

# FDI SUPPORTS INVESTMENT OPPORTUNITIES IN INDUSTRIAL FACTORIES AND WAREHOUSES

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## HIGHLIGHTS

1

THE PROPORTION OF FOREIGN DIRECT INVESTMENT (FDI) IN 2021 WAS AS HIGH AS 76.73 PERCENT, HIGHER THAN IN 2019 DURING THE COVID-19 CRISIS WHEN FDI WAS 66.95 PERCENT.

2

FOUR POPULAR INDUSTRY GROUPS, WITH A TOTAL INVESTMENT VALUE OF MORE THAN 262.73 BILLION BAHT, ACCOUNTING FOR 77% OF THE TOTAL FOREIGN INVESTMENT. THE NUMBER ONE GROUP WAS ELECTRICAL AND ELECTRONIC APPLIANCES AT 31% FOLLOWED BY THE MEDICAL GROUP AT 18% THE PETROCHEMICAL GROUP AT 14% AND THE AGRICULTURE AND FOOD PROCESSING GROUP AT 14%.

3

AT THE END OF 2021, READY-MADE WAREHOUSE SPACE FOR RENT IN CHACHOENGSAO, CHONBURI AND RAYONG AMOUNTED TO 2.3 MILLION SQUARE METRES. IN 2021, THERE WAS A SLIGHT INCREASE IN THE NEW SUPPLY OF WAREHOUSES, AMOUNTING TO 135,000 SQUARE METRES. ON THE DEMAND SIDE, A TOTAL OF 1.9 MILLION SQUARE METRES OF WAREHOUSE SPACE WERE LEASED FROM A TOTAL OF 2.3 MILLION SQUARE METRES, ACCOUNTING FOR AN OCCUPANCY RATE OF 81.7 PERCENT.

4

AT THE END OF 2021, THE TOTAL AREA OF READY-BUILT FACTORIES FOR RENT IN CHONBURI AND RAYONG AMOUNTED TO 1.5 MILLION SQUARE METRES. THE NEW SUPPLY WAS UP TO 30,000 SQUARE METRES. ON THE DEMAND SIDE, A TOTAL OF 1.2 MILLION SQUARE METRES OF READY-BUILT FACTORIES WERE LEASED FROM A TOTAL FACTORY SPACE OF 1.4 MILLION SQUARE METRES.

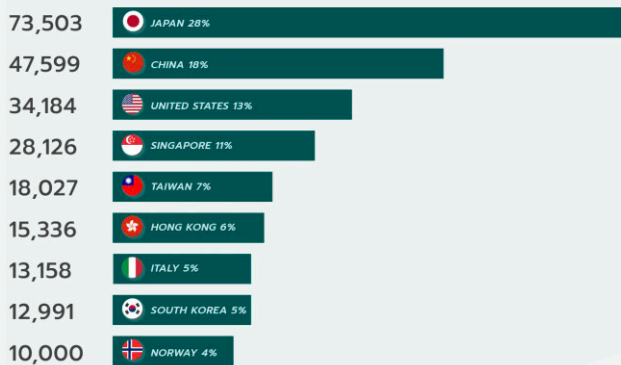
### 3 NEW S-CURVE INDUSTRIES GREW 30% TO 172% FROM 2019 TO 2021, WITH A TOTAL INVESTMENT OF OVER 98 BILLION BAHT

#### FOREIGN INVESTMENT APPLICATION STATISTICS

YEAR	2018	2019	2020	2021	% CHANGE
NUMBER OF PROJECTS	1,517	1,523	1,599	1,674	5%
VALUE OF INVESTMENT (MILLIONS OF BAHT)	814,857	691,386	404,610	642,680	59%
PROPORTION OF FDI	66.59%	66.59%	47.80%	76.73%	29%

Source: Office of the Board of Investment

#### FOREIGN INVESTMENT (MILLIONS OF BAHT)



Source: Office of the Board of Investment

Over the past three years, almost every business sector experienced the impacts of an economic slowdown and the spread of Covid-19. Also, the current war between Russia and Ukraine acts as a catalyst for disruption to the overall economy. On the whole, business recovery remains slow, but it is well accepted that the main drivers of economic recovery in the country include the industrial and export sectors, which offer investment opportunities during these times of crisis. The industrial sector itself has improved due to the picking up of demand for imports and exports, which signals the economic recovery of the country's trade partners. In terms of investment capital in the Thai industrial sector, there has been an increase in many areas, especially in the petrochemical, food, and medical sectors. Domestic transportation activities continue to meet the demand from e-commerce and work from home policies, which enables people to order more products online. In addition, the electric vehicle group is another interesting sector; given the foreign investment to set up factories and production lines in Thailand, this sector will likely lead to an increase in demand for real estates, such as warehouses for rent, in the future.

In 2021, the application for investments by foreigners totaled more than 642.68 billion baht, a figure that is close to the total investment in 2019, before the Covid-19 crisis, of 691.386 billion baht. In addition, the proportion of foreign direct investment (FDI) in 2021 was as high as 76.73 percent, higher than in 2019 during the Covid-19 crisis when FDI was 66.95 percent. These figures reflect upcoming trends in the next 1 to 2 years when investment projects in the application process start to gradually be approved.

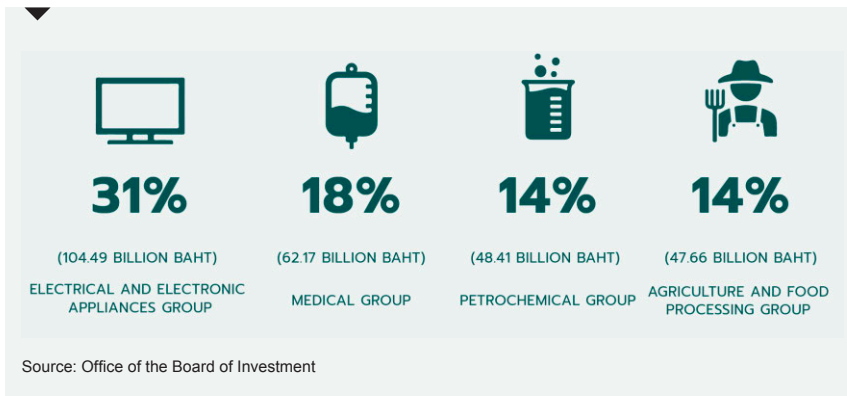
## APPLICATION FOR INVESTMENT IN TARGET INDUSTRIES IN 2021 INCREASED BY 80 PERCENT

5 EXISTING INDUSTRIES	NUMBER OF PROJECTS			INVESTMENT (MILLIONS OF BAHT)			TREND
	2019	2020	2021	2019	2020	2021	
ELECTRICAL AND ELECTRONIC APPLIANCES	142	152	131	75,040	50,220	104,490	
PETROCHEMICALS AND CHEMICALS	75	84	78	20,010	17,800	48,410	
AGRICULTURE AND FOOD PROCESSING	194	171	198	37,980	38,610	47,660	
AUTOMOBILES AND AUTOMOTIVE PARTS	106	95	95	58,310	37,330	24,570	
TOURISM	31	13	15	28,880	8,200	16,390	
7 NEW S-CURVE INDUSTRIES	NUMBER OF PROJECTS			INVESTMENT (MILLIONS OF BAHT)			TREND
	2019	2020	2021	2019	2020	2021	
MEDICAL	30	77	71	8,420	22,070	62,170	
BIOTECHNOLOGY	17	18	17	9,030	10,500	21,880	
DIGITAL	179	133	170	8,280	1,610	14,030	
AIRCRAFT	3	7	5	590	1,440	450	
AUTOMATION AND ROBOTICS	12	13	10	1,020	1,120	440	
HOMELAND SECURITY	4	3	-	400	460	-	
HUMAN RESOURCE DEVELOPMENT AND EDUCATION	6	6	-	1,350	240	-	
<b>TOTAL</b>	<b>799</b>	<b>772</b>	<b>790</b>	<b>249,310</b>	<b>189,600</b>	<b>340,490</b>	

Source: Office of the Board of Investment

In 2021, 790 investment projects were submitted in the targeted industries with a total value of 340.49 billion baht, reflecting an increase of 80 percent from the previous year and an increase of 37 percent from 2019 before the Covid-19 crisis hit. Existing industries that are in an uptrend include electrical and electronic appliances, petrochemicals and chemicals (on the merits of e-commerce growth), and agriculture and food processing. The new industry groups or the New S-Curve that are on an upward trajectory most prominently include the medical group, followed by the biotechnology and digital groups.

## 4 POPULAR INDUSTRIAL GROUPS FOR FOREIGN INVESTMENT



In 2021, the current investment of foreigners in Thailand concentrated around four popular industry groups, with a total investment value of more than 262.73 billion baht, accounting for 77 percent of the total foreign investment. The number one group was electrical and electronic appliances at 31 percent (104.49 billion baht), followed by the medical group at 18 percent (62.17 billion baht), the petrochemical group at 14 percent (48.41 billion baht), and the agriculture and food processing group at 14 percent (47.66 billion baht).

## MEDICAL INDUSTRY IS MOST PROMINENT (NEW S-CURVE)

### CHANGES IN INVESTMENT RANKING, BY INDUSTRY GROUP

5 Existing Industries 7 New S-Curve Industries

RANK	2019	2020	2021
1	ELECTRICAL AND ELECTRONIC APPLIANCES	ELECTRICAL AND ELECTRONIC APPLIANCES ↗	ELECTRICAL AND ELECTRONIC APPLIANCES ↗
2	AUTOMOBILES AND AUTOMOTIVE PARTS	AGRICULTURE AND FOOD PROCESSING ↗	MEDICAL ↗
3	AGRICULTURE AND FOOD PROCESSING	AUTOMOBILES AND AUTOMOTIVE PARTS ↘	PETROCHEMICALS AND CHEMICALS ↗
4	TOURISM	MEDICAL ↗	AGRICULTURE AND FOOD PROCESSING ↘
5	PETROCHEMICALS AND CHEMICALS	PETROCHEMICALS AND CHEMICALS ↗	AUTOMOBILES AND AUTOMOTIVE PARTS ↘
6	BIOTECHNOLOGY	BIOTECHNOLOGY ↗	BIOTECHNOLOGY ↗
7	MEDICAL	TOURISM ↘	TOURISM ↗
8	DIGITAL	DIGITAL ↗	DIGITAL ↗
9	HUMAN RESOURCE DEVELOPMENT AND EDUCATION	AIRCRAFT ↗	AIRCRAFT ↗
10	AUTOMATION AND ROBOTICS	AUTOMATION AND ROBOTICS ↗	AUTOMATION AND ROBOTICS ↗
11	AIRCRAFT	HOMELAND SECURITY ↗	HOMELAND SECURITY ↗
12	HOMELAND SECURITY	HUMAN RESOURCE DEVELOPMENT AND EDUCATION ↘	HUMAN RESOURCE DEVELOPMENT AND EDUCATION ↗

Source: Office of the Board of Investment

Investment capital in the medical industry grew rapidly. From being in seventh place in 2019, it moved up to fourth place in 2020 and rose to second place in 2021 with an investment of 62.17 billion baht. This represented an average CAGR of 172 percent from 2019 to 2021, driven by three main factors: 1. Treatment standards and quality of service; 2. Medical hub policy announced by the government in 2003; and 3. Thailand's goal of become the centre of medical device exports to neighbouring countries (CLMV). Most of the popular sites for medical industry factories or warehouses are located in the Eastern Economic Corridor (EEC). This is an area where the government supports investment to become a medical hub and expand the medical device export market to CLMV countries.

### CHANGES IN INVESTMENT RANKING, BY INDUSTRY GROUP

INDUSTRY	NUMBER OF PROJECTS			INVESTMENT (MILLIONS OF BAHT)			TREND	CAGR
	2019	2020	2021	2019	2020	2021		
ELECTRICAL AND ELECTRONIC APPLIANCES	142	152	131	75,040	50,220	104,490		18%
MEDICAL	30	77	71	8,420	22,070	62,170		172%
PETROCHEMICALS AND CHEMICALS	75	84	78	20,010	17,800	48,410		56%
AGRICULTURE AND FOOD PROCESSING	194	171	198	37,980	38,610	47,660		12%
AUTOMOBILES AND AUTOMOTIVE PARTS	106	95	95	58,310	37,330	24,570		-35%
BIOTECHNOLOGY	17	18	17	9,030	10,500	21,880		56%
TOURISM	31	13	15	28,880	8,200	16,390		-25%
DIGITAL	179	133	170	8,280	1,610	14,030		30%
AIRCRAFT	3	7	5	590	1,440	450		-13%
AUTOMATION AND ROBOTICS	12	13	10	1,020	1,120	440		-34%
HOMELAND SECURITY	4	3	-	400	460	-		-100%
HUMAN RESOURCE DEVELOPMENT AND EDUCATION	6	6	-	1,350	240	-		-100%
TOTAL	799	772	790	249,310	189,600	340,490		17%

Source: Office of the Board of Investment

## THE MARKET FOR WAREHOUSES AND INDUSTRIAL FACTORIES EXPANDED WELL

The Research and Project Development Consultancy of Knight Frank Chartered (Thailand) Co., Ltd., a specialist in real estate investment analysis and investment trust establishment, surveyed and assessed the overall industrial and

warehouse market in 2021, and saw significant and positive signs from the expansion of the market for warehouses and ready-made factories for rent. A summary of the findings is as follows:



## THE MARKET FOR READY-MADE WAREHOUSES FOR RENT IN CHACHOENGSAO, CHONBURI AND RAYONG

At the end of 2021, ready-made warehouse space for rent in Chachoengsao, Chonburi and Rayong amounted to 2.3 million square metres. In 2021, there was a slight increase in the new supply of warehouses, amounting to 135,000 square metres. Most of this space is in Chonburi at 60 percent, followed by Chachoengsao at 30 percent and Rayong at 10 percent. Chachoengsao, Chonburi and Rayong are three provinces located in the Special Economic Zone (EEC) that receives support from the government. This has helped draw developers to engage in project development in this area. We believe that there will be an investment in setting up factories in such areas as well as corresponding demand.

It is thus expected that this area will need more warehousing space in the future.

On the demand side, a total of 1.9 million square metres of warehouse space were leased from a total of 2.3 million square metres, accounting for an occupancy rate of 81.7 percent. The occupancy rate increased in 2020, which was 79.3 percent, and the rented warehouse space increased in 2020 by approximately 160,000 square metres. The average annual take-up of warehouse space rentals in this area for the past 5 years is approximately 140,000 square metres per year.

## THE MARKET FOR READY-MADE FACTORIES FOR RENT IN CHONBURI AND RAYONG

At the end of 2021, the total area of ready-built factories for rent in Chonburi and Rayong amounted to 1.5 million square metres. The new supply was up to 30,000 square metres (in 2019, no new supply was added, and in 2020, the new supply was around 50,000 square metres). Most of the prefabricated factories are located in Chonburi province at 62 percent of the supply, while Rayong province housed 38 percent. Such factories in this area increased a lot because Chonburi and Rayong are two provinces in the Special Economic Zone (EEC) that receive tax incentives from the government. Also, this area is an important production base

for growing industries such as medical devices. Main products include rubber gloves, catheters, syringes and wound dressings, which have expanded the market during the Covid-19 outbreak. On the demand side, at the end of 2021, a total of 1.2 million square metres of ready-built factories were leased from a total factory space of 1.4 million square metres. This marks an occupancy rate of 86.5 percent, which is slightly increased from the 86.3 percent rate in 2020 (the average occupancy rate of prefabricated factories in this area has an annual take-up of roughly 40,000 square metres per year).

## INDUSTRY TRENDS IN 2022

Thailand's industrial sector and exports are likely to continue to expand due to the easing of the Covid-19 situation, the gradual recovery of the global economy and the re-opening of countries. Also, the government has measures to promote investment via the Office of the Board of Investment (BOI), which will attract more foreign investors to the country. The main industrial and export sectors, such as electrical appliances and electronics, petrochemicals, and agriculture and food processing, will continue their prominence. The new targeted industries that have been expanding well are expected to be in business groups that align with the government's investment promotion policy related to new target industries (New S-Curve). Moreover, the public sector will continue to support business operations in other industries that will be a driving

force of the Thai economy in the future, such as services related to the high-speed rail project connecting three airports; engineering design services; business services related to advanced international distribution centre and warehouse projects; digital platform design and development services; international business centre (IBC) services for overseas affiliates; control of production, packaging, storage, inspection, and quality assurance services of chemicals; wastewater treatment; licensing and sub-licensing services of software and applications related to medical procedures; installation, repair and maintenance services for solar photovoltaic power generation systems and related products; and EV charging station services for electric vehicles and services for the use of management systems in such stations.

**We like questions, if you've got one about our research, or would like some property advice, we would love to hear from you.**



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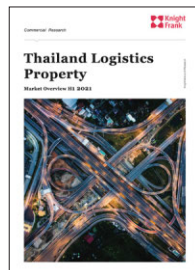
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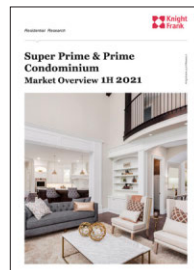
Bangkok Office  
Market Overview  
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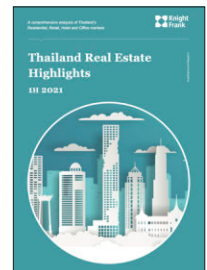
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