



# Industry Focus and Indicator Update

แนวโน้มอุตสาหกรรมไทยหลัก 33 อุตสาหกรรม จัดทำโดยทีมวิจัยธุรกิจ ธนาคาร แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

1. Automobile
2. Auto Parts
3. Electrical Appliances
4. HDD
5. Integrated Circuits
6. Frozen & Processed Chicken
7. Frozen Seafood
8. Cassava Products
9. Oil Palm
10. Rice
11. Rubber
12. Sugar
13. Cement
14. Construction Contractor
15. Condominium in BMR
16. Low-rise Housing in BMR
17. Office Building in BMR
18. Retail Space in BMR
19. Industrial Estate
20. Credit Card
21. Auto Hire-Purchase
22. Personal Loan
23. Hot & Cold Rolled Steel Sheet
24. Long Product Steel
25. Private Hospitals
26. Tourist Accommodation
27. Modern Trade
28. Motorcycle
29. Petrochemicals
30. Power Generation
31. Refinery
32. Oil Service Station
33. Banking



May 2023

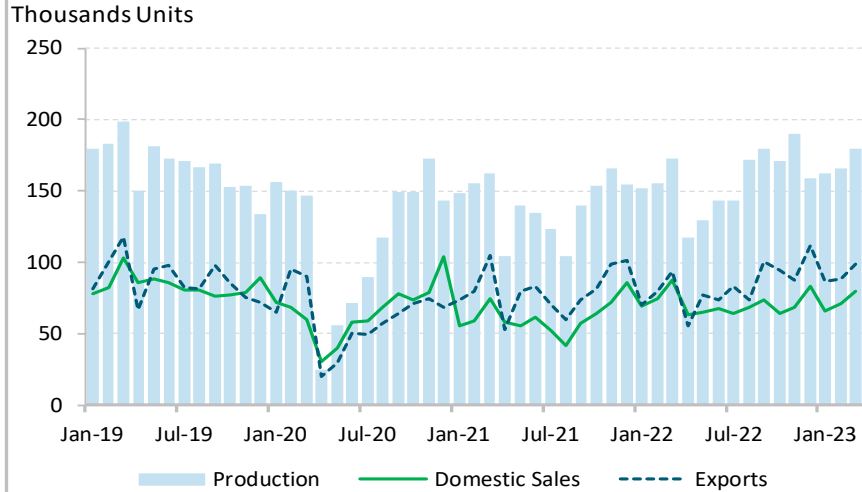
ผู้วิเคราะห์: BR Team

Business Research

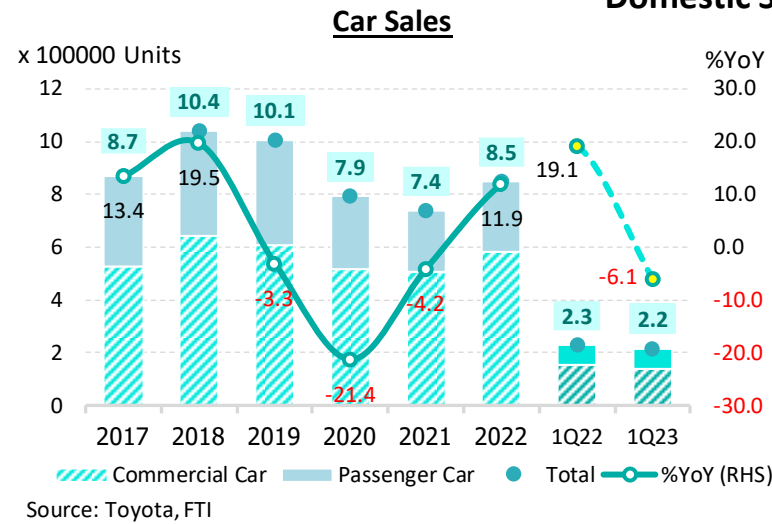


# Automobile (รถยนต์)

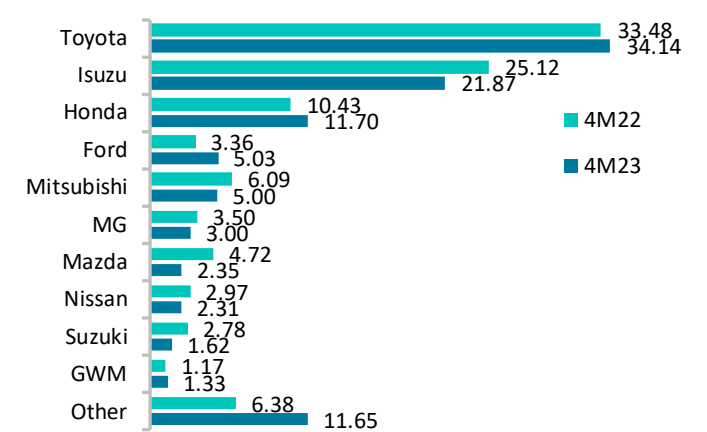
### Production and Sales



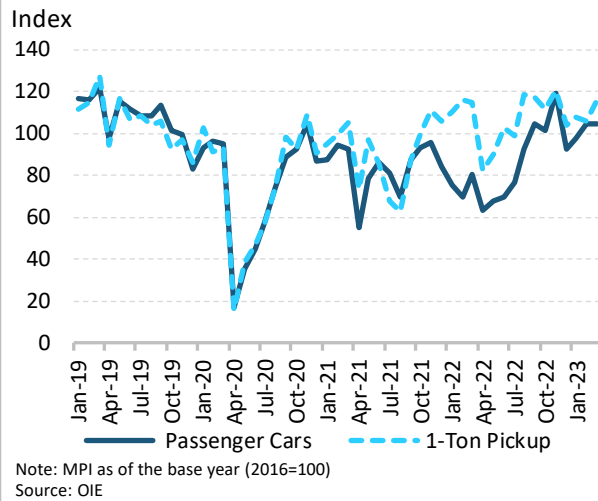
### Domestic Sales



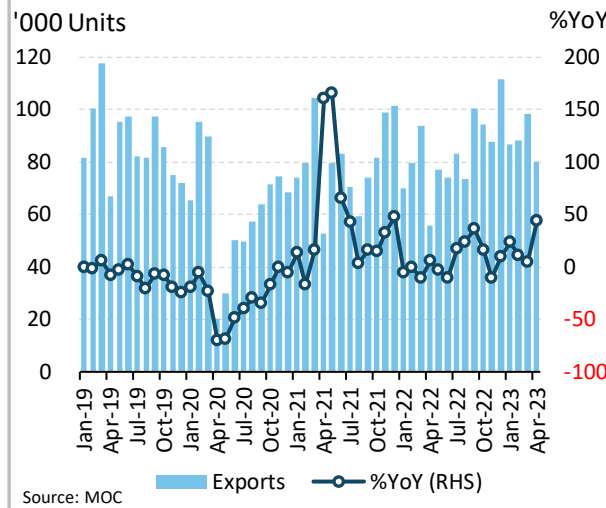
### Domestic Share by Automaker (%)



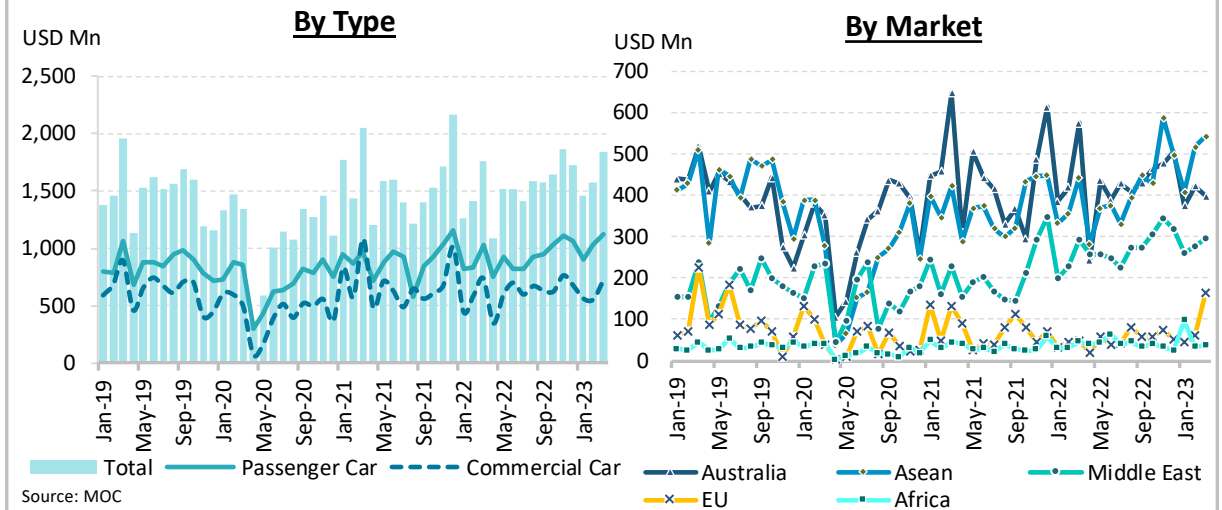
### Manufacturing Production Index (MPI)



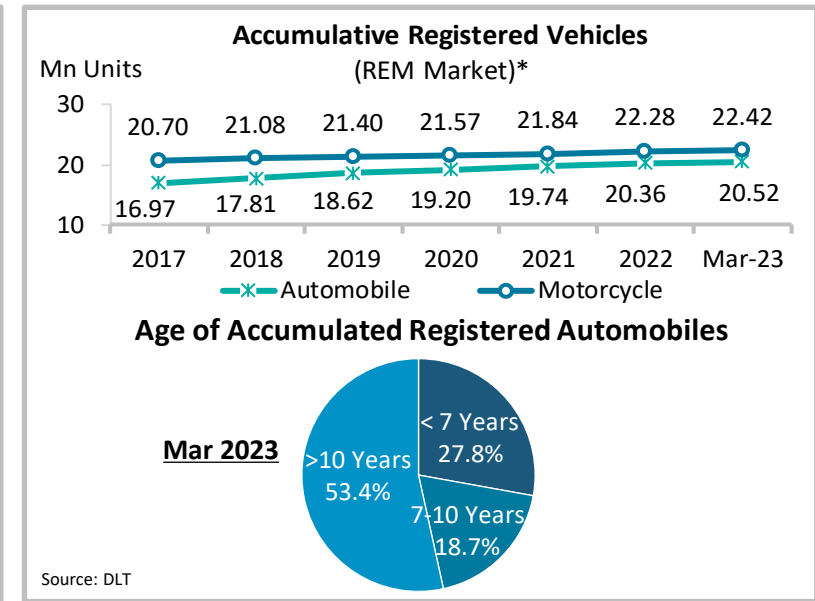
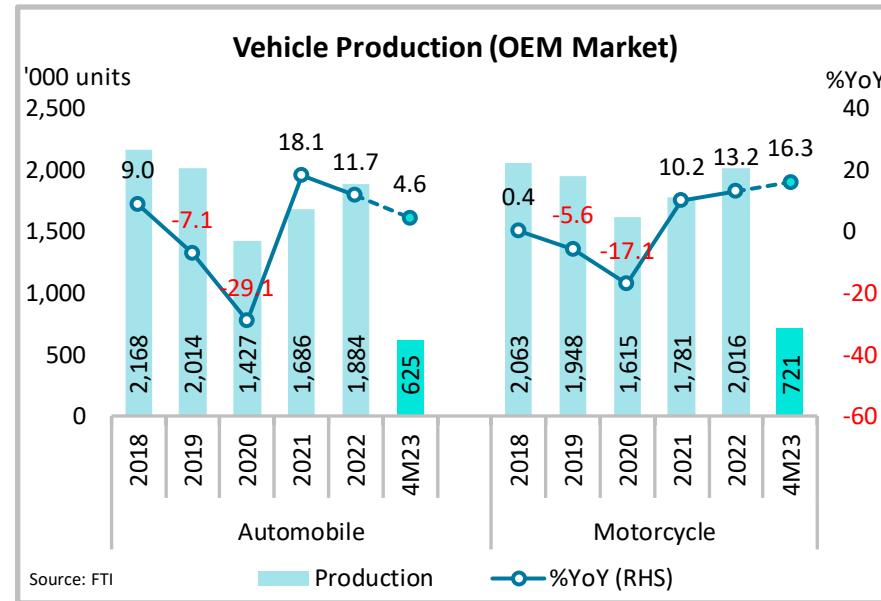
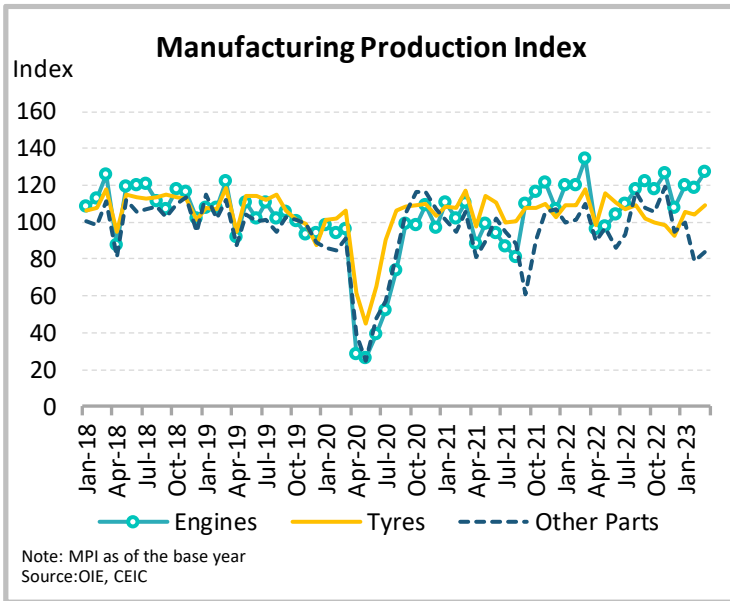
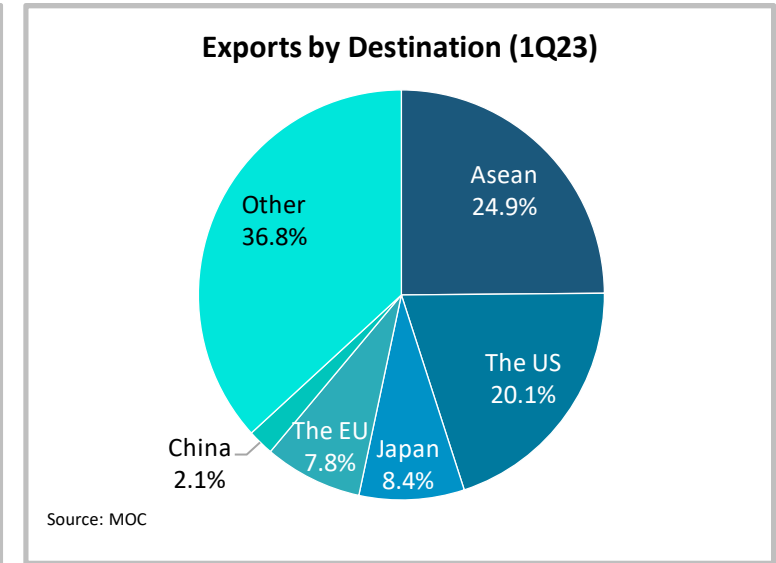
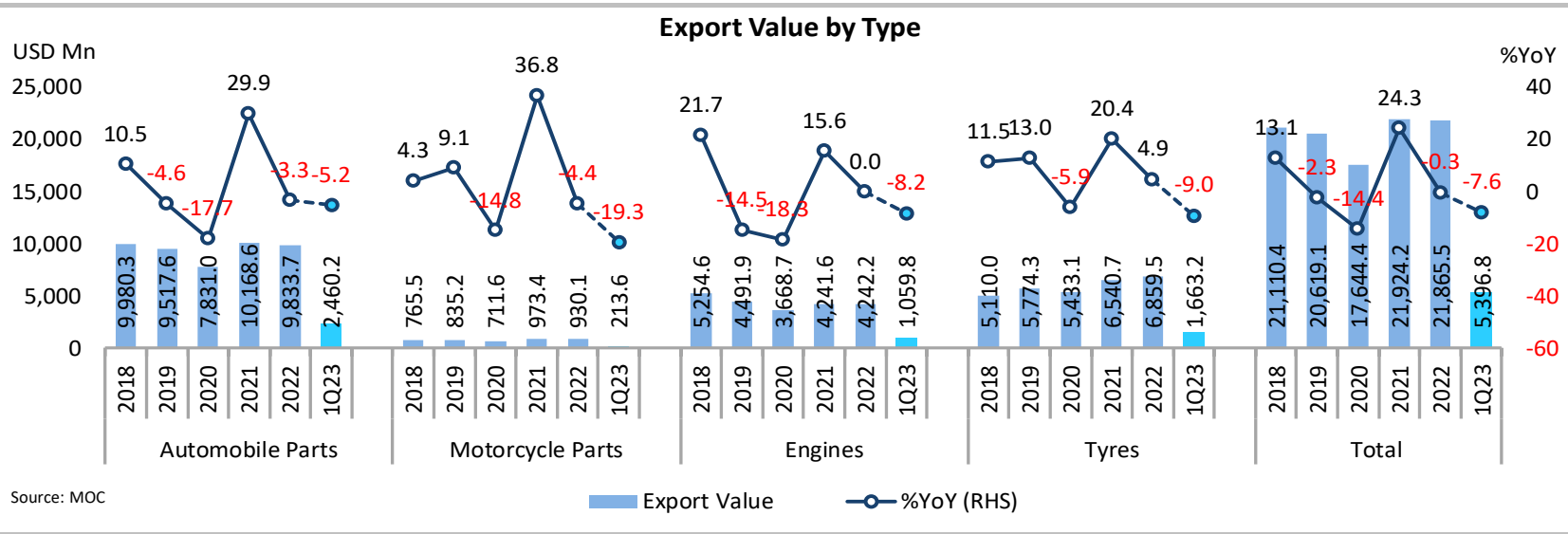
### Car Exports



### Export Value

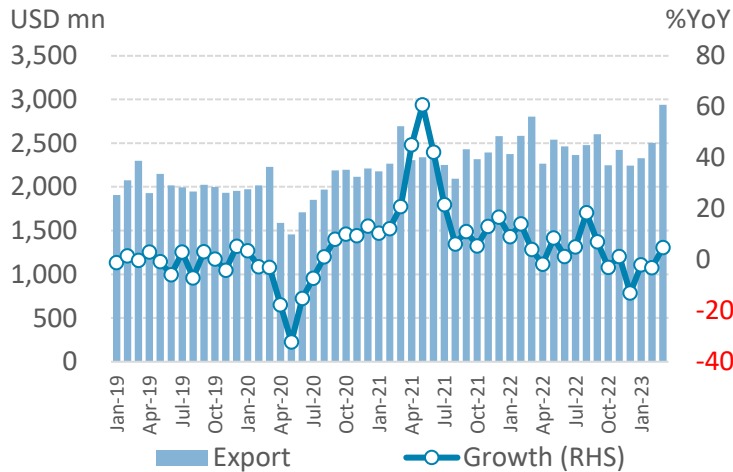


# Auto Parts (ชิ้นส่วนยานยนต์)



# Electrical Appliances (เครื่องใช้ไฟฟ้า)

### Electrical Appliance Export Value



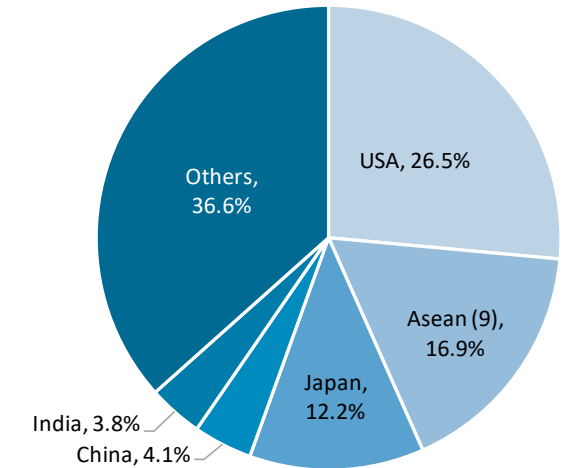
### Electrical Appliance Export

#### Electrical Appliance Export by Product

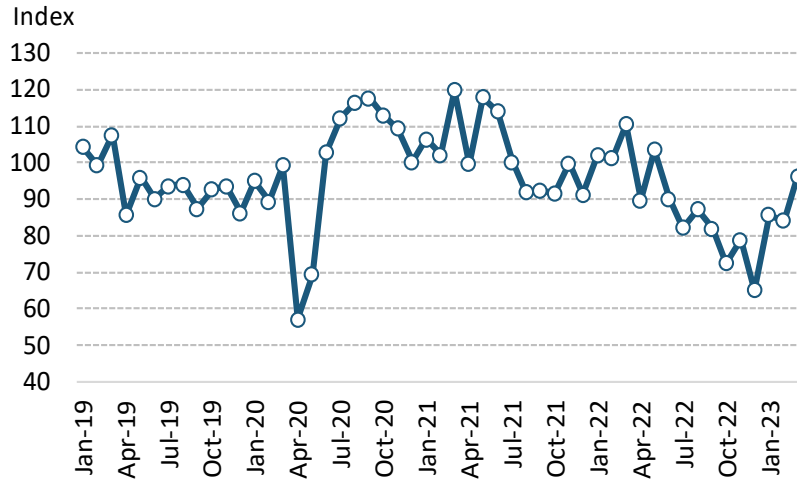
Unit: USD mn

	2019	2020	2021	2022	3M23	%YoY	Share (%)
Air conditioner	5,496	5,253	6,486	7,044	2,273	12.9	29.3
Television receiver	3,041	2,412	2,862	2,795	715	-4.2	9.2
Refrigerator	1,977	2,098	2,393	2,222	516	-19.1	6.6
Washing machine	1,286	1,226	1,343	1,190	337	-3.3	4.3
Microwave Oven	765	950	1,239	1,403	345	-10.4	4.4
Compressor	827	698	903	919	236	-5.7	3.0
Video recording	450	349	602	508	104	-43.8	1.3
Others	10,381	10,521	12,444	13,306	3,244	1.5	41.8
<b>Total</b>	<b>24,224</b>	<b>23,506</b>	<b>28,273</b>	<b>29,387</b>	<b>7,769</b>	<b>0.1</b>	<b>100.0</b>

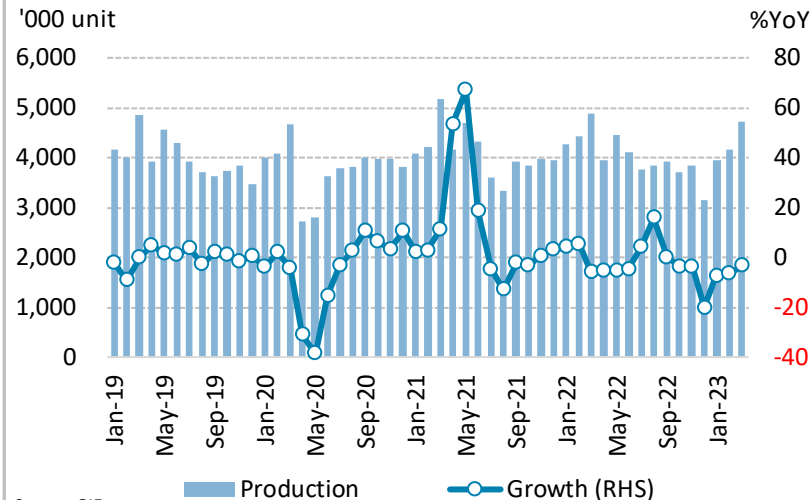
### Export Market Share (3M2023)



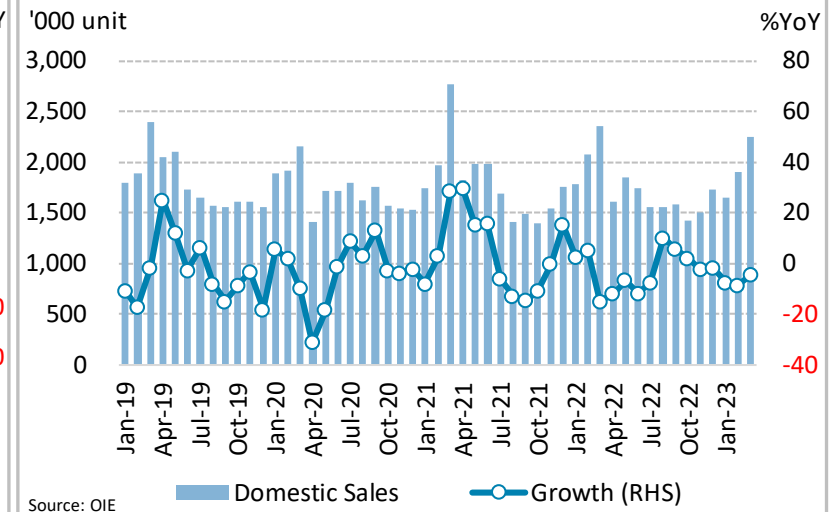
### Manufacturing Production Index (MPI)



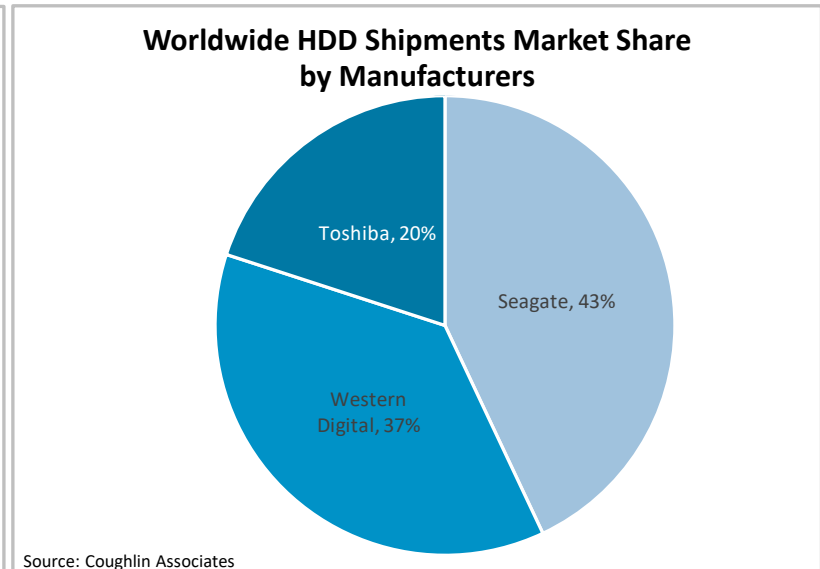
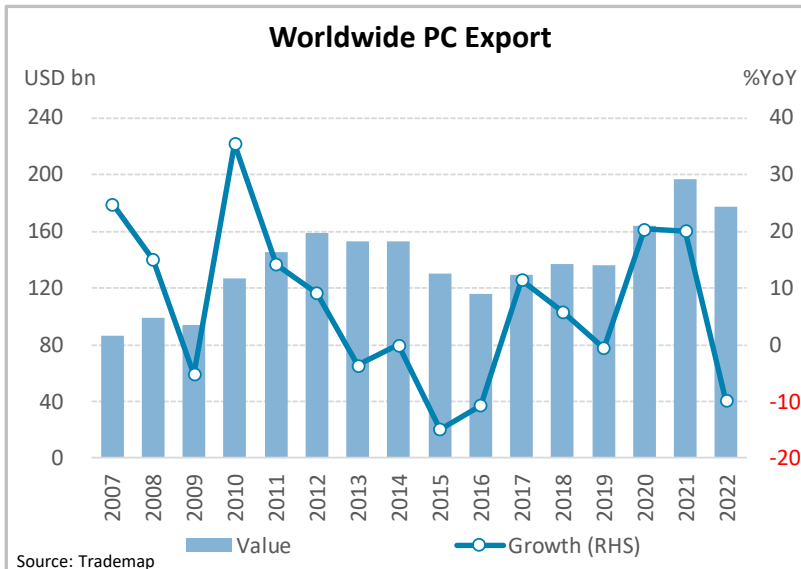
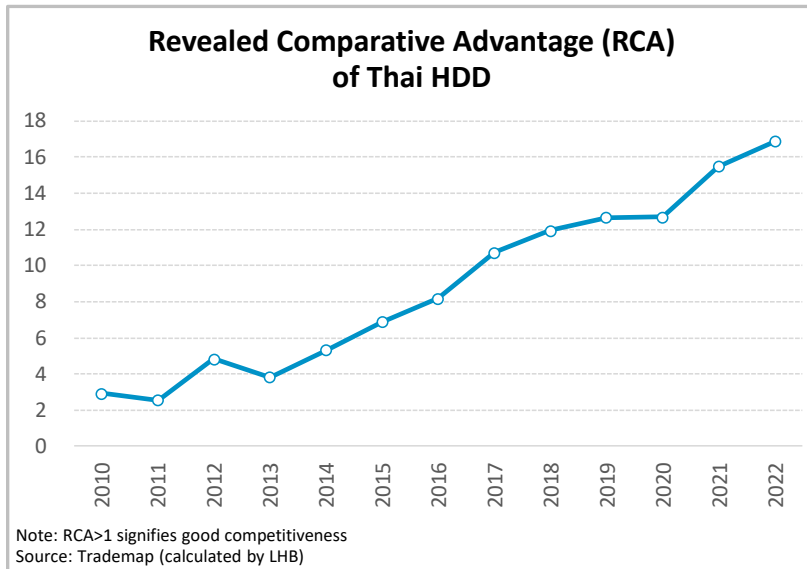
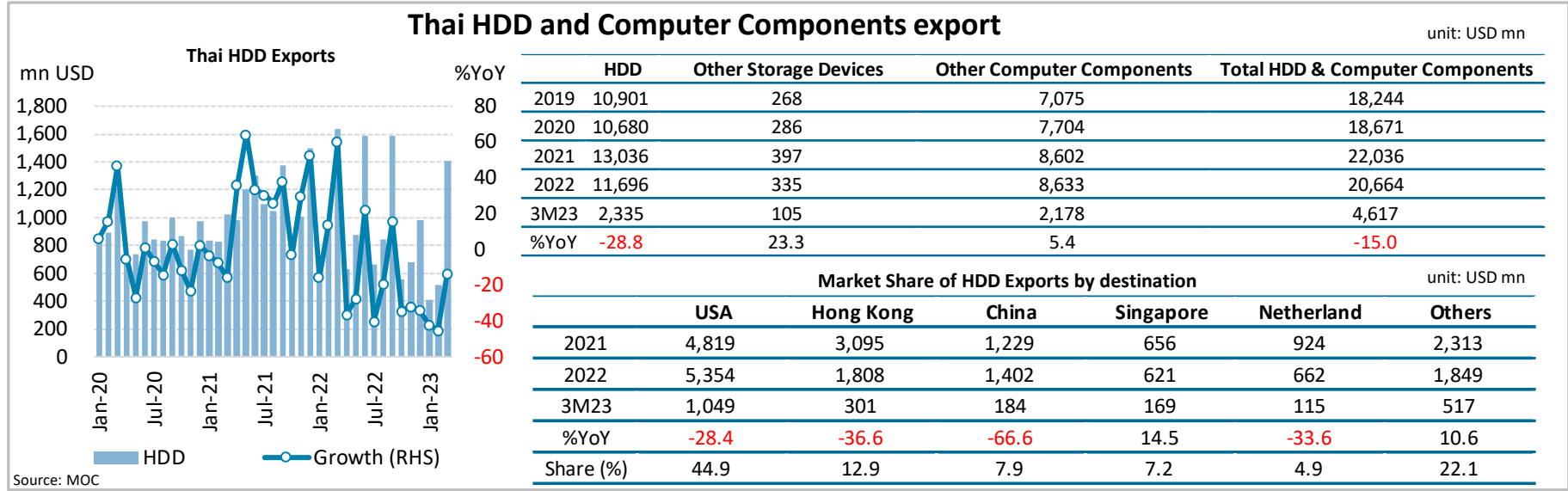
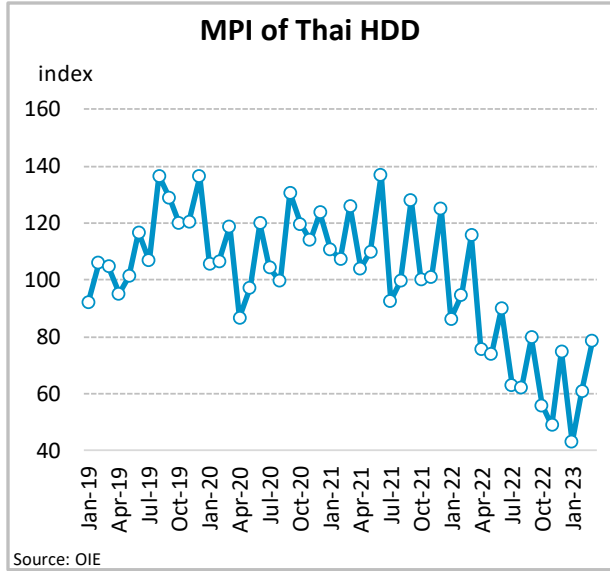
### Electrical Appliance Production



### Domestic Electrical Appliance Sales

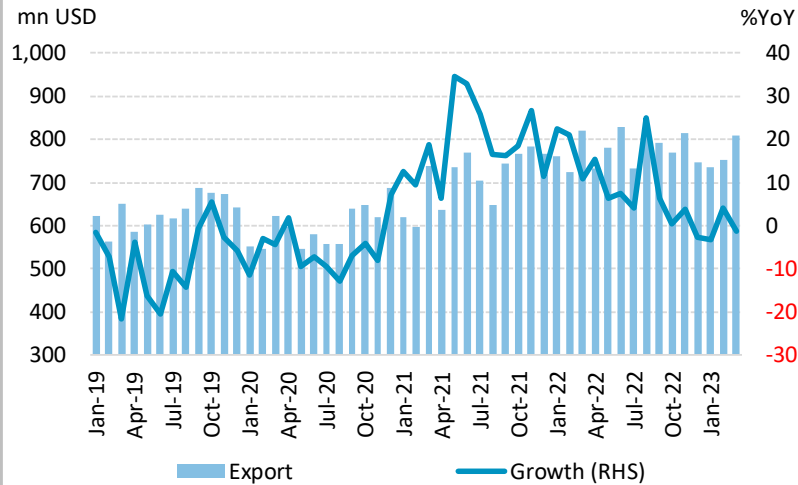


# Hard Disk Drive : HDD (ฮาร์ดดิสก์ไดรฟ์)



# Integrated Circuits: IC (แผงวงจรไฟฟ้า)

### Thai IC Export



Source: MOC

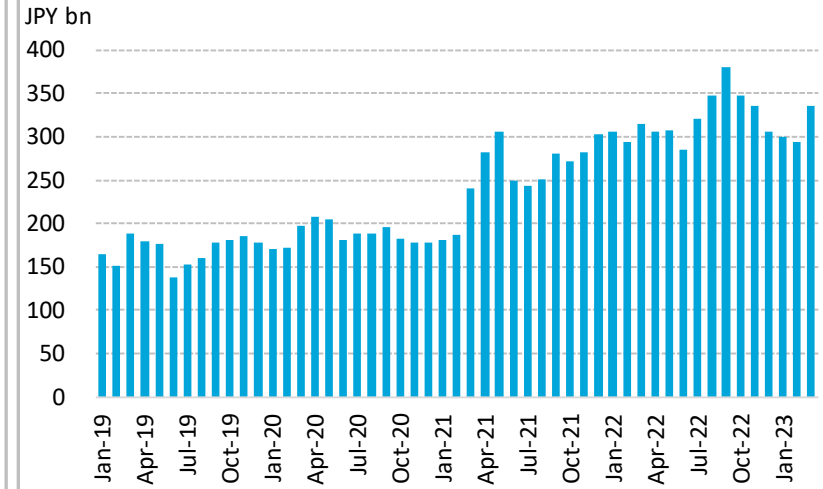
### Market Share of Thai IC Exports by Destination

Unit: USD mn

Country	2021	2022	3M23	%YoY	Share (%)
Hongkong	2,343.4	2,003.3	438.3	-18.7	19.1
Singapore	986.9	1,280.6	318.6	4.5	13.9
USA	564.6	741.1	197.1	18.0	8.6
Taiwan	490.6	685.9	194.9	35.4	8.5
Japan	627.6	653.6	180.3	20.3	7.8
Others	3,503.9	3,955.4	969.8	-3.0	42.2
<b>Total</b>	<b>8,517.0</b>	<b>9,319.7</b>	<b>2,299.0</b>	<b>-0.3</b>	<b>100.0</b>

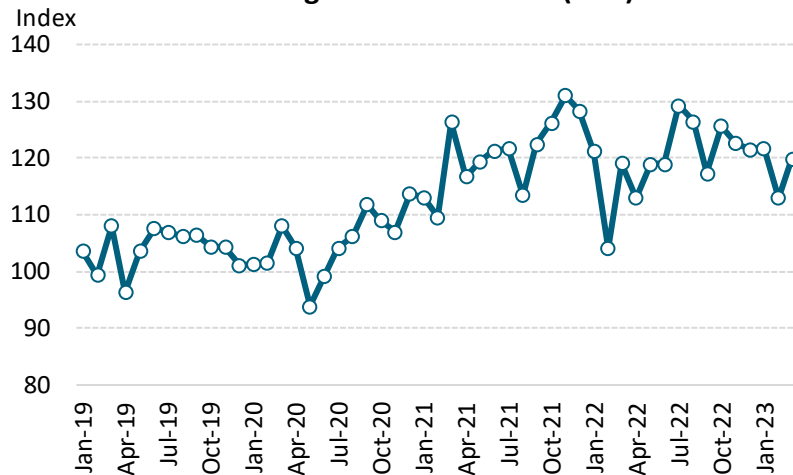
Source: MOC

### SEAJ Billing (three month avg)



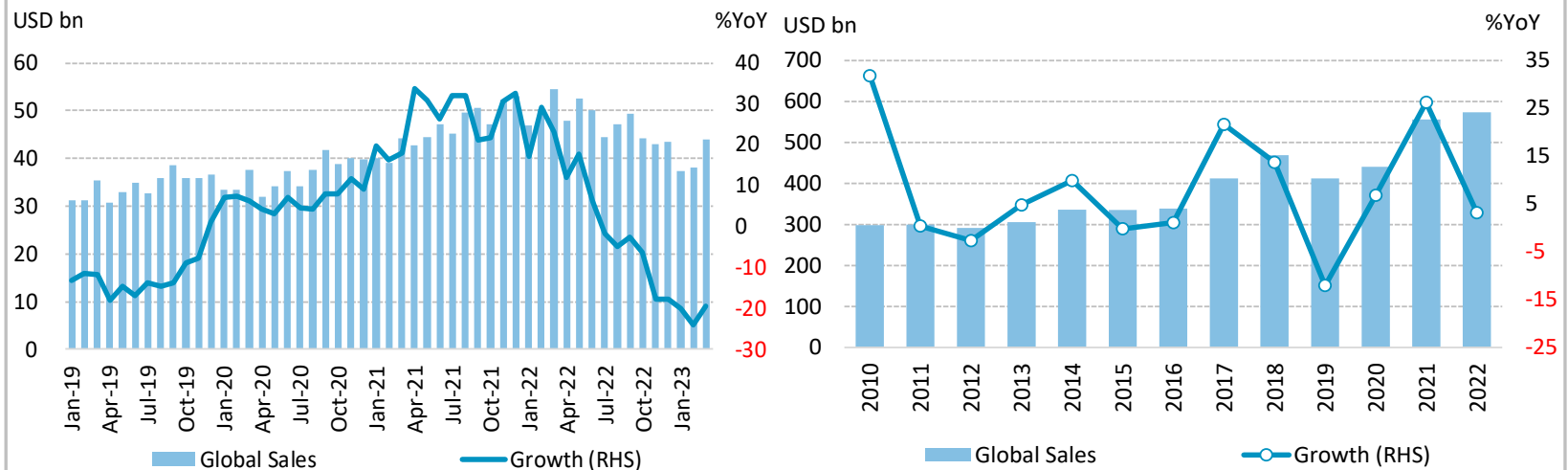
Source: Semiconductor Equipment Association of Japan (SEAJ)

### Manufacturing Production Index (MPI)



Source: OIE

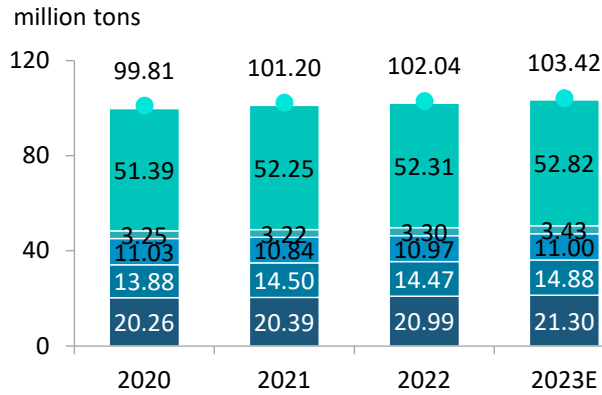
### Worldwide Sales of Semiconductors



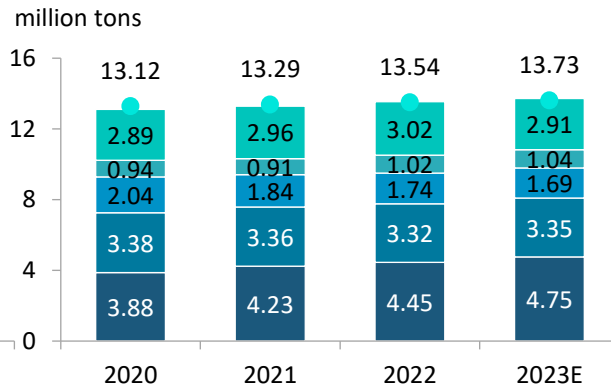
Source: World Semiconductor Trade Statistics

# Frozen and Processed Chicken (ไก่แช่แข็งและแปรรูป)

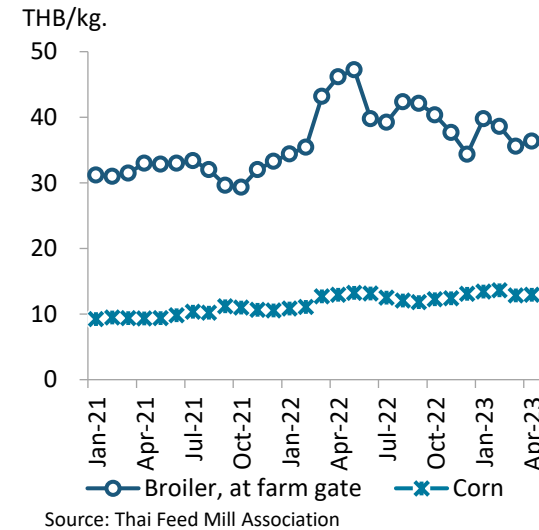
### World's Chicken Production



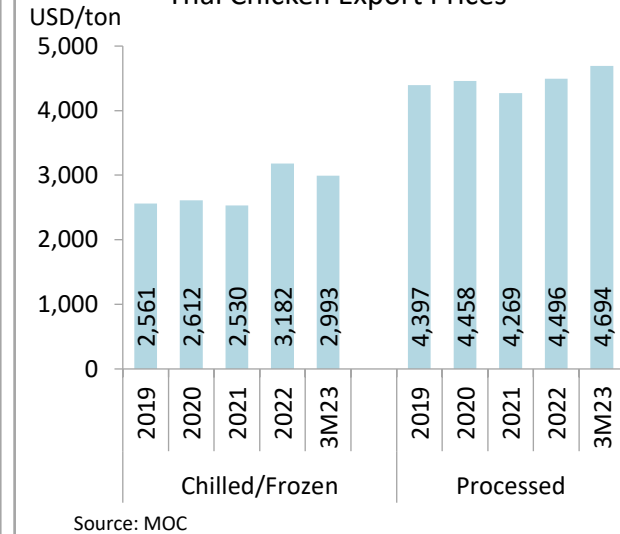
### World's Chicken Exports



### Broiler and Corn Prices

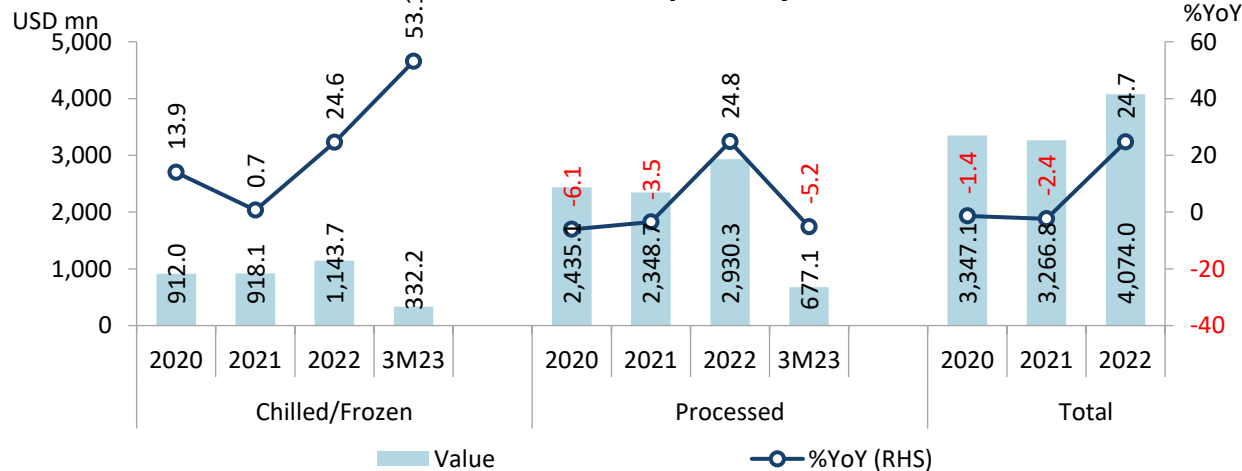


### Thai Chicken Export Prices



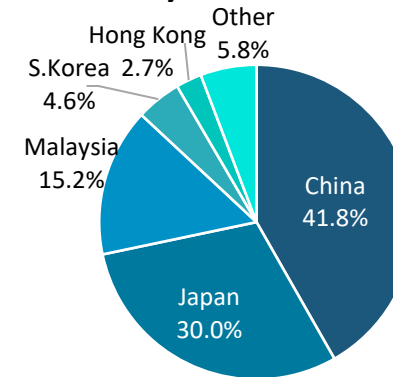
Source: USDA, E = Estimate

### Thai Chicken Exports by Product



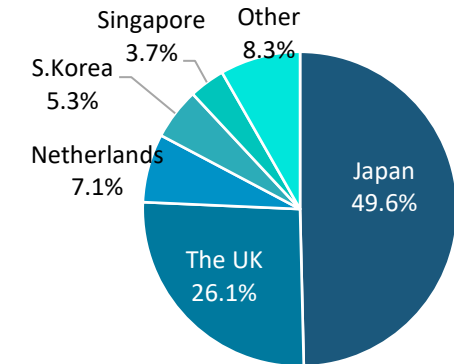
Source: MOC

### 2022 Chilled/Frozen Chicken by Destination

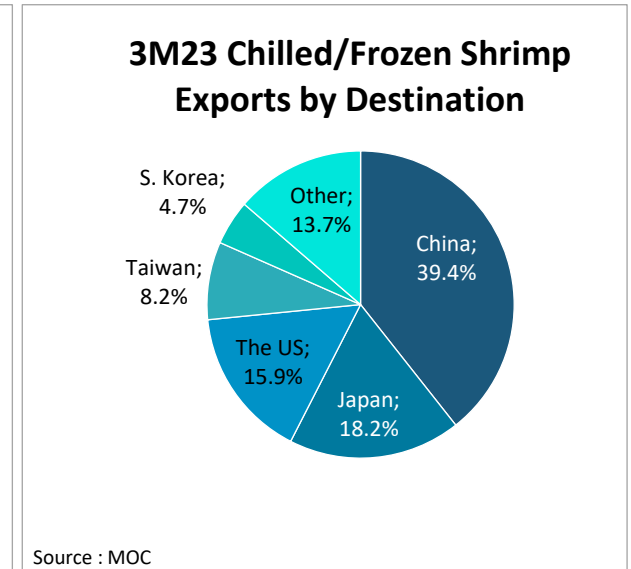
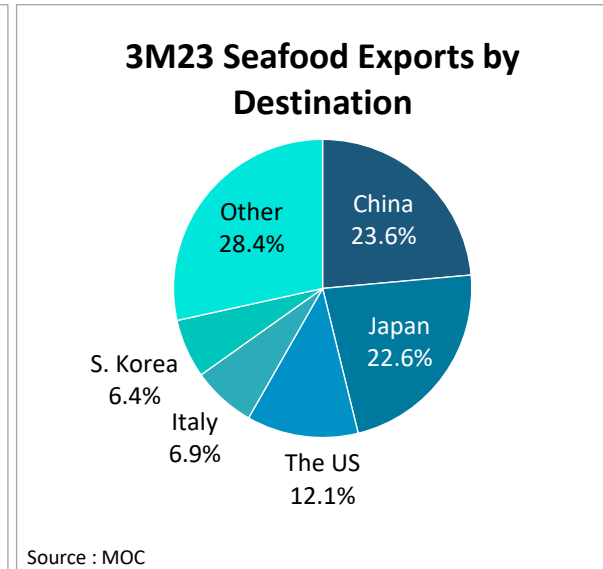
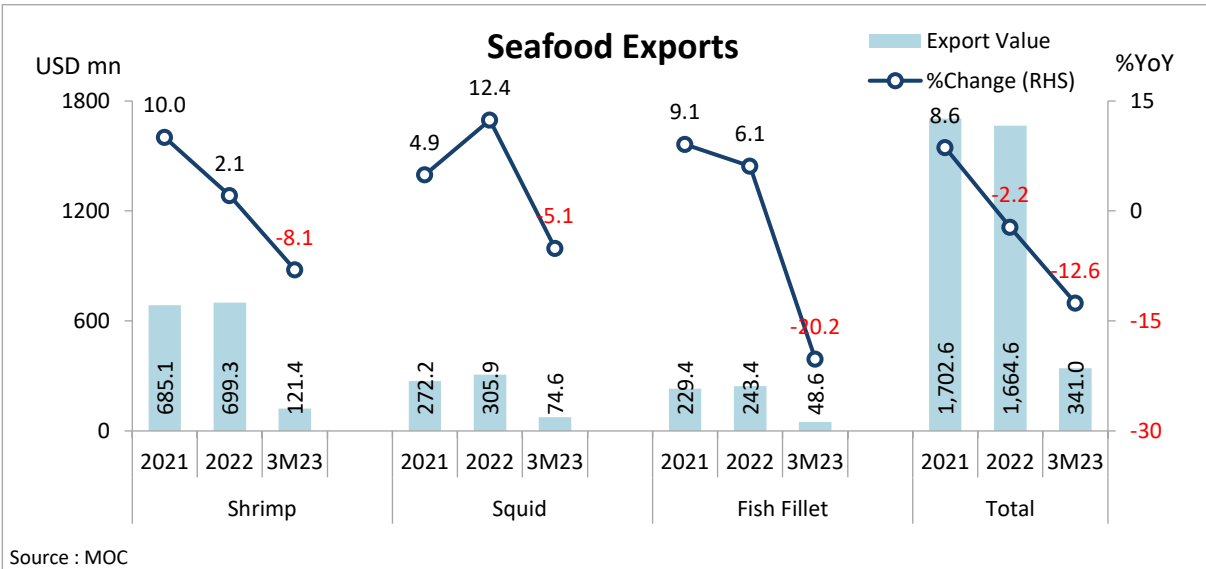
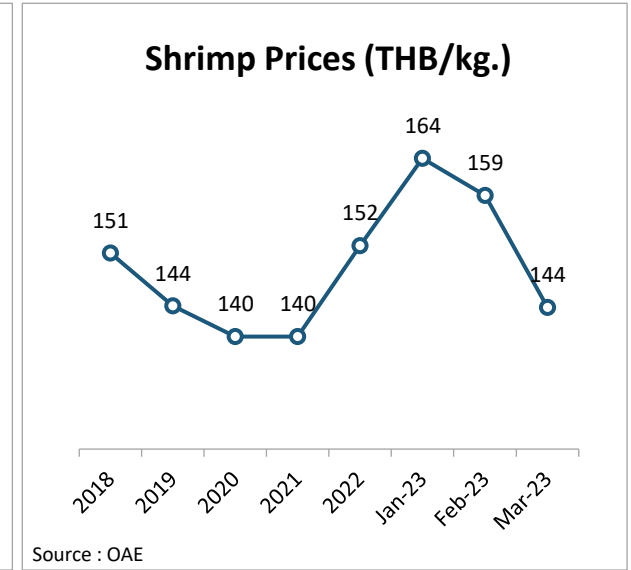
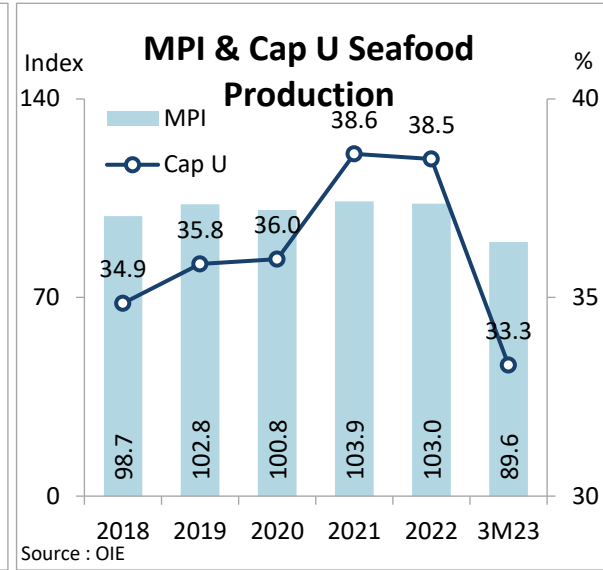
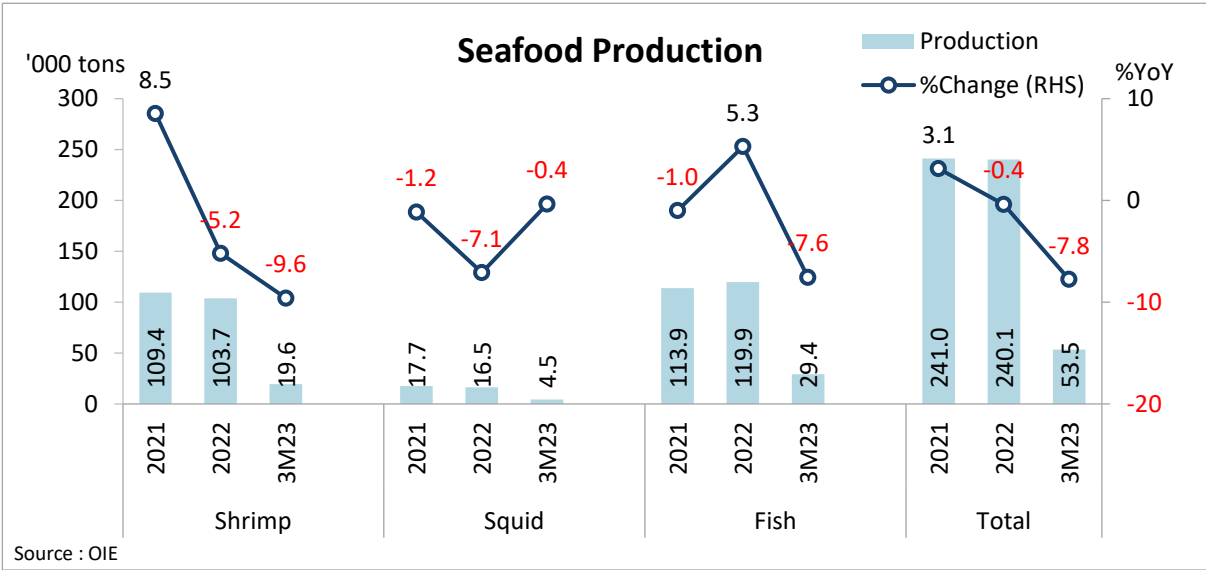


Source: MOC

### 2022 Processed Chicken by Destination



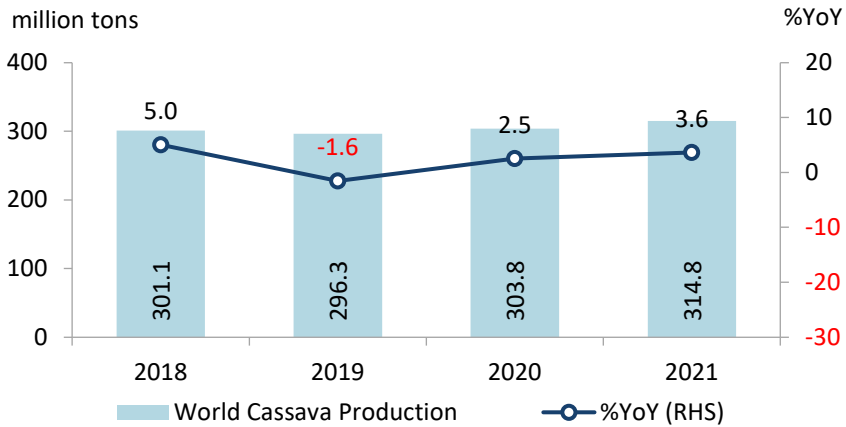
# Frozen Seafood (อาหารทะเลแช่แข็ง)



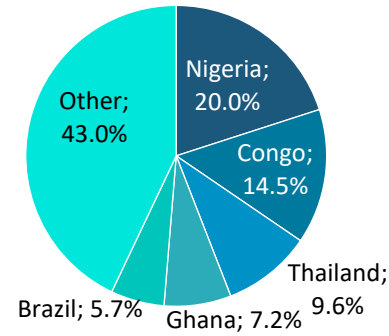


# Cassava Products (ผลิตภัณฑ์มันสำปะหลัง)

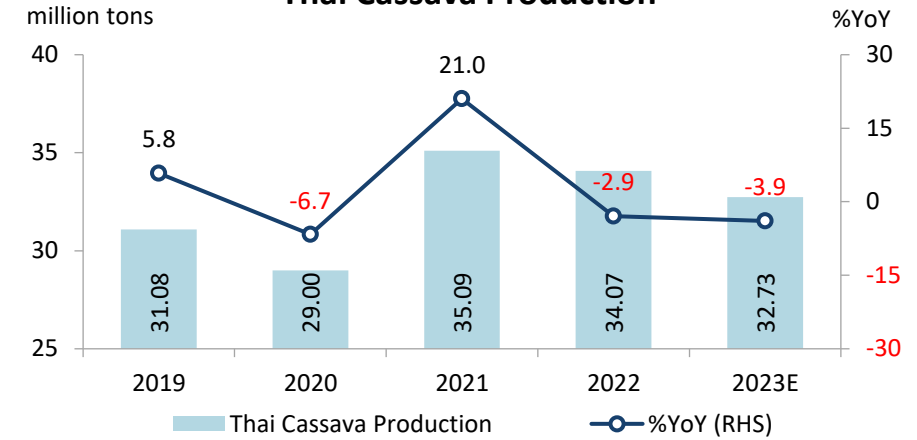
### World Cassava Production



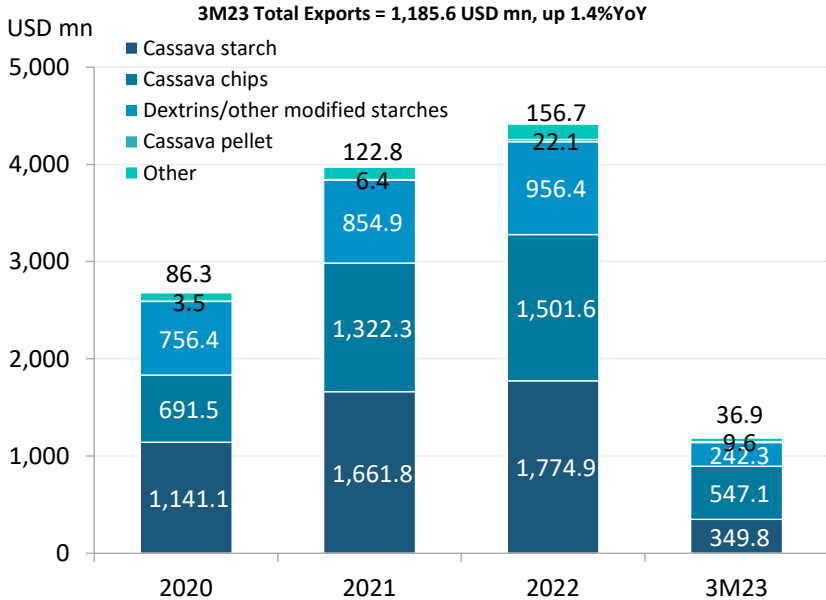
### 2021 World Cassava Production by Country



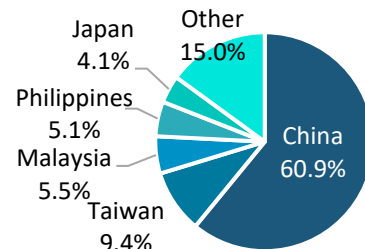
### Thai Cassava Production



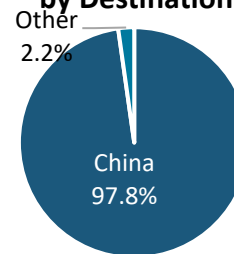
### Thai Cassava Products Exports



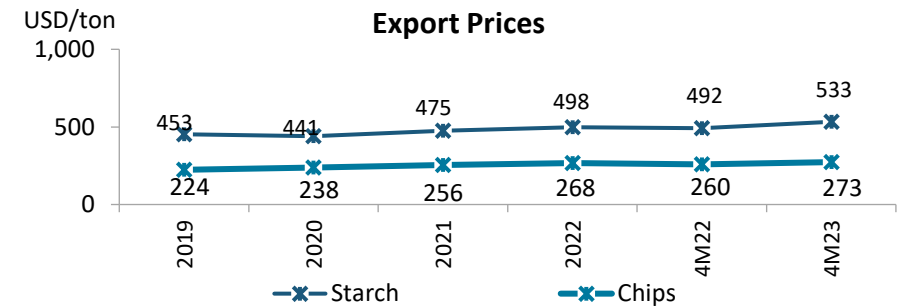
### 3M23 Cassava Starch Exports by Destination



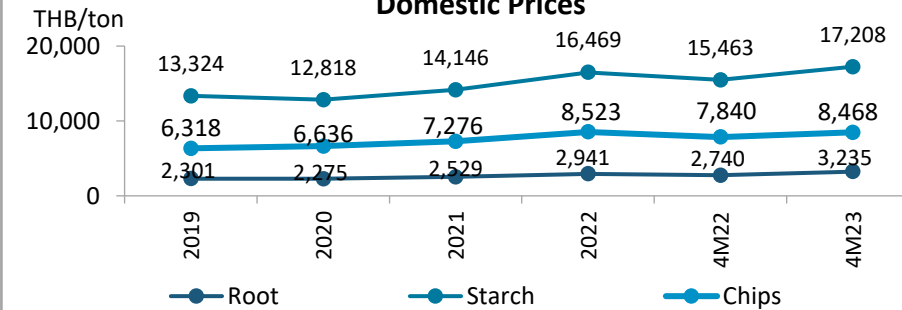
### 3M23 Cassava Chip Exports by Destination



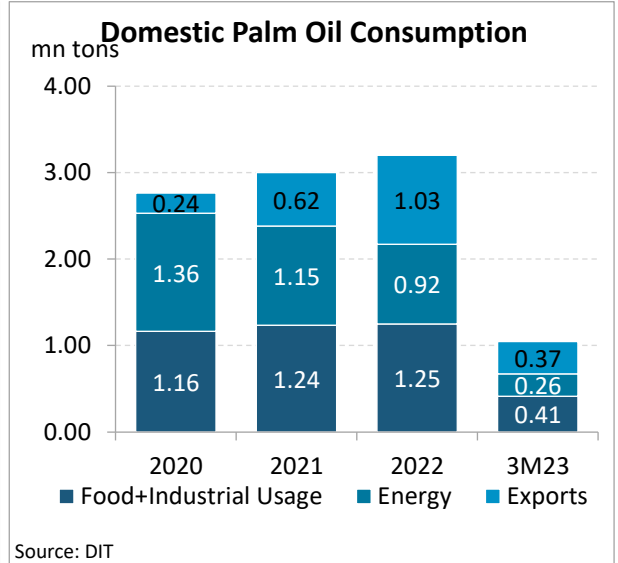
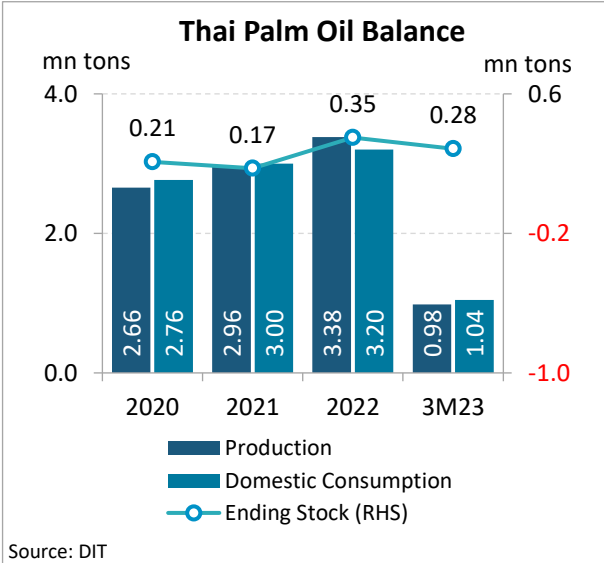
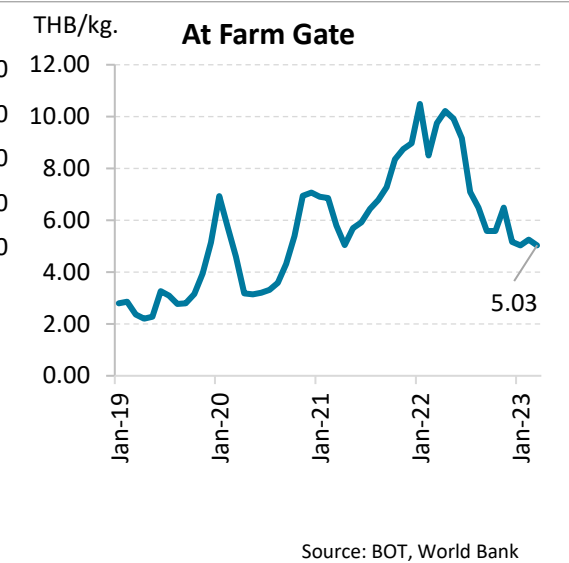
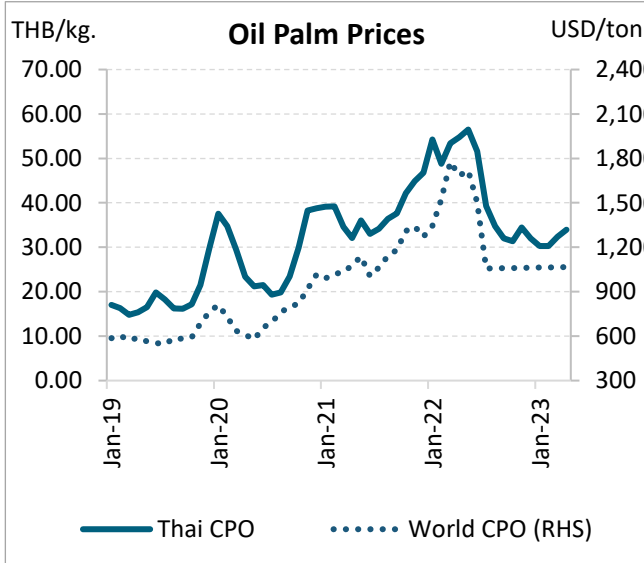
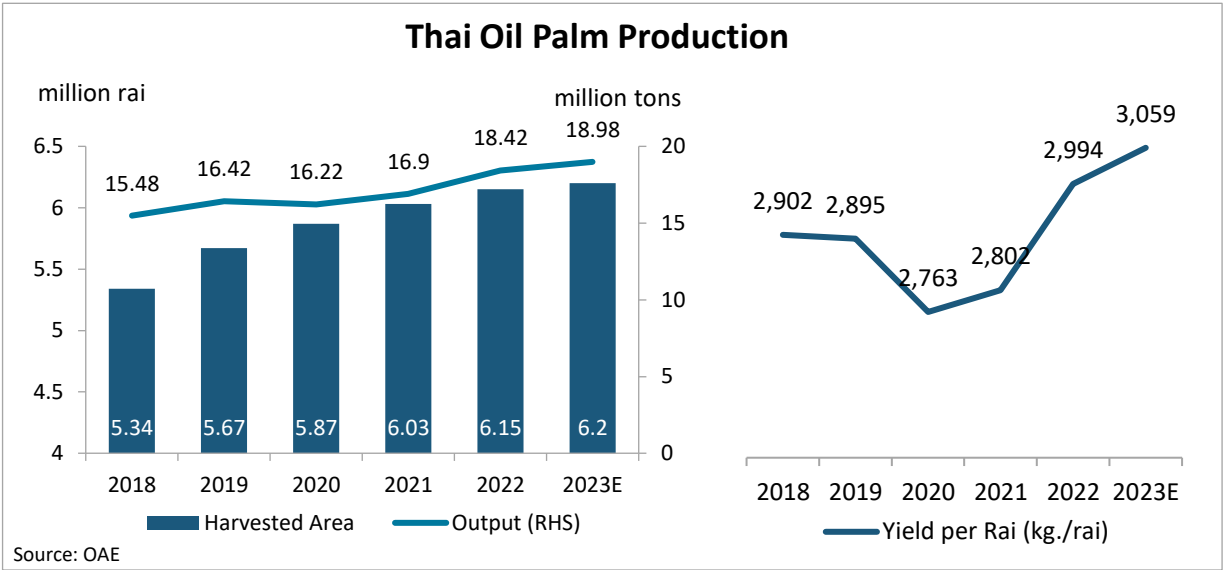
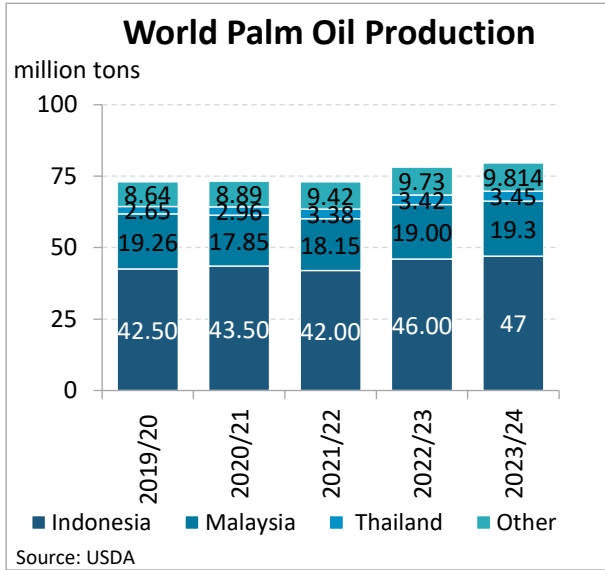
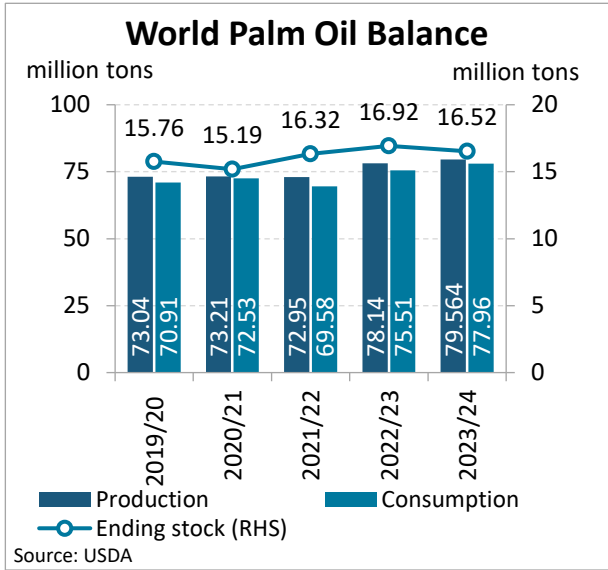
### Export Prices



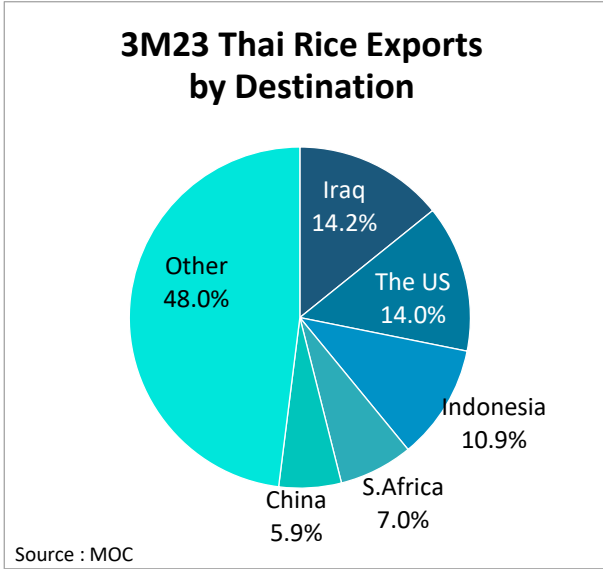
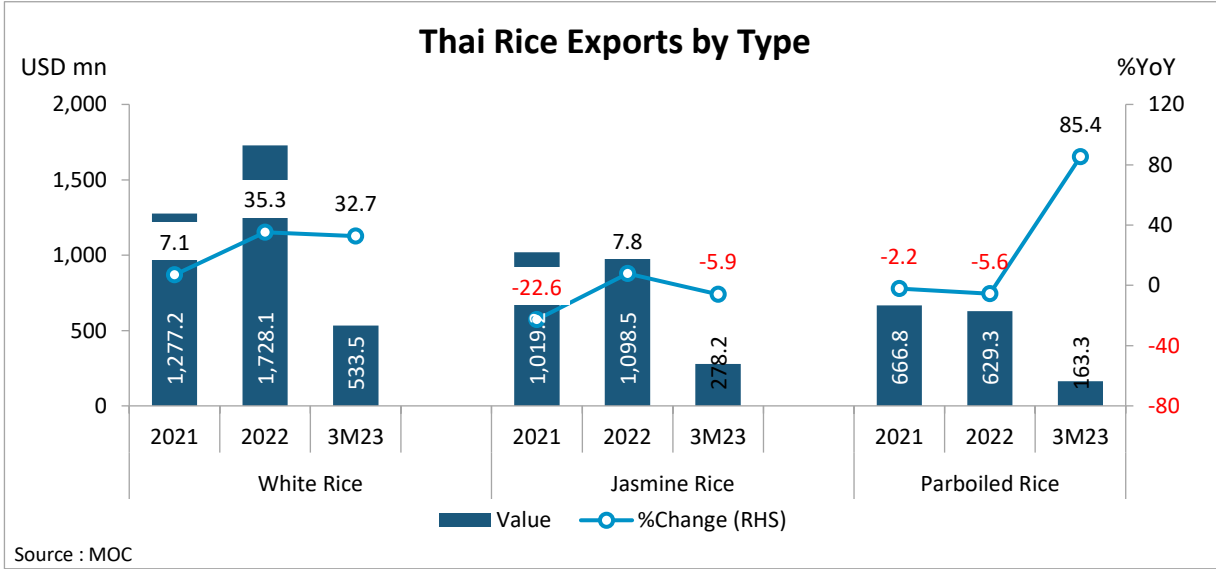
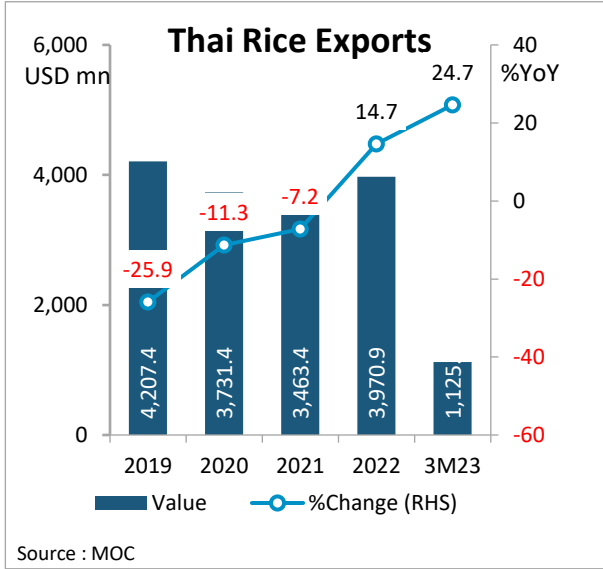
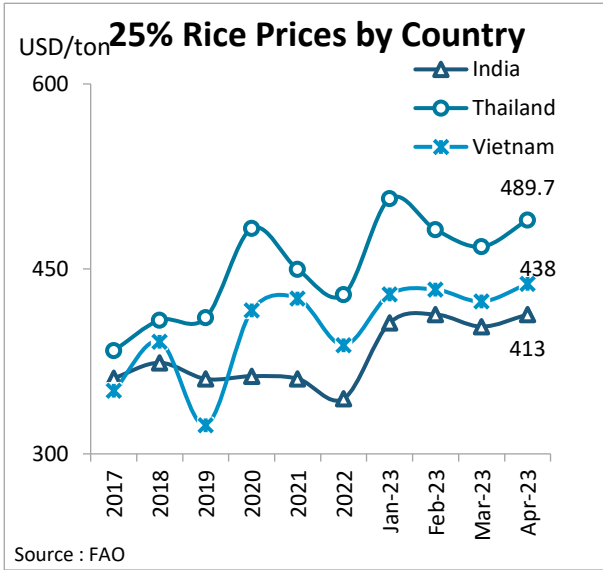
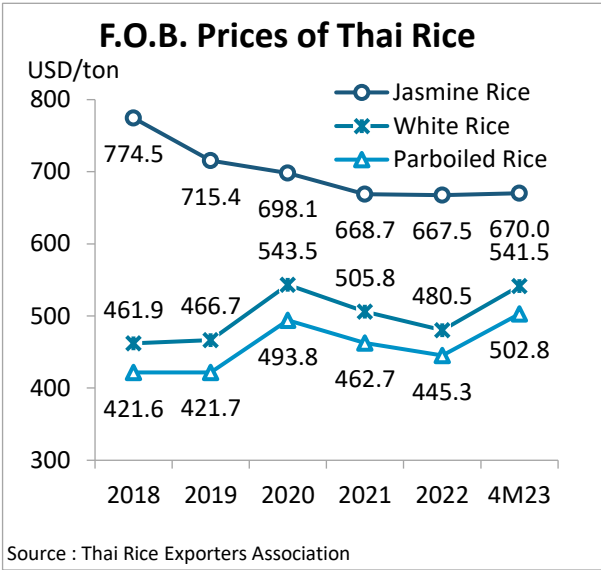
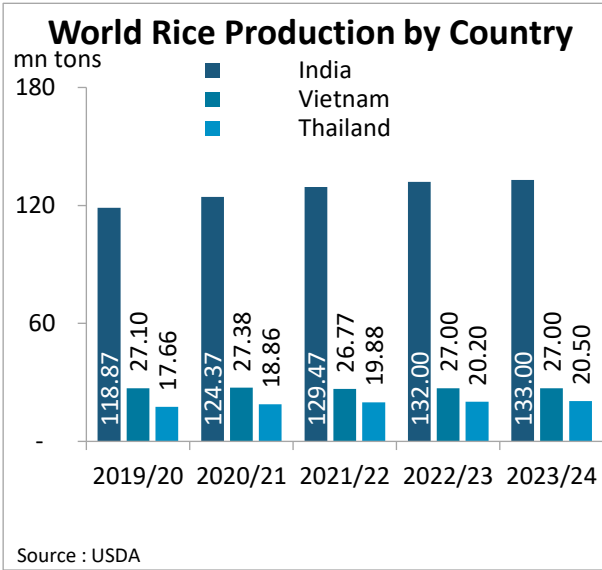
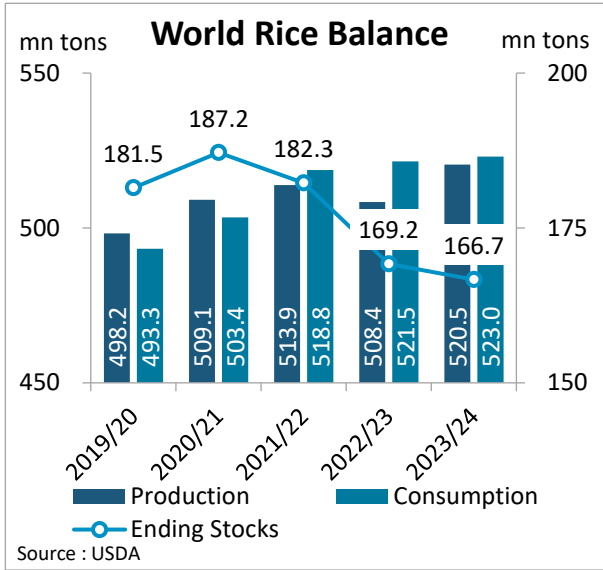
### Domestic Prices



# Oil Palm (ปาล์มน้ำมัน)

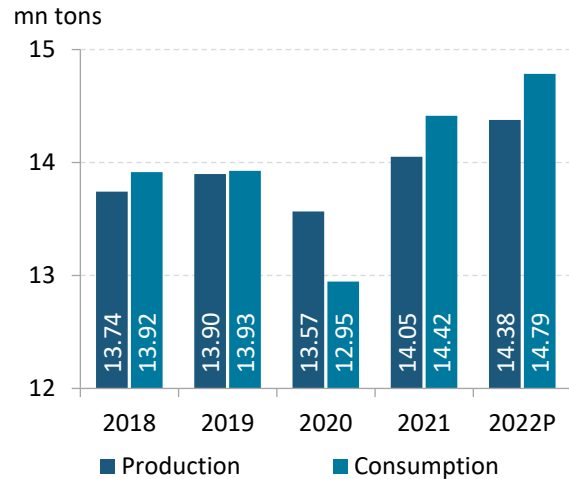


# Rice (ข้าว)



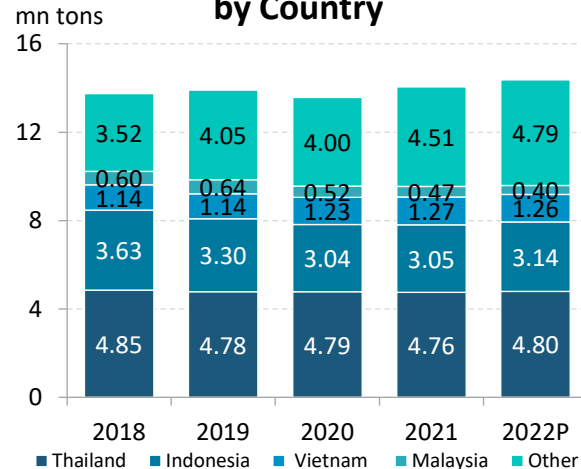
# Rubber (ยางพารา)

## World Natural Rubber Balance



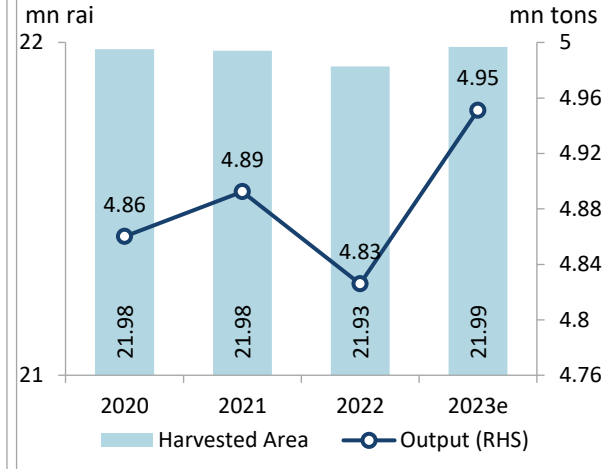
Source : OAE

## Natural Rubber Production by Country



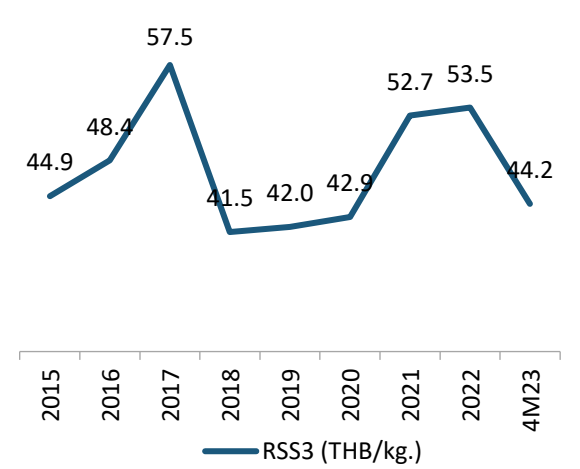
Source : OAE

## Thai Rubber Harvested Area



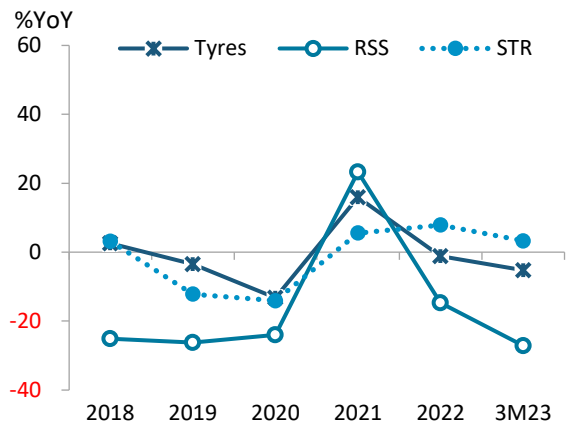
Source : OAE

## Thai Rubber Prices at Farm Gate



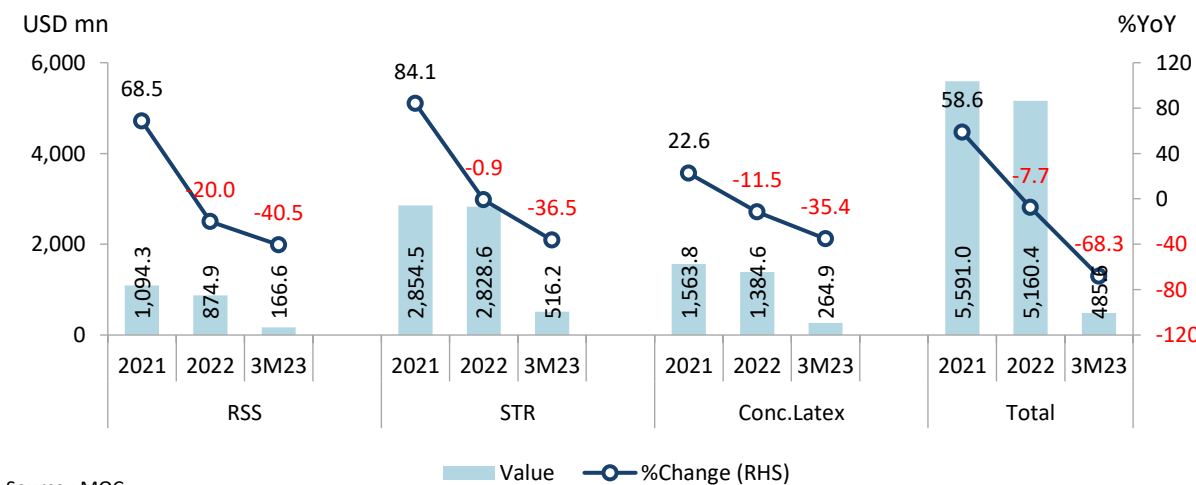
Source : OAE

## MPI of Thai Rubber Products



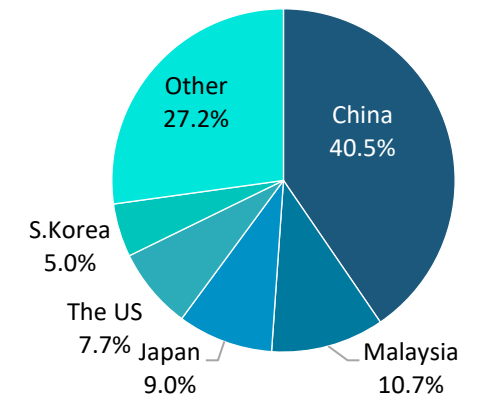
Source : OIE

## Thai Rubber Exports by Type



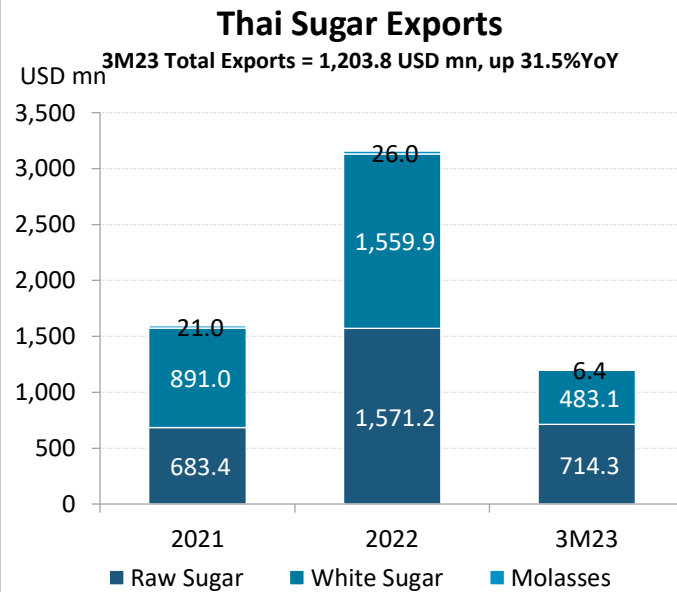
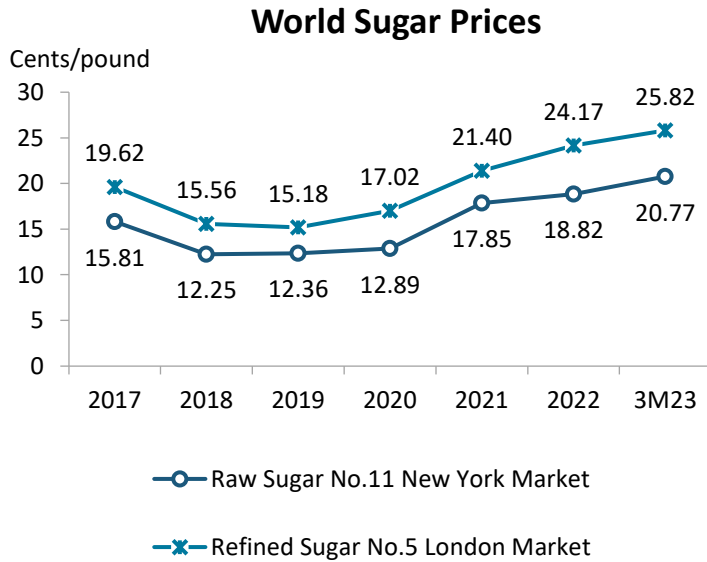
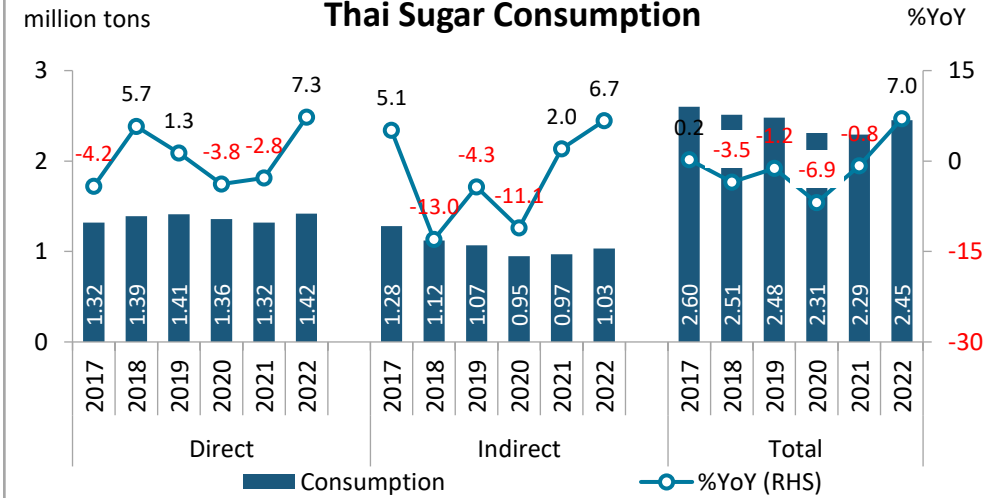
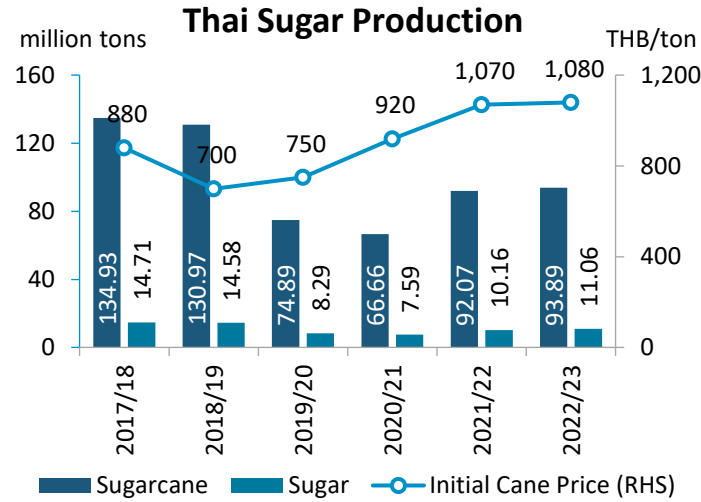
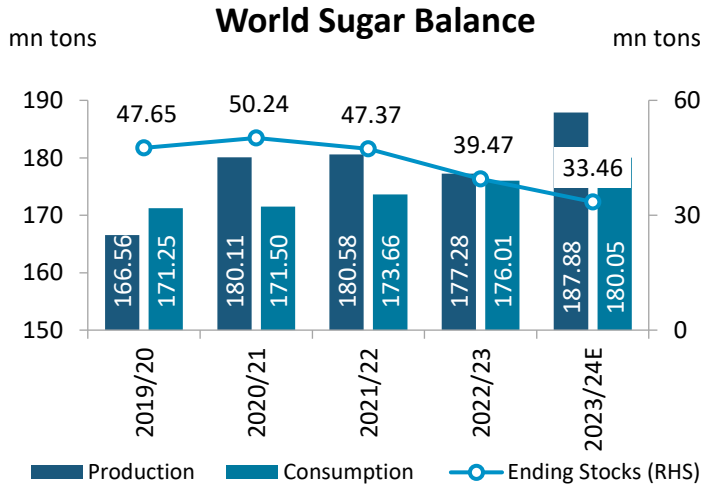
Source : MOC

## 3M23 Thai Rubber Exports by Destination

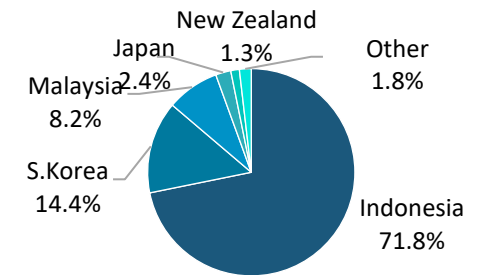


Source : MOC

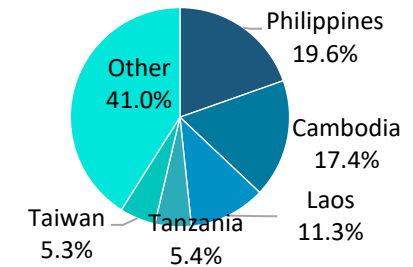
# Sugar (น้ำตาล)



### 3M23 Raw Sugar Exports by Destination

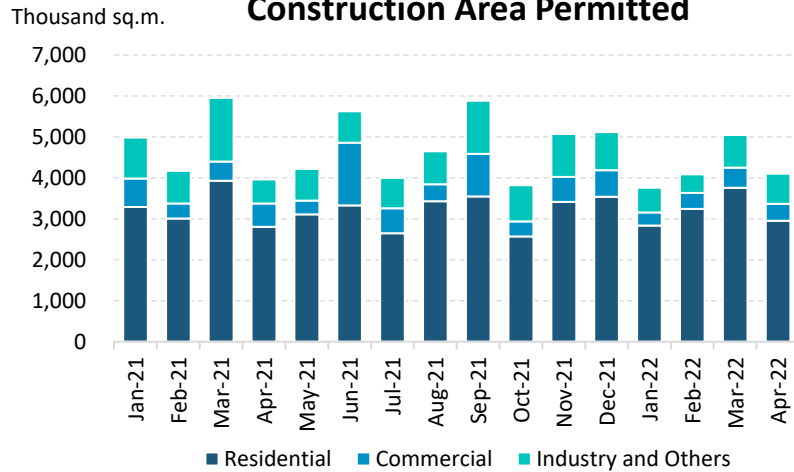


### 3M23 White Sugar Exports by Destination



# Cement (ปูนซีเมนต์)

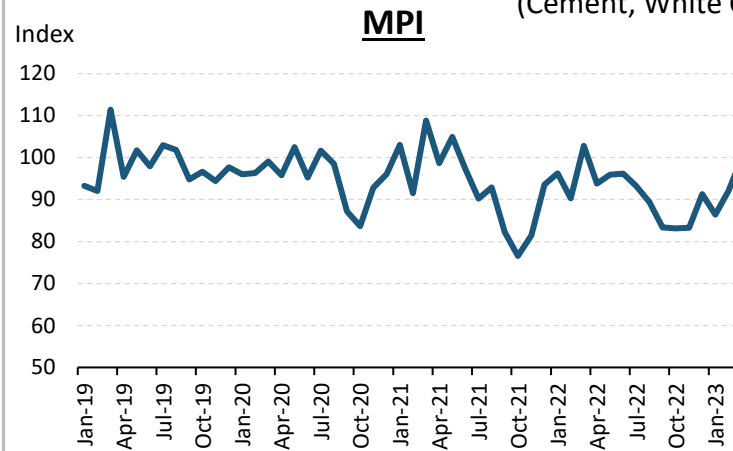
## Construction Area Permitted



Source: Toyota, FTI

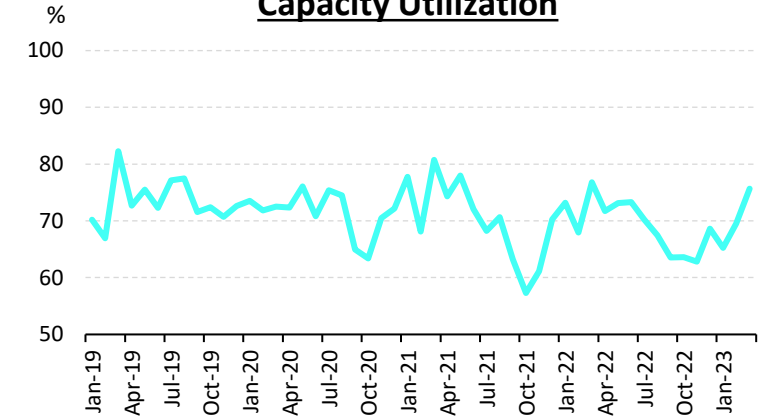
## MPI & Capacity Utilization

(Cement, White Cement and Clinkers)



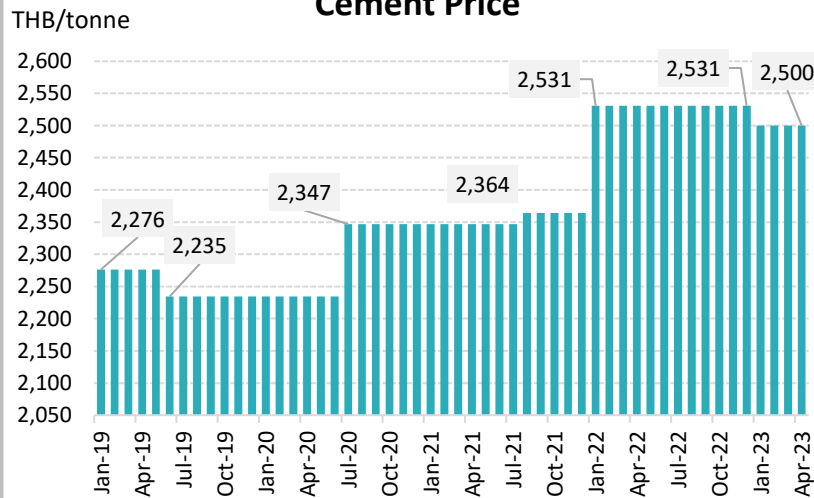
Note: MPI as of the base year (2016=100)  
Source: OIE

## Capacity Utilization



Source: Semiconductor Equipment Association of Japan (SEAJ)

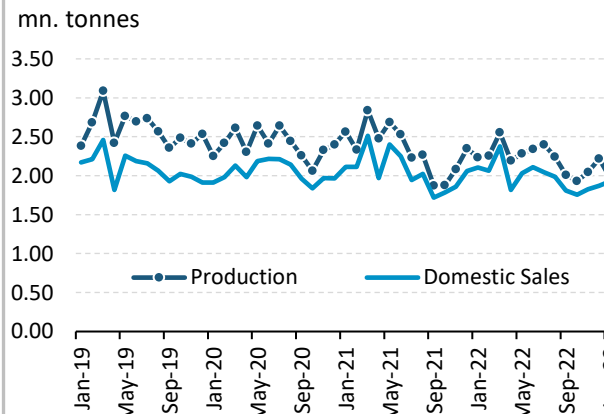
## Cement Price



Source: MOC

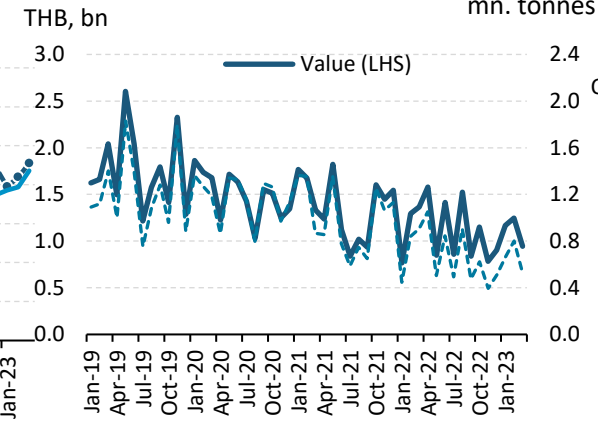
## Thai Cement Production, Domestic Sales and Exports

### Production & Domestic Sales



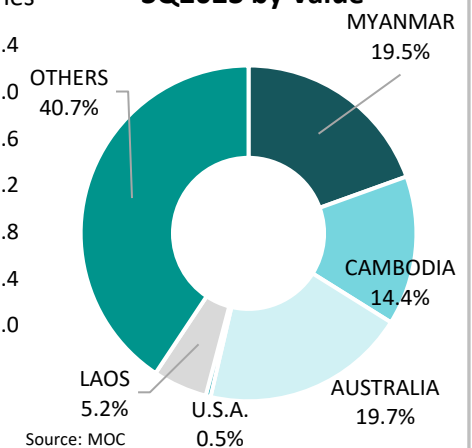
Source: OIE

### Thai Cement Exports



Source: MOC

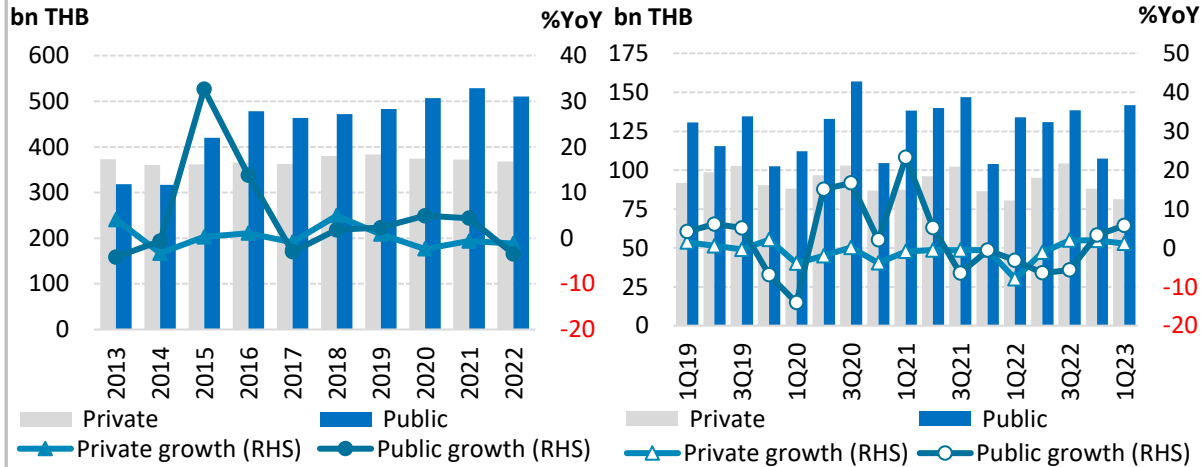
### Export Market Shares in 3Q2023 by Value



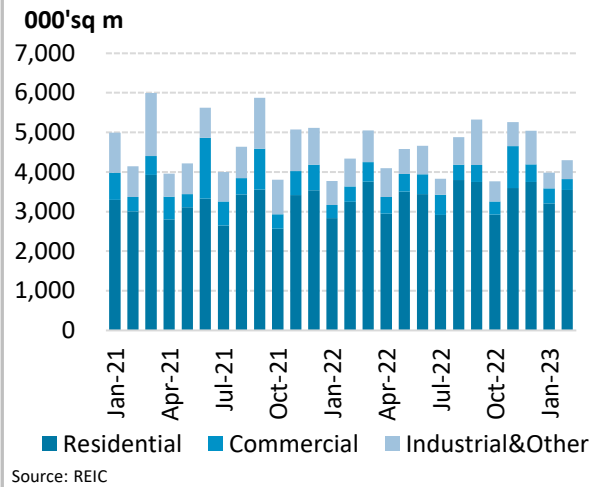
Source: MOC

# Construction Contractor (รับเหมาก่อสร้าง)

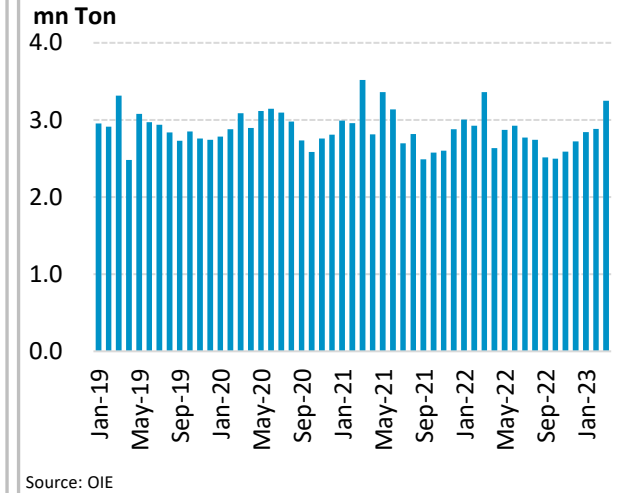
## Construction Gross Fixed capital (constant price)



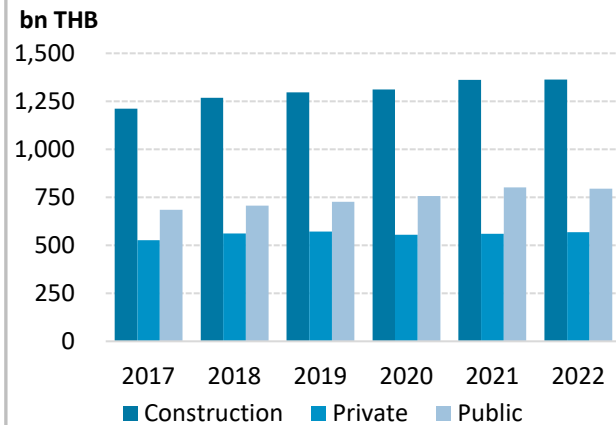
## Construction areas permitted



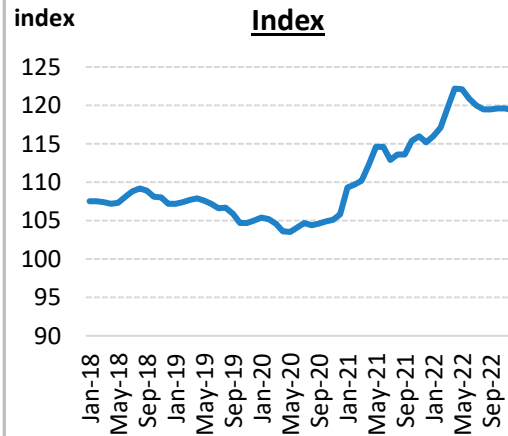
## Domestic Cement Sales



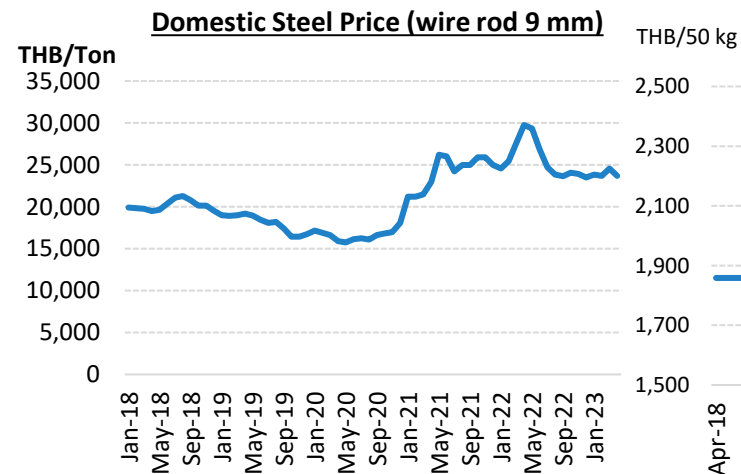
## Construction Gross Fixed capital (current price)



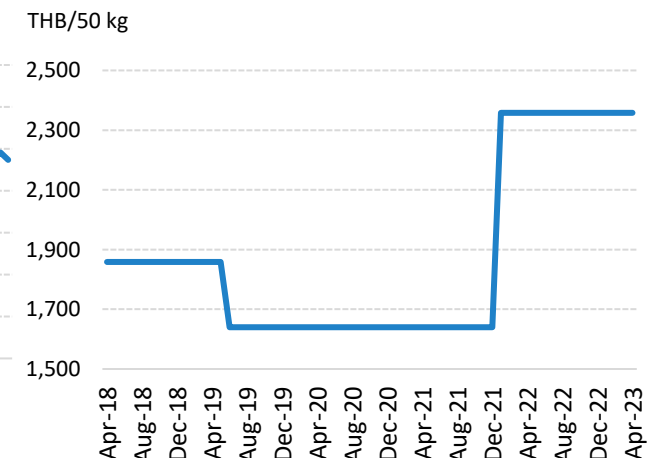
## Construction Materials Price Index



## Construction Material Price

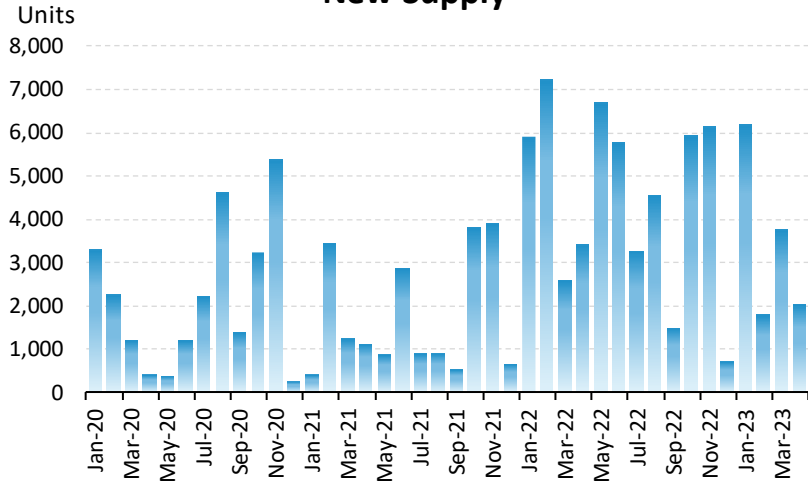


## Domestic Cement Price



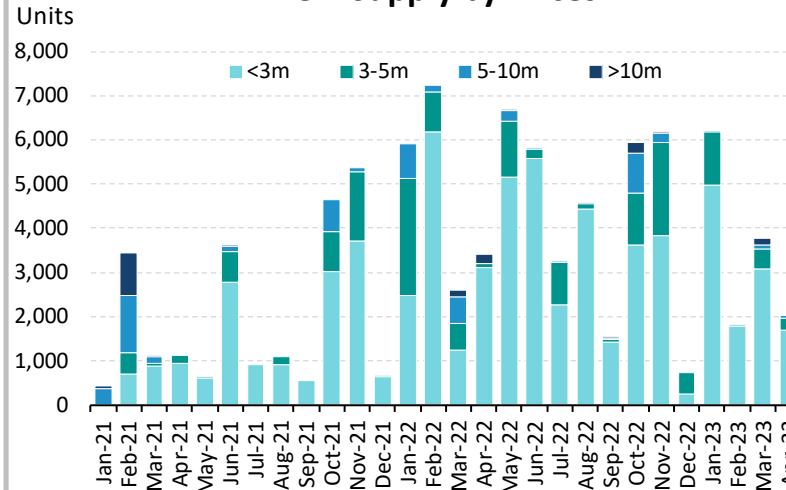
# Condominiums in BRM (คอนโดมิเนียม)

### New Supply



Source: AREA

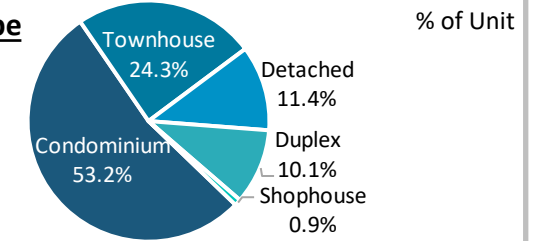
### New Supply by Prices



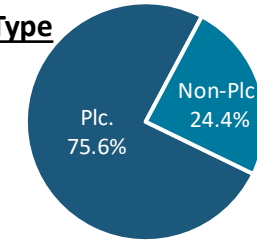
Source: AREA

### Share of Newly Launched Project (4M23)

#### By Project Type

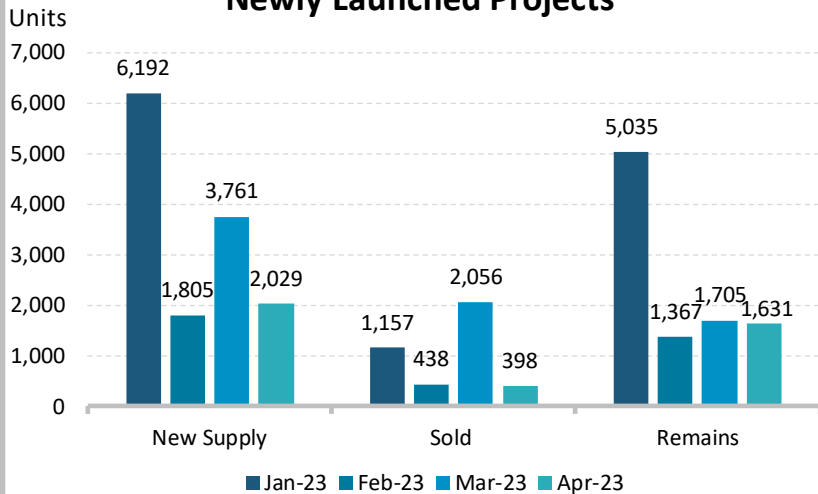


#### By Company Type



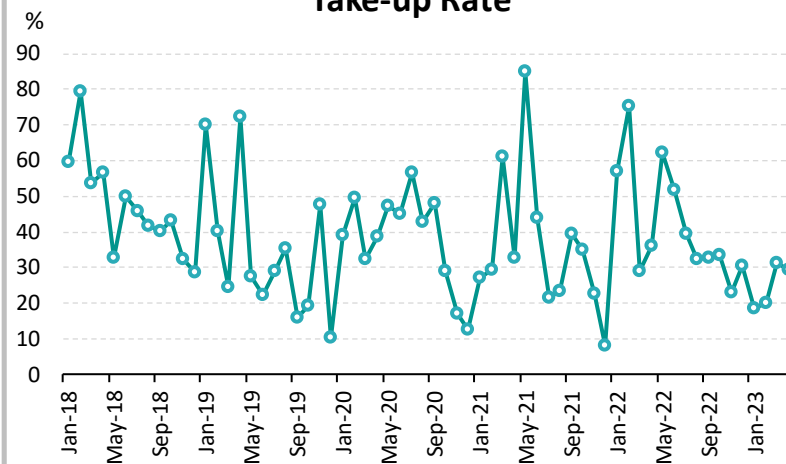
Source: AREA

### Newly Launched Projects



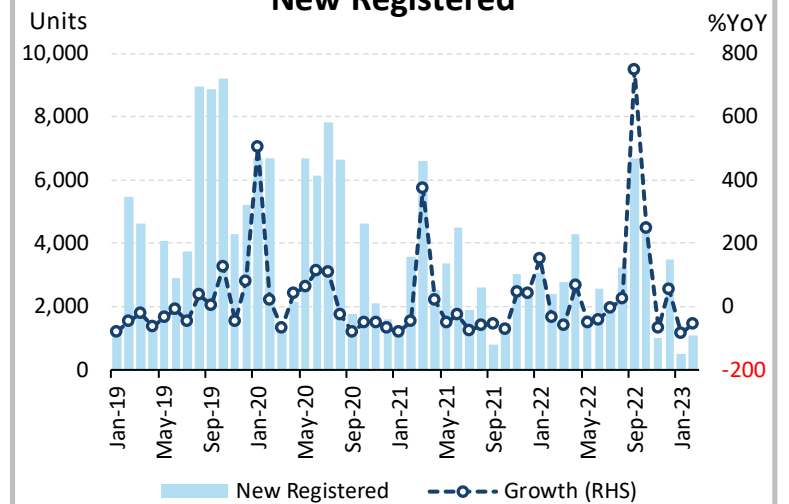
Source: AREA

### Take-up Rate



Source: AREA

### New Registered

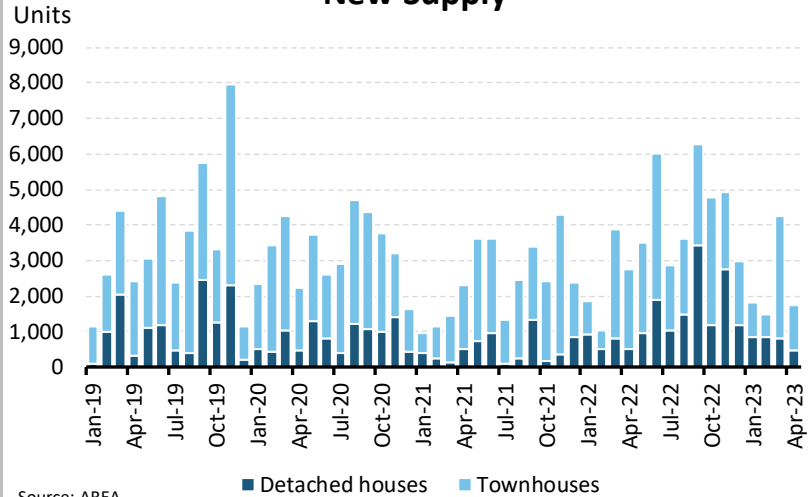


Source: BOT



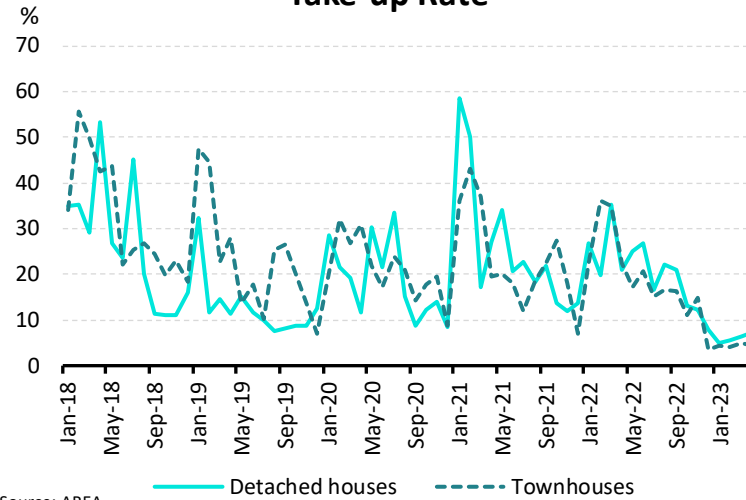
# Low-rise Housing in BRM (บ้านจัดสรร)

### New Supply



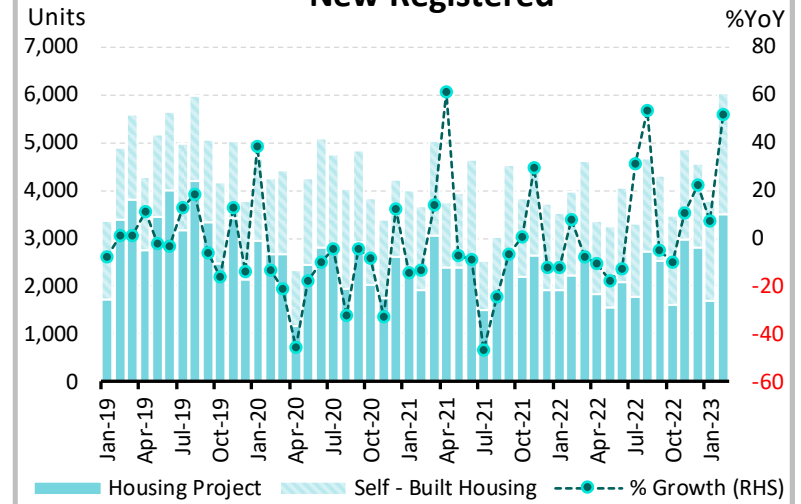
Source: AREA

### Take-up Rate



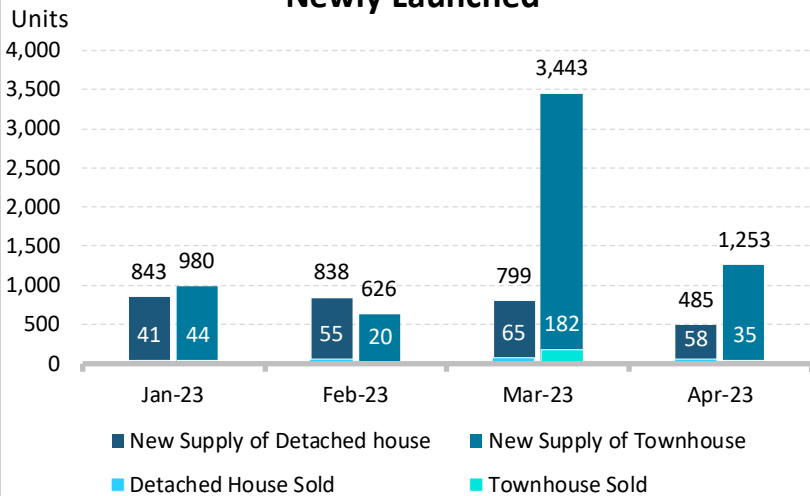
Source: AREA

### New Registered



Source: BOT

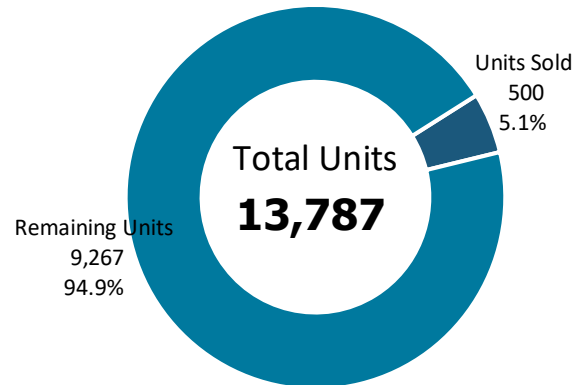
### Newly Launched



Source: AREA

### Low-Rise Housing Market\* (4M23)

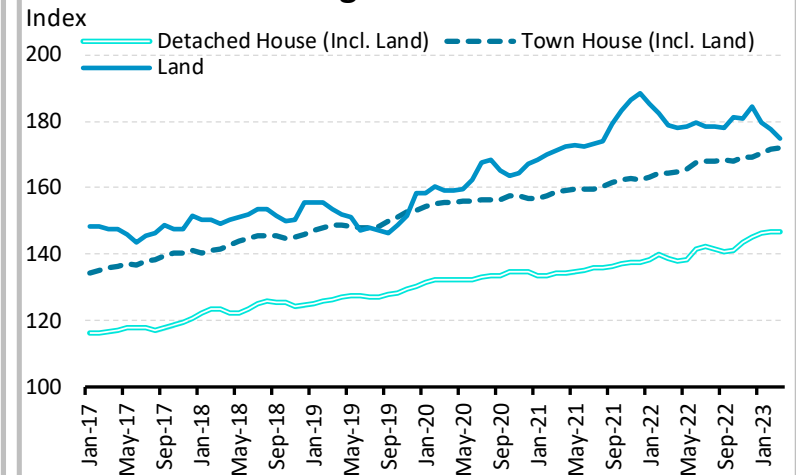
(Newly Launched)



Source: AREA

\*Detached house And Townhouse

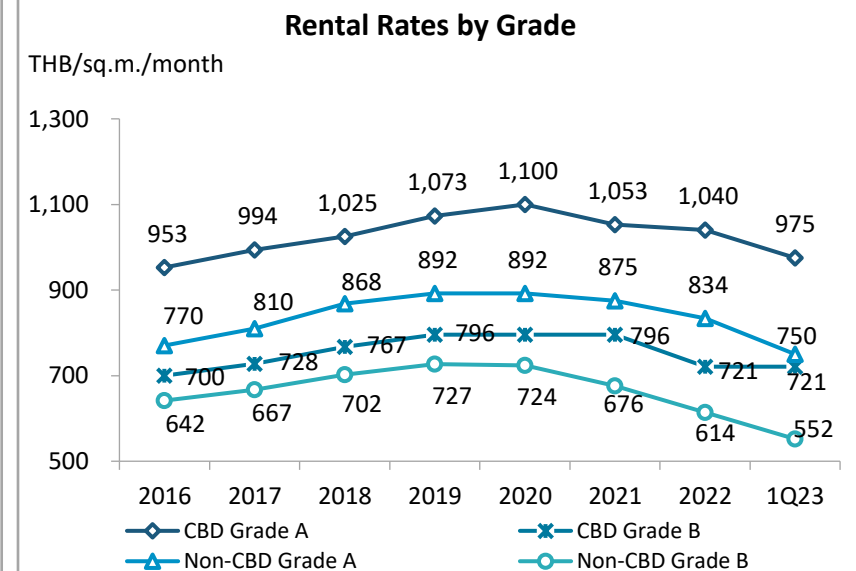
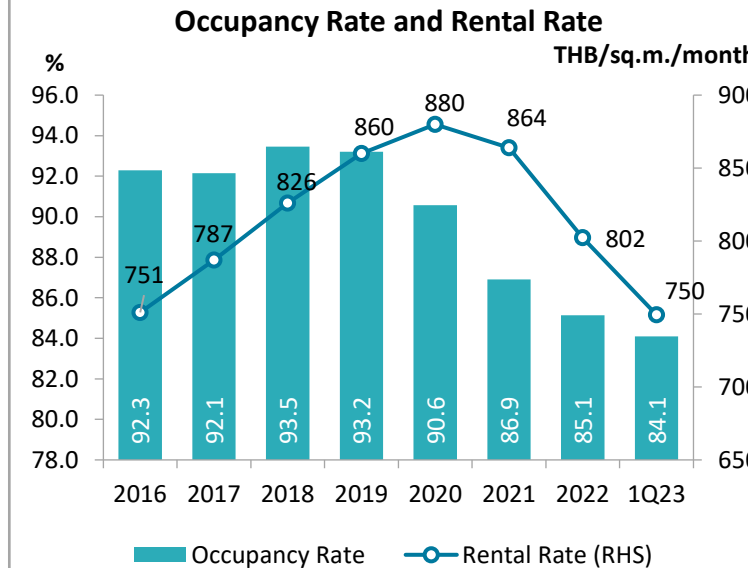
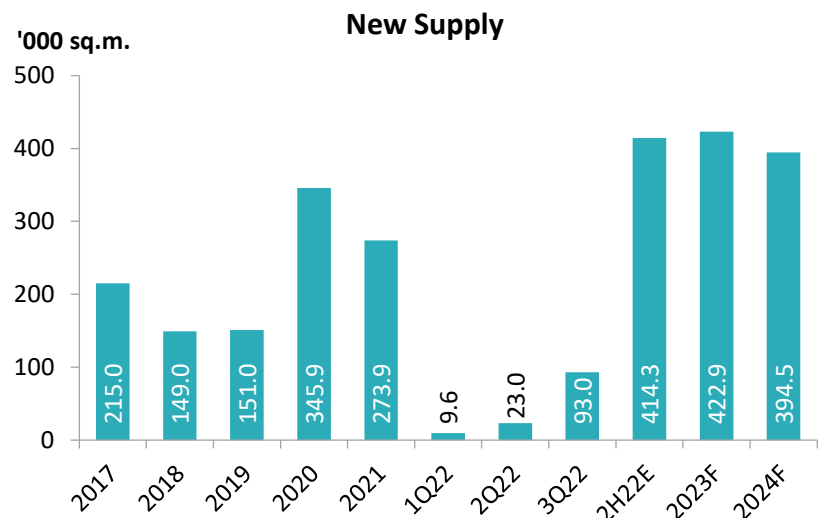
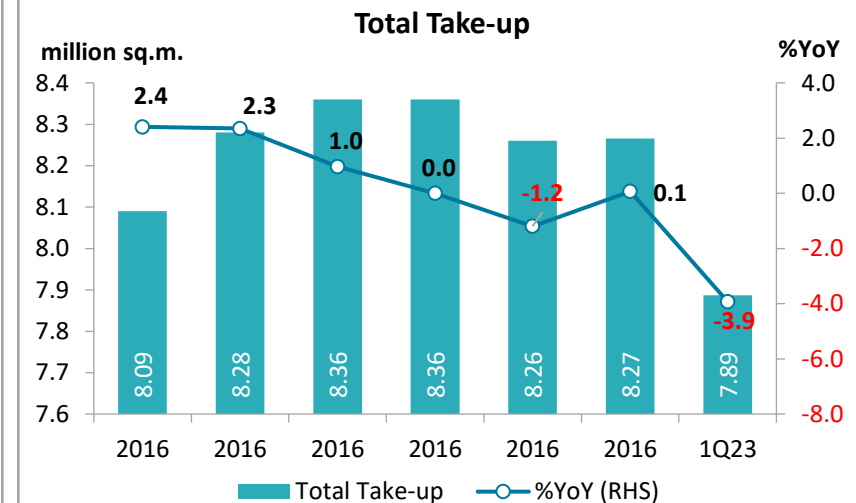
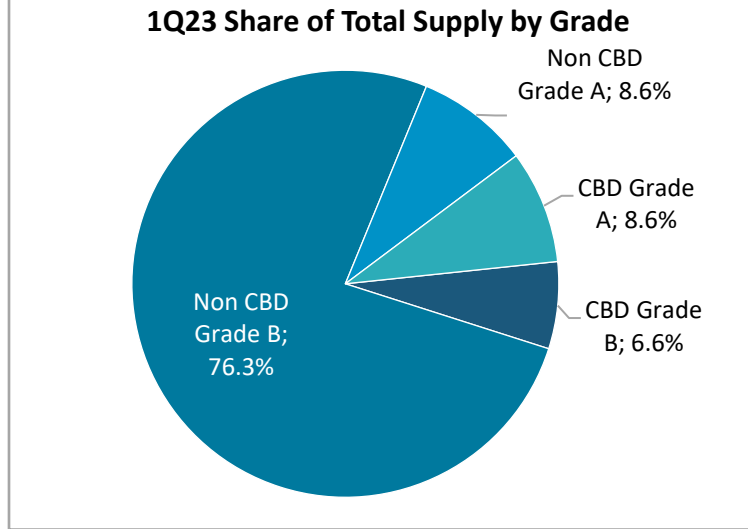
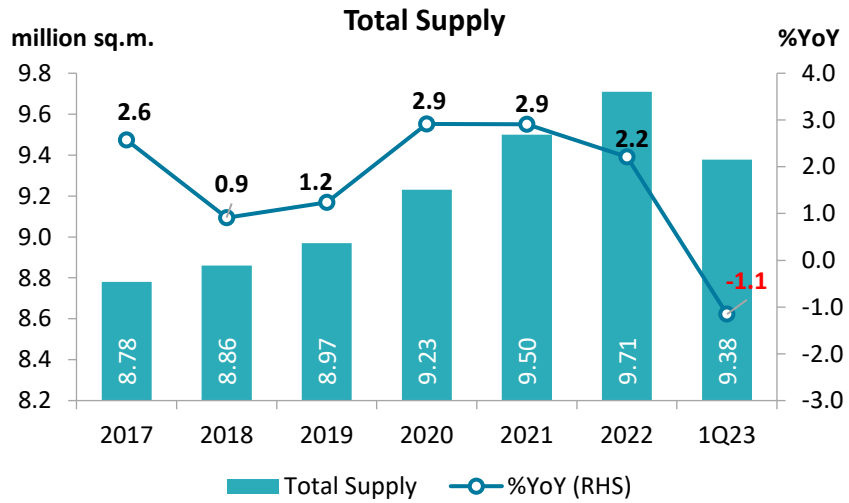
### Housing Price Index



Note: based year 2011 = 100

Source: BOT

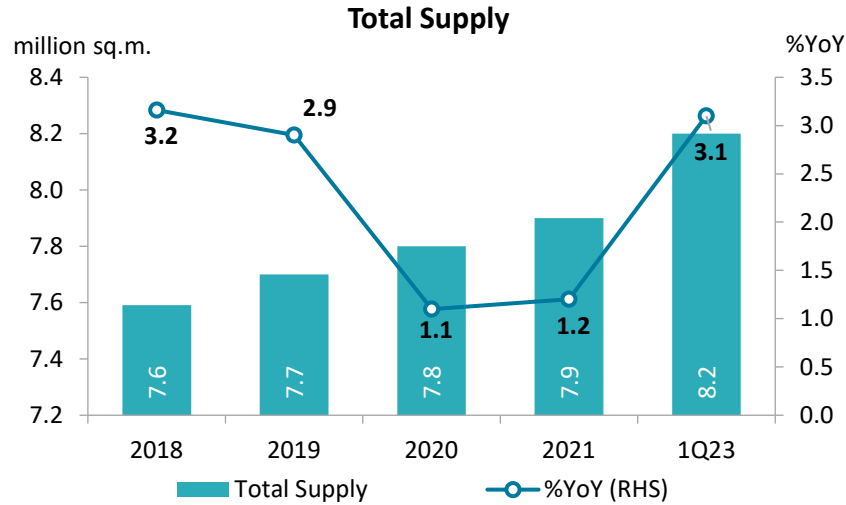
# Office Building in BMR (อาคารสำนักงานให้เช่า)



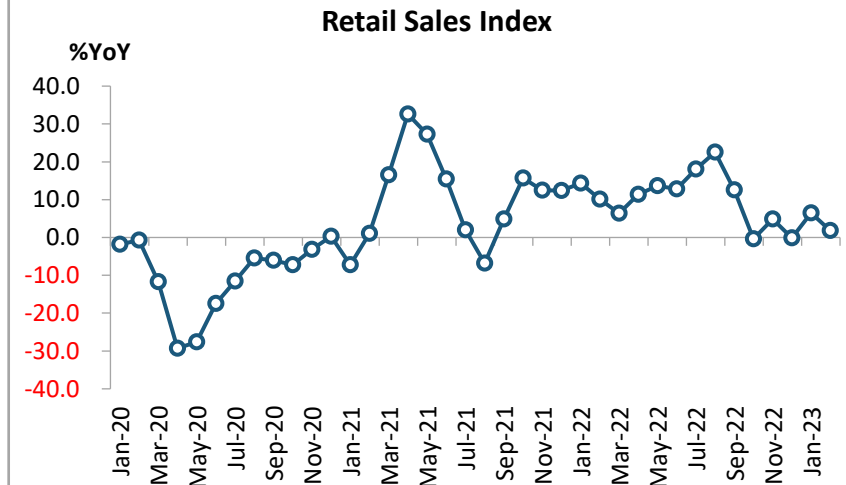
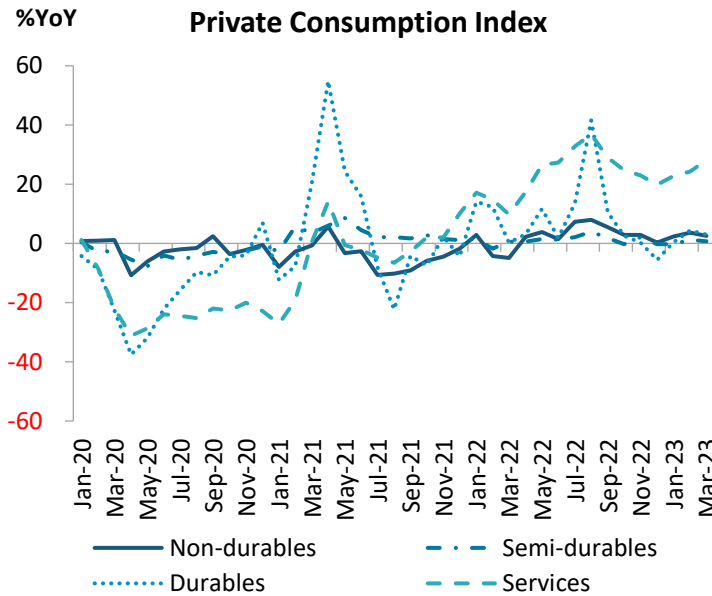
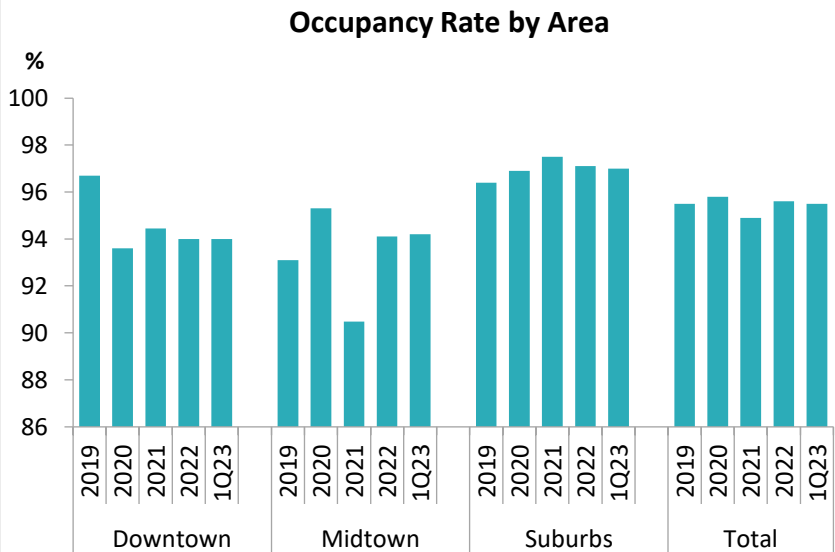
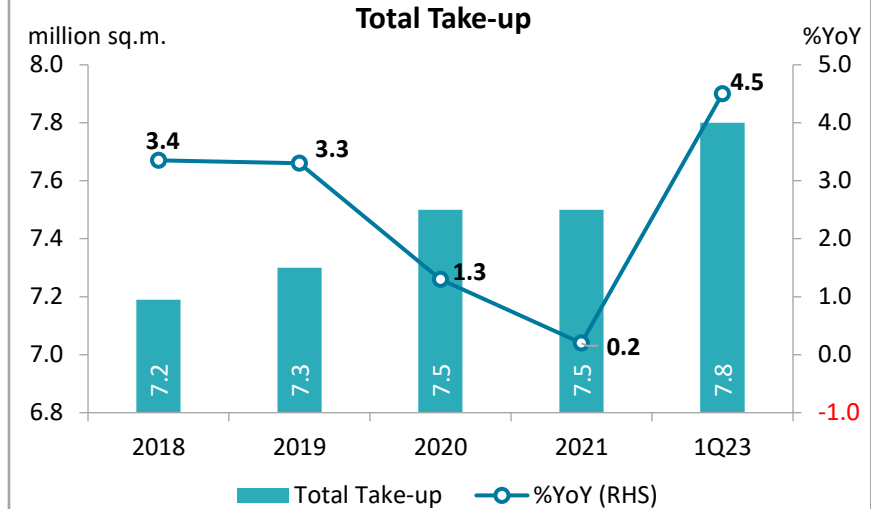
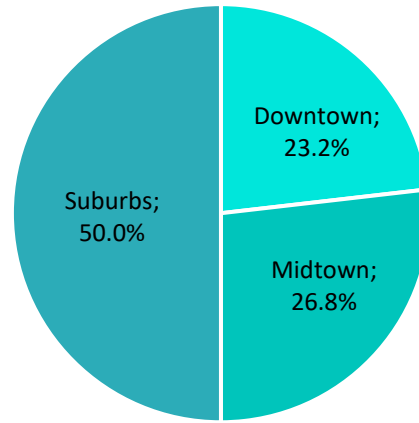
Source: CBRE Note: E=Estimate, F=Forecast

Source: LH Business Research analysis

# Retail Space in BMR (พื้นที่ค้าปลีก)



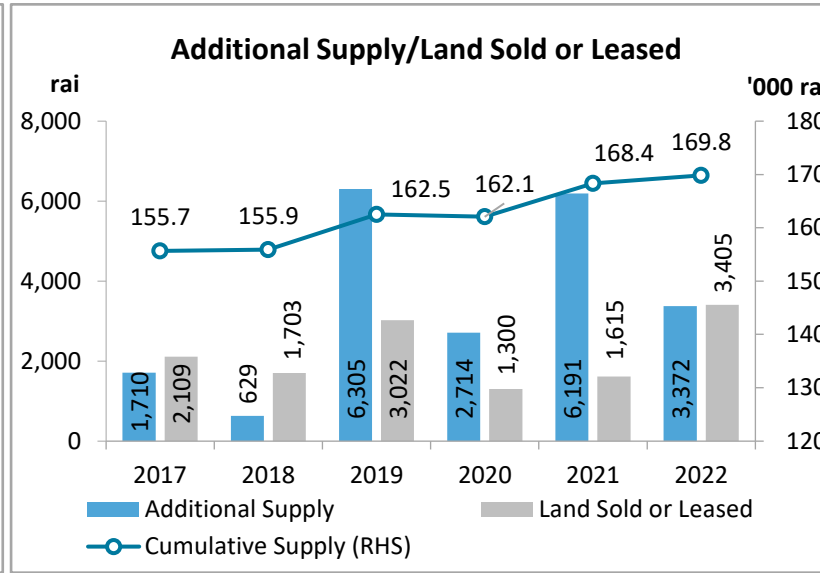
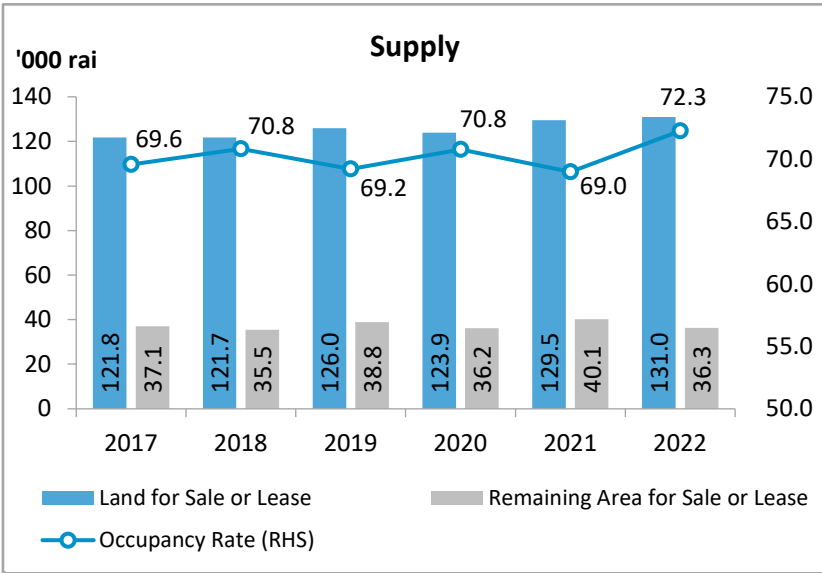
### 1Q23 Share of Total Supply by Grade



Source: CBRE, BOT

Source: LH Business Research analysis

# Industrial Estate (นิคมอุตสาหกรรม)

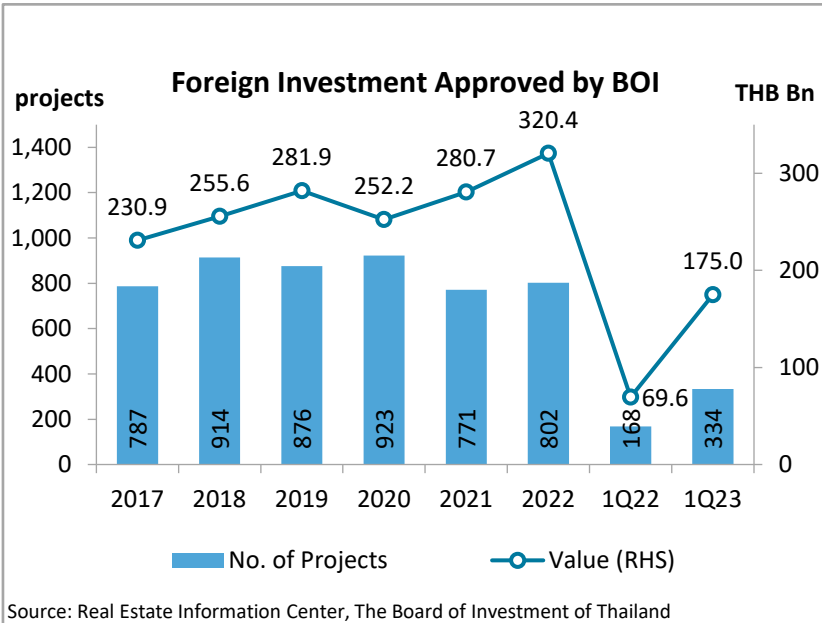


### Additional Supply (rai)

Year	BKK& Vicinity	North	Central	East	NE	West	South	Total
2020	-	-	1,392	1,322	-	-	-	2,714
2021	-	-	-	6,191	-	-	-	6,191
2022	-	-	-	3,372	-	-	-	3,372

### Land Sold or Leased (rai)

Year	BKK& Vicinity	North	Central	East	NE	West	South	Total
2020	42	202	11	1,041	-	4	-	1,300
2021	117	-	113	1,325	60	-	-	1,615
2022	258	17	-	2,935	16	20	159	3,405



### Foreign Investment Projects Classified by Sector

Unit: THB Bn	2020		2021		2022	
	No. of Projects	Value	No. of Projects	Value	No. of Projects	Value
Agricultural Products	57	8.2	72	24.9	66	25.0
Minerals and Ceramics	32	21.9	14	5.7	22	23.2
Light Industry/Textiles	64	8.1	57	43.1	43	30.5
Metal Products and Machinery	234	77.9	179	45.1	183	83.1
Electrical and Electronic Products	233	55.2	186	67.8	175	79.0
Chemicals and Paper	57	17.1	64	59.4	58	21.2
Services	245	63.5	199	34.7	255	58.5
Technology and Innovation Development	1	0.4	0	0	0	0
<b>Total</b>	<b>923</b>	<b>252.2</b>	<b>771</b>	<b>280.7</b>	<b>802</b>	<b>320.4</b>

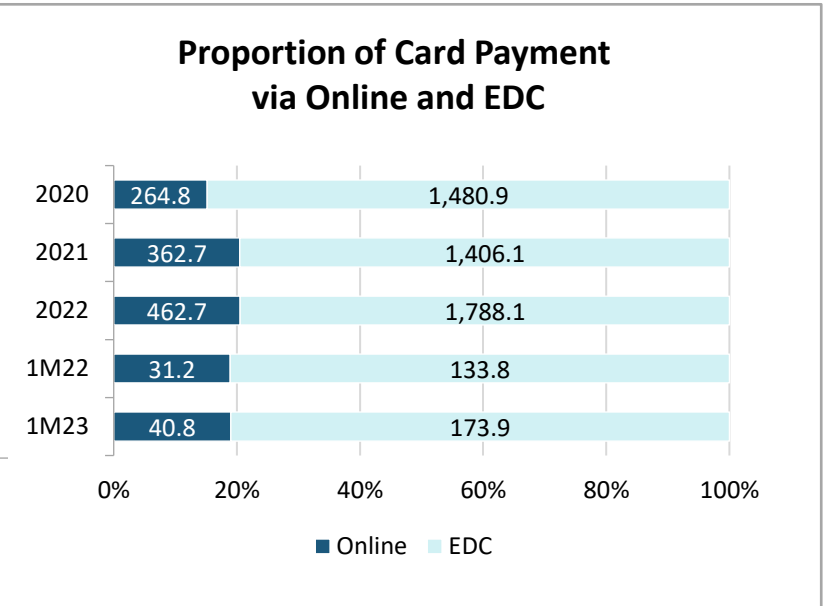
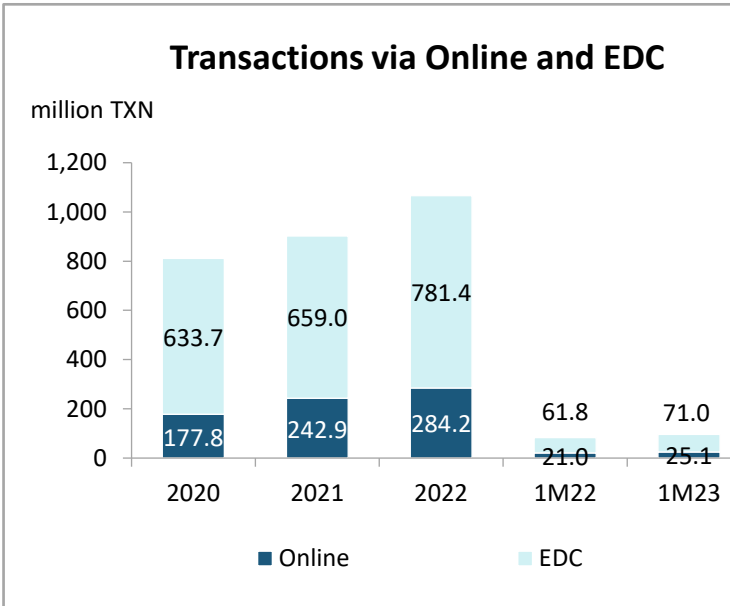
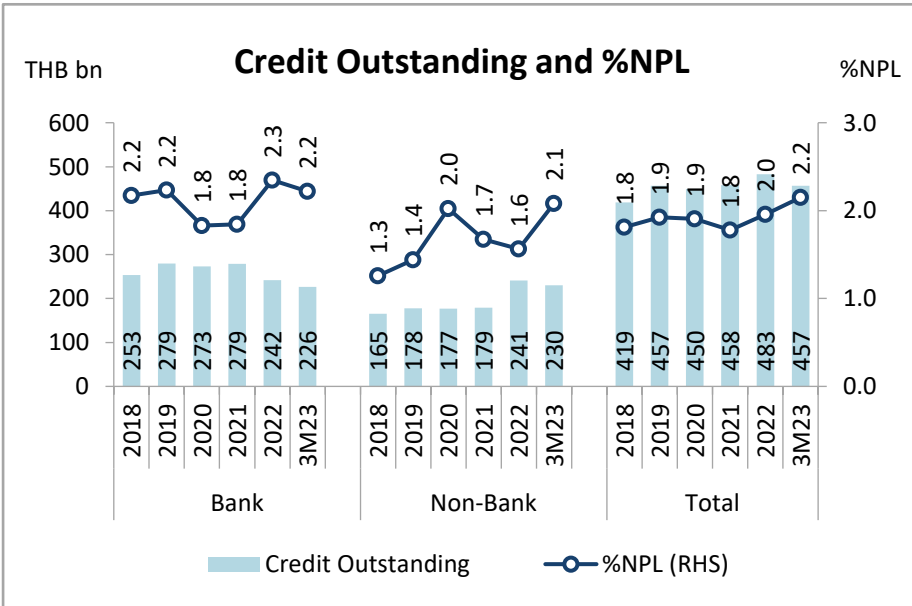
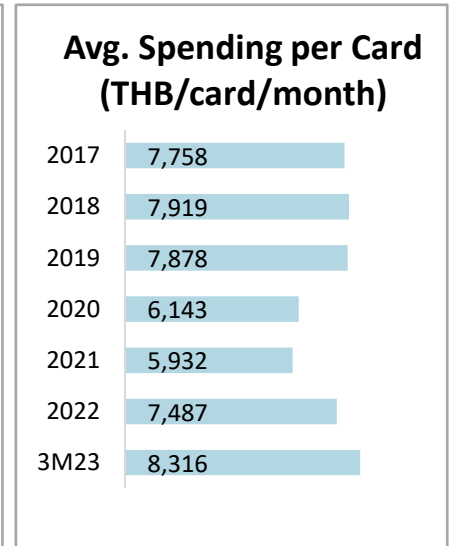
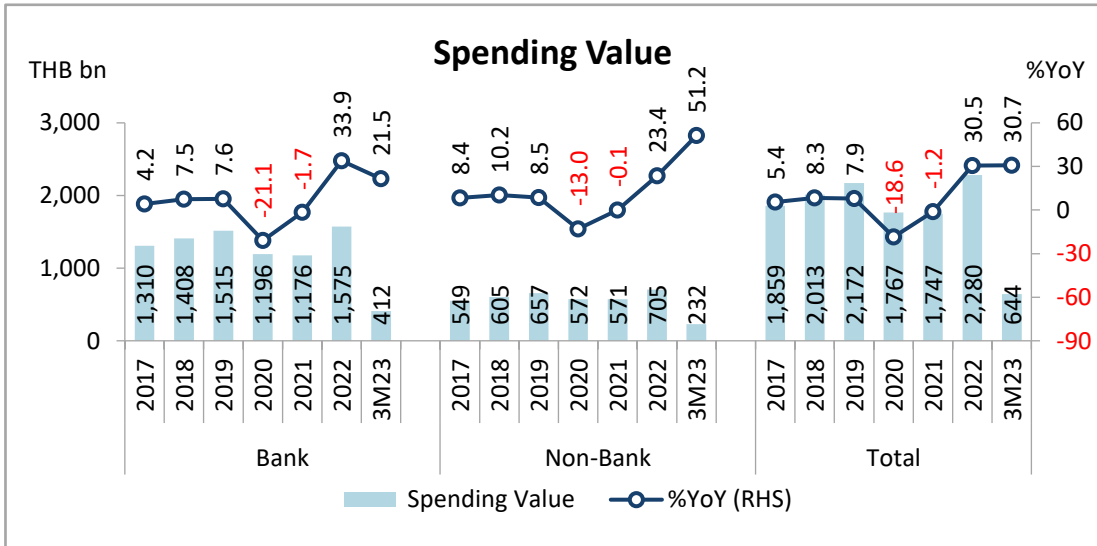
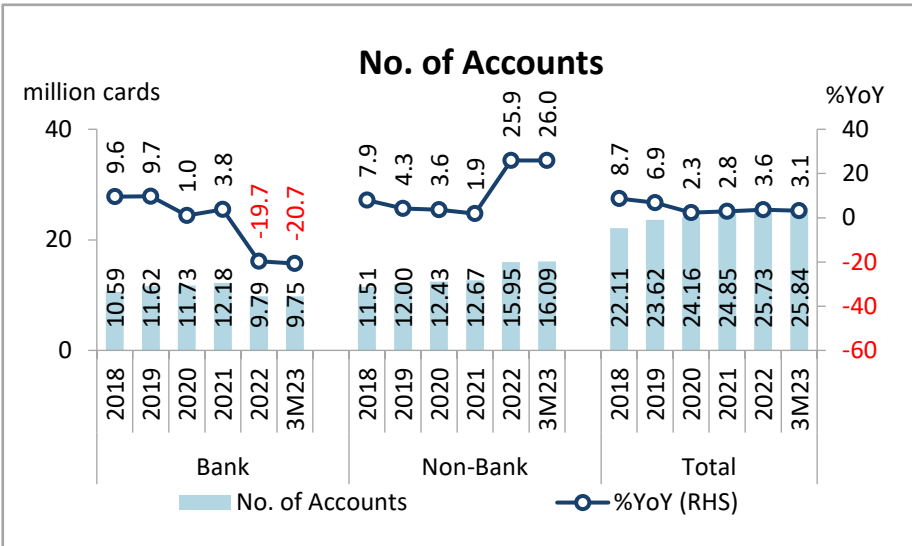
### Top 10 Foreign Investment 1Q2023 Approved by BOI

Ranking	Country	No. of Projects	Value (THB Bn)
1	Singapore	43	42,442
2	China	54	33,498
3	Japan	97	27,886
4	South Korea	6	19,574
5	The US	7	13,908
6	Netherlands	19	7,212
7	Hong Kong	14	5,087
8	Switzerland	5	4,157
9	Australia	5	3,413
10	Taiwan	26	3,396

Source: Real Estate Information Center, The Board of Investment of Thailand

Source: LH Business Research analysis

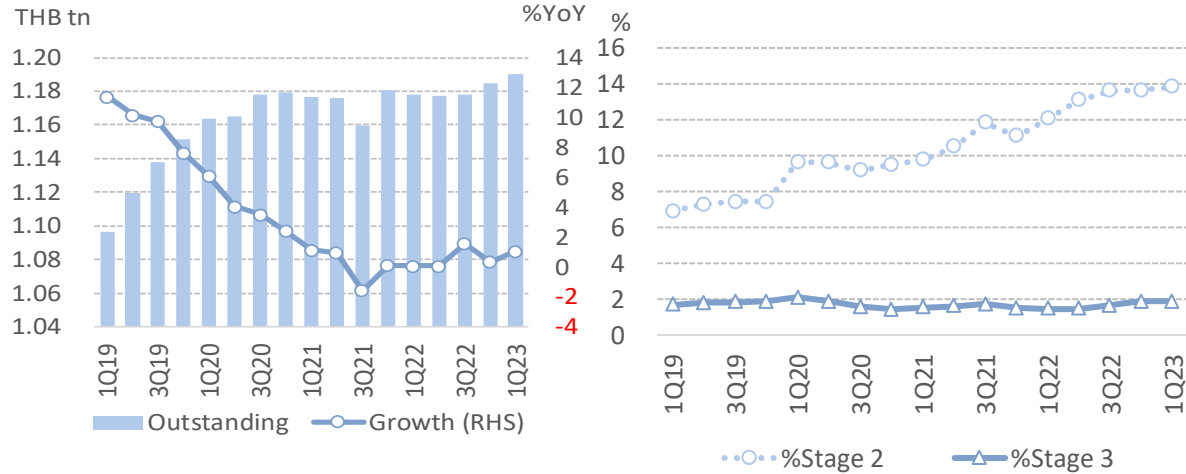
# Credit Card (บัตรเครดิต)



Note: EDC stands for Electronic Data Capture.

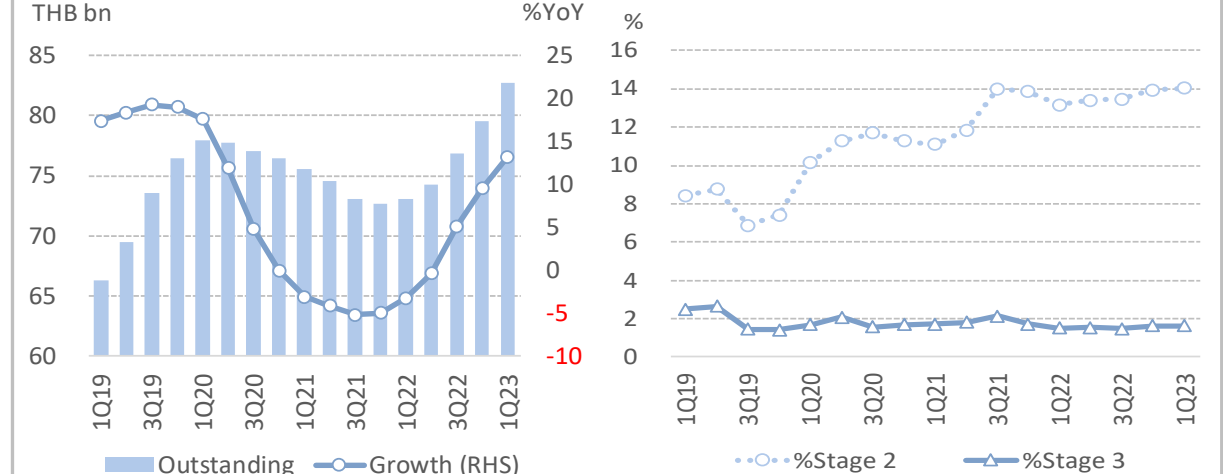
# Auto Hire-Purchase (เช่าซื้อรถยนต์)

## Hire-Purchase Loan Outstanding & Quality



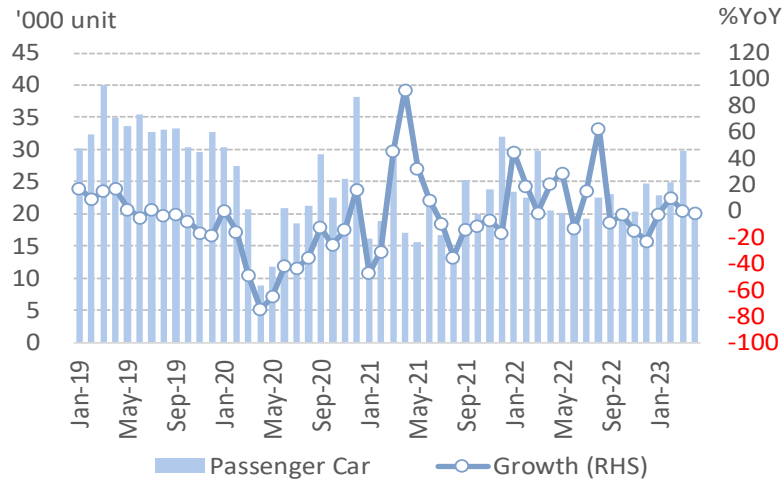
Source: BOT

## Title Loan Outstanding & Quality



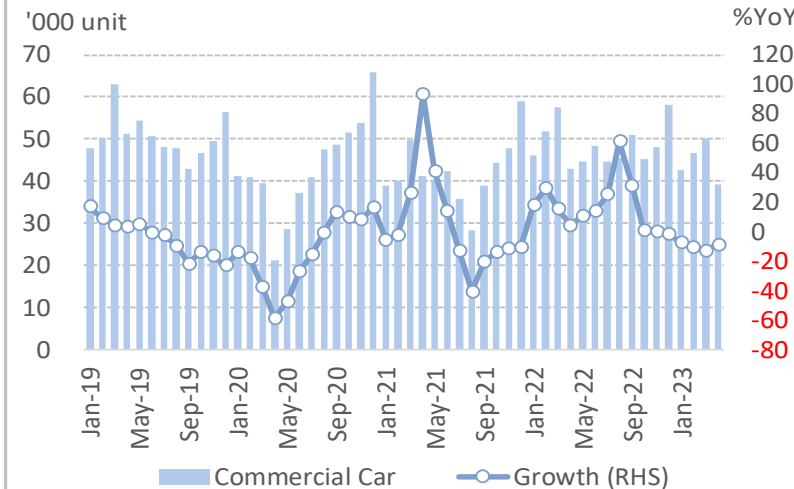
Source: BOT

## Passenger Car sales



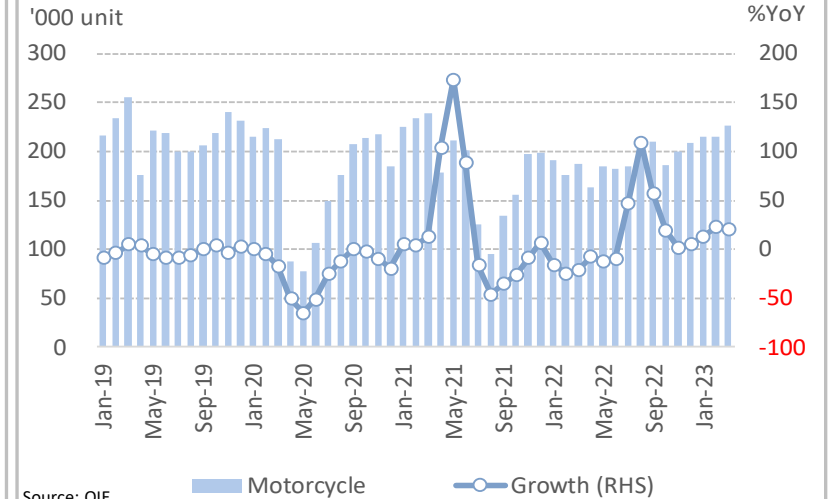
Source: TOYOTA

## Commercial Car sales



Source: TOYOTA

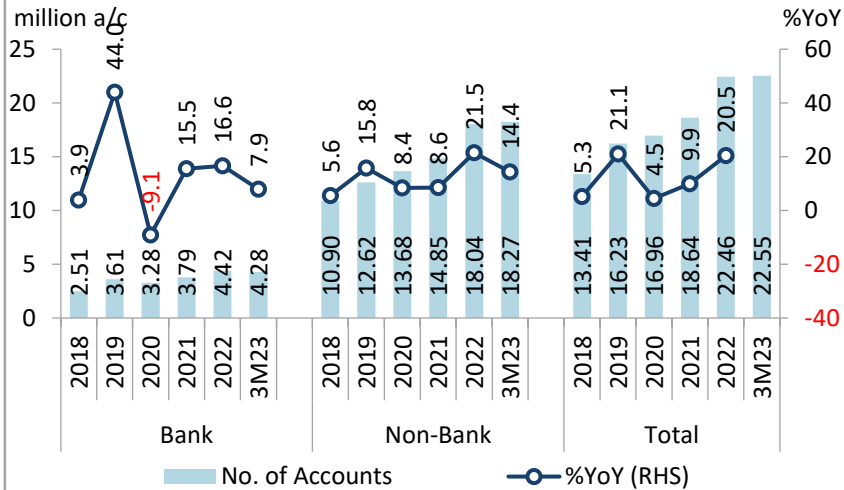
## Motorcycle sales



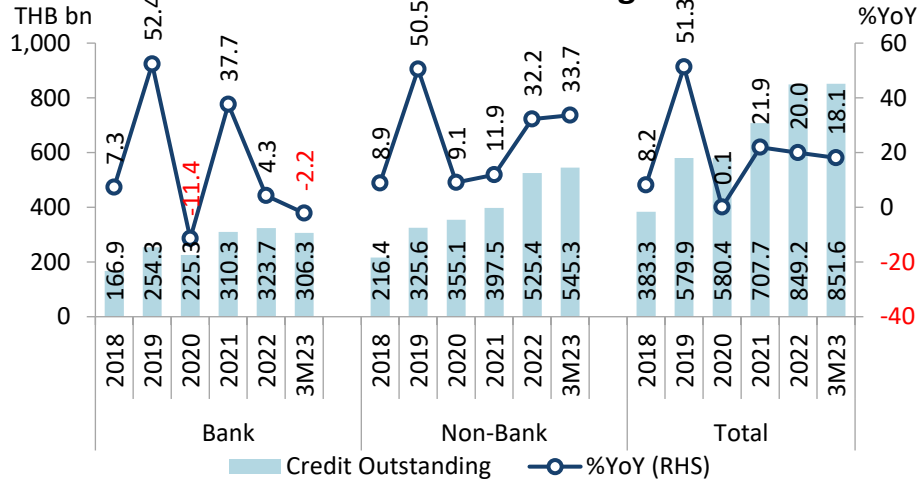
Source: OIE

# Personal Loan (สินเชื่อส่วนบุคคล)

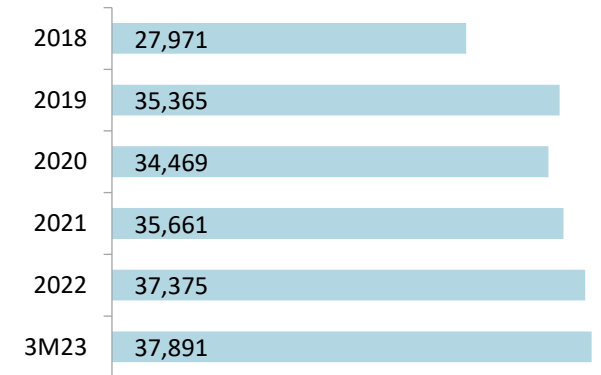
### No. of Accounts



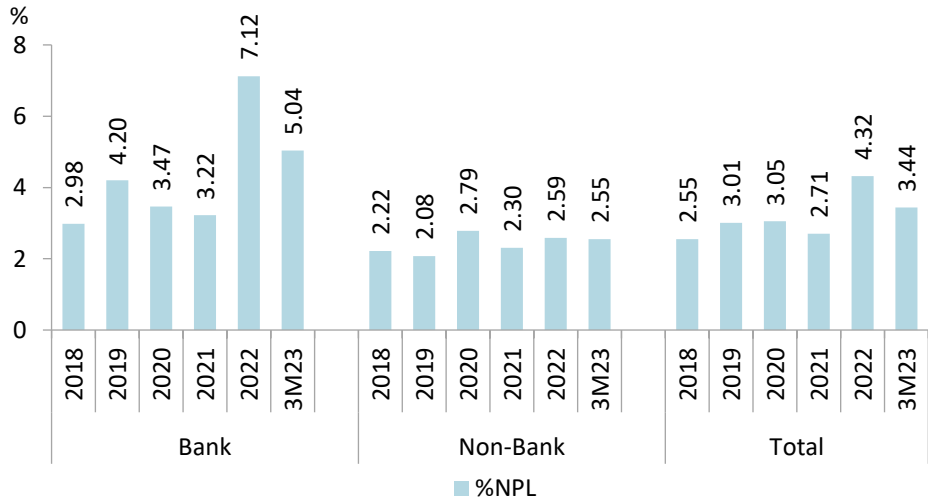
### Credit Outstanding



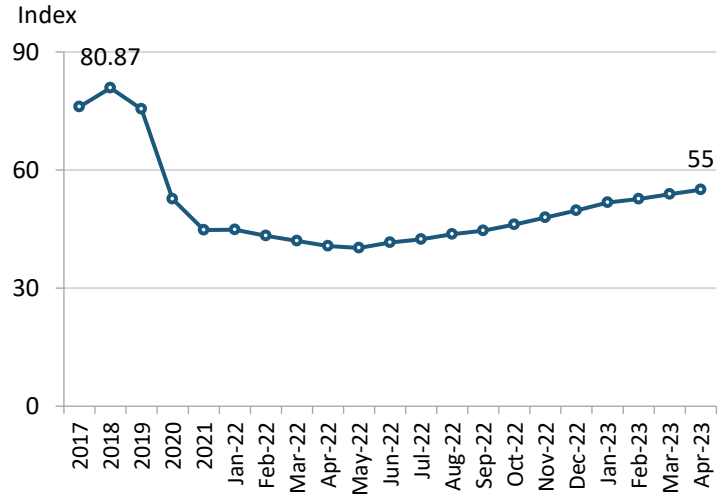
### Outstanding per Account (THB/account/month)



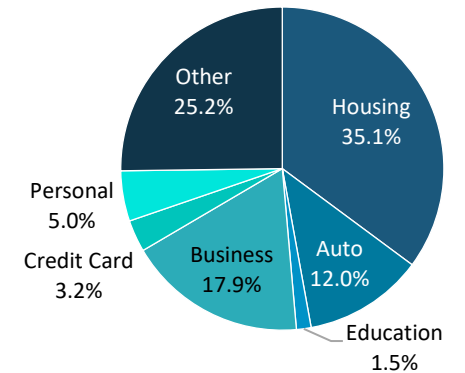
### %NPL



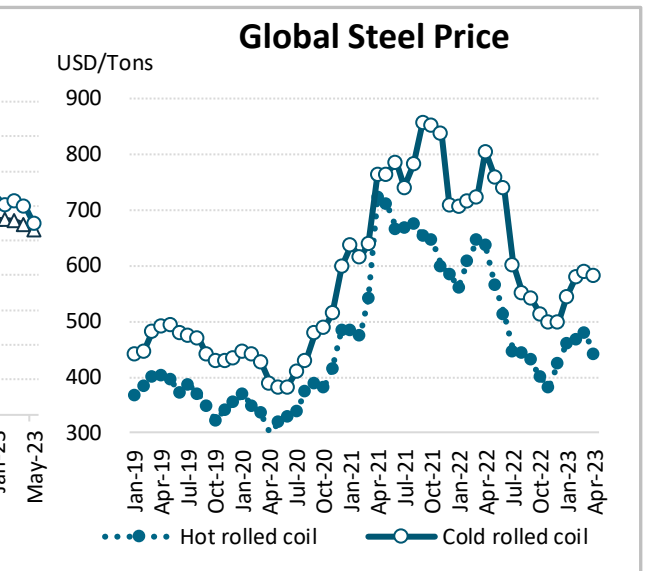
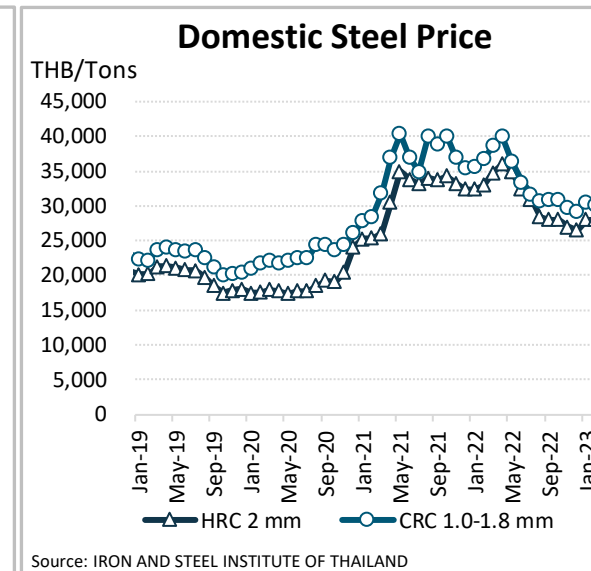
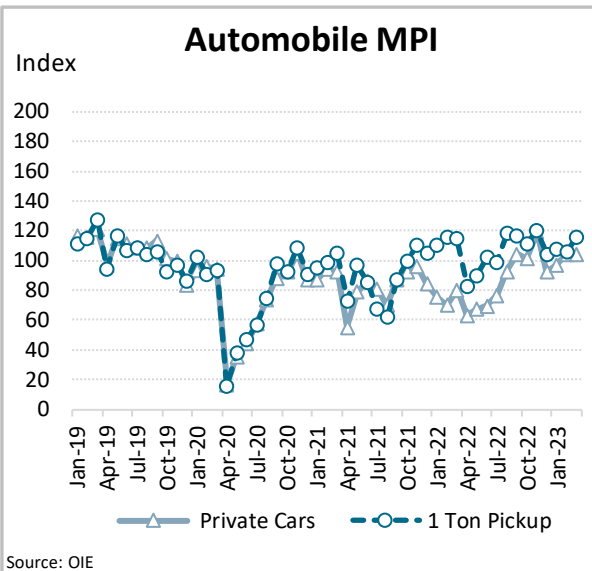
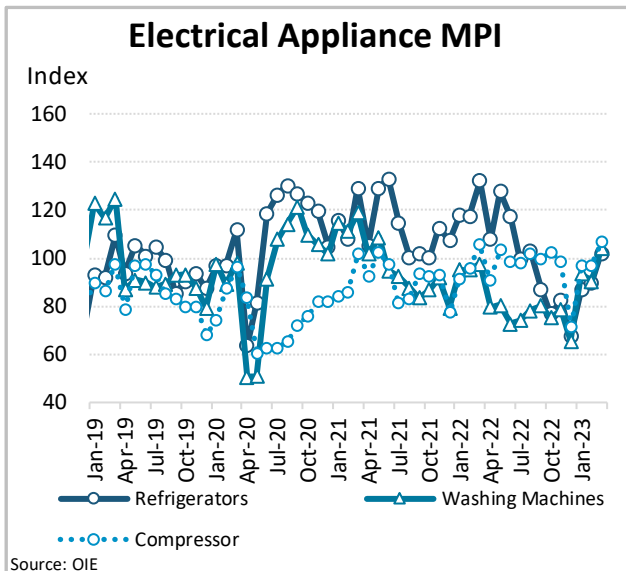
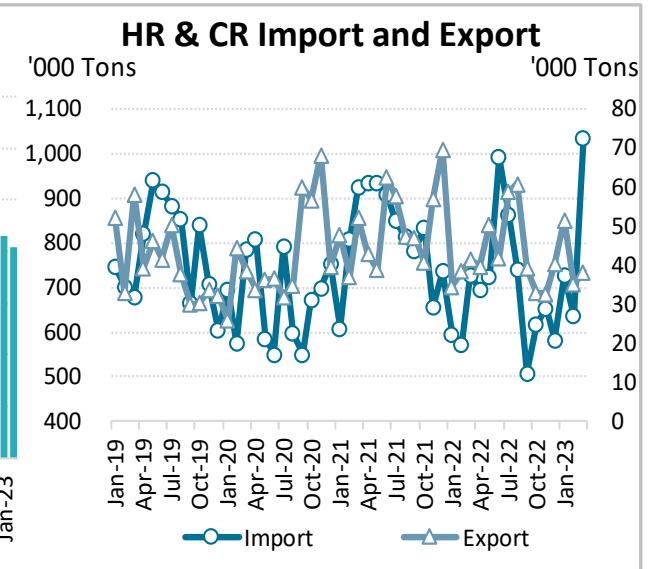
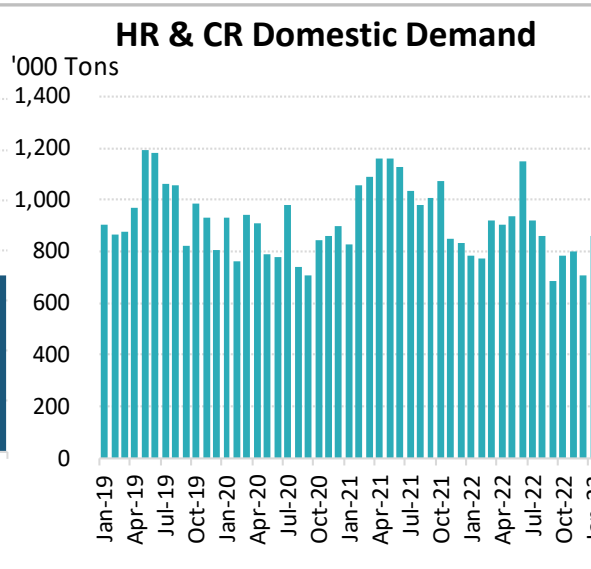
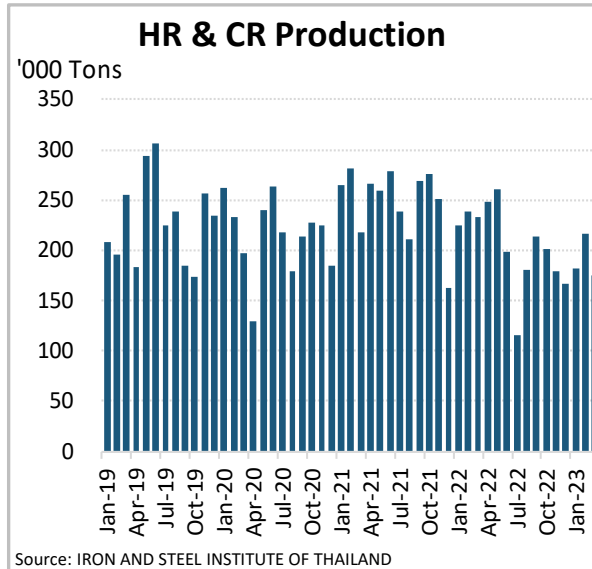
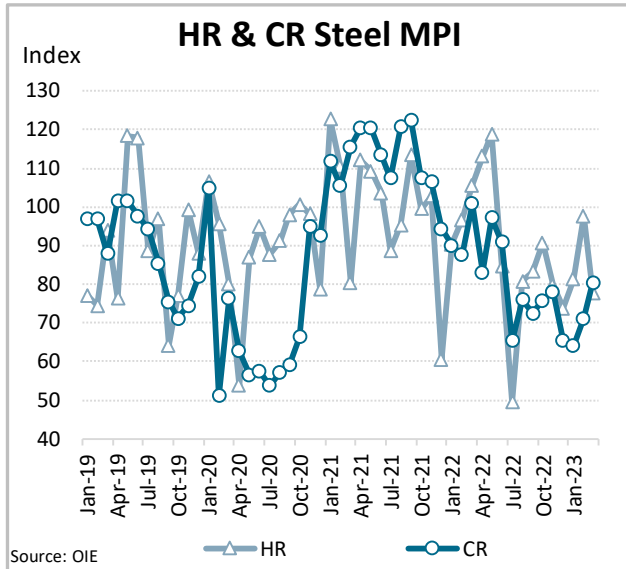
### Consumer Confidence Index



### 4Q22 Household Debt Total = 15.09 THB tn



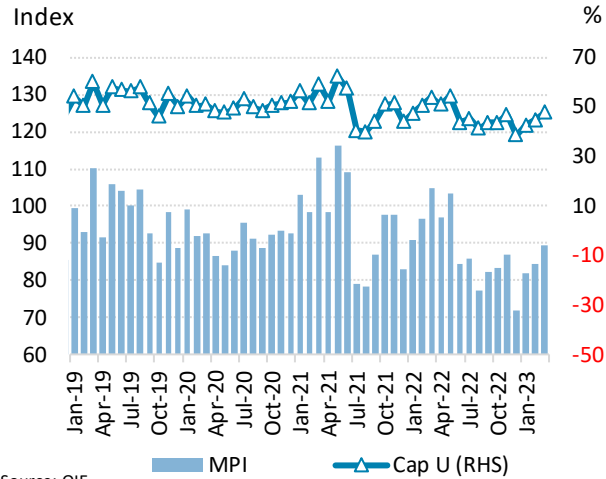
# Hot & Cold Rolled Steel Sheet (เหล็กแผ่นรีดร้อนรีดเย็น)





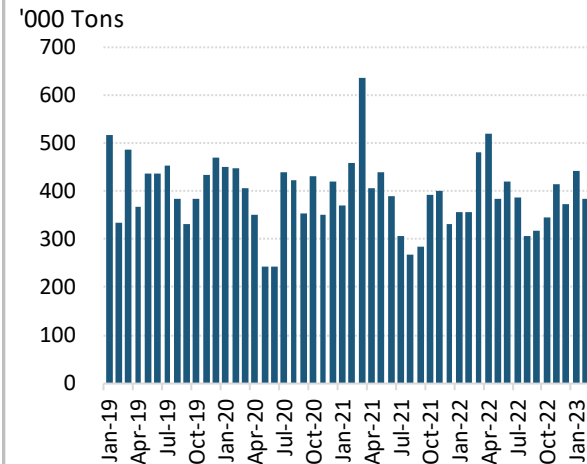
# Long Product Steel (เหล็กทรงยาว)

### MPI & Capacity Utilization



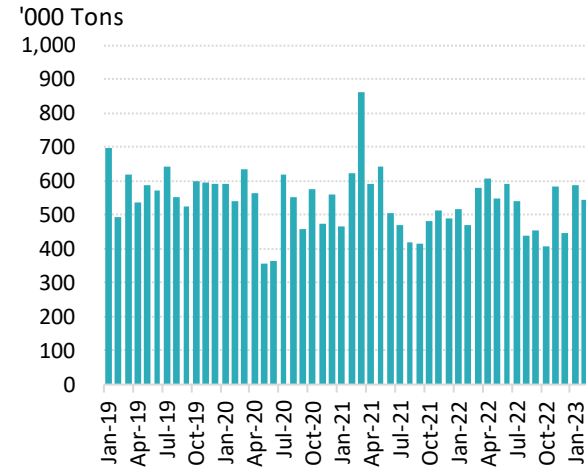
Source: OIE

### Production

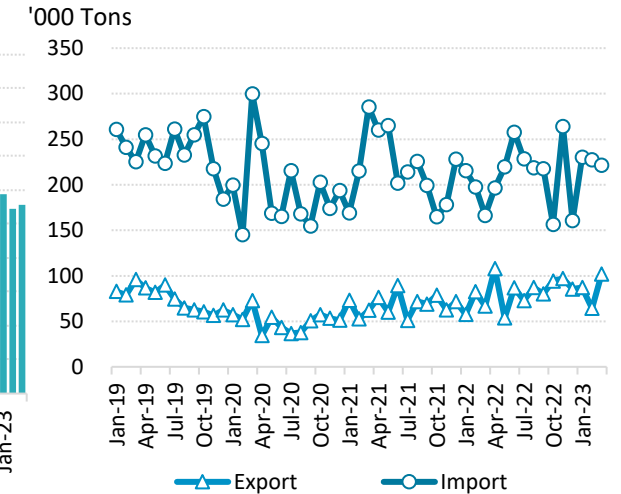


Source: IRON AND STEEL INSTITUTE OF THAILAND

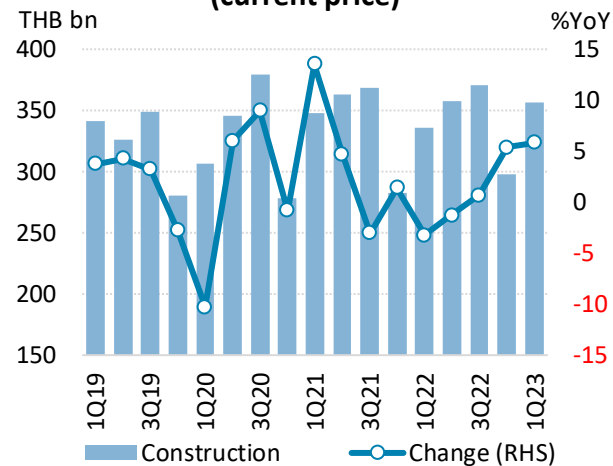
### Domestic Demand



### Import and Export

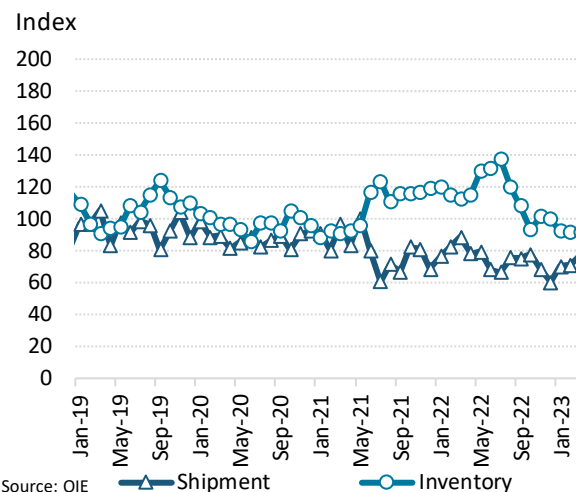


### Construction Gross Fixed Capital (current price)



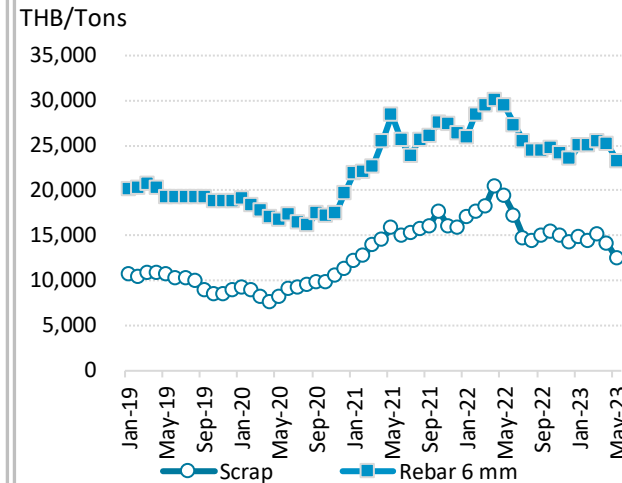
Source: NESDC

### Shipment & Inventory index



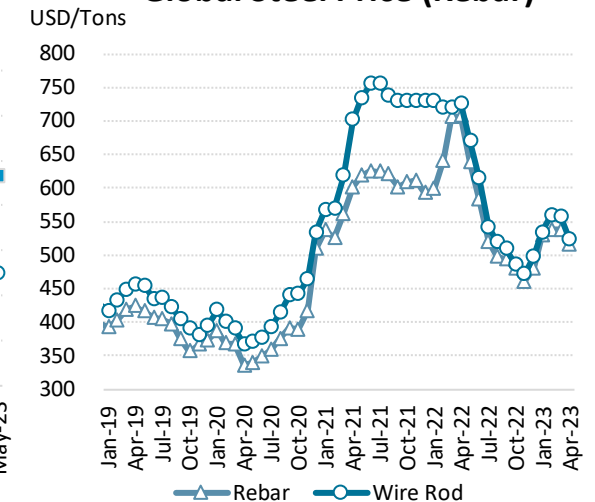
Source: OIE

### Domestic Price

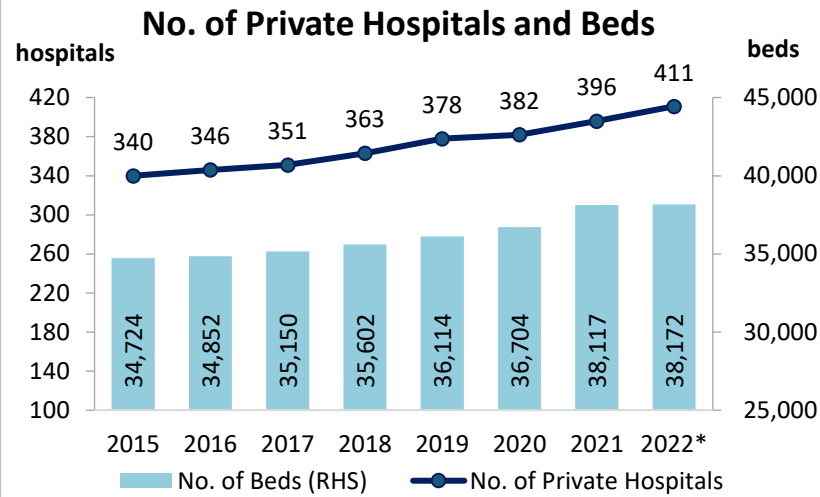


Source: IRON AND STEEL INSTITUTE OF THAILAND

### Global Steel Price (Rebar)

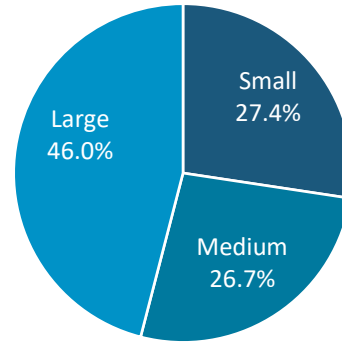


# Private Hospitals (โรงพยาบาลเอกชน)



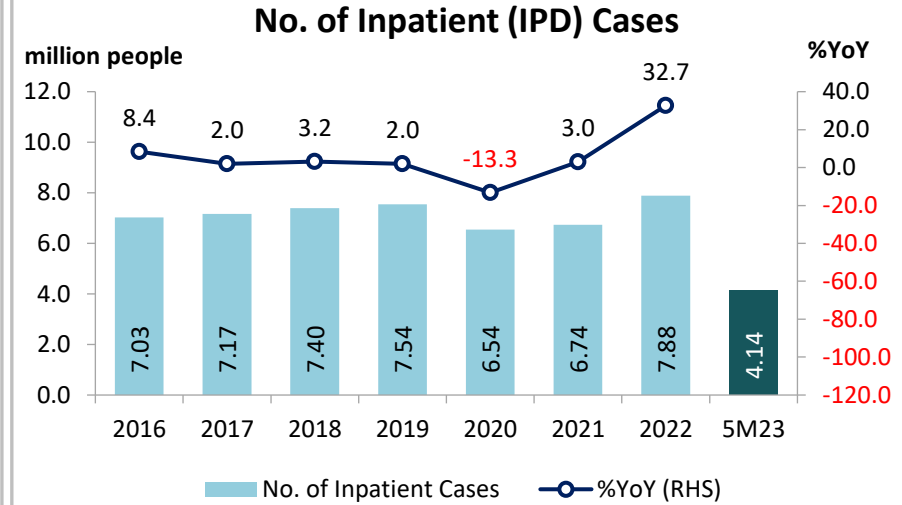
Source: MOPH, Note: \*updated as of 6 Oct 2022

### Share of Private Hospitals by Size (2022)\*\*

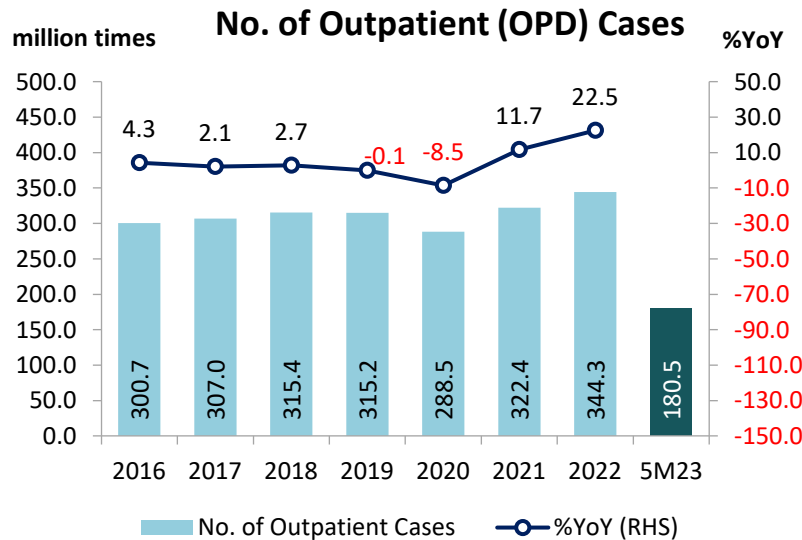


\*\*As of 24 Aug 2022

Remark: small size (1-30 beds), medium size (31-200 beds), large size (more than 200 beds)

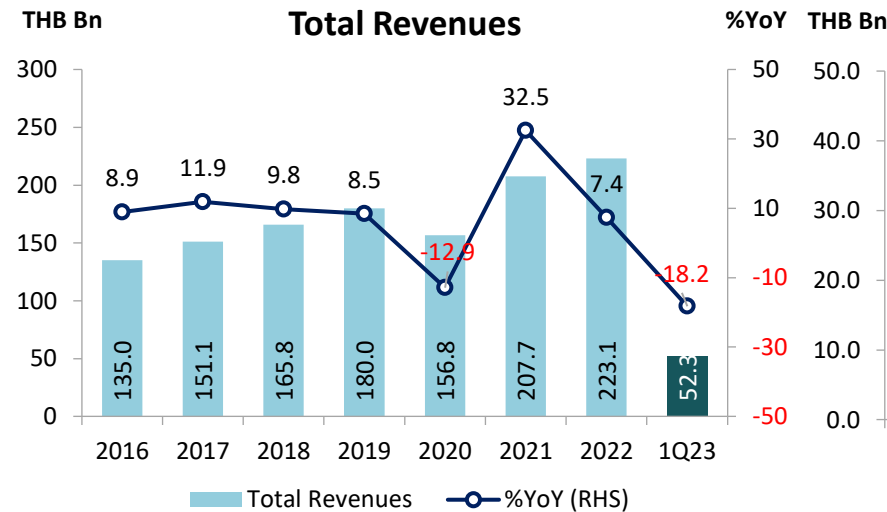


Source: Health Data Center, MOPH

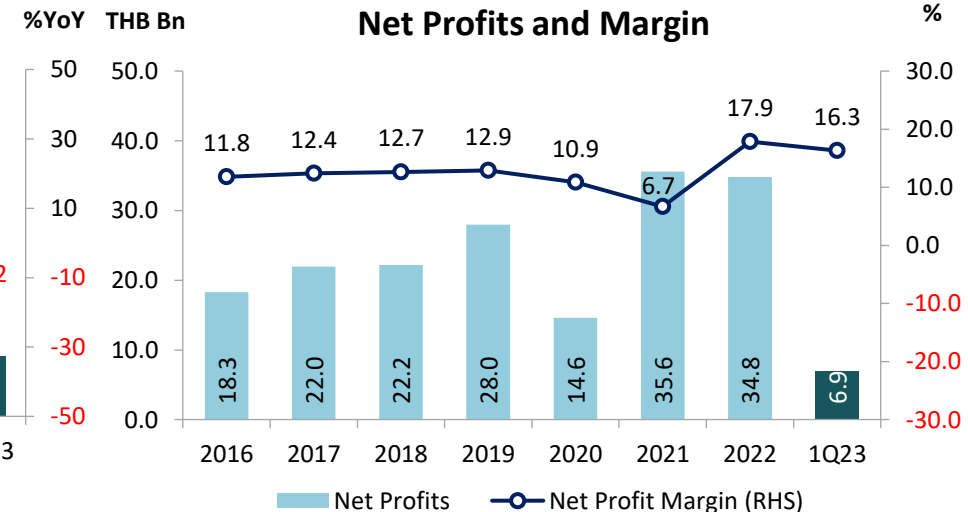


Source: Health Data Center, MOPH

### Performance of SET-listed Private Hospitals in Thailand

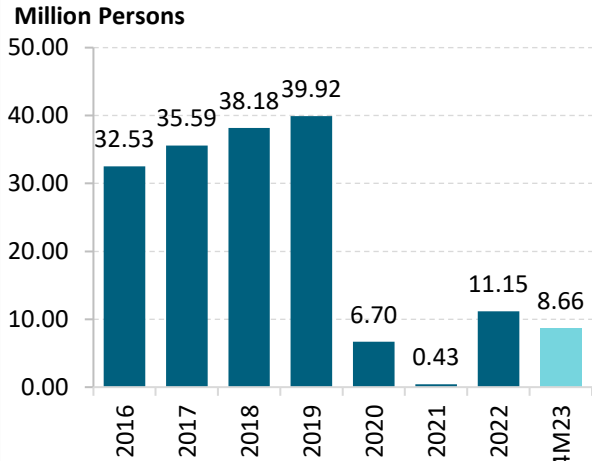


Source: SETSMART



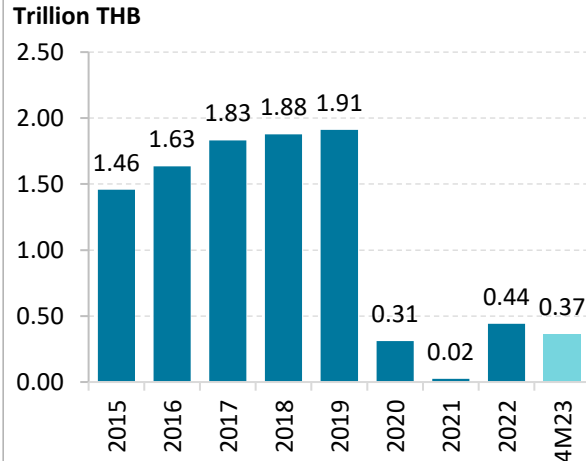
# Tourist Accommodation (โรงแรม) [1/2]

### International Tourist Arrivals



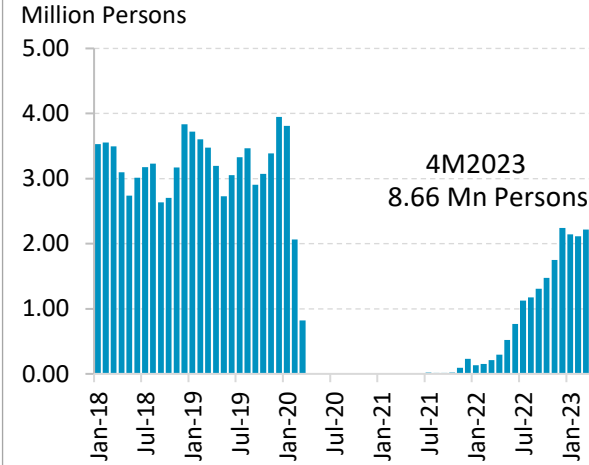
Source : MOTs

### Receipts from International Tourist



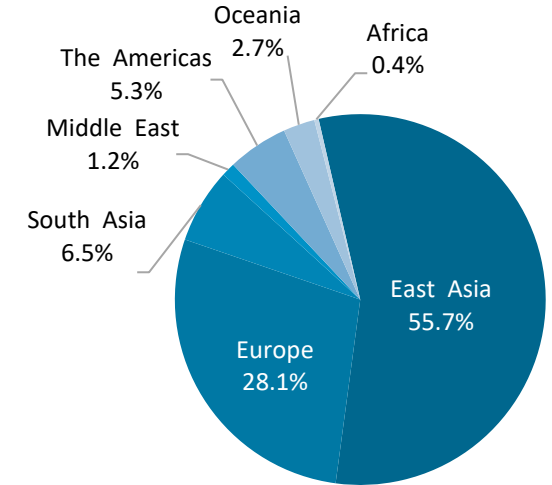
Source : MOTs

### International Tourist Arrivals



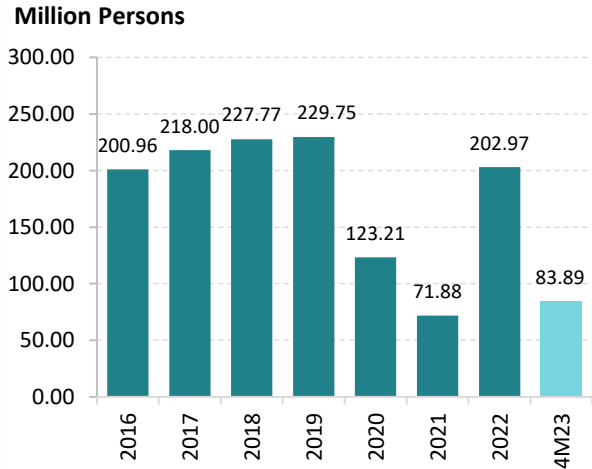
Source : MOTs

### Share by region 4M2023



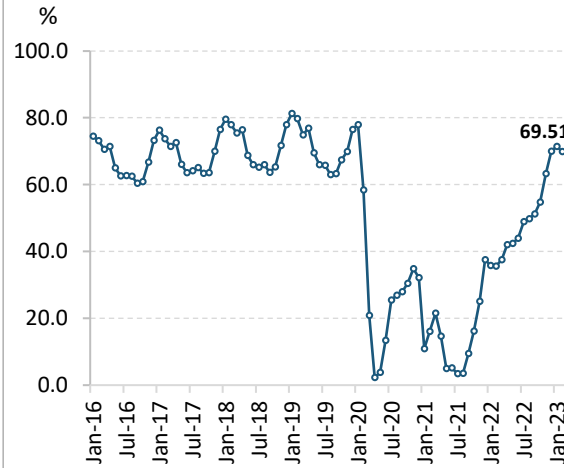
Source : MOTs

### Thai Visitor



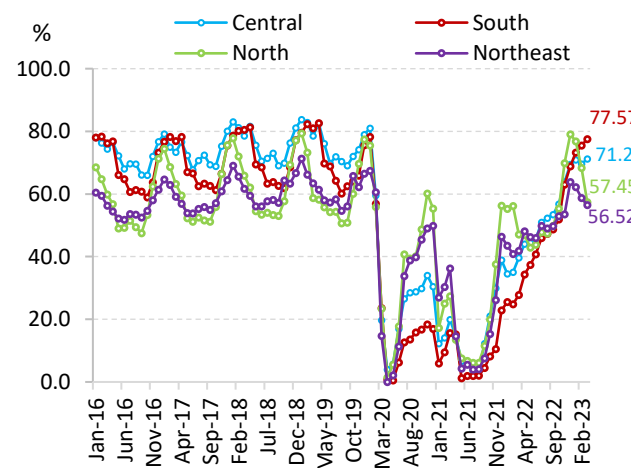
Source : MOTs

### Occupancy Rate (Nationwide)

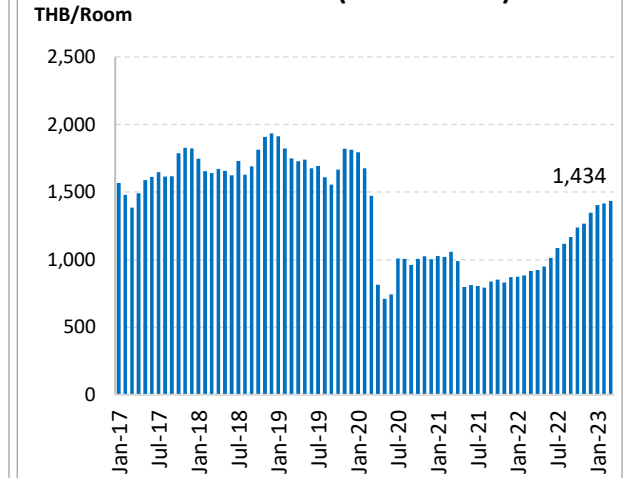


Source : BOT

### Occupancy Rate (Region)



### Room Rate (Nationwide)



Source : BOT

# Tourist Accommodation (โรงแรม) [2/2]

## International Tourist Arrivals by Region

Million Persons

Region	2019	2020	2021	2022	4M2023	%YoY
ASEAN	10.69	1.65	0.03	4.53	2.79	2,690.8
East Asia	16.64	2.09	0.04	5.90	2.04	1,086.7
Europe	6.72	2.08	0.25	2.55	2.44	503.0
South Asia	2.40	0.32	0.01	1.18	0.57	836.8
Middle East	0.70	0.08	0.03	0.47	0.10	116.3
The Americas	1.63	0.32	0.05	0.61	0.46	624.2
Oceania	0.89	0.14	0.01	0.37	0.24	543.9
Africa	0.20	0.02	0.00	0.07	0.03	381.6
<b>Total</b>	<b>39.87</b>	<b>6.70</b>	<b>0.43</b>	<b>15.68</b>	<b>8.66</b>	<b>872.0</b>

Source : MOTs

## International Tourist Arrivals (thousand persons)

Month	2019	2020	2021	2022	4M2023
Jan	3,718.5	3,810.2	7.7	133.9	2,144.9
Feb	3,603.7	2,062.0	5.7	153.0	2,113.6
Mar	3,473.1	819.4	6.7	210.8	2,219.0
Apr	3,195.0	0.0	8.5	293.4	2,182.1
May	2,726.8	0.0	6.1	521.4	-
Jun	3,052.3	0.0	5.7	767.5	-
July	3,327.2	0.0	18.1	1,124.2	-
Aug	3,466.5	0.0	15.1	1,174.7	-
Sep	2,902.7	0.0	12.2	1,309.1	-
Oct	3,074.1	1.2	20.3	1,475.4	-
Nov	3,386.4	3.1	91.3	1,748.4	-
Dec	3,947.3	6.6	230.5	2,241.2	-
<b>Total</b>	<b>39,873.53</b>	<b>6,702.40</b>	<b>427.87</b>	<b>11,153.03</b>	<b>8,659.64</b>

## International Tourist Arrivals (%YoY)

Month	2019	2020	2021	2022	4M23
Jan	5.3	2.5	-99.8	1,640.4	1,501.9
Feb	1.5	-42.8	-99.7	2,564.2	1,281.8
Mar	-0.6	-76.4	-99.2	3,029.5	952.5
Apr	3.2	-100.0	n.a.	3,339.4	643.9
May	-0.4	-100.0	n.a.	8,515.5	-
Jun	1.3	-100.0	n.a.	13,379.0	-
July	4.7	-100.0	n.a.	6,126.3	-
Aug	7.4	-100.0	n.a.	7,677.2	-
Sep	10.1	-100.0	n.a.	10,598.0	-
Oct	13.7	-100.0	1,587.9	7,178.2	-
Nov	6.8	-99.9	2,877.3	1,815.9	-
Dec	2.9	-99.8	3,415.8	872.3	-
<b>Total</b>	<b>4.4</b>	<b>-83.2</b>	<b>-93.6</b>	<b>2,506.6</b>	<b>994.7</b>

## Occupancy Rate (%)

### Central (Inc.BKK)

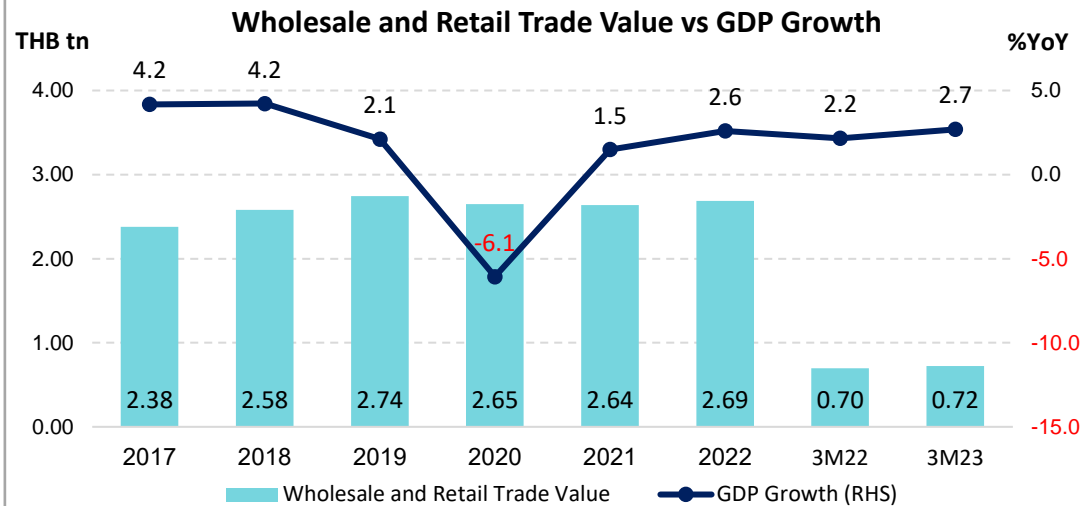
### Southern

### Northern

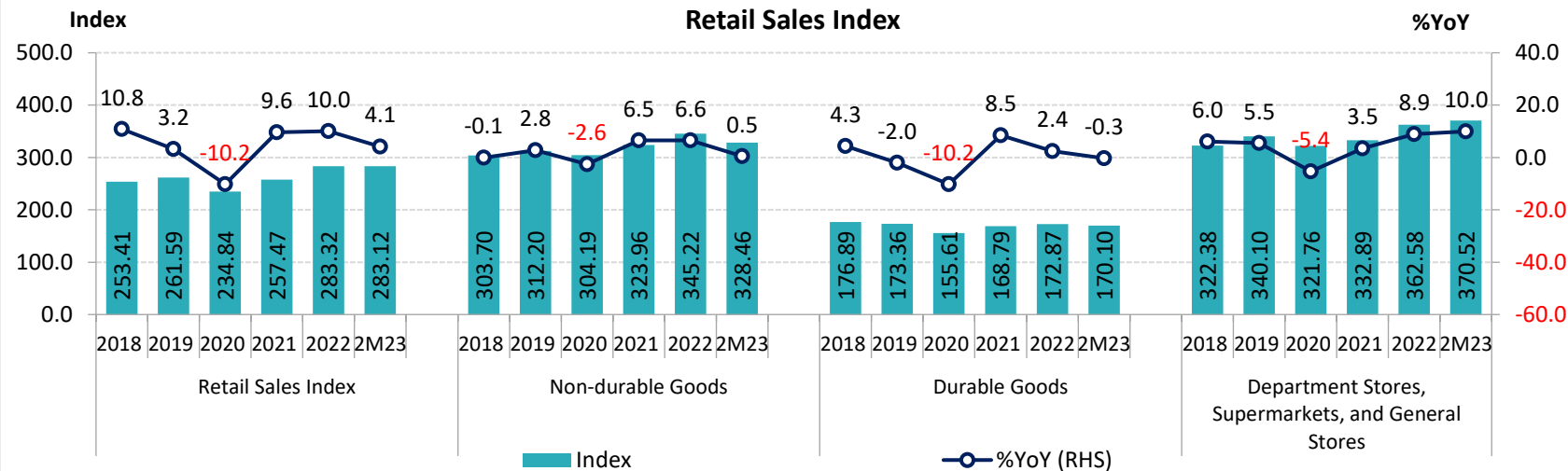
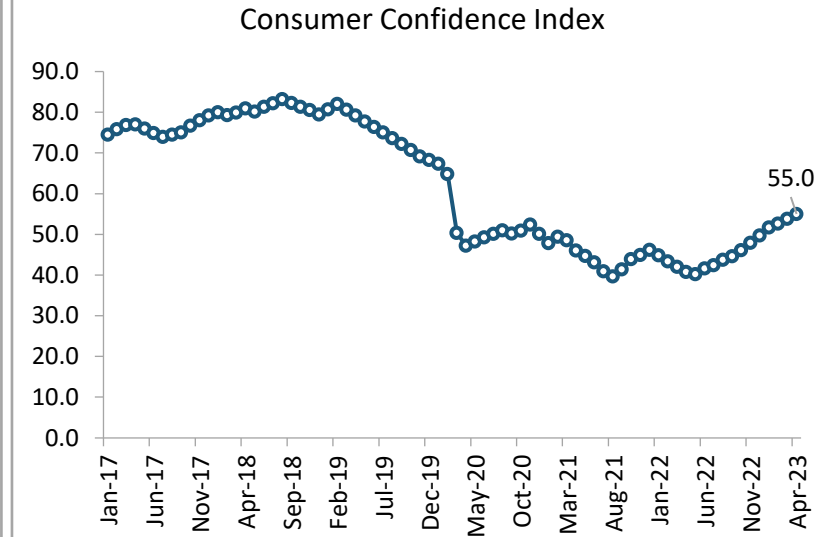
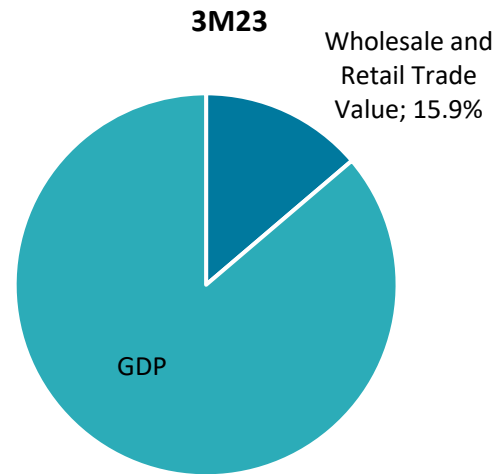
### Northeastern

	2019	2020	2021	2022	4M23		2019	2020	2021	2022	4M23		2019	2020	2021	2022	4M23		2019	2020	2021	2022	4M23						
Jan	81.26	77.97	10.85	35.83	71.44	Jan	83.77	80.97	12.24	34.58	70.90	Jan	79.59	78.24	5.98	25.55	73.26	Jan	79.40	75.47	17.27	55.29	76.82	Jan	71.28	67.38	26.97	43.49	62.24
Feb	79.76	58.39	16.04	35.64	69.89	Feb	82.84	59.55	14.08	35.01	69.57	Feb	82.31	56.91	9.48	24.78	75.47	Feb	73.26	55.84	24.99	56.15	68.33	Feb	66.23	60.60	30.31	40.88	58.72
Mar	74.83	20.82	21.51	37.50	69.51	Mar	78.53	19.73	19.94	39.64	71.20	Mar	80.96	23.57	15.63	27.82	77.57	Mar	58.71	23.40	27.35	47.08	57.45	Mar	63.48	14.74	36.30	41.88	56.52
Apr	76.89	2.26	14.63	42.05	-	Apr	82.54	4.01	14.63	44.01	-	Apr	82.63	0.86	15.19	34.28	-	Apr	58.18	1.45	13.45	46.89	-	Apr	61.39	0.05	14.65	48.09	-
May	69.51	3.83	4.95	42.38	-	May	76.10	5.68	6.61	44.47	-	May	69.76	0.54	1.25	37.38	-	May	55.78	5.54	7.56	42.94	-	May	57.98	2.13	4.33	46.25	-
Jun	65.98	13.43	5.15	43.97	-	Jun	69.73	16.93	6.58	45.61	-	Jun	68.82	6.26	1.95	40.76	-	Jun	54.28	17.78	6.75	43.85	-	Jun	57.33	11.33	5.54	46.00	-
July	65.80	25.41	3.45	48.91	-	July	71.89	26.58	3.47	51.02	-	July	64.24	12.64	1.90	45.98	-	July	54.39	40.72	6.12	47.80	-	July	58.32	33.84	4.03	49.81	-
Aug	63.04	26.93	3.51	49.76	-	Aug	70.38	28.55	3.57	52.30	-	Aug	60.22	13.55	2.07	47.28	-	Aug	50.69	39.45	6.09	47.42	-	Aug	54.67	38.80	4.14	49.04	-
Sep	63.25	27.93	9.42	51.22	-	Sep	69.09	28.82	12.23	53.42	-	Sep	62.47	15.88	4.48	48.76	-	Sep	50.84	40.14	11.56	49.84	-	Sep	56.13	39.89	7.58	49.74	-
Oct	67.37	30.40	16.19	54.73	-	Oct	72.01	29.83	21.01	56.78	-	Oct	64.01	16.71	8.13	51.87	-	Oct	60.10	48.72	19.90	55.39	-	Oct	65.78	45.51	15.30	52.92	-
Nov	69.93	34.82	25.03	63.32	-	Nov	74.18	34.03	29.89	63.80	-	Nov	65.94	18.40	10.53	63.05	-	Nov	69.65	60.18	37.60	69.86	-	Nov	62.20	49.05	26.19	53.50	-
Dec	76.47	32.16	37.52	69.99	-	Dec	78.96	30.48	38.92	69.44	-	Dec	75.62	16.95	22.90	68.82	-	Dec	77.44	55.32	56.25	79.06	-	Dec	66.48	49.85	46.39	63.85	-
<b>Avg.</b>	<b>71.17</b>	<b>29.53</b>	<b>14.02</b>	<b>47.94</b>	<b>70.28</b>	<b>Avg.</b>	<b>75.84</b>	<b>30.43</b>	<b>15.26</b>	<b>49.17</b>	<b>70.56</b>	<b>Avg.</b>	<b>71.38</b>	<b>21.71</b>	<b>8.29</b>	<b>43.03</b>	<b>75.43</b>	<b>Avg.</b>	<b>61.89</b>	<b>38.67</b>	<b>19.57</b>	<b>53.46</b>	<b>67.53</b>	<b>Avg.</b>	<b>61.77</b>	<b>34.43</b>	<b>18.48</b>	<b>48.79</b>	<b>59.16</b>

# Modern Trade (ร้านค้าปลีกสมัยใหม่)

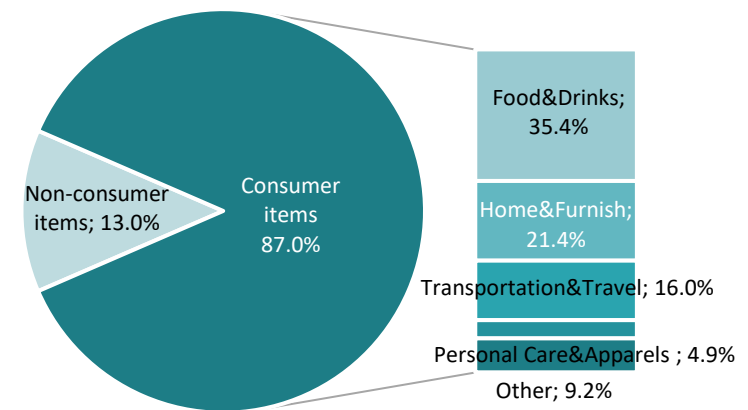


Note: GDP, wholesale and retail trade value at current market prices



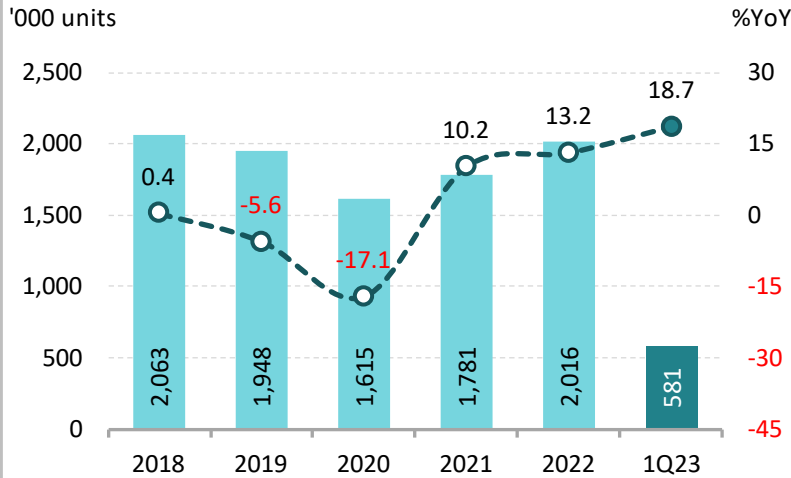
Source: The National Economic and Social Development Council, BOT, National Statistical Office

### 2021 Monthly Household Expenditure by Type



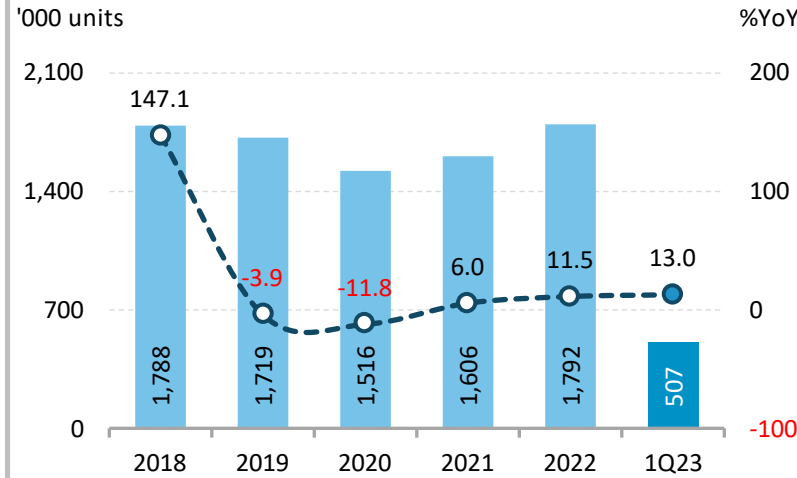
# Motorcycle (รถจักรยานยนต์)

### Production



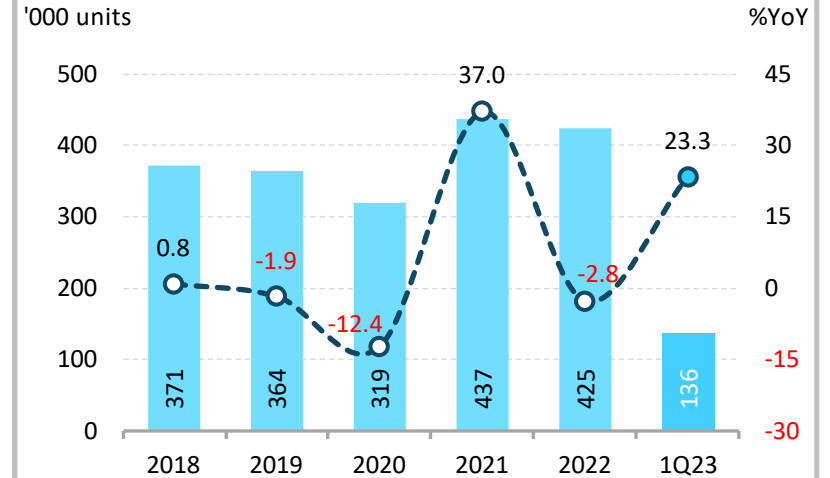
Source: FTI

### Domestic Sales



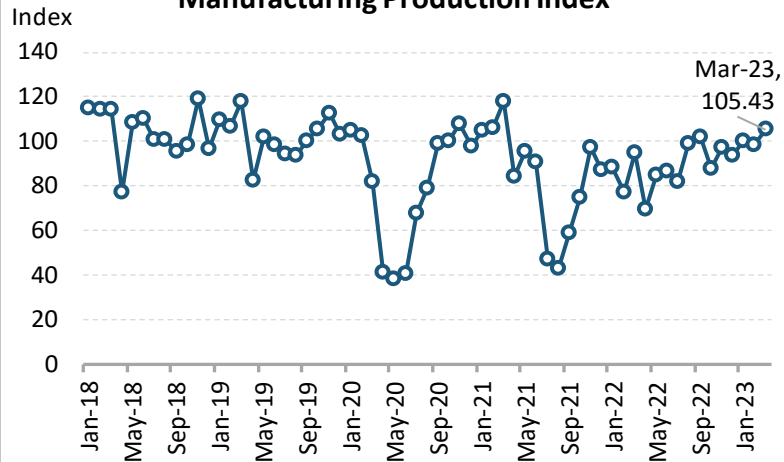
Source: FTI

### Exports



Source: MOC

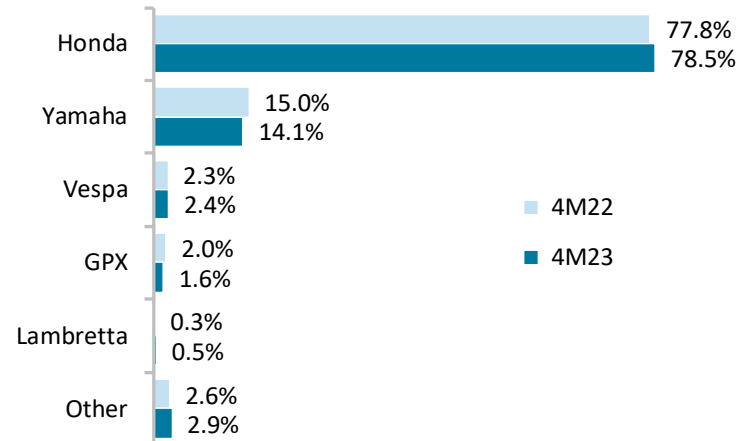
### Manufacturing Production Index



Note: MPI as of the base year (2016=100)

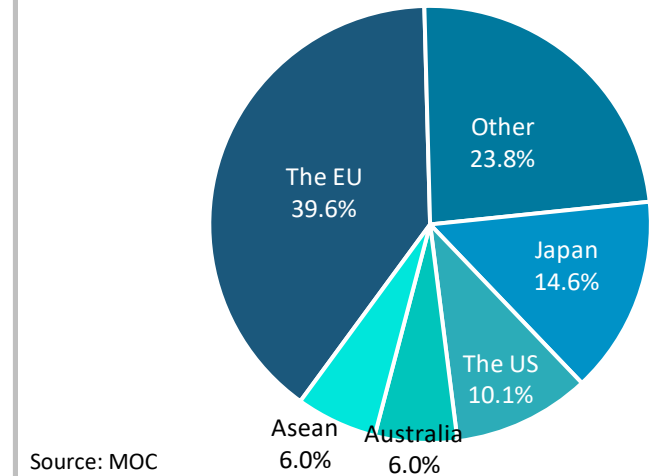
Source: OIE

### Domestic Registered by Brand



Source: DLT

### Exports by Destination (1Q23)

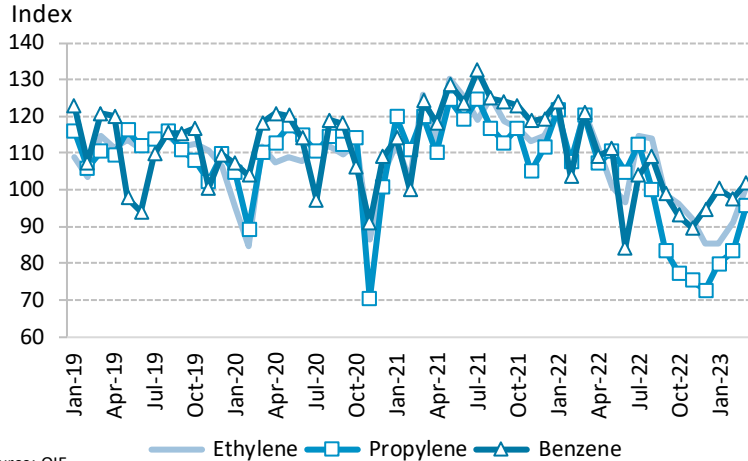


Source: MOC

# Petrochemicals (ปิโตรเคมี)

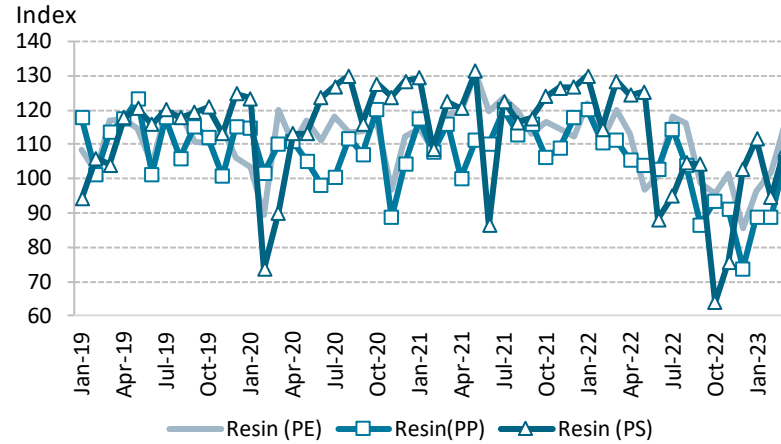
## Manufacturing Production Index

### Upstream

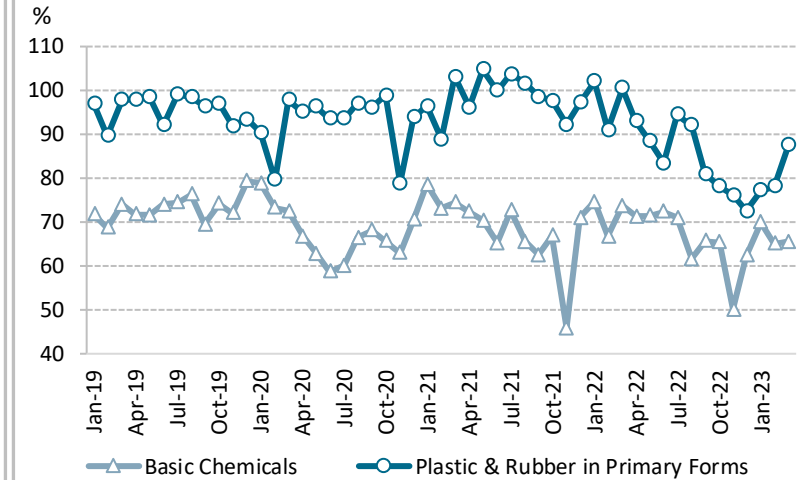


Source: OIE

### Downstream

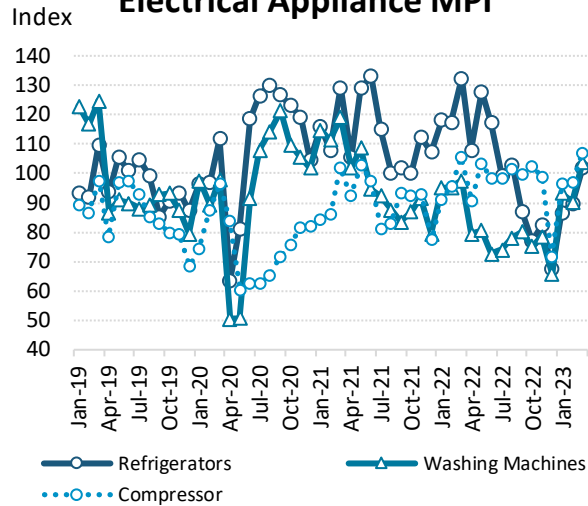


## Capacity Utilization



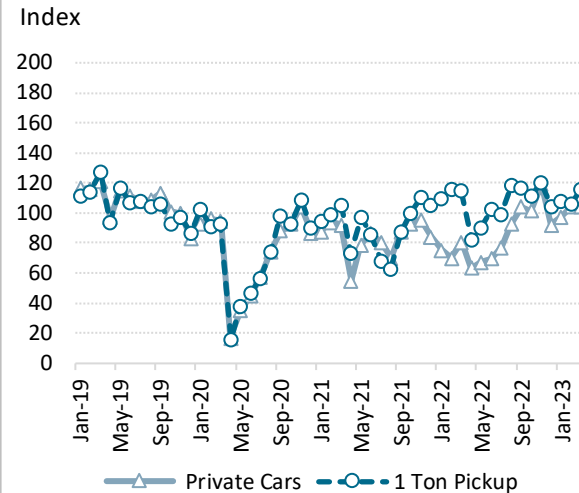
Source: OIE

## Electrical Appliance MPI



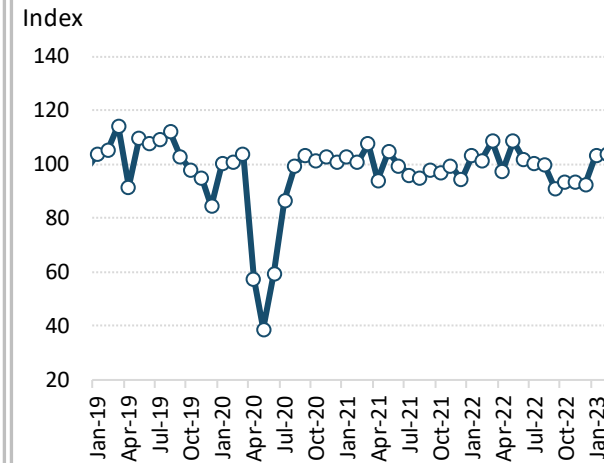
Source: OIE

## Automobile MPI



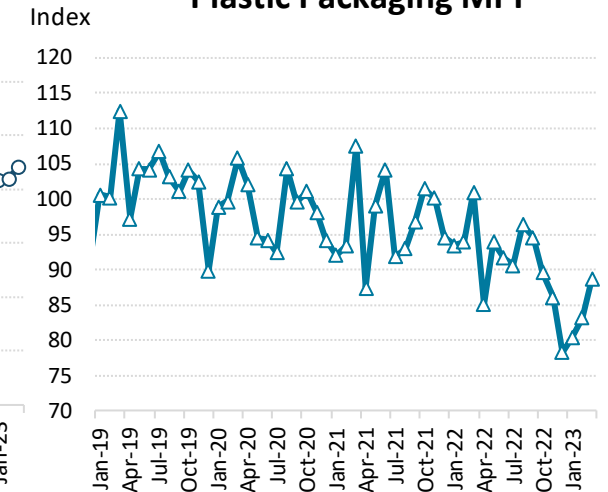
Source: OIE

## Tire MPI

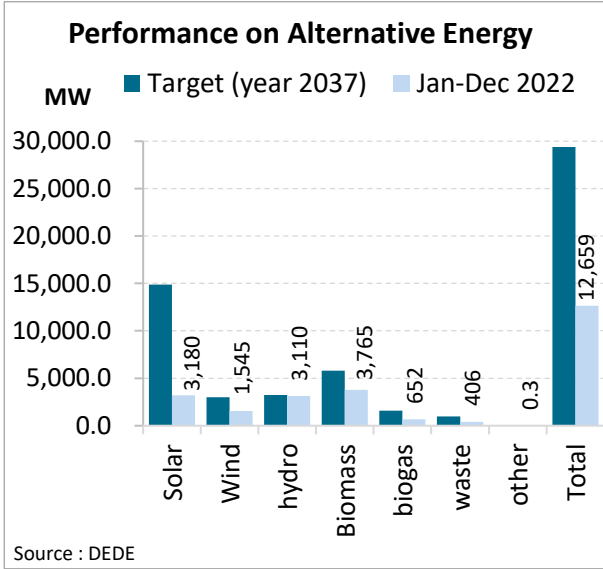
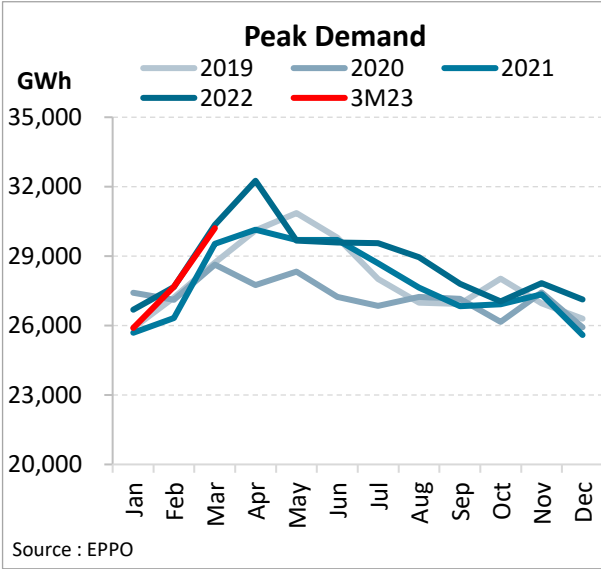
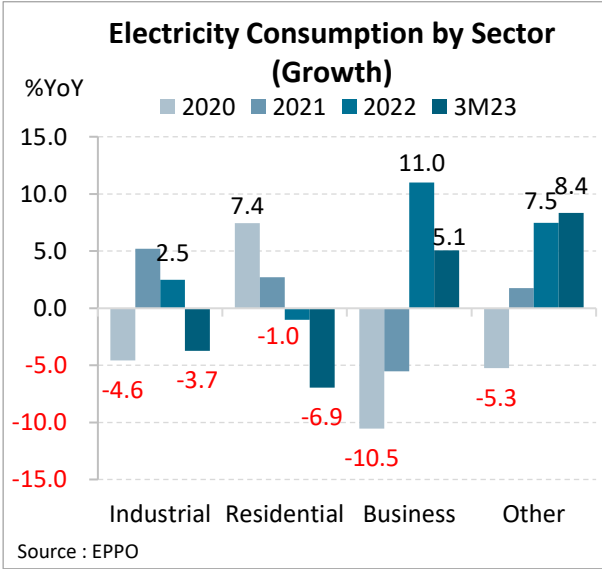
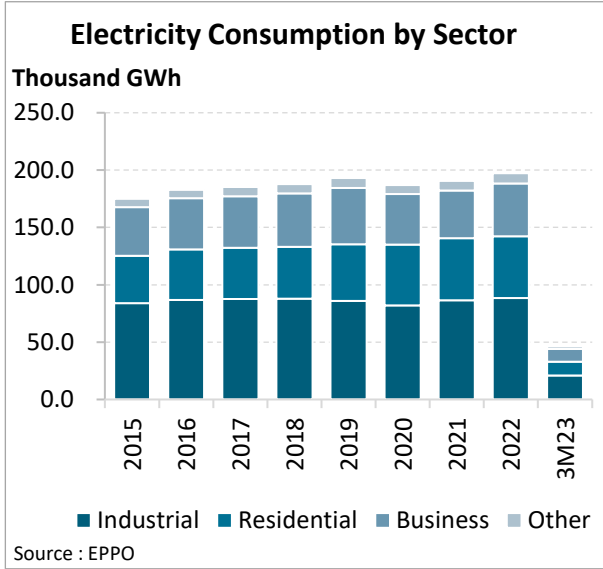
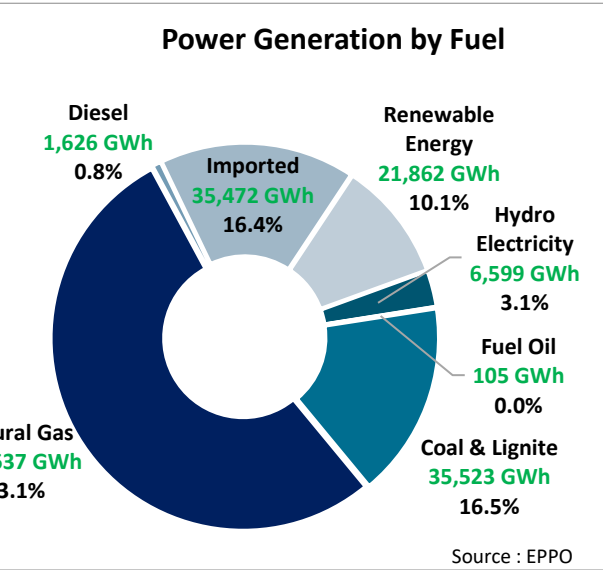
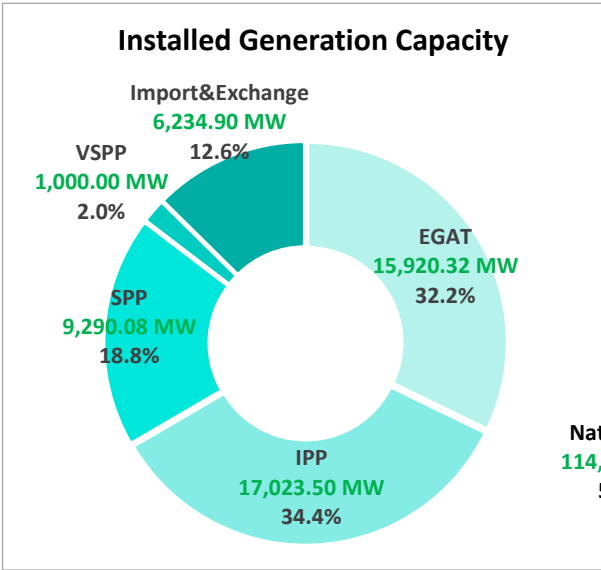
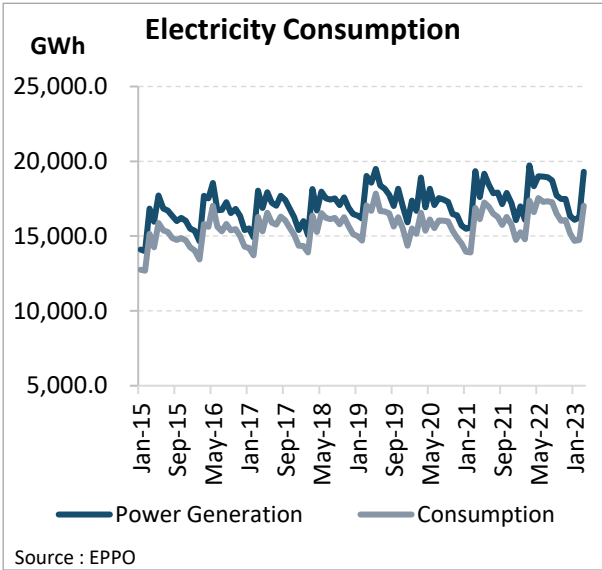
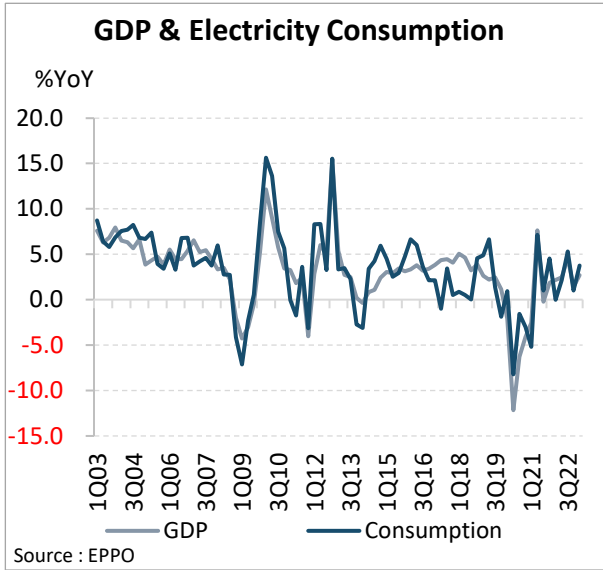


Source: OIE

## Plastic Packaging MPI



# Power Generation (ผลิตไฟฟ้า) [1/2]





# Power Generation (ผลิตไฟฟ้า) [2/2]

## Electricity Consumption

Unit : Gwh

Category	2020	2021	2022	3M23	%YoY
Industrial	82,158	86,427	88,574	21,096	-3.7
Residential	52,860	54,290	53,747	11,787	-6.9
Business	43,950	41,529	46,097	11,239	5.1
Agriculture	417	398	335	176	23.9
Government and Non-Profit	204	201	216	52	-1.2
Others	3,872	3,829	4,219	1,057	9.5
Free of Charge	3,586	3,794	4,068	1,035	5.4
<b>Total</b>	<b>187,046</b>	<b>190,468</b>	<b>197,256</b>	<b>46,442</b>	<b>-2.1</b>

Source : EPPO

## Power Generation by Fuel

Unit : Gwh

Category	2020	2021	2022	3M23	%YoY
Natural Gas	113,859	113,113	114,637	28,128	-6.3
Coal&Lignite	36,823	36,065	35,523	7,643	-5.2
Imported	29,551	33,356	35,472	6,827	-4.3
Renewable Energy	20,529	21,927	21,876	6,320	10.0
Hydro Electricity	4,540	4,540	6,599	2,158	27.1
Diesel	97	294	1,626	545	198.9
Fuel Oil	624	422	105	4	37.8
<b>Total</b>	<b>206,023</b>	<b>209,717</b>	<b>215,838</b>	<b>51,626</b>	<b>-2.3</b>

Source : EPPO

## Renewable Energy Consumption for Power Generation by Fuel Type

Unit : MW

Target 2037	Target 2037	2019	2020	2021	2022
Solar	12,139	2,982.62	2,979.24	2,982.68	3,135.16
Hydro-floating Solar	2,725	-	-	45.00	45.00
Biomass	5,790	3,410.14	3,517.38	3,773.67	3,765.46
Wind	2,989	1,506.82	1,506.73	1,546.32	1,545.32
Biogas	1,565	529.98	557.24	572.72	651.99
Municipal Waste	900	314.67	333.68	348.48	371.09
Industrial Waste	75	-	-	-	34.43
Small Hydro Power	308	187.85	190.39	190.39	191.75
Large Hydro Powe	2,920	2,919.66	2,919.66	2,919.66	2,918.40
Other	0.30	0.30	0.30	0.30	0.30
<b>Total</b>	<b>29,411</b>	<b>11,852</b>	<b>12,005</b>	<b>12,379</b>	<b>12,659</b>

Source : DEDE

## Peak Demand

Unit : MW

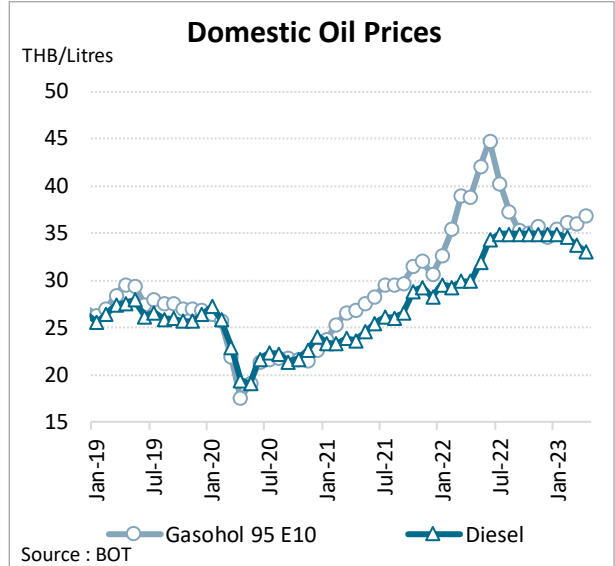
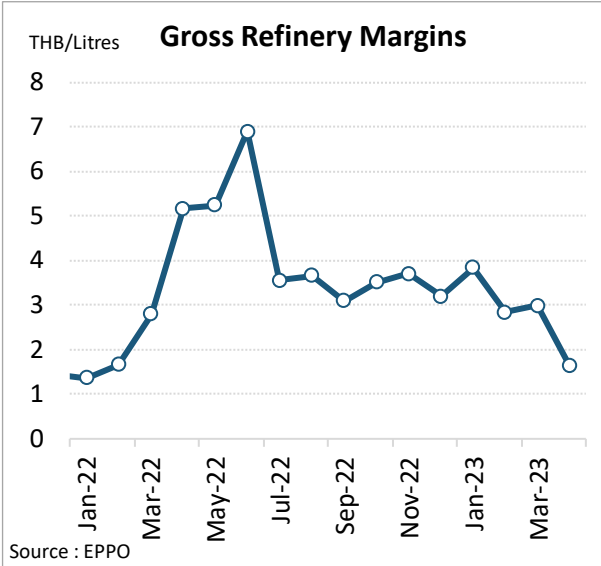
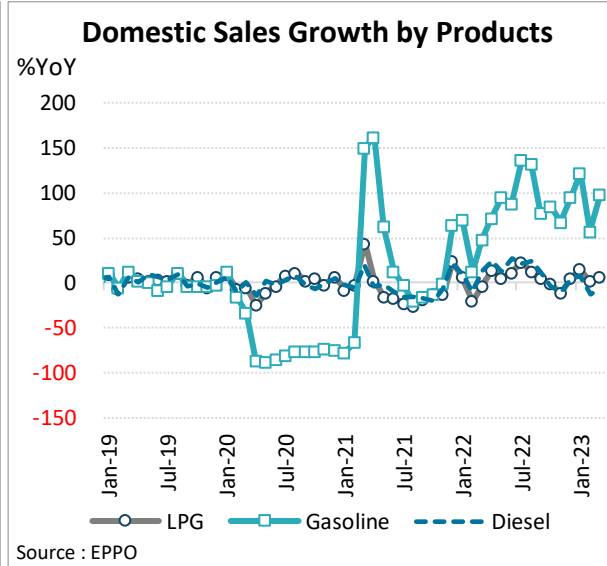
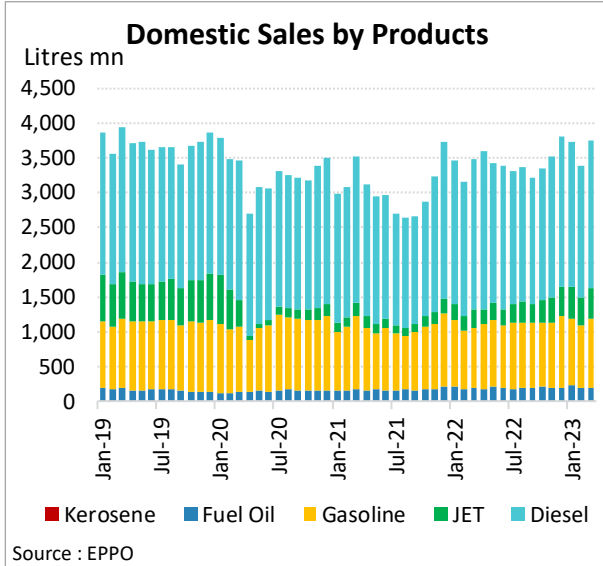
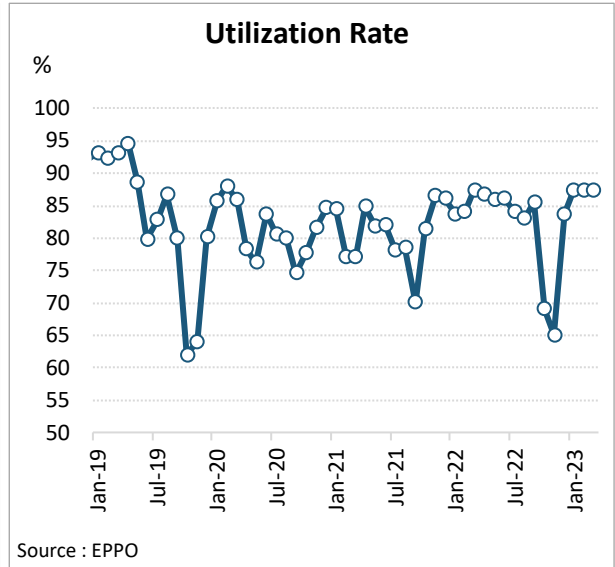
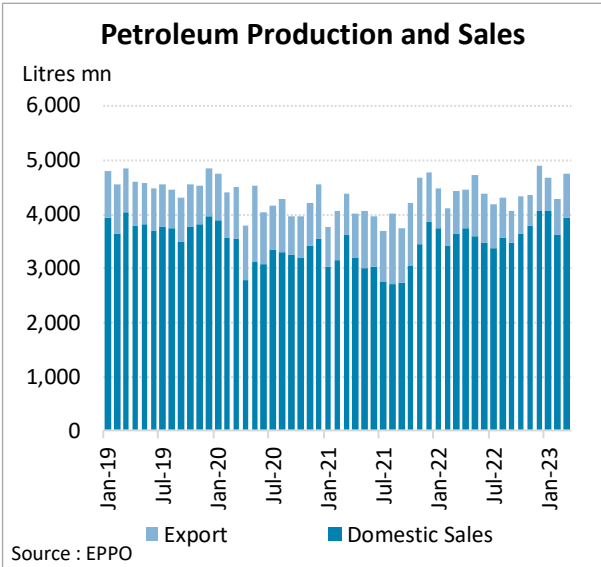
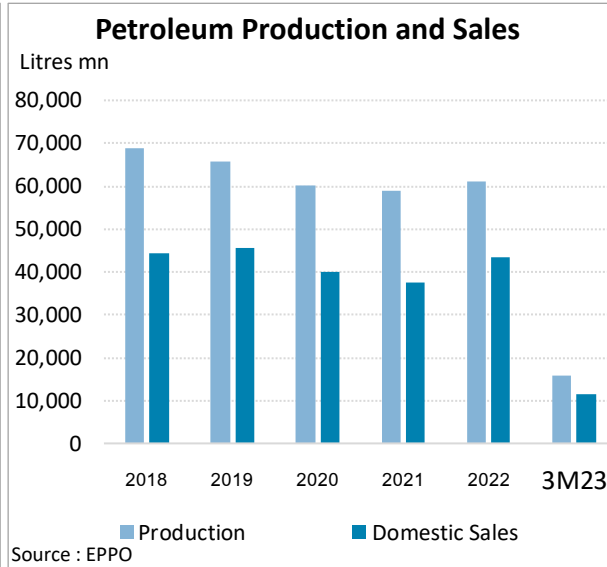
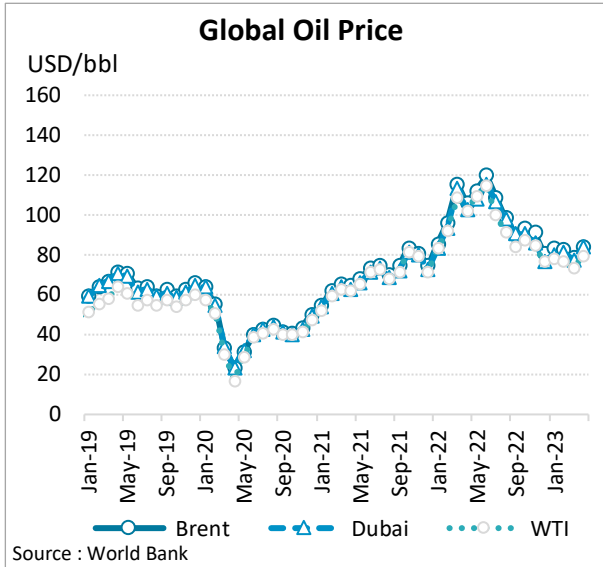
	2019	2020	2021	2022	3M23
Jan	25,898	27,423	25,686	26,688	25,896
Feb	27,215	27,112	26,319	27,673	27,687
Mar	28,722	28,637	29,537	30,349	30,213
Apr	30,120	27,747	30,135	32,255	-
May	30,853	28,328	29,702	29,675	-
Jun	29,800	27,240	29,692	29,594	-
July	28,015	26,855	28,691	29,558	-
Aug	26,987	27,235	27,642	28,952	-
Sep	26,937	27,159	26,841	27,808	-
Oct	28,026	26,162	26,920	27,042	-
Nov	26,958	27,433	27,347	27,833	-
Dec	26,295	25,924	25,597	27,125	-
<b>Max</b>	<b>30,853.2</b>	<b>28,636.7</b>	<b>30,135.3</b>	<b>32,254.5</b>	<b>30,213.2</b>

## Power Generation

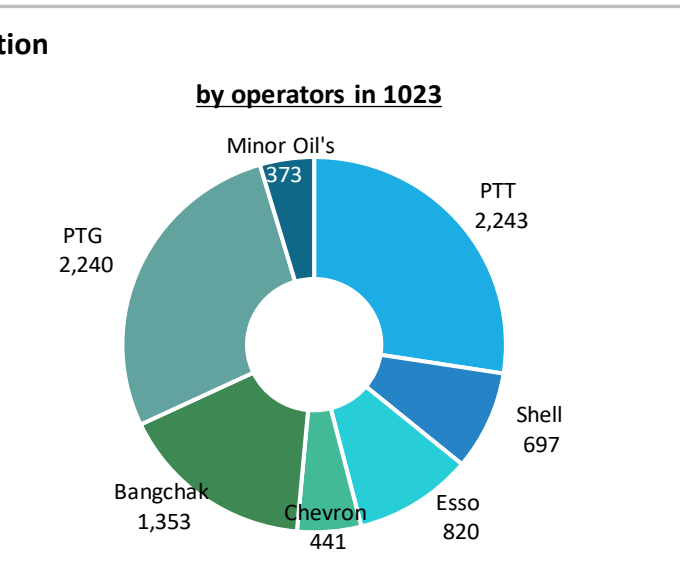
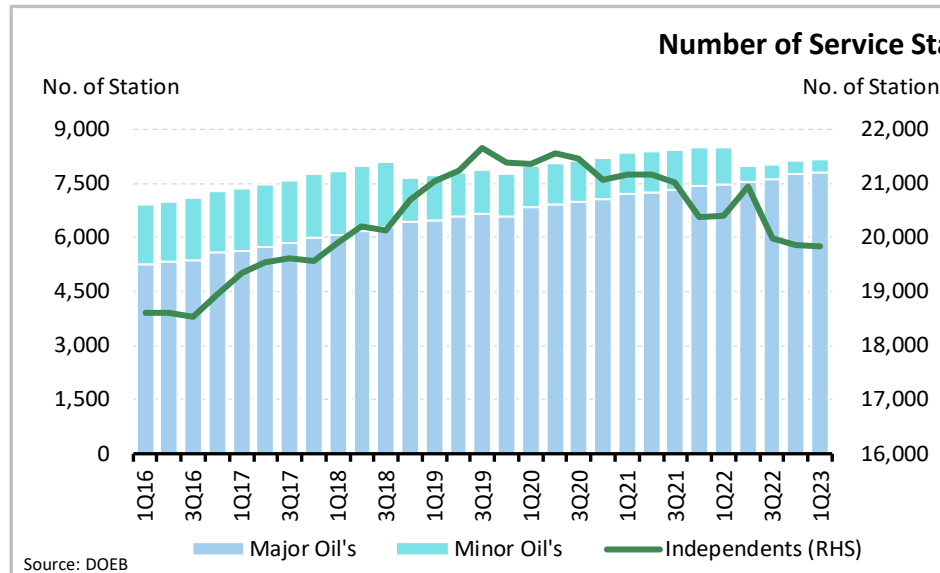
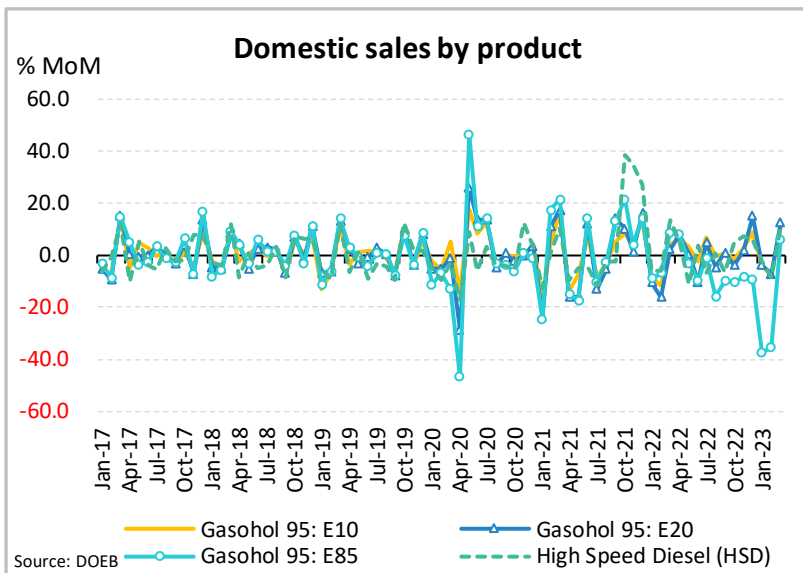
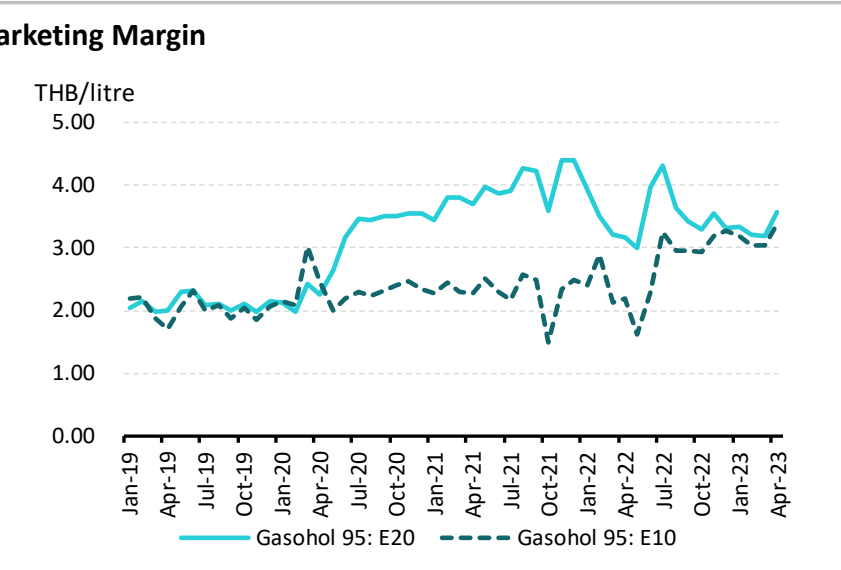
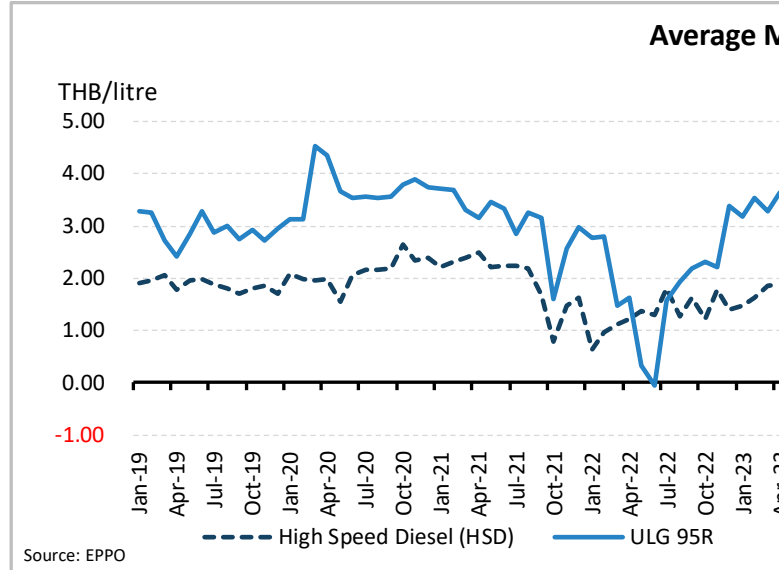
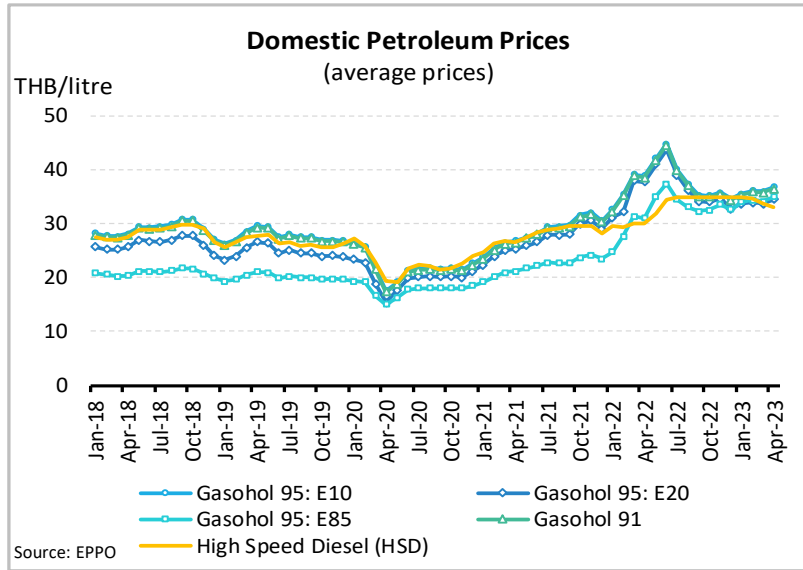
Unit : Gwh

	2019	2020	2021	2022	3M23
Jan	16,374	17,383	15,499	16,991	16,082
Feb	16,178	16,699	15,558	16,099	16,235
Mar	19,020	18,925	19,344	19,739	19,308
Apr	18,582	16,933	17,605	18,333	-
May	19,491	18,170	19,169	19,000	-
Jun	18,377	17,066	18,450	18,971	-
July	18,168	17,542	17,875	18,943	-
Aug	17,754	17,445	17,920	18,730	-
Sep	17,014	17,279	17,138	17,728	-
Oct	18,164	16,480	17,882	17,484	-
Nov	17,007	16,387	17,204	17,476	-
Dec	15,920	15,713	16,074	16,345	-
<b>Total</b>	<b>212,050</b>	<b>206,023</b>	<b>209,717</b>	<b>215,838</b>	<b>51,626</b>

# Refinery (โรงกลั่นน้ำมัน)

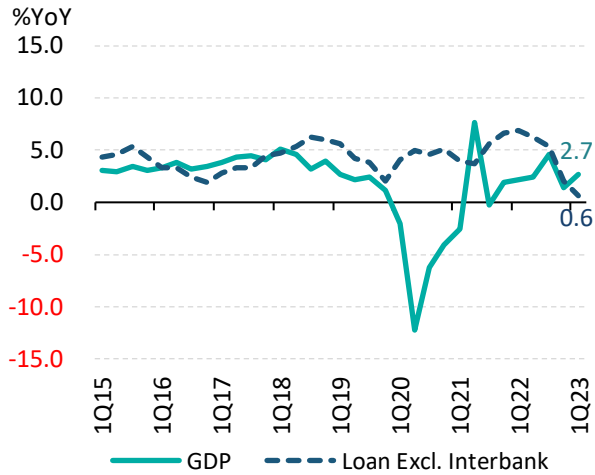


# Oil Service Station (สถานีบริการน้ำมันเชื้อเพลิง)



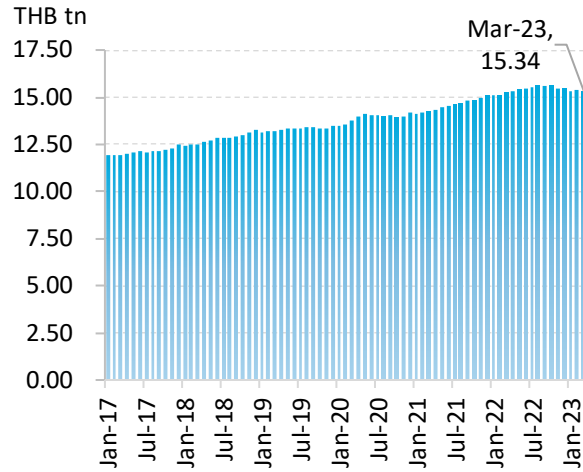
# Banking (ธนาคาร)

### Bank Loan Growth



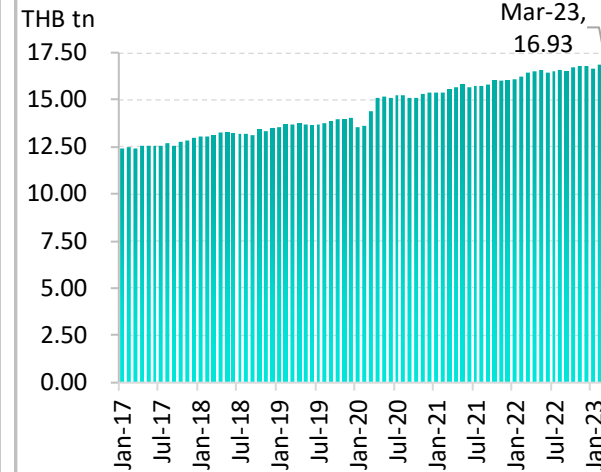
Source: BOT

### Bank Loan (Excl. Interbank)



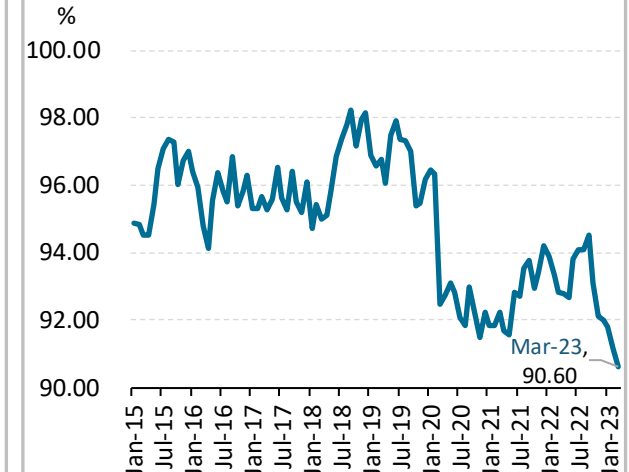
Source: BOT

### Deposits



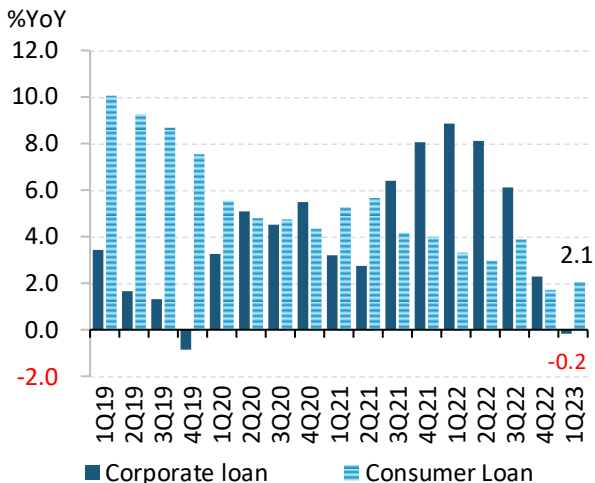
Source: BOT

### Loan to Deposit ratio (Inc.B/E)



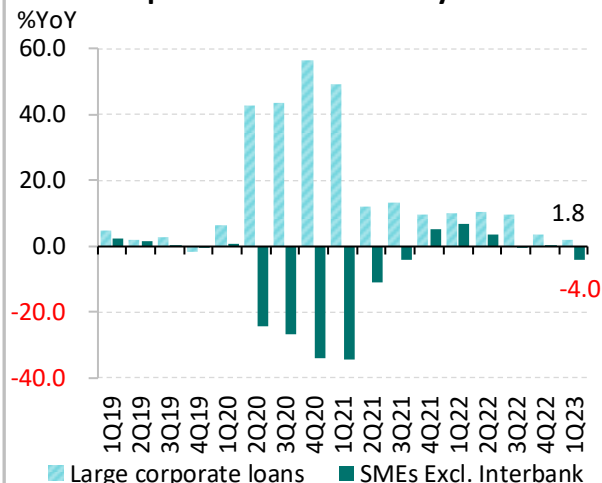
Source: BOT

### Bank Loan Growth by Sector



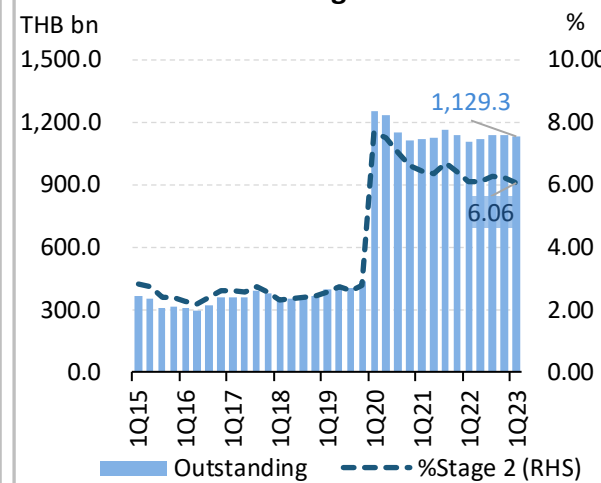
Source: BOT

### Corporate Loan Growth by Size



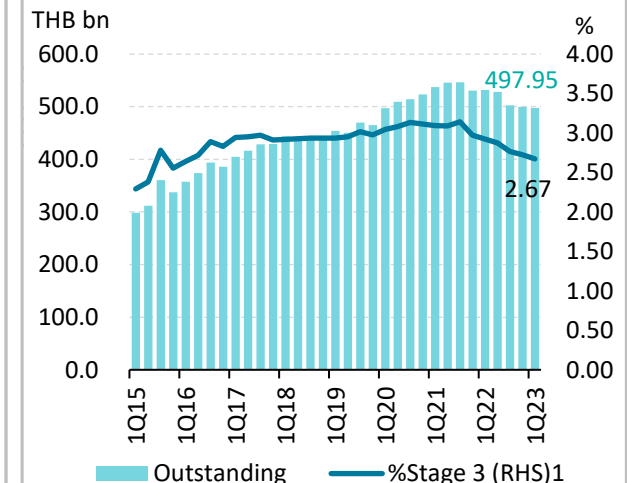
Source: BOT

### % Stage 2



Source: BOT

### NPL ratio



Source: BOT

# End of Presentation

---

## Disclaimer

ข้อมูล บทวิเคราะห์ และการแสดงความคิดเห็นต่างๆที่ปรากฏอยู่ในรายงานฉบับนี้ ได้จัดทำขึ้นบนพื้นฐานของแหล่งข้อมูลที่ได้รับมาจากแหล่งข้อมูลที่เชื่อถือได้ เพื่อใช้ประกอบการวิเคราะห์ภาวะเศรษฐกิจและอุตสาหกรรมซึ่งเป็นเอกสารภายในของธนาคารแลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน) เท่านั้น ทั้งนี้ธนาคารฯ จะไม่รับผิดชอบความเสียหายใดๆทั้งปวงที่เกิดขึ้นจากการนำข้อมูล บทวิเคราะห์ การคาดหมาย และความคิดเห็นต่างๆ ที่ปรากฏในรายงานฉบับนี้ไปใช้ โดยผู้ที่ประสงค์จะนำไปใช้ต้องยอมรับความเสี่ยง และความเสียหายที่อาจเกิดขึ้นเองโดยลำพัง