What next for the global steel industry in a post Covid-19 world?

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The last decade saw significant 'highs' and 'lows' in terms of industry profitability…
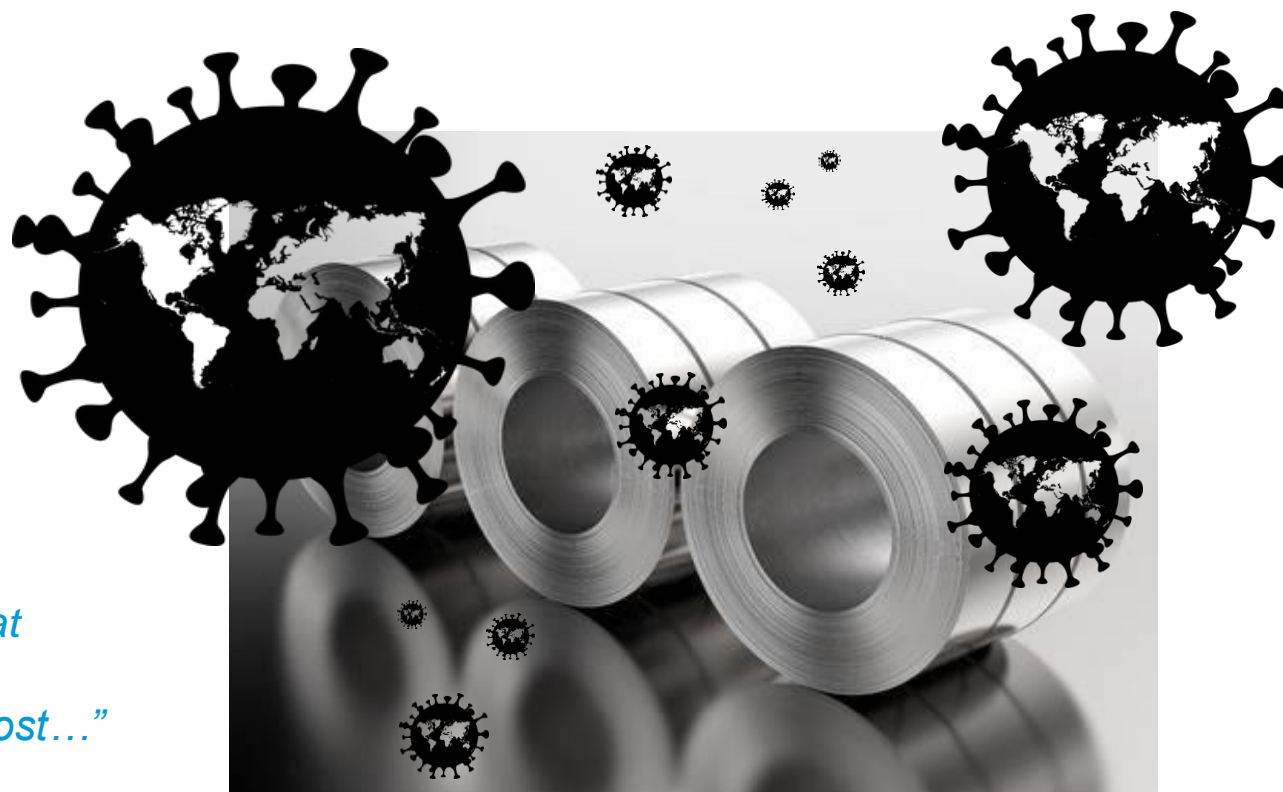
Global steel industry margin, % EBITDA
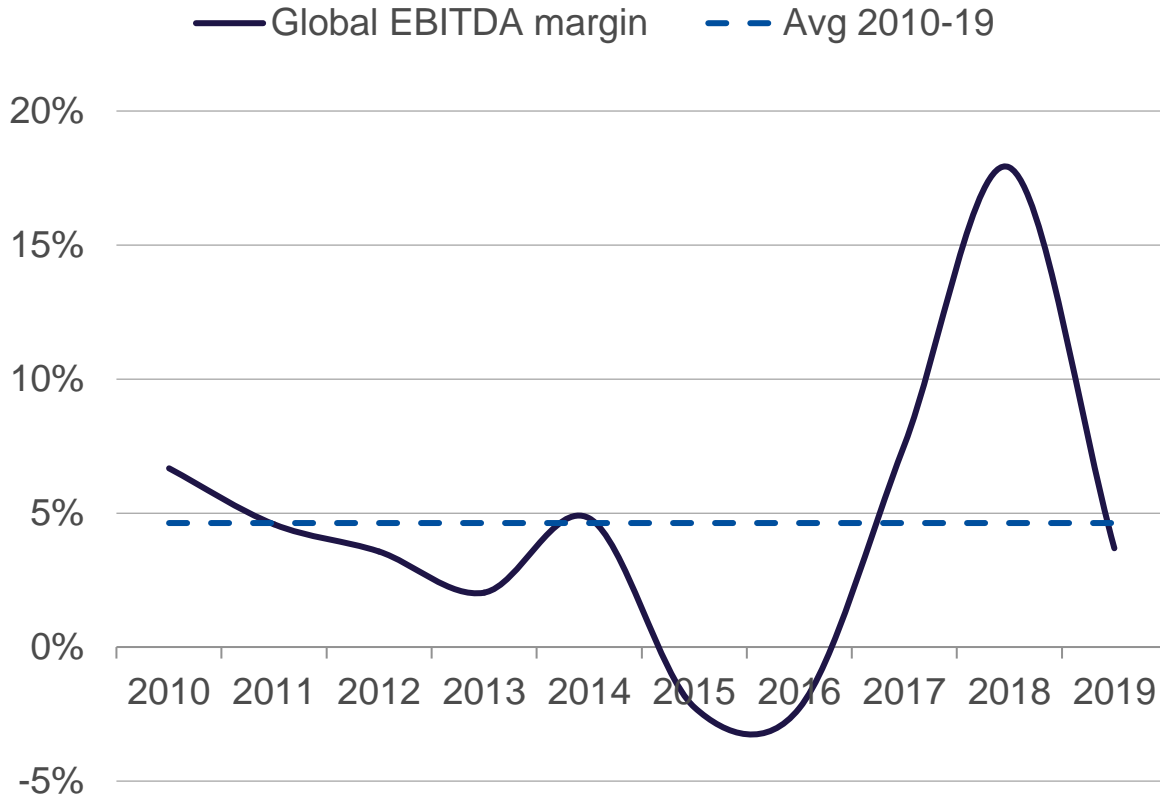
HRC to raw materials basket spread, US$/t (real 2019)

— Global EBITDA margin   – – Avg 2010-19

— German HRC to RM basket spread   – – – Avg 2010-19
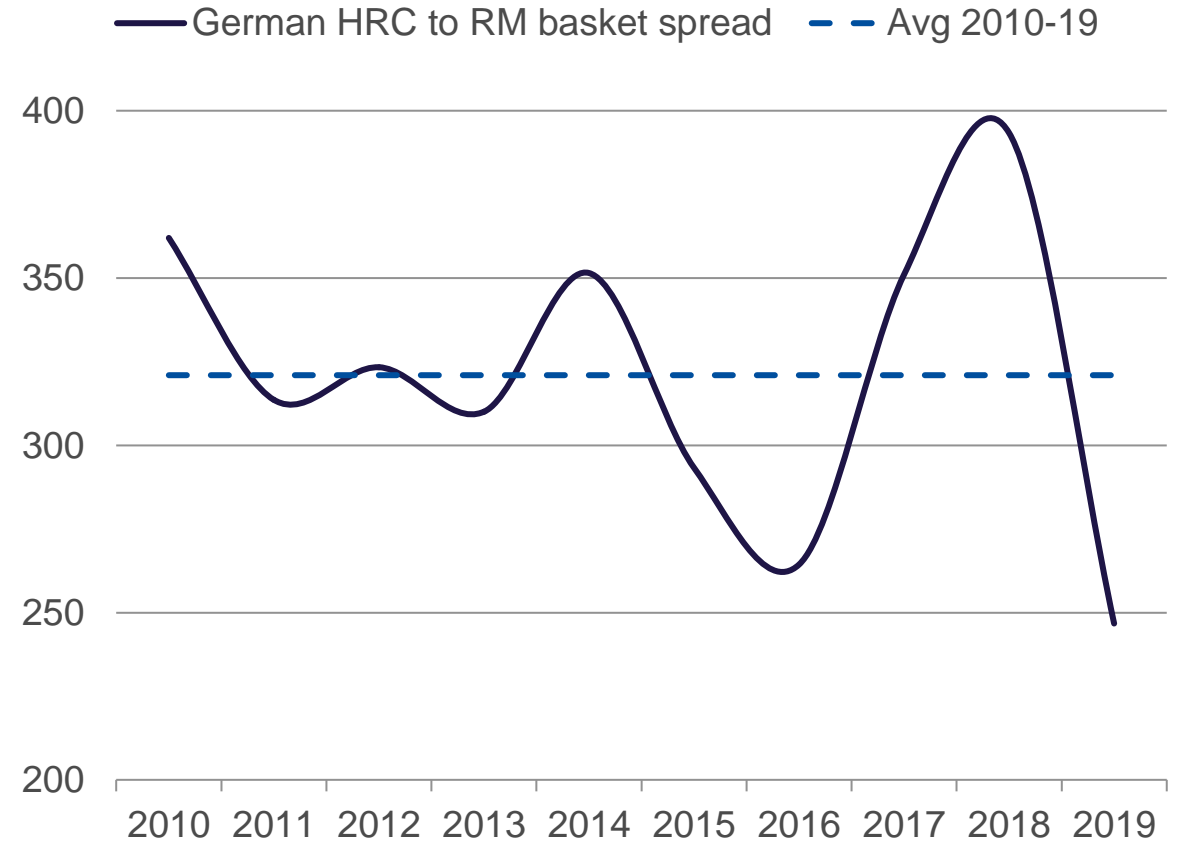
…the industry was already delicately balanced going into the new decade.

Data: CRU Steel cost model and price data

Then Covid-19 struck!...

"…ArcelorMittal have announced it has stopped output at its Zenica works in Bosnia…" **April, 2020**

"…outside of China, Covid-19 means that 283Mt (annualised) capacity has been lost…" **June 23rd, 2020**

"…reports suggesting major mills in Philippines have temporarily suspended operations at their EAFs…" **May 2020**

CRU's Covid-19 scenarios have been developed around the two **key uncertainties**…

More effective POLICIES

2

How effective POLICIES are

Economic and industrial policies and their implementation, which can mitigate economic effects from restrictions.

1

The science:
PUBLIC HEALTH RESPONSE
to Covid-19

Public health responses to Covid-19, including lockdowns and social distancing, which affect the economy.

More Covid-19 RESTRICTIONS
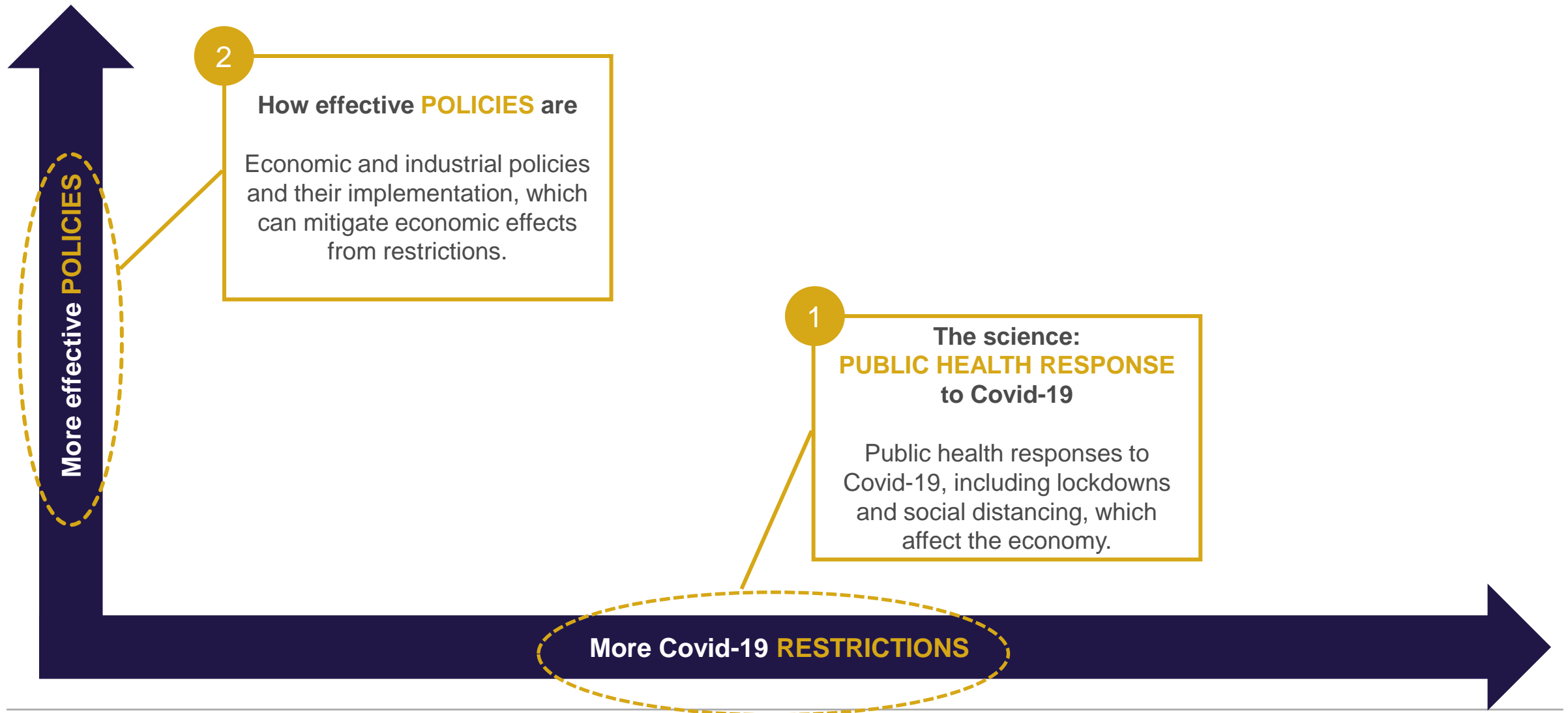
…creating a range of outcomes

More effective POLICIES (vertical axis)

More Covid-19 RESTRICTIONS (horizontal axis)

Example GDP trajectory for **Single lockdown** with **effective** economic / industrial **polices**

Example GDP trajectory for **Multiple lockdowns** with **effective** economic / industrial **polices**

Example GDP trajectory for **Single lockdown** with **ineffective** economic / industrial **polices**

Example GDP trajectory for **Multiple lockdowns** with **ineffective** economic/ industrial **polices**

We have developed three likely outcomes as scenarios

More effective **POLICIES**

More Covid-19 **RESTRICTIONS**

Upside: **"Quick recovery"**

Base case: **"A distanced year"**

Downside: **"Multiple waves"**

Single lockdown with **effective** economic / industrial **polices**

Single lockdown with **ineffective** economic / industrial **polices**

Multiple lockdowns with **effective** economic / industrial **polices**

Multiple lockdowns with ineffective economic / industrial **polices**

Macro assumptions driving the forecast

| Model levers	Upside "Quick recovery"	Base case "A distanced year"	Downside "Multiple waves"
Covid-19 RESTRICTIONS The more severe the public health response to counter the spread of the epidemic, the deeper the economic downturn that it causes.	**Social distancing** (enforced and voluntary) **ends by June 2020.**	**Social distancing** (enforced and voluntary) **ends by December 2020.**	Two additional **lockdowns** in **Q4 2020** and **Q2 2021,** followed by gradual easing **with social distancing until December 2021**.
Effectiveness of POLICIES Governments' policy responses are aimed at cushioning the downturn. The more appropriate they are, and the more consumers/firms react positively to them, the quicker the recovery.	Quick recovery GDP returns to 2019 Q4 levels **by 2020 Q4**.	Moderate recovery Starts later in H2 2020 GDP returns to 2019 Q4 levels **by 2021 Q2**.	Slow recovery Starts later at end of 2021 GDP returns to 2019 Q4 levels **by 2022 Q3**.

We have modelled falls in consumption in different economic sectors…

| Personal Consumption Expenditure (Major groups)	First lockdown	Gradual relaxation of restrictive measures	2nd and 3rd lockdowns
	% change in consumption with respect to 2019 Q4 level (or pre Covid-19 baseline)		
Food and drink	9	3	6
Clothing and footwear	-75	-35	-55
Utilities	0	0	0
Household goods	-60	-20	-40
Health	4	2	4
Transport	-70	-35	-50
Communications	-4	0	-2
Recreation and culture	-65	-25	-35
Education	0	0	0
Restaurants and hotels	-80	-50	-70
Other goods and services	-40	-15	-20

Key | Loss | Neutral | Gain

…resulting in global GDP forecasts

World GDP level, $ trillion
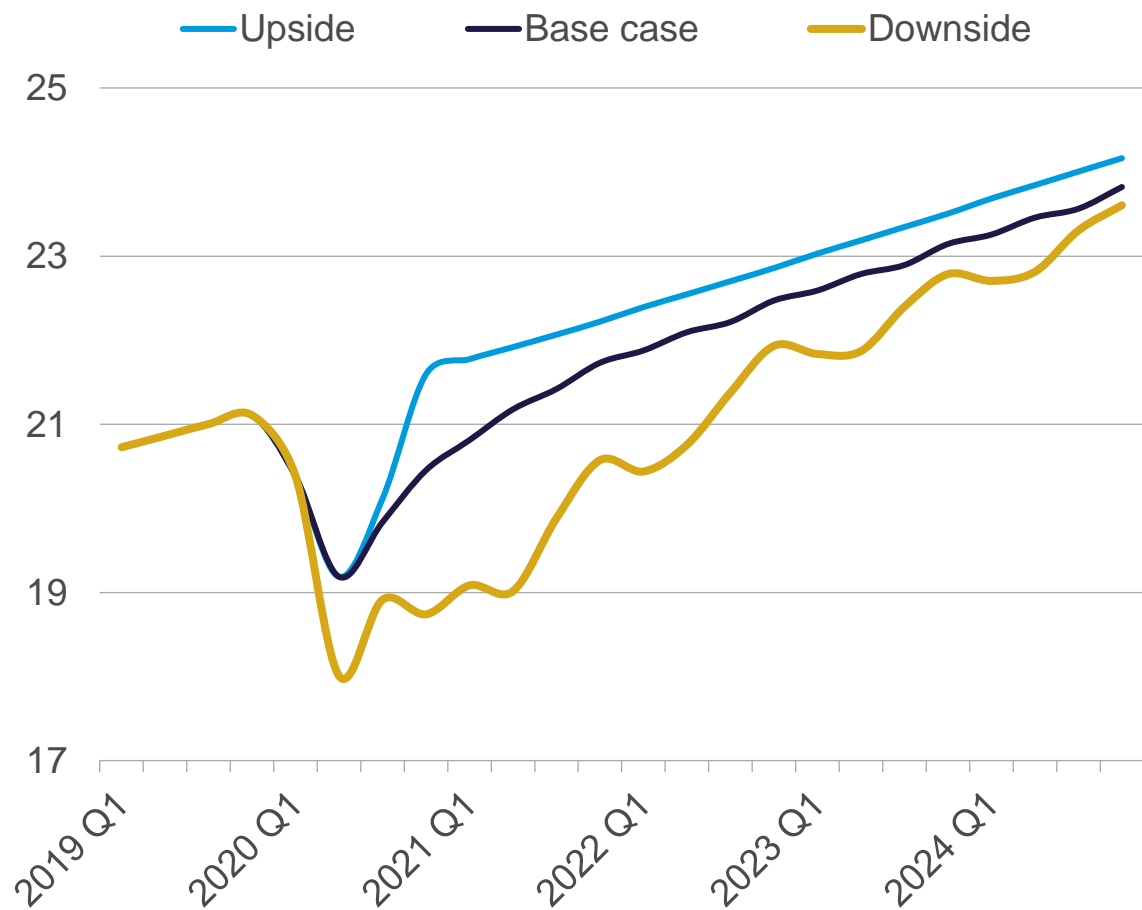
World GDP, % change, y/y
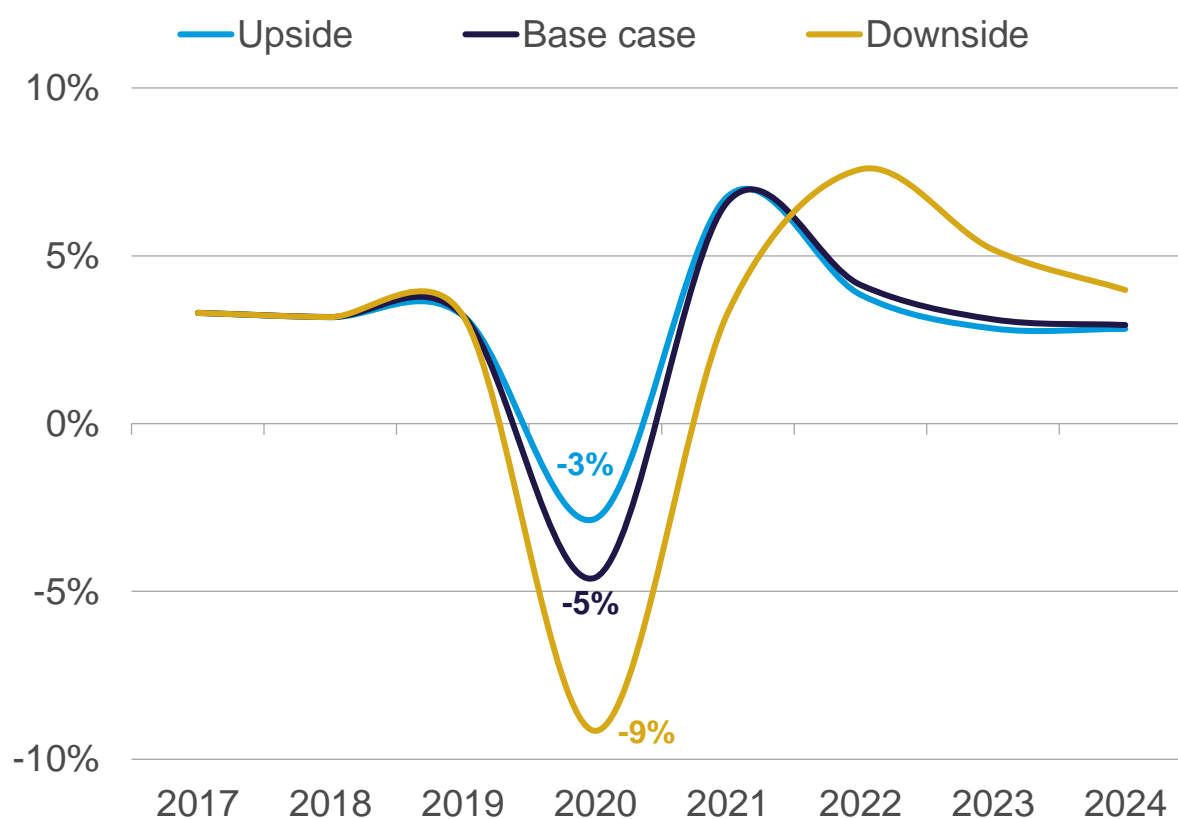
…and Industrial Production (IP) forecasts

World IP, index

Upside — Base case — Downside

World IP, y/y change, %


Upside — Base case — Downside

-3.6%
-5.7%
-13.2%
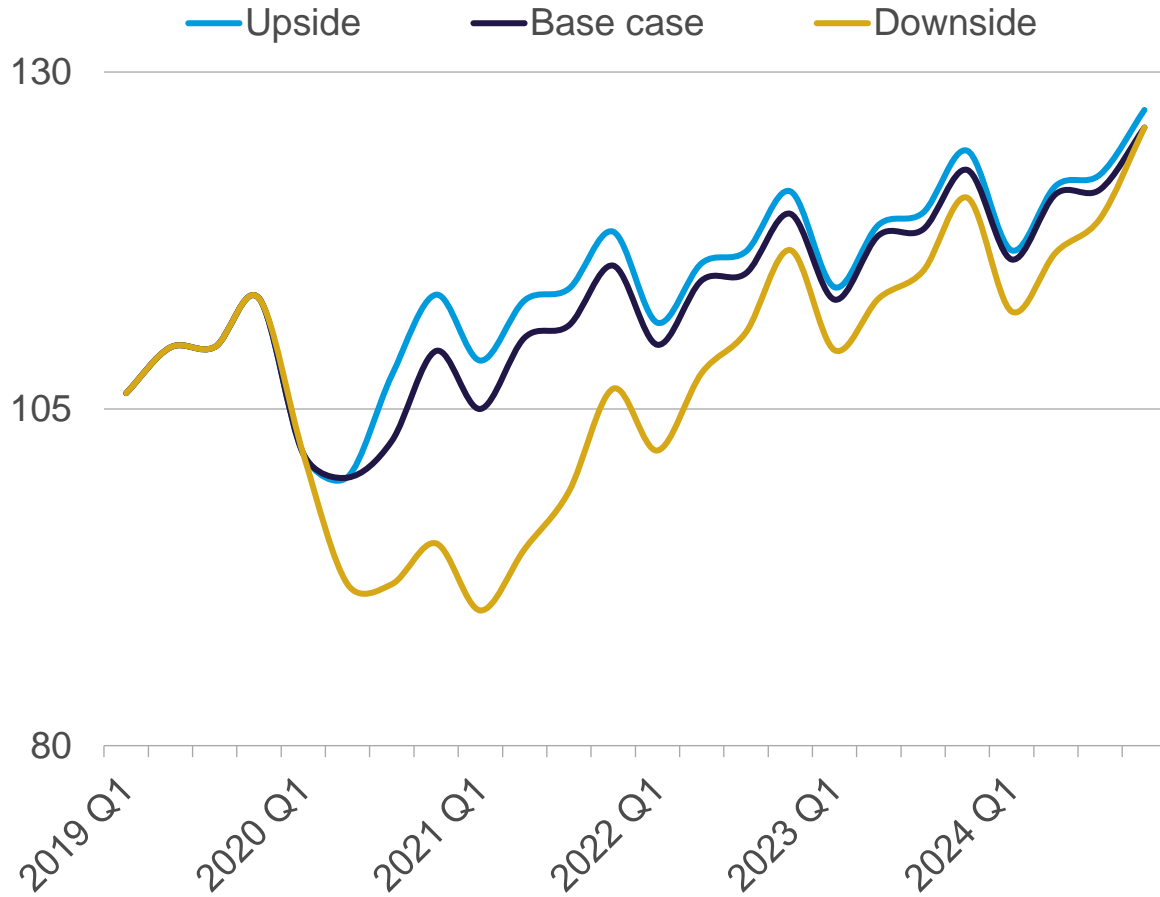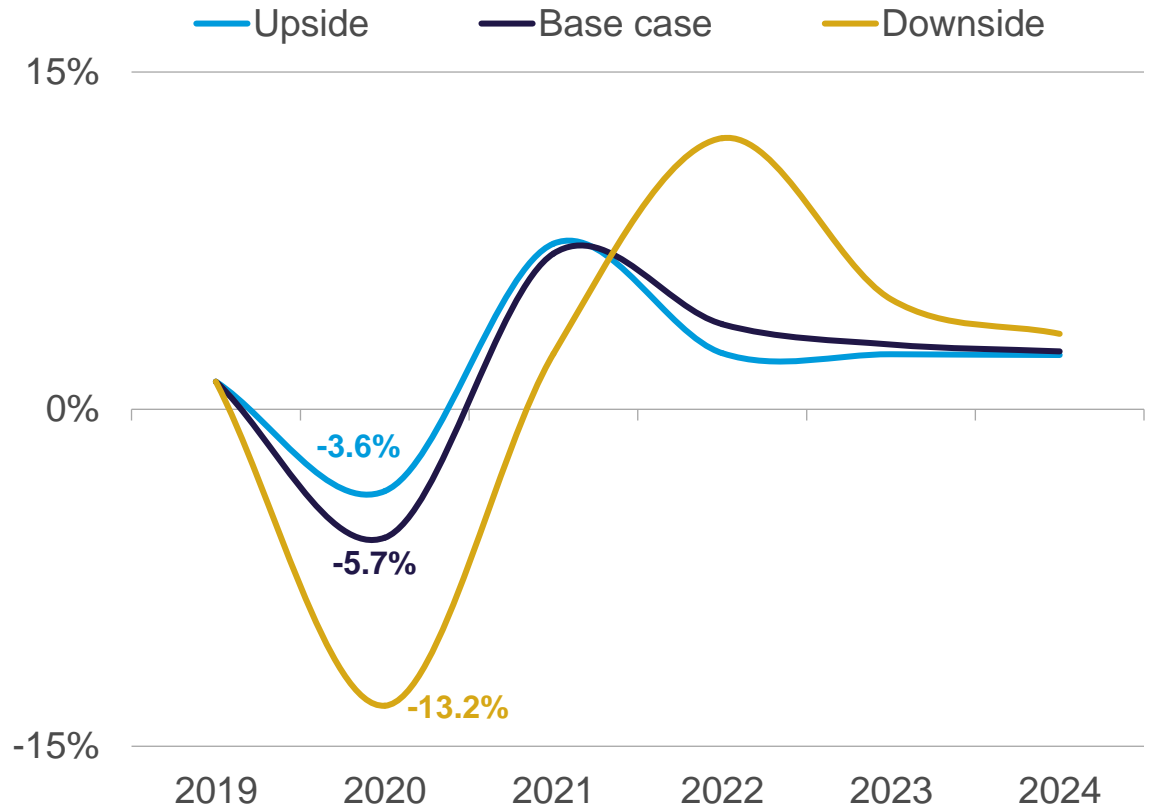
Some key takeaways from these scenarios…

- **Considerable uncertainty** remains in any economic forecast as the world recovers from Covid-19

- A scenarios approach is a good way to 'embrace' what we believe to be the **two key uncertainties**:

  - Effectiveness of **government policy** and **industry response**
  - The **public health response** to Covid-19

- **GDP is forecast to contract in 2020, in all scenarios**, with a range of -3% y/y to -9% y/y

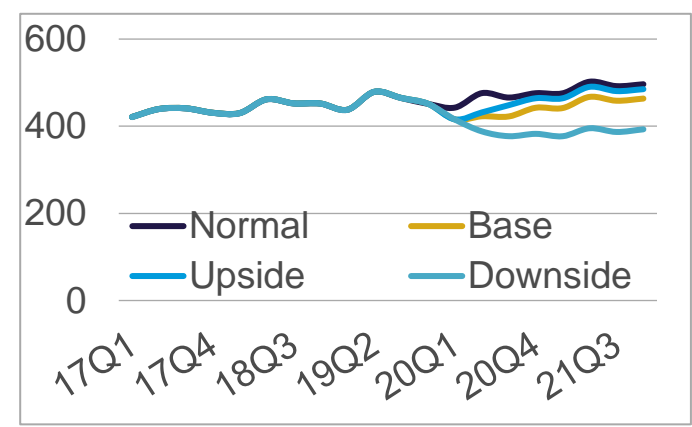- Industrial Production **(IP) is forecast to contract more that GDP** during 2020.
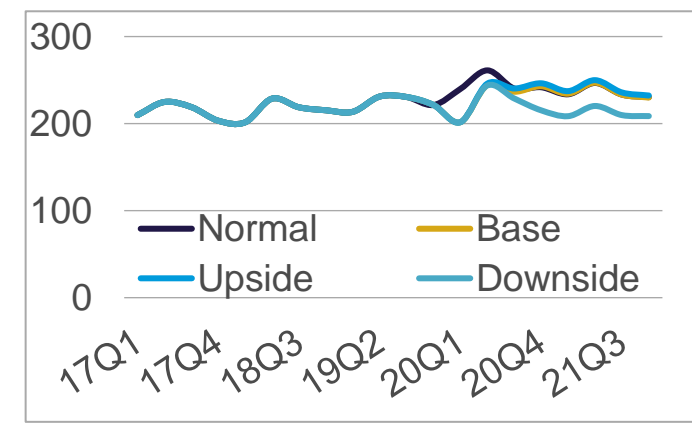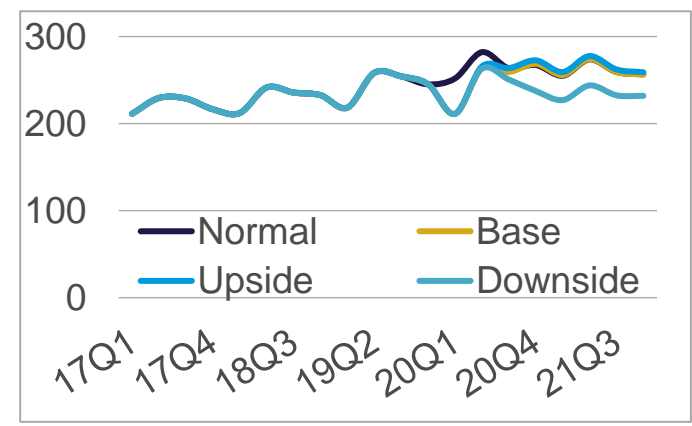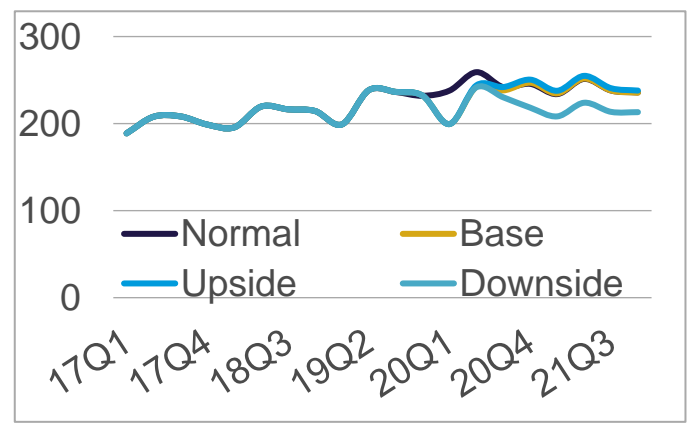
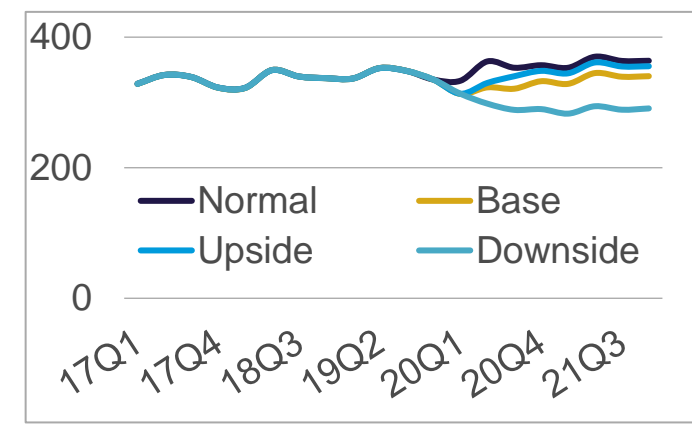# So what does all this mean for global steel demand?…

Finished Steel Demand (Mt/quarter)
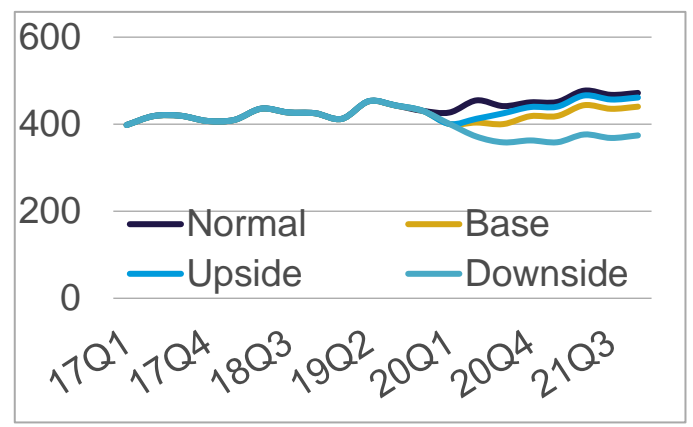
Crude Steel Production (Mt/quarter)

Hot metal production (Mt/quarter)

World

China

Implications of Covid-19 on the global steel industry…

Short / Medium Term

- **Weakness in demand** – only China is forecast to recover to 'normal' levels in our base case and upside case.
- **Overcapacity** – as supply comes back, risk of too much steel chasing too little demand, with knock-on effects for regions like SE Asia (see next slide).
- **High iron ore prices** – reduced spreads squeezing mill margins

Medium / Long Term

- Our base case and downside case show **shortfalls of demand of between 126mt and 391mt** annual demand shortfall compared to 'normal' levels, well into 2021 and beyond.

- The **decade will be defined** by how the industry responds to and is shaped by the following:

Lack of industry profitability slows move to LC technology	← **Decarbonisation** →	*Accelerated switch / adoption of LC technology*
Re-emergence of 'national champions'	← **Ownership and consolidation** →	*Distressed assets either closed or restructured through new ownership*
Return to nationalist agendas and protectionism creates structural over-capacity	← **Capacity and supply side discipline** →	*Covid-19 crisis causes new projects / expansions to be re-appraised*

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Global demand weakness led to import competition in Southeast Asia

LHS: HR coil prices, $/t ; RHS: offer vs tradeable price differential, $/t

Asia-India differential — **CIS-Asia differential** — **Asia-China differential** — **CFR Far East**

1 **China drove prices at the start of the year…**

2 **…but currently India is the price setter**

CIS prices are being offered at an attractive discount

Decreasing competitiveness

Increasing competitiveness
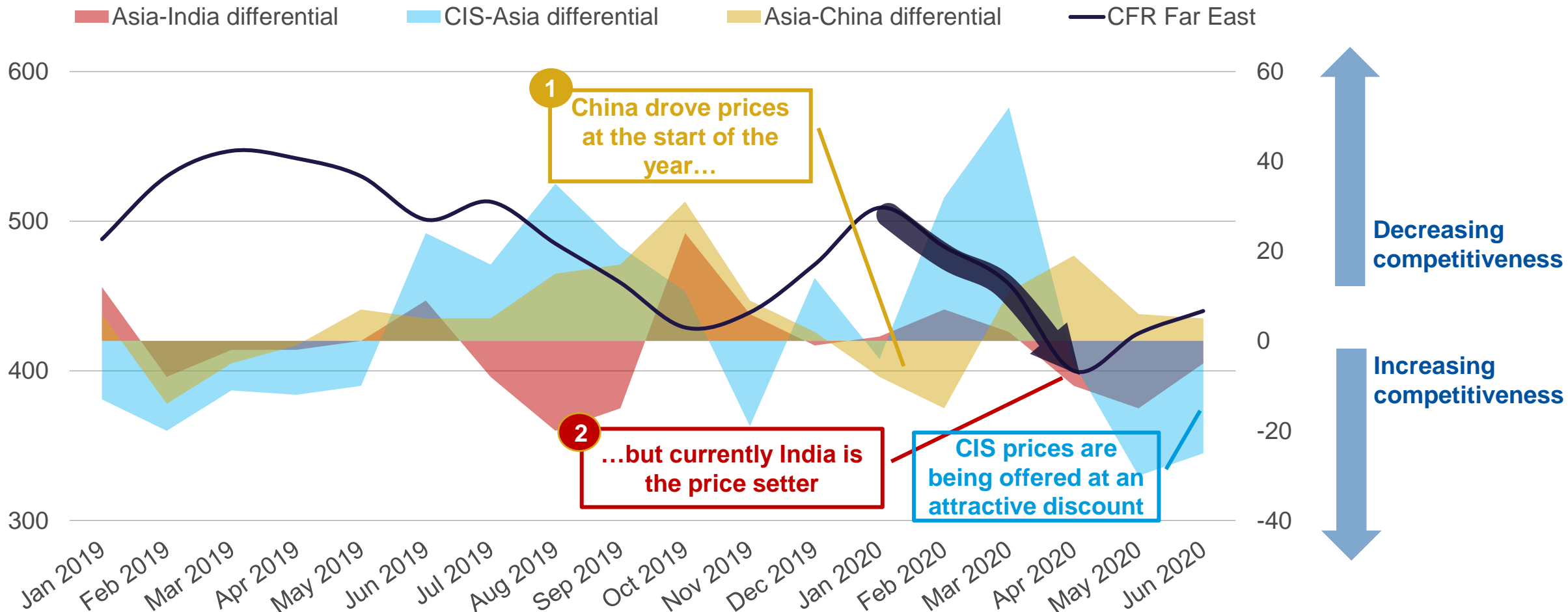
Several near term risks to Southeast Asian demand and prices

Import competition
- Domestic demand weakness in key exporting countries will draw import competition in Southeast Asia
- High cost competitiveness of these exporters will lead to price aggressiveness and production cuts at local mills unable to compete.

High iron ore prices
- Iron ore prices are very high relative to global demand and current prices largely hinge on strong Chinese demand
- Iron ore prices have been prone to Covid-19 related price shocks like those observed in Brazil
- Indian domestic iron ore prices are expected rise from mine auctions to be conducted in August which would affect India's export competitiveness

Inventory pressure
- Inventory levels have risen due to restricted end-use activity and weak exports.
- Inventories of products like HDG coil are more prone to remain high due to sustained weakness in automotive demand.

Investment for new projects
- Investments for new projects will likely be affected by restricted public spending and weaker than usual FDI flows.

Weaker 2020 H2
- Demand in 2020 H2 is under risk from a second wave of Covid-19 outbreak
- Demand will also be affected by slower productivity due to social-distancing measures in place

Source: CRU Sheet Market Outlook, CRU Iron Ore Market Outlook, CRU Long Products Market Outlook

Some concluding remarks…

- The global steel industry **entered the new decade delicately balanced**, facing significant challenges but also opportunities.

- Covid-19 is and will remain a **major disruptor** for some time – both on **demand and supply** sides.

- CRU has developed **three economic scenarios to model the impact of Covid-19** on global and regional steel demand.

- The industry will need to adjust to a **'new normal' of reduced demand of between -2% and -7% lower** than 'normal' levels until at least the end of 2021, with a risk of a downside of **-21%**

- Opportunity to use the crisis to **accelerate responses** to pre-pandemic challenges, such as decarbonisation.

- Covid-19 has identified a new core competency required of businesses across all sectors – '**resilience'**. The steel industry has a **long history of resilience** and has shown the ability to rebound from crises before – **it will do so again!**

Acknowledgments:-

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