

Report on the Industrial Economics Status in Q4/2021 and Outlook for Q1/2022



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Executive Summary

Summary of Thai Industrial Economic Status in Q4/2021

The industrial economic status in Q4/2021, when considered from the Manufacturing Production Index (MPI), it increased by 4.9 percent, an improvement compared to Q3/2021, which decreased by 0.2 percent. As a result of the COVID-19 pandemic starting to unravel, resulting economic activities in the country gradually returned to close to the pre-pandemic period. In addition, the export sector continued to grow in line with the gradual recovery of the global economy. Key industries that expanded in Q4/2021 were petroleum refining from a low base in the previous year when Thailand faced the COVID-19 pandemic in many areas. The government, therefore, has more measures to control the pandemic, causing economic activity to slow down the impact of the use of refined oil but this year in November, Thailand has started to open the country to foreign tourists again, so the use of refined fuel in the country has increased. Electronic components from increased demand on the global market to be used in conjunction with more products used in daily life, such as automobiles, home appliances and various electrical equipment. Automobiles increased as a result of the global economic recovery and a greater demand for automobiles causing an increase in exports. Furniture manufacturers received more orders for metal furniture products this year due to the low base last year from the COVID-19 pandemic, which is still severe both inside the country and abroad.

Outlook of Key Industries for Q1/2022

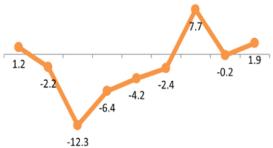
- Iron and Steel: It is expected to be stable compared to the same period last year, with supporting factors from continuous industry expansion, infrastructure construction and government-industry support policies. However, there is a risk from the pandemic of COVID-19 in the country, this may cause a slowdown in steel demand and a downward trend in steel prices on the global market and will affect the competitiveness of Thai manufacturers.
- Electronics: It is expected that the MPI and export value will continue to increase by 5.0 and 7.0 percent, respectively, as the economies of trading partner countries and the world export markets have recovered from the situation of the COVID-19 pandemic including the expansion of the network and the development of the 5G Data Center and IoT technology systems, there is a continuous increase in demand for electronic products from both domestic and foreign countries.
- Automobiles: It is estimated that in Q1/2022, more than 450,000 automobiles will be manufactured, which is divided into 50-55 percent production for domestic sales and 45-50 percent production for exports.
- Motorcycles: It is estimated that in Q1/2022, more than 500,000 motorcycles will be manufactured, which is divided into 80-85 percent production for domestic sales and 15-20 percent production for exports.
- Pulp, Paper and Print Media: Paper products used in the manufacture of packaging boxes will increase in line with domestic consumption. At the same time, paper packaging continues to benefit from its use for online shopping. Exports will continue to expand in the pulp group.

- <u>Cement:</u> Large public utility projects, as well as economic stimulus measures that the government and the Bank of Thailand have gradually implemented to promote consumer demand in the real estate sector, are expected to increase production and sales volumes.
- Textile and Wearing Apparel: As demand from major trading partners, such as the United States of America, Japan, China and the EU, steadily recovers throughout the supply chain, there will be a little expansion. Domestic demand began to recover as a result of the policy to boost domestic consumption and open the country. Despite the fact that the system has been hampered by a shortage of foreign employees who returned to the nation during COVID-19 and have not re-entered the system.
- Pharmaceuticals: Pharmaceutical production in Q1/2022 is expected to increase by 5.00 percent from the same quarter of the previous year in line with the good growth trend of the domestic drug market. Exports are expected to increase by 5.00 percent in Malaysia, the Philippines and Laos markets, which tend to increase continually and provide increasing demand for medicines from Thailand.
- Rubber and Rubber Products: Production of automotive tires is expected to increase by 3.00 percent in line with the expansion trend of the export market. The production of rubber gloves is expected to decrease by 5.00 percent due to Thailand's inability to compete in price. The production of primary processed rubber is expected to increase by 5.00 percent in line with the rising demand of both domestic and international markets.
- Food: The overall MPI and export value are expected to grow slightly compared to the same quarter of the previous year because the world economy and trade tend to expand continuously. In addition, there was a positive factor from the depreciation of the Thai Baht. However, the situation of production and exports is still at risk from the pandemic of COVID-19 (Omicron) that occurs in Thailand and trading partners, including adjusting the price of raw materials in the production of food products. This affects the cost of the industrial sector and results in a decrease in the purchasing power of consumers.



Thailand's Economic and Industrial Overview in Q4/2021

Gross domestic product increased by 1.9 percent (%YoY)

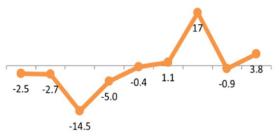


Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: Office of the National Economic and Social Development Council

Gross Domestic Product or GDP in Q4/2021 expanded by 1.9 percent, up from a contraction of 0.2 percent in the previous quarter and an improvement over the same period last year that decreased by 4.2 percent.

Industrial sector's GDP increased by 3.8 percent (%YoY)



Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: Office of the National Economic and Social Development Council

In Q4/2021, industrial sector's GDP increased significantly compared to the previous quarter and the same period of the previous year, as demand for goods and services improved both domestically and internationally in Thailand's trading partners, particularly for durable goods such as automobiles, electrical appliances and electronic equipment, as well as the gradual recovery of economic activity and control of the spread of COVID-19 in the country.

The GDP of the industrial sector in Q4/2021

increased by 3.8 percent, an increase from 0.9 percent contraction in the previous quarter and increasing significantly compared to the same period last year which decreased by 0.4 percent.

Key Industrial Index

Manufacturing Production Index

increased by 4.9 percent (%YoY)



Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: The Office of Industrial Economics

In Q4/2021, the Manufacturing Production Index (MPI) stood at 100.71 points, an increase of 10.76 percent from the previous quarter (90.93 points) and an increase of 4.9 percent from the same quarter of 2020 (95.99 points).

Industries contributing to the increase of the MPI from the previous quarter were the manufacture of automobiles, petroleum refining and sugar.

Industries contributing to the increase of the MPI from the same quarter of 2020 were the manufacture of petroleum refining, electronic components and circuit boards and automobiles.

Shipment Index

increased by 5.1 percent (%YoY)



Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: The Office of Industrial Economics

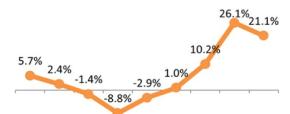
In Q4/2021, the Shipment Index stood at 102.36 points, an increase of 10.7 percent from the last quarter (92.5 points) and an increase of 5.1 percent from the same quarter of 2020 (97.40 points).

Industries contributing to the increase of the Shipment Index from last quarter were the manufacture of automobiles, petroleum refining, malt and liquor made from malt.

Industries contributing to the increase of the Shipment Index from the same quarter of 2020 were the manufacture of automobiles, petroleum refining and electronic circuit boards.

Finished Goods Inventory Index

increased by 21.1 percent (%YoY)



Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: The Office of Industrial Economics

In Q4/2021, the Finished Goods Inventory Index stood at 154.22 points, an increase of 2.3 percent from the previous quarter (150.81 points) and an increase of 21.1 percent from the same quarter of 2020 (127.32 points).

Industries contributing to the increase of the Finished Goods Inventory Index from the previous quarter were the manufacture of computers and components, automobiles and electronic components and circuit boards.

Industries contributing to the increase of the Finished Goods Inventory Index from the same quarter of 2020 were the manufacture of computers and components and other rubber products.

Capacity Utilization Rate

stood at 65.43 percent

Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: The Office of Industrial Economics

In Q4/2021, the Capacity Utilization Rate stood at 65.43 percent, increasing from the previous quarter (59.34 percent) and increasing from the same quarter of 2020 (63.71 percent).

Industries contributing to the increase of the Capacity Utilization Rate from the previous quarter were the manufacture of automobiles, petroleum refining and motorcycles.

Industries contributing to the increase in the Capacity Utilization Rate from the same quarter of 2020 were the manufacture of automobiles and furniture.

Industrial Sentiment Index of Q4 was at 84.77 points



Q4/19 Q1/20 Q2/20 Q3/20 Q4/20 Q1/21 Q2/21 Q3/21 Q4/21

Source: The Federation of Thai Industries

In Q4/2021, the Industry Sentiment Index was 84.77 points, which increased from the last quarter (78.23 points) and decreased from the same quarter of 2020 (86.40 points). The three-month forecast for the sentiment index was at 95.83 points, increasing from the same quarter of 2020 (92.90 points).

Positive variables are helping to boost industrial sentiment in Q4/2021. The number of daily infected people has fallen as a result of the COVID-19 pandemic, which is moving in the right direction, as has the proportion of people who have got the vaccine. As a result, the government's restrictions have been relaxed. The economy began to recover gradually and the country opened to tourists in a test and go program on November 1st, 2021. In addition, both domestic and international demand continued to expand in durable goods such as the automotive industry, electrical, electronic and metallurgical machinery, although during December there was a mutation of the COVID-19 (Omicron) in the 5th wave abroad (Africa) and began to spread widely in many countries in Europe and the United States of America. However, there are still risk factors that entrepreneurs are concerned about, such as the issue of higher operating costs due to rising energy (fuel), raw materials and transportation costs.

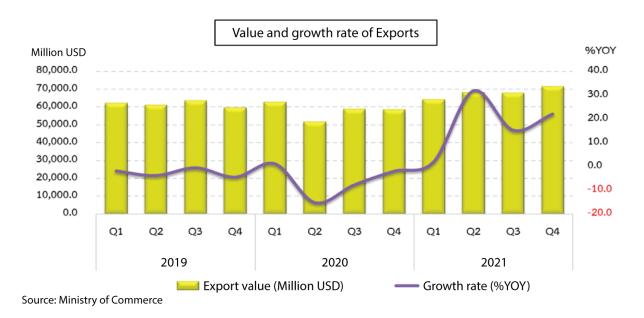
Container shortages and high sea freight rates have persisted since early 2021, semiconductor chip shortages have impacted global supply chains in the automobiles, electrical and electronics industries.

Foreign Trade of Thailand

"The value of foreign trade in Q4/2021 increased compared to the same period last year from the factors supporting the continuous recovery of the world economy and also benefitting from the long holiday at the end of the year which was a contributing factor to increased exports. The import side continued to expand including imports of fuel products, capital goods, raw materials and semi-finished goods to support production in the export market that is likely to grow in the next phase."

Thailand's foreign trade situation in Q4/2021 reached a total value of 142,339.6 million USD, export value increased by 22.1 percent compared to the same period last year to 71,317.0 million USD and import value increased by 29.4 percent from the same period last year to 71,022.6 million USD. The overall trade balance for Q4/2021 was valued at 294.31 million USD.

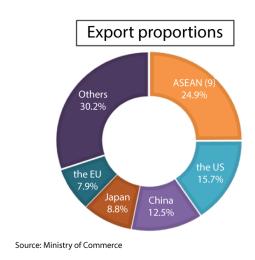
Export Structure



Exports in Q4/2021 increased by 22.1 percent compared to the same period last year to 71,317.0 million USD. Key products with changes in exports were as follows: agricultural product's export value increased by 19.2 percent to 6,298.8 million USD; agro-industrial product's export value increased by 19.4 percent to 5,156.9 million USD; industrial product's export value increased by 20.3 percent to 56,878.7 million USD; mineral and fuel product's export value increased by 93.8 percent to 2,982.6 million USD.

Industrial products with an increase in exports were automobiles, accessories and parts were valued at 7,687.5 million USD, an increase of 21.8 percent, computers, accessories and parts were valued at 5,868.4 million USD, an increase of 16.9 percent, plastic pellets were valued at 2,905.4 million USD, an increase of 33.0 percent, chemical products were valued at 2,676.0 million USD, an increase of 50.8 percent and circuit boards were valued at 2,318.9 million USD, an increase of 18.7 percent.

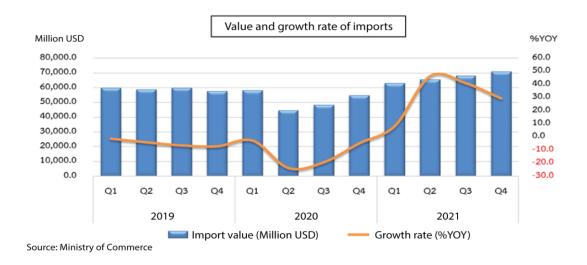
Export Markets



In Q4/2021, goods exports to Thailand's major trading partners increased in almost every market, with ASEAN (9 countries) leading the way, followed by the United States of America, the EU and China, with only Japan showing a slight contraction. The proportion of exports to all 5 markets, namely ASEAN (9 countries), the United States of America, China, Japan and the EU (27 countries), totalling 69.8 percent and exports to other markets representing 30.2 percent of total exports. Details are as follows:

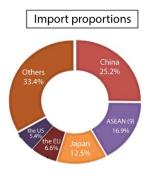
- Thailand has a proportion of export value to ASEAN (9 countries), the United States of America, China, Japan and the EU (27 countries), which accounted for 24.9 percent, 15.7 percent, 12.5 percent, 8.8 percent and 7.9 percent, respectively.
- The export growth rate, compared with the same period last year, found that Thailand's main trading partners expanded in almost every market. In particular, ASEAN (9 countries) increased the most by 29.3 percent, followed by the United States of America increased by 24.3 percent, the EU increased by 20.8 percent and China increased by 17.9 percent and followed by only Japan which decreased slightly by 0.4 percent.

Import Structure



Thailand's imports in Q4/2021 were valued at 71,022.6 million USD, an increase of 29.4 percent from the same period last year. Key product categories with import changes were fuel products which were valued at 12,543.27 million USD, an increase of 100.0 percent, capital goods which were valued at 17,163.6 million USD, an increase of 13.3 percent, raw materials and semi-finished products which were valued at 29,233.0 million USD, an increase of 27.8 percent, consumer products which were valued at 8,583.3 million USD, an increase of 20.8 percent, vehicles and transportation equipment which were valued at 3,460.5 million USD, an increase of 2.6 percent and weapons, military supplies and other goods which were valued at 39.0 million USD, decreasing by 69.6 percent.

Source of Imports



In Q4/2021, Thailand's major import markets expand in all markets. China increased the most, followed by Japan, the United States of America, the EU (27 countries) and ASEAN (9 countries). All 5 markets accounted for 66.4 percent of total imports and 33.4 percent of imports from other markets. All imports with details are as follows:

Source: Ministry of Commerce

- Thailand imported products from China, ASEAN (9 countries), Japan, the EU (27 countries) and the United States of America, which accounted for 25.2 percent, 16.9 percent, 12.5 percent, 6.6 percent and 5.4 percent, respectively.
- The growth rate of imports when compared to the same period last year in the main market all expanded. China increased the most by 47.7 percent, Japan increased by 34.2 percent, the United States of America increased by 29.1 percent, the EU (27 countries) increased by 21.1 percent and ASEAN (9 countries) increased by 20.7 percent.

Global Economy in Q4/2021

"The global economy is continuing to improve following the relaxation of pandemic control measures in many countries and vaccination coverage expanded to more people. As a result, many different types of businesses can operate in a similar way to how they would in normal circumstances including the manufacturing industry, trade and a lower unemployment rate. The rate of inflation has increased."

Summary of Key Countries' Economic Indicators in Q4/2021

Quarterly Growth (%YoY)

	GDP	Inflation	MPI	Export	Import	Unemp. Rate	Policy Rate
USA	1 5.8	1 6.7	1 4.5	1 22.8	1 8.7	At 3.97	At 0.00-0.25
China	1 4.0	1.8	↑ 3.9 ^b	1 22.7	1 24.4	At 3.96	At 4.35
Japan	1 0.7	1 0.5	1 .2	1 6.4	1 26.2	At 2.63	At -0.10
South Korea	4.1	1 3.6	1 6.0	1 24.5	1 39.4	At 2.97	At 1.00
Singapore	أ 5.9	1 3.7	16.0	1 25.9	1 29.9	At 2.00	At 0.67 ^a
Thailand	1 .9	1 2.4	1.9	1 22.1	1 29.4	At 1.64	At 0.50

Source: ceicdata, https://www.nesdc.go.th, http://tradereport.moc.go.th

Note: a are estimated figures for Q3/2021, b are estimated figures for Q4/2021

The global economy has continued to grow. This was reflected in the expansion of key countries' economic production, exports and imports in the same direction. The unemployment rate was lower than the previous quarter, benefitting from the policy of opening the country and easing the lockdown measures. This is a factor supporting the gradual recovery of labour in both the manufacturing and service sectors. As for the policy interest rate, it remained at a low level to stimulate private investment while inflation tends to rise.

Crude oil prices are likely to rise from concerns over the pandemic situation. Demand for oil increased as economic activity expanded. Moreover, the tight supply of production as OPEC and its allies operates in gradual production, causes the crude oil supply in the market to slow down. As a result, Dubai crude oil price in Q4/2021 averaged 78.4 USD/barrel, an increase compared to Q4/2020, which averaged 44.6 USD/barrel. NYMEX crude oil price during December averaged 71.6 USD/barrel.

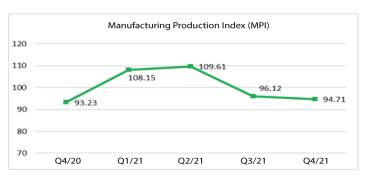
However, there are concerns about the global economy, such as the COVID-19 (Omicron) mutation, which might disrupt supply chains and raise energy prices. As a result, product prices will shift correspondingly, including fears about geopolitical conflicts, which may put pressure on consumers' purchasing power to grow in a short time frame in the future. Domestic demand and Thailand's commercial partners are helping to ameliorate the situation. This includes the government's steady economic recovery initiatives as well as more widespread vaccination. All of these are driving factors for company activity and the industrial sector has room to expand.

Part 2 Thai Industrial Economic Sectors in Q4/2021 and Outlook for Q1/2022

Iron and Steel Industry

The MPI of the iron and steel industry in Q4/2021 increased from the same period of 2020 from the production of flat steel products such as tinplates, cold rolled steel sheets and galvanized steel sheets.

Manufacturing Production Index (MPI)



Source: The Office of Industrial Economics

Domestic Consumption and Import Value



Source: The Office of Industrial Economics and Iron and Steel Institute of Thailand

Production in Q4/2021, the MPI reached 94.7, increasing by 1.6 percent from the same quarter of the previous year (%YoY) but decreasing by 1.5 percent from the previous quarter (%QoQ). When compared to the same quarter of the previous year, flat steel production increased by 9.5 percent. The product that expanded the most was tinplates that increased by 52.3 percent, followed by cold rolled steel sheets and galvanized steel sheets which increased by 21.5 and 18.7 percent, respectively. The production of long steel decreased by 0.3 percent, the products that decreased the most were cold-rolled structural steel, which decreased by 19.6 percent, followed by steel wires and wire rods, which decreased by 11.8 and 6.1 percent, respectively. However, the production of deformed bar steel and round steel bars increased by 6.6 and 3.7 percent, respectively.

Domestic consumption in Q4/2021 reached 4.2 million metric tons, an increase of 0.4 percent from the same quarter of the previous year (%YoY) but decreased by 2.6 percent from the previous quarter (%QoQ). when compared to the same quarter of the previous year, flat steel consumption increased by 2.0 percent due to the consumption of tinplates which increased by 41.6 percent, followed by galvanized steel sheets and cold rolled steel sheets which increased by 27.6 and 10.4 percent, respectively. However, the consumption of long steel decreased by 5.8 percent, due to the consumption of wire rods that decreased by 20.6 percent and steel bar and hot-rolled structural steel decreased by 0.4 percent.

Imports in O4/2021 were valued at 3.4 billion USD. increasing from the same quarter last year by 57.0 percent (%YoY) but decreased by 3.3 percent from the previous guarter (%QoQ). When compared to the same quarter of the previous year, imports of long steel increased by 48.7 percent. The products with the largest growth in imports were carbon steel bars, which increased by 123.9 percent (the main countries imported by Thailand were Japan, China and South Korea) followed by stainless steel wire rod with an increase by 116.6 percent and seamless steel pipe increased by 71.8 percent. Flat steel imports increased by 59.7 percent. The product with the largest increase in imports was tinplated steel increased by 125.8 percent (the main countries imported by Thailand are China, South Korea and Japan) followed by the galvanized steel sheets (HDG) which increased by 99.5 percent and hot-rolled thin steel sheets (carbon steel) which increased by 92.5 percent.

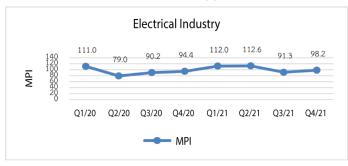
Outlook for Iron and Steel Industry in Q1/2022

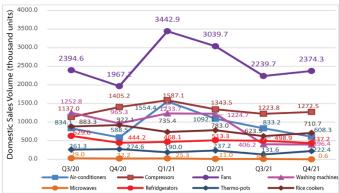
It is expected to be stable compared to the same period last year, with supporting factors from continuous industry expansion infrastructure, construction and government industry support policies. However, there is a risk from the pandemic situation of the COVID-19 domestically, which may slow down steel demand and the downward trend of steel prices in the world market. This will affect the competitiveness of Thai manufacturers.

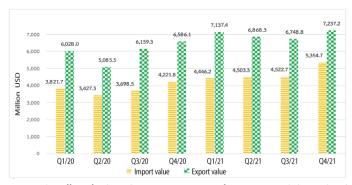
Electrical Industry

The production of electrical appliances in Q4/2021 increased by 4.0 percent compared to the same quarter of the previous year. As the world economy began to recover causing Thailand to have more orders for electrical appliances. The products that have been increasing are split type air conditioners with condensing units, fans, refrigerators, washing machines, rice cookers, electric motors, transformer cables and has increased export value in the United States of America, China and Japan markets.

MPI of Electrical Appliances







Source: The Office of Industrial Economics, Ministry of Commerce and Electrical and Electronics Institute

Outlook for Electrical Appliances Industry in the Q1/2022

The electrical appliance industry in Q1/2022 is expected to expand the production index and export value by approximately 3.0 percent and 5.0 percent, respectively. The pandemic situation has gradually eased from the COVID-19 situation that began to unfold and gradually open the city in many countries as more consumers receive vaccines against COVID-19. This has a positive effect on the expansion of the electrical appliance industry. However, there are still issues to be observed that could negatively affect production and exports, such as the COVID-19 mutation.

the MPI reached 98.2 points increasing by 7.5 percent from the previous quarter (%QoQ) and increasing by 4.0 percent from the same quarter of the previous year

Production of electrical appliances in Q4/2021,

(%YoY), due to the increasing number of orders in both domestic and international markets from recovery of the world economy from the pandemic of COVID-19 and demand from the world's main markets. Products that have increased are cables, electric motors, compressors, split type air conditioners with condensing units, fans, split type air conditioner fan coil units that increased by 50.73,

Domestic sales in Q4/2021, products increased compared to the same quarter of the previous year, including fans which increased by 20.7 percent.

26.63, 11.26, 11.08, 9.82 and 4.2 percent, respectively.

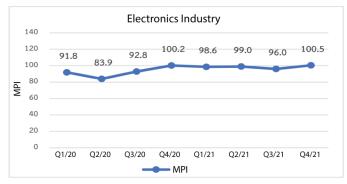
Imports of electrical appliances in Q4/2021 were valued at 5,354.7 million USD, an increase of 18.4 percent (%QoQ) from the previous quarter and an increase of 26.8 percent (%YoY) from the same quarter last year. The main products that were imported were transformers, with an increase of 13.2 percent, while air conditioners, microwave ovens and refrigerators decreased by 18.5,8.3 and 1.6 percent, respectively.

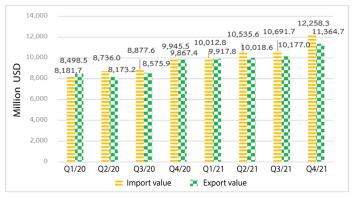
Exports of electrical appliances in Q4/2021 were valued at 7,237.2 million USD, an increase of 7.2 percent (%QoQ) from the previous quarter and an increase of 9.9 percent (%YoY) from the same quarter last year. Rice cookers and air conditioners increased by 36.1 percent and 23.7 percent, respectively, while electric irons, refrigerators and microwave ovens decreased by 15.9, 16.6, 2.2 and 1.75 percent, respectively.

Electronics Industry

Production of electronics in Q4/2021 slightly increased by 0.3 percent compared to the same quarter of the previous year, Production has recovered at the same level as before the COVID-19 crisis. Products with increased production include circuit boards (PWB), integrated circuits (IC) and semiconductor device transistors, with increased export value in the United States of America, China and Asia markets.

MPI, Import and Export Value of Electronics





Source: The Office of Industrial Economics / Electrical and Electronics Institute

The production of electronics in Q4/2021 reached an MPI of 100.5 points, increasing by 4.6 percent (%QoQ) from the previous quarter and increasing by 0.3 percent (%YoY) compared to the same quarter last year. Electronic products that showed an increase included circuit boards (PWB), integrated circuits (IC) and semiconductor device transistors, with an increase of 28.5 percent, 15.3 and 15.0 percent, respectively. Meanwhile, the decline in electronics products, was namely due to printers and HDD and printed circuit boards (PCBA) which decreased by 21.3, 12.9 and 0.5 percent, respectively. Due to the pandemic of COVID-19 beginning to unravel, this has caused the demand for electronic devices such as smartphones, tablets and smart electronic devices to increase, including the development of 5 G technology systems, data centers and products for IT infrastructure, there is still a growing demand for electronic products.

Import of electronics in Q4/2021 were valued at 12,258.3 million USD, increasing by 14.7 percent (%QoQ) from the previous quarter and increasing by 23.3 percent (%YoY) compared to the same quarter last year. The main products that have increased are computers, printed circuits, telephones and equipment, integrated circuits (ICs) and diodes, transistors and semiconductor components which increased by 70.1, 54.1, 46.4, 42.8 and 23.9 percent, respectively. While printers, photocopiers and components and projectors decreased by 25.0 percent and 19.1 percent, respectively.

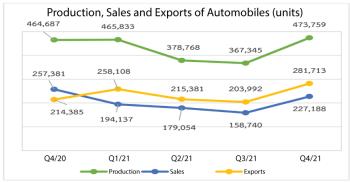
Export of electronics in Q4/2021 were valued at 11,364.7 million USD, increasing by 11.7 percent (%QoQ) from the previous quarter and increasing by 15.2 percent (%YoY) compared to the same quarter last year from the increase in exports to the main markets such as the United States of America, China and Asia. Circuit boards, semiconductors include transistors, diodes and other and printed circuits increased by 10.6, 7.2 and 4.2 percent, respectively.

Outlook for Electronics Industry in Q1/2022

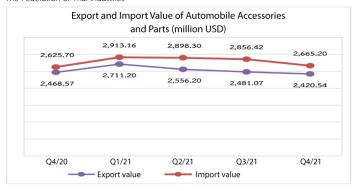
Electronics Industry in Q1/2022 is expected to continue to expand for the MPI and export value by about 5.0 and 7.0 percent, respectively, as trading partners' economies and global export markets recover and Thailand recovers from the COVID-19 pandemic, including expanding the network and developing 5G, Data Center and IoT technology systems. This causes the demand for electronic products from both domestic and foreign countries to increase.

Automobile and Parts Industry

The production volume of automobiles in Q4/2021 has expanded when compared to the same period last year. The export market has expanded as the world economy has begun to recover from the clarity of the COVID-19 vaccine measures and economic stimulus measures that all countries have begun to adopt. However, domestic sales have slowed down compared to the same period last year but expanded compared to the previous quarter.



Source: The Office of Industrial Economics; data gathered from the Automotive Industry Club, The Federation of Thai Industries



Source: Information and Communication Technology Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department

Outlook for Automobiles Industry in Q1/2022

The Office of Industrial Economics forecasts that in Q1/2022 over 450,000 units of automobiles will be manufactured, of which 50-55 percent will be for domestic sales and 45-50 percent for exports.

Automobile Production

In Q4/2021, automobiles production increased by 28.97 percent (%QoQ) from Q3/2021 to 473,759 units and increased by 1.95 percent (%YoY) from the same quarter last year. The production consisted of passenger cars (34 percent), 1-ton pickup trucks and derivatives (63 percent) and other commercial vehicles (3 percent).

Domestic Sales of Automobiles

In Q4/2021, it increased by 45.43 percent (%QoQ) from Q3/2021 to 227,188 units but decreased by 45.43 percent (%YoY) from the same quarter last year.

Automobiles Exports

In Q4/2021, it increased by 38.10 percent (%QoQ) from Q3/2021 to 281,713 units and increased by 31.41 percent (%YoY) from the same quarter last year, with the proportion divided into exports of passenger cars (31 percent), 1-ton pickup trucks (60 percent) and PPV vehicles (9 percent).

Export Value of Automobile Parts and Accessories

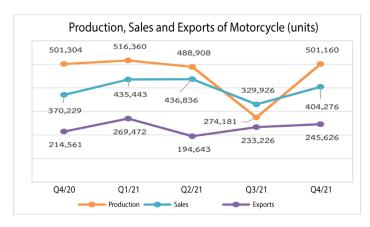
In Q4/2021, exports value decreased by 2.44 percent (%QoQ) from Q3/2021 to 2,420.54 million USD and deceased by 1.95 percent (%YoY) from the same quarter last year. Key export markets for automobile parts and accessories were the United States of America, Japan and Indonesia.

Import Value of Automobile Parts and Accessories

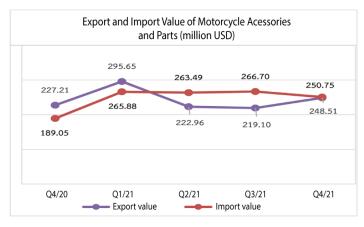
In Q4/2021, imports decreased by 6.70 percent (%QoQ) from Q3/2021 to 2,665.20 million USD but increased by 1.50 percent (%YoY) from the same quarter last year. Key import markets for automobile parts and accessories were Japan, China and the United States of America.

Motorcycle and Parts Industry

The production volume of motorcycles in Q4/2021 was slowed down in production compared to the same period last year. However, the export market and the domestic market are expanding. As the world economy has begun to recover from the clarity of the COVID-19 vaccine measures and economic stimulus measures both domestically and internationally that have begun to be applied.



Source: The Office of Industrial Economics; data gathered from the Automotive Industry Club, The Federation of Thai Industries



Source: Information and Communication Technology Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department

Outlook for Motorcycle Industry in Q1/2022

The Office of Industrial Economics (OIE) estimates that in Q1/2022 over 500,000 units of motorcycles will be manufactured, of which 80-85 percent will be for domestic sales and 15-20 percent for exports.

Motorcycle Production

In Q4/2021, production of motorcycles increased by 82.78 percent (%QoQ) from Q3/2021 to 501,160 units but decreased by 0.03 percent (%YoY) from the same quarter last year.

Domestic Sales of Motorcycles

In Q4/2021, domestic sales increased by 22.54 percent (%QoQ) from Q3/2021 to 404,276 units and increased by 9.20 percent (%YoY) from the same quarter last year.

Motorcycle Exports

In Q4/2021, exports reached 245,626 units (exported as CBU 104,957 units and CKD 140,669 sets), increasing by 5.32 percent (%QoQ) from Q3/2021 and increasing by 14.48 percent (%YoY) from the same quarter last year.

Export Value of Motorcycle Parts

In Q4/2021, imports of motorcycle parts and accessories increased by 13.42 percent (%QoQ) from Q3/2021 to 248.51 million USD and increased by 9.37 percent (%YoY) from the same quarter last year. Key export markets for motorcycle parts and accessories were Japan, China and the United States of America.

Import Value of Motorcycles Parts and Accessories and Bicycle

In Q4/2021 decreased by 5.98 percent (%QoQ) from Q3/2021 to 250.75 million USD and increased by 32.64 percent (%YoY) from the same quarter last year. Key import markets for motorcycle parts and accessories were the United States of America, Japan and China.

Chemical Industry

In Q4/2021, the value of chemical industry exports and imports increased when compared to the same quarter of the previous year. In the aftermath of the COVID-19 pandemic, the production index of some chemicals increased in comparison to the same quarter last year.

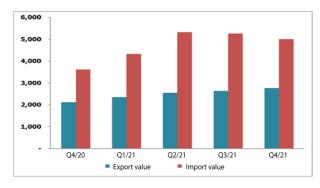
Production and Sale

MPI and Shipment Index



Source: The Office of Industrial Economics

Export and import value of chemicals products (Million USD)



Source: Information and Communication Technology Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department The MPI in Q4/2021 was at 94.40 points increasing by 11.78 percent (%YoY) when compared to the same quarter last year. Products that cause the MPI to grow include fertilizer, talcum powder, shampoo but when compared to the previous quarter (%QoQ) it has decreased by 3.28 percent.

The shipment index in Q4/2021 was at 93.65 points increasing by 5.99 percent when compared to the same quarter of the previous year (%YoY) but when compared to the previous quarter (%QoQ) it has decreased by 4.03 percent.

Exports of chemical products in Q4/2021 was valued at 2,770.41 million USD, increasing by 30.45 percent compared to the same quarter last year (%YoY). Key products that contributed to an increase in export value included chemical fertilizers, organic chemicals and miscellaneous chemicals and compared to the previous quarter (%QoQ) increased by 4.89 percent. Exports expanded in key markets such as China, India, Japan and Vietnam.

Imports of chemical products in Q4/2021 totaled 5,009.28 million USD, an increase of 38.49 percent compared to the same quarter of last year (%YoY). Key products that contributed to an increase in import value were inorganic chemicals, chemical fertilizers and organic chemicals but compared to the previous quarter (%QoQ), it decreased by 9.54 percent.

Outlook for Chemical Industry in Q1/2022

Exports and imports of chemicals are expected to expand compared to the same quarter last year, as the COVID-19 pandemic eases. However, depending on the direction of the global economy's recovery, energy costs are likely to rise significantly. As a result, the cost of raw materials used in the production of oil-related products such as plastic resins and chemicals increased as a result of the export of these products.

Plastics Industry

The plastics industry in Q4/2021 export volume decreased when compared to the same quarter of previous year in line with the demand of the main trading partner countries. In addition, due to the pandemic of COVID-19 (Omicron) not having a severe impact.

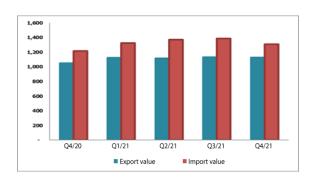
Production and Marketing

MPI and Shipment Index



Source: The Office of Industrial Economics

Export and Import Value (Million USD)



Source: Information and Communication Technology Center, Office of the Permanent
Secretary of Commerce in collaboration with Customs Department

The MPI in Q4/2021 stood at 93.05 points, increasing by 0.55 percent compared to the same quarter of the previous year (%YoY). The MPI that expanded the most was other plastic packaging, plastic film and plastic sacks and compared to the previous quarter (%QoQ) it increased by 1.37 percent.

The shipment index in Q4/2021 stood at 94.69 points, increasing by 0.41 percent compared to the same quarter of the previous year (%YoY). The most expanding shipment index was plastic films and other plastic packaging and when compared to the previous quarter (%QoQ) it increased by 5.08 percent.

Export value in Q4/2021 increased by 7.38 percent from the same quarter of the previous year (%YoY) to 1,125.50 million USD. The product groups with the highest export expansion are sheets, thin sheets, films, foil and other non-cellular bands (HS 3920) and compared to the previous quarter (%QoQ) it increased by 0.41 percent.

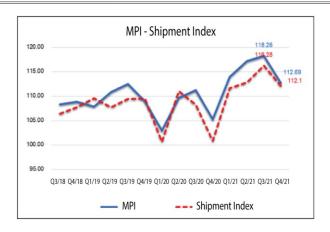
Import value in Q4/2021 increased by 7.76 percent from the same of the quarter previous year (%YoY) to 1,308.55 million USD. The product groups with the highest import expansion are single long fiber product group (HS 3916) and when compared to the previous quarter (%QoQ) it decreased by 5.64 percent.

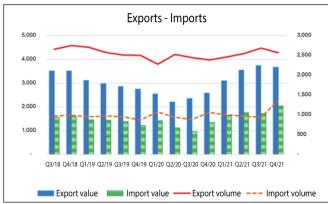
Outlook for Plastics Industry in Q1/2022

Due to the recovery of the tourism industry, products related to the plastics industry start to come back better. However, the volatility of world crude oil prices tends to increase. As a result, the cost of raw materials used in the production of plastics industry has increased as well.

Petrochemical Industry

The petrochemical industry in Q4/2021 increased in MPI and shipments by 6.69 and 11.12 percent from the same quarter of the previous year (%YoY), from vaccines for COVID-19 being available in many countries, In addition, many countries have relaxed lockdown measures. As a result, the production and exports of petrochemicals in this quarter improved.





The MPI in Q4/2021 stood at 112.69 points, increasing by 6.69 percent compared to the same quarter last year. The product that contributed to the increase in MPI of upstream petrochemicals was Ethylene and downstream petrochemicals was PP resin.

The shipment index in Q4/2021 stood at 112.10 points, increasing by 11.12 percent compared to the same quarter last year. The product that contributed to the increase in shipment index of upstream petrochemicals was Propylene and downstream petrochemicals was PP resin and PE resin.

Exports of petrochemicals in Q4/2021 increased by 5 6.37 percent from the same quarter last year to 3,680.03 million USD. Petrochemicals were exported to major countries such as China, Vietnam and Japan. Products that contributed to the increase in exports of upstream petrochemicals (155.47 percent) were Ethylene and Toluene and products contributing to the increase in exports of downstream petrochemicals (32.49 percent) were PP resin and PE resin.

Imports of petrochemicals in Q4/2021 increased by 50.98 percent from the same quarter last year to 2,045.63 million USD. Petrochemicals were imported from major countries such as Japan, China and the United States of America. Products that contributed to the increase in imports of upstream petrochemicals (36.26 percent) were Toluene, Propylene and products contributing to the increase in exports of downstream petrochemicals (55.02 percent) were PE resin and PP resin.

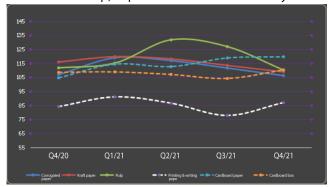
Outlook for Petrochemical Industry in Q1/2022

The overall petrochemical industry is expected to expand in Q1/2022, following the recovery of many countries' economies that have returned. Following the COVID-19 suspension, there was an increase in product demand or increased operations in many sectors in foreign trading partners. However, there is a drawback, namely the scarcity of coal and natural gas for power generation in China and the EU. This has an impact on rising oil prices, as it raises the cost of the petrochemical industry, which then has to raise the price of the product, potentially slowing demand.

Pulp, Paper and Print Media Industry

The pulp, paper, and print media industry in Q4/2021, when compared (%QoQ) and (%YoY) found that it had expanded in the cardboard group, writing paper and paper boxes while the production of pulp, kraft paper and corrugated paper have decreased, the overall value for exports and imports increased when compared with (%YoY) but decreased when compared with (%QoQ).

MPI in Pulp, Paper and Print Media Industry



Source: The Office of Industrial Economics

Export-Import of Pulp, Paper and Print Media



Unit: million USD

Source: Information and Communication Technology Center, Ministry of Commerce

Production

In Q4/2021, when compared (% QoQ) and (%YOY) production has decreased in the pulp group (-13.15 percent, -1.40 percent). kraft paper (-4.05 percent, -6.08 percent) and corrugated paper (-4.83 percent, -0.64 percent) while production increased in the cardboard group (+0.69%, +14.32%), writing paper (+11.81%, +3.41%) and paper boxes (+5.83%, +1.57%), respectively. Various products which are produced are increasing and decreasing mainly from domestic use. However, paper products and paper packaging continue to grow in demand, especially in the current situation due to the COVID-19 outbreak.

Exports

Pulp and paper products in Q4/2021, when compared (%QoQ) were valued at 620.65 million USD (-4.37 percent), from the pulp group (-20.69 percent) with China as the main partner trading country. Print media group (-5.73 percent) Hong Kong and the United States of America are the main trading partners. Meanwhile, the paper product group, including chests, boxes and envelopes increased (+4.18 percent) from exports to Vietnam that increased (+21.04 percent) and when comparing (%YoY) the total export value (+18.33 percent) from the pulp group (+188.91 percent) with more than 90.00 percent being exported to China. As well as print media exports slightly increased (+0.19 percent), while the paper and paper products sector have decreased (-3.67 percent).

Imports

Pulp and paper products in Q4/2021 were valued at 853.50 million USD. When compared (%QoQ) the value of imports have decreased (-4.02 percent) in pulp and paper and paper products have decreased (-2.35 percent) and (-9.18 percent), respectively. Meanwhile, imports of paper and print media products increased (+7.18 percent) and (+9.56 percent), respectively but when comparing (%YoY) imports they have increased (21.59 percent) due to the high demand for paper products in the country and continue to increase. especially paper packaging due to more online trading and it is expected to continue to expand. This will benefit the paper industry as well as the production chain that will expand accordingly.

Outlook in Q1/2022

The outlook in Q1/2022 is expected that paper products used in the manufacture of packaging boxes will increase in line with domestic consumption. At the same time, paper packaging has benefited according to the usage for online shopping. Exports will continue to expand in the pulp group.

Ceramics Industry

The volume of production and domestic sales of wall and floor tiles in Q4/2021 decreased due to the economic situation and the slowdown in the domestic market due to the pandemic of COVID-19. The export segment expanded according to the needs of the main markets such as the United States of America, China and Japan.

Ceramics Production, Sales, and Exports





Source: 1. Production volume and domestic sales: Division of Information and Industrial

Economic Indices, the Office of Industrial Economics

Note: From the survey of 15 wall and tiling factories and 38 sanitary ware factories

2. Export value: Information and Communication Technology Center, Office of the

Permanent Secretary. Ministry of Commerce

Sale volume (million units)

Outlook for Ceramics Industry in Q1/2022

Production and domestic sales of ceramics in Q1/2022 are expected to increase as the domestic market demands from the government's economic stimulus measures and sales promotions stimulate the market of entrepreneurs including production to support increasing orders from major export markets such as the United States of America, China and Japan. Imports are expected to expand as well from importing ceramic products used in laboratories and other ceramic products. There are still important factors that need to be closely monitored, namely energy prices, oil prices and raw materials that have a rising price. This may affect the purchasing power of consumers and hinder the economic recovery.

Production in Q4/2021, production of wall and floor tiles reached a volume of 28.97 million square meters, decreasing by 2.73 percent from Q3/2021 (%QoQ) and decreasing by 5.99 percent from the same quarter last year (%YoY). Sanitary ware reached a volume of 2.05 million pieces increasing by 11.62 percent from Q3/2021 and increasing by 11.89 percent from the same quarter last year support the expansion of the export market after the pandemic of the COVID-19 began to unfold in many countries.

Sales in Q4/2021, wall and floor tiles reached a sales volume of 36.35 million square meters, increasing by 2.37 percent from Q3/2021 (%QoQ) but decreasing by 6.39 percent from the same quarter of the previous year (%YoY). Meanwhile, sanitary ware sales reached 0.73 million pieces, increasing from Q3/2021 by 4.90 percent, but decreasing by 22.96 percent from the same quarter last year from the economic situation and the slowdown in the domestic market because consumers are concerned about the situation of the pandemic of COVID-19.

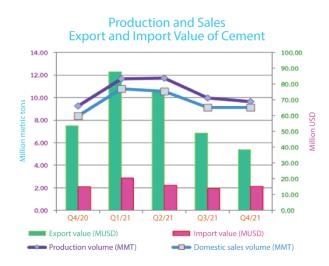
Exports in Q4/2021, exports of wall and floor tiles reached a value of 25.26 million USD, an increase of 1.36 percent from Q3/2021 (%QoQ) but decreasing by 1.14 percent from the same quarter of the previous year (%YoY). Meanwhile, exports of sanitary ware were valued at 70.74 million USD, increasing by 9.79 percent from Q3/2021 and increasing by 15.80 percent from the same quarter last year. The main market for exports includes the United States of America, China, Japan and the CLMV countries.

Government policies related to the ceramics industry

Committee on Energy Policy Administration (CEPA), there was a resolution to freeze the price of diesel fuel not to exceed 30 Thai bath through the Fuel Fund and freeze the price of cooking gas (LPG) at 318 Thai bath per 15kg tank (excluding shipping costs) until March 31st, 2022, including asking for support for PTT Public Company Limited to maintain the retail price of NGV gas at 15.59 Thai baht per kilogram until March 15th, 2022. This will help reduce production and transportation costs for entrepreneurs especially the ceramic industry, most of them use LPG gas in the production process and use diesel and NGV gas to transport goods.

Cement Industry

The cement industry in Q4/2021, when compared to the same quarter of the previous year, production and sales decreased as consumers were also affected by the economic impact of pandemic of COVID-19. Export value has declined as major export markets have been affected by the pandemic of COVID-19. The value of imports began to expand slightly.



Source: 1. Production volume and domestic sales: Division of Information and Industrial Economic Indices, the Office of Industrial Economics

2. Export value: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce

Cement production (excluding clinker) in Q4/2021 decreased by 3.24 percent (%QoQ) from Q3/2021 to 9.66 million metric tons and decreased by 5.74 percent (%YoY) from the same quarter of the previous year.

Domestic sales of cement (excluding clinker) in Q4/2021 reached 9.13 million metric tons, an increase of 0.11 percent from Q3/2021 but decreased by 1.83 percent (%YoY) from the same quarter of the previous year caused by consumers being affected economically due to the pandemic of COVID-19.

Cement exports-imports (excluding clinker) in Q4/2021 reached an export value of 38.37 million USD, decreasing by 21.50 percent from Q3/2021 and decreasing by 28.29 percent (%YoY) from the same quarter of the previous year which exports decreasing from the Philippines, Myanmar and Cambodia markets by 38.08 percent, 36.70 and 12.87 percent, respectively, as the main export markets are still affected by the pandemic of COVID-19. The import of cement (excluding clinker) was valued at 15.22 million USD, increasing by 10.10 percent from Q3/2021 and increasing by 1.06 percent (%YoY) from the same quarter of the previous year. This increased from the Netherlands and Lao People's Democratic Republic by 8.51 percent and 2.63 percent, respectively.

Outlook for Cement Industry in Q1/2022

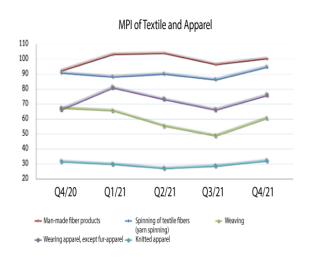
The cement industry (excluding clinker) in Q1/2022, compared to the same quarter of the previous year. Production and sales volumes are expected to expand with large public utility projects as the main driving factor, including economic stimulus measures that the government and the Bank of Thailand gradually released to stimulate consumer demand in the real estate sector is now in effect.

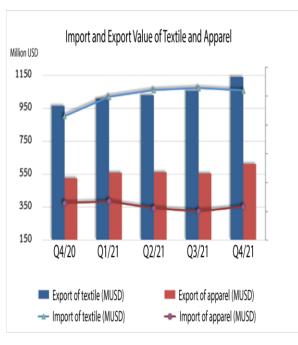
Government policies related to the cement industry

- 1) The Bank of Thailand (BOT) has temporarily relaxed the LTV-loan to value measure, from the former limit of 70-95% from the contract price to 100% from October 21st, 2021 December 31st, 2022
- 2) On January 17th, 2022, the website of the Royal Thai Government Gazette published the Ministry of Interior announcement regarding fee collection registration of rights and juristic acts according to the land code by reducing the transfer fee and legal act from 2 percent to 0.01 percent, the mortgage fee from 1 percent to 0.01 percent, which will be effective from January 18th December 31st, 2022, covering second-hand housing / debt restructuring in addition to a new home to stimulate the real estate business for another year.

Textile and Apparel Industry

In Q4/2021, the MPI of textile and apparel have expanded throughout the supply chain compared to the previous quarter. The main factor is from the demand of the export market and domestic market increasing to support the New Year's festival together with the relaxation of government measures. However, compared to the same period of the previous year, the MPI of textile and ready-made garments expanded from the low base last year, coupled with the recovery of important export markets in the United States of America, Japan, Vietnam, China and Indonesia markets.





Production and Domestic Sales

The MPI of textile fibers increased by 6.34 (%YoY) from artificial fibers and natural fibers. The main factor was the low base in the previous year that was affected by the pandemic of COVID-19. In addition, it received a power support from recovery in key export markets such as Japan, China, Bangladesh and Vietnam. For fabrics, the MPI decreased by 10.19 percent (%YoY) from the woven fabrics (cotton) group. While clothes, the MPI increased by 14.11 percent (%YoY) due to exports of sports apparel and ready-made children's clothing expanding in key markets such as the United States of America, Japan, Belgium, China, Germany and the United Kingdom. Compared to the Q3/2021, the MPI expanded throughout the supply chain, with fibers, textiles, fabrics and apparel increasing by 7.01 percent, 24.20 and 14.73 percent (%QoQ), in line with the demand for the New Year celebrations and relaxation of government measures.

Domestic Sales

Textile fibers, fabrics and apparel increased by 6.56 percent, 8.59 and 1.71 percent (%YoY) from the low base in the previous year that was affected by the pandemic of COVID-19 situation. In addition, demand for raw materials for exports returned to expand in the United States of America, Japan, Vietnam, China and Indonesia together with the purchasing power of domestic consumers beginning to return to prepare to celebrate the New Year's festival and relaxation of government measures.

Exports-Imports

Overall, textile and apparel exports began to recover throughout the supply chain with a value of 1,753.49 million USD increasing by 17.48 percent (%YoY). When considering the product group, it was found that the textile group was valued at 1,140.80 million USD increasing by 18.21 percent. The apparel group was valued at 612.70 million USD increasing by 16.16 percent. Due to the low base in the previous year that was affected by the pandemic. In addition, major trading partners continued to recover resulting in a demand for textiles and apparel increasing in key markets such as the United States of America, Japan, Vietnam, China and Indonesia. Furthermore, compared to Q3/2021 (%QoQ), exports expanded throughout the supply chain.

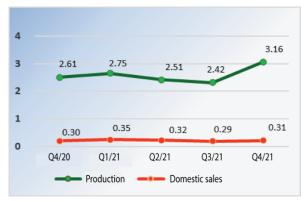
Overall, imports of textiles and apparel were valued at 1,271.75 million USD, increasing by 13.56 percent (%YoY) in the yarn, fiber and fabric group, partly due to the production of products for export in line with increasing demand coupled with the low base last year. For ready-made garments, they decreased due to the slowdown in the purchasing power of domestic consumers due to the impact of the COVID-19.

Outlook in Q1/2022 will expand slightly as demand from major trading partners such as the United States of America, Japan, China and the EU gradually recovers throughout the supply chain. In addition, domestic demand began to return from the policy to stimulate domestic consumption and to open the country. Despite being affected by the shortage of foreign workers who returned to the country during the COVID-19 and have not returned to the system.

Wood and Wooden Furniture Industry

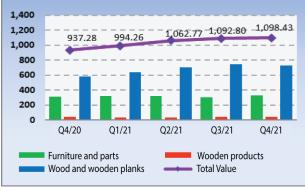
The production volume of wooden furniture in Q4/2021 increased when compared to the same quarter of the previous year. In terms of selling wooden furniture in the country, there has been an increase in volume from production to meet the needs of both domestic and international markets. The volume increased due to the recovery of domestic purchasing power. Exports of wood and wood panel products increased in value as a result of increased demand from key trading partners, which coincided with the global economic recovery.

Domestic Production and Sales of Wooden Furniture (million pieces)



Source: The Office of Industrial Economics

Export Value of Wood and Wooden Products (million USD)



Source: Ministry of Commerce

Production of wooden furniture in Q4/2021 reached 3.16 million pieces, increasing by 30.58 percent from the previous quarter and increasing by 21.07 percent from the same quarter last year as a result of increased production to meet domestic and international market demand.

Domestic sales of wooden furniture in Q4/2021 reached 0.31 million pieces, increasing by 6.90 percent from the previous quarter and increasing by 3.33 percent from the same quarter last year from the relaxation of the government's measures to control the pandemic of COVID-19, which has a positive effect on purchasing power and the domestic economy.

Exports value of wood and wooden products in Q4/2021 had a total value of 1,098.43 million USD, increasing by 0.52 percent from the previous quarter and increasing by 17.19 percent from the same quarter last year. Divided into furniture and parts, wood products and wood and wood panel products, were valued at 330.53, 42.77 and 725.13 million USD, respectively. When compared to the same quarter of the previous year, it was found that export value of furniture and parts increased by 5.06 percent, export value of wood products increased by 8.83 percent and export value of wood and wood panel products increased by 24.30 percent. Overall, the export value of wood and wood products increased in all product groups caused by an Increased demand from key trading partners such as the United States of America, the United Arab Emirates and Saudi Arabia according to the recovering world economy.

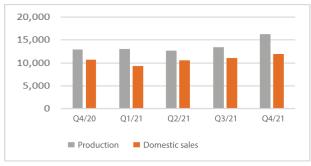
Outlook for Wood and Wooden Furniture Industry in Q1/2022

Outlook for Q1/2022 is expected that the production volume of wooden furniture will continue to increase from production to meet the demand of both domestic and international markets. As for the sales volume of wooden furniture in the country, it is expected to expand from the recovery of purchasing power and the domestic economy.

Pharmaceutical Industry

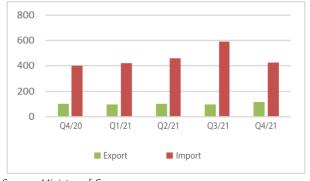
The volume of pharmaceuticals production in Q4/2021 was up significantly from the same quarter the previous year and it was at the highest production volume in the past 6 years, in line with the increase in domestic drug sales from the previous quarter and good expansion of the export market especially in Malaysia and Cambodia markets.

Domestic Production and Sales (metric tons)



Source: The Office of Industrial Economics

Pharmaceutical Export-Import-Value (Million USD)



Source: Ministry of Commerce

Pharmaceutical production in Q4/2021 amounted to 16,267.66 metric tons, increasing by 25.56 percent from the same quarter last year, by expanding the production of all kinds of drugs including tablets, liquid medicine, capsules, injections, creams and powders which increased by 28.26 percent, 20.99, 18.89, 6.04, 45.60 and 39.65 percent, respectively, in line with the increase in orders from both domestic and international markets.

Pharmaceutical sales in Q4/2021 amounted to 11,945.72 metric tons, increasing by 12.24 percent from the same quarter last year, by expanding the production of all kinds of drugs including tablets, liquid medicine, capsules, injections, creams and powders which increased by 19.71 percent, 6.68, 9.83, 0.44, 20.25 and 7.01 percent, respectively. In terms of the overall of the country's drug market, there has been a significant increase from the previous quarter. New species have emerged as a result of the COVID-19 outbreak and is making people more aware of their surroundings and purchasing drugs to stockpile for future use.

Pharmaceutical exports in Q4/2021 were valued at 117.24 million USD, increasing by 13.32 percent from the same quarter last year. The majority of them are focused on the market expansion in the ASEAN region. Drug imports totaled 426.82 million USD, increasing by 6.61 percent from the same quarter the previous year with most of them being imported from Europe and India.

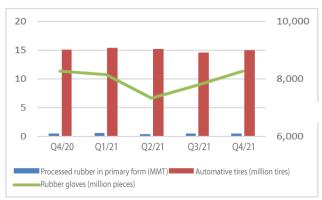
Outlook for Pharmaceutical Industry in Q1/2022

Pharmaceutical production in Q1/2022 is expected to increase by 5.00 percent from the same quarter of the previous year in line with the good growth trend of the domestic drug market. Exports are expected to increase by 5.00 percent in Malaysia, the Philippines and Laos markets, which tend to increase continually and provide increasing demand for medicines from Thailand.

Rubber and Rubber Product Industry

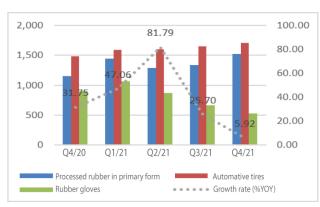
The production volume of primary processed rubber in Q4/2021 expanded mainly from exports to China, the United States of America and Japan, while the production of automotive tires and rubber gloves declined slightly following the slowdown in the domestic market for automotive tires products and international markets for rubber gloves products.

Volume of production of primary processed rubber, automotive tires and rubber gloves



Source: The Office of Industrial Economics

Export Value of primary processed rubber, automotive tires and rubber gloves (million USD)



Source: Ministry of Commerce

Production of primary processed rubber, automobile tires and rubber gloves in Q4/2021 reached 0.52 million metric tons, 15.04 million tires and 8,268.81 million pieces, respectively. When compared to the same quarter last year, the production of primary processed rubber increased by 2.23 percent because the international market has expanded well causing more orders. Meanwhile, production of automobile tires and rubber gloves decreased by 0.11 percent and 0.09 percent, respectively, due to the pandemic of COVID-19 in factories and a market slowdown both inside the country and abroad.

Sales of primary processed rubber, automobile tires and rubber gloves in Q4/2021 reached 0.13 million metric tons, 11.27 million tires and 502.51 million pieces, respectively. When compared to the same quarter last year, the sales of primary processed rubber and automobile tires decreased by 2.04 percent and 0.31 percent, respectively. This was due to the decline in the demand from related industries, while the volume of rubber gloves sales increased by 14.86 percent from more orders.

Exports of primary processed rubber, automobile tires and rubber gloves in Q4/2021 were valued at 1,519.78 million USD, 1,706.72 million USD and 526.28 million USD, respectively. When compared to the same quarter last year, the exports of primary processed rubber and automobile tires increased by 31.35 percent and 15.09 percent, respectively, while the export of rubber gloves decreased by 41.72 percent.

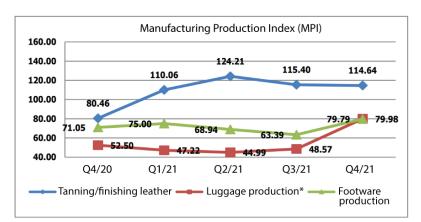
Outlook for Rubber and Rubber Product Industry in Q1/2022

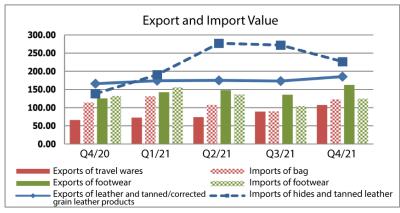
Production of automobile tires in Q1/2022 is expected to increase by 3.00 percent in line with the trend of the export market. The production of rubber gloves is expected to decrease by 5.00 percent because Thailand cannot compete in price. The production of primary processed rubber is expected to increase by 5.00 percent in line with the rising demand of both domestic and international markets.

Footwear and Leather Product Industry

In Q4/2021, when compared to the same quarter of the previous year, tanning and dressing of leather and footwear production has increased in production in line with increasing demand for both exports and domestic sales, due to the pandemic of the COVID-19 that around the world has accelerated vaccination for people. The government has measures to open the country to expand tourism areas, extend drinking and eating times, thereby reducing consumer concerns and spending, which is beneficial to the leather and footwear industry.

Production, Export, and Import (million USD)





Source: 1. MPI – The Office of Industrial Economics

- 2. Export & Import Value Ministry of Commerce
- * Includes handbags and similar products, saddlery and harnesses
- ** Year 2021 add the products and adjust the weights

Production

In Q4/2021, when compared to the same quarter last year, the MPI of tanning and dressing of leather increased by 42.49 percent. Footwear increased by 12.30 percent and luggage increased by 52.32 percent from domestic sales and exports.

Exports-Imports

Exports in Q4/2021, when compared to the same quarter last year, export value increases in every product. Leather and leather products, compressed leather, travel appliances and footwear increased by 11.69, 62.12 and 29.30 percent, respectively. Footwear has an export value of 62.60 million USD. The major export markets that have increased are the United States of America, China, Myanmar and France. Due to the situation in many countries, the pandemic of the COVID-19 has eased and many countries have accelerated vaccination. As a result, people are more confident in travelling and spending.

Imports in Q4/2021, when compared to the same quarter last year, the value of raw and tanned leathers increased by 63.91 percent. Bags increased by 7.48 percent as a result of government spending stimulus measures to increase purchasing power. Footwear decreased by 5.54 percent.

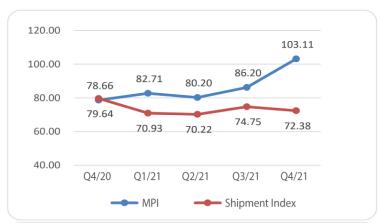
Outlook for Footwear and Leather Production Industry in Q1/2022

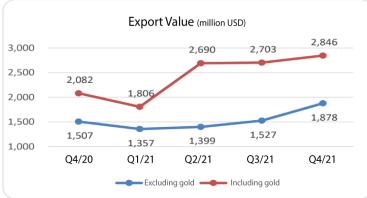
The footwear and leather industry is still in decline due to lower exports and domestic sales but production of luggage and footwear has improved slightly compared to the previous quarter and outbreaks in many countries have been able to manage problems and reduce the severity of the pandemic, allowing the lockdown to be relaxed. The area has been opened to allow for more time for eating and drinking. In addition, the 3rd shot vaccination has been accelerated and promoted, which has helped to restore confidence in some people.

Gems and Jewelry Industry

In Q4/2021, when compared to the same quarter of the previous year, overall production and sales of gems and jewelry increased due to increased production for export (excluding gold) due to the fact that every country has accelerated the vaccination against COVID-19 for the people causing the pandemic to improve (decrease in deaths). The government has continued measures to promote and help the people, including opening more tourist areas which is beneficial to the gem and jewelry industry.

Production, Sales, and Exports





Source: 1. MPI and Shipment Index — the Office of Industrial Economics
2. Export value — Ministry of Commerce

Production

Overall gems and jewelry production in Q4/2021 compared to the same quarter last year (%YOY) increased by 3 0.99 percent from the production of diamond products and genuine jewelry which increased by 9.37 percent and 31.60 percent to support the year-end festival.

Sales

Sales of gems and jewelry in the Q4/2021 compared to the same quarter last year (%YOY) decreased by 9.12 percent, decreasing in diamond products, genuine jewelry and artificial jewelry which decreased by 18.30, 8.44 and 13.46 percent, respectively.

Exports

Gems and jewelry (excluding gold) in Q4/2021 compared to the same quarter last year (%YOY) had a total value of 1,878 million USD increasing by 24.66 percent from the export value of diamonds, gems, genuine jewelry and artificial jewelry that increased by 37.33, 56.50, 23.87 and 23.70 percent, respectively. The main export markets are the United States of America, India and Australia. If considering the overall gem and jewelry exports, it had a total value of 2,845.76 million USD, increasing by 36.70 percent, with the exports value of unformed gold increasing by 68.26 percent.

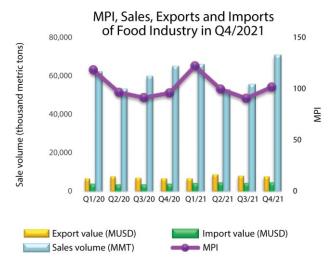
Outlook for Gems and Jewelry Industry in Q1/2022

Overall, gem and jewelry production in Q1/2022 is expected to improve slightly due to the pandemic of the COVID-19 and mutations, although they spread rapidly, their severity tends to decrease along with decreased mortality because people have been vaccinated with $1^{\rm st}$ to $3^{\rm rd}$ shots and the situation in foreign countries has a tendency to reduce pandemic and deaths. Therefore, it should be a good result and the world will relax various measures to prepare to support the opening of the country.

Food Industry

The MPI of the food industry in Q4/2021 increased compared to the same period of the previous year, due to the relaxation of government measures and continued demand for certain items. The MPI of the food industry has expanded, such as crude palm oil, raw sugar, frozen vegetables, other canned fruits, seasoned cooked chicken, frozen fish and tapioca starch. Export values that expanded are rice, cassava products, fresh, chilled, frozen, canned and processed fruits.

MPI, Sales, Exports, and Imports of food industrial products



Source: The MPI and Sales volume collected the Office of Industrial Economics

Export and import value compiled from the Ministry of Commerce by grouping of the Office of Industrial Economics

The MPI of the food industry in Q4/2021 reached 102.6, increasing by 6.6 percent compared to the same quarter of the previous year (%YoY). The production of food products expanded, such as palm oil, which increased by 34.6 percent from crude palm oil and refined palm oil due to the decrease in the amount of palm production to the world market. This allows Thailand to have more orders and exports of palm oil. In addition, the demand for palm oil in the country increased due to the gradual recovery of economic activities. Followed by sugar, which expanded by 14.6 percent from raw sugar. This was due to the production of sugarcane that started to be crushed on December 7th, 2021, which was earlier than the previous year's production. In addition, the production in 2021/2022 had increased in volume. Cassava increased by 11.5 percent from cassava starch due to consumer demand of domestic and international markets especially China, which is the main export market, has imported cassava starch to be used as a substitute for corn starch. Livestock increased by 10.2 percent from seasoned cooked chicken due to the consumer demand of the market inside the country and abroad. In addition, during the same period of the previous year, major export markets, including Japan and the EU have been affected by COVID-19. This causes imports decreased. Processed vegetables and fruit increased by 4.8 percent from frozen vegetables and fruits and other canned fruits due to consumer demand in foreign markets. The main export markets are China, Japan, the United States of America, along with the reserve production as inventory and fisheries increased by 3.0 percent due to the demand for consumption in both domestic and international markets. The main export markets are the United States of America, China and Japan.

Domestic food sales in Q4/2021 amounted to 71,152.85 thousand metric tons, increasing by 9.3 percent (%YoY) compared to the same quarter last year. The products that are sold in the country increase such as table seasoning and cooking utensils increasing by 20.3 percent from table seasoning followed by macaroni and noodles increasing by 11.6 percent from instant noodles, palm oil increasing by 11.3 percent from crude palm oil and cassava increasing by 9.8 percent from cassava starch.

Exports in Q4/2021 were valued at 8,181.4 million USD, increasing by 17.7 percent (%YoY) compared to the same quarter of the previous year, from key products such as rice, because rice prices in Thailand are competitive. Cassava products because China, the main market, has imported cassava chips for ethanol production and cassava starch for use in the food industry. Fresh, chilled, frozen, canned and processed fruit, due to the quality of the product is acceptable to world-class standards. The main export markets for sugar is Indonesia, Cambodia and Vietnam.

Imports in Q4/2021 were valued at 4,508.29 million USD, increased by 1.8 percent (%YoY) compared to the same quarter of the previous year, from the import of oilseeds to support the vegetable oil industry, followed by milk and dairy products to support continuous industries such as milk powder, cream, milk-related products and flour products to support the continuous industry especially instant noodles.

Outlook for Food Industry in Q1/2022 is expected that the production index and export value will grow slightly compared to the same quarter of the previous year because the world economy and trade tend to expand continuously. In addition, there were positive factors from the THB depreciation. However, the situation of production and exports still has risks from the pandemic of COVID-19 (Omicron) occurring in countries and trading partners including adjusting the price of raw materials in the production of food products which affects the cost of the industrial sector and the purchasing power of consumers decreases.

Prepared by

Topic	Coordination Division	Telephone Number
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in Q4/2021 and Outlook for Q1/2022		
Sectoral Industry		
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