







Thailand Performance with EEC, Trade Wars, and Investment Implications (Now Drought and COVID-19)

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WHA Industrial Development Public Company Limited

Agenda



- I. Global and Regional Macro Environment
- II. Thailand Performance: Macro, Trade, Investments and Key Risks
- III. EEC: Program Update and Regional Competition



Subdued Global Growth with Downside Risks

Country		GDP Growth (%)	Country		GDP Growth (%	6)
	2019E GDP Growth (%)	2020P GDP Growth (%)	2020P Coronavirus + Trade Impact		2019E GDP Growth (%)	2020P GDP Growth (%)	2020P Coronavirus + Trade Impact
USA	▼ 2.3%	V 2.0%	[?]	★ : China	▼ 6.1%	▼ 6.0%	[?]
European Union	▼ 1.2%	▲ 1.3%	[?]	India	V 4.8%	▲ 5.8%	[?]
Japan	▲1.0%	v 0.7%	[?]	Middle East and Central Asia	▼ 0.8%	2.8%	[?]
United Kingdom	- 1.3%	▲ 1.4%	[?]	ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, Vietnam)	▼ 4.7%		[?]



Thailand in Context: Major Economies Key Macro Indicators

	US	China	Japan	Germany	South Korea	Taiwan	India	Russia	Thailand
		*	•	_	**	*	<u> </u>		
GDP Value (2018) ^{/1} (USD Billion)	20,580	13,368	4,972	3,951	1,720	590	2,719	1,657	505
GDP Growth 2018 2019F 2020F (%)	2.9% ^{/2} 2.3% ^{/2} 2.0% ^{/2}	6.6% ^{/2} 6.1% ^{/2} 6.0% ^{/2}	0.3% ^{/2} 1.0% ^{/2} 0.7% ^{/2}	1.5% ^{/2} 0.5% ^{/2} 1.1% ^{/2}	2.7% ^{/1} 2.0% ^{/1} 2.2% ^{/1}	2.6% ^{/1} 2.0% ^{/1} 1.9% ^{/1}	6.8% ^{/2} 4.8% ^{/2} 5.8% ^{/2}	2.3% ^{/2} 1.1% ^{/2} 1.9% ^{/2}	4.1% 2.5% ^{/6} 2.7% ^{/6}
Inflation Rate (2018) ^{/1} (%)	2.4%	2.1%	1.0%	1.9%	1.5%	1.5%	3.4%	2.9%	1.1%
Trade Balance (2018) ^{/4} (USD Billion)	(950)	359	(10)	270	70	49	(185)	211	3
Export Value (2018) ^{/4} (USD Billion)	1,664	2,494	738	1,557	605	336	323	449	252
Export Growth (2018) (%)	7.6%	9.8%	5.7%	7.4%	5.5%	5.7%	9.2%	25.1%	6.7%
Import Value (2018) ^{/4} (USD Billion)	2,614	2,135	748	1,287	535	286	508	238	249
Import Growth (2018) (%)	8.5%	16.0%	11.4%	9.7%	11.9%	10.3%	14.3%	25.2%	12.5%
FDI Outflows ^{/5} 2016 2017 2018 (USD Billion)	289 300 (64)	196 158 130	151 160 143	71 92 77	30 34 39	18 12 18	5 11 11	27 34 36	12 17 18
Population 2018 (Million People)	327	1,395	126	83	52	24	1,334	144	68
Unemployment Rate ^{/3} (2018) (%)	3.9%	3.9%	2.7%	3.4%	3.7%	3.6%	2.5%	5.5%	0.4%



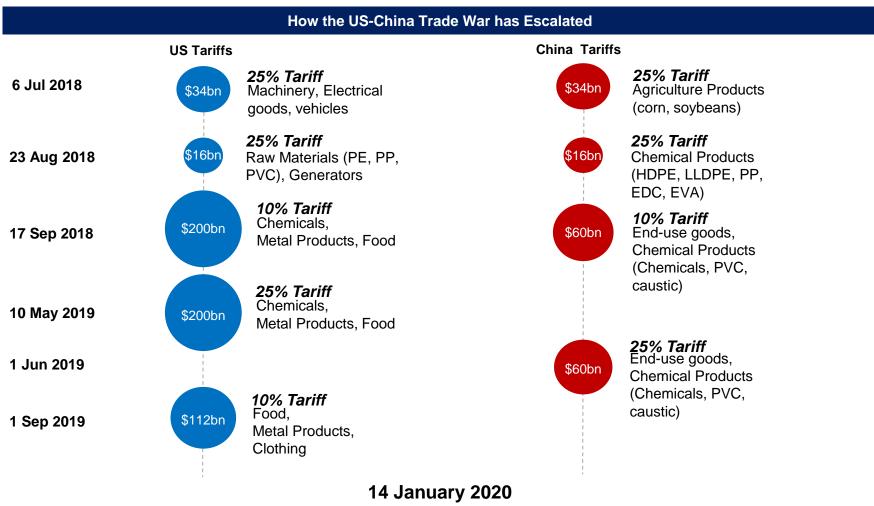
Thailand in Context: ASEAN Key Macro Indicators

	Cambodia	Laos	Myanmar	Vietnam	Indonesia	Singapore	Philippines	Malaysia	Thailand
	AMA .		*	*		©		(*	
GDP Value (2018) ^{/1} (USD Billion)	24	18	69	241	1,022	364	331	359	505
GDP Growth ^{/1} 2018 2019F 2020F (%)	7.5% 7.0% 6.8%	6.3% 6.4% 6.5%	6.8% 6.2% 6.3%	7.1% 6.5% 6.5%	5.2% 5.0% 5.1%	3.2% 0.5% 1.0%	6.2% 5.7% 6.2%	4.7% 4.5% 4.4%	4.1% 2.5% ^{/5} 2.7% ^{/5}
Inflation Rate (2018) ^{/1} (%)	2.4%	2.0%	5.9%	3.5%	3.2%	0.4%	5.2%	1.0%	1.1%
Trade Balance (2018) ^{/3} (USD Billion)	(5)	(1)	(9)	7	(8)	41	(48)	30	3
Export Value (2018) ^{/3} (USD Billion)	19	6	15	243	180	412	67	247	252
Export Growth (2018) (%)	18.3%	10.0%	19.0%	13.8%	6.8%	10.3%	-1.8%	14.3%	6.7%
Import Value (2018) ^{/3} (USD Billion)	24	6	24	237	189	370	115	217	249
Import Growth (2018) (%)	20.1%	2.8%	5.5%	12.1%	19.9%	13.1%	12.9%	12.2%	12.5%
FDI Outflows ^{/4} 2016 2017 2018 (USD Billion)	0.08 0.12 0.26	0.02 0.01 N/A	N/A N/A N/A	1.0 0.5 0.6	(12)* 2.1 8.1	40 44 37	1 2 1	8 6 5	12 17 18
Population 2018 (Million People)	16	7	53	95	264	6	107	32	68
Unemployment Rate ^{/2} (2018) (%)	N/A	0.6%	4.0%	2.0%	5.5%	4.2%	2.5%	3.4%	0.4%



US-China Trade Tensions in Summary

US China Trade Tensions Rapidly Escalated in 2019 before Phase 1 Deal Signed



US, China sign phase one trade deal



Latest Developments of US-China Trade Tensions

Trade Tensions Set to Continue in 2020 Despite Trade Deal Signed

Phase One Trade Deal



US & China signed "phase one" trade deal on Jan 15 2020

But most tariffs remain in place on USD 360 bn.

President Trump says he may wait till after 2020 election to finish phase 2 trade deal



CHINA PURCHASES

China agreed to increase purchases of American manufacturing, agriculture, energy products and services by <u>at least USD 200 bn over the next two years</u> (above USD 186 bn purchases in 2017).



TARIFFS

US will cut tariffs it imposed, on Sep 1, on USD 120 bn of Chinese goods, to 7.5%. But U.S. tariffs of 25% on USD 250 bn worth of goods will remain unchanged and part of a Phase 2 deal



INTELLECTUAL PROPERTY

Deal includes <u>stronger Chinese legal protections</u> for patents, trademarks, copyrights, including elimination of pressure for foreign companies to transfer technology to Chinese firms as a condition of market access or approvals



CURRENCY

China has made commitments to <u>refrain from competitive</u> devaluation

WILL U.S. AND CHINA EASE TENSIONS DUE TO CORONAVIRUS?





Significance to Thailand or Vietnam, One Drop becomes a Flood?

China's GDP USD 13,368 bn

China's Export USD **2,494** bn



Thailand's GDP USD **505** bn **Thailand's Export** USD 252 bn



Vietnam's GDP USD 241 bn **Vietnam's Export** USD 243 bn



- China GDP is 26 times larger than Thailand's and 55 times larger than Vietnam
- China Exports is 9.9 times larger than Thailand and 10.3 times larger than Vietnam
- **Export Products of rubber,** machinery, vehicles are complementary to Thailand
- **Export Products of textiles &** garments, mobile & parts are complementary to Vietnam
- China's Auto Production is 13 times larger than Thailand and the Largest in the World
- Countries still have various **Trade Agreements in Place**
- 2019 Auto Production Down **Globally**

27,809,196

Cars Production









Vietnam – European Union Free Trade Agreement

European Parliament on Feb 12th 2020 Ratified the EVFTA and the EVIPA Agreements between Vietnam and EU. Trade Pacts Help Vietnam Enhance its Position In World Arena

Key highlights of the EVFTA

European Commission described the FTA as "The most ambitious free trade deal ever concluded with a developing country"

Tariff Barriers: ~ 99% of elimination of custom duties

- 65% of duties on EU exports eliminated immediately. Remaining phased out over 10Y.
- 71% of duties eliminated immediately on VN exports. Remaining eliminated within 7Y.

Non-tariff barriers:

- Vietnam to align with international standards on motor vehicles and pharmaceuticals.
- EU products that comply with standards will not require Vietnamese testing or certification

Investment:

- VN manufacturing sectors (food, tyres, construction mat.) to open up to EU investment
- Improved access to VN service markets (banking, insurance, other service sectors)

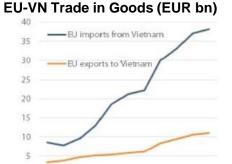
Vietnam's Beneficiary Industries:

 Manufacturing of smartphones and electronic products, textiles, footwear, agri. products)

Upcoming Challenges:

 Brexit may impact importance of EVFTA, as UK is one of biggest markets for VN's exports, and one of VN's biggest investors.

Vietnam and the EU as trading partners



In 2018, EU was 2nd largest export market of Vietnam

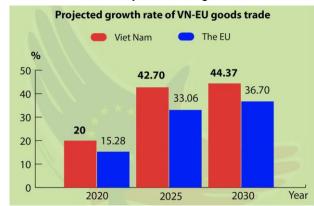
€38.2 bn EU Imports from Vietnam

Vietnam ranks 16th as EU Trading Partner

€11.1 bn EU Exports to Vietnam

EVFTA will help raise Vietnam's revenue from exports to EU by ~ 20% by 2020; Vietnam's imports from EU will also increase but at a lower rate than exports, at ~ 15.3% by 2020

- Vietnam Ministry of Planning & Investment

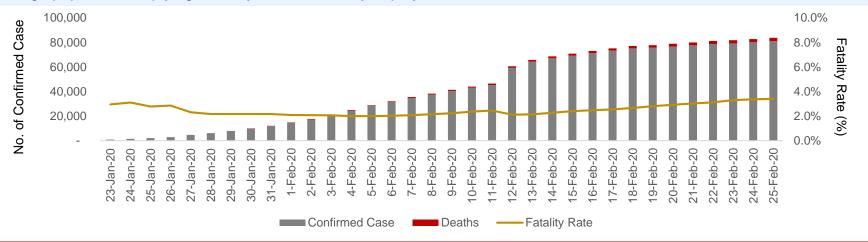




Current Situation of Corona Virus

Corona Virus Situations

- As of 25 Feb, more than **80,000** confirmed infected cases and **2,700** deaths in **33** countries (Mortality Rate : ~ 3.4%).
- According to experts, coronavirus vaccine will most likely take years of development and testing before it can reach a large population, implying that any vaccine is likely to play a limited role in this outbreak.



A Reminder of SARS

SARS Outbreak: Nov 2002 - Jul 2003

- **8,000** Confirmed Cases
- **770** Deaths (Mortality Rate: ~10%)
- 29 Countries effected

SARS Impacts

- 2Q'03 GDP growth rate decreased to 9.1% from 11.1% in Q1'03 before rebounded to 10.0% in 3Q'03
- Shanghai composite dropped by 9.0% after the outbreak but bounced back afterwards

Thailand

China

- Tourist arrivals fell by 7% in 2003 before rebounding 16% in 2004
- Short-term impact on SET

Similarities and Differences between Coronavirus VS SARS

- Coronavirus has spread far faster than SARS did.
- Coronavirus shares 80% of its genome with SARS,.
- Coronavirus' fatality rate is lower than SARS'.



Current Situation of Coronavirus, China 16% of World GDP

Impact to China's Economy

Economist Intelligence Unit believes the <u>virus could reduce real GDP growth in 2020 by 0.5 - 1.5%</u> against its baseline forecast of 5.9%.

China's GDP Growth 6.8 6.7 **Date Corona** 6.6 **Probability** Virus comes under control 25% End-Feb 50% End-Mar 5.4 End-Jun 20% 5% 4.5 Not contained in 2020

Impact to Thailand's Economy

- · Stop or reduction of international travel
- Restriction to access cash/banks for Chinese companies
- Impact to Chinese government approvals, projects or cash remittance
- Disruption to Suppliers / Supply Chains
- · Increase uncertainty to invest

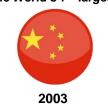
2016 2017 2018 2019 2020

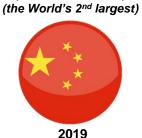
Impact to Global Economy

GDP: \$14.1 billion

(16% of world GDP)

GDP: \$1.6 billion (4% of world GDP) (the World's 7th largest)





Slowdown in Chinese growth may be a significant drag on global growth

- China's role in world economy is much larger than during the SARS
- China's economy is more vulnerable today, with productivity and overall economic growth falling as a result of the US-China trade conflict.

Most Affected Industries



159 million of Chinese tourists in 2019 with second-highest spending (outbound market) worth USD 275 bn.



> 20 international airlines stopped flying in and out of China

Cathay Pacific: Asked staff to take 3 months of unpaid leave due to the impact of the coronavirus.



China is a major supplier of parts to auto plants around the world -- nearly USD 35 bn of parts in 2018 (UN data)

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Thailand Outlook

Taking into account the coronavirus epidemic, the delayed fiscal budget and the drought situation, many bank research institutes recently revised down Thailand's GDP Growth in 2020

		202	20
		Previous	New
2 Carlotte	NESDC (17 Feb 2020)	2.7% - 3.7%	1.5% – 2.5%
SCB	SCB EIC (17 Feb 2020)	2.1% (5 Feb 2020)	1.8%
KResearch 📀	KResearch (19 Dec 2019)	2.5%	2.7%
Phatra	Phatra Securities (6 Feb 2019)	2.8%	2.2%
TMB a-n-a-l-y-t-i-c-s	TMB Analytics (6 Feb 2020)	2.8%	1.7-2.1%

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Risk Factors

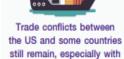




Support Factors

Continue increase in tourist number









of household debt

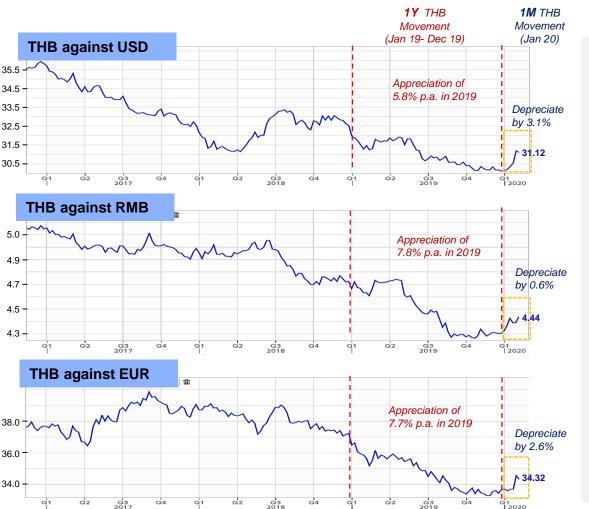
		Thai	Economic	Growth I	Forecast by NESDC
	Unit : %YOY	2019	2020F (previous forecast)	2020F Coronavirus + Trade Impact	Key factors in 2020 ^{/1}
	Private Consumption	4.5%	3.5% (3.7%)	[?]	 Consumption of durable goods to decline further, especially cars Rising household debt
	Private Investment	2.8%	3.2% (4.2%)	[?]	 Sluggish exports impacts investment in export-related businesses Domestic demand slowdown and business' financial fragility
	Government Consumption	1.4%	2.6% (2.6%)	[?]	 Budget delay lowers disbursement in Q4/19, while benefits 2020
	Government Investment	0.2%	4.8% (6.5%)	[?]	 Budgeting delay lowers disbursement in Q4/19, while benefits disbursement in 2020 Several mega-projects planned to start in 2020
	Exports of goods	-3.2%	1.4% (2.3%)	[?]	 Despite phase 1 deal, trading partners' affected by economic slowdown and baht appreciation, US trade policy uncertainty
	Imports of goods	-5.4%	2.7% (3.5%)	[?]	 Imports to decrease in 2020 from stagnant exports and domestic demand slowdown
3	Headline inflation	0.7%	0.4-1.4% (0.5-1.5%)	[?]	 Crude oil prices likely to increase slightly in 2020, but domestic oil prices to be stable with baht appreciation Core inflation to remain low with decelerated domestic demand

Source: NESDC, SCB EIC, KResearch, Phatra Securities, TMB Analytics

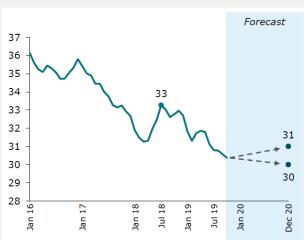


Thai Baht Appreciation, 2020 Weakening

In 2019, THB Rose 5.8% Against USD Since Early 2020, THB has fallen 3.1% Due to Investors Concerns Over Impact of Coronavirus And China's Slowdown



Forecasted THB against USD in 2020



THB range is estimated to be **30-31 THB/USD** in 2020

Key Factors Potentially Influencing THB to Remain Strong

- High current account surplus 6% in 2020
- Policy rate cuts by Thai MPC
- Relatively low international assets to GDP (low capital outflow)
- Significant capital inflows to Thailand, resulting from THB status as a regional safe haven currency

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Thai Exports Down



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In 2019, Exports Declined by 2.7% YoY. US the Only Destination where Thai Exports Still Grow



- In 2019, export value decreased by 2.7% YoY given economic slowdown in key trading partners and the escalating trade tension and Thai Baht appreciation.
- Exports to US are the only destination growing.
- Meanwhile, exports to China, Japan and several countries fell
- As a result of recent contraction, BoT adjusted exports 2020 forecast to expand by only 0.5% YoY.
- Top exports products are Automotive, Electronics and Agromanufacturing accounting for 42 % of total exports value

T	hailand	Expo	rts Va	lue by	Coun	try		Thailand Exports Value by Product							
Unit : USD Bn	2014	2015	2016	2017	2018	2019	% Change YoY	Unit : USD Bn	2014	2015	2016	2017	2018	2019	% Change YoY
USA	23.9	24.1	24.5	26.6	28.0	31.3	11.8%	Automotive	31.6	32.4	33.5	35.6	38.4	37.1	-3.3%
China	25.1	23.7	23.8	29.5	30.3	29.2	-3.8%	Electronics	33.3	32.1	31.2	35.6	37.3	34.9	-6.5%
Japan	21.7	20.1	20.5	22.1	24.9	24.6	-1.5%	Agro-manufacturing	27.1	25.6	25.9	29.1	31.3	31.3	0.0%
Vietnam	7.9	8.9	9.4	11.6	13.0	12.1	-6.5%	Machinery & Equipment	19.3	19.2	19.2	20.6	21.9	20.6	-6.3%
Hong Kong	12.6	11.8	11.5	12.3	12.5	11.7	-6.5%	Agriculture & Fishery	20.1	17.8	17.1	20.2	20.2	18.5	-8.2%
Malaysia	12.8	10.2	9.6	10.3	11.6	10.5	-10.2%	Electrical Appliances	12.3	12.0	12.5	13.2	13.5	13.6	1.3%
Australia	9.3	9.8	10.3	10.5	10.8	10.2	-5.1%	Petro-Chemicals	13.2	11.7	11.2	12.4	14.4	13.1	-8.7%
Indonesia	9.5	7.8	8.2	8.8	10.2	9.1	-11.2%	Products							
Singapore	10.4	8.8	8.2	8.3	9.3	8.8	-5.0%	Metal & Steel	9.6	9.2	9.2	10.5	11.9	11.1	-6.8%
India	5.6	5.3	5.2	6.5	7.6	7.3	-3.9%	Petroleum products	11.4	8.2	5.6	7.5	9.7	7.6	
Others	88.7	83.9	84.2	90.2	94.6	91.4		Chemicais	8.5	6.3	6.0	7.4	9.1	7.5	
Olliela	00.7							Others	41.03	39.72	44.06	44.63	45.29	50.91	12.4%
Total	227.5	214.3	215.4	236.6	253.0	246.2	-2.7%	Total	227.5	214.3	215.4	236.6	253.0	246.2	-2.7%

Source: Bank of Thailand 27 February 2020



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Thai Imports and Trade Balance

Unit: USD Bn + 1.4 % YoY BoT Forecasted



Thailand Imports Value by Country

Unit: USD mm	2014	2015	2016	2017	2018	2019	%Change YoY
China	38.5	41.1	42.0	44.2	49.9	50.3	0.9%
Japan	35.5	31.2	30.7	32.1	35.3	33.2	-5.8%
USA	14.6	13.9	12.0	14.8	15.0	17.3	15.6%
Malaysia	12.7	11.9	10.8	11.6	13.2	12.9	-2.9%
South Korea	8.5	7.0	7.3	8.0	8.9	8.6	-2.7%
Taiwan	7.5	7.5	7.1	8.1	8.6	8.0	-6.8%
Singapore	7.9	7.2	6.5	7.9	7.7	7.6	-0.6%
UAE	12.7	8.2	6.0	7.4	10.4	7.4	-29.2%
Indonesia	7.3	6.6	6.3	7.3	8.0	7.2	-9.1%
Germany	5.9	5.5	5.9	6.1	6.8	6.3	-7.0%
Others	76.5	62.6	59.6	74.0	84.5	77.7	-8.1%
Total	227.7	202.7	194.2	221.5	248.2	236.6	-4.7%

Thailand Trade Balance - Large Deficit with China

	Thailand Trade Surplus (Deficit)					
Unit: USD Bn	2014	2015	2016	2017	2018	2019
USA (Surplus)	9.3	10.2	12.5	11.8	13.1	14.0
China (Deficit)	(13.4)	(17.3)	(18.2)	(14.7)	(19.6)	(21.2)
Japan (Deficit)	(13.8)	(11.2)	(10.2)	(10.0)	(10.3)	(8.7)
Vietnam	3.9	4.9	5.0	6.6	7.3	6.7
Hong Kong	11.4	10.3	9.9	9.4	9.6	8.7
Malaysia	0.02	(1.7)	(1.2)	(1.2)	(1.6)	(2.4)
Australia	3.9	5.6	6.9	6.1	4.9	6.3
Indonesia	2.2	1.3	1.9	1.5	2.3	1.9
Singapore	2.6	1.6	1.7	0.4	1.6	1.2
India	2.6	2.7	2.6	2.6	2.8	2.5
Others	(9.0)	5.5	10.4	2.7	(5.2)	0.6
Total	(0.3)	11.7	21.2	15.1	4.8	9.6

- In 2019, imports value decreased by 4.7% and the forecasted total imports for full year 2020 has been estimated by BoT to expand by 1.4 % YoY.
- Top imports counterparties are China, Japan, and the US accounting for 43% of total Imports.
- Despite acceleration in imports from the US and China, imports from Japan and other main trading partners shrank compared to 2018
- Trade surplus reach at THB 9.6 Bn., representing double the level of 2018

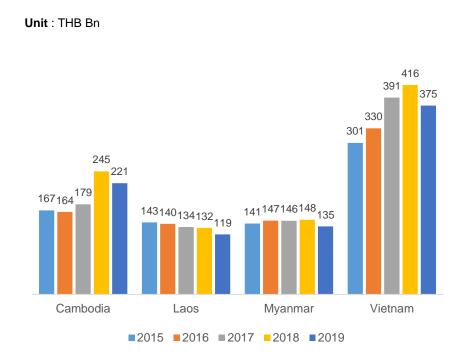
Source: Bank of Thailand 27 February 2020



CLMV Exports and Cross-Border Trade Trend Encouraging

Increasing Trend of Regional Trade and Integration, despite 2019 decrease in Export Value

Thailand's Export to CLMV



- In 2019, total exports to CLMV countries was THB 27.5 bn, decreased by 6.3 % YoY
- For full year of 2019, total cross-border trading value was around THB 1,337 bn, slightly decreased by 3.4% YoY leading by the trading value between Thailand and Malaysia accounting almost half of total cross-border trading value.

Thail	and Cross	-border	Trade Va	alue	
Unit: THB Bn	2015	2016	2017	2018	2019
Cambodia					
Exports	104.7	101.3	101.7	123.0	140.1
Imports	(20.4)	(19.7)	(23.5)	(22.8)	(21.2)
Balance	84.3	81.6	78.2	100.2	118.9
Laos					
Exports	133.1	136.4	131.3	128.9	117.9
Imports	(43.9)	(66.5)	(75.8)	(84.8)	(79.6)
Balance	89.2	69.9	55.5	44.1	38.3
Myanmar					
Exports	100.8	109.3	109.0	105.2	102.5
Imports	(117.1)	(78.6)	(75.4)	(88.1)	(93.9)
Balance	(16.3)	30.6	33.6	17.1	8.6
Malaysia					
Exports	250.5	258.1	312.5	293.8	251.9
Imports	(235.7)	(243.2)	(252.2)	(278.1)	(262.2)
Balance	14.8	14.9	60.3	15.7	(10.3)

Tr	Trade Value via Thai Border										
Unit: THB Bn	2015	2016	2017	2018	2019						
Singapore											
Exports	23.1	27.2	30.4	36.8	30.4						
Imports	(38.6)	(39.4)	(40.6)	(49.4)	(42.4)						
Balance	(15.5)	(12.2)	(10.2)	(12.6)	(12.0)						
Southern China											
Exports	25.1	22.9	37.2	32.9	53.7						
Imports	(35.7)	(43.2)	(49.9)	(70.5)	(76.7)						
Balance	(10.6)	(20.3)	(12.6)	(37.6)	(23.0)						
Vietnam											
Exports	27.1	36.0	62.2	57.7	52.8						
Imports	(23.6)	(19.0)	(17.4)	(20.6)	(12.0)						
Balance	3.4	17.0	44.8	37.0	40.8						



2019 Industrial Production Down 4.4%

Manufacturing Production and Capacity Utilization Posted a YoY Drop in 2019

Manufacturing Production Index and Capacity Utilization yey % 80 70 60 40 30

 Besides a 2.1% increase MoM in Dec 2019, 2019 saw a drop -4.4% YoY of manufacturing production

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CAPU (%)(Right Hand Side Axis)

 Output in December shrank for automotive, clothes production, refined petroleum, electronics parts, rubber and steel products

01

- The average capacity utilization in 2019 stood at 66.3%, decreased from 69.8% in 2018
- In 2019, there were only 2 out of 18 sectors that average capacity utilization rate exceed 80%, which are chemicals, and motor vehicles.

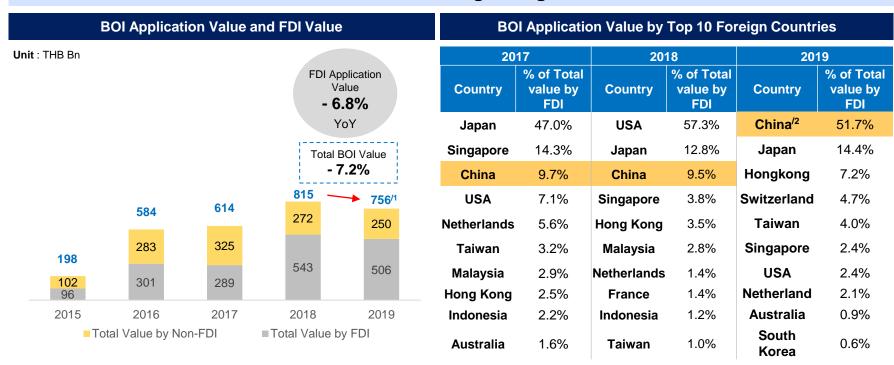
Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼		Capacii	y Utiliz	ation	Rate		
Beverages 58.5 56.7 55.6 55.5 56.9 62.5 Tobacco products 46.8 45.6 41.4 76.0 63.1 58.9 ▼ Textiles 56.3 54.9 53.0 50.5 56.9 50.9 ▼ Wearing apparel 73.4 71.4 66.5 65.3 60.1 56.6 ▼ Paper and paper products 72.2 69.7 71.0 71.1 74.8 74.5 ▼ Refined petroleum products 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65	Key Sector	2014	2015	2016	2017	2018	2019
Tobacco products 46.8 45.6 41.4 76.0 63.1 58.9 ▼ Textiles 56.3 54.9 53.0 50.5 56.9 50.9 ▼ Wearing apparel 73.4 71.4 66.5 65.3 60.1 56.6 ▼ Paper and paper 72.2 69.7 71.0 71.1 74.8 74.5 ▼ Refined petroleum 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Fabricated metal products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Machinery and equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Food products	67.9	66.3	65.3	67.1	58.7	57.1 🔻
Textiles 56.3 54.9 53.0 50.5 56.9 50.9 ▼ Wearing apparel 73.4 71.4 66.5 65.3 60.1 56.6 ▼ Paper and paper products 72.2 69.7 71.0 71.1 74.8 74.5 ▼ Refined petroleum products 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Fabricated metals products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2	Beverages	58.5	56.7	55.6	55.5	56.9	62.5
Wearing apparel 73.4 71.4 66.5 65.3 60.1 56.6 ▼ Paper and paper products 72.2 69.7 71.0 71.1 74.8 74.5 ▼ Refined petroleum products 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 </th <th>Tobacco products</th> <th>46.8</th> <th>45.6</th> <th>41.4</th> <th>76.0</th> <th>63.1</th> <th>58.9</th>	Tobacco products	46.8	45.6	41.4	76.0	63.1	58.9
Paper and paper products 72.2 69.7 71.0 71.1 74.8 74.5 ▼ Refined petroleum products 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9	Textiles	56.3	54.9	53.0	50.5	56.9	50.9
Products 72.2 69.7 71.0 71.1 74.8 74.3 ▼ Refined petroleum products 76.3 85.4 81.4 84.3 86.6 79.2 ▼ Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Machinery and equipment 61.1 57.1 61.0 55	Wearing apparel	73.4	71.4	66.5	65.3	60.1	56.6
Chemicals and chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	products	72.2	69.7	71.0	71.1	74.8	74.5
Chemical products 81.7 81.0 80.7 83.2 82.1 80.6 ▼ Basic phamaceutical products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7		76.3	85.4	81.4	84.3	86.6	79.2
Products 67.0 64.7 63.6 67.2 74.1 74.0 ▼ Rubber and plastic products 63.8 63.8 57.8 60.5 52.3 49.6 ▼ Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Chemicals and chemical products	81.7	81.0	80.7	83.2	82.1	80.6
Products 63.8 63.8 57.8 60.5 52.3 49.6 Other non-metallic mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ✓ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ✓ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ✓ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ✓ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ✓ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 △ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ✓	Basic phamaceutical products	67.0	64.7	63.6	67.2	74.1	74.0
mineral products 69.8 66.7 65.6 62.8 66.4 65.1 ▼ Basic metals 48.1 45.6 50.4 51.6 55.2 50.2 ▼ Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Rubber and plastic products	63.8	63.8	57.8	60.5	52.3	49.6
Fabricated metal products 68.7 60.9 61.9 58.0 63.5 58.4 ▼ Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Other non-metallic mineral products	69.8	66.7	65.6	62.8	66.4	65.1
products Computer, electronic products 80.0 68.0 68.4 75.9 83.8 76.4 ▼ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ▼ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Basic metals	48.1	45.6	50.4	51.6	55.2	50.2
products 80.0 68.0 68.4 75.9 83.8 76.4 ✓ Electrical equipment 61.2 61.8 62.1 63.4 64.9 59.8 ✓ Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	products	68.7	60.9	61.9	58.0	63.5	58.4
Machinery and equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Computer, electronic products	80.0	68.0	68.4	75.9	83.8	76.4
equipment 61.1 57.1 61.0 55.2 56.6 58.8 ▲ Motor vehicles 81.9 84.3 83.5 84.7 87.3 81.0 ▼	Electrical equipment	61.2	61.8	62.1	63.4	64.9	59.8
	Machinery and equipment	61.1	57.1	61.0	55.2	56.6	58.8
Euroitura 20.0 27.9 25.4 26.2 42.9 44.5	Motor vehicles	81.9	84.3	83.5	84.7	87.3	81.0
Turrillure 39.9 37.0 33.1 30.3 42.8 41.3 ▼	Furniture	39.9	37.8	35.1	36.3	42.8	41.5

Capacity Utilization Rate



2019 BOI Applications in Value Decreased Slightly

Total Value of BOI Applications and FDI Applications Were Down 7.2% and 6.8% YoY Respectively. China moves to #1 Among Foreign Countries



WHA Industrial Development 2019 surge in Chinese investments with 57 new contracts from Chinese and Taiwanese customers, representing 58% of total

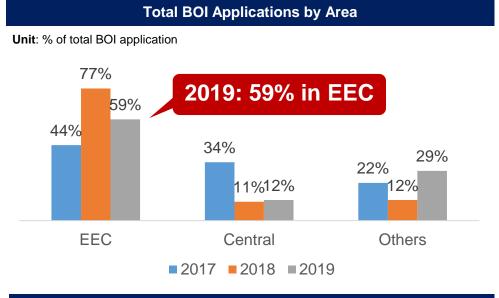
¹¹ Total investment applications of THB 756 bn in 2019 was slightly beating a target at THB 750. Total number of projects submitted in 2019 increased to 1,624 compared to 1,517 projects In 2018. Investment Applications in the targeted industries, led by electronics & electrical sector and automotive sector represented THB 154.5 bn, or 53.9% of the total.

^{/2} In terms of the country source of the FDI applications, Chinese investors ranked first with applications for 203 projects (out of a total of 991 projects) worth THB 261.7 bn, followed by Japanese investors, with 227 projects worth THB 73.1 bn.

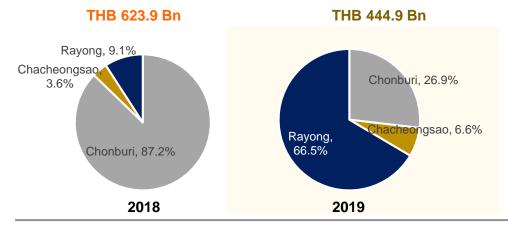


BOI Applications by Areas and Targeted Industries

Target Industries Account for 38% of Total BOI Applications in 2019



Breakdown of BOI Applications in EEC Area



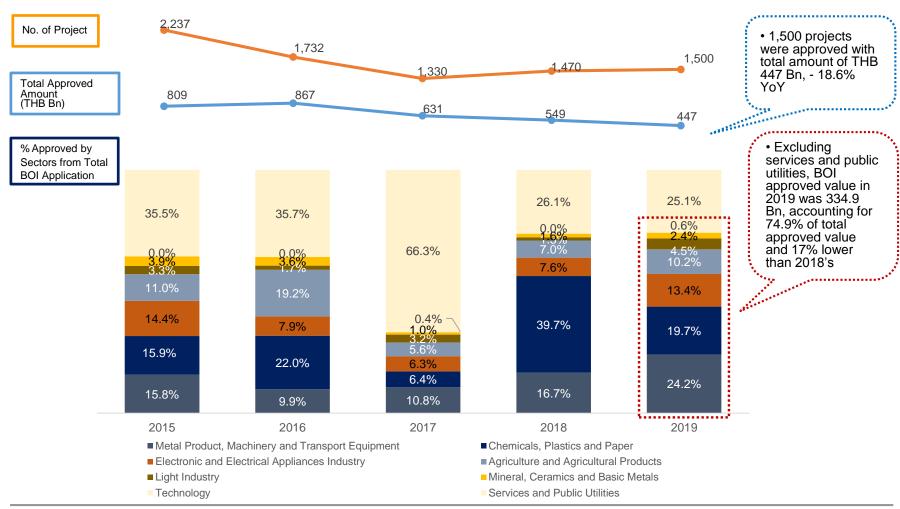
Unit : THB Bn.		2017	2018	2019	
	Agriculture & Biotechnology	54.5	28.7	38.4	
	Smart Electronics	50.6	21.5	80.5	
First S- Curve	Next Generation Automotive	79.7	153.6	74	
	Affluent, Medical & Wellness Tourism	31.1	23.9	24.9	
	Petrochemical & Petroleum Product	118.6	508.6	40.1	
	□ <u>=</u> □ Digital	5.5	12.4	9.0	
	Medical Hub	11.1	7.8	8.4	
New S-	Biofuels & Biochemical	32.8	6.1	9.6	
Curve	Robotics	1.9	0.2	1.0	
	Aviation & Logistics	1.9	6.6	0.6	
Total Targeted Industries		387.7	769.4	286.5	
% of Total	al BOI Applications	48.6%	85.3%	37.9%	
In 2010 POLymenia de auditentique for 500 mariento in 550					

- In 2019, BOI received applications for 506 projects in EEC, worth THB 444.9 Bn or 59% of investment applications
- Applications in targeted industries were worth THB 286.5 Bn.
 - New S-curve industries represent THB 28.6 Bn mostly Biofuels & Biochemical
 - First S-curve group fetched THB 257.4 Bn, led by Smart Electronics group.



2019 BOI Approvals Down 19%

Metal Product, Chemical, and Services Sector Account for 75%of BOI Approval Value for New Investment Project in 2019

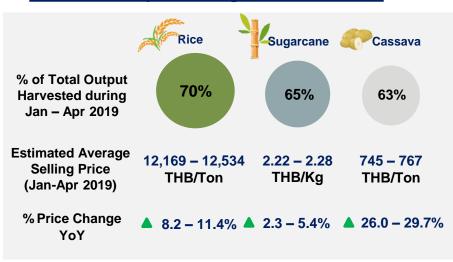




Drought and Potential Water Shortage Impact GDP

Drought Crisis in 2020...Initial Economic Costs Estimated at about THB 46 - 58 Bn, or 0.27% - 0.34% of GDP In 2020

Estimated Impact on Agricultural Sector



Overall Output Farm Income Stimated to YoY Farm Income Estimated to YoY

- Off-season drought in 2019 (May-July 2019) caused by El Nino resulted in lower than normal rainfall.
- Expected to be prolonged as water levels at dams across the country have declined by 33.1% YoY (16 Jan 2020). Such <u>water levels are</u> <u>more critical than the severe drought period</u> in 2015.
- · Rice, Cassava and Sugarcane have been hit the hardest
 - o Their prices are expected to increase over the short term in 2020.
 - With ebbing supplies of such crops may crimp farm income by 0.5-1.0% YoY during Jan – Apr of 2020.

Estimated Macro Impact

		<u> </u>	
Drought Duration	5-Month length (Jan-May 2020)	6-month length (Jan-June 2020)	7-month length (Jan-July 2020)
Economic Loss (THB Bn)	46.4	49.2	57.5
As % of 2020F GDP	0.27%	0.29%	0.34%

- Current drought <u>not only has direct impact on agricultural sector</u> but also <u>indirect effects on manufacturing and services sectors</u> that have supply chains involving Chemicals, fertilizer & pesticide, vegetable oil, and others
- Loss form lower crops output is estimated at THB 46.4 Bn if drought prolonged until May 2020 accounting for 0.27% of 2020F GDP

Agenda



- I. Global and Regional Macro Environment
- II. Thailand Performance: Macro, Trade, Investments and Key Risks
- **III. EEC: Program Update and Regional Competition**

WHA Industrial Development

Infrastructure Investment - Transportation

"Develop Transport Infrastructure to Boost Efficiency in Passengers and Goods"



Economic Boosting

 More than 44% of total investment in EEC of THB 1.7 trillion will be spent on infrastructure projects and will help boost economy



Increasing Transport

- Better transportation, easier to access, leading higher traffic
- Increase Capacity of Consumption Demand



1st Step of Connecting to the World

 Create regional value chain in CLMV with links to Belt and Road Initiative

AIRPORT

Capacity
(Unit : Million Passenger p.a.)

Current

15.0 in 2022

U-Tapao Airport

3.0 – 5.0

Suvarnabhumi 45.0 90.0 in 2020 105.0 in 2025 120.0 in 2030

Don Muang Airport (2019 Actual 41.0) 70.0 in 2025

SEAPORT

Capacity (p.a.)

Map Ta Phut Gas and Port Phase 3/1 Liquid Cargo

uid Cargo 31 Million Tons

Laem Chabang Port Phase 3/3 **18.1** Million TEU^{/2}

3.0 Million Cars

HIGHWAY

Pattaya - Sattahip Motorway

4 lane, 32-km extension of Highway 7 from Pattaya to Sattahip and to Maptaphut IE in the future



RAIL

High-speed Rail

Linking 3 Suvarr Airports

Dual Track
Railway Linking 3
Ports

Suvarnabhumi -> U-Tapao in **45 mins**

Bangkok -> Map Ta Phut in <2 hours

Accommodate **110** Million Passenger p.a.

Accommodate **5.9** Million Passenger and **250** Million Tons p.a.



Infrastructure Investment Progress: 694.5 MB Total Investment Development

Transportation Latest Status		Expected Operation	Investment	Total Investment Projects in EEC 1.7 Trillion Baht		
Motorway Bangkok - Pattaya – Sattahip (Map Ta Phut)	97% Completion ^{/1}	2020	N/A	Investment Allocation 0.24%		
High-speed rail linking three airports	Oct19: CP consortium signed contract with SRT ^{/2}	2024	224,500 MB 65% 35%	11.76% 0.65% 29.41% 8.82%		
Laem Chabang Port Phase 3	Jan 20: Awarded to PTT, Gulf, and China Harbour Engineering	2025	114,047 MB 47% 53%	11.76% 23.53% 2.06% ■ U-Tapao Airport ■ Map Ta Put Port - Phase 3		
Map Ta Put Port Phase 3	Oct 19: IEAT signed PPP with Gulf MPT LNG Terminal ^{/3}	2025	55,400 MB 23% 77%	■ Laem Chabang Port - Phase 3 ■ High Speed Rail ■ Motorway ■ New Cities ■ Tourism ■ Industry ■ Dual-Track Railway		
U-Tapao International Airport	Jan 20: BBS JV (BTS, BKK Airways, STEC) won bid ^{/4}	2023	290,000 MB 6% 94%	Government ON		
U-Tapao MRO	Dec 19: Thai Airways to announce qualified company in March 2020 ^{/5}	2022	10,588 MB 60%<mark>40%</mark>	PRIVATE SECTOR		
Funded by Government Funded by Private Sector						

Source: Bangkok Post, GTCC 1/2020

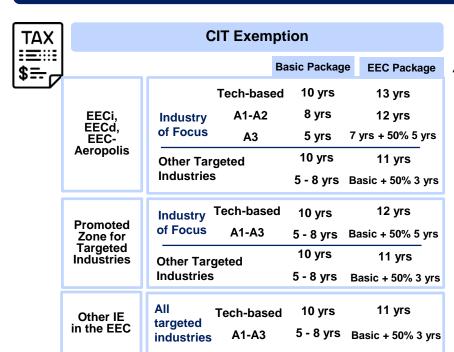
[/]¹ (as of June 2019) COD in 2020 /² build high-speed train network linking Don Mueang , Suvarnabhumi and U-tapao airport /³ (Gulf 70%, PTT Tank Terminal 30%)

²⁷ February 2020

Tax and Non-tax Incentives



The EEC provides among the most attractive incentives in the region...





Lowest Personal Income Tax rate (15%) in ASEAN

For **Foreign staffs** in promoted zones subjected to **17%** PIT For **Executives** working at headquarters/international trading companies in EEC subjected to **15%** PIT



Exemption of import duties on machinery

Exemption of import duties tax on machinery, raw or essential materials that import for using in production and R&D.



Freehold Land and Leasing 50+49 years

- Permission for foreign ownership on land for BOI promoted projects (best incentive in Asean) and IEAT
- Have the rights to make the state's land lease agreement for 50 years, and renewable upon approval for further 49 years.



Smart Visa

SMART SMART

TALENT INVESTORS





EXECUTIVE START-UP

- Maximum renewable 4-year visa (not exceeding employment contract term)
- 90-day reporting to the Immigration extended to 1 year
- No work permit required
- No re-entry permit required
- Spouse and children granted permission to work with no work permit



One-stop Service Center

One-stop service center to facilitate foreign investors by providing useful information and issuing the permits for trading, export and import in one location



PPP and EEC fast Track

Normal Track
40
Months

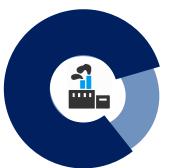
PPP Track
20
Months

8-10
Months



Industrial Promotional Zones for Target Industries

"21 Industrial Estates out of 34 Industrial Estates in EEC are promoted to be Promotional Zones"



34 Industrial Estates in EEC Area *134,805* Rai



21 EEC Promotional

Zone for targeted industries

86,755 Rai, sellable 28,666 rai

CHACHOENGSAO
1 Zones
CHONBURI
12 Zones
RAYONG
8 Zones

9 Zones from WHA
Declared Area 34,434 Rai

Tax Benefits for EEC Industrial Promotional Zone							
EEC Industrial Promotional Zone	Basic Package	EEC Package					
Target Industries*	10 yrs 5 – 8 yrs	12 yrs Basic + 50% 5 yrs					
Other Industries	10 yrs 5 – 8 yrs	11 yrs Basic + 50% 3 yrs					
Other Estates in EEC	10 yrs 5 – 8 yrs	11 yrs Basic + 50% 3 yrs					

- 18 NEW Industrial Estates (35,450 Rai) applying with IEAT to establish industrial estates in EEC Area
- 6 Industrial Estates is 100% Purple Zone under new EEC Town Planning* (10,444 Rai) which are Pinthong 6, Lak Chai IE, WHA IER, WHA ESIE4 (Expansion)
- Industrial Estates is 80% Purple Zone under new EEC Town Planning* (8,317 Rai) which are Rojana IE Nong Yai, Blue Tec City IE
- Industrial Estates cannot change into Purple
 Zone under new EEC Town Planning* (17,205 Rai)
 which are 403 Rai in Chonburi from WHA, 304
 Industrial Park 2 (3,000 Rai), Bang Chak Project
 (5,800 rai)

Remark *EEC's new Town Planning is effective on 9 Dec 2019



EEC and Thailand: Positives and Areas for Improvements

POSITIVES

- Infrastructure and Logistics Connectivity (Roads, Ports, Airports, Rail)
- Power supply
- Utilities supply
- Communication Infrastructure
- Supplier Industry Clusters
- Industrial Estates
- Stable Government Policies
- BOI / EEC Incentives, Freehold Land

AREAS FOR IMPROVEMENTS

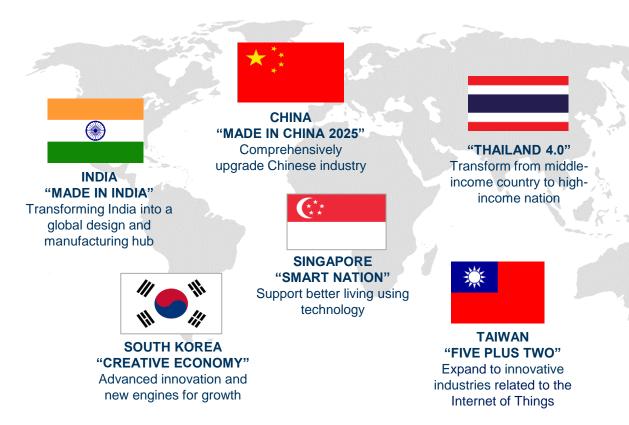
- Availability of High Skilled Labor Required for Thailand 4.0 Program
- Lack of / Limited Labor Mobility Within ASEAN
- Unfavorable Demographics of Thailand

EEC and Regional Competing Programs



The World is Preparing for 21st Century Economy

Countries worldwide are setting up new economic models to transform themselves into 21st century economy.



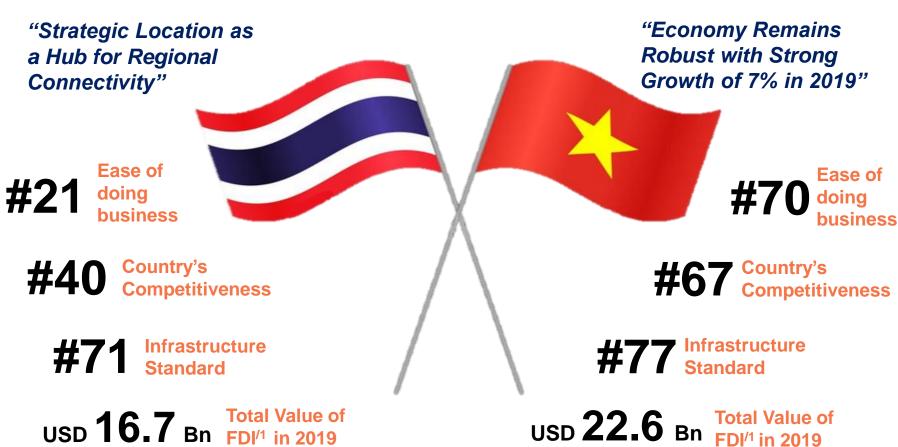
How to Compete?

- DIFFERENTIATE our competitiveness by utilizing Thailand's greatest strengths and highlighting our uniqueness in terms of location, resources, skills, people
- INTEGRATE our infrastructure and development plan with China' BRI initiative to accelerate more investment and trade activities in EEC region as well as connect Thailand with the world

Regional Competition



Thailand and Vietnam Remain Competitive Investment Destinations







Your Ultimate
Solution Partner



APPENDIX

Our Comprehensive Platform



"Our 4 Integrated Business Hubs"



"Comprehensive Platform allows WHA Group to offer Unique Total Solution to our Client"

WHA Group Overview WHA GROUP AT-A-GLANCE





Industrial Development





Logistics



 $11^{1/1} + 3$ industrial estates

68,500/1 rais total IEs

million m² under owned & managed

750 well-known customers profile

25,300/1 rais undeveloped area

200+ well-known tenants profile



Utilities & Power





Digital Platform



Utilities

Power

105 mm m³

554 equity MW data centers

equity racks

Services

Industrial Estates

460

WHA is a SET-50 listed company with a market capital of USD 2,239/3 mm and under MSCI Small-Cap Index

/¹ Including Vietnam Project amounting to total area of c.20,000 rais with undeveloped area of c. 16,900 rais.

/2 Including pre-leased area



Latest Developments of US-China Trade Tensions

Trade Tensions Set to Continue in 2020 Despite Trade Deal Signed

		Latest Key Developments between US-China
16-May-19		Banning US companies from selling to Huawei without gov't approval
1-Jun-19		Tariffs of 25% (List 1), 20% (List 2), and 10% (List 3) now in effect on USD 60 bn worth of American goods exported to China
26-Jun-19	4	US and China agreed to a tentative truce in the lead up to G20 Summit
9-Jul-19	=	US exempts 110 Chinese products from 25% tariffs
6-Aug-19	•	US declares China to be a currency manipulator
1-Sep-19	4	Both US and China began implementing tariffs on each other's imports
20-Sep-19	\$	US releases new tariff exemption lists, which exempt over 400 Chinese goods from tariffs (equipment and materials)
13-Dec-19	40	US, China agree to 'phase one deal' before next tariff hike scheduled to be Dec 15.
13-Jan-20		US drops China's currency manipulator label
15-Jan-20	40	US, China sign phase one trade deal. The phase one deal will cut US tariffs and boost China's purchases of US products.
14-Feb-20		China lowers the tariff on some items from 10% to 5%, and others from 5% to 2.5% on USD 75 bn worth of goods, in line with phase one deal



Trade Tensions not only limited to US and China

US Also Open Trade Tension Front Line with Other Major Trading Partners

Latest Key Developments between US-Other Nations WTO reached a historic ruling authorizing US to impose 2-Oct-19 punitive tariffs on USD 7.5 bn worth of European What's the status of Trump's trade fights? products citing Airbus received USD billions in illegal subsidies, giving the aircraft producer an unfair South Korea Europe advantage over American competitor Boeing. June 2018 and Oct 2019: Sept 2018: Canada and Mexico Nov 2018: Tariffs imposed over Updates to an US will impose 10% tariff on Airbus planes and 25% tariff existing pact steel, aluminium and A signed, but not fully for agricultural products like French wine, Italian cheese, Airbus subsidies, with preserve US approved, deal and Scottish whisky. Airbus-producing countries Britain, tariffs on trucks more threatened updates Nafta France, German, and Spain will be subject to more tariffs than other FU member states Trump signed a final trade agreement with Japan that 7-Oct-19 would reopen some of the markets that farmers had lost access to after the US withdrew from a multilateral Asia-Pacific pact in early 2017 Trump took no action on the deadline of a 180-day review 14-Nov-19 period for the decision whether he will impose up to 25% tariffs on U.S. light-vehicle and auto part imports. In response to a digital services tax law passed in France 2-Dec-19 (3% tax on revenue earned in France from digital services), US would retaliate with stringent tariffs as high as 100% on luxury products from France, targeting at up to USD 2.4 bn worth of French imports. However, in Jan 2020, Trump **Brazil and Argentina** China Japan Dec 2019: Jan 2020: Oct 2019: reached a deal with French President to delay a digital Tariffs threatened on A phase one deal Partial deal sets services tax until the end of 2020. lowers tensions terms similar to steel, aluminium Trump tweeted that he will raise tariffs on steel (25%) and 2-Dec-19 but leaves tariffs those in rejected aluminum (10%) imports from Brazil and Argentina, citing TPP weaker currencies in Brazil and Argentina. However, on 20 Dec. Trump is backtracking on the Brazilian tariffs BBC The UK will impose a tax (2%) on big tech companies in 22-Jan-20 April 2020. The US warned that the retaliation, probably a tax on UK car exports to the US (1/5 vehicles

manufactured in the UK are exported to the US)



The Mega Plan to Boost Thailand Competitiveness in Global Arena

"5 pillars of EEC are Designed to Develop Three Eastern Provinces in Every Dimensions"



STRATEGIC LOCATION



INFRASTRUCTURE LINKAGE



EXCELLENT INVESTMENT ATMOSPHERE

Infrastructure Development



BKK-Rayong High-Speed Rail Link

Laem Chabang Deep Sea Port

Map Ta Phut Phase 3 Port

Sattahip Commercial Port

EECi Innovation Hub

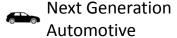
Pattaya-Map Ta Phut Motorway

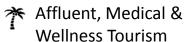
U-Tapao International Airport

EECd Digital Hub

12 Targeted Industries Development

S-Curve







Food For the Future



Agriculture & Biotechnology

New S-Curve





□**₌**d Digital



Medical Hub



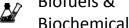


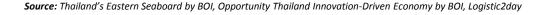
National Defense Human Resource





and Education Development







The Mega Plan to Boost Thailand Competitiveness in Global Arena

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STRATEGIC LOCATION



INFRASTRUCTURE LINKAGE



EXCELLENT INVESTMENT ATMOSPHERE

3 City Development

CHACHOENGSAO - New Bangkok Urban

CHON BURI Educational and Human
Resource Development center

SRI RACHA
LAEM CHABANG

Center of Work-Life
Harmony

PATTAYA World-famous
SATTAHIP Tourist Destination

U-TAPAO Home of Future ASEAN's
Aviation & Marine Service
Center

RAYONG Home of Petrochemicals and Energy Industries

4 Incentive Enhancement



- Exemption from corporate income tax for up to 15 Years
- 17% personal income tax rate for management, investor, experts



- Permission to own land for BOI promoted projects
- Rights to state's land lease for 50 + 49 years



 Exemption of import duties on machinery/raw materials



 Matching Grants for Investment/ R&D/ Innovation for Targeted Industries

5 Investment Facilitation



 One-stop service center to facilitate foreign investors and issue permits for trading, export and import



 Five-year work visa to attract investors, experts and scientists from around the world



 EEC Fast-track to speed up launch of investment projects, and shorten the time frame to 8-10 months from current average of 40 months

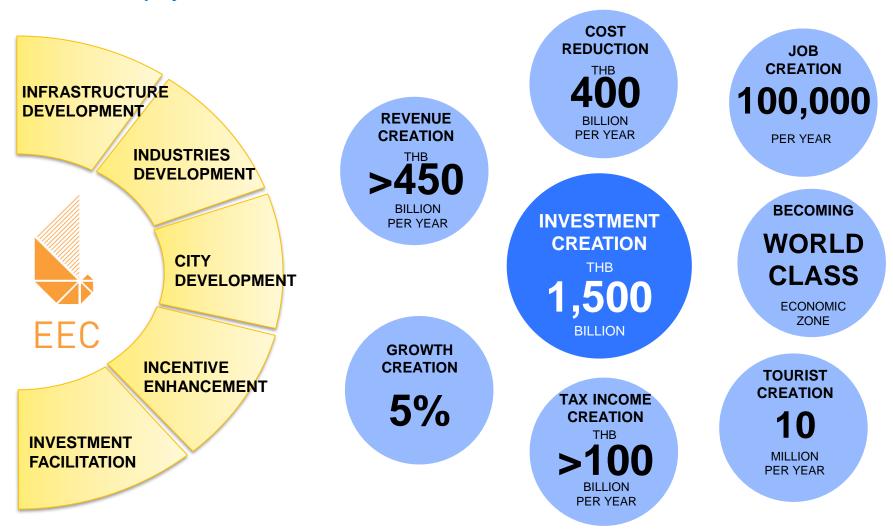


V

Development

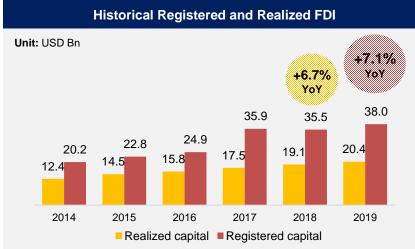
EEC Value Creation

"EEC is Anticipated to Stimulate Investments from Foreign and Domestic Corporates, Employment, as well as Economic Growth and Government's Tax Revenue"





Vietnam: Attractive FDI Destination



- In 2019, total registered FDI reached at USD 38 Bn, with disbursement of USD 20.4 Bn
- Out of total 61 provinces and cities, Hanoi attracted the most FDI at 22% of total, followed by HCMC and Binh Duong at 21.8% and 8.7%, respectively

Foreign Investment								
2	018		201	9				
USD 35.5 B		USD 38.0 Billion Total Registered Capital						
24% Japan	47% Manufacturing	# • #	21% South Korea		65% Manufacturing			
24% South Korea	19% Real Estate	*	20% Hong Kong		10% Real Estate			
<u>@</u> 14%	10%	<u>©</u>	12%		7%			

Singapore

Whole sale

& Retail

		istered FDI by Provinc	
Rank	Province	Number of Project	Registered Capital (USD Bn)
1	Ho Chi Minh	9,173	47.3
2	Binh Duong	3,772	34.4
3	Ha Noi	5,934	34.1
4	Dong Nai	1,659	31.2
5	Ba Ria - Vung Tau	466	31.0
6	Bac Ninh	1,510	18.8
7	Hai Phong	779	18.7
8	Thanh Hoa	142	14.2
9	Ha Tinh	77	11.7
10	Thai Nguyen	157	8.3
11	Hai Duong	449	8.2
12	Long An	1,164	7.9
13	Tay Ninh	324	7.0
14	Quang Ninh	129	6.3
15	Quang Nam	218	6.1
16	Bac Giang	502	5.9
17	Da Nang	774	5.5
18	Vinh Phuc	417	5.1
19	Hung Yen	468	4.9
20	Kien Giang	58	4.8
21	Khanh Hoa	113	4.3
22	Thua Thien Hue	114	3.9
23	Binh Thuan	146	3.7
24	Ha Nam	308	3.6
25	Tra Vinh	43	3.3
26	Nam Dinh	108	3.3
27	Binh Phuoc	270	2.8
28	Tien Giang	50	2.8
29	Nghe An	117	2.6
30	Phu Yen	95	2.2
31	Quang Ngai	47	2.0
32	Ninh Thuan	61	1.8
33	Phu Tho	51	1.7
34	Ninh Binh	182	1.6
35	Ben Tre	74	1.4
	Other Provinces	876	10.0
	Total	30,827	362.6

Source: Ministry of Planning, Vietnam

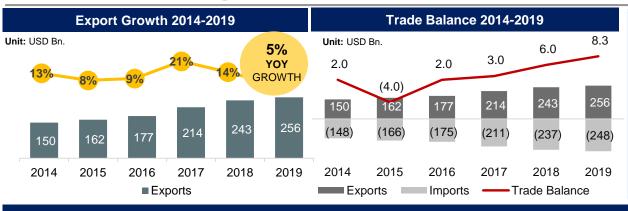
Singapore

Whole sale

& Retail

WHA Industrial Development

Vietnam: Growing Trade



- In 2019, Vietnam Trade balance increased to USD 8.3 Bn.
- Telephone, Computers and Textile account for almost half of total exports of Vietnam
- USA, China, Japan, South Korea remain the top four exports counterparties.
- Among top trade parties, Vietnam has trade deficits with China, South Korea and Thailand

Top 10 Export Destinations

Top Export Value by Products

Unit: USD Bn.	SD Bn						·						
	2014	2015	2016	2017	2018	2019		2014	2015	2016	2017	2018	2019
USA							Netherland	s					
Export	28.6	33.5	38.4	41.6	47.5	61.3	Export	3.8	4.8	6.0	7.1	7.1	6.9
Import	(6.3)	(7.8)	(9.7)	(9.2)	(12.8)	(14.4)	Import	(0.5)	(0.7)	(0.7)	(0.7)	(8.0)	(0.7)
Balance	22.3	25.7	28.7	32.4	34.7	47.0	Balance	3.3	4.1	5.3	6.4	6.3	6.2
China							India						
Export	14.9	16.6	22.0	35.5	41.3	41.4	Export	2.5	2.5	2.7	3.8	6.5	6.7
Import	(43.6)	(49.5)	(50.0)	(58.2)	(65.4)	(75.5)	Import	(3.1)	(2.7)	(2.7)	(3.9)	(4.1)	(4.5)
Balance	(28.7)	(32.9)	(28.0)	(22.7)	(24.1)	(34.0)	Balance	(0.6)	(0.2)	0	(0.1)	2.4	2.1
Japan							Germany						
Export	14.7	14.1	14.7	16.8	18.9	20.4	Export	5.2	5.7	6.0	6.4	6.9	6.6
Import	(12.9)	(14.2)	(15.1)	(16.6)	(19.0)	(19.5)	Import	(2.6)	(3.2)	(2.9)	(3.2)	(3.8)	(3.7)
Balance	1.8	(0.1)	(0.4)	0.2	(0.1)	0.9	Balance	2.6	2.5	3.1	3.2	3.1	2.9
Korea							UK						
Export	7.2	8.9	11.4	14.8	18.2	19.7	Export	3.6	4.6	4.9	5.4	5.8	5.8
Import	(21.7)	(27.6)	(32.2)	(46.7)	(47.5)	(46.9)	Import	(0.6)	(0.7)	(0.7)	(0.7)	(1.0)	(0.9)
Balance	(14.5)	(18.7)	(20.8)	(31.9)	(29.3)	(27.2)	Balance	3.0	3.9	4.2	4.7	4.8	4.9
Hong Kong	g						Thailand						
Export	5.3	7.0	6.1	7.6	8.0	7.2	Export	3.5	3.3	3.7	4.8	5.5	5.3
Import	(1.0)	(1.3)	(1.5)	(1.7)	(1.5)	(1.3)	Import	(7.1)	(8.3)	(8.8)	(10.5)	(12.0)	(11.7)
Balance	4.3	5.7	4.6	5.9	6.5	5.8	Balance	(3.6)	(5.0)	(5.1)	(5.7)	(6.5)	(6.4)

Unit: %of	I otai	Export	value
			20

		<u>2018</u>	<u>2019</u>
1	Telephones and parts	20.2%	20.4%
2	Computers and parts	12.0%	14.3%
3	Textile, sewing products	12.5%	13.0%
4	Footwear	6.7%	7.3%
5	Machinery, instrument, accessory	6.8%	7.3%
6	Wood and wooden products	3.7%	4.2%
7	Means of transport and equipment	3.3%	3.4%
8	Seafood	3.6%	3.4%
9	Iron, Steel	1.9%	1.7%
10) Fibers, not spun	1.7%	1.7%

Source: General Statistics Office Vietnam