JCAP

Survey China

June 25, 2018

Tim Murray
tim@jcapitalresearch.com

Ada Wang
ada@jcapitalresearch.com
+1 860 391-6094

Survey Structure

- Survey of 10 steel traders supplying:
  - 5 construction industry only
  - 2 manufacturing industry only
  - 3 construction and manufacturing
- Regional:
  - 2 East China
  - 1 South China
  - 2 Central China
  - 3 North China
  - 2 West China
- Ownership type:
  - 4 SOE
  - 6 Private
- The total amount of steel traded by the survey group is 2.5 mln tons or 0.3% of domestic steel consumption. Each survey participant is one of the top five steel traders in its respective province. The 10 provinces covered in this survey consume approximately 63% of all domestically consumed steel in China.
- Our past surveys have proven good predictors for industry trends on a quarterly aggregate basis but the respondents demonstrate high volatility and significant regional differences.
- Repeat sources: All
- Interviews conducted May 15-19, 2018

Objectives

- To understand the current demand and outlook for steel from construction and manufacturing endusers of steel. We survey sales, inventory, financing, and the industry environment to build a picture of demand and outlook.

Steel Survey Q2

Steel Production: Lower than Reported

Steel Demand Sliding: Property and Infrastructure Weakening

- **Production figures are overstated more like 1-2% than 6.6% growth:** Our survey of steel traders and futures traders is indicating that production has been constrained this year to hold up prices. We think the stats are wrong.
- **Steel prices up 8% in Q2 but Iron ore flat:** We believe production controls have held steel prices up while demand declines and this is consistent with flat iron ore prices.
- **Infrastructure FAI growth has halved to 9.4%:** The survey show infrastructure spending falling in half the provinces we surveyed.
- **Property construction remains weak.** New starts data indicated better growth than last year. Our survey is not confirming that trend. 70% of provinces surveyed indicated declines.
- **Outlook for Steel and Iron Ore:** We expect demand to weaken and this will lead to lower steel and iron ore prices in Q3. We expect Iron ore to trade around $60 in Q3.

Data says production of steel is up 6%? We think it is flat or up 1-2%

Data indicates that crude steel production is up 6.6% YTD May or 23 MMT. Our survey is showing that domestic steel demand is most likely flat and exports are down 19% or 6 MMT YTD May. Our research is indicating steel mills are reducing production to hold up prices and to avoid building inventory. We believe production is more like 1-2% growth.

Pig iron production, the intermediate product from iron ore to steel is up only 1.6%. Imported iron ore is flat and inventory at port is up 10 MMT YTD May. Domestic iron ore production is flat or slightly down. If available iron ore is down then Pig iron seems to be overstated and is probably more likely flat.

Growth in crude steel is from the scrap steel used to produce steel either in converters or electric arc furnaces (EAF). Scrap steel used in steel production increased by 58% in 2017 to 148 MMT, almost all of that was used in converters, EAF use of scrap only grew 6%. In 2017 intermediate furnaces were closed and that released available scrap. Scrap steel VAT tax is slowly being reduced. That enabled the growth in 2017. We believe it is unlikely available scrap steel was sufficient to grow steel production by 6.6% YTD May.

Our research is indicating steel mills are reducing production to hold up prices and to avoid building inventory.

Steel traders in seven provinces told us steel mills were limiting or reducing production and that demand was down. Steel traders explained the rising price for steel because steel mills were reducing production. Five steel traders told us that some steel types were difficult to purchase, suggesting tight supply. We can also see that steel prices are rising as iron ore prices remain stable. This is consistent with production being constrained. Rising prices have encouraged steel traders to restock but it looks like inventory has just shifted from steel mills to traders. Trader steel inventory is up YTD June and steel mill inventory is down 20% YTD.

Data is indicating property new starts are up 10.6% YTD May 2018, higher than the 9.6 YTD May 2017 when property markets were clearly stronger. This survey is indicating that property construction demand for steel is flat to down. We struggle to reconcile the activity on the ground with the data. The price gap between flat steel for industry and construction steel has returned to a more normal premium of RMB200. This is consistent with demand for construction steel falling back to normal.

Tim Murray tim@jcapitalresearch.com **Ada Wang** ada@jcapitalresearch.com +1 860 391-6094

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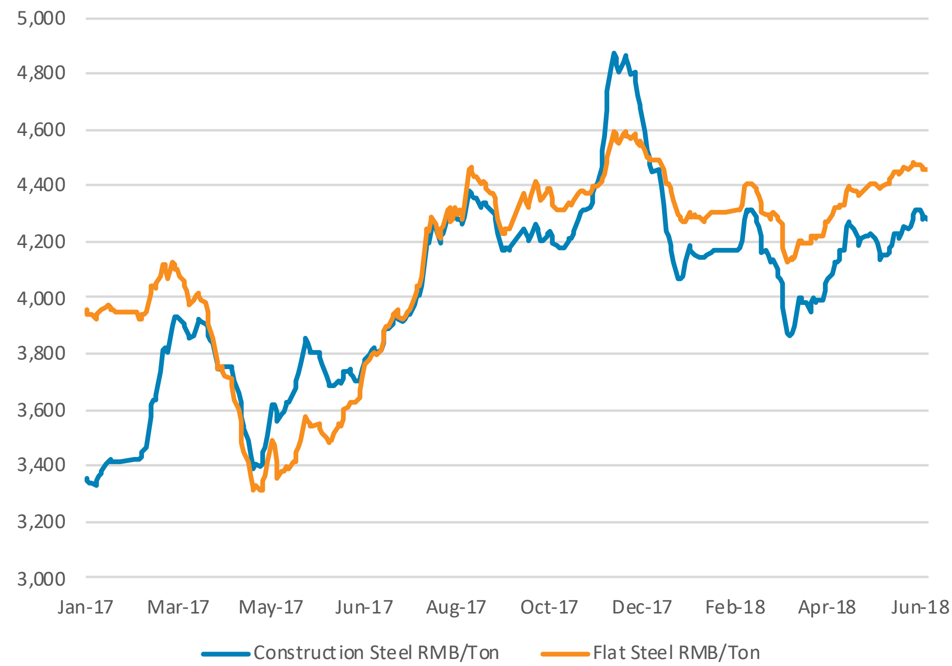
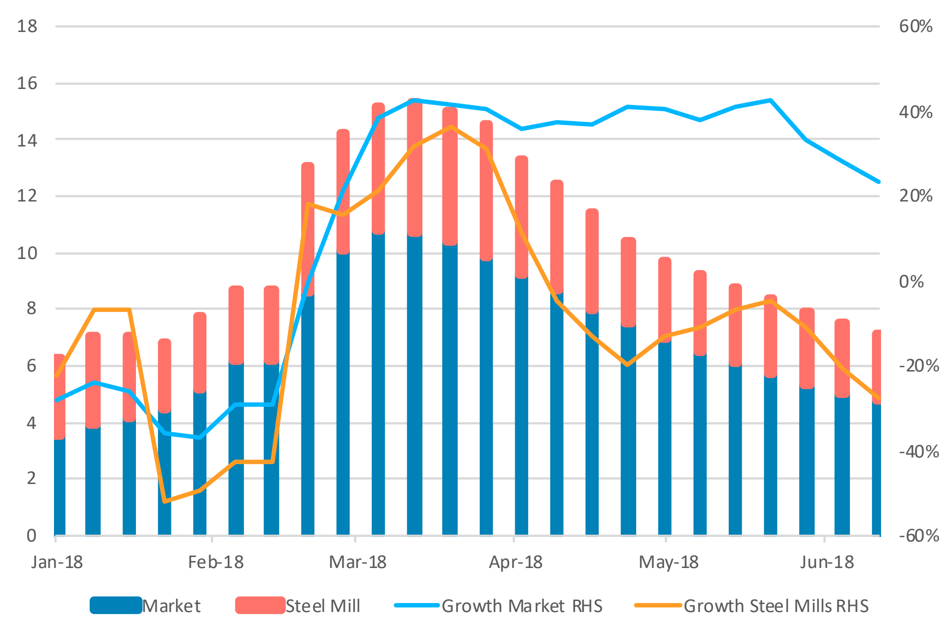
Chart 1. Construction Steel vs Flat Steel (RMB/Ton)



Source: Wind

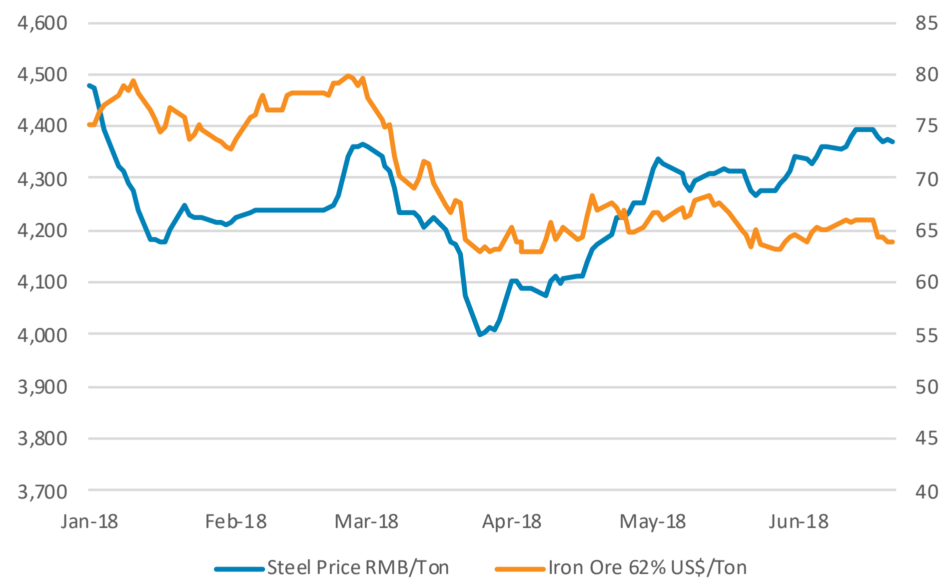
Construction Steel Demand Leads Decline

Chart 2. Construction Steel Inventory MMT



Source: Wind

Chart 3. Iron Ore Vs Steel Price



Source: Platts, Wind

Infrastructure growth falls: Bad provinces down, good holding

Infrastructure is a weaker component of steel demand in 2018. Infrastructure FAI fell from 12.4% YTD April to 9.4% YTD May. The growth was 20% the same time last year. The expected Central government enforced deleveraging of local governments and crack down on PPP financing is now impacting on infrastructure growth. As we have noted there now seems to be a division of "good" provinces where they have strong economies and fiscal revenue and "bad' provinces where growth and fiscal revenues have been falsified and infrastructure spending has been reckless and unaffordable.

Our survey is showing wealthy provinces like Jiangsu, Zhejiang, and Guangdong still have good growth in infrastructure.

National statistics show that infrastructure investment declined -1.7% in Q1 2018. Our survey participant in Changsha, Hunan in Central China stated that infrastructure investment declined in Q2. In the first 4 months of the year Hunan cancelled 145 PPP projects valued at $30 billion. Our survey indicated declining infrastructure spending in five provinces.

Futures Traders: Production and demand falling, less speculation

We spoke with several futures brokers trading iron ore and they believe fundamental market activity has been the main driver of futures pricing. Demand was delayed after spring festival, coupled with environmental controls restricting production. This along with a high inventory of iron ore and increased use of scrap enabled steel prices to rise while iron ore prices fell.

They believe the volume of futures increased due to physical market hedging. Investment companies that speculate on iron ore futures are employing people that are experienced in trading spot markets and better understand physical markets.

They believe the opening of the domestic iron ore futures market to foreign players had very little impact on the market. Most of the big players like Glencore and Cargill were already present. However, over time they believe more international traders will participate and this will be a good thing. There will be less market concentration and so large players will have less of an ability to manipulate the market as they have in the past.

The property market is in a down cycle and there is a crackdown on lending leading to lower liquidity in the market.

Their outlook for Q3 is as its is going into the low season, when demand will fall then this should trigger a fall in the price or iron ore. The market will reflect the overall macro situation. The property market is in a down cycle and there is crack down on lending leading to lower liquidity in the market. Demand for steel is falling but production controls for environmental reasons is seeing production fall faster than demand. So steel prices are holding up. Outlook is for greater volatility in iron ore price. Underlying weakness from weak demand, lower steel production in Q3 and higher supply of iron ore in Q4.

Q2 Survey Results

- **Q2 steel demand down:** 50% of steel traders had lower sales in Q2 YoY, an improvement over Q1 when 80% of steel traders had lower YoY. However, 70% of steel traders reported sales in their region were down in Q2. 20% of the traders outperformed the market. Most regions continue to report declining sales. When we compared Q2 actual sales with the expectations the steel traders had in Q1 for sales in Q2 sales were worse than expected for two traders and better for one.

- **Q3 outlook neutral to down:** 40% of steel traders expect sales to decline, 30% improve and 30% neutral up from 70% expecting decline in Q1. 70% of steel traders will destock or hold inventory levels, 30% plan to restock. Steel traders are not optimistic about Q3.

- **Property construction demand better than Q1:** Three cities, Chongqing, Suzhou and Changsha recorded increased sales to new property projects and said property construction demand was growing. 5 cities said property demand for steel was declining. This is an improvement over Q1 when all steel traders said demand from property was in decline.

- **Infrastructure demand patchy:** 45% of steel traders indicated that demand from infrastructure was growing, compared to 60% in Q1. We believe infrastructure growth declined in Q2 and will continue in Q3.

Table 1. Steel Trader Demand Q2 2018

City	2018 Q2 Sales (Distributor)	Demand in Q2	2018 Q2 Sales YoY	2018 Q2 Sales Est. YoY (Region)	2018 Q3 Sales OutlookEst YoY	Outlook for Demand in Q3 2018
Harbin North	-8%	Construction projects have been slow to start this year, some have still not started. Industrial steel demand is up a bit. Property construction is bad and infrastructure projects are not being approved. There are no infrastructure projects under construction.	-50%	-10%	0%	This year will be down on last year, but we expect the 2H to be better than the first half as we expect more projects to commence.
Shenyang North	100%	The market is good we have been offloading our inventory to wholesalers. Last year we did not have so much stock. End demand is only up a little.	60%	5%	20%	The outlook for the next month is still strong. Prices are rising due to South China environment restrictions on steel production. There are no large infrastructure projects in North East China. We still expect good sales for one more month.

City	2018 Q2 Sales (Distributor)	Demand in Q2	2018 Q2 Sales YoY	2018 Q2 Sales Est. YoY (Region)	2018 Q3 Sales OutlookEst YoY	Outlook for Demand in Q3 2018
Qingdao North	-50%	Qingdao property market demand has dropped dramatically. Many projects are halted. Auto and white goods are also bad. Our company is closing.	-10%	-20%	0%	Winter restock in January was large, and there is a lot of inventory in the market. Infrastructure project approvals are very difficult now. There are a lot of international and domestic meetings that will slow demand, as construction will be halted.
Wuhan Central		Everyone is relying on sales to whitegoods and auto manufactures. Construction steel sale are reliant on project coming online, which is not likely.		3-5%	-10%	All infrastructure projects, including metro, still continuing. Property construction is slowing fast. Q2 sales will clearly be lower. We do not know how far prices will fall.
Chongqing West	3%	This is peak season for construction and industrial demand. Also futures prices lifted prices in spot markets which improved sales.	-8%	5%	-5%	Low season is approaching and factories will take holidays.
Chengdu West	10%	We are expanding our customer base for industrial steel. Property is not doing well and we are focused on selling to roads and bridges.	15%	10%	5%	We are expecting growth to slow. Sales to the auto sector have fallen a lot. We are reliant on infrastructure but new approved projects are few.
Hangzhou East	-46%	Demand is worse than last year, infrastructure demand is down a lot. We have found it harder to get supply from steel mills. Property sector is also poor.	-60%	-20%	-10%	Demand will fall. Supply is also a problem, steel mills have been curtailing production. The local steel mills are struggling to meet the needs of the province.

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City	2018 Q2 Sales (Distributor)	Demand in Q2	2018 Q2 Sales YoY	2018 Q2 Sales Est. YoY (Region)	2018 Q3 Sales OutlookEst YoY	Outlook for Demand in Q3 2018
Suzhou East	-6.5%	We lost sales to competitors. In April and May car production was clearly greater than sales. A reduction in import tax from 1 July for autos led dealers to sell down stock.	-4%	-5%	-5%	It is low season for auto sales and inventory is high. The tax concessions on car purchases are being reduced from 1 July. We expect this to have a negative impact on car sales.
Guangzhou South	10%	Steel prices have been rising since the beginning of May, construction projects are going well, end demand is up, So sales are up.	-15%	25%	0%	Expect demand to be flat in Summer, the low season.
Changsha South	5%	Demand is not as good as we expected. We were using low prices to reduce stock.	-20%	10-15%	30%	We are expecting an improvement in demand and sales in Q3. The number of newly started projects is lower than we expected.
	5%	Demand improved in 2Q Construction has improved slightly both property and infrastructure.	-15%	5%	-5%	We are expecting demand to fall as some PPP projects are being cancelled as they will not make money and local government are deleveraging. There is like a wave of project cancellations.

Table 2. New Property Construction Projects Q2 (% of sales)

	Harbin	Chengdu	Qingdao	Chongqing	Suzhou	Guangzhou	Changsha
Q2 2018	15%	0%	0%	20%	40%	0%	28%
Q2 2017	15%	0%	10%	15%	20%	40%	30%

Source: J Capital

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Table 3. New Infrastructure Projects Q2 (% of sales)

	Shenyang	Qingdao	Chongqing	Guangzhou	Chengdu	Changsha
Q2 2018	20%	0%	25%	60%	8%	10%
Q2 2017	40%	8%	20%	70%	0%	9%

Source: J Capital

Table 4. Steel Trader Inventory Q2 2018

City	QoQ	YoY	Q3 Outlook	Notes	Could steel mills meet demand in Q2?
Harbin North	20%	0%	0%	Prices were rising and my stock was low so restocked. Prices are high now and we expect prices to fall so we are not restocking.	Basically can meet needs, some types in short supply.
Shenyang North	0%	90%	50%	Stock levels are much higher as there are more wholesalers to supply. As there are production cuts in South China we are thinking of restocking.	No problem
Qingdao North	-35%	-40%	0%	It is harder to make money from physical steel sales and so very few people are holding stock. We will not restock, we will maintain the minimum.	No there is a shortage, particularly industrial steel. Steel mills can make better profits on construction steel so they are making less industrial steel. And there are less small steel mills.
Wuhan Central	5%	0%	-10%	After prices started to rise we increased inventory a little. We plan to destock	Some steel types are hard to get. We cannot get the volume we want.
Chongqing West	-20%	-15%	10%	We destocked as we expected prices to fall and it was hard to purchase from the steel mills. We are just holding stock for one month of sales. We are ordering more auto steel	Most product is easy to buy some types you may have to wait 20 days.
Chengdu West	-50%	0%	0%	The market is too unpredictable to hold a lot of stock. We will just maintain stock.	This is a sellers' market and the steel mills have the power. Construction steel is tight.
Hangzhou East	-15%	10%	5%	We destocked as prices were not rising in April. Stock is up on last year because last year was a boom year and we could not buy enough stock. Our orders are looking terrible and so we will not restock much.	No problem in supply of auto steel
Suzhou East	23%	33%	40%	Sales are up and so we need to hold higher levels of stock. We will need to increase stock as sales improve.	No problem
Guangzhou South	-47%	-15%	30%	We had too much stock going into Q2 so we destocked.	No problem with supply. Northern prices are high.

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City	QoQ	YoY	Q3 Outlook	Notes	Could steel mills meet demand in Q2?
Changsha South	20%	0%	-5%	We only recently restocked after a long period of destocking. We plan to reduce stock next quarter.	No problems

Source: J Capital

Table 5. Steel Mill Inventory Q1

City	Increase YoY	Reasons
Harbin North	-10%	Steel mills are reducing production, profits are not as good as they were last year. Demand and production down.
Shenyang North	-50%	Holding down stock as demand is low
Qingdao North	Normal	Still mills are starting to slow down production, inventory is a good levels.
Wuhan Central	Normal	It is a seller’s market and they have good profits.
Chongqing West	-15%	Steel mills are producing to orders and orders are down and so stock are down.
Chengdu West	-5%	Steel mills are producing to orders and there are more environment inspections and so some furnaces have been switched off.
Hangzhou East	-5%	Inventory at steel mills have been falling for 3 months. There has been more environmental controls limiting production.
Suzhou East	Normal	Steel mills are controlling production and prices are rising.
Guangzhou South	-20%	Every steel mill has low or no inventory
Changsha South	-2%	Levels are normal

Source: J Capital

Steel Traders: Outlook for Construction

Harbin: Decline
It is unlikely there will be many new residential projects. Infrastructure projects have slowed down, and project approvals have slowed down. Infrastructure spending is contracting. Metro systems planning has been halted. Urbanization continues in the province, but there is not a lot of demand for apartments. The housing stock available is too expensive these people.

Qingdao: Decline
There are no new infrastructure projects. Property is slowing down. We see investment shifting from infrastructure to industry. New energy vehicle production investment is greater than infrastructure now. Demand for steel is shifting from construction steel to industrial steel.

Wuhan: Flat
Property is only doing okay. PPP projects still proceeding as normal. Infrastructure is still okay

Shenyang: Growth
Most of the infrastructure in the North East is concentrated in Jilin. Property construction is normal and may increase in 2H as inventory of apartments has been sold down. Most of our infrastructure projects are power plants.

Hangzhou: Flat
Hangzhou wants to be Tier 1 city and is spending a lot on city infrastructure to look like one. Hangzhou will host the Asian Games in 2020 so there will be no slowdown in infrastructure spending. Property construction is not doing well.

Guangzhou: Growth
Infrastructure is greater than property construction this year. There is more investment going into developing high tech zones now.

Chengdu: Decline
With the exception of Jianyang Airport there are no major infrastructure projects in the province. There is clearly a lot less infrastructure this year. Property construction is also slowing. PPP project financing is very tight, there have been almost no PPP projects approved this year. Last year there were a lot of PPP projects. Local government finances appear very tight.

Changsha: Decline
Developers now have cash flow problems and their enthusiasm for building is waning. PPP projects have been heavily affected. Metro lines and bridge construction is still ok. Infrastructure project growth is slowing.

Suzhou: Growth
Infrastructure and property are at normal or expanding. Developers are all still planning new developments.

Chongqing: Growth
We are expecting property construction projects to increase in the 2H. But there is some uncertainty about policy in the sector. Infrastructure for roads and bridges is still the core of demand.

Notable Quotes

"Small steel mills continue to go out of business".

Harbin

"Environmental crack downs will continue. Non-compliant steel mills will have their furnaces turned off."

Qingdao

"Q3 will not be that great and prices will fall."

Wuhan

"The lowering of tariffs on imported cars and parts will have a negative impact on domestically produced cars in the short term. In the long run it will create a stronger industry."

Hangzhou

"Songshan Iron and Steel, a listed steel company with production capacity of 6 MMT, has gone into liquidation after heavy losses."

Guangdong

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"Everyone is worried about liquidity in the market and are more cautious about worried about nonpayment on contracts."

Changsha

"Chongqing Iron and Steel was taken over by Baogang Wuhan group and they implemented stricter pricing policy."

Chongqing

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