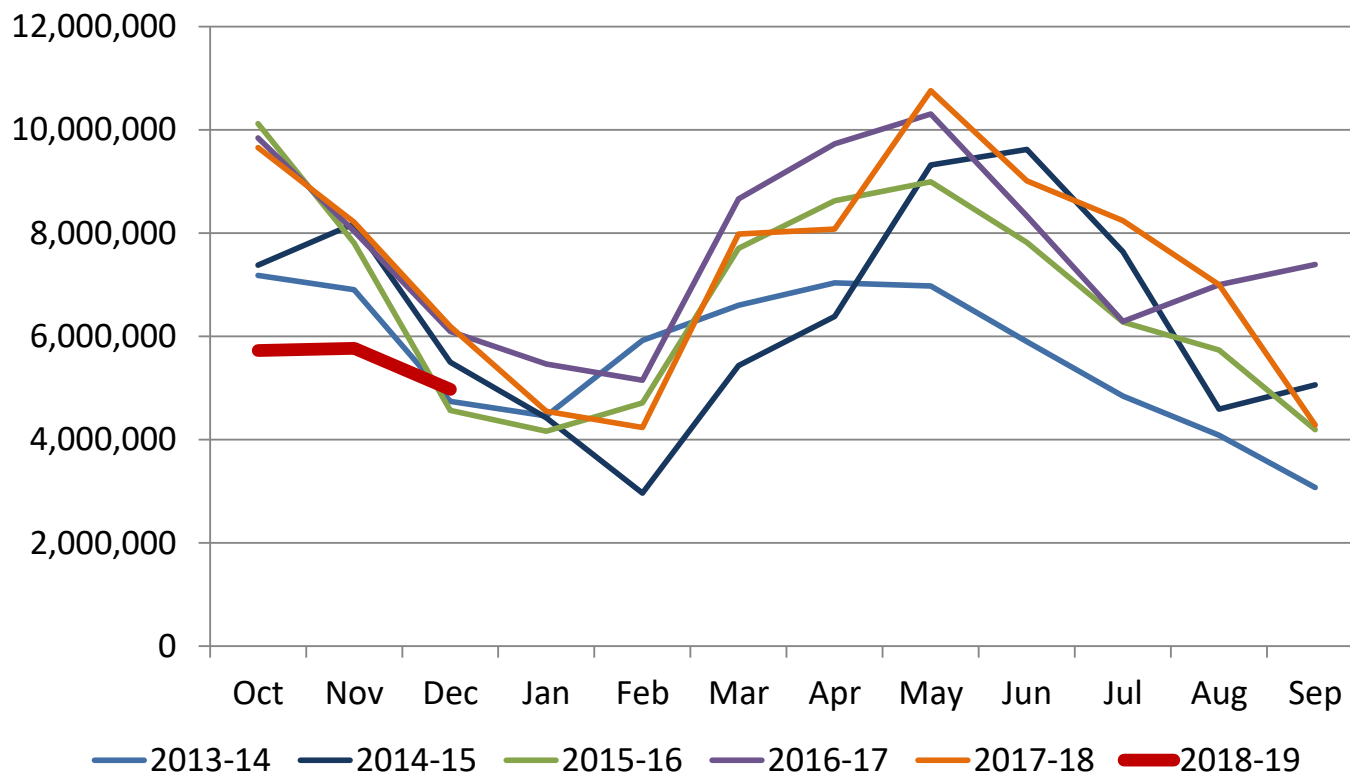
US Soybean Inventories (bushels, mn)



It's not all the fault of tariffs: Chinese imports are down as well

- Swine flu
- Slowing general economy

**Chinese Soybean Imports**



China agreed to buy 1.5-2.0m tonnes of soybeans in December

Announced another 10 million tonnes this week

However,

- The December agreement only covers three months
- Purchases by state-owned enterprises (private buyers still covered by tariffs)
- This week's announcement does not include a timeframe

In theory, US exports should backfill higher exports from Latin America to China

In practice, the transition has clearly been lumpy

Policy uncertainty compounds the problem

It should take time for trade to recover

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February 22, 2019

# Disclosure Appendix

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