### GLOBAL STEEL EXCESS CAPACITY: SOME KEY MESSAGES

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**Contact:** Anthony de Carvalho, <u>anthony decarvalho@oecd.org</u>

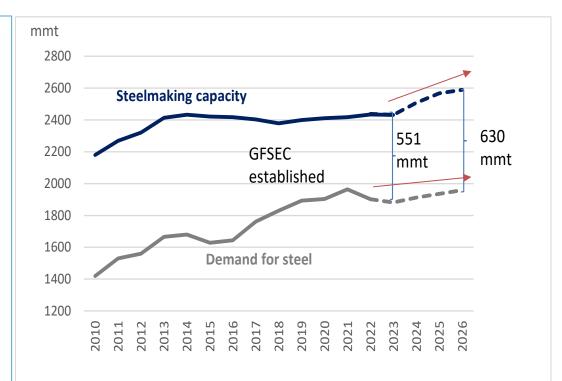




### THE EXCESS CAPACITY SITUATION IS GETTING WORSE AND IS NOT SUSTAINABLE

## The global excess capacity is growing unsustainably...

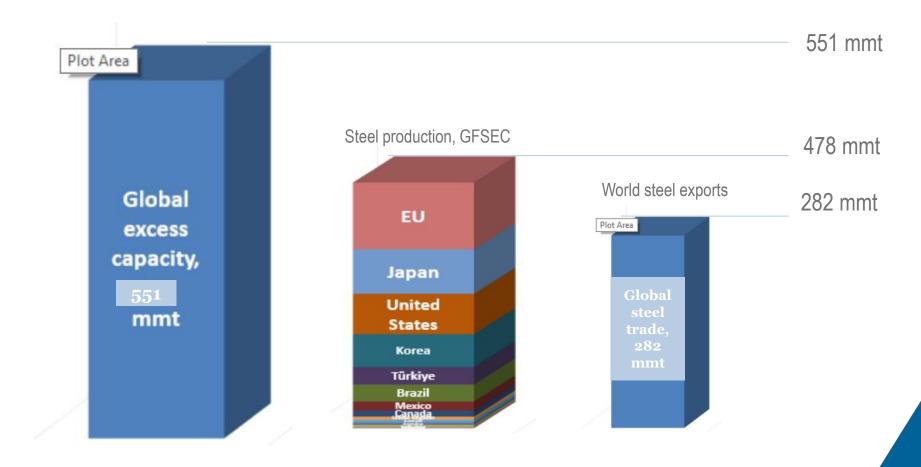
- World capacity at 2,432 mmt in 2023
- Potential increase in capacity by 157 mmt in 2024-26 to new record highs
- The gap between capacity and demand was 551 mmt in 2023 and **rising**
- Some excess capacity cyclical but **structural** excess capacity is the most problematic



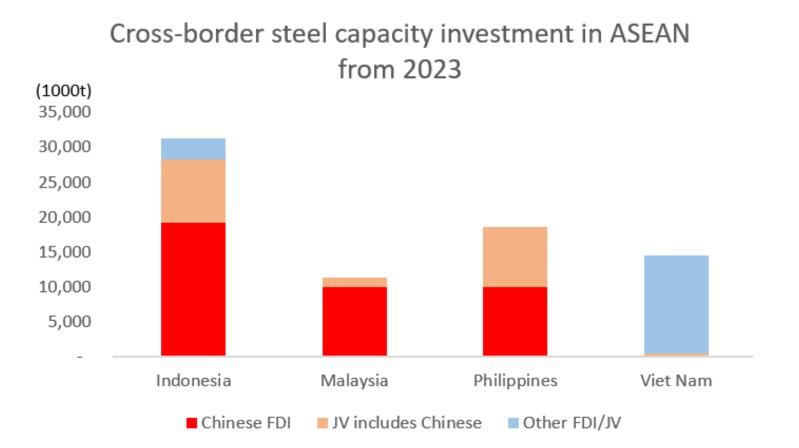
Sources: Demand from worldsteel, capacity from the OECD. Demand scenario based on worldsteel's April 2024 SRO and CRU for later years; Capacity scenario based on steel capacity investment data by the OECD.

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## Global excess capacity exceeds total production of countries and global steel exports

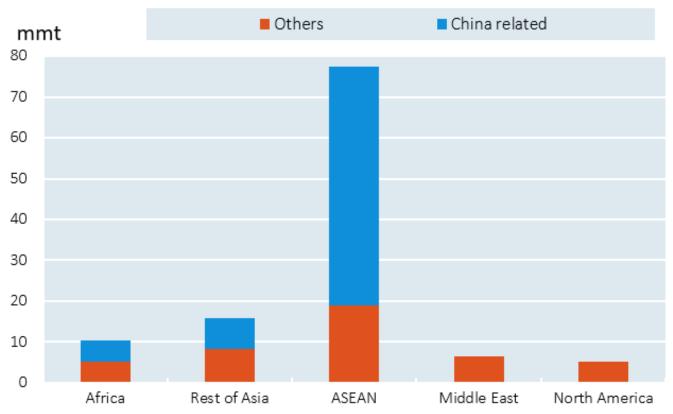


# ...capacity expansion driven by Chinese investments in ASEAN...



### ASEAN receives the largest share of Chinese investment (82% of China's cross-border investment)

Total cross-border steel investments and destination after 2023

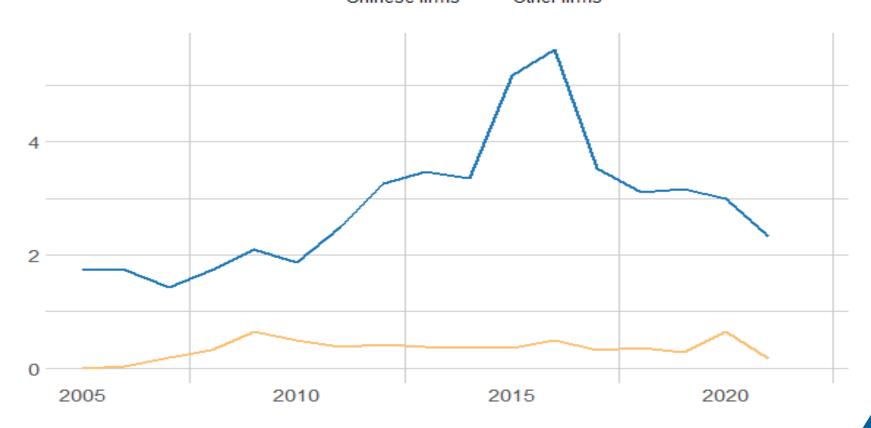




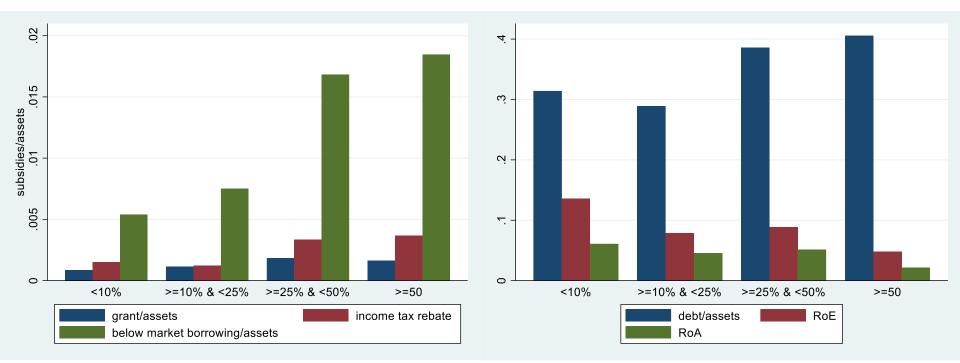
### THE ROOT CAUSES OF GLOBAL EXCESS CAPACITY HAVE NOT BEEN RESOLVED YET

# A bird's eye view of steel subsidies: China versus other countries

Grants and below-market borrowing, share of revenue (%)



# The Elephant in the Room: steel SOEs get more subsidies per asset than POEs for higher indebtedness and lower profitability

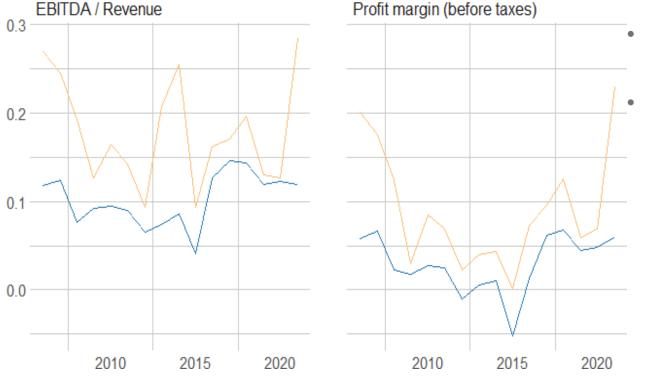


Split-off by share of government ownership of:

- 1) subsidies per asset (left side)
- 2) debt per asset, return on assets (RoA) and return on equity (RoE) (right side).

## ...impacts on profitability and capacity

Chinese firms — Other firms



- Steel Committee research findings:
- USD 1 million of grants in non-OECD economies leads to a capacity increase of 7,000-11,000 metric tonnes. No impact in OECD countries.



### IMPACTS OF CHINESE SUBSIDIES ON STEEL INDUSTRIES OF OTHER COUNTRIES – NOT SUSTAINABLE

## First time we have robust quantitative results on how subsidies hurt other countries' steel industries



March 2024

- Lower aggregate domestic market shares: imports of steel products from sources of excess capacity increase relative to the domestic steel demand.
- Decrease in domestic utilisation rates
- Reduced revenue and profits: firms total revenue and EBITDA over sales ratio are negatively affected. Confirmed by timeseries approach: steel stock prices are below predicted values in most cases pointing to a decrease in profitability.
- Inconclusive impacts over other countries' steel exports

Download at https://steelforum.org/gfsec-impacts-of-global-excess-capacity.pdf

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## Empirical work: different approaches for robustness

Data collected to estimate the impacts of excess capacity :

- Country level panel data (72 countries over 2002-2022)

Combines detailed data on international trade flows, steel production, apparent steel use, market prices and crude steel capacity.

- Firms panel data (46 steelmaking firms from 17 countries over 2005-2022)

OECD's MAGIC database with financial data of steel firms, number of employees, credit ratings, government grants and below-market borrowings, and government participation in the firm's ownership, among others.

- Time-series data (from 14 countries over September 1998 to September 2023)

Daily records of stock returns for a sample of steel industry firms

### Results (panel approach): Negative impacts on steel market selected variables

#### Aggregated panel Firm-level panel (72 countries) (46 firms) Chinese Export imports / Exports / EBITDA / Utilisation Total revenue / Total Total Total Explanatory rate revenue Total domestic production revenue revenue variables demand Cash grants ratio Nil Nil Structural Below-market borrowings excess capacity Nil Nil ratio Cyclical excess Chinese steel demand Nil capacity Cash grants ratio x Nil Chinese steel demand Below-market borrowings ratio x Chinese steel Nil demand

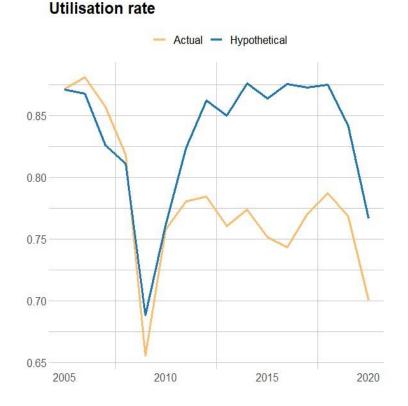
Impacts on non-Chinese firms

Note: The cells indicate the sign of the coefficient corresponding to the impact of the variables in rows over the variables shown in columns. The colour scale reflects the degree of significance of the results obtained in the different specifications. No shading indicates that the parameters estimated were insignificant, thus are assumed not to have any effect on the dependent variable (denoted "Nil").

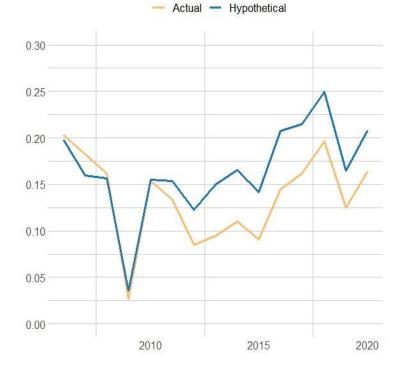
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A counterfactual exercise shows steel industries outside of China would have been much healthier if China had not subsidised its steel industry

Non-Chinese firms: actual and hypothetical rates of capacity utilisation and profitability assuming Chinese subsidisation had remained constant at 2005 levels



#### EBITDA / Revenue



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### Recent data highlight the negative effects of global excess capacity

**Steel prices** 



**Down more than 15%** over past year in many countries

**Profitability** 



**Steel import surges** 



Market share and workers

Down by 50% in 2022 for the average steel firm

Chinese steel exports surge 40% in 2023.

Brazil's steel imports up 49% in 2023 and 10% so far in 2024

GFSEC global production share has fallen to 25% and workers laid off

Investment for a better future



Hinders product and process innovations

Wasteful energy and higher emissions



**Much lower CO2 emissions** for global steel industry if excess capacity reduced



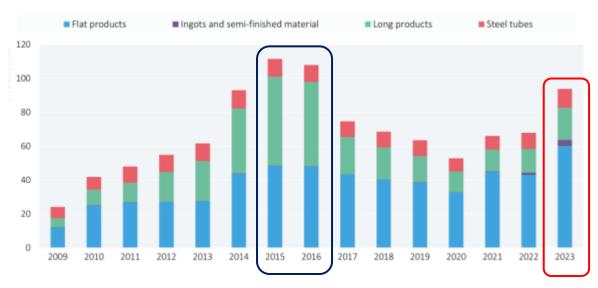
### TRADE POLICY REACTIONS INCREASING...BUT ALSO LESS EFFECTIVE BECAUSE OF TRADE CIRCUMVENTION AND INDIRECT STEEL EXPORTS



### Chinese export main destinations

Destinations	Volumes (mmt)	Yearly growth
ASEAN	26.4	39.8%
KOR	8.6	33.7%
EU	4.7	8.9%
TUR	4.1	64.0%
ARE	3.7	84.6%

### Chinese exports by product

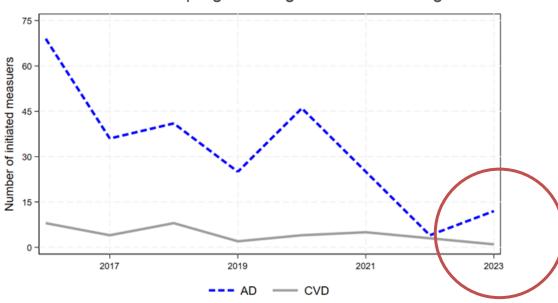


- All major CHN export partners exhibited a surge in inbound shipments.
- ASEAN countries as a group remain the main importer of CHN steel products.

Record in the exports of flat products → lower needs of flat for the domestic infrastructure industry rather than diversification.

## Steel trade policy reactions on the rise...

- AD/CVD: their use reached peak in 2016, now increasing in the application of AD investigations and safeguards
- ➢ Steel excess capacity on the rise again, coupled with a boom in Chinese exports → resurgence in the use of trade defense instruments
- Since 2016, 22 cases of anti-circumvention of steel. Recently Brazil and Thailand have launched cases.
- > Non-tariff measures are also increasing
- Shift towards regionalized trade patterns, also to de-risk supply chains due to geopolitical tensions
  Anti-dumping investigations increasing



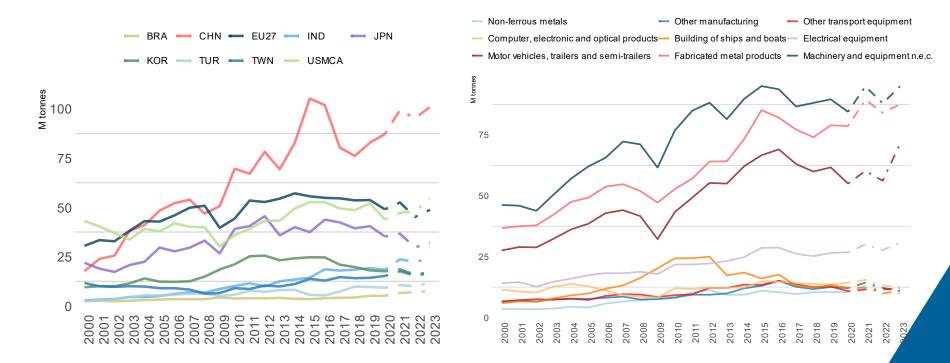
## Indirect steel exports almost as high as regular steel exports and returning to peak levels in 2023





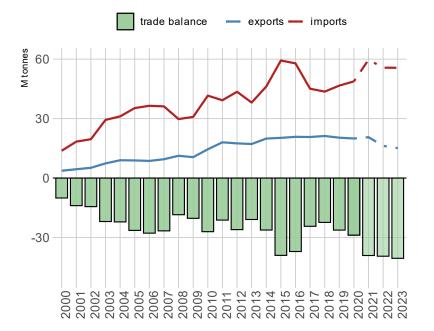
## With marked differences across countries and industries

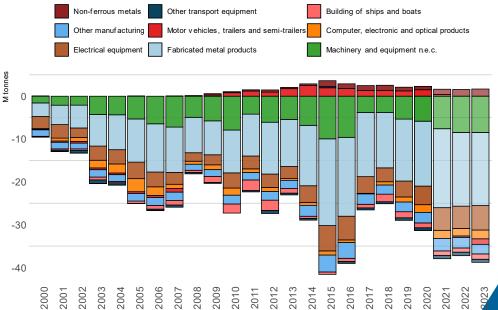
Chinese indirect steel exports on the rise (reaching 101 Mt in 2023) They remain stable or decrease in other countries World level: strong surge in steel exports contained in cars. Machinery and metals recovering 2021 values.



## GFSEC-China indirect steel trade balance

The trade deficit widens in 2023 to **-40.5 Mt**. Explained by lower GFSEC exports. Imports stable Higher trade deficit in metal products, machinery, and electrical equipment since 2020 **Balanced** trade in cars (surplus until 2020)







### CONCLUSION: EXCESS CAPACITY RISKS THE DECLINE OF OUR STEEL AND MANUFACTURING INDUSTRIES AND REQUIRES STRONG POLICY ACTION

## The GFSEC is committed to take actions

- A industry stakeholder event in March 2024 focussed on "New Approaches to Address Global Excess Capacity" with industry stakeholders
  - Listening to industry concerns about the global excess capacity
  - Thinking out of the box about solutions
  - Collecting ideas on how to deal with the global excess capacity
- **Deepening GFSEC substantive work** in 2024 on the impacts and urgency of the excess capacity situation
- Looking at short-term and longer-term actions to address global excess capacity
- Ministerial Meeting on 8 October to agree on collective actions to address the excess capacity problem



- Steel excess capacity needs to be addressed for a healthy and sustainable steel industry
- Excess capacity is not only harming the steel industry but may spread downstream and harm manufacturing more broadly in the impacted countries
- The OECD is committed to helping countries deal with this problem – a Ministerial Meeting in October will agree on actions to take



### Thank you!

<u>Contact:</u> Anthony de Carvalho, <u>anthony.decarvalho@oecd.org</u>