

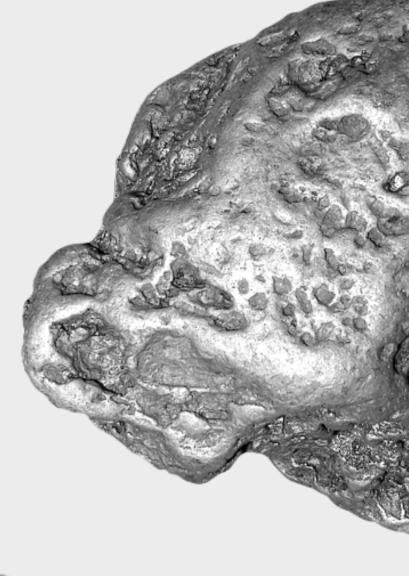
Steel Fundamentals: Time to unravel?

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01 A review of supply & demand dynamics on a global scale What has changed and what key factors should be assessed? Fastmarkets steel forecast predictions for 2019



Over the past decade, Asian demand has become increasingly important...

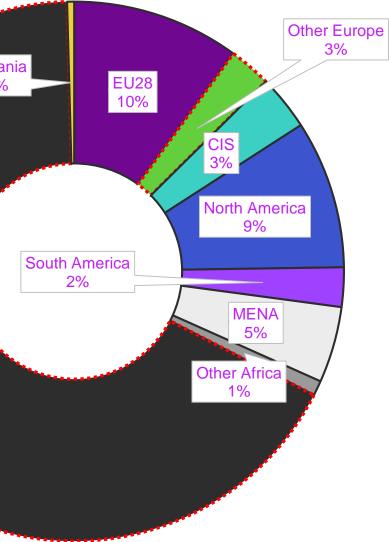
Other Europe Oceania Oceania 2% 0% 1% EU28 15% CIS 4% South America North America 4% 11% Asia 57% Asia 67% MENA 5% **Other Africa** 1% Steel has grown by 3% per year

Apparent Steel Use, 2008 – 1.23bn tonnes

Apparent Steel Use, 2018f – 1.66bn tonnes

Source: WSA, Fastmarkets MB research. Note: f forecast.

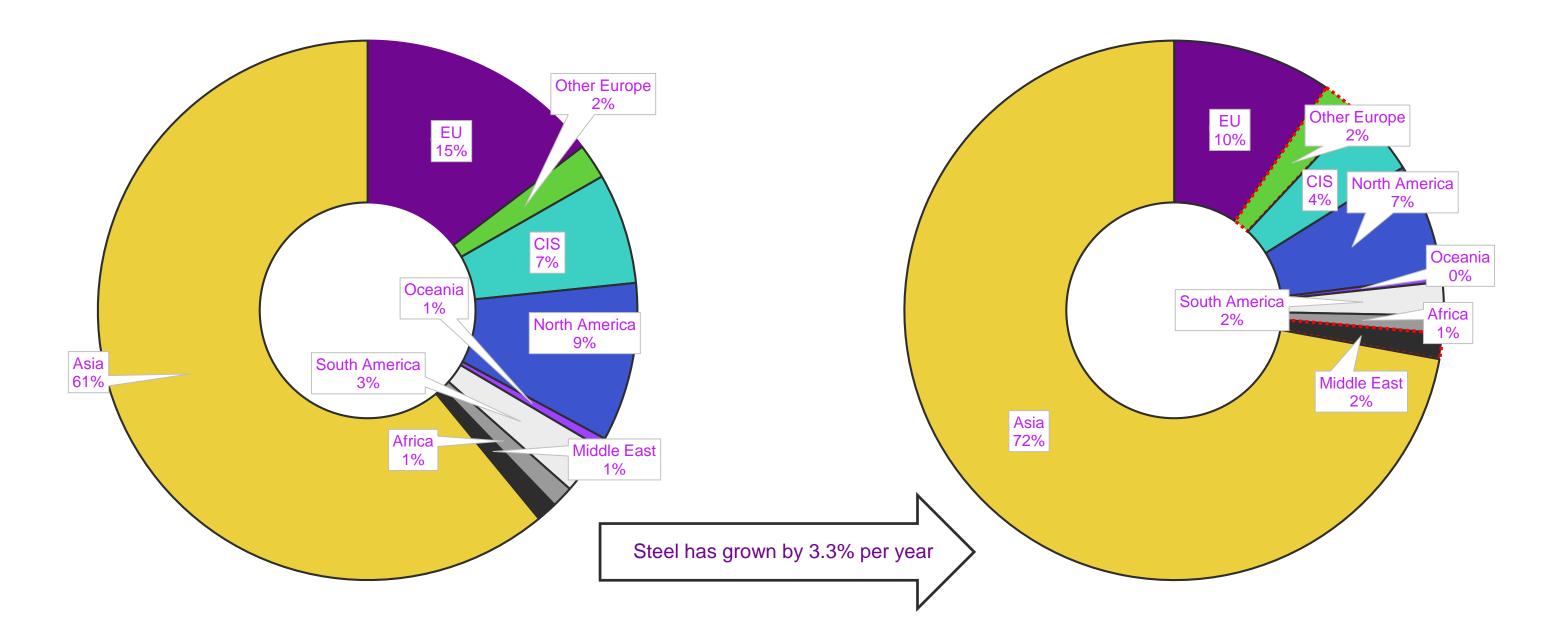




....but Asia's place is even more significant in supply

Finished Steel Output, 2008 – 1.26bn tonnes

Finished Steel Output, 2018f – 1.74bn tonnes

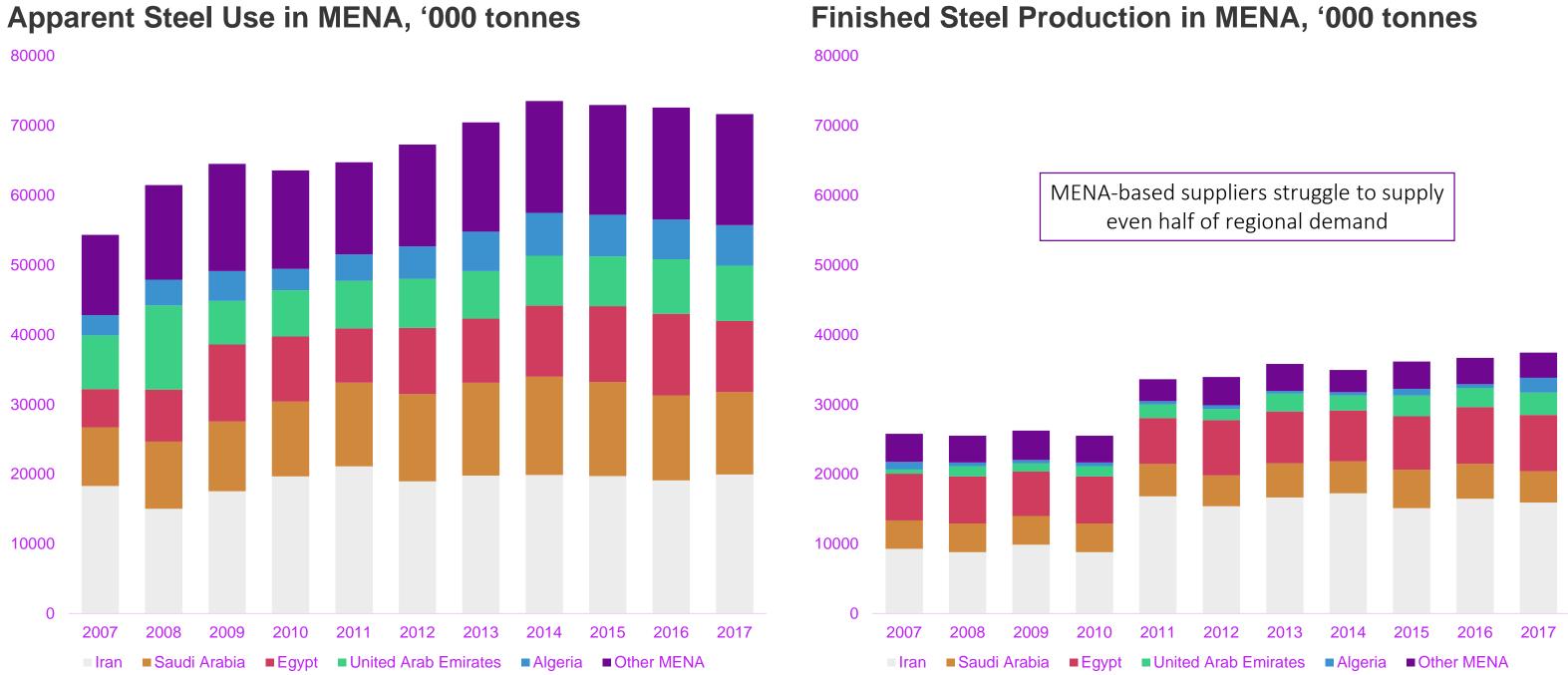


Source: WSA, Fastmarkets MB research. Note: f forecast.





No wonder MENA is so attractive to external suppliers



Fastmarkets MB research, WSA



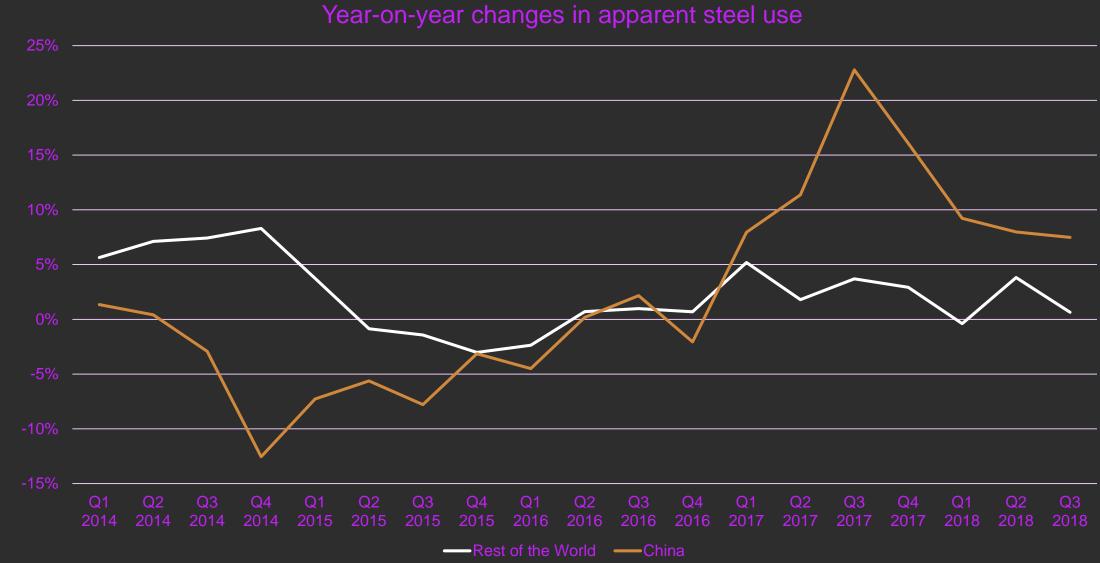


But in recent years, Asia and especially China has been restoring the "firm" in fundamentals...

GLOBAL STEEL USAGE ROSE BY APPROXIMATELY 4.6% THROUGH THE FIRST NINE MONTHS.

CHINA CONTINUES TO STAND OUT, AT 8.2%, **CONTRASTING WITH** 1.4% ELSEWHERE.

THE DIFFERENCE THIS YEAR IS THAT **MOMENTUM IS SLOWING DOWN**



...and as local demand goes up so Chinese exports go down.

But is the "inverse" relationship between prices and trade flows breaking down?

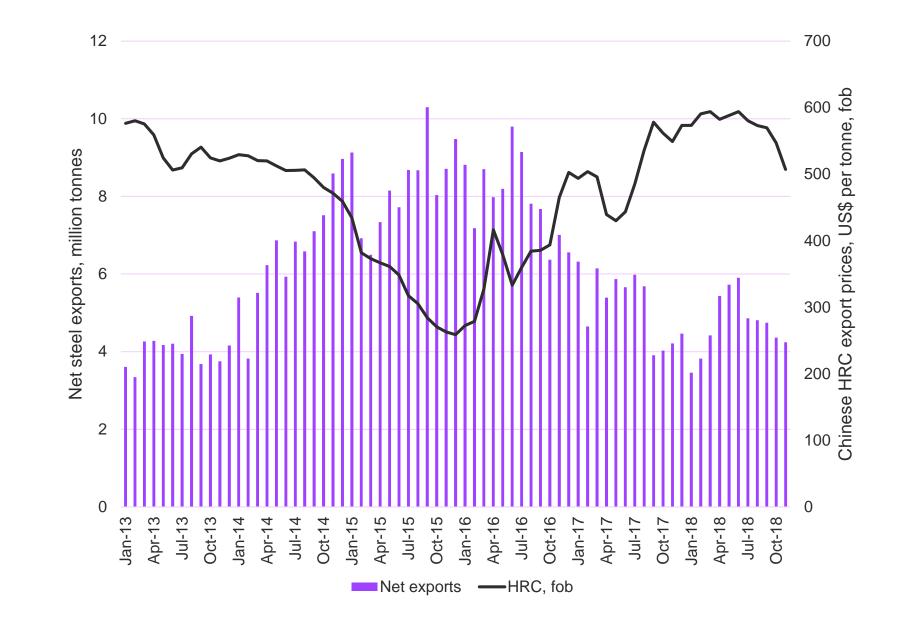
The "demand pull" in China continues to incentivize Chinese, as well as non-Chinese suppliers. Indeed imports have increased this year in China.

Chinese exports, however, have fallen a further 9% and exporters had been disinclined to compete; raising prices and dissuading customers overseas.

However, more recently Chinese suppliers are slashing prices even amid depressed demand...

Are fundamentals finally slackening?

Fastmarkets MB research Steel: Weekly Market Tracker





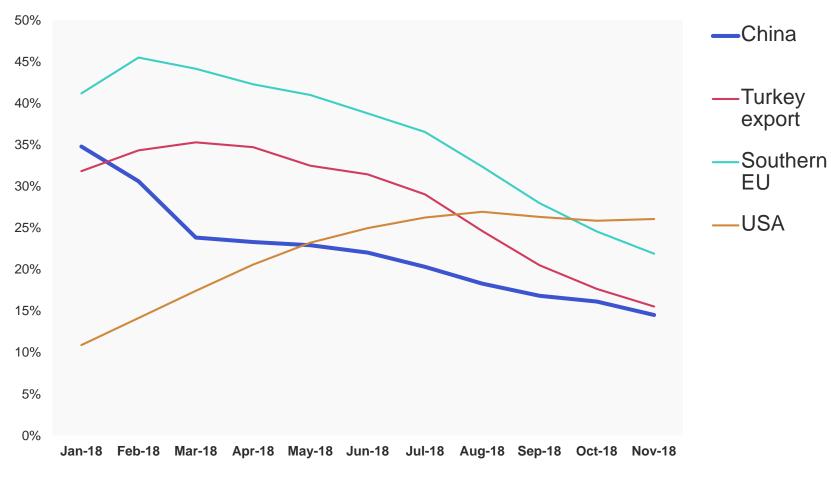
As a result, prices, notably of rebar, are finding support...

...but these are generally losing momentum

So far this year, the average rebar spot price assessed by Fastmarkets MB has risen by between 15-26%.

In US dollar terms, this is between \$69 and \$143 per metric tonne higher than a year ago.







...while HR coil price developments have been more extreme

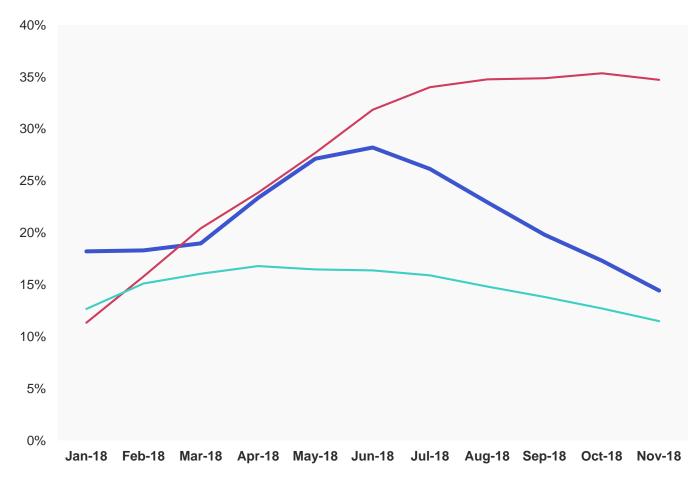
...but are also losing momentum

Between January and November this year, HRC spot prices have risen by between 12-35%

In US dollar terms, this is between \$68, in both China and the EU, and as much as \$237 per tonne in the USA.

An interesting point of difference with rebar, is that HRC prices have underperformed, just, in China and the EU, but outperformed dramatically in the USA.

CUMULATIVE YEAR-ON-YEAR CHANGES IN HRC SPOT PRICES





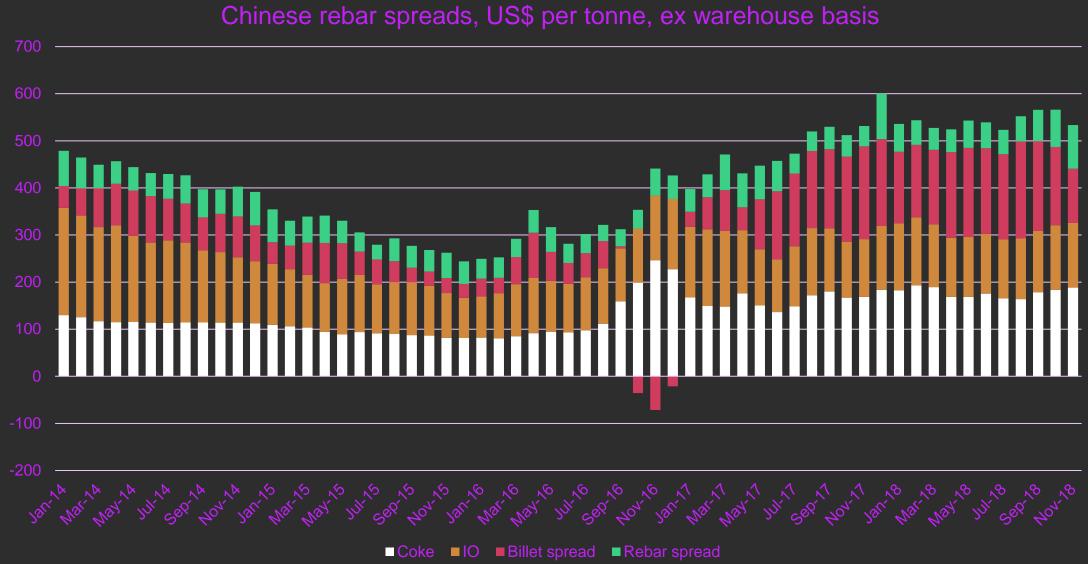


—US HRC

-Northern EU HRC

More importantly for producers, margins have continued to increase...

BACKWARDLY **INTEGRATED REBAR PRODUCERS HAD BEEN ESPECIALLY PROFITABLE IN SELLING BILLET THOUGH THESE MARGINS ARE NOW RETREATING HARD**



Fastmarkets MB research. Note: Coke input derived from imported PHCC. Spreads compare billet prices with coke and iron inputs. The rebar spread compares rebar and billet prices.





...and so too have those overseas

In-line with prices, metal spreads for rebar producers outside of China have also increased.

Again we find in re-rolling markets such as Turkey, however, the spreads have not been so elevated.

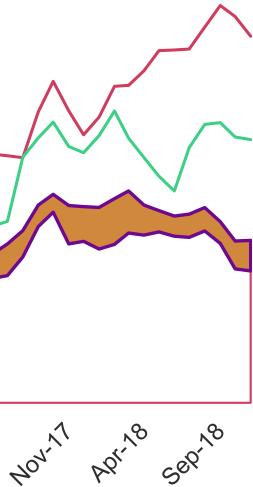
Economically speaking, it is better to produce your own steel.

500 450 Rebar \$ per tonne 400 350 300 250 200 150 100 50 0 JUI-1A Nat. 16 19,10 ACT NO JUNTI 131117

Sources: Fastmarkets MB research



□Turkish billet ■Turkish rebar —US rebar —EU rebar



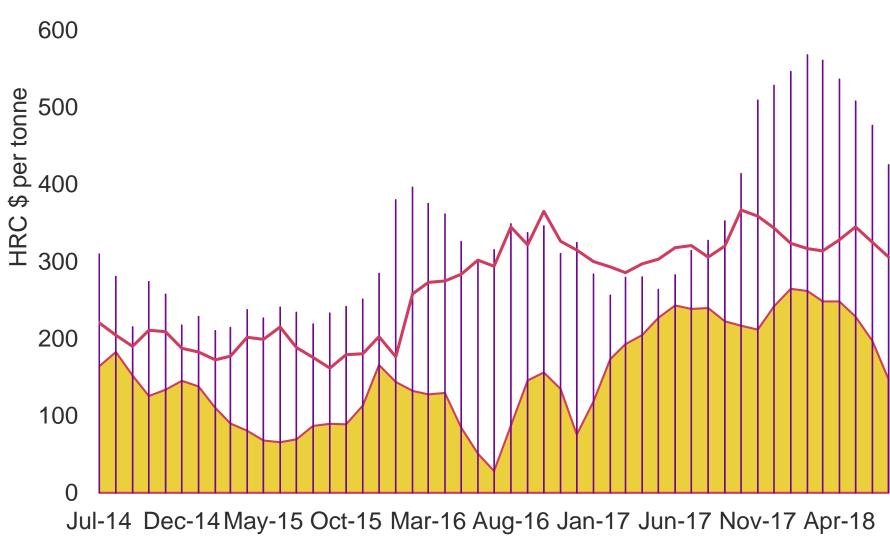
HRC margins rose higher still but are now in free fall

In comparatively stable Europe, mills have been careful to protect the margins they recorded two years ago.

In the USA and China, however, suppliers have been more ambitious, but now rapid spot-market corrections are under way.

\$600/t margins are not sustainable; but nor are \$150/t levels now resuming in China.

Chinese US —Northern EU



Sources: Fastmarkets MB research



So what has changed? Last year, demand underperformed suppliers* expectations; yet many markets outperformed...

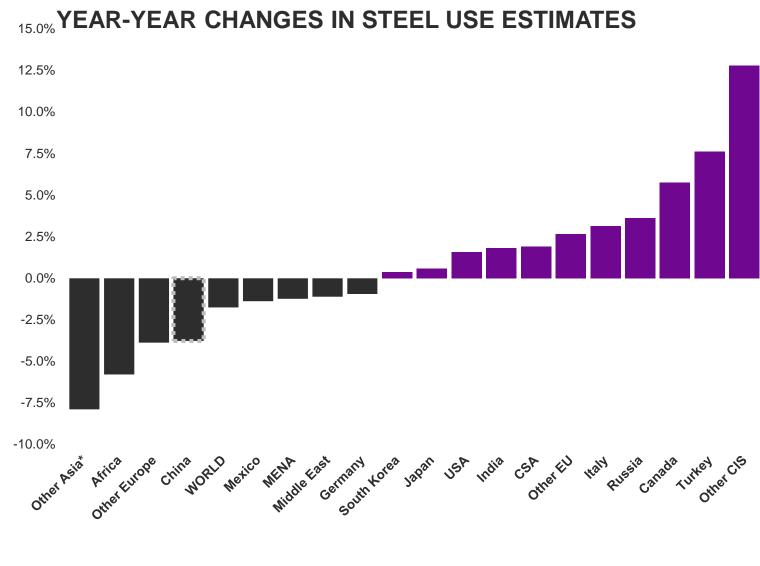
Steel use continues to surprise

The World Steel Association's latest estimates for apparent steel use last year (2017) proved slightly lower than they had anticipated.

They overestimated the usage in Asia, including China as well as Africa (sub-Saharan). As usual producers here in the Middle East and North Africa (MENA) had a better idea of the strength of their markets.

While Asia and other traditionally high growth markets underperformed expectations overall, some markets proved stronger than expected, most notably India, Italy, Central and South America (CSA), Turkey, and the CIS.

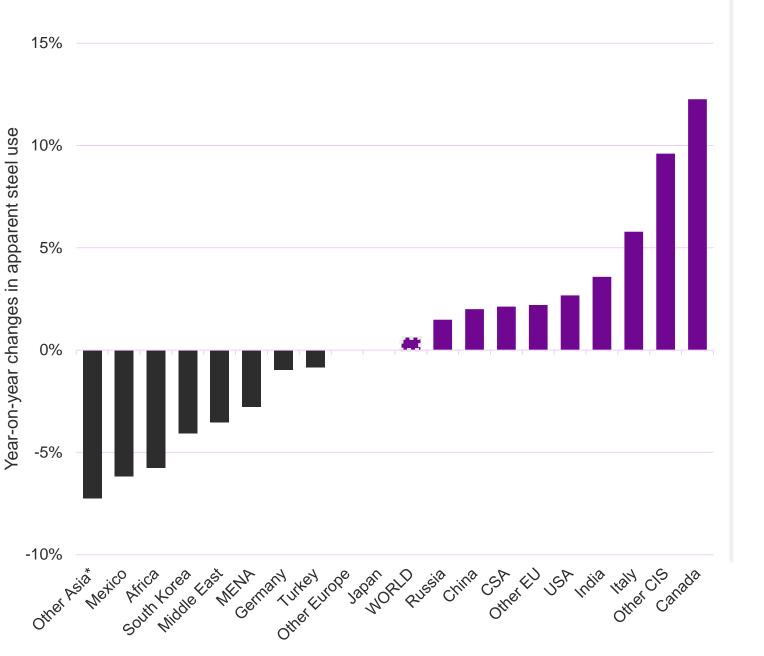
Fastmarkets MB research. Note; * World Steel Association (WSA). Data compares 2017 forecasts released in October 2017 with estimates published a year later





So far this year, demand has outperformed

The world's largest steel markets have had a better year than expected: MENA, by contrast, continues to underperform



China

USA

upwardly revised estimate of 98Mt in 2017.

India

 Indian use is on course to reach a record 95Mt this year, up 7.6% above the upwardly revised 89Mt in 2017.

WORLD

estimate of 1,595Mt.

MENA

۲ total of 72Mt in 2017.



According to WSA, Chinese steel use will reach a new record this year of 781Mt, which is 6.0% higher than the downwardly revised estimate of 737Mt in 2017.

US steel use is predicted to close on 100Mt this year, 2.2% higher than an

The better than expected usage in the world's largest markets should pull the market 3.9% higher in 2018 to 1,658Mt, from a downwardly revised 2017

Unusually for the region, steel usage growth in predicted to be below the global average this year at 2.8%, bringing the total to 74Mt from a downwardly revised



Supply-side factors that should be assessed...



Depends what we mean by work!

Section 232 has been far more effective than Section 201 in protecting US steelmakers.

US finished steel imports have fallen by 12.5% year-on-year after 11 months.

US mill shipments (including exports) rose by 4.4% year-on-year through the first 9 months.

Capacity utilization rates have more recently moved above 80%.

Consumers have still imported more HRC (including plate in coil) than last year and they are now pushing local prices down.



...is focusing on protectionism more fruitful than focusing on cutting capacity?

WHATEVER HAPPENED TO OVER CAPACITY?

WHY HAVE PRICES/MARGINS NOT BEEN NEGATIVELY AFFECTED BY SURPLUS CAPACITY?



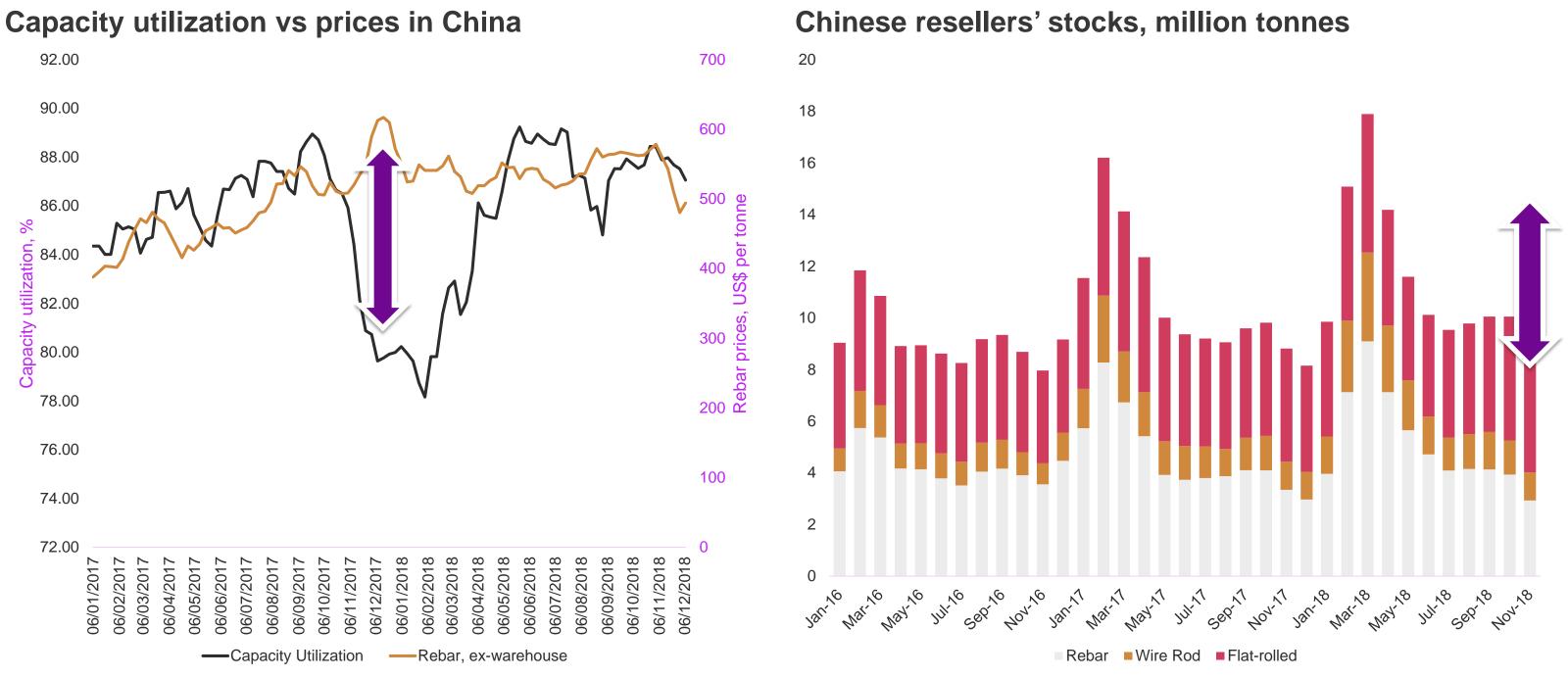
78%

The WSA's last monthly capacity utilization rate for global crude steel in July 2018



The average margin growth for HRC producers so far this year

In China, where capacity does play a part, can we soon expect some winter price spikes like last year?



Fastmarkets MB research, Steelhome.



Fastmarkets Forecasts

What's next?

It's all about demand, what drives it, and whether it will continue to slow



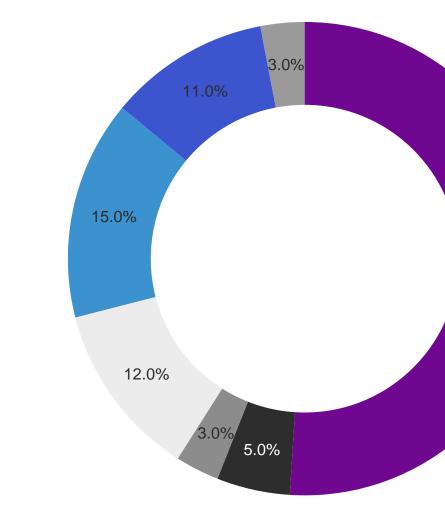
End-use sectors: The magnificent 7!

Construction remains dominant

At 809Mt last year, construction accounted for by far the largest demand for steel.

Fastmarkets MB research calculates that these 7 sectors have been growing by a combined rate of 2.2% per year over the past decade.

The faster growing sectors have been comparatively small: domestic appliances and other electrical equipment at 3.6% and 3.4% respectively





CONSTRUCTION

■ OTHER TRANSPORT

DOMESTIC APPLIANCES

AUTOMOTIVE

MECHANICAL EQUIPMENT

METAL PRODUCTS

ELECTRICAL EQUIPMENT

51.0%

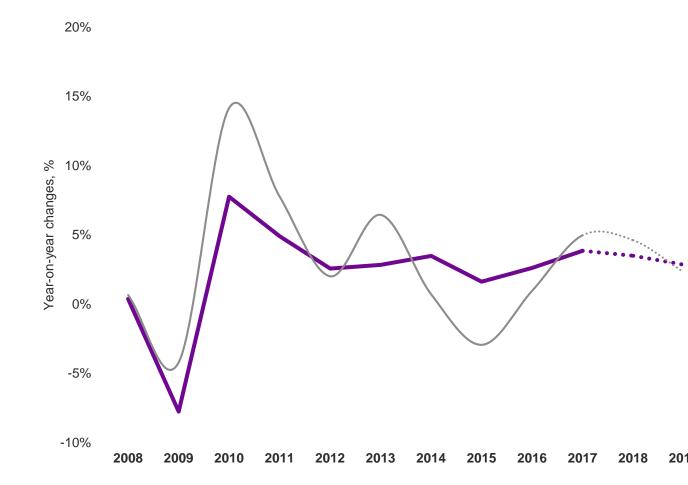
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As end-user industries slow, so must steel

Steel slowdown to continue

Just as a slowdown in industrial production is curbing momentum in steel demand this year, so a further erosion is bound to impact steel.

After a predicted rise of 4.7% in 2018, we expect steel growth will more than halve next year to just 2.3%.





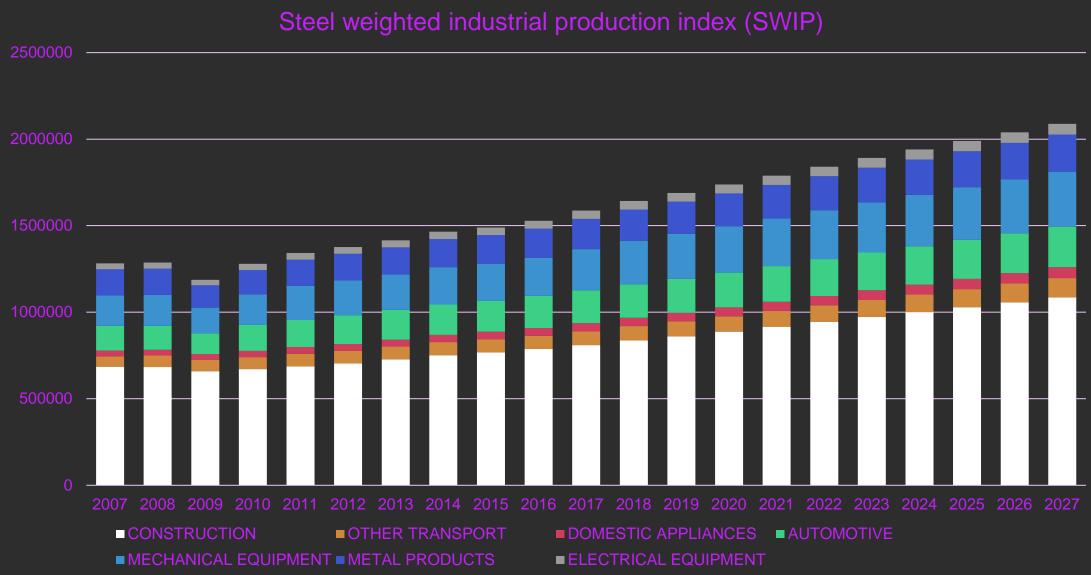




2019

But the longer-term demand fundamentals are firm

UNDERLYING OUTPUT OF MAJOR STEEL CONSUMING SECTORS, THE **MAGNIFICENT 7, IS FORECAST TO ACCELERATE FROM** 2.2% TO 2.8% PER YEAR OVER THE NEXT DECADE



So what about prices? When it comes to steel price forecasting we are very consistent...

Our Steel Tracker (ST) specializes in short-term price forecasting

So far this year we have consistently been within 5% of the actual assessments published by our price reporting team across a wide range of flat-rolled, long products and semi-finished steel prices.

Our accuracy ratings are even higher on stainless steel (SSM) and...

we have been the top steel raw material forecasters on APEX for the past two quarters, as published in the Steel Raw Materials Tracker (SRM)

Q3 2018 FORECASTING June issue AVERAGE ST SAMPLE

Q2 2018 FORECASTING March issue AVERAGE ST SAMPLE

Q1 2018 FORECASTING December issue AVERAGE ST SAMPLE



ACCURACY %

96% ACCURACY % 97% ACCURACY % **96**%

...please take a look at our Research "Trackers" outside, for some useful pointers. Many thanks!

Weeklies



Monthlies





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0 August 2016