

# **The ASEAN Steel Industry in 2019 and Overcapacity Issues**

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Global Forum Stakeholder Event  
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# About **SEAISI**

## 01 Members



~900 members with >400,000 employees • 27 countries  
... since 1971

## 02 Direction



VISION: To become a world-class steel institute to contribute to sustainable steel value chain in ASEAN

MISSION: To educate and advocate sustainable development of ASEAN steel value chain, in partnership with global institution and experts

## 03 Our Events



SEAISI organizes a major international conference & exhibition and a forum every year. The SEAISI Conference & Exhibition is the one of the largest events on the iron & steel industry in ASEAN.

## 04 Publications



Statistical Yearbook • Steel Quarterly Journal •  
Member Directory • Map of ASEAN Steel Industry •  
Monthly Newsletter



## OUTLINE:

A

- ☐ ASEAN Steel Consumption
- ☐ ASEAN Steel Imports & Exports
- ☐ ASEAN Steel Consuming Sectors

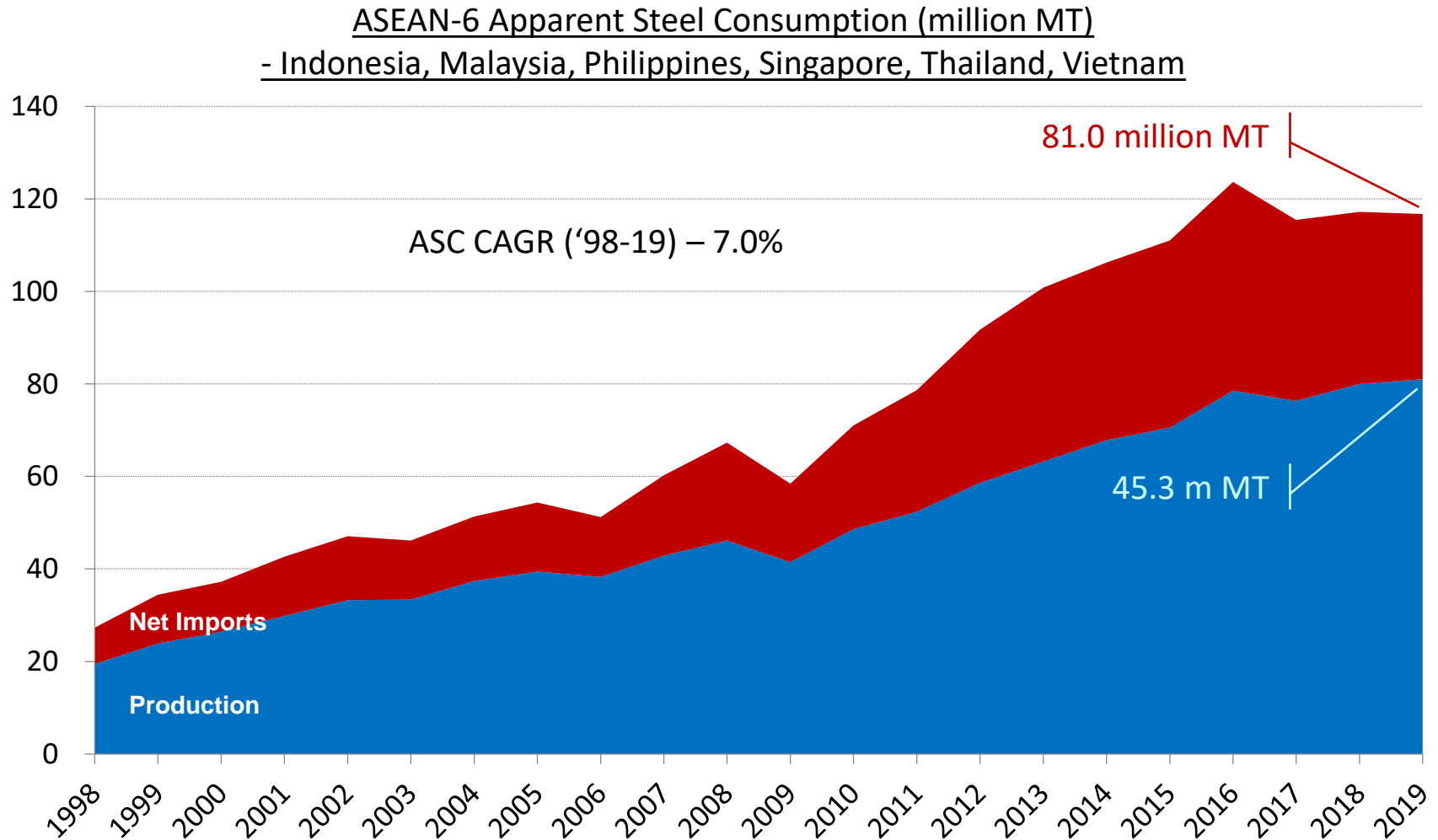
- ☐ Rise of the Megamills

B

- ☐ Emerging Low Cost Centres for Stainless Steel
- ☐ Future Scenario & Recovery
- ☐ Why Do We Have This Issue?
- ☐ A Case Study

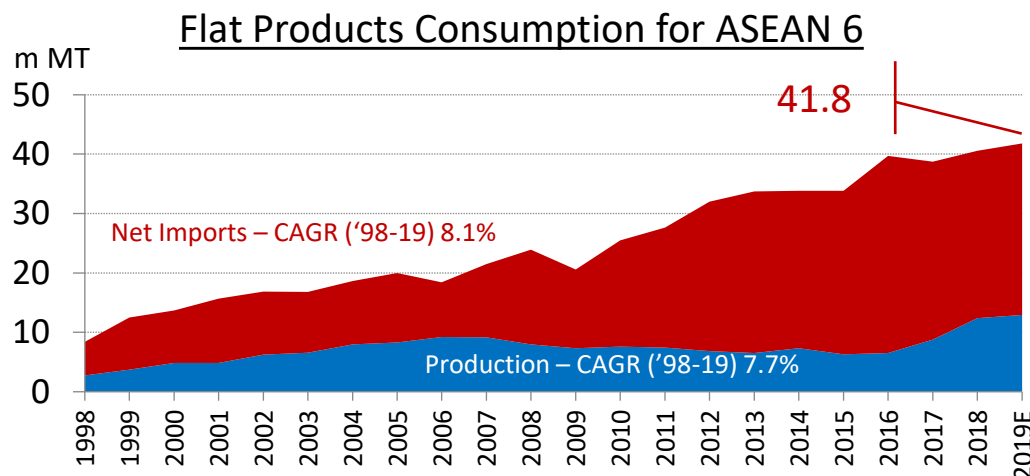
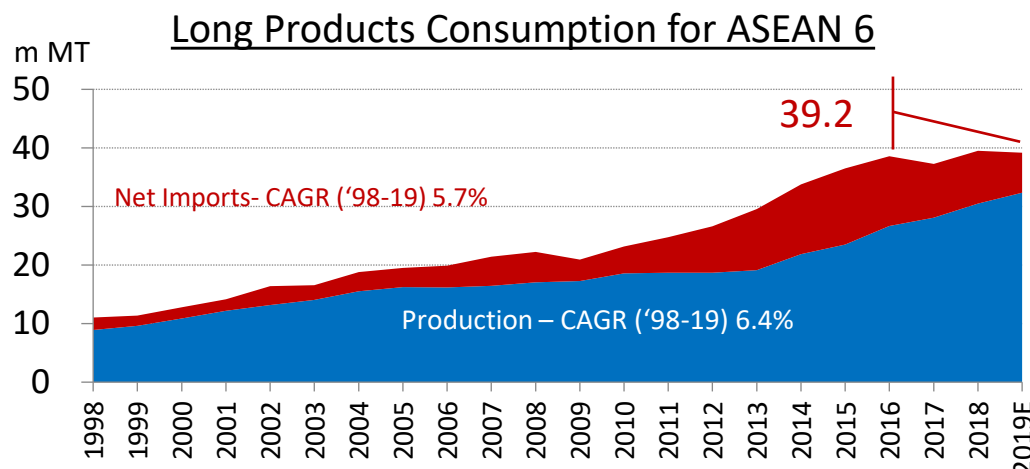
# APPARENT STEEL CONSUMPTION IN ASEAN

In 2019, ASEAN-6 apparent steel consumption reached 81 million tonnes, up 1.2% from 80 million tonnes a year ago



# APPARENT CONSUMPTION OF STEEL (FLATS/LONGS)

The continued growth in long steel production is partly to serve export while flat steel production is to serve domestic



## Long Products (2019E)

- Consumption : 39.2 m MT
- Production : 32.4 m MT
- Net Imports : 6.8 m MT
- Production growth partly is to export
- 2020 Forecast : 38.0 m MT

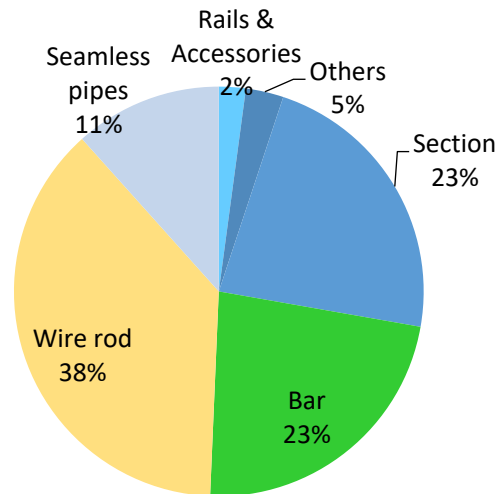
## Flat Products (2019E)

- Consumption : 41.8 m MT
- Production : 12.9 m MT
- Net Imports : 28.9 m MT
- Market is mostly served by imports
- 2020 Forecast : 41 m MT

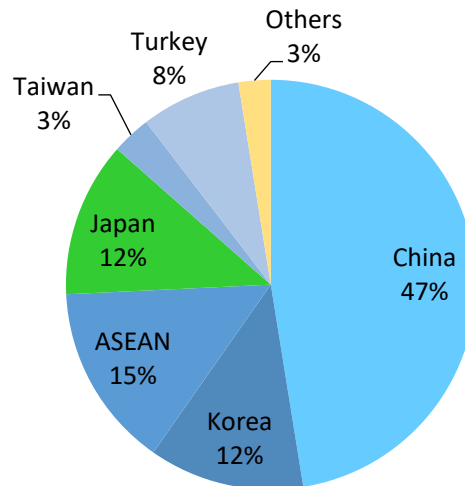
# LONG PRODUCT IMPORTS IN ASEAN

ASEAN imported a total of 12.5 million MT of long products in 2019, mainly from China, Japan, Korea and within ASEAN; These are used in the Construction Sector

## Long Products Import by Products (2019)



## Long Products Import by Countries (2019)



## Total Import

- ASEAN imported a total of 12.5 million MT of long steel in 2019

## Import by Products

- More than 80% of steel imports are for the Construction sector
  - Wire Rod (38%)
  - Bar (23%)
  - Sections (23%)

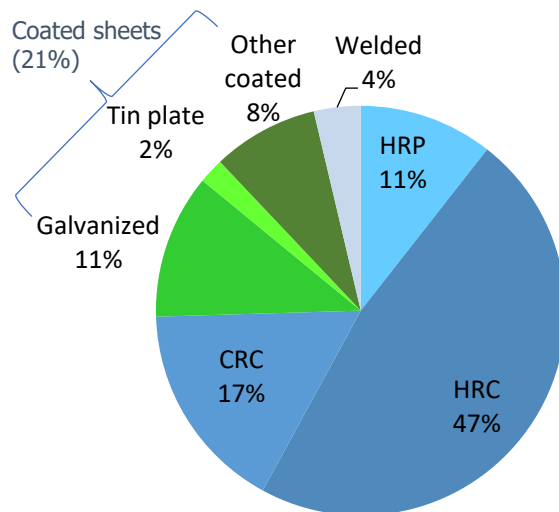
## Import by Countries

- China continues to dominate long products supply, supplying 47% of steel in 2019
- The other major suppliers are from Japan (12%), Korea (12%), Turkey (8%) and Taiwan (3%)
- Intra ASEAN imports increased from 9% in 2018 to 15% in 2019

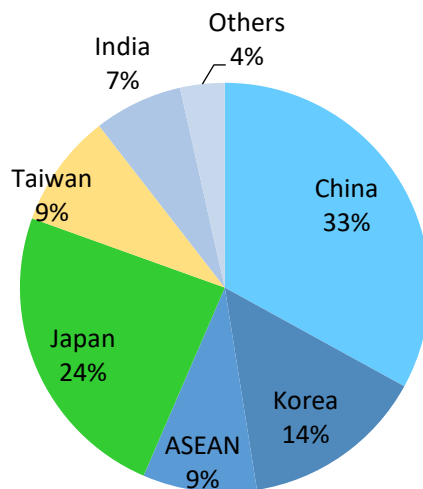
# FLAT PRODUCT IMPORTS IN ASEAN

ASEAN imported a total of 38.7 million MT of flat products in 2019, mainly from China, Japan, Korea and within ASEAN

Flat Products Import  
by Products (2019)



Flat Products Import  
by Countries (2019)



## Total Import

- ASEAN imported a total of 38.7 million MT of flat steel in 2019

## Import by Products

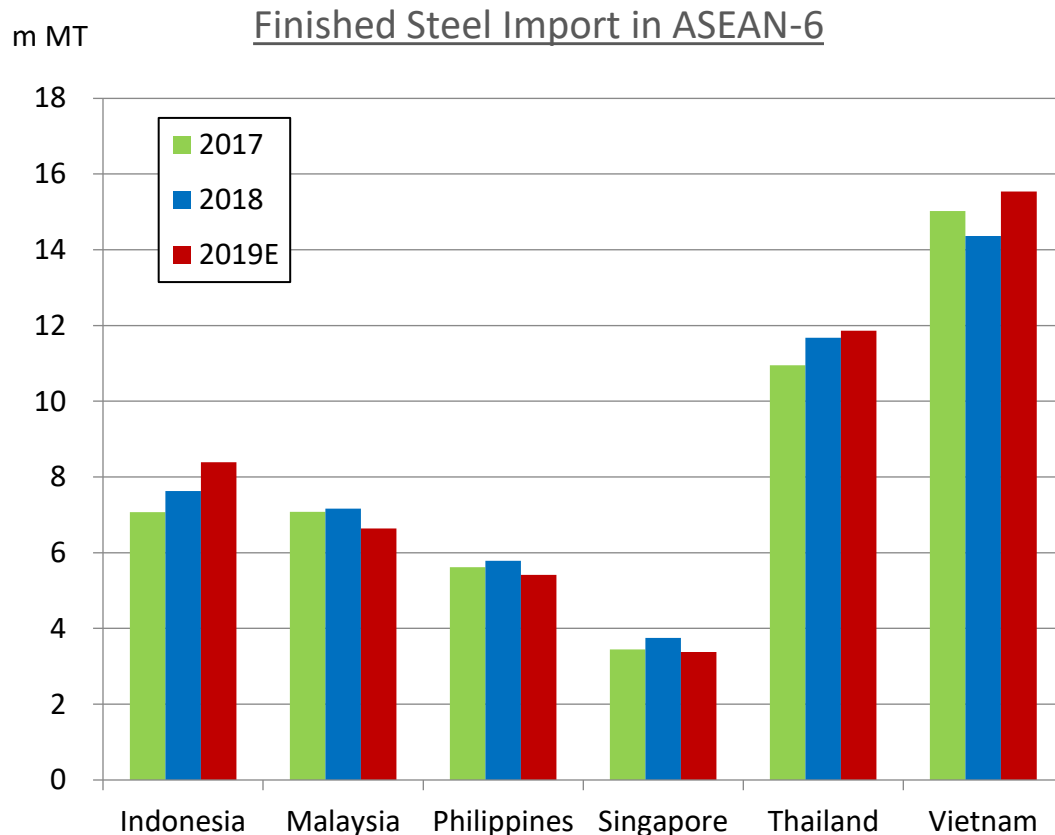
- More than 70% of steel imports into ASEAN are
  - HR Coils (47%)
  - Coated Sheets (22%)
  - CR Coils (17%)
  - HR Plates (11%)

## Import by Countries

- Major supply of flat products came from
  - China (33%)
  - Japan (24%)
  - Korea (14%)
  - Within ASEAN (9%)

# ASEAN FINISHED STEEL IMPORTS

Finished steel import in Indonesia and Vietnam increased in 2019 mainly due to increase in domestic demand



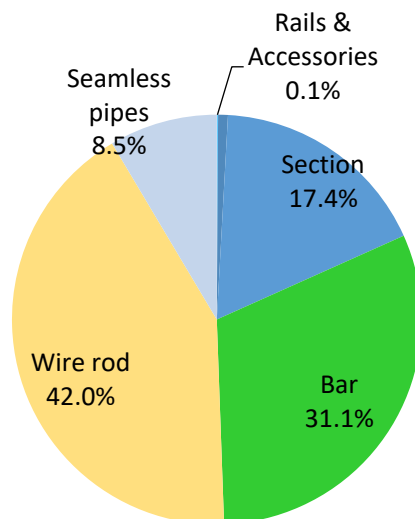
- Finished steel import growth in most ASEAN-6 countries increased slightly, by 1.3% in 2019
- Vietnam and Indonesia experienced strong growth in steel import, by 8-9% y-o-y
- A major portion of the import in Indonesia was flat steel, especially HRC and coated sheet, while Vietnam import increase was for Section and HRC.



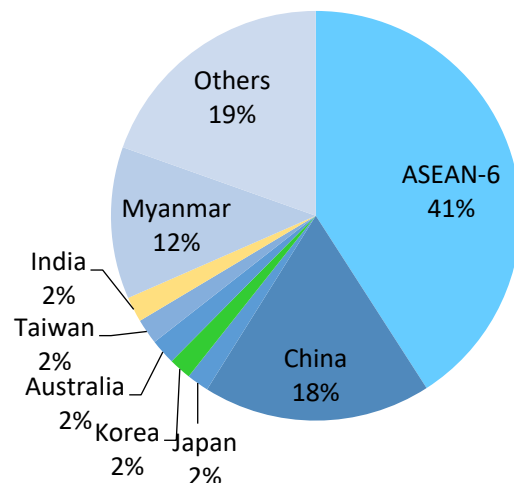
# LONG PRODUCT EXPORTS IN ASEAN

ASEAN exported a total of 5.7 million MT of long products in 2019, mainly to other ASEAN countries, India, Korea, Australia and Taiwan

## Long Products Export by Products (2019)



## Long Products Export by Countries (2019)



## Total Exports

- ASEAN exported a total of 5.7 million MT of long steel in 2019

## Export by Products

- More than 80% of steel exports are:
  - Bars (31%)
  - Wire Rod (42%) (mostly from Malaysia)
  - Sections (17%)

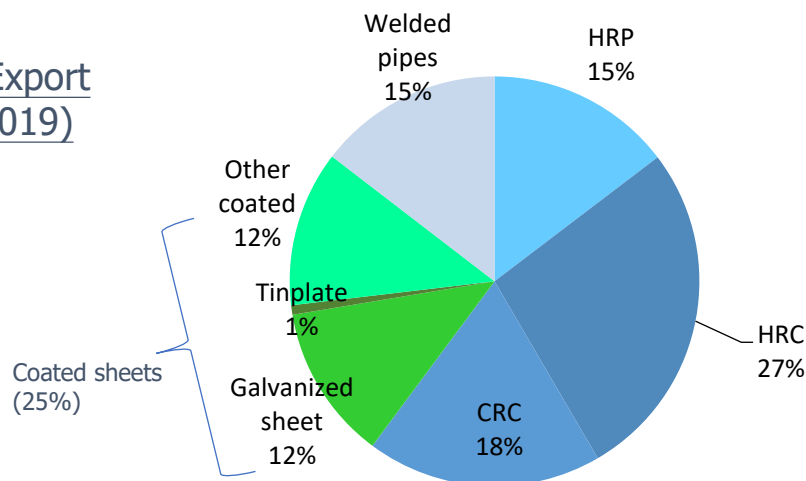
## Export by Countries

- Most of ASEAN long products exports are to neighbouring ASEAN countries (41%) and Myanmar (12%) and to China 18%

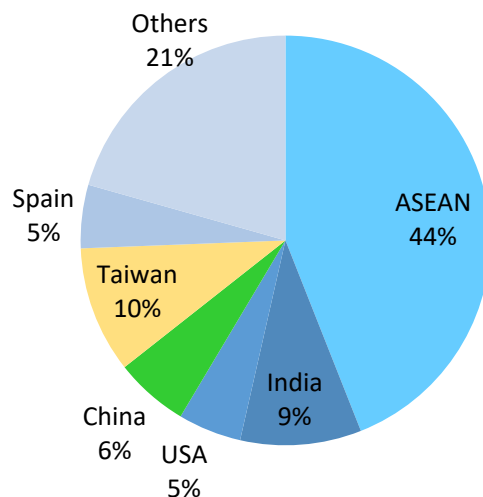
# FLAT PRODUCT EXPORTS IN ASEAN

ASEAN exported a total of 9.8 MT of flat products in 2019, mainly within ASEAN

## Flat Products Export by Products (2019)



## Flat Products Export by Countries (2019)



## Total Export

- ASEAN exported a total of 9.8 million MT of flat steel in 2019

## Export by Products

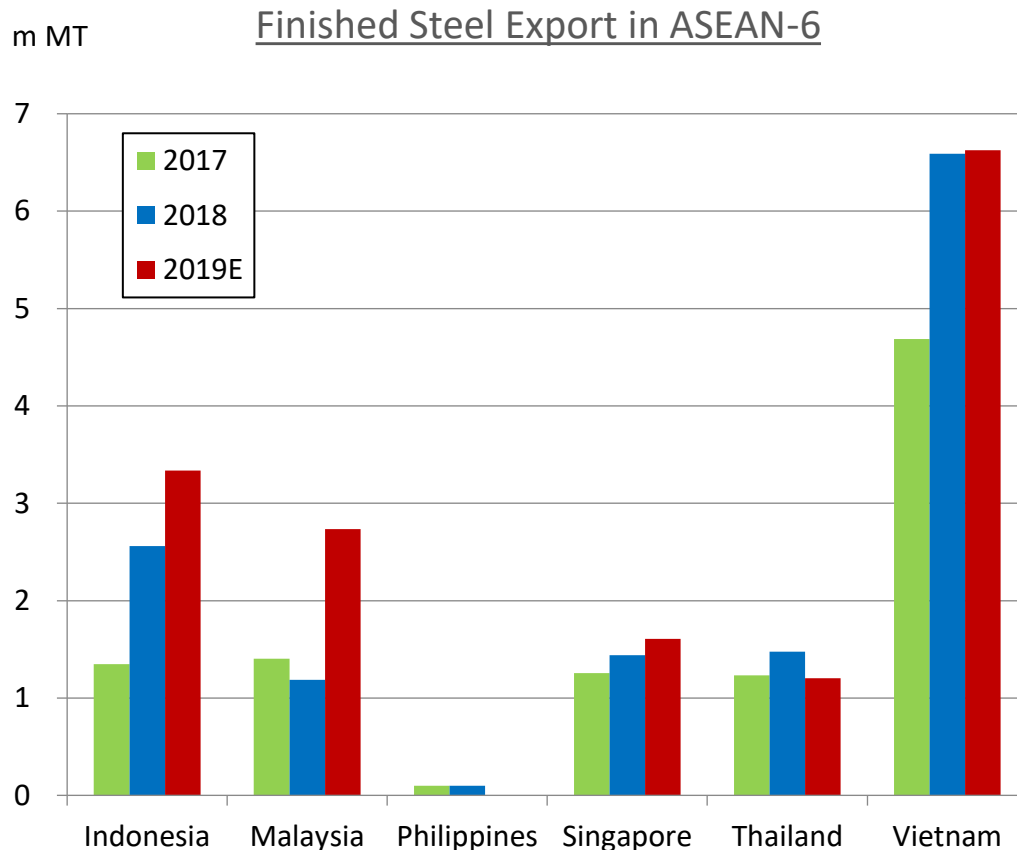
- Most steel exports are:
  - Coated Sheets (25%)
  - HR Coils (27%)
  - CR Coils (18%)
  - Welded Pipes (15%)
  - HR Plates (15%)

## Export by Countries

- Most flat products were exported to
  - Within ASEAN (44%)
  - Taiwan (10%)
  - India (9%)
  - China (6%)

# ASEAN FINISHED STEEL EXPORTS

Finished steel export from ASEAN-6 registered significant increases in 2019, mainly from Vietnam and Indonesia which is the export from production from new capacity

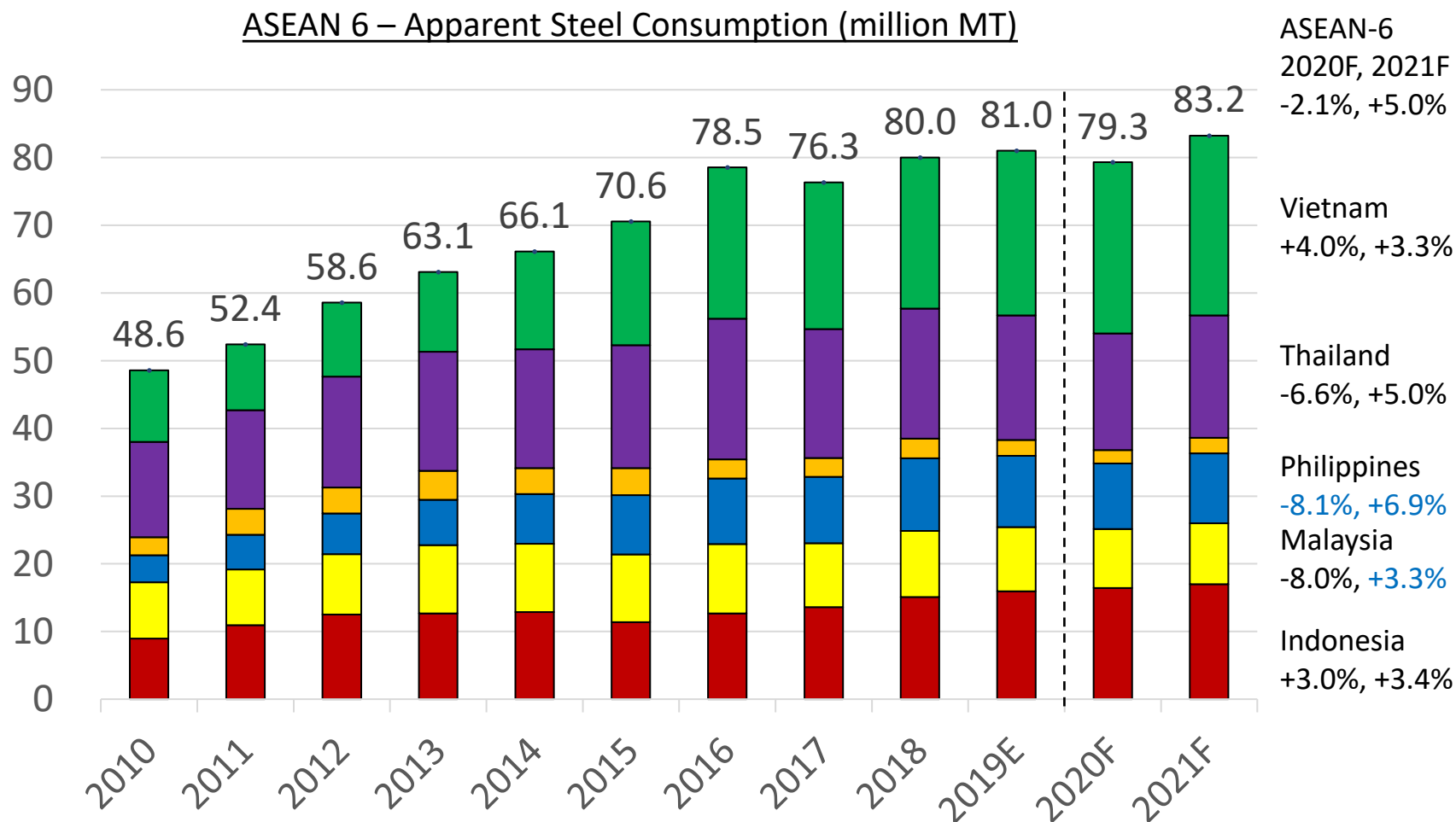


- Most of ASEAN countries are not significant steel exporters.
- However, Indonesia's steel export continued to increase significantly
  - Stainless Steel
  - Plates
- Malaysia's export of wire rod jumped from as low as 100,000 tonnes a year to 1.3 million tonnes in 2019
- Vietnam remained the biggest steel exporter in ASEAN.

# FORECAST FOR ASEAN-6 STEEL DEMAND

(3/3)

ASEAN-6 ASC is expected to dip to 79.3m MT (-2.1%), supported by growth in Vietnam and Indonesia; 2021 ASC (for now) is expected to reach 83.2 m MT

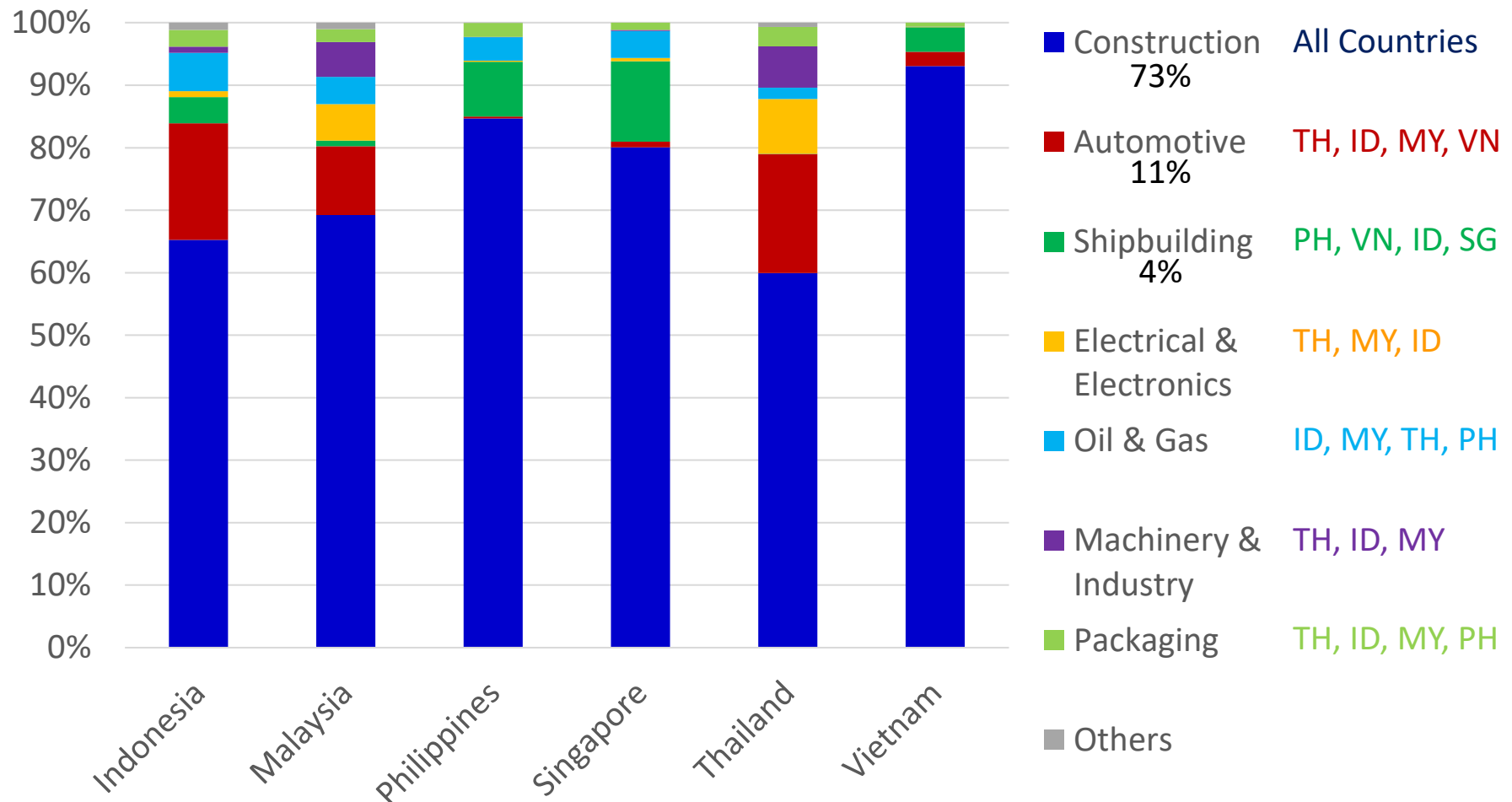


Note: The forecast is assumes COVID19 is contained by mid 2020 and economic recovery starts soon thereafter

# DEMAND FOR ASEAN STEEL - STEEL USING SECTORS

Steel Demand in ASEAN-6 have traditionally been in the Construction Sector followed by Automotive and Shipbuilding Sectors

Apparent Steel Consumption by Steel Consuming Sectors & Country - 2015 Study (%)



## OUTLINE:

A

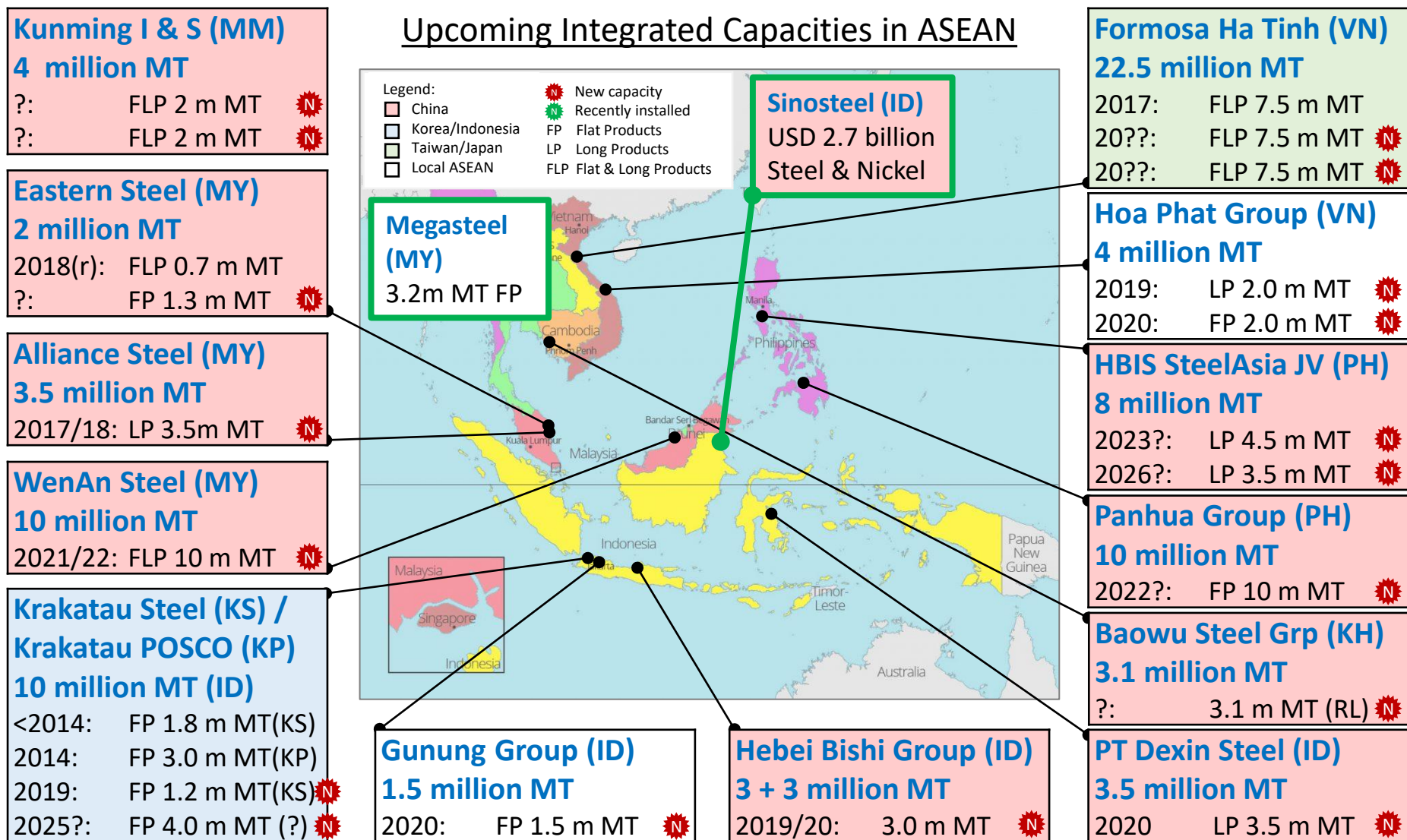
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# RISE OF THE INTEGRATED MEGAMILLS (CARBON STEEL)

Many huge integrated mills (carbon steel) are starting up in Malaysia, Indonesia, Philippines and Vietnam, with most of the investors being China Steel Mills



# EMERGING LOW COST CENTRES FOR STAINLESS STEEL

Over the last 4-5 years, Tsingshan and Jiangsu Delong have invested in Nickel Production facilities in Indonesia, which provided the lowest costs of production

**TSINGSHAN GROUP @ MOROWALI (2015-2018)**

**TSINGSHAN GROUP @ WEDA BAY (2020)**

Sulawesi Mining Investment	
NPI	: 0.3 m MT
SS Slabs	: 1.0 m MT

Henjaya Mines Indonesia	
FeNi Ore	: 180 m MT
Ni	: ~2.3 m MT

Weda Bay Nickel Project (Mines)	
FeNi Ore	: 59.9 m MT
Ni	: ~9.3 m MT

Weda Bay Nickel (Smelter)	
Nickel	: 30,000 +
(NPC)	35,000 MT

Indo Guang Ching Nickel SS Industry	
NPI	: 0.6 m MT
SS Slabs	: 1.0 m MT
SS HRC	: 2.0 m MT

IndoTsingshan Stainless Steel	
NPI	: 0.6 m MT
SS Slabs	: 1.0 m MT

Indo Ruipu Nickel and Chrome Alloy	
FerroCh	: 0.6 m MT
SS CRC	: 0.7 m MT
Coke	: 0.6 m MT

Tsingshan Steel Indonesia	
NPI	: 0.5 m MT
Carbon	: 1.0 m MT

Virtue Dragon Nickel Industry	
NPI	: 0.8 m MT
S. Steel	: 3.0 m MT

Obsidian Stainless Steel	
SS Billets	: 0.6 m MT
	: +2.4 m MT



**JIANGSU DELONG @ KONAWE (2019)**



# WHY SO MANY INVESTMENTS IN ASEAN

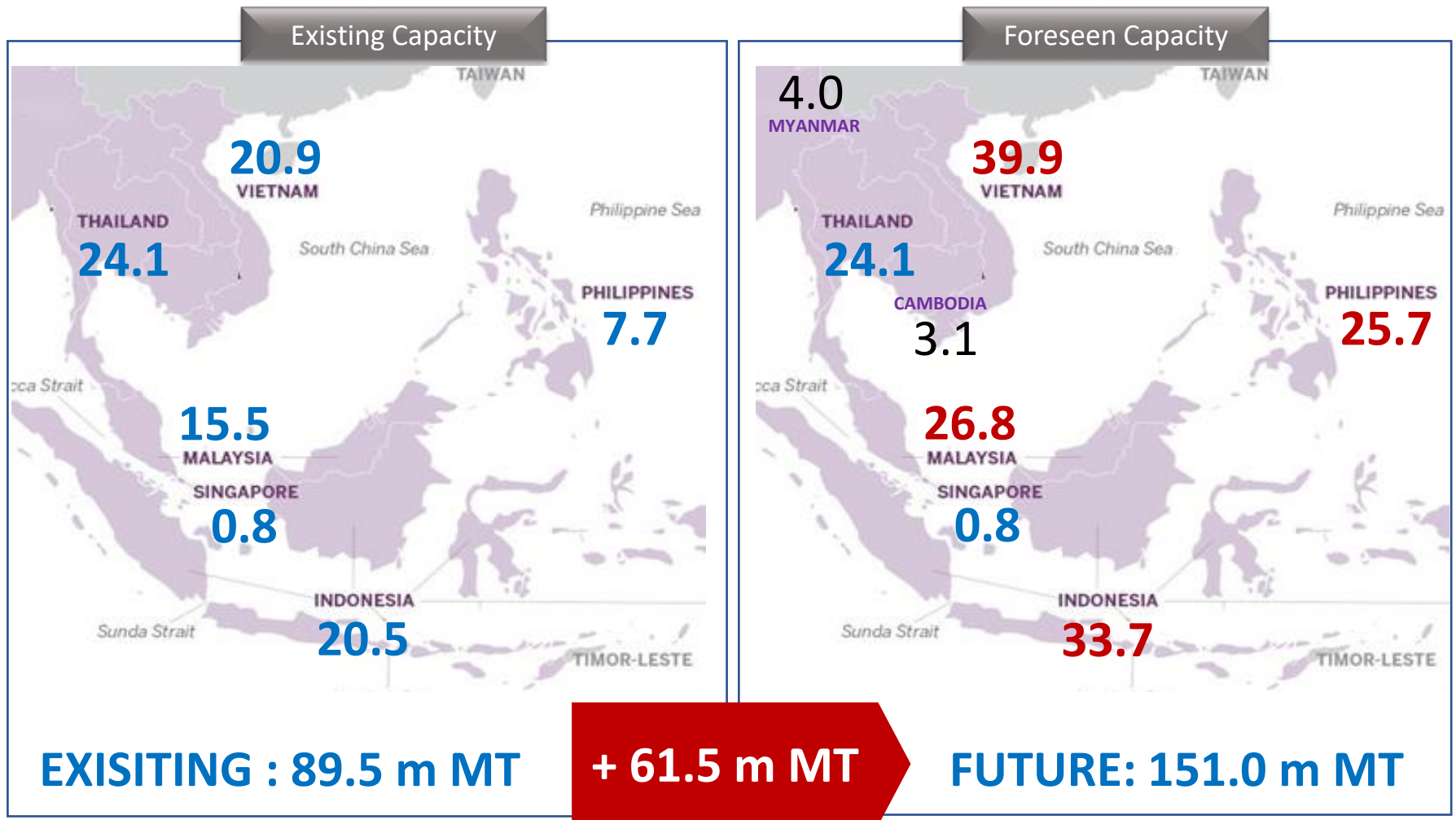
A myriad of reasons for investments in ASEAN, with a few success stories

1. Attractiveness of ASEAN as potential Economic Bloc
  - Opportunity to build facilities in one country and export to the others
2. ASEAN is one of the fastest growing market for steel
3. Access to Market / Expansion Strategy
4. Investment opportunities to cover supply demand gaps  
(Formosa Ha Tinh, Krakatau POSCO)
5. Low cost source of raw materials  
(Tsingshan Steel, Jiangsu Delong)
6. Unable to grow in China due to Supply Reforms
7. Forced to close capacity in China due to Supply Reforms
8. Ability to export products back to China

Applicable to  
investments  
from Chinese  
Steel Mills

# THE FUTURE SCENARIO

Should all integrated mill capacities come on stream, there will be an additional 61.5 million MT of steel coming from all the identified integrated mills in ASEAN

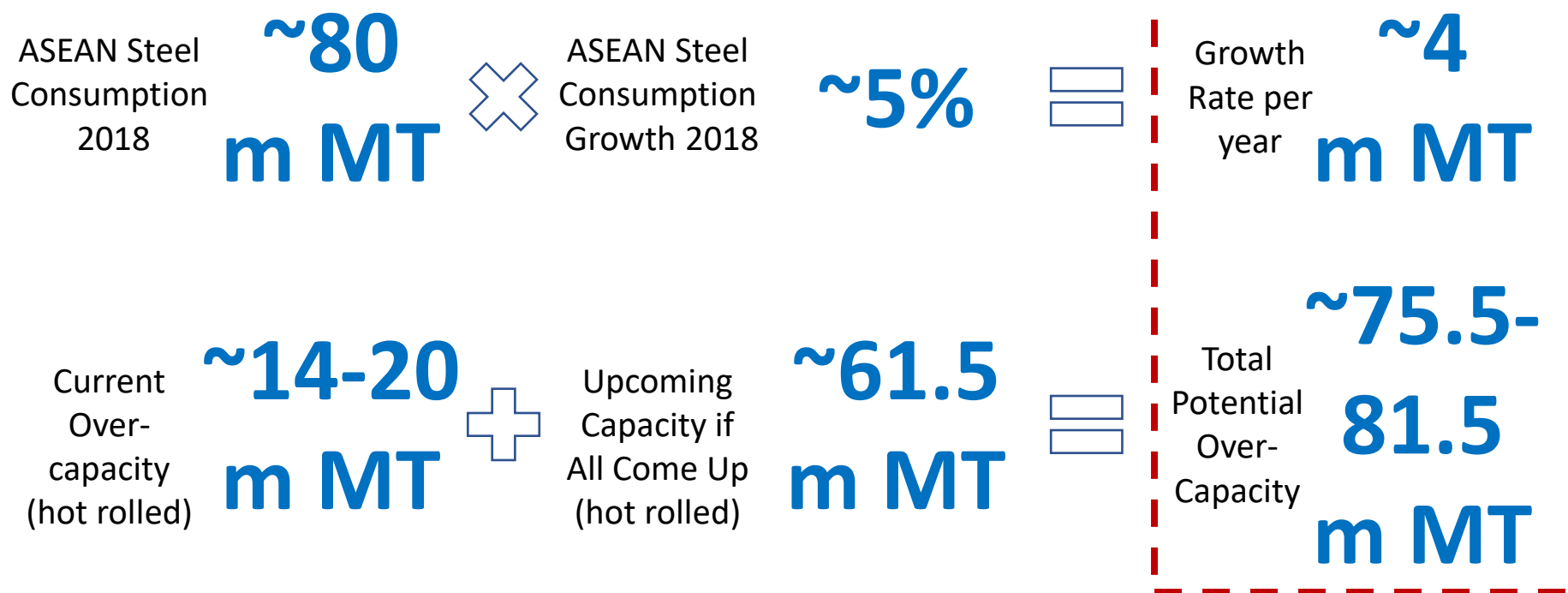


Excluding Myanmar  
& Cambodia

# RECOVERY – SIMPLE NUMBERS

(1/2)

How long does it take for current consumption growth to catch up with all potential installed capacity in ASEAN?



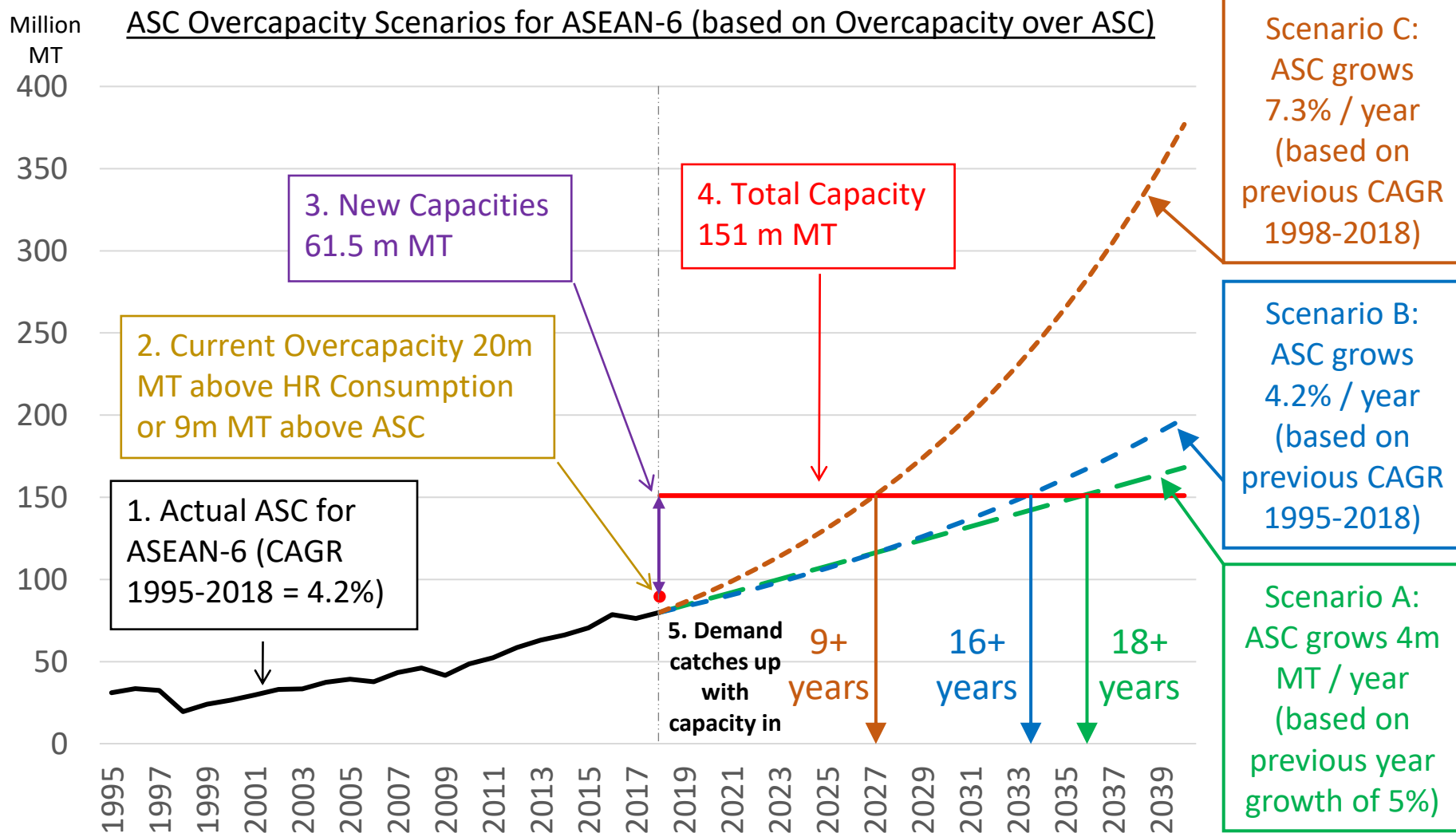
Years for Consumption Growth of ~4 m MT to reach ~78.5 m MT of Overcapacity, excluding all other EAF steelmaking capacities coming up

**~18.9 – 20.4 years**

# RECOVERY – SIMPLE NUMBERS

(2/2)

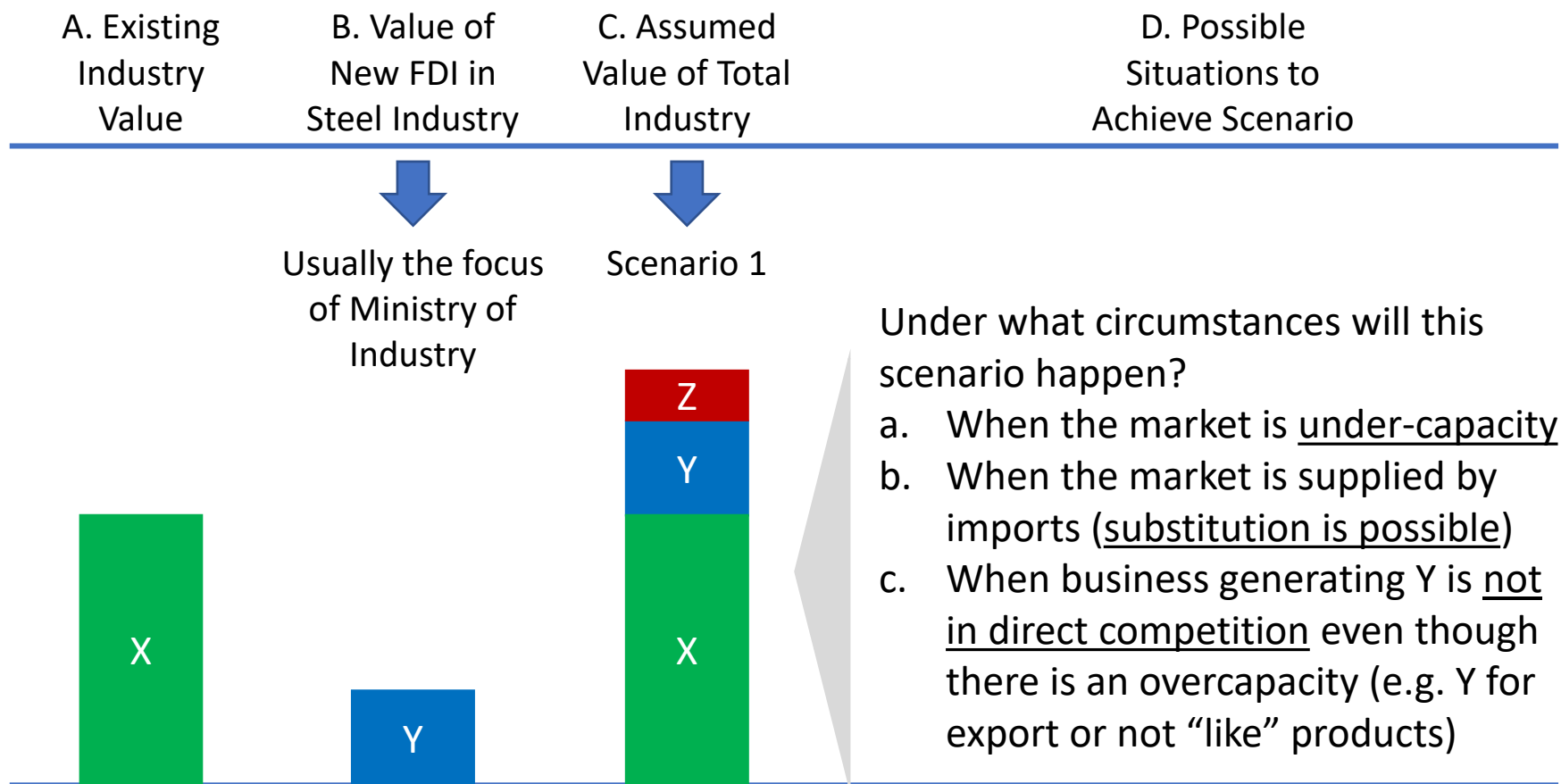
Scenario analysis shows most positive realistic scenario (2) will still see demand catching up with supply in 16+ years; COVID19 will add another 2-3 years



# WHY DO WE HAVE THIS ISSUE?

(1/2)

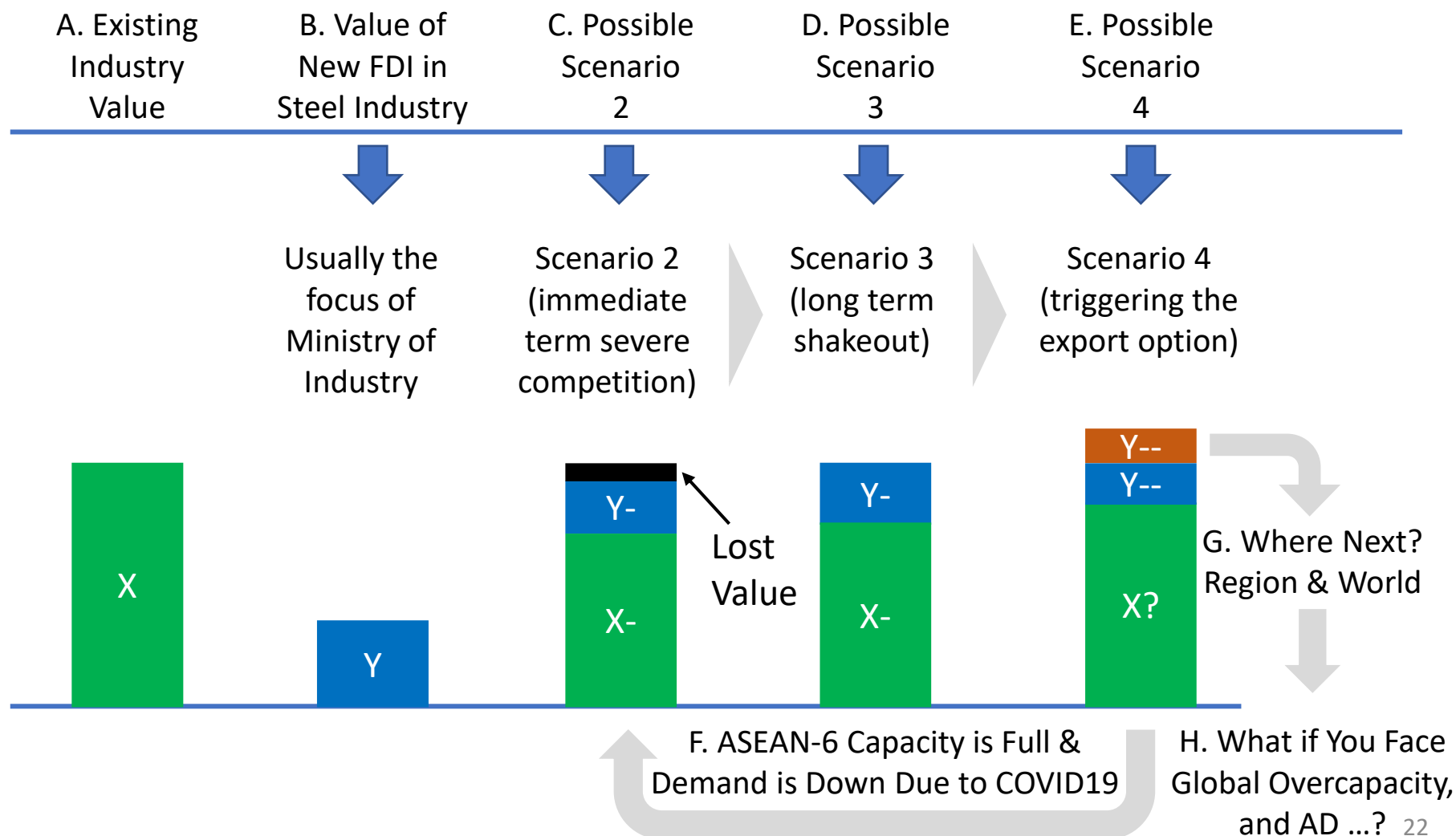
Authorities usually focus on FDI only, mainly based on KPI, and usually assume the FDI is value adding, which is true under certain circumstances ...



# WHY DO WE HAVE THIS ISSUE?

(2/2)

... however, in an overcapacity situation, the assumed value of  $X+Y+Z$  may not happen because there is no room for the new entrant in the domestic market



# CONCLUSIONS

1. Many proposed huge mega mills in ASEAN will add capacity to an already overcapacity market, threatening the sustainability of ASEAN Steel Industry and eventually the Global Steel Industry
2. Positioned well, few investments have been able to capture market share without disrupting the market; these add value
3. Authorities reviewing FDIs should consider these:
  - Industry situation (i.e. overcapacity)
  - Ensuring overall industry value add happens (i.e. “X+Y+Z”) and to avoid decreasing the overall industry value (i.e. “X- and Y-”)
  - Regional developments that could impact local industries
4. GFSEC continues to play a critical role in addressing the persistent global excess capacity issues in the world

## Case Study

- Ongoing event since Oct 2018
- Overcapacity situation
- New entrant’s shifting to exports
- Puts a value to direct negative impact on Steel Producers
- Actual impact on entire industry will be substantially more

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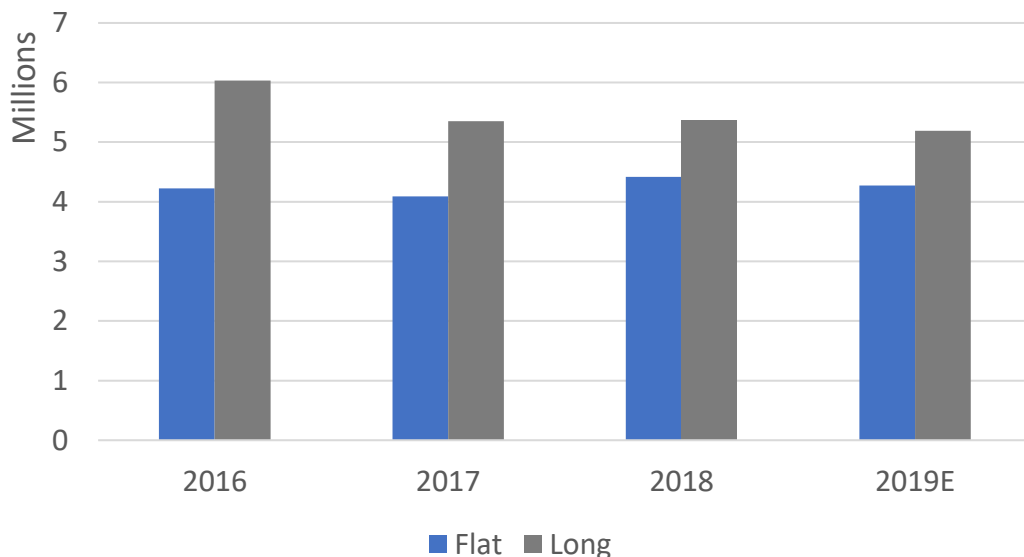
# MALAYSIA – APPARENT STEEL CONSUMPTION & TRADE

Malaysia's steel demand shrank moderately in both long and flat steel demand due to economic slowdown in the country which has impacted all sectors

Apparent Steel Consumption 2019 (E) (MT)

Finished steel	2017	2018	2019E	% Growth
Production	3,772,057	3,800,735	5,561,568	46.3%
Import	7,076,476	7,163,277	6,638,935	-7.3%
Export	1,405,423	1,187,887	2,735,801	130.3%
<b>Consumption</b>	<b>9,443,110</b>	<b>9,776,125</b>	<b>9,464,702</b>	<b>-3.2%</b>

Apparent Steel Consumption (m MT)



- Steel consumption in 2019 continued to decline moderately
  - Production increased nearly 2 million tonnes (46.3%)
  - Import dropped 7% to 6.6m MT
  - **Export surged around 1.5m MT, which was mainly the export of wire rod, 60% of the wire rod export was to ASEAN countries**
- It is expected that steel demand in 2020 will drop dramatically due to COVID-19.
- However, with the impact of COVID-19, the growth may be minimum.

# MALAYSIA – EXPORTS IN 2019

In 2019, Malaysia exported ~5.5 million tonnes of steel, the bulk of which are semi finished products and wire rods; 90% of exports were to the APAC region

## Heat Map of Malaysia Exports in 2019 (~ 5.5 million MT)

Source: SEAISI Research & Analysis

Malaysia Steel Exports	Europe	Russia & CA	Africa	Middle East	ASEAN-4	ASEAN-6	China	Other APAC	Americas	Others	Grand Total
380 Semi - Finished Steel						20%	17%	3%			39%
410 Rails & Accessories											0%
420 Steel Sheet Piles											0%
430 Sections						3%					3%
440 Bars					2%	1%	2%			1%	6%
450 Wire Rods					1%	14%	4%	2%	1%	2%	24%
470 Plates						1%		1%			3%
480 HR Coils/Sheets											1%
500 CR Products	1%			1%		2%		2%		1%	7%
600 Coated Sheets & Strips						1%					3%
700 Pipes & Tubes						2%			1%	1%	4%
800 Cld Fin, Cld Frmd St.						2%		2%			4%
900 Iron & Steel Scrap						3%	1%	3%		1%	7%
<b>Grand Total</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>	<b>4%</b>	<b>49%</b>	<b>24%</b>	<b>13%</b>	<b>2%</b>	<b>7%</b>	<b>100%</b>

1

### Top 5 Exports

- Semi Fin Steel (bllt, bm blnk)
- Wire Rods
- Scrap
- Bars

2

### Top 5 Destinations

- ASEAN-6
- China
- Other APAC
- ASEAN-4
- Americas

3

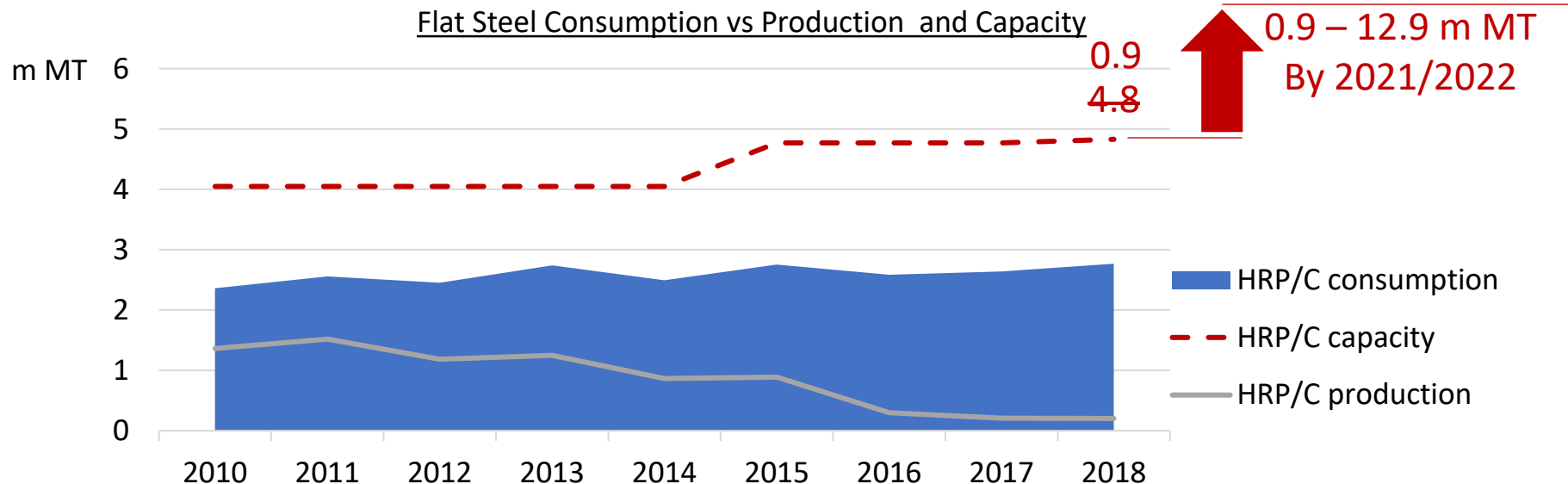
### Top 5 Export Items

- Semis > ASEAN-6, China
- WR > ASEAN-6, China
- Scrap > ASEAN-6, O-APAC
- Sections > ASEAN-6
- Semis > O-APAC

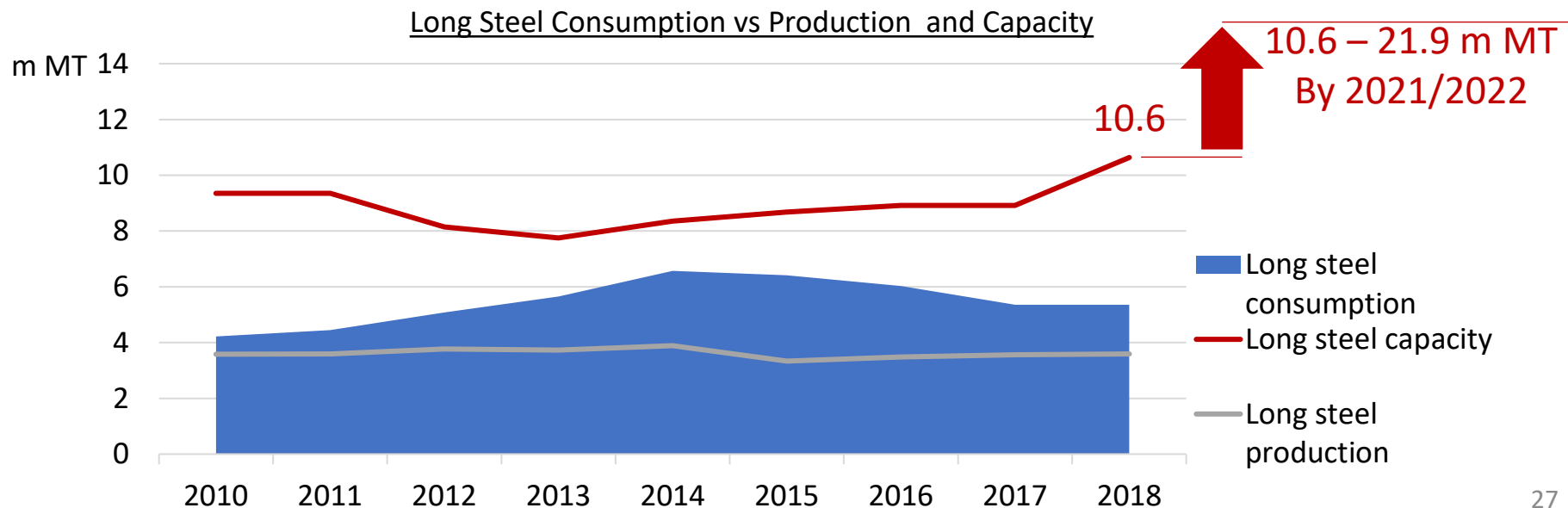
Note:  
ASEAN-6 refers to Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam

# MALAYSIA – CAPACITY VS CONSUMPTION

Flat Steel Consumption vs Production and Capacity



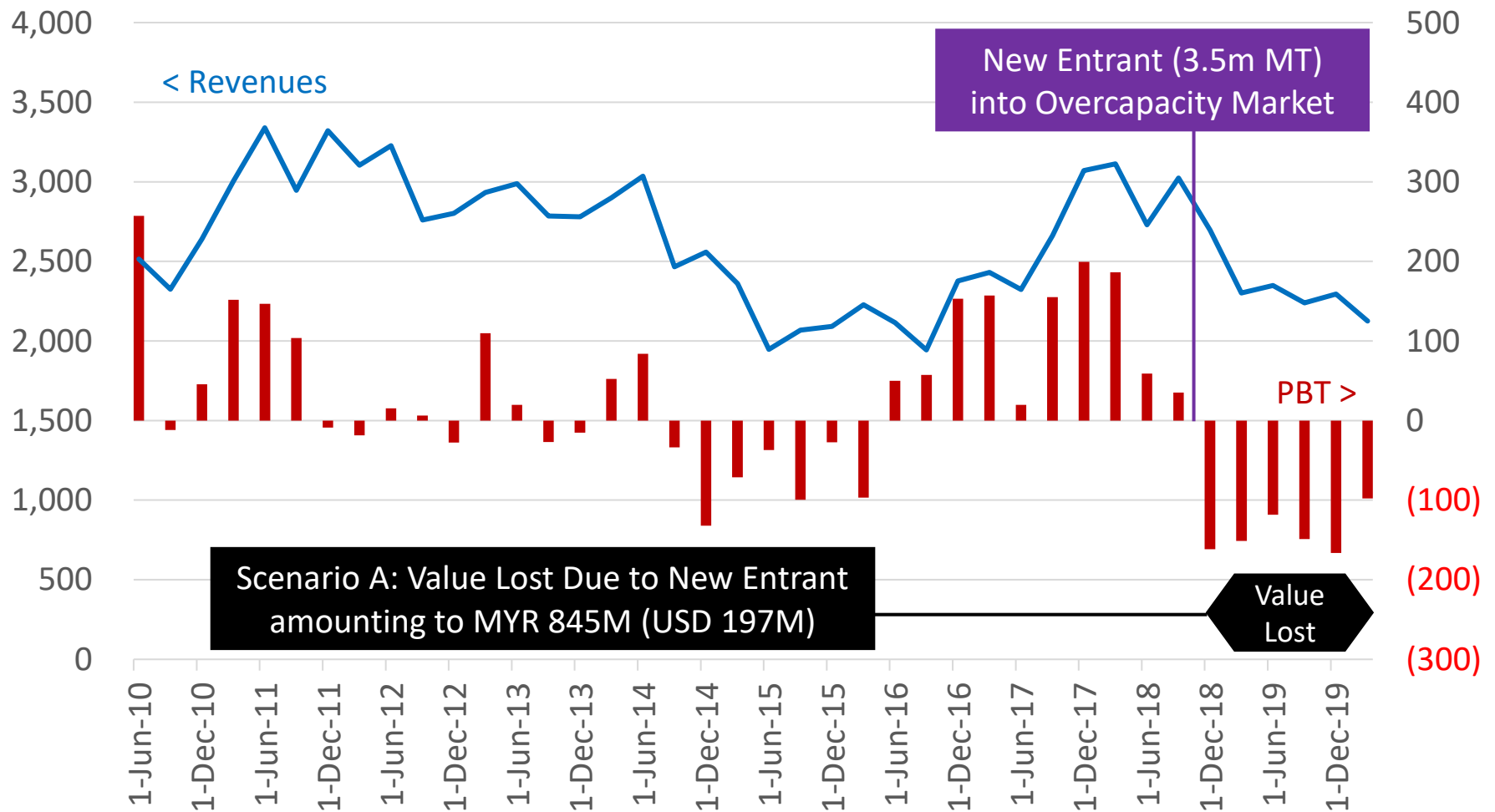
Long Steel Consumption vs Production and Capacity



# NEW ENTRANT IN AN OVERCAPACITY MARKET (1/4)

A new entrant into the overcapacity long products market, led to losses of ~MYR 845m (~USD 197m), if we were to attribute the all losses to the party

Aggregated Revenues & PBT for 6 Listed Long Products Producers in Malaysia (MYR million)

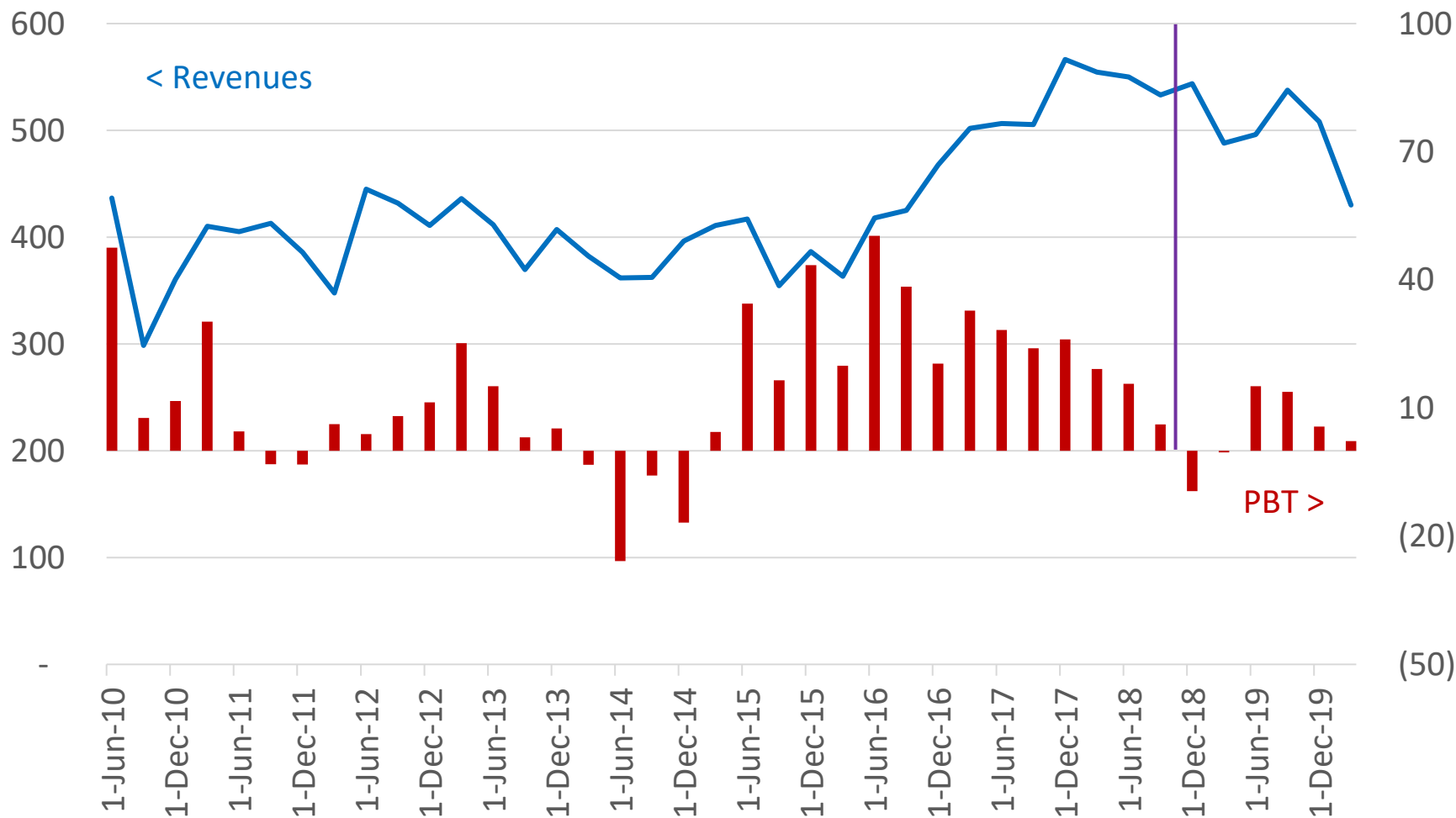


# NEW ENTRANT IN AN OVERCAPACITY MARKET

(2/4)

The flat producers typically produce products for the Construction Industry, and we will use this as a proxy for industry trend

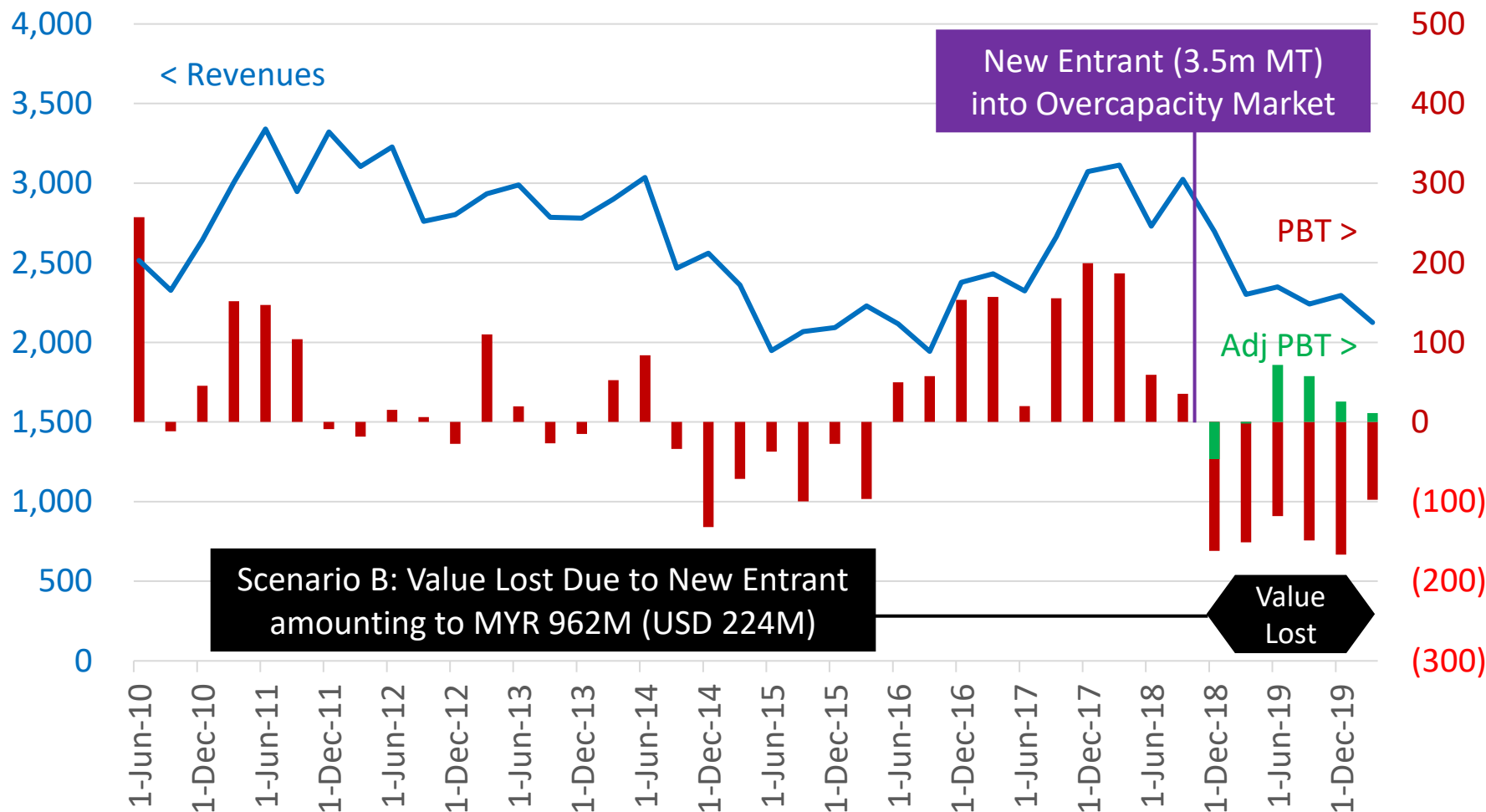
Aggregated Revenues & PBT for 2 Listed Long Products Producers in Malaysia (MYR million)



# NEW ENTRANT IN AN OVERCAPACITY MARKET (3/4)

Using Flat Products Producers' PBT as a proxy for industry trend, then the 6 listed entities' losses is estimated to be around ~MYR 962m (~USD 224m)

Aggregated Revenues & PBT for 6 Listed Long Products Producers in Malaysia (MYR million)



# NEW ENTRANT IN AN OVERCAPACITY MARKET (4/4)

A New Entrant in an overcapacity market will cause the industry to lose value; Officers should be aware of the need to increase industry value instead of FDIs

- In an overcapacity market, a new entrant who produces “like products” will lead to a severe competition in the market
- The industry will experience a loss of value, with the direct impact on Producers:
  - 6 listed companies lost ~MYR 845 to 962 million from Oct 2018 to Mar 2020
  - As the 6 listed companies represent 70-75% of market, grossing up to 100% of market, the total lost group value is ~MYR 1.12 – 1.37 bn over 18 months
- The above scenario does not calculate loss of jobs and business sustainability issues that may lead to business closures (e.g. funding and liquidity)
- In a COVID19 scenario, the impact will be worse as demand is greatly affected
- The assumption that an FDI is a full incremental value does not work in a market that is in an overcapacity situation and when the FDI is going to come into the market with “like products”
- Authorities in charge of FDIs should consider FDIs with a view of enhancing entire industry value instead of just achieving the FDI only, and be aware of potential regional risks that may not be so apparent





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