



รายได้ประชาชาติของประเทศไทย พ.ศ. ๒๕๖๖

National Income of Thailand 2023

สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ
Office of the National Economic and Social Development Council

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Preface

The Office of the National Economic and Social Development Council (NESDC) is responsible for compiling the National Income of Thailand in compliance with the International System of National Accounts (SNA). The National Income of Thailand covers 3 sides of approaches covering production, expenditure and income, which reflects the overall economic activities of accounting of the country.

The National Income of Thailand 2023 edition, following the International System of National Accounts (SNA), is compiled using the chained volume measures (CVMs) in measuring the real terms. In this 2023 edition, data are revised back to 2021 in accordance with the latest available primary data. This is to ensure the accuracy and consistency of the entire system of national accounts. Details of revisions are indicated in the revision note on the following pages.

On this occasion, we would like to express our gratitude to agencies and individuals who constantly supply basic data as well as contribute suggestions on enhancing compilation of the National Income of Thailand and other statistic accounts.



(Danucha Pichayanon)
Secretary-General
National Economic and Social Development Council
December 2024

Revisions to the National Income of Thailand 2023 Edition

In this publication, the estimates have been revised back to 2021. The revisions were made based on the most recent data from the primary sources as follows:

1. Revised data

- Agricultural, forestry, and fishing: revised agricultural figures back to 2021 according to the Agricultural Statistics of Thailand 2023 from the Office of Agricultural Economics, and amended fishery figures back to 2021 according to the Fisheries Statistics of Thailand 2023 from the Department of Fisheries.
- Mining and quarrying: revised mineral production figures back to 2021 according to mineral production of Thailand from the Department of Primary Industries and Mines, and the Department of Mineral Fuels.
- Manufacturing sector: revised industrial production figures back to 2021 according to the Manufacturing Product Index (MPI) from the Office of Industrial Economics, Ministry of Industry; revised imports and exports of merchandise data from the Custom Department; and other revised inline with relevant activities for example agriculture, Mining and quarrying, and transportation.
- Wholesale and retail; trade and repair of motor vehicles and motorcycle: revised data back to 2021 due to updated production data of manufacturing, agriculture and mining sectors.
- Accommodation and catering services: revised income for the Value Added Taxes assessment back to 2022.
- Financial and insurance activities: revised data back to 2021 according to the updated annual reports of specialized financial institutions and other financial institutions; revised life and non-life insurances from the Office of Insurance Commission (OIC).
- Electricity, Construction, Transportation and storage, and Information and communication: revised data back to 2021 on account of updating in relevant data.
- Water supply; sewerage, waste management and remediation activities and real estate activities; revised data back to 2022.
- Private final consumption expenditure, General government consumption expenditure, Gross fixed capital formation, and change in inventories; revised data back to 2021 according to relevant data sources.
- Exports and Imports of goods and services: revised back to 2021, in accordance with the updated balance of payments from the Bank of Thailand.
- Updated other basic data according to the latest data available from original data sources.

2. Abbreviation

- New Classification of Individual Consumption by Purpose (COICOP: 2018) is implemented for Private Final Consumption Expenditure (PFCE).
- Gross Domestic Production at current factor cost by economic activities are replaced with Gross Domestic Product at basic prices by economic activities as presented in table 4.
- This publication has two letters assigned after data period (s) in tables (r and p). The letter "r" stands for "revised" representing revision figures based on most recent data, coverage, and compilation methodology. Moreover, the letter "p" stands for "preliminary" annual figure, subject to revisions in the next series of publications.

Executive Summary

The Thai economy in 2023, measured by the Gross Domestic Product (GDP), grew by 2.0%, decelerated from the 2.6% growth observed in 2022. The slowdown was observable in both agricultural and non-agricultural sectors. As a result, there was a decrease in agricultural production of main crops. Concurrently, non-agricultural production was affected by the decline in manufacturing production, regarding weakening external demand from trading partners' economies. In contrast, the services sector accelerated as the number of foreign tourists increased with higher growth rate and domestic travelling activities continuously expanded.

Total production rose by 2.0%, propelled by a 2.0% growth in agricultural production, which decelerated from 2.4% in 2022. The yields of main crops dropped, resulting from El Niño phenomenon which reduced rainfall. The non-agricultural production increased by 2.0%, from 2.6% in 2022. The deceleration in non-agricultural production was induced by a decrease in manufacturing sector, reflected by lower external demand which was in line with economic situation of trading partners. Meanwhile service sector production simultaneously grew in various sectors, including wholesale and retail trade, repair of motor vehicles and motorcycles, as well as, transportation and storage, etc.

For domestic demand, private final consumption expenditure increased by 6.9%, accelerated from 6.2% in 2022. The expansion was influenced by a rise in the number of foreign tourists, resulting in higher expenditure for food and beverages. This was coupled by lower unemployment rate, causing an increase in household income. However, general government final consumption declined by 4.7%, from an increase of 0.1% in 2022. Gross fixed capital formation rose by 1.2%, slowed down from 2.2% in 2022. Notably, private investment displayed consecutive growth, while public investment dropped. In terms of the external sector, exports and imports of goods and services grew by 2.4% and 2.5%, respectively.

National income in 2023 registered a value of 17,505,174 million baht, presented an increase of 4.0%. Sources of income included a return on labor with a value of 5,618,954 million baht, expanded by 3.9%. Additionally, returns on capital, land, and entrepreneurs valued at 7,048,418 million baht expanded by 2.9%. In addition, taxes on production and import, less subsidies, valued at 1,669,558 million baht, increased by 16.1%. Consumption of fixed capital valued at 3,168,244 million baht, expanded by 1.2%. In per capita terms, national income per capita in 2023 was 249,928 baht, rose from 240,860 baht in 2022. Disposable income per capita was 147,603 baht, and consumption expenditure per capita was 147,351 baht. Consequently, per capita personal savings was valued at 2,091 baht in 2022.

For overall economic stability, gross saving increased by 1.4%, an improvement from a fall of 1.3% in 2022. Gross investment fell by 16.7%. Consequently, the saving-investment gap (equivalent to the current account) posted a surplus with a value of 266,723 million baht, accounting for 1.5% of GDP. This was better than a deficit of 602,207 million baht in 2022.

GDP implicit price deflator increased by 1.3%, decelerated from 4.7% in 2022. The deceleration was contributed to the agricultural price index, which dropped by 0.6%, from a 5.1% increase in 2022. Moreover, the non-agricultural price index increased by 1.5%, compared to 4.6% in 2022. In addition, the Consumer Price Index (CPI) and the Producer Price Index (PPI) expanded by 1.2% and 2.4%, orderly.

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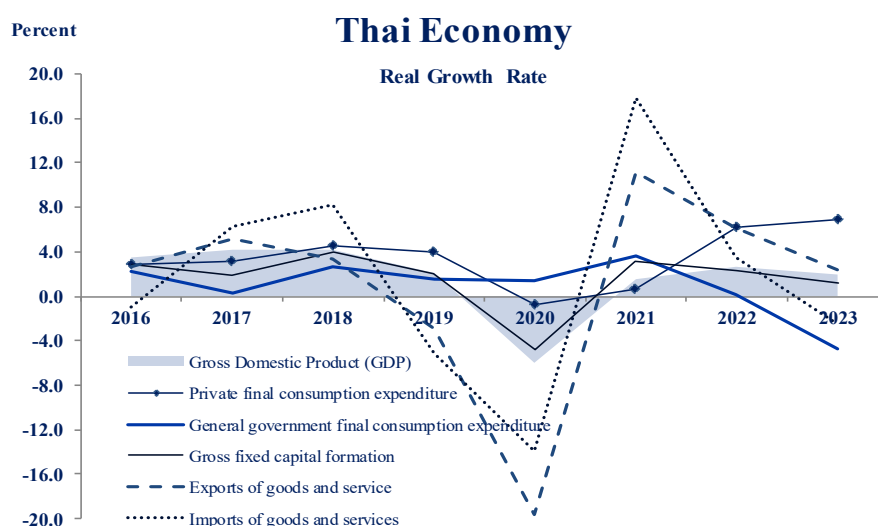
Thai Economy in 2023, National Accounts Perspectives

Overview

GDP in 2023 rose by 2.0%, decelerated from 2.6% in 2022.

Gross Domestic Product for 2023 experienced a growth of 2.0%, slowed down from 2.6% in 2022. The deceleration was noticeable in both agricultural and non-agricultural sectors. The agricultural sector grew by 2.0%, resulting from a decrease in agricultural production of main crops. The non-agricultural production rose by 2.0%, from 2.6% in 2022. This was affected by a decline in industrial sector, regarding weak external demand from trading partners' economies. In contrast, the services sector accelerated as the number of foreign tourists and domestic travelling activities simultaneously expanded.

Gross Domestic Product (GDP) in 2023 at current market prices valued at 17,954,667 million baht. After deducting 449,493 million baht of net factor income from the rest of the world, Gross National Income (GNI) registered at 17,505,174 million baht, increased by 4.0%. Per capita NI was 249,928 baht, higher than 240,860 baht in 2022, or expanded by 3.8%.



Domestic Demand: Private final consumption expenditure in 2023 increased by 6.9%, accelerated from 6.2% in 2022. On the contrary, government final consumption expenditure dropped by 4.7%, from a rise of 0.1% in 2022. Gross fixed capital formation rose by 1.2%, decelerated from 2.2% in 2022. Supporting factors for domestic demand included (1) an increase in tourist-related activities as the number of foreign tourists visiting Thailand rose; (2) lower unemployment rate boosted household income; (3) expenditure stimulus measures and a cost of living allowance for energy consumption contributing to higher purchasing power of household; and (4) an expansion in machinery and equipment investment in the private sector.

External Sector: Exports of goods and services at current market prices in 2023 expanded by 3.4%, continued from 19.9% in 2022. There was a 2.1% drop in merchandise exports, while service receipts increased by 43.9%. On the import side, imports of goods and services at current market prices fell by 3.0%. In particular, merchandise imports decreased by 4.5%, while service payments rose by 3.7%. As a result, the trade and services balance at current market prices valued a surplus of 370,766 million baht, after two years of deficit during COVID-19 pandemic. This was attributed to a trade surplus of 683,212 million baht, compared to a surplus of 465,175 million baht in 2022. In contrast, services registered a deficit of 312,446 million baht, lower than the deficit of 832,404 million baht in 2022. However, net factor income was recorded at a deficit of 449,493 million baht, improved from a deficit of 553,723 million baht. The improvement was from both compensation of employees and property income. On the other hand, net current transfers recorded a surplus of 345,450 million baht, higher than that of 2022. Ultimately, the current account registered a surplus of 266,723 million baht in 2023, from a deficit of 602,207 million baht in 2022.

National Income (NI) or income from factors of production in 2023 recorded the value of 17,505,174 million baht, increased by 4.0%. This expansion was propelled by the compensation of employees, constituting 32.1% of NI and experiencing an increase of 3.9%. Net property income and operating income, accounting for 40.3% of NI, rose by 2.9%. Moreover, consumption of fixed capital, representing 18.1% of NI, with a rise of 1.2%. Taxes on production and imports less subsidies, constituting 9.5%, recorded a gain of 16.1%.

Gross Domestic Savings in 2023 registered with value of 4,299,434 million baht, reflecting a rise of 1.4%, compared to a 1.3% drop in 2022. Consequently, overall net savings, valued at 1,378,349 million baht, fell by 5.1%, from an increase of 2.7% in 2022. The drop was contributed by a decrease of 35.1% in private saving, while public saving rose by 132.3%.

Overall Economic Stability saving revealed a rise of 1.4%. Meanwhile, overall investment decreased by 16.7%. As a result, the saving-investment gap (equivalent to the current account) registered a surplus of 266,723 million baht, from a deficit of 602,207 million baht in 2022. The surplus accounted for 1.5% of gross domestic product.

GDP Implicit Price Deflator increased by 1.3%, decelerated from 4.7% in 2022. The agricultural price index fell by 0.6%, compared to a 5.1% rise in 2022. Furthermore, the non-agricultural price index increased by 1.5%, slowed down from 4.6% in 2022. The consumer price index (CPI) expanded by 1.2%, and the producer price index (PPI) dropped by 2.4%.

Gross Domestic Product

GDP in 2023 expanded by 2.0%, after 2.6% in 2022.

Gross domestic product in 2023 increased by 2.0%, decelerated from 2.6% in 2022, driven by slowdown in both agricultural and non-agricultural sector. Agricultural sector grew by 2.0%, lower than 2.4% in 2022. This slowdown was attributable to the El Niño phenomenon, which resulted in a decrease in rainfall, led to lower yields of major crops. Besides, non-agricultural sector rose by 2.0%, compared to a rise of 2.6% in 2022. The key factor was the decline in industrial sector due to reduced external demand in response to the economic conditions of trading partner countries. Meanwhile, the service sector accelerated, propelled by the increasing number of foreign tourists and the continuous growth in domestic tourism, resulted in continual expansion of tourism-related sectors.

Agricultural production rose by 2.0%, slowed down from 2.4% in 2022. This growth was propelled by lower yields of main crops, including paddy, sugarcane, oil palm, and rubber. Meanwhile, livestock production increased due to higher production of swine and broiler. Additionally, fishery production expanded due to an increase in marine fishery production.

Non-agricultural production increased by 2.0%, lower than 2.6% in 2022. Industrial sector declined by 1.9%, compared to a rise of 0.6% in 2022. The decrease was driven by manufacturing production which dropped by 2.7%, after an increase of 1.3% in 2022, owing to reduced external demand in response to the economic conditions of trading partners. In addition, service sector expanded by 4.2%, accelerated from 3.7% in 2022. This growth was propelled by an expansion in tourism-related sectors including accommodation and food service activities; wholesale and retail trade, and repair of motor vehicles and motorcycles; and transportation and storage.

**Real GDP growth and structure
at current market prices classified by economic activities**

(unit : percent)

Economic activities	Real GDP growth			Structure at current prices		
	2021	2022	2023	2021	2022	2023
Agriculture	2.2	2.4	2.0	8.7	8.7	8.6
Agriculture, forestry and fishing	2.2	2.4	2.0	8.7	8.7	8.6
Non-agriculture	1.5	2.6	2.0	91.3	91.3	91.4
Mining and quarrying	-3.6	-12.3	-1.2	2.2	2.2	2.0
Manufacturing	4.7	1.3	-2.7	27.2	27.0	25.0
Electricity, gas, steam and air conditioning supply	0.3	3.4	4.3	2.5	2.9	3.2
Water supply; sewerage, waste management and remediation activities	4.5	4.2	5.0	0.4	0.4	0.4
Construction	2.2	-2.3	-0.6	2.7	2.5	2.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.5	3.3	3.9	16.2	15.4	15.8
Transportation and storage	-2.3	7.9	8.8	4.6	4.7	5.0
Accommodation and food service activities	-15.0	34.9	19.3	3.2	4.3	5.3
Information and communication	5.5	5.2	3.6	2.8	2.8	2.8
Financial and insurance activities	5.6	-2.3	1.4	8.3	8.4	8.9
Real estate activities	1.6	2.5	1.5	2.7	2.6	2.6
Professional, scientific and technical activities	-3.1	1.1	3.2	1.7	1.7	1.7
Administrative and support service activities	-7.8	4.8	6.8	1.2	1.3	1.3
Public administration and defence; compulsory social security	0.3	-1.1	0.9	6.5	6.2	6.2
Education	0.3	1.4	0.6	4.4	4.2	4.2
Human health and social work activities	3.6	5.3	4.1	2.5	2.6	2.6
Arts, entertainment and recreation	5.6	0.8	2.1	0.7	0.6	0.7
Other service activities	-5.8	1.3	2.6	1.2	1.2	1.2
Activities of households as employers	-0.1	-0.5	1.1	0.2	0.2	0.2
Gross domestic product, (GDP)	1.6	2.6	2.0	100.0	100.0	100.0

Agricultural production grew by 2.0%. Prices of agricultural products decreased by 0.6%.

Agricultural sector

Overall agricultural production grew by 2.0%, slowed down from 2.4% in 2022. Production of both non-perennial crops and perennial crops rose by 0.5% and 0.9%, orderly. Livestock production grew by 6.9%. Agricultural services expanded by 11.9%. Production of forestry and fishery increased by 0.9% and 4.0%, respectively. Moreover, implicit prices of agricultural products decreased by 0.6%, compared to a rise of 5.1% in 2022.

Growth rate of agricultural sector (real term) and implicit price deflator growth

(unit : percent)

Sector	2021	2022	2023
Agriculture, forestry and fishery growth	2.2	2.4	2.0
Non-perennial crops	4.7	4.3	0.5
Perennial crops	2.9	1.4	0.9
Livestock	-4.6	-0.3	6.9
Agricultural services	7.6	17.0	11.9
Forestry	4.1	-4.3	0.9
Fishery	-2.7	-0.6	4.0
Implicit price deflator growth	1.0	5.1	-0.6

Agriculture, forestry and fishing

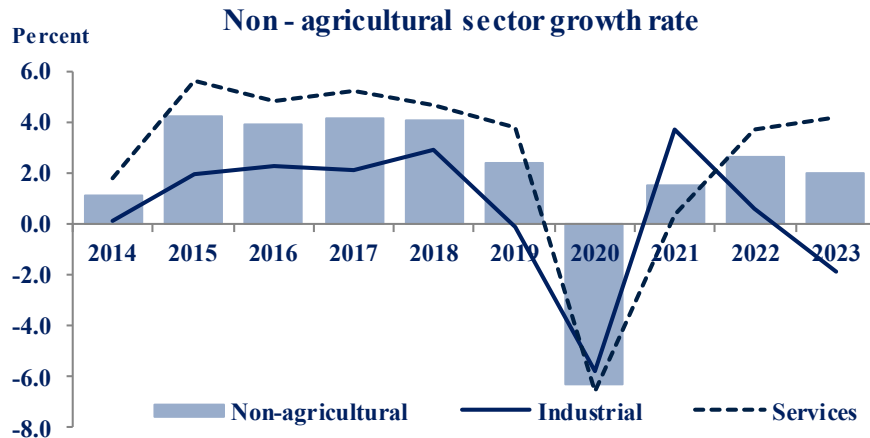
Total production expanded by 2.0%, consisted of several production activities as follows:

- **Non-perennial** grew by 0.5%, due to higher yields of main crops such as vegetable and maize which rose by 5.8% and 5.7%, respectively. Meanwhile, production of paddy declined by 0.4% due to the El Niño phenomenon, causing a reduction in rainfall, led to a drought.
- **Perennial crops** increased by 0.9%, driven by higher yields of major crops, particularly fruits, which grew by 6.5%. These included durian, mangosteen, and other fruits. However, there was a decrease in the yields of oil palm and rubber.
- **Livestock** grew by 6.9%, primarily due to an increase in production of swine and broiler, despite a decrease in production of hen's eggs, cattle, and buffalo.
- **Agricultural services** grew by 11.9%, driven by an increase in planting and harvest services corresponding to expanded planting area.
- **Forestry and logging** rose by 0.9%, propelled by an expansion in silviculture and other forest activities; and logging. Meanwhile, production of firewood and charcoal; and gathering of non-wood forest products declined.
- **Fishing** increased by 4.0%, resulted from an increase in marine fishery despite a decrease in freshwater fishery.

Implicit prices of agricultural products decreased by 0.6%, compared to a rise of 5.1% in 2022. The decline was attributable to lower prices of maize, oil palm, rubber, swine, cattle, and fishing products. Meanwhile, prices of paddy, sugar cane, pineapple, and other fruits increased.

Non-agricultural sector

Non-agricultural sector expanded by 2.0%.



Mining and quarrying

Mining and quarrying decreased by 1.2%, improved from a fall of 12.3% in 2022. The contraction was attributable to natural gas and crude oil production which declined by 0.8%, continued from a drop of 15.9% in 2022. This was driven by a 10.0% decline in crude oil production, continued from a 19.5% fall in 2022, in line with lower production in main sources; namely, Sirikit and others in the S1 group; Tantawan Benchamas group; and Erawan group. Additionally, the natural gas and condensate production decreased by 2.6%, after a fall of 14.7% in 2022, due to lower production in main sources including Erawan group; Bongkot; Sirikit; and Arthit. Similarly, the quarrying of stone, sand, and clay decreased by 0.6%, following a fall of 1.5% in 2022.

Manufacturing

Manufacturing decreased by 2.7%, compared to a rise of 1.3% in 2022. This was propelled by weak external demand in response to the economic conditions of trading partners. The industries with negative contributions included food products; chemical and chemical products; beverages; and computer, electronic and optical products, along with deceleration in refined petroleum products and motor vehicles. In 2023, production capacity utilization rate stood at 59.6%, lower than 63.6% in 2022.

Manufacturing with a contraction

- **Food products** decreased by 0.3%, compared to a rise of 7.3% in 2022. The manufacture of sugar; processed fruit and vegetable products; animal feed; and vegetable oil decreased. Meanwhile, that of whole-grain products; dairy products; and bakery products increased.
- **Beverages** declined by 1.0%, after a 4.0% increase in 2022. The manufacture of beer, wine, and energy drinks decreased, despite a slowdown in drinking water and expansion in alcohol and soft drinks.
- **Tobacco products** dropped by 6.7%, improved from a 10.7% fall in 2022, due to decrease in manufacture of tobacco products, and cigarettes and cigars, in line with domestic demand.
- **Textile** decreased by 9.5%, compared to a rise of 1.2% in 2022. The decline was found in manufacture of made-up textile articles, except apparel; weaving from synthetic fibers; and spinning of natural fibers.
- **Wearing apparel** decreased by 17.1%, continued from a decrease of 0.6% in 2022, due to lower manufacture of outerwear and other clothing accessories, such as scarves and shawls. Meanwhile, manufacture of underwear and sleepwear increased.
- **Leather and other products** dropped by 10.4%, compared to an expansion of 31.8% in 2022. The decline was driven by lower production in every product such as leather bag; footwears; and tanning and dressing of leather.

**Growth rate (real term)
and structure of manufacturing sector at current market prices**

(unit : percent)

	Growth rate (real term)			Structure at current prices		
	2021	2022	2023	2021	2022	2023
Food products	3.5	7.3	-0.3	15.4	15.6	16.0
Beverages	-0.6	4.0	-1.0	6.7	6.7	7.3
Tobacco products	-5.5	-10.7	-6.7	0.7	0.6	0.6
Textiles	-2.9	1.2	-9.5	1.8	1.7	1.6
Wearing apparel	-8.4	-0.6	-17.1	1.8	1.7	1.5
Leather and related products	5.0	31.8	-10.4	1.0	1.2	1.1
Wood and products of wood and cork	4.6	5.2	5.2	1.2	1.3	1.4
Paper and paper products	1.9	-7.0	-1.4	1.4	1.3	1.3
Printing and reproduction of recorded media	0.7	0.7	1.0	0.2	0.2	0.2
Coke and refined petroleum products	-1.7	6.3	3.7	10.4	13.2	12.7
Chemicals and chemical products	6.5	-6.0	-1.9	9.1	8.6	8.9
Basic pharmaceutical products and pharmaceutical preparations	6.3	13.8	1.8	1.3	1.4	1.5
Rubber and plastics products	3.5	-1.2	-4.3	6.6	6.5	6.2
Other non-metallic mineral products	2.2	1.4	-5.1	3.5	3.5	3.5
Basic metals	21.4	-10.8	-8.2	1.8	1.6	1.4
Fabricated metal products, except machinery and equipment	4.5	-0.1	-3.9	3.2	3.1	3.1
Computer, electronic and optical products	6.4	-11.1	-16.0	9.4	8.0	7.0
Electrical equipment	7.4	-2.3	-3.9	5.1	4.8	4.8
Machinery and equipment not elsewhere classified	5.2	-3.3	-6.2	4.4	4.0	3.9
Motor vehicles, trailers and semi-trailers	17.0	10.3	3.3	7.4	7.6	8.2
Other transport equipment	7.1	5.4	-4.2	2.2	2.2	2.3
Furniture	23.6	-11.7	-12.2	1.0	0.8	0.8
Other manufacturing	6.6	4.6	-0.3	4.1	4.2	4.4
Repair and installation of machinery and equipment	-10.2	0.1	-0.2	0.0	0.0	0.0
Total value added	4.7	1.3	-2.7	100.0	100.0	100.0

- **Paper and paper products** declined by 1.4%, improved from a fall of 7.0% in 2022. The recovery was attributable to an increase in manufacture of pulp; and other articles of paper and paperboard in response to demand from related industries. However, manufacture of corrugated paper and paperboard continually decreased.
- **Chemical and chemical products** fell by 1.9%, after a drop of 6.0% in 2022. The improvement was driven by recovery in manufacture of plastic pellets and primary plastics; soap and detergents; and cosmetic products, along with an increase in chemical fertilizers and gases used in industrial production.
- **Rubber and plastic products** decreased by 4.3%, following a decrease of 1.2% in 2022, owing to lower manufacture of tyre, sheet rubber and rubber blocks; fiberglass products; and plastic packaging, in line with demand from related industries.
- **Other non-metallic mineral products** dropped by 5.1%, compared to a 1.4% rise in 2022. This was driven by a decline in the production of all products, such as concrete products, cement, plaster, porcelain products, and glass and glass products.
- **Basic metals** dropped by 8.2%, improved from a fall of 10.8% in 2022, driven by a recovery in manufacture of basic iron and steel in response to demand from related industries.
- **Fabricated metal products** declined by 3.9%, continually decreased from 0.1% in 2022. This was attributable to a decrease in manufacture of tanks, construction metals, and metal cans. Meanwhile, manufacture of steam generators, wire products, chain, springs, bolts and screws increased.
- **Computer, electronic and optical products** declined by 16.0%, compared to a fall of 11.1% in 2022. This contraction was attributable to a lower manufacture of electronic components and boards; and computers and peripheral equipment. However, manufacture of watches and clocks; optical products; and photographic equipment increased.
- **Electrical equipment** dropped by 3.9%, after a 2.3% decline in 2022, due to a decrease in the manufacture of wiring and cables; air conditioners; refrigerators; and electric motors and generators, in line with domestic demand.
- **Machinery and equipment** fell by 6.2%, following a fall of 3.3% in 2022, due to lower manufacture of other general-purpose machinery; agricultural machinery except tractor; and engines and turbines, except aircraft, vehicle and cycle engines.
- **Other transport equipment** decreased by 4.2%, compared to an increase of 5.4% in 2022, due to a decline in building of ships and a slowdown in motorcycle production, in line with the domestic demand.
- **Furniture** contracted by 12.2%, lower than a drop of 11.7% in 2022, due to a decrease in manufacture of wooden and metal furniture in response to decline in domestic demand.
- **Other manufacturing** declined by 0.3%, in contrast to a rise of 4.6% in 2022. This was driven by decrease in manufacture of jewelry and related articles; and other manufacturing such as games and toys; and medical equipment.

Manufacturing with an expansion

- **Wood and products of wood and cork** increased by 5.2%, continually rose from 5.2% in 2022. The growth was driven by manufacture of veneer sheets and wood-based panels; and sawmilling and planing of wood.
- **Printing and reproduction of recorded media** rose by 1.0%, continually expanded from 0.7% in 2022, due to an increase in manufacture of newspaper and magazines.
- **Coke and refined petroleum products** rose by 3.7%, slowed down from 6.3% in 2022, in accordance with decelerated domestic demand.
- **Basic pharmaceutical products and pharmaceutical preparation** grew by 1.8%, decelerated from 13.8% in 2022. This increase was a response to heightened domestic demand of pharmaceutical products.
- **Motor vehicles** grew by 3.3%, slowed down from 10.3% in 2022. This growth was driven by an acceleration in manufacture of personal cars while that of parts and accessories for motor vehicles slowed down. However, manufacture of pickup truck decreased, in line with reduced domestic demand.

Electricity, gas and air conditioning supply

Electricity, gas, and air conditioning supply grew by 4.3%, from 3.4% in 2022. This growth was driven by electric power generation and transmission which expanded by 4.2%, from 4.8% in 2022. The expansion of electric power generation and transmission was propelled by an increase in electricity consumption in residential users, small and medium enterprises, despite a decrease in large enterprise. Besides, gas separation grew by 5.9%.

Electricity, gas and air conditioning supply growth (real term)

(unit : percent)

Items	2021	2022	2023
Electricity	0.4	4.8	4.2
Gas separation plant	-6.1	-23.5	5.9
Total	0.3	3.4	4.3

Electricity consumption growth and consumption structure

(unit : percent)

Items	2021	2022	2023
Consumption growth	1.9	3.5	3.3
Residential	2.7	-1.0	7.4
Small enterprises	-1.9	4.3	5.5
Medium enterprises	-0.7	4.4	4.5
Large enterprises	4.7	3.8	-1.4
Special enterprises	-15.4	31.8	22.0
Others	4.6	22.2	-8.4
Consumption structure	100.0	100.0	100.0
Residential	29.3	28.1	29.2
Small enterprises	11.2	11.3	11.5
Medium enterprises	16.0	16.1	16.3
Large enterprises	39.5	39.7	37.9
Special enterprises	2.2	2.8	3.3
Others	1.8	2.1	1.9

Water supply; sewerage, waste management and remediation activities

Water supply; sewerage, waste management and remediation activities increased by 5.0%, accelerated from 2022. This was attributable to water supply which grew by 5.6%, higher than 2.1% in 2022. Additionally, waste collection, treatment, disposal activities, and materials recovery expanded by 4.0%, compared to an 8.3% rise in 2022. This included a 3.1% increase in non-hazardous waste collection and a 4.8% rise in materials recovery, both of which slowed from 7.9% and 8.7% in 2022, respectively.

Growth of water supply, sewerage, waste management (real term)

(unit : percent)

Items	2021	2022	2023
Water supply	2.6	2.1	5.6
Waste collection and Materials recovery	9.0	8.3	4.0
Total	4.5	4.2	5.0

Construction

Construction decreased by 0.6%, marking an improvement compared to a 2.3% decrease in 2022. This was attributable to the continual expansion of non-dwelling construction especially for industrial plants and an increase in permitted construction areas. However, government construction experienced a decline, and state enterprise construction also slowed down.

Wholesale and retail trade; repair of motor vehicles and motorcycles

Wholesale and retail trade, and repair of motor vehicle and motorcycles grew by 3.9%, from 3.3% in 2022, owing to a continual increase in retail sales. The retailed trade was driven by accelerated private consumption expenditure as well as an increase in the number of foreign tourists. Meanwhile, sales of motor vehicles and motorcycles slowed down in response to a deceleration in domestic demand.

Transportation and storage

Transportation and storage rose by 8.8%, following an increase of 7.9% in 2022. The expansion was attributable to land, water, and air transport services, which increased by 4.6%, 0.2%, and 43.0%, respectively. These were attributable to an increase in passenger transport due partly to the foreign tourists whose number rose continually as well as an expansion in domestic travelling. Moreover, postal and courier activities grew by 4.5%, after 4.2% in 2022, in accordance with private operators' turnover.

Accommodation and food service activities

Accommodation and food service activities grew by 19.3%, following a rise of 34.9% in 2022. This increase was driven by expansions in accommodation and food services with 45.0% and 10.7% increase, compared to 88.9% and 23.5% in 2022, respectively. In 2023, the number of foreign tourists stood at 20,054,665 people, led by Malaysian, Chinese and South Korean orderly while the number of foreign tourists in 2022 recorded at 11,065,226 people, In addition, domestic travelling also increased.

Information and communication

Information and communication expanded by 3.6%, decelerated from 5.2% in 2022. This was mainly driven by telecommunication activities with a rise of 2.1%, lower than 4.8% in 2022, in line with communication operators' turnover. In addition, computer programming and consultancy activities grew by 7.3%, from 7.8% in 2022. Besides, programming and broadcasting activities; and motion picture, video and television program production, and sound recording activities rose by 0.3% and 3.2%, orderly.

Financial and insurance activities

Financial and insurance activities grew by 1.4%, compared to a decrease of 2.3% in 2022. This resulted from an expansion in volume of credits, deposits, and fees in commercial banks and specialized financial institutions. In addition, the net interest margin on loans and deposits increased, but the inflation rate decreased. Furthermore, credit-card business in non-banks expanded. Similarly, insurance mostly increased from life insurance. However, nonlife insurance continually dropped from the prior year due to decreased premiums from a deceleration in cars sales. Meanwhile, the overall operation of security companies continually decreased from a dropping turnover and fee incomes in 2022.

Real estate activities

Real estate activities increased by 1.5%, slowed down from 2.5% in 2022. This growth resulted from real estate activities with own or leased property which grew by 2.0%, compared to 3.0% in 2022. Meanwhile, real estate brokerage activities declined by 4.6% owing to the tightening credit approval by financial institutions, which affected consumer decision-making for purchase, along with the high level of household debt.

Professional, scientific and technical activities

Professional, scientific and technical activities grew by 3.2%, accelerated from 1.1% in 2022. The expansion was attributable to increase in legal and accounting activities; head offices and management consultancy activities; advertising and market research activities; other professional, scientific and technical activities; and veterinary activities.

Administrative and support services activities

Administrative and support services activities rose by 6.8%, accelerated from 4.8% in 2022. This expansion was attributable to a favorable expansion in rental and leasing activities; and security and investigation activities which rebounded from a decrease in 2022. In addition, travel agency, tour operator and reservation service activities decelerated in accordance with the number of foreign tourist arrivals and the changing travel habits. Additionally, general cleaning of the building activities; and other business support service activities also increased.

Education

Education increased by 0.6%, slowed down from 1.4% in 2022. Private education increased by 2.7% and public education rose by 0.9%, lower than 1.0% in 2022.

Human health and social work activities

Human health and social work activities grew by 4.1%, decelerated from 5.3% in 2022. This was attributable to an expansion in human health activities which grew by 4.5%, after 5.0% in 2022, driven by a slowdown in public health. However, other human health activities; residential care both with and without accommodation for the children and elderly; and other social work decreased.

Art, entertainment and recreation

Art, entertainment, and recreation increased by 2.1%, compared to a rise of 0.8% in 2022. The growth was propelled by acceleration in operation of sports facilities, along with an increase in activities of government lottery in accordance with the number of lotteries. Additionally, botanical garden activities; and creative, arts and entertainment activities increased.

Other service activities

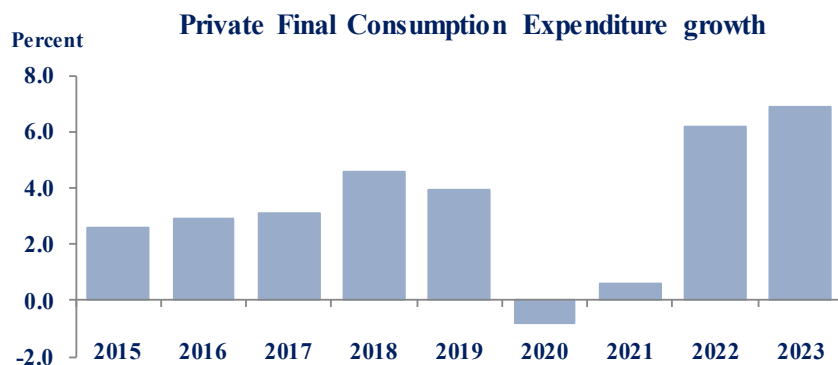
Other service activities expanded by 2.6%, after a rise of 1.3% in 2022. This expansion was driven by an increase in membership organizations activities; repair of computers, and personal and household goods activities; and other personal service activities such as laundry service, spa, and haircut and beauty salon.

Expenditure on Gross Domestic Product

Private final consumption expenditure (PFCE) expanded by 6.9%.

Composition of Private Final Consumption Expenditure

Private final consumption expenditure increased by 6.9%, accelerated from 6.2% in 2022.



This expansion was driven by various factors, including the thriving tourism sector, particularly the increase in foreign tourists visiting Thailand, and supporting positive growth in food and beverage spending. Moreover, the lower unemployment rate resulted in higher household income, reflecting by the consumer confidence index in 2023 improving to 56.7%, compared to 43.9% in 2022. The government continued implementing policies to stimulate household spending and reduce the cost of living in energy by lowering fuel and electricity prices for vulnerable groups. Household spending on the non-durable goods and services, grew by 3.3% and 12.3%, accelerated from 3.0% and 10.4% in 2022, respectively. Meanwhile, spending on semi-durable goods increased by 2.5%, decelerated from 3.2% in 2022. However, spending on durable goods expanded by 2.4%, slowing from a 5.7% in 2022. The deceleration was mainly due to a slowdown in household vehicle purchases, partly as a result of tightened loan approval controls by financial institutions.

Private final consumption expenditure in the domestic market, excluding residents abroad, rose by 9.4%, compared to 8.7% in 2022. Household final consumption expenditure grew by 9.6%, accelerated from 8.9% in 2022. Non-profit institutions serving households increased by 0.4%, improved from a 1.7% decline in 2022.

Private final consumption expenditure in the domestic market, excluding the expenditure of residents abroad and non-residents in the country, grew by 5.3%, accelerated from 5.0% in 2022. When including the expenditure of residents abroad, which expanded by 73.7% and slowed from 112.4% in 2022, private final consumption expenditure increased by 6.9% from 6.2% in 2022.

Private Final Consumption Expenditure growth (real term) and structure at current market prices

(unit : percent)

Item	Growth rate (real term)			Structure at current prices		
	2021	2022	2023	2021	2022	2023
PFCE in domestic market	-1.8	8.7	9.4	100.1	102.7	105.5
less: expenditure of non-residents in the country	-66.7	311.2	91.0	1.2	4.9	9.1
PFCE excluding expenditure of non-residents	0.9	5.0	5.3	98.9	97.8	96.4
plus: expenditure of residents abroad	-22.1	112.4	73.7	1.1	2.2	3.6
Private Final Consumption Expenditure	0.6	6.2	6.9	100.0	100.0	100.0

Household consumption expenditure classified by goods and services items.

PFCE Classified by goods and services items.

Food and non-alcoholic beverages rose by 3.6%, from 3.4% in 2021. Consumption of non-alcoholic beverages expanded by 6.7%, accelerated from 3.0% in 2021. Meanwhile, spending on food grew by 3.3%, slightly below 3.4% in 2021. This was attributed to a slowdown in the consumption of cereals and cereal products, milk, other dairy products and eggs, sugar, confectionery and desserts, and ready-made food and other food products.

Alcoholic beverages and tobacco and narcotics expanded by 2.8%, continued from 2.0% in 2021. Alcoholic beverage consumption grew by 4.5%, accelerated from 3.4% in 2021. Meanwhile Tobacco and consumption remained unchanged, compare to a decline of 0.2% in 2021.

Clothing and footwear went up 3.1%, accelerated from 2.8% in 2021. This expansion was attributable to an improvement in clothing spending which grew by 3.4%, compared to a 2.6% decrease in 2021. Meanwhile, footwear purchases grew by 0.9%, slowed down from 4.8% in 2021.

Housing, water, electricity, gas, and other fuels increased by 3.6%, accelerated from 1.4% in 2021. This growth was due to a rise in expenses on electricity, gas, and other fuels, which rose by 6.3%, rebounded from a 0.8% decrease in 2021. In contrast, spending on housing rentals, water supply, and miscellaneous services related to the dwelling grew by 2.2%, decelerated from 2.3% in 2021.

Furnishings, household equipment and routine household maintenance fell by 0.7%, reversed from a 1.0% increase in 2021. This decline resulted from a 1.7% decrease in furniture, furnishings, and loose carpets, compare to a 2.0% expansion in 2021. Additionally, household textiles, household appliances, tools and equipment for house and garden, and goods and services for routine household maintenance slightly decreased 0.6%, following a 0.9% increase in 2021.

Health grew by 3.9%, slowed down from 9.4% in 2021. this growth was attributable to expenses on medicines and health products, outpatient care services and inpatient care services which increased by 2.3%, 6.5% and 4.3%, decelerated from 7.0%, 10.7% and 10.7% in 2021, respectively.

Transport expanded by 4.4%, decelerated from 8.8% in 2021. Spending on vehicle purchases, operation of personal transport equipment, and passenger transport services rose by 5.6%, 0.9% and 10.0%, lower than 12.3%, 3.8% and 14.4% in 2021, respectively. However, spending on transport service of goods expanded by 5.3%, accelerated from 4.7% in 2021.

Information and communication rose by 4.0%, accelerated from 0.6% in 2021. This growth was due to expenses on information and communication equipment and software (excluding games) which increased by 5.5% and 13.5%, rebounded from a drop of 2.9% and 2.8% in 2021, respectively. Additionally expenses on information and communication services grew by 2.9%, compared to a 0.3% decline in 2021.

Recreation, sport and culture increased by 6.4%, from 5.7% in 2021, mainly due to spending on other recreation and entertainment expanding, which expanded by 7.6%, compared to 7.0% in 2021. Moreover, spending on newspapers, books, and stationery increased by 3.0%, improved from a 0.1% fall in 2021. Meanwhile, spending on recreational durables fell by 15.2%, continued from a 6.6% decline in 2021.

Education services expanded by 1.5%, lower than 1.9% in 2022, primarily as a result of the deceleration of expenses on secondary education, post-secondary non-tertiary education and education not defined by level. However, expenses for early childhood and primary education and tertiary education continued to grow.

Restaurants and accommodation services grew by 46.6%, slowed down from 67.9% in 2022. This was attributable to expenses on restaurant services, and accommodation services, which rose by 32.7% and 88.5%, decelerated from 42.4% and 317.5% in 2022, respectively.

Insurance and financial services increased by 5.0%, improved from a 3.2% decline in 2022. This growth was mainly driven by expanses on insurance and financial services, which rose by 2.7% and 6.5%, rebounded from a 2.3% and 3.9% fall in 2022, respectively.

Personal care, social protection and miscellaneous goods and services expanded by 2.1%, from 1.0% in 2022. This increase was supported by higher expenses on personal care and other services, which rose by 5.9% and 1.1%, following increases of 4.7% and 0.0% in 2022, respectively. Meanwhile, expenses on personal jewelry slightly decreased by 0.8%, improved from a 1.7% decline in 2022.

Non-profit institutions serving households consumption expenditure rose by 0.4%, recovered from a 1.7% reduction in 2022. This expansion stemmed from spending on health services, education, and social protection services, which increased by 1.3%, compared to a 1.8% decline in 2022. On the other hand, other services dropped by 0.7%, compared to a 1.5% decrease in 2022.

Private consumption expenditure classified by durability 4 categories

PFCE by durability of 4 categories.

Durable goods expanded by 2.4%, decelerated from 5.7% in 2022. Purchasing of vehicles rose by 5.6%, slowing from 12.3% in 2022. In addition, the spending on personal care, social protection and miscellaneous goods and services, as well as on furnishings, households equipment and routine maintenance, decreased by 1.9% and 2.4%, compared to a drop of 1.6% and 0.9% in 2022, orderly. However, expenses on information and communication increased by 5.5%, from 2.9% in 2022.

Semi-durable goods increased by 2.5%, decelerated from 3.2% in 2022. Specifically, expenses on clothing and footwear rose by 3.2%, slowing from 4.3% in 2022. Nonetheless, expenses on furnishings, households equipment and routine maintenance, as well as transport, dropped by 0.3% and 3.8%, compared to increases of 1.7% and 2.0% in 2022, respectively.

Non-durable goods increased by 3.3%, from 3.0% in 2022. Expenses on food and non-alcoholic beverages and alcoholic beverages, tobacco and narcotics grew by 3.6% and 2.8%, from 3.4% and 2.0% in 2022, respectively. Meanwhile, spending on health and transport expanded by 2.5% and 1.1%, lower than 7.3% and 4.1% in 2022, orderly.

Services expanded by 12.3%, accelerated from 10.4% in 2022. The expansion was driven by expenses on recreation, sport and culture; and personal care, social protection and miscellaneous goods and services which grew by 8.2% and 2.0%, accelerated from 7.6% and 1.2% in 2022, respectively. Spending on information and communication, and insurance and financial services grew by 3.5% and 5.0%, improved from a drop of 0.1% and 3.2% in 2022, orderly. Meanwhile, restaurants and accommodation services expanded by 46.6%, decelerated from 67.9% in 2022.

**Private final consumption expenditure classified by purpose (COICOP)
and by durable appearance, growth (real term) and structure at current market prices**

(unit : percent)

	Growth rate			Structure		
	2021	2022	2023	2021	2022	2023
PFCE classified by purpose (COICOP)						
Food and non-alcoholic beverages	3.0	3.4	3.6	28.7	27.7	27.0
Alcoholic beverages, tobacco and narcotics	-1.6	2.0	2.8	3.3	3.0	2.9
Clothing and footwear	-9.1	2.8	3.1	3.4	3.2	3.0
Housing, water, electricity, gas and other fuels	2.6	1.4	3.6	10.5	10.0	9.8
Furnishings, household equipment and routine maintenance	0.9	1.0	-0.7	4.2	3.9	3.5
Health	9.0	9.4	3.9	5.1	5.0	4.8
Transport	-6.0	8.8	4.4	12.6	13.5	12.9
Information and Communication	-2.3	0.6	4.0	3.0	2.7	2.6
Recreation, sport and culture	-1.4	5.7	6.4	4.0	3.8	3.8
Education services	1.6	1.9	1.5	1.5	1.3	1.2
Restaurants and accommodation services	-18.6	67.9	46.6	8.5	14.0	19.7
Insurance and financial services	2.4	-3.2	5.0	6.6	6.3	6.4
Personal care, social protection and miscellaneous goods and services	-3.0	1.0	2.1	7.0	6.7	6.4
Individual consumption expenditure of non-profit institutions serving households	-5.1	-1.7	0.4	1.7	1.6	1.5
plus: Expenditure of residents abroad	-22.1	112.4	73.7	1.1	2.2	3.6
less: Expenditure of non-residents in the country	-66.7	311.2	91.0	1.2	4.9	9.1
Private Final Consumption Expenditure (PFCE)	0.6	6.2	6.9	100.0	100.0	100.0
PFCE classified by durable appearance						
Durable goods	-4.5	5.7	2.4	7.8	7.7	7.3
Semi-durable goods	-1.1	3.2	2.5	8.2	7.6	7.2
Non-durable goods	1.6	3.0	3.3	44.4	43.8	42.2
Services	1.0	10.4	12.3	39.6	40.9	43.3

Composition of general government final consumption expenditure

General Government final consumption expenditure in real terms decreased by 4.7%.

General government final consumption expenditure at current market prices in 2023 was recorded at 2,983,435 million baht, reflecting a decrease of 3.1%, compared to an expansion of 4.3% in 2022. This decline was primarily due to reduced expenditure associated with Coronavirus Disease 2019 (COVID-19). Specifically, purchases from enterprises and abroad were valued at 852,312 million baht, marking a decrease of 0.5%, compared to a 3.3% expansion in the previous year. Social transfers in kind—purchased market production recorded a value of 310,849 million baht, decreased by 30.5% from an expansion of 11.5% in 2022, mainly due to a reduction of health expenditure. Meanwhile, government compensation of employees was valued at 1,742,535 million baht, expanded by 3.3%, continued from a 3.6% expansion in 2022. Consumption of fixed capital recorded a value of 338,871 million baht, reflecting a 1.3% increase, decelerated from 2.8% in the previous year. Moreover, purchases by households and enterprises amounted to 261,132 million baht, rose by 5.8%, slowed down from 6.0% in 2022.

By the functions of government, total general government final consumption at current market prices in 2023 consisted of the following: education services accounted for 28.9%; health services accounted for 20.8%; general public services accounted for 13.7%; economic affairs accounted for 12.5%; defense accounted for 9.0%; public order and safety accounted for 8.7%; and remaining services, including housing and community amenities; recreation, culture and religion; environmental protection; and social protection, accounted for 6.4%.

General government final consumption expenditure in real terms decreased by 4.7%, compared to an expansion of 0.1% in 2022. This decline was driven by a 1.4% decrease in purchases from enterprises and abroad, following a 2.4% decrease in the previous year. Social transfers in kind—purchased market production decreased by 31.4%, reversing from an expansion of 4.8% in 2022. Meanwhile, compensation of employees increased by 1.2%, accelerated from 0.1% in 2022. Consumption of fixed capital increased by 0.8%, decelerated from 1.2% in 2022. Lastly, purchases by households and enterprises increased by 5.4%, accelerated from 0.4% in 2022.

Gross capital formation

Gross capital formation in 2023 at current market prices recorded a value of 4,032,711 million baht, consisting of 4,117,222 million baht of gross fixed capital formation and 84,511 million baht of depleted inventories.

In real terms, gross fixed capital formation grew by 1.2% in 2023, slowed down from 2.2% in 2022. The main contributing factor was private investment which increased by 3.1%, decelerated from 4.6% in 2022. Meanwhile, public investment contracted by 4.2%, after a 3.9% decrease in 2022.

Investment (by type of institutions)

	Value at current market prices (Million Baht)			Growth rate (real term) (%)		
	2021	2022	2023	2021	2022	2023
Construction	1,361,718	1,368,430	1,376,626	2.3	-2.2	-0.5
Private	559,878	566,998	589,091	-0.6	-1.5	2.8
Public	801,840	801,432	787,535	4.4	-2.7	-2.8
Equipment	2,443,403	2,691,401	2,740,596	3.6	4.7	2.1
Private	2,185,364	2,439,405	2,513,226	3.9	6.2	3.2
Public	258,039	251,996	227,370	0.7	-7.6	-8.6
Investment	3,805,121	4,059,831	4,117,222	3.1	2.2	1.2
Private	2,745,242	3,006,403	3,102,317	3.0	4.6	3.1
Public	1,059,879	1,053,428	1,014,905	3.5	-3.9	-4.2

Private Investment

Private investment in 2023 at current market prices recorded a value of 3,102,317 million baht, consisting of 589,091 million baht of private construction and 2,513,226 million baht of private machinery and equipment. In real terms, private investment expanded by 3.1%, decelerated from 4.6% in 2022.

Private Investment

	Value at current market prices (Million Baht)			Growth rate (real term) (%)		
	2021	2022	2023	2021	2022	2023
Construction	559,878	566,998	589,091	-0.6	-1.5	2.8
Residential	281,578	297,315	306,492	-3.2	2.9	2.0
Non-residential	160,442	184,109	194,655	1.0	11.4	4.5
Others	102,736	70,479	73,124	5.9	-33.1	2.9
Cost of ownership transfer	15,122	15,095	14,820	-10.1	-4.2	-4.7
Machinery and equipment	2,185,364	2,439,405	2,513,226	3.9	6.2	3.2
Private Investment	2,745,242	3,006,403	3,102,317	3.0	4.6	3.1

Private construction at current market prices recorded a value of 589,091 million baht, comprising dwelling construction at 306,492 million baht, non-dwelling construction at 194,655 million baht, and other construction at 73,124 million baht. In real terms, private construction increased by 2.8%, rebounded from a decrease of 1.5% in 2022. This growth was driven by the following segments: other construction increased by 2.9, accelerated from a 33.1% decrease in 2022; dwelling construction increased by 2.0%, slowed down from 2.9% in 2022; and non-dwelling construction grew by 4.5%, decelerated from 11.4% in 2022. In contrast, the cost of ownership transfer decreased by 4.7%, higher than a fall of 4.2% in 2022.

Private investment in equipment and machinery at current market prices recorded a value of 2,513,226 million baht. In real terms, it increased by 3.2%, decelerated from 6.2% in 2022. A key contributing factor was increased investment in office equipment, particularly in a computing machinery with related parts; software; and radio broadcast and television receiver. This rise was partly attributed to the growing role of technology in the society, which boosted demand for these items. Additionally, investment in other vehicles expanded, mainly due to an increase in ship imports. On the other hand, investment in industrial equipment decreased, and transport equipment also dropped, in line with the decline of registration for road vehicles, particularly passenger cars.

Public Investment

Public investment at current market prices recorded a value of 1,014,905 million baht, consisting of 787,535 million baht of public construction and 227,370 million baht of public machinery and equipment. In real terms, public investment decreased by 4.2%, compared to a 3.9% decrease in 2022. This reduction was driven by a decrease in government investment, while state enterprise investment slowed down.

Public Investment

	Value at current market prices (Million Baht)			Growth rate (real term) (%)		
	2021	2022	2023	2021	2022	2023
Construction	801,840	801,432	787,535	4.4	-2.7	-2.8
Dwellings	13,791	16,311	18,335	17.1	13.2	11.0
Non-dwellings	133,322	128,355	132,714	0.4	-6.8	1.7
Others	654,727	656,766	636,486	5.0	-2.2	-4.1
Machinery and equipment	258,039	251,996	227,370	0.7	-7.6	-8.6
Public investment	1,059,879	1,053,428	1,014,905	3.5	-3.9	-4.2

Public construction at current market prices recorded a value of 787,535 million baht, comprising 18,335 million baht in dwellings, 132,714 million baht in non-dwellings, and 636,486 million baht in other construction. In real terms, public construction dropped by 2.8%, after a 2.7% decrease in 2022. This decline was primarily attributed to a 6.2% reduction in government construction projects, compared to a 6.4% decrease in 2022. The main reason was a reduction in investment value from loans under the Emergency Decree authorizing the Ministry of Finance to borrow funds for addressing, mitigating, and recovering the economy and society affected by the COVID-19 pandemic and delays in the enactment of the Fiscal Year 2024 Budget which hindered the disbursement of investment budgets in the Q4/2023 as planned. Meanwhile, state enterprise construction increased by 3.6%, slowed down from 5.4% in 2022. This growth was primarily driven by ongoing projects, such as the electrical distribution system project, the water pipeline construction system and ongoing construction works in other construction category.

Public investment in machinery and equipment at current market prices recorded a value of 227,370 million baht. In real terms, it decreased by 8.6%, compared to a 7.6% decrease in 2022. Government machinery and equipment investment dropped by 10.3%, after a fall of 18.6% in 2022. Meanwhile, state enterprise machinery and equipment investment decreased by 7.1%, in contrast to an expansion of 4.7% in 2022, primarily due to reductions in industrial equipment investment.

Investment classified by type of assets

Tangible fixed assets at current market prices recorded a value of 3,941,000 million baht, consisting of 324,827 million baht in dwelling construction, 957,497 million baht in non-dwelling construction, 2,644,277 million baht in machinery and equipment, and 14,399 million baht in cultivated assets. In real terms, the investment in tangible fixed assets increased by 1.5%, decelerated from 1.8% in 2022. In further detail: dwelling construction increased by 2.5%, lower than 3.4% in 2022; non-dwelling construction increased by 0.3%, rebounded from a fall of 5.5% in 2022; machinery and equipment grew by 1.8%, while cultivated assets increased by 0.7%, both slowed down from 4.6% and 24.2% respectively, in 2022.

Intangible fixed assets at current market prices recorded a value of 161,402 million baht, comprising 74,918 million baht in mineral exploration and 86,484 million baht in computer software. In real terms, the investment in intangible assets decreased by 4.0%, reversed from a 14.5% increase in 2022. This was largely due to a 17.4% reduction of mineral exploration investment, compared to a 22.8% increase in 2022. Meanwhile, the investment on computer software increased by 11.0%, accelerated from 6.3% in 2022.

Costs of ownership transfer at current market prices recorded a value of 14,820 million baht. In real terms, it decreased by 4.7%, after a 4.2% drop in 2022.

Investment (by type of assets)

	Value at current market prices (Million Baht)			Growth rate (real term) (%)		
	2021	2022	2023	2021	2022	2023
Tangible fixed assets	3,655,364	3,875,480	3,941,000	2.9	1.8	1.5
Dwelling	295,369	313,626	324,827	-2.4	3.4	2.5
Non-dwelling	981,152	945,637	957,497	3.7	-5.5	0.3
Machinery and equipment	2,368,091	2,602,300	2,644,277	3.2	4.6	1.8
Cultivated assets	10,752	13,918	14,399	6.9	24.2	0.7
Intangible fixed assets	134,635	169,255	161,402	11.7	14.5	-4.0
Mineral exploration	66,584	89,414	74,918	6.5	22.8	-17.4
Software	68,051	79,841	86,484	17.4	6.3	11.0
Costs of ownership transfer	15,122	15,095	14,820	-10.1	-4.2	-4.7
Investment	3,805,121	4,059,831	4,117,222	3.1	2.2	1.2

Change in inventories

Overall change in inventories at current prices decreased with the value of 84,511 million baht in 2023. A decline in stock covered manufacturing and mining, while agricultural products rice and gold increased. In particular, the crude oil, where inventory has depleted due to a decrease in the value of imports and domestic crude oil production, while petroleum products continue to be produced, driven by the recovery of the transportation sector. The decline in manufacturing inventories led by plastics and synthetic rubber in primary forms; electronic components and boards; engines and turbines, except aircraft, vehicle and cycle engines; and computers and peripheral equipment, while, there were increase in stocks of manufacturing including jewelry; related articles, motor vehicles, and processing; and processing and preserving of fish and fish products, fresh, chilled or frozen. The increase in inventory of agricultural products covered cassava, rubber and paddy. The stock of gold increased slightly due to lower imports compared to the previous year.

External Sectors

Exports of goods and services expanded.

Exports of goods and services

Exports of goods and services at current market prices in 2023 presented a value of 11,750,353 million baht, which expanded by 3.4%. This was due to the increase in service receipts, while merchandise exports declined.

Merchandise exports at current market prices recorded a value of 9,777,620 million baht, which represented a 2.1% decrease, principally derived from a decline in the export of manufactured products. A decline in manufactured product exports was primarily driven by a decrease in the export of computer parts and accessories, attributed to the growing popularity of solid-state drives (SSD) which replaced hard disk drives (HDD). Additionally, export of other major manufactured products such as air conditioners, metal and chemicals and petrochemical products also decreased. In addition, export of agro-industrial products decreased, particularly canned fish, palm oil, rubber products, and animal feed. In contrast, export of some manufacturing products, such as sugar, telecommunication equipment, parts of electrical appliances, passenger cars and pickup trucks increased.

Export of agricultural products slightly expanded. Rice exports quantity in 2023 was 8.8 million tons, which met the target of 8.0 million tons set by the Ministry of Commerce. The increase in rice exports was partly derived from a large import volume from Indonesia, along with other trading partners such as U.S.A. and Africa, driven by food security challenge in several nations. Furthermore, India, the largest rice export country, controlled the export of non-basmati rice to control food prices and inflation. Moreover, export of fruits expanded particularly in durian in accordance with demand from China.

Overall exports was partly diminished by lower non-monetary gold exports. In 2023, the whole exports in real term decreased by 2.6%, reversed from an expansion of 1.1% in 2022, while prices of export increased by 0.5%. Exports to major destinations such as Japan, ASEANs and Europe decreased.

Service receipts at current market prices recorded a value of 1,972,733 million baht, which grew by 43.9%. This was principally originated from an increase in the number of foreign tourists, in consequence, travel and transportation receipts significantly rose. Furthermore, other business services also expanded.

Imports of goods and services decreased.

Imports of goods and services

Imports of goods and services at current market prices in 2023 revealed a value of 11,379,587 million baht, which contracted by 3.0%, reversed from 23.4% expansion in 2022. This reduction was established from decrease in import of goods, while service payments increased.

Merchandise imports at current market prices recorded a value of 9,094,408 million baht, which declined by 4.5%. The decrease was due to a reduction in raw material and intermediate goods imports, which resulted from lower crude oil import values, aligned with the global oil price situation. In addition, imports of chemicals and petrochemical products also decreased. An expansion in consumer goods imports was driven by higher vehicle imports, in line with household purchases of vehicles. Capital goods imports increased, particularly in the category of computer products, in response to the growing demand for machinery and equipment. Overall, imports of goods in volume terms decreased by 4.3%, while import prices slightly decreased by 0.2%.

Service payments at current market prices showed a value of 2,285,179 million baht, which rose by 3.7%. This was mainly attributable to expansion of travel and transportation payments. Besides, other business service payment also rose.

Trade and services balance and current account

Trade and services balance at current market prices registered a surplus of 370,766 million baht, presented a turnaround after 2 years consecutive deficit following the COVID-19 pandemic. Trade balance showed a surplus of 683,212 million baht which larger than a surplus of 465,175 million baht in preceding year. Meanwhile, service balance presented a deficit of 312,446 million baht, better than a deficit of 832,404 million baht in 2022. Primary income posted a deficit of 449,493 million baht, better than a deficit of 553,723 million baht in 2022, driven by a smaller deficit in the levels of compensation of employees and property income. Secondary income presented a surplus value of 345,450 million baht, larger than the surplus in 2022. Ultimately, current account which comprises of trade and services balance, primary income and secondary income, registered a surplus of 266,723 million baht, improved from a deficit of 602,207 million baht in 2022.

Trade and services balance and current account at current market prices

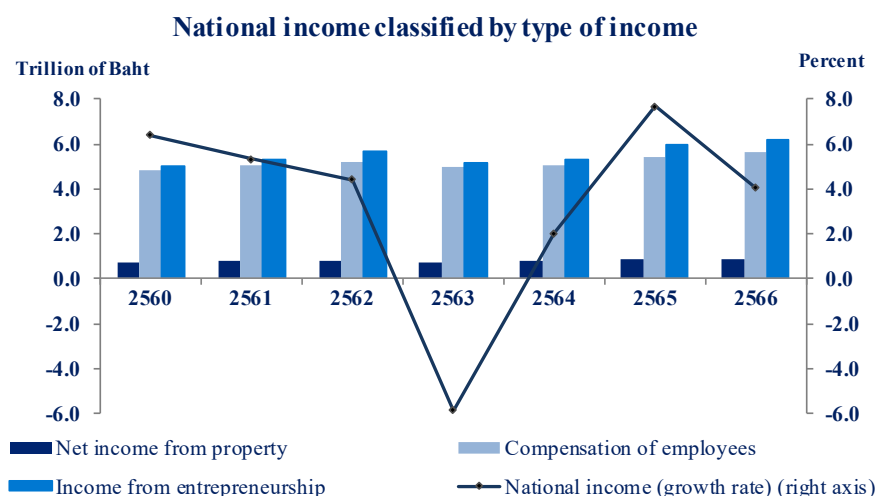
Items	Value at current market prices (Million Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Exports	9,478,795	11,360,477	11,750,353	17.5	19.9	3.4
Goods	8,665,055	9,989,604	9,777,620	22.1	15.3	-2.1
Services	813,740	1,370,873	1,972,733	-15.7	68.5	43.9
Imports	9,500,510	11,727,706	11,379,587	31.0	23.4	-3.0
Goods	7,644,245	9,524,429	9,094,408	31.1	24.6	-4.5
Services	1,856,265	2,203,277	2,285,179	30.7	18.7	3.7
Trade and services balance	-21,715	-367,229	370,766			
Percentage to GDP (%)	-0.1	-2.1	2.1			
Primary income	-562,295	-553,723	-449,493			
Secondary income	238,138	318,744	345,451			
Current account balance	-345,873	-602,207	266,723			
Percentage to GDP (%)	-2.1	-3.5	1.5			

Exchange rate

In 2023, exchange rate presented an average value of 34.8 Thai baht per US dollar, slightly appreciated from 35.1 Thai baht per US dollar in 2022.

National income and savings

National income



Gross National Income at current market prices in 2023 was recorded a value of 17,505,174 million baht, which grew by 4.0%, compared to a rise of 7.7% in 2022. Compensation of employees, accounting for 32.1% of gross national income, expanded by 3.9%. Return on capital, land, and entrepreneurship, representing 40.3% of gross national income, increased by 2.9%, principally due to an expansion in net return on income from property and return on entrepreneurship, which grew by 2.6% and 3.0%, respectively. Taxes on production and imports less subsidies rose by 16.1%, an improvement from 0.2% decrease in 2022. Lastly, consumption of fixed capital increased by 1.2%.

Type of income	Value at current market prices (Millions Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Compensation of employees	5,065,907	5,409,628	5,618,954	1.2	6.8	3.9
Income from property and entrepreneurship	6,077,659	6,847,294	7,048,418	3.2	12.7	2.9
Income from property (Net)	766,097	838,570	860,760	5.0	9.5	2.6
• Households & Non-profit institutions	768,502	849,163	911,883	3.7	10.5	7.4
• Government	-2,405	-10,593	-51,123	79.2	-340.5	-382.6
Income from entrepreneurship	5,311,562	6,008,724	6,187,658	2.9	13.1	3.0
• Households & Non-profit institutions	2,976,431	3,355,708	3,979,089	-4.0	12.7	18.6
• Corporations	2,335,131	2,653,016	2,208,569	13.2	13.6	-16.8
Taxes on production and import less subsidies	1,440,174	1,437,785	1,669,558	-0.2	-0.2	16.1
Consumption of fixed capital	3,040,598	3,129,527	3,168,244	2.2	2.9	1.2
National income	15,624,338	16,824,279	17,505,174	2.0	7.7	4.0
Population (1,000 persons)	69,688	69,851	70,041	0.3	0.2	0.3
National income per capita (Baht)	224,204	240,860	249,928	1.8	7.4	3.8

The compensation of employees grew by 3.9%, slow down from 6.8% expansion in 2022

Compensation of employees

Compensation of employees or return on labor in 2023 presented value at 5,618,954 million baht, equivalent to 32.1% of Gross National Income (GNI), and increased by 3.9%, compared to a rise of 6.8% in 2022. Compensation of employees in public sector increased by 3.2%, slightly decelerated from a growth of 3.4% in 2022, whereas compensation of employees in private sector grew by 4.3%, slowed down from 8.8% in 2022. On the other hand, compensation of employees can be divided in to two parts as follows: (1) wages and salaries increased by 2.8% ,and (2) employer's contribution in social security fund and other welfare, rose by 10.3%. In 2023, there was no new minimum wage promulgated, while salaries in the government sector were increased in usual pattern, and no special salary adjustment was applied. Labor force survey by the National Statistical Office (NSO) in 2023 indicated that the total number of employed persons increased by 1.8%. The number of employed persons with employee status increased by 1.7%. Public employees dropped by 0.2%. Private employees, accounting for 80.8% proportion of total employees, increased by 2.6%, aligned with the increase in the number of insured person under section 33 of social security act at the end of 2023 which increased by 2.2%, compared to 4.5% in 2022.

Compensation of employees by economic activities

Sector	Value at current prices (Millions Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Agricultural sector	217,191	232,111	238,058	4.4	6.9	2.6
Agriculture, forestry and fishing	217,191	232,111	238,058	4.4	6.9	2.6
Non-agricultural sector	4,907,818	5,207,910	5,408,181	0.8	6.1	3.8
Industrial	1,433,734	1,563,265	1,556,219	1.1	9.0	0.2
Manufacturing	1,284,728	1,400,758	1,399,138	1.1	9.0	-0.1
Others	149,006	162,507	167,081	1.2	9.1	2.8
Services	3,474,084	3,644,645	3,841,962	0.7	4.9	5.4
Construction	208,277	214,525	227,075	0.3	3.0	5.9
Wholesale and retail trade; repair of motor vehicles and motorcycles	507,652	549,465	584,940	-0.5	8.2	6.5
Transportation and storage	159,309	170,680	181,384	-5.1	7.1	6.3
Accommodation and food service activities	110,870	148,576	191,514	-16.1	34.0	28.9
Financial and insurance activities	366,363	362,264	376,777	2.0	-1.1	4.0
Public administration and defence; compulsory social security	782,100	797,385	821,934	2.8	2.0	3.1
Education	665,026	689,516	708,455	2.3	3.7	2.7
Human health and social work activities	330,737	357,139	379,649	5.9	8.0	6.3
Others	343,750	355,095	370,234	-1.9	3.3	4.3
The rest of the world	-59,102	-30,393	-27,285	16.1	48.6	10.2
Total	5,065,907	5,409,628	5,618,954	1.2	6.8	3.9

Private sector and public sector compensation of employees

Compensation of employees in the public sector, 36.0% of overall compensation of employees of the nation, increased by 3.2%, slightly lower than 3.4% in 2022. Compensation of government employees increased by 3.3%. Compensation of state enterprises and public corporations increased by 2.6%. Compensation of employees in the private sector (including net compensation of employees from abroad), accounting for 64.0% of the total compensation of employees, grew by 4.3%, slowed down from 8.8% in 2022. Considering production activities, compensation of employees expanded in both the agricultural and non-agricultural sectors.

Compensation of employees by economic activities

Compensation of employees expanded in both the agricultural and non-agricultural sectors.

Compensation of employees in the agricultural sector amounted to 238,058 million baht, representing 4.2% of the total compensation of employees, increased by 2.6%. This was partly originated from larger planting area, particularly for maize and off-season rice. Furthermore, the increase was supported by higher values of major agricultural products, such as food crops, fruits and vegetables. These reasons were contributable to the increase in compensation of employees in the agricultural sector.

Compensation of employees in the non-agricultural sector amounted to 5,408,181 million baht, representing 96.2% of the total compensation of employees, with an increase of 3.8%, compared to 6.1% growth in 2022. This expansion can be observed from both industrial and service activities.

- **Compensation of employees in the industrial sector**, accounting for 27.9% of the total compensation of employees, expanded by 0.2%, a slowdown from 9.0% in 2022. The largest proportion in the industrial sector is manufacturing activities which declined by 0.1% in 2023, compared to 0.9% increase in 2022. Compensation of employees in mining and quarrying fell by 1.3%, from an 8.3% expansion in the preceding year. Compensation of employees in electricity, gas, steam and air conditioning supply activities together with water supply; and sewerage, waste management, and remediation activities grew by 3.6%, and 6.3%, respectively.

- **Compensation of employees in the services sector**, accounting for 68.4% of the total compensation of employees, increased by 5.4%, from 4.9% in 2022. Compensation of employees in human health and social work activities; education activities; and public administration, defence, and compulsory social security activities, grew by 6.3%, 3.7%, and 3.1%, respectively, which mainly derived from an increase in compensation of public employees. Compensation of employees in accommodation and food service activities; and transportation and storage activities grew by 28.9% and 6.3% in 2023, followed increases of 34.0% and 7.1% in 2022, respectively. These were primarily due to the increase in the number of foreign tourists. Compensation of employees in wholesale and retail trade, and repair of motor vehicles and motorcycles activities; and construction increased by 6.5% and 5.9%, orderly. Compensation of employees in financial and insurance activities expanded by 4.0%, recovered from 1.1% decline in 2022, mainly due to an increase in financial service activities, especially in commercial banks, and insurance and pension fund. On the contrary, activities auxiliary to financial service and insurance activities contracted. Lastly, compensation of employees in other services activities increased by 4.3%, accelerated from 3.3% in 2022.

Net compensation of employees from the rest of the world recorded a deficit of 27,285 million baht. Compensation of employees received from the rest of the world was 31,261 million baht, which was lower than 58,546 million baht paid as compensation to the rest of the world.

Returns on land, capital, and entrepreneurs

Net return on land, capital, and entrepreneurship was valued at 7,048,418 million baht, equivalent to 40.3% of Gross National Income. It grew by 2.9%, lower than 12.7% in 2022.

Income from farming and households and non-profit institutions serving households (NPISHs): gross mixed income was valued at 3,979,089 million baht, representing 22.7% share of Gross National Income. This increase of 18.6%, improved from 12.7% in 2022. Income from farms increased by 1.9%, driven primarily by an expansion in overall agricultural production, especially major crops such as rice, rubber, vegetables and maize, partly due to an increase in irrigated areas. Additionally, prices for major agricultural product, including rice, also increased. Furthermore, other mixed income showed an improvement compared to 2022.

Income from entrepreneurship or profit of corporations was recorded at 2,208,569 million baht, a decline of 16.8%.

Net income from property of households and non-profit institutions serving households (NPISHs) was valued at 911,883 million baht, which increased by 7.4%, compared to a rise of 10.5% in 2022. This slowdown resulted from greater expansion in property income payments compared to property income receipts.

Households and private non-profit institutions income from property

(unit : percent)

Item	Growth rate			Structure		
	2021	2022	2023	2021	2022	2023
Income						
Interest received	-11.2	4.6	28.6	18.7	18.2	21.8
• from banks	-13.7	3.4	31.6	15.7	15.1	18.5
• from others	4.8	10.7	13.7	3.0	3.1	3.3
Dividends	11.5	10.4	1.4	54.2	55.7	52.6
Rent	1.2	3.0	4.3	8.0	7.7	7.5
Others	-4.5	3.3	6.0	19.1	18.4	18.2
Total	2.5	7.3	7.4	100.0	100.0	100.0
Expense						
Interest paid	-0.6	-0.4	8.6	74.5	73.9	74.6
Rent	1.2	3.0	4.3	25.5	26.1	25.4
Total	-0.2	0.4	7.5	100.0	100.0	100.0

• **Households and NPISHs property income receipt** were valued at 1,292,224 million baht, which increased by 7.4%, slightly accelerated from 7.3% in 2022. This increase resulted from a 28.6% boost in interest income, higher than 4.6% in 2022. The rise in interest income was driven by higher interest rates, in accordance with higher interest income received from banks, incorporated with a rise in policy rate. In addition, other property income receivables, such as provident funds, government pension funds, and life insurance, increased by 6.0%, accelerated from 3.3% in 2022. Income from land rent for agricultural areas increased by 4.3%, compared to a rise of 3.0% in 2022. Meanwhile, dividend grew by 1.4%, decelerated from 10.4% in 2022. Households and NPISHs received dividends from various establishments, including private corporations, commercial banks, and state-owned enterprises which continued to increase. However, dividends received from cooperatives and listed companies declined.

• **Households and NPISHs property income payment** were valued at 380,341 million baht, which increased by 7.5%, accelerated from 0.4% in 2022. This was mainly due to an increase of 8.6% in interest payments, which rebounded from 0.4% decrease in 2022. The increase in interest payments resulted from higher interest paid by households and NPISHs to banks, to pawnshops, on loans from life insurance policies, to cooperatives and to mortgage interests. The key factor contributing to an increase, was the higher average interest rate compared to 2022, in line with the prevailing policy rate. Moreover, consumer loans (excluding loans for land, dwelling and real estate, and working abroad) experienced a slight deceleration.

General government income from property decreased by 1.8%, from a drop of 2.7% in 2022. The decline was mainly from interest received and dividend. Income from dividends dropped by 8.1%, comprised of dividend receivable, income from special state enterprise, dividend received from income of state enterprise groups; including, the transport, industrial, and commercial sectors, and dividend income from other sources. In addition, interest received fell by 7.3% which was partly from a decrease in interest received from financial institutions. In contrast, rental income increased by 34.6%, driven by higher real estate rental fees.

General government income from property

(unit : percent)

Item	Growth rate			Structure		
	2021	2022	2023	2021	2022	2023
Rent	-2.3	7.5	34.6	5.2	5.7	7.8
Interest received	-8.2	24.1	-7.3	14.8	18.9	17.8
• From Banks	-6.6	23.4	-80.0	11.1	14.1	2.8
• From others	-12.6	26.2	208.3	3.7	4.8	15.0
Dividend	26.8	-11.6	-8.1	60.3	54.8	51.3
Sub total	16.4	-3.8	-4.8	80.3	79.4	76.9
Investment income on pension entitlement	4.1	1.7	10.1	19.7	20.6	23.1
Total	13.7	-2.7	-1.8	100.0	100.0	100.0

Saving and saving - investment gap

Gross saving

Gross saving was valued at 4,299,434 million baht, which increased by 1.4%, a rebound from 1.3% decrease in 2022. Net saving was valued at 1,378,349 million baht, which decreased by 5.1%, compared to a 2.7% increase in 2022. This decline in net saving was from a 32.5% decline in households and NPISHs, and a 35.4% contraction in private corporations. However, government net saving accelerated compared to the previous year, due to a lower deficit, recording a deficit of 335,197 million baht, an improvement from a deficit of 750,904 million baht in 2022. Furthermore, net saving by public corporations and state enterprises grew by 58.8%, compared to an increase of 26.3% in 2022. Consumption of fixed capital registered a value of 3,168,244 million baht, which grew by 1.2%, slowed down from 2.9% in 2022.

Saving and gross capital formation

Item	Value at current price (Millions Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Gross capital formation	4,640,553	4,841,233	4,032,711	24.7	4.3	-16.7
• Private sector	2,745,242	3,006,403	3,102,317	4.5	9.5	3.2
• Public sector	1,059,879	1,053,428	1,014,905	5.2	-0.6	-3.7
• Change in inventories	835,432	781,402	84,511			
Gross saving	4,294,680	4,239,026	4,299,434	-1.8	-1.3	1.4
• Net saving	1,414,375	1,451,943	1,378,349	1.4	2.7	-5.1
• Depreciation	3,040,598	3,129,572	3,168,244	2.2	2.9	1.2
• Discrepancy	160,293	342,489	247,159			
Saving-investment gap	-345,873	-602,207	266,723	-152.8	-74.1	144.3
Saving-investment gap to GDP (%)	-2.1	-3.5	1.5			

Private sector net savings

Private net savings comprising households, non-profit institutions serving households (NPISHs), private corporations, and cooperatives were valued at 1,233,305 million baht, which decreased by 35.1%.

1) Net savings of households and non-profit institutions serving households (NPISHs)

Net savings of households and NPISHs were valued at 146,446 million baht, representing a 32.5% decline. The details were as follows.

Households and NPISHs income receipts were valued at 12,285,255 million baht, which increased by 8.0%, accelerated from 3.5% in 2022. Primary income receipts, the principal source of income, expanded by 9.1%, compared to 8.6% in 2022. This primary income consisted of: (1) compensation of employees, accounting 45.7% share of households and NPISHs income, increased by 3.9%, (2) property income increased by 7.4%, slightly higher than 7.3% in 2022 (3) households and NPISHs mixed income, a 34.3% share of total income, increased by 17.5%, compared to 12.1% in 2022. As a result, primary income expanded by 9.1%, driven by growth in compensation of employees, gross mixed income and operating surplus, and property income receivable. Secondary income receipts, comprising social benefits other than social transfers in kind and other current transfers, decreased by 1.1%, recovered from a deep contraction in 2022.

Primary and secondary income payment were valued at 1,712,541 million baht, which increased by 10.9%, an improvement from a 9.1% in 2022. The majority of expenses were from property income payable which increased by 7.5%, compared to a slight increase in 2022. Additionally, income taxes rose by 6.4%, lower than a rise of 18.4% in 2022. Net social security contributions expanded by 14.4%. Meanwhile, transfers to government and rest of the world also increased by 14.2%.

The effect of the increase in receipts and expenses of Households and NPISHs, was a 7.6% increase in disposable income, accelerated from 2.7% in 2022. After deducting by Private Final Consumption Expenditure, which increased by 8.8%, and exceeded the growth rate of household disposable income, and adjusting for the change in pension entitlements, net savings of households and NPISHs contracted by 32.5%. In other words, per capita net savings of households and NPISHs were value at 2,091 baht, which decreased by 32.7%.

Personal income, expenditure and saving

Item	Value at current prices (Millions Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Personal income	10,991,225	11,374,001	12,285,255	2.3	3.5	8.0
Personal outlay	1,415,214	1,543,837	1,712,541	0.1	9.1	10.9
Disposable personal income	9,576,011	9,830,164	10,572,714	2.6	2.7	7.6
<u>Less</u> Private consumption expenditure	8,455,842	9,482,300	10,320,596	1.8	12.1	8.8
<u>Plus</u> Adjustment for the change in pension entitlement ^{1/}	103,552	100,821	128,778	-11.7	-2.6	27.7
<u>Less</u> Consumption of fixed capital	225,004	231,588	234,450			
Net savings	998,717	217,097	146,446	7.0	-78.3	-32.5
Net Disposable income per capita (Baht)	134,184	137,415	147,603	2.2	2.4	7.4
Personal outlay per capita (Baht)	121,339	135,750	147,351	1.5	11.9	8.5
Personal savings per capita (Baht)	14,331	3,108	2,091	6.8	-78.3	-32.7

Remark 1/ only government funds such as social security fund (in the case of child allowance and old age), private teacher aid fund, Bangkok Metropolitan Administration pension fund and local administration pension fund

2) Net savings of private corporations and cooperatives

Net savings of private corporations and cooperatives, adjusted according to the national accounts definition, were valued at 1,086,859 million baht, a decrease of 35.4%, compared to a 13.4% decline in 2022. Net savings of private corporations were recorded at 1,078,345 million baht, which decreased by 35.7%, in contrast to 13.7% expansion in 2022. Such a decline originated from a decrease in other private corporations and commercial banks. On the contrary, the profit by national accounts definition of listed companies in the Stock Exchange of Thailand (excluding private commercial banks and public corporations) expanded compared to the preceding year. Saving of cooperatives were valued at 8,514 million baht, which increased by 17.0%, recovered from a 21.0% reduction in 2022.

Net saving

Item	Value at current prices (Millions Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
Net savings	1,414,375	1,451,943	1,378,349	-1.4	2.7	-5.1
Private sector	2,482,428	1,900,348	1,233,305	11.0	-23.4	-35.1
• Households	998,717	217,097	146,446	7.0	-78.3	-32.5
• Corporations & cooperatives	1,483,711	1,683,251	1,086,859	13.8	13.4	-35.4
Public sector	-1,068,053	-448,405	145,044	-33.2	58.0	132.3
• Government	-1,307,554	-750,904	-335,197	-33.2	42.6	55.4
• Enterprises	239,501	302,499	480,241	33.4	26.3	58.8
Gross saving	4,294,680	4,239,026	4,299,434	-1.8	-1.3	1.4
Gross savings to GDP (%)	26.5	24.4	23.9			

Public sector net savings

Public net savings, consisting of general government, public corporations and government enterprises, were valued at 145,044 million baht, with an increase of 132.3%. Government net savings were recorded a deficit of 335,197 million baht, smaller than a 750,904 million baht deficit in 2022. This deficit has persisted since 2014. Meanwhile, net savings of state enterprises were valued at 480,241 million baht, which rose by 58.8%, compared to an increase of 26.3% in 2022.

1) General government net savings

General government net savings recorded a deficit of 335,197 million baht in 2023, marking another consecutive year of deficit. However, the value of deficit narrowed from 750,904 million baht in 2022. General government revenue amounted to 4,903,593 million baht, with an increase of 4.6%. The increase was driven by taxes, the primary sources of revenue, which rose by 4.8%. Meanwhile, government expenditure on non-investment items were valued at 4,771,141 million baht, which fell by 4.6%. The value of adjustment for the change in pension entitlement was valued at 128,778 million baht, which expanded by 27.7%, and consumption of fixed capital was valued at 338,871 million baht with an increase of 1.3%. As a result, general government net saving increased by 55.4%.

A rise in general government income in 2023 was primarily driven by increases in taxes on production and imports, as well as current taxes on income and wealth, which could be categorized as follows:

General government income, expenditure and savings

Item	Value at current prices (Million Baht)			Growth rate (%)		
	2021	2022	2023	2021	2022	2023
General government income	4,500,669	4,687,667	4,903,593	3.9	4.2	4.6
General government expenditure	2,427,591	1,924,028	1,787,706	16.1	-20.7	-7.1
Disposable general government income	2,073,078	2,763,639	3,115,887	-7.5	33.3	12.7
<u>Less</u> Final consumption expenditure	2,951,660	3,079,209	2,983,435	5.9	4.3	-3.1
<u>Less</u> Adjustment for the change in pension entitlement ^{1/}	103,552	100,821	128,778	-11.7	-2.6	27.7
<u>Less</u> Consumption of fixed capital	325,420	334,513	338,871	2.3	2.8	1.3
General government net savings	-1,307,554	-750,904	-335,197	-33.2	42.6	55.4

Remark 1/ only government funds such as social security fund (in the case of child allowance and old age), private teacher aid fund, Bangkok Metropolitan Administration pension fund and local administration pension fund

Taxes on production and imports accounted for 35.8% of total general government revenue, rose by 6.7%. The increase in tax revenue was mainly from

(1) Value Added Taxes (VAT) increased due to a rise in VAT from domestic consumption while VAT from imports declined.

- *VAT from domestic consumption* increased as private consumption expenditure expanded, especially in sectors related to tourism, including accommodation and food service activities; and electricity, gas, steam and air conditioning supply.
- *VAT from imports*, the decrease was a result of dropping value of imports, incorporating with a fall in crude oil price.

(2) Oil and oil product tax in 2023 increased for the first time in the last five years, resulting from the end of tax cut measure on July 20, 2023. Hence, tax collection increased in the second half of the year.

(3) Specific business tax expanded in accordance with transactions in real estate and financial activities. Particularly, commercial banks' income increased as a result of a rise in interest received.

(4) Liquor tax rose, thanks to an improvement in tourist-related activities, together with entertainment facilities opening business as usual

(5) Land and building tax increased as the end of three-year period of tax cut measure.

(6) Stamp duty increased both for cash payment and transfer of property rights.

Increases from other taxes on production and imports included taxes from non-alcoholic beverage, motorcycle, battery, mineral royalty, Bangkok metropolitan administration and provincial administration tax for petrol, hotel tax for provincial administration, and business registration fee, etc.

The types of taxes on production and imports with a decrease were import duties, petroleum royalty, automobile tax, beer tax, and tobacco tax.

Property income from government and investment income payable on pension entitlements accounted for 4.7% of total government revenue, decreased by 1.8%. The contraction was from the income from dividend with the share of 51.3% of total government property income, decreased by 8.1%, partly contributable to dividend receivable, income from special state enterprise, and income from state enterprise groups; namely, transport, industrial, and commercial sectors, while the other dividend income also fell. Interest received which accounted for 17.8% of total government property income, dropped by 7.3% both from banks and other financial institutions.

Meanwhile, other property income, namely investment income payable on pension entitlements accounted for 23.1% of total government property income, rose by 10.1%, due to a rise of interest and dividend received (child allowance and old-age program) from the social security fund. Moreover, rental income which constituted 7.8% of total government property income, rose by 34.6%, attributed partly to rental fees.

Current taxes on income, wealth, and etc. accounted for 24.2% of total government revenue, which increased by 2.1%.

- **Tax revenue** increment was mainly from corporate income tax, increased by 2.5%, due partly to (1) Tax collection on net profit rose by 1.0%, from an increase in companies' profits in 2022. The listed companies' profits dropped in the second half of 2022, while tax collection increased highly in 2022. (2) Tax collection on forecasted net profit rose by 0.2%, following an improvement of automotive industry. On the other hand, the first-half profit of listed companies in 2023 dropped. (3) Withholding tax collection by the private sector increased by 1.5%. and (4) Withholding tax on service and profit distribution rose by 14.5% partly from dividend payment to foreign juristic person.

- **Personal income tax** increased by 6.2%. This was partly due to withholding tax on salary income with a gain of 6.6% from higher level of employment in both public and private sectors. Moreover, withholding tax collection on interest and dividend increased by 8.5%. This was partly due to withholding tax from dividend paid by listed companies and for interest on deposits. Meanwhile, withholding tax collections on service fees expanded by 6.7%. Lastly, withholding tax on income on immovable property rose by 4.9% due to higher number of transactions resulting from reduction in fees for property transfer.

- **Petroleum income tax** collection dropped by 22.4%. resulting from a shift from concession contract to production-sharing system in 2023.

Social contributions, which accounted for 15.3% of total government revenue, expanded by 14.4%. This gain was partly attributable to an increase in employers' and household's actual social contributions from higher employment, together with the resumption of usual rate of social security contribution. As a result, employers' actual social contributions towards social security fund, local administration pension fund, and workmen's compensation fund increased. However, private teacher aid fund decreased. There was an increase in employers' imputed social contributions; namely pension, perpetuity, medical allowance, and children education allowance. Lastly, households' social contributions supplements increased from both interest and dividend receivable.

Miscellaneous current transfers receivable, which accounted for 1.1% of total government revenue, dropped by 3.9%. This reduction was mainly contributed by a drop of income from donations and traffic fines. However, government lottery office's unclaimed lottery prize and interest, and indemnification increased.

Interest paid, which accounted for 4.7% of total government expenditure, increased by 16.0%, from 0.4% in 2022. The increase was mainly from higher interest expenses on domestic and foreign debt. The interest expense on domestic debt increased by 15.2% from government bond, and promissory notes for financing deficit. However, short-term loan interest of commercial banks fell. On the contrary, interest expense on foreign debt expanded by 19.5%.

Subsidies, which accounted for 1.8% of total government expenditure, decreased by 57.9%, from a 66.4% rise in 2022. The drop was mainly from fuel subsidies, subsidies for agricultural products, and private education subsidy for the management of fundamental education. However, export subsidies continued to expand.

Social benefits other than social transfers in kind, which accounted for 15.4% of total government expenditure, increased by 5.9%, from a rise of 5.0% in 2022. The increase was from usual pension; perpetuity; monthly payment of perpetuities; inherited pension; medical expenses; children education allowances; allowances for the disabled; severance in case of old age pension, maternity, and the disabled. On the other hand, there was a declined in allowances for the elderly, newborn-child support grant, government contributions for elderly, and severance payments for unemployment, child support and death.

Miscellaneous current transfers payable, which accounted for 1.5% of total government expenditure, dropped by 53.2%. The decline was from the end of stimulus measure for economic activities regarding COVID-19 pandemic as a remedy and support for private consumption. On the contrary, there were increases in aids for victims of disasters, cost of indemnification, and cost for public training.

2) Net savings of public corporations and government enterprises

Net savings of public corporations and government enterprises were valued at 480,241 million baht, which increased by 58.8%, continued from a growth of 26.3% in 2022. The net profit of public corporations and government enterprises in business accounting for the 2022 calendar year amounted to 581,837 million baht, which rose by 98.2%, rebounded from a fall of 54.5% in 2022. After adjustments based on the national accounts definition, the net profit of public corporations and government enterprises in national accounts, before profit allocation, grew by 40.6%, accelerated from 19.5% in 2022. After deducting profit allocations, comprising (1) dividend (2) profit delivered to government and (3) bonus payment from net profit, that of increased by 9.4%.

Net savings of public corporations and state enterprises classified by organization establishments, public corporations net saving or performance in national accounts aspects were valued at 71,683 million baht, which increased by 61.0%, recovered from a 7.2% fall in 2022. Net savings of other state enterprises were valued 408,558 million baht, which rose by 58.4%, continued from 34.7% in the previous year.

Saving – investment gap

Gross saving was recorded at 4,299,434 million baht, which rose by 1.4%, improved from 1.3% decline in 2022. Gross Capital Formation or investment registered a value of 4,032,711 million baht, which reduced by 16.7%, from a 4.3% increase in 2022. Such gross saving and investment resulted in a surplus in the saving-investment gap of 266,723 million baht, equivalent to 1.5% of GDP. This surplus marked a rebound from two consecutive years of deficit in 2021 and 2022, which were valued at 345,873 million baht and 602,207 million baht, respectively.

GDP Implicit Price Deflator

Overall price level expanded by 1.3%, slowed down from 4.7% in 2022.

GDP Implicit Price Deflator

GDP Implicit Price Deflator in 2023 expanded by 1.3%, slowed down from 4.7% in 2022. Agricultural price deflator fell by 0.6%, from an increase of 5.1% in 2022, while the non-agricultural price deflator rose by 1.5%, decelerated from 4.6% in 2022. Several activities showed diminishing price level, including agriculture, forestry and fishing activities; mining and quarrying activities; manufacturing activities; water supply, sewerage, waste management and remediation activities; and information and communication activities. Conversely, some activities contributed to an increase in the overall price level, such as wholesale and retail trade, repair of motor vehicles and motorcycles activities; and accommodation and food service activities. Meanwhile that of electricity, gas, steam and air conditioning supply activities; construction activities; transportation and storage activities; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities; public administration and defence, compulsory social security activities; education activities; human health; and social work activities decelerated.

On the expenditure side, the overall deflator expanded by 2.0%, compared to a rise of 3.5% in 2022. The price deflators for private final consumption expenditure, government final consumption expenditure, and gross fixed capital formation increased by 1.8%, 1.6%, and 0.2%, respectively. For external sector, price deflator of exports of goods and services increased by 1.1%, while price deflator of imports of goods and services diminished by 0.5%.

Consumer price index (CPI) in 2023 increased by 1.2%, slowed down from 6.1% expansion in 2022. Meanwhile, producer price index (PPI) dropped by 2.4%, compared to an expansion of 10.4% in 2022.

Growth rate of implicit price deflator

(unit : percent)

Implicit price deflator	2019	2020	2021	2022	2023
Gross domestic product, (GDP)	1.0	-1.3	1.8	4.7	1.3
Agriculture	3.2	2.5	1.0	5.1	-0.6
Non-agriculture	0.8	-1.6	1.9	4.6	1.5
Expenditure on gross domestic product	0.8	-0.6	1.1	3.5	2.0
Private final consumption expenditure	1.0	-0.4	1.2	5.6	1.8
General government final consumption expenditure	1.5	0.7	2.2	4.2	1.6
Gross fixed capital formation	0.2	0.1	1.5	4.4	0.2
Exports of goods and services	-2.4	-0.1	5.8	12.9	1.1
Imports of goods and services	-2.6	-0.6	11.1	19.3	-0.5
Consumer Price Index (CPI)	0.7	-0.8	1.2	6.1	1.2
Producer Price Index (PPI)	-0.7	-1.6	4.7	10.4	-2.4

Appendix

Revision of Private Final Consumption Expenditure (PFCE) under Classification of Individual Consumption According to Purpose (COICOP) 2018

The reclassification of Private Final Consumption Expenditure (PFCE) of Thailand based on Classification of Individual Consumption by Purpose (COICOP) 2018, has been undertaken by Office of the National Economic and Social Development Council. This initiative aims at studying and establishing guidelines for categorization of private final consumption expenditure. The prior classification based on COICOP 1999, has been updated in accordance with COICOP 2018. This recent framework was published by the United Nations Statistics Division (UNSD).

COICOP is an international standard for categorizing private final consumption expenditure. Its purpose is to provide a conceptual framework for classifying goods and services with similar characteristics based on their function or purpose within household consumption expenditure, non-profit institutions serving households (NPISHs), and government expenditure on individual consumption goods and services. As a key component of the System of National Accounts (SNA), COICOP is adopted in various statistical applications, such as household expenditure statistics from household budget surveys; analysis of living standards; consumer price indices; international comparison of Gross Domestic Product (GDP), and expenditure components through purchasing power parity; and other statistics related to culture, sports, food, health, and tourism.

The process of the revision of COICOP 2018 has been launched in 2015, leading by UNSD in collaboration with experts and users worldwide. This revised COICOP (COICOP 2018) offers higher details of classification than COICOP 1999 in response to an increase in demand from users for high level of granularity while addressing several issues. This improvement appropriately reflects significant changes in goods and services, and enhances linkages between COICOP and other classifications, resulting in alignment with the needs of statistical framework and policy applications across diverse international organizations.

The structure of COICOP 2018 consists of 15 divisions. Divisions 01–13 are designated for classifying individual consumption expenditure of households, while Division 14 is for individual consumption expenditure of NPISHs. The Division 15 is assigned for individual consumption expenditure of general government. COICOP 2018 has a hierarchical structure with four levels, coded with numerical digits, starting from two digits at the top level and extending to five digits at the most detailed level. For example, coding system for Division 03 Clothing and footwear.

Division	03	Clothing and footwear (2-digit level)
Group	03.1	Clothing (3-digit level)
Class	03.1.1	Clothing materials (SD) (4-digit level)
Subclass (Goods and Services)	03.1.1.0	Clothing materials (SD) (5-digit level)

The broad structure presents numerical codes with category names at the division and group levels (2-digit and 3-digit levels). For detailed structure, categories are further classified into class (4-digit level) and subclass (5-digit level) accordingly. Classes and subclasses are categorized by product durability as durable goods (D), semi-durable goods (SD), non-durable goods (ND), and services (S) to facilitate further analysis.

In addition, the division level in COICOP 2018 consists of 15 divisions, comparing to 14 divisions in COICOP 1999. Insurance and financial services are separated from miscellaneous goods and services. Consequently, the classification of household consumption expenditures has increased to 13 divisions, from 12 divisions in COICOP 1999. The numbers of categories at group level and class level have also increased from 58 and 157 categories to 63 and 186 categories, respectively. At the most detailed subclass level, there are 338 categories, while the subclass level does not exist in COICOP 1999.

**Comparison of the number of categories
between COICOP 1999 and COICOP 2018 by level**

COIOP level	Number of categories)	
	COICOP 1999	COICOP 2018
Division	14	15
Group	58	63
Class	157	186
Subclass	NA	338

Significant revisions of COICOP 2018

1) A new category, “Division 12 Insurance and financial services” in COICOP 2018 was separated from “Division 12: Miscellaneous goods and services” in COICOP 1999. In other words, “Division 12 Miscellaneous goods and services” in COICOP 1999 was divided into two categories: “Division 12 Insurance and financial services” and “Division 13 Personal care, social protection and miscellaneous goods and services”. The reason for separation was partly due to highly diverse details of the “Division 12” in COICOP 1999. As a result, the expenditure of this division in some countries presented a substantially high share of total spending.

2) Renaming, redefining descriptions, as well as reorganizing categories within or between divisions for enhancing clarity. Key changes include:

- Classification at the highest or division level remained mostly unchanged to minimize fragmentation and avoid disruption of time-series data. However, “Division 08 Communication” and “Division 09 Recreation and culture” should be reorganized into “Division 08 Information and communication” and “Division 09 Recreation, sport and culture”.
- Items related to information, such as televisions and computers, have been adjusted or relocated from “Division 09 Recreation and culture” to “Division 08 Communication”, and also renamed to “Division 08 Information and communication”. This change aims at improving reflection of details, while encompassing new equipment for communication and information reception. This will accommodate rapid advancement in technology and communication. However, the classification mainly relies on a purpose perspective and avoids dependence on technology advancement.

- Rename “Division 09 Recreation and culture” in COICOP 1999 to “Division 09 Recreation, sports, and culture” in COICOP 2018 in order to better reflect the details within division. “Class 09.1.1: Equipment for the reception, recording and reproduction of sound and pictures, 09.1.3: Information processing equipment and “09.1.4: Recording media” have been moved to “Division 08 Information and communication”, as this equipment is used for information and communication purposes. Meanwhile, services for repairs and rentals of information and communication equipment, as well as television licensing fees and television network subscriptions, have been moved from Division 09 to Division 08.
- “Division 07 Transport” has been updated to include Postal services, which were previously in “Division 08 Communication”. This change reflects main usage of postal services by household for sending and receiving parcels, while letter mailing has become rare. Therefore, to better represent the purpose of postal services in COICOP 2018, postal services have been moved to Transport Division.

3) While COICOP 1999 classified items into three levels: division, group, and class, COICOP 2018 distinguishes four levels, with the fourth level being the most detailed level: subclass (Goods and Services). Furthermore, there is an increase in categories for both group and class levels, as shown in the table above.

Revision of Thailand's Classification of Private Final Consumption Expenditure according to COICOP 2018

1) Mapping of COICOP 1999 codes to COICOP 2018 codes at the most detailed level depends on relational alignment.

- One-to-one mapping (mapping item-to-item) compares corresponding items based on definition, meaning, scopes, and establishes code connections. In this case, data can be directly mapped and transferred, especially at the 5-digit detailed level (in case of Thailand) with the new 5-digit codes (COICOP 2018). However, in some instances there could be both cross group or class mappings within the same division, as well as across divisions.
- Many-to-one mapping (mapping multiple items to one item) compares and links multiple items from the original 5-digit level (in case of Thailand) to one item at the new 5-digit level (COICOP 2018). Thailand’s COICOP 1999 classification has previously been extended to 5-digit level, which provide more details than the COICOP 1999 at 4-digit level. This allows us to conveniently map our items in COICOP 1999 format to the COICOP 2018 at a detailed, 5-digit level.
- One-to-many mapping (mapping one item to multiple items) involves breaking down a single item into multiple items according to new classification. This requires further study and information-gathering of relevant data for disaggregating the original item in alignment with the new classification. The information may include direct data, relevant surveys - such as household socio-economic survey, or other relevant indicators.

In addition, classification at subclass level can specify items by durability which can be categorized into durable goods (D), semi-durable goods (SD), non-durable goods (ND), and services (S).

2) Summary of mapping and transfer of private final consumption expenditure data.

- Divisions with no changes in the value of time-series data, include five categories: Alcoholic beverages, tobacco and narcotics; Housing, water, electricity, gas, and other fuels; Furnishings, household equipment and routine household maintenance; Education services; and Restaurants and accommodation services.
- Divisions with an increase in the value of time-series data, include three categories: Food and non-alcoholic beverages, Transport, and Information and communication services.
- Divisions with a decrease in the value of time-series data, include four categories: Clothing and footwear; Health; Recreation, sport and culture; and Personal care, social protection and miscellaneous goods and services.
- New division: Insurance and financial services.

The adjustments and changes do not affect overall value at current market prices, as they represent reclassifications either between divisions or within the same division, in line with the new classification improvements. Each reclassified item corresponds to increases and decreases between divisions. However, differences arise in the value from chain volume measures (CVM) due to changes in the price structure of certain divisions. This can be particularly seen in items with many-to-one or one-to-many relations, which in turn having impacts on the compilation of real values. Nonetheless, these differences do not significantly affect the growth rates in real terms for private final consumption expenditure. In other words, the growth rate in real terms remains unchanged.

Comparison of the structures between COICOP 1999 and COICOP 2018.

The comparison of the structures between COICOP 1999 and COICOP 2018 at the main category level reveals some changes in names or descriptions, and this also include reallocation of sub-items within or between categories for clarity.

**Comparison of previous publication table classified by COICOP 1999
and new publication table classified by COICOP 2018**

COICOP 1999	COICOP 2018
Individual consumption expenditure of households	Individual consumption expenditure of households
Food and non-alcoholic	Food and non-alcoholic beverages
<i>Food</i>	<i>Food</i>
Bread and cereals	Cereals and cereal products
Meat	Meat
Fish	Fish and other seafood
Milk, cheese and eggs	Milk, other dairy products and eggs
Oil and fat	Oils and fats
Fruit	Fruits and nuts
Vegetables	Vegetables
Sugar, jam, honey, chocolate and confectionery	Sugar, confectionery and deserts
Food products n.e.c.	Ready-made food and other food products n.e.c.
<i>Non-alcoholic beverages</i>	<i>Non-alcoholic beverages</i>
Alcoholic beverages, tobacco and narcotics	Alcoholic beverages, tobacco and narcotics
<i>Alcoholic beverages</i>	<i>Alcoholic beverages</i>
<i>Tobacco</i>	<i>Tobacco and narcotics</i>
Clothing and footwear	Clothing and footwear
<i>Clothing</i>	<i>Clothing</i>
<i>Footwear</i>	<i>Footwear</i>
Housing, water, electricity, gas and other fuels	Housing, water, electricity, gas and other fuels
<i>Housing and water</i>	<i>Housing and water</i>
<i>Electricity, gas and other fuels</i>	<i>Electricity, gas and other fuels</i>
Furnishings, household equipment and routine maintenance of the house	Furnishings, household equipment and routine household maintenance
<i>Furniture and furnishings, carpets and other floor covering</i>	<i>Furniture and furnishings, and loose carpets</i>
<i>Households equipment and routine maintenance of the house</i>	<i>Households equipment and routine maintenance of the house</i>
Health	Health

COICOP 1999	COICOP 2018
Transport	Transport
<i>Purchase of vehicles</i>	<i>Purchase of vehicles</i>
<i>Operation of personal transport equipment</i>	<i>Operation of personal transport equipment</i>
<i>Transport services</i>	<i>Passenger transport services</i>
	<i>Transport services of goods</i>
Communication	Information and communication
Recreation and culture	Recreation, sport and culture
<i>Audio-visual, photographic and information Processing equipment</i>	<i>Recreational durables</i>
<i>Other recreation and entertainment</i>	<i>Other recreation and entertainment</i>
<i>Newspaper, books and stationery</i>	<i>Newspapers, books and stationery</i>
Education	Education services
Restaurants and hotels	Restaurants and accommodation services
	Insurance and financial services
Miscellaneous goods and services	Personal care, social protection and miscellaneous goods and services
<i>Personal care</i>	<i>Personal care</i>
<i>Personal effects n.e.c.</i>	<i>Other personal effects</i>
<i>Financial services</i>	
<i>Other services n.e.c.</i>	<i>Other services</i>
Individual consumption expenditure of non-profit institutions serving households (NPISHs)	Individual consumption expenditure of non-profit institution serving households (NPISHs)
<i>Health, education, and social protection</i>	<i>Health, education, and social protection</i>
<i>Other services n.e.c.</i>	<i>Other services n.e.c.</i>
Private final consumption expenditure in the domestic market	Private final consumption expenditure in the domestic market
Plus: Expenditure of residents abroad	Plus: Expenditure of residents abroad
Less: Expenditure of non-residents in the country	Less: Expenditure of non-residents in the country
Private final consumption expenditure	Private final consumption expenditure

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Main Accounts

Account 1 Production account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Intermediate consumption	19,155,793	20,134,060	21,103,117	21,045,569	19,522,387	21,015,415	22,803,925	22,551,159
Value added, gross / Gross domestic product	14,590,337	15,488,664	16,373,340	16,889,169	15,661,294	16,186,633	17,378,002	17,954,667
Consumption of fixed capital	2,488,386	2,628,663	2,775,404	2,912,542	2,974,143	3,040,598	3,129,572	3,168,244
Value added, net / Net domestic product	12,101,951	12,860,001	13,597,936	13,976,627	12,687,151	13,146,035	14,248,430	14,786,423
Resources								
Output	32,367,535	34,170,430	35,912,619	36,329,176	33,773,723	35,793,686	38,804,337	38,904,078
Market output	30,074,425	31,806,964	33,442,549	33,758,880	31,154,908	33,121,873	36,046,066	36,097,184
Non-market output	2,293,110	2,363,466	2,470,070	2,570,296	2,618,815	2,671,813	2,758,271	2,806,894
Taxes on products	1,422,778	1,489,791	1,607,673	1,640,638	1,464,830	1,504,491	1,558,537	1,662,037
Subsidies on products (-)	44,183	37,497	43,835	35,076	54,872	96,129	180,947	60,289

Account 2 Generation of income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Compensation of employees, payable	4,689,364	4,845,989	5,040,726	5,245,584	5,076,977	5,125,009	5,440,021	5,646,239
Wages and salaries	4,119,571	4,243,272	4,405,577	4,557,016	4,395,851	4,417,935	4,670,986	4,797,918
Employers' social contributions	569,793	602,717	635,149	688,568	681,126	707,074	769,035	848,321
Taxes on production and imports, payable	1,521,872	1,588,125	1,712,869	1,745,260	1,525,844	1,565,445	1,646,224	1,757,263
Taxes on products	1,422,778	1,489,791	1,607,673	1,640,638	1,464,830	1,504,491	1,558,537	1,662,037
Other taxes on production	99,094	98,334	105,196	104,622	61,014	60,954	87,687	95,226
(less) Subsidies, receivable	68,330	61,657	68,587	59,727	83,278	125,271	208,439	87,705
Subsidies on products	44,183	37,497	43,835	35,076	54,872	96,129	180,947	60,289
Other subsidies on production	24,147	24,160	24,752	24,651	28,406	29,142	27,492	27,416
Mixed income and operating surplus, gross	8,447,431	9,116,207	9,688,332	9,958,052	9,141,751	9,621,450	10,500,196	10,638,870
Consumption of fixed capital	2,488,386	2,628,663	2,775,404	2,912,542	2,974,143	3,040,598	3,129,572	3,168,244
Mixed income and operating surplus, net	5,959,045	6,487,544	6,912,928	7,045,510	6,167,608	6,580,852	7,370,624	7,470,626
Resources								
Value added, gross / Gross domestic product	14,590,337	15,488,664	16,373,340	16,889,169	15,661,294	16,186,633	17,378,002	17,954,667
Value added, net / Net domestic product	12,101,951	12,860,001	13,597,936	13,976,627	12,687,151	13,146,035	14,248,430	14,786,423

Account 3 Allocation of primary income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Balance of primary incomes, gross								
/ National income, gross	13,904,972	14,794,813	15,582,085	16,268,255	15,314,095	15,624,338	16,824,279	17,505,174
Balance of primary incomes, net								
/ National income, net	11,416,586	12,166,150	12,806,681	13,355,713	12,339,952	12,583,740	13,694,707	14,336,930
Resources								
Mixed income and operating surplus, gross	8,447,431	9,116,207	9,688,332	9,958,052	9,141,751	9,621,450	10,500,196	10,638,870
Mixed income and operating surplus, net	5,959,045	6,487,544	6,912,928	7,045,510	6,167,608	6,580,852	7,370,624	7,470,626
Compensation of employees	4,711,391	4,855,252	5,044,149	5,170,262	5,006,559	5,065,907	5,409,628	5,618,954
Wages and salaries	4,141,598	4,252,535	4,409,000	4,481,694	4,325,433	4,358,833	4,640,593	4,770,633
Employers' social contributions	569,793	602,717	635,149	688,568	681,126	707,074	769,035	848,321
Taxes on production and imports	1,521,872	1,588,125	1,712,869	1,745,260	1,525,844	1,565,445	1,646,224	1,757,263
Taxes on products	1,422,778	1,489,791	1,607,673	1,640,638	1,464,830	1,504,491	1,558,537	1,662,037
Other taxes on production	99,094	98,334	105,196	104,622	61,014	60,954	87,687	95,226
(less) Subsidies	68,330	61,657	68,587	59,727	83,278	125,271	208,439	87,705
Subsidies on products	44,183	37,497	43,835	35,076	54,872	96,129	180,947	60,289
Other subsidies on production	24,147	24,160	24,752	24,651	28,406	29,142	27,492	27,416
Property income^{1/}	-707,392	-703,114	-794,678	-545,592	-276,781	-503,193	-523,330	-422,208

Note: ^{1/} Property income receivable less property income payable

Account 4 Secondary distribution of income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Current transfers	3,074,078	3,208,526	3,386,657	3,638,352	3,775,087	4,114,426	3,794,080	3,906,697
Current taxes on income, wealth, etc.	945,045	940,953	1,053,244	1,082,561	947,276	975,264	1,161,921	1,186,397
Taxes on income	908,726	897,742	1,004,085	1,032,703	897,716	925,438	1,106,213	1,131,184
Other current taxes	36,319	43,211	49,159	49,858	49,560	49,826	55,708	55,213
Social contributions	705,812	744,059	785,408	846,615	811,566	834,889	904,068	1,018,194
Employers' actual social contributions	176,570	182,437	194,909	203,300	185,576	171,382	186,428	222,039
Employers' imputed social contributions	393,223	420,280	440,240	485,268	495,550	535,692	582,607	626,282
Households' actual social contributions ^{1/}	92,613	95,960	102,721	108,326	84,593	80,091	86,509	116,449
Households' social contributions supplements ^{2/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Social benefits other than social transfers in kind	421,938	459,179	526,108	578,218	652,269	679,948	713,790	756,098
Social security benefits in cash	36,394	38,769	45,333	51,242	87,141	83,206	74,262	79,996
Other social insurance benefits	294,198	316,394	335,134	365,699	388,673	409,690	451,224	480,743
Social assistance benefits in cash	91,346	104,016	145,641	161,277	176,455	187,052	188,304	195,359
Other current transfers	1,001,283	1,064,335	1,021,897	1,130,958	1,363,976	1,624,325	1,014,301	946,008
Net non-life insurance premiums ^{3/}	184	251	279	296	306	364	386	377
Current transfer within general government	701,203	762,526	710,498	724,119	682,805	733,736	601,475	588,222
Current international cooperation	2,548	1,985	2,008	1,430	1,480	1,345	1,611	1,661
Miscellaneous current transfers	297,348	299,573	309,112	405,113	679,385	888,880	410,829	355,748
Disposable income, gross	14,145,548	15,050,268	15,840,846	16,491,755	15,503,456	15,862,475	17,143,024	17,850,624
Disposable income, net	11,657,162	12,421,605	13,065,442	13,579,213	12,529,313	12,821,877	14,013,452	14,682,380
Resources								
Balance of primary incomes, gross								
/ National income, gross	13,904,972	14,794,813	15,582,085	16,268,255	15,314,095	15,624,338	16,824,279	17,505,174
Balance of primary incomes, net								
/ National income, net	11,416,586	12,166,150	12,806,681	13,355,713	12,339,952	12,583,740	13,694,707	14,336,930
Current transfers	3,314,654	3,463,981	3,645,418	3,861,852	3,964,448	4,352,563	4,112,825	4,252,147
Current taxes on income, wealth, etc.	945,045	940,953	1,053,244	1,082,561	947,276	975,264	1,161,921	1,186,397
Taxes on income	908,726	897,742	1,004,085	1,032,703	897,716	925,438	1,106,213	1,131,184
Other current taxes	36,319	43,211	49,159	49,858	49,560	49,826	55,708	55,213
Social contributions	705,812	744,059	785,408	846,615	811,566	834,889	904,068	1,018,194
Employers' actual social contributions	176,570	182,437	194,909	203,300	185,576	171,382	186,428	222,039
Employers' imputed social contributions	393,223	420,280	440,240	485,268	495,550	535,692	582,607	626,282
Households' actual social contributions ^{1/}	92,613	95,960	102,721	108,326	84,593	80,091	86,509	116,449
Households' social contributions supplements ^{2/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Social benefits other than social transfers in kind	421,938	459,179	526,108	578,218	652,269	679,948	713,790	756,098
Social security benefits in cash	36,394	38,769	45,333	51,242	87,141	83,206	74,262	79,996
Other social insurance benefits	294,198	316,394	335,134	365,699	388,673	409,690	451,224	480,743
Social assistance benefits in cash	91,346	104,016	145,641	161,277	176,455	187,052	188,304	195,359
Other current transfers	1,241,859	1,319,790	1,280,658	1,354,458	1,553,337	1,862,462	1,333,046	1,291,458
Non-life insurance claims ^{3/}	1	1	0	17	17	14	16	16
Current transfer within general government	701,203	762,526	710,498	724,119	682,805	733,736	601,475	588,222
Current international cooperation	3,009	2,572	3,180	2,673	3,255	4,509	2,173	3,067
Miscellaneous current transfers	537,646	554,691	566,980	627,649	867,260	1,124,203	729,382	700,153

Note: ^{1/} The government social security plans included in government account comprise 6 funds as below:

- 1) Social security fund
- 2) The Workmen's Compensation fund
- 3) Private teacher aid fund (the former name is headmaster and private school teacher welfare fund)
- 4) The national health security fund
- 5) Bangkok Metropolitan Administration pension fund
- 6) Local administration pension fund

^{2/} Governmental funds consist of social security fund (In the case of child allowance and old age)

^{3/} Government only

Account 5 Use of disposable income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Final consumption expenditure	9,757,238	10,103,138	10,652,906	11,137,256	11,094,850	11,407,502	12,561,509	13,304,031
Individual consumption expenditure	8,507,840	8,833,595	9,308,851	9,751,272	9,708,945	10,011,834	11,141,722	11,872,551
Collective consumption expenditure ^{1/}	1,249,398	1,269,543	1,344,055	1,385,984	1,385,905	1,395,668	1,419,787	1,431,480
Adjustment for the change in pension entitlements	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778
Saving, gross	4,388,310	4,947,130	5,187,940	5,354,499	4,408,606	4,454,973	4,581,515	4,546,593
Saving, net	1,899,924	2,318,467	2,412,536	2,441,957	1,434,463	1,414,375	1,451,943	1,378,349
Resources								
Disposable income, gross ^{1/}	14,145,548	15,050,268	15,840,846	16,491,755	15,503,456	15,862,475	17,143,024	17,850,624
Disposable income, net	11,657,162	12,421,605	13,065,442	13,579,213	12,529,313	12,821,877	14,013,452	14,682,380
Adjustment for the change in pension entitlements	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778

Note: ^{1/} Governmental funds consist of social security fund (welfare and senility plan), Bangkok Metropolitan Administration pension fund and local administration pension fund.

Account 6 Redistribution of income in kind account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Social transfers in kind	1,211,288	1,254,859	1,304,166	1,344,888	1,401,003	1,555,992	1,659,422	1,551,955
Social transfers in kind - non-market production	951,068	984,792	1,036,005	1,065,756	1,111,745	1,154,947	1,212,298	1,241,106
Social transfers in kind - purchased market production	260,220	270,067	268,161	279,132	289,258	401,045	447,124	310,849
Adjusted disposable income, gross	14,145,548	15,050,268	15,840,846	16,491,755	15,503,456	15,862,475	17,143,024	17,850,624
Adjusted disposable income, net	11,657,162	12,421,605	13,065,442	13,579,213	12,529,313	12,821,877	14,013,452	14,682,380
Resources								
Disposable income, gross	14,145,548	15,050,268	15,840,846	16,491,755	15,503,456	15,862,475	17,143,024	17,850,624
Disposable income, net	11,657,162	12,421,605	13,065,442	13,579,213	12,529,313	12,821,877	14,013,452	14,682,380
Social transfers in kind	1,211,288	1,254,859	1,304,166	1,344,888	1,401,003	1,555,992	1,659,422	1,551,955
Social transfers in kind - non-market production	951,068	984,792	1,036,005	1,065,756	1,111,745	1,154,947	1,212,298	1,241,106
Social transfers in kind - purchased market production	260,220	270,067	268,161	279,132	289,258	401,045	447,124	310,849

Account 7 Use of adjusted disposable income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Uses								
Actual final consumption	9,757,238	10,103,138	10,652,906	11,137,256	11,094,850	11,407,502	12,561,509	13,304,031
Actual individual consumption	8,507,840	8,833,595	9,308,851	9,751,272	9,708,945	10,011,834	11,141,722	11,872,551
Actual collective consumption	1,249,398	1,269,543	1,344,055	1,385,984	1,385,905	1,395,668	1,419,787	1,431,480
Adjustment for the change in pension entitlements	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778
Saving, gross	4,388,310	4,947,130	5,187,940	5,354,499	4,408,606	4,454,973	4,581,515	4,546,593
Saving, net	1,899,924	2,318,467	2,412,536	2,441,957	1,434,463	1,414,375	1,451,943	1,378,349
Resources								
Adjusted disposable income, gross	14,145,548	15,050,268	15,840,846	16,491,755	15,503,456	15,862,475	17,143,024	17,850,624
Adjusted disposable income, net	11,657,162	12,421,605	13,065,442	13,579,213	12,529,313	12,821,877	14,013,452	14,682,380
Adjustment for the change in pension entitlements	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778

Account 8 External income account

(Million Baht)

Transactions and balancing items	2016	2017	2018	2019	2020	2021r	2022r	2023p
Income of non-residents								
Import of goods and services	7,806,464	8,397,737	9,169,690	8,473,402	7,252,166	9,500,510	11,727,706	11,379,587
<i>Import of goods</i>	6,270,835	6,815,779	7,394,423	6,707,886	5,832,256	7,644,245	9,524,429	9,094,408
<i>Import of services</i>	1,535,629	1,581,958	1,775,267	1,765,516	1,419,910	1,856,265	2,203,277	2,285,179
Primary income receivable by non-residents	913,155	982,533	1,073,374	965,696	728,048	1,035,877	1,083,944	1,002,891
<i>Compensation of employees</i>	56,705	60,680	64,887	111,756	102,659	95,471	62,679	58,546
<i>Property income</i>	856,450	921,853	1,008,487	853,940	625,389	940,406	1,021,265	944,345
Secondary income receivable by non-residents	133,111	123,024	122,168	192,501	158,660	163,636	181,760	209,835
Other current transfer	133,111	123,024	122,168	192,501	158,660	163,636	181,760	209,835
<i>Public</i>	2,548	1,985	2,008	1,430	1,480	1,345	1,611	1,661
<i>Private</i>	130,563	121,039	120,160	191,071	157,180	162,291	180,149	208,174
Use of income by non-residents								
Export of goods and services	9,785,869	10,326,731	10,616,163	10,052,248	8,064,693	9,478,795	11,360,477	11,750,353
<i>Export of goods</i>	7,533,353	7,920,724	8,114,859	7,534,817	7,099,300	8,665,055	9,989,604	9,777,620
<i>Export of services</i>	2,252,516	2,406,007	2,501,304	2,517,431	965,393	813,740	1,370,873	1,972,733
Primary income payable by non-residents	227,790	288,682	282,119	344,782	380,849	473,582	530,221	553,398
<i>Compensation of employees</i>	78,732	69,943	68,310	36,434	32,241	36,369	32,286	31,261
<i>Property income</i>	149,058	218,739	213,809	308,348	348,608	437,213	497,935	522,137
Secondary income payable by non-residents	373,687	378,479	380,929	416,001	348,021	401,773	500,505	555,285
Other current transfer	373,687	378,479	380,929	416,001	348,021	401,773	500,505	555,285
<i>Public</i>	3,009	2,572	3,180	2,673	3,255	4,509	2,173	3,067
<i>Private</i>	370,678	375,907	377,749	413,328	344,766	397,264	498,332	552,218
Balance on external income account	-1,534,616	-1,490,598	-913,979	-1,181,432	-654,689	345,873	602,207	-266,723

Gross Domestic Product

**Table 1 Expenditure on gross domestic product
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private final consumption expenditure	7,296,553	7,578,734	8,004,685	8,406,384	8,307,941	8,455,842	9,482,300	10,320,596
General government final consumption expenditure	2,460,686	2,524,403	2,648,220	2,730,872	2,786,909	2,951,660	3,079,209	2,983,435
Gross fixed capital formation	3,459,901	3,579,177	3,730,869	3,812,385	3,635,368	3,805,121	4,059,831	4,117,222
Change in inventories	-380,535	-26,962	398,424	209,730	85,035	835,432	781,402	-84,511
Plus: Exports of goods and services	9,785,869	10,326,731	10,616,163	10,052,248	8,064,693	9,478,795	11,360,477	11,750,353
<i>Exports of goods (f.o.b)</i>	7,533,353	7,920,724	8,114,859	7,534,817	7,099,300	8,665,055	9,989,604	9,777,620
<i>Exports of services</i>	2,252,516	2,406,007	2,501,304	2,517,431	965,393	813,740	1,370,873	1,972,733
Less: Imports of goods and services	7,806,464	8,397,737	9,169,690	8,473,402	7,252,166	9,500,510	11,727,706	11,379,587
<i>Imports of goods (f.o.b)</i>	6,270,835	6,815,779	7,394,423	6,707,886	5,832,256	7,644,245	9,524,429	9,094,408
<i>Imports of services</i>	1,535,629	1,581,958	1,775,267	1,765,516	1,419,910	1,856,265	2,203,277	2,285,179
Expenditure on gross domestic product	14,816,010	15,584,346	16,228,671	16,738,217	15,627,780	16,026,340	17,035,513	17,707,508
Plus: Statistical discrepancy	-225,673	-95,682	144,669	150,952	33,514	160,293	342,489	247,159
Gross domestic product, (GDP)	14,590,337	15,488,664	16,373,340	16,889,169	15,661,294	16,186,633	17,378,002	17,954,667

**Table 2 Expenditure on gross domestic product
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private final consumption expenditure	5,051,411	5,207,385	5,445,589	5,661,562	5,617,440	5,651,378	6,000,444	6,412,379
General government final consumption expenditure	1,526,168	1,530,150	1,571,045	1,595,583	1,617,299	1,676,834	1,678,580	1,600,203
Gross fixed capital formation	2,418,543	2,463,149	2,560,080	2,610,781	2,486,963	2,564,183	2,621,719	2,653,494
Change in inventories	-340,739	-68,590	258,420	117,390	127,759	289,706	238,095	-7,902
Plus: Exports of goods and services	7,368,456	7,750,204	8,009,917	7,773,334	6,243,447	6,935,787	7,362,964	7,536,501
<i>Exports of goods (f.o.b)</i>	5,628,100	5,931,454	6,154,112	5,925,896	5,583,531	6,438,514	6,508,770	6,341,878
<i>Exports of services</i>	1,750,022	1,828,446	1,865,472	1,856,054	718,366	574,909	920,567	1,272,375
Less: Imports of goods and services	6,413,517	6,812,902	7,376,621	6,995,499	6,022,365	7,098,803	7,342,348	7,158,339
<i>Imports of goods (f.o.b)</i>	5,212,824	5,600,454	6,042,682	5,694,638	5,093,801	6,025,776	6,086,426	5,821,752
<i>Imports of services</i>	1,199,428	1,214,911	1,335,223	1,299,221	952,633	1,106,384	1,254,797	1,323,291
Expenditure on gross domestic product (sum up)	9,621,253	10,076,629	10,476,813	10,773,407	10,104,924	10,063,364	10,626,952	11,127,384
Residual (GDE (sum up) - GDE CVM)	-104,420	-36,597	-53,760	-3,888	-17,366	-206,411	80,943	381,685
% Residual (GDE sum up) to GDE CVM	-1.1	-0.4	-0.5	0.0	-0.2	-2.0	0.8	3.6
Expenditure on gross domestic product	9,725,673	10,113,226	10,530,573	10,777,295	10,122,290	10,269,775	10,546,009	10,745,699
Gross domestic product, (GDP)	9,848,502	10,259,941	10,693,204	10,919,319	10,258,697	10,417,928	10,686,750	10,902,382

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 2.1 Expenditure on gross domestic product
chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private final consumption expenditure	157.3	162.2	169.6	176.3	174.9	176.0	186.9	199.7
General government final consumption expenditure	200.8	201.3	206.7	209.9	212.8	220.6	220.9	210.6
Gross fixed capital formation	191.3	194.8	202.5	206.5	196.7	202.8	207.4	209.9
Change in inventories								
Plus: Exports of goods and services	210.6	221.5	228.9	222.2	178.4	198.2	210.4	215.4
<i>Exports of goods (f.o.b)</i>	198.3	209.0	216.9	208.8	196.8	226.9	229.4	223.5
<i>Exports of services</i>	264.6	276.5	282.1	280.7	108.6	86.9	139.2	192.4
Less: Imports of goods and services	204.6	217.4	235.4	223.2	192.1	226.5	234.3	228.4
<i>Imports of goods (f.o.b)</i>	213.2	229.1	247.2	232.9	208.4	246.5	249.0	238.1
<i>Imports of services</i>	173.9	176.2	193.6	188.4	138.1	160.4	182.0	191.9
Expenditure on gross domestic product	172.2	179.1	186.4	190.8	179.2	181.8	186.7	190.2
Gross domestic product, (GDP)	170.7	177.8	185.3	189.3	177.8	180.6	185.2	189.0

Table 2.2 Growth rate of expenditure on gross domestic product
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
(Percent)								
Private final consumption expenditure	2.9	3.1	4.6	4.0	-0.8	0.6	6.2	6.9
General government final consumption expenditure	2.2	0.3	2.7	1.6	1.4	3.7	0.1	-4.7
Gross fixed capital formation	2.9	1.8	3.9	2.0	-4.7	3.1	2.2	1.2
Change in inventories								
Plus: Exports of goods and services	2.7	5.2	3.4	-3.0	-19.7	11.1	6.2	2.4
<i>Exports of goods (f.o.b)</i>	0.2	5.4	3.8	-3.7	-5.8	15.3	1.1	-2.6
<i>Exports of services</i>	11.8	4.5	2.0	-0.5	-61.3	-20.0	60.1	38.2
Less: Imports of goods and services	-1.0	6.2	8.3	-5.2	-13.9	17.9	3.4	-2.5
<i>Imports of goods (f.o.b)</i>	-2.3	7.4	7.9	-5.8	-10.6	18.3	1.0	-4.3
<i>Imports of services</i>	4.7	1.3	9.9	-2.7	-26.7	16.1	13.4	5.5
Expenditure on gross domestic product	3.4	4.0	4.1	2.3	-6.1	1.5	2.7	1.9
Gross domestic product, (GDP)	3.4	4.2	4.2	2.1	-6.1	1.6	2.6	2.0

Table 2.3 Contributions to growth rate of expenditure on gross domestic product
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
(Percent)								
Private final consumption expenditure	1.5	1.5	2.2	1.9	-0.4	0.3	3.2	3.7
General government final consumption expenditure	0.4	0.0	0.4	0.3	0.2	0.7	0.0	-0.8
Gross fixed capital formation	0.7	0.4	0.9	0.5	-1.1	0.7	0.5	0.3
Change in inventories	-1.5	1.9	2.8	-1.3	0.0	2.3	-2.7	-4.6
Plus: Exports of goods and services	1.8	3.5	2.2	-1.9	-11.7	5.7	3.6	1.5
<i>Exports of goods (f.o.b)</i>	0.1	2.8	1.9	-1.8	-2.6	6.9	0.6	-1.5
<i>Exports of services</i>	1.7	0.7	0.3	-0.1	-9.1	-1.2	3.0	3.0
Less: Imports of goods and services	-0.6	3.3	4.5	-2.9	-7.0	8.3	2.0	-1.7
<i>Imports of goods (f.o.b)</i>	-1.1	3.2	3.5	-2.6	-4.2	6.8	0.5	-2.4
<i>Imports of services</i>	0.5	0.1	1.0	-0.3	-2.8	1.5	1.5	0.7
Expenditure on gross domestic product	3.4	4.0	4.2	2.3	-6.0	1.5	2.7	1.9
Gross domestic product, (GDP)	3.4	4.2	4.2	2.1	-6.1	1.6	2.6	2.0

***Gross Domestic Product
(Production)***

**Table 3 Gross domestic product
at current market prices by economic activities**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	1,236,981	1,302,041	1,342,911	1,372,848	1,362,979	1,407,090	1,515,266	1,537,418
Agriculture, forestry and fishing	1,236,981	1,302,041	1,342,911	1,372,848	1,362,979	1,407,090	1,515,266	1,537,418
Non-agriculture	13,353,356	14,186,623	15,030,429	15,516,321	14,298,315	14,779,543	15,862,736	16,417,249
Industrial	4,791,853	5,029,209	5,278,347	5,254,658	4,791,808	5,232,893	5,664,954	5,481,838
Mining and quarrying	399,753	386,153	416,991	411,820	324,142	357,561	388,397	351,919
Manufacturing	3,960,437	4,184,233	4,373,783	4,327,276	4,002,295	4,394,933	4,696,147	4,484,947
Electricity, gas, steam and air conditioning supply	373,038	396,457	422,034	446,482	397,176	407,678	504,315	565,621
Water supply; sewerage, waste management and remediation activities	58,625	62,366	65,539	69,080	68,195	72,721	76,095	79,351
Services	8,561,503	9,157,414	9,752,082	10,261,663	9,506,507	9,546,650	10,197,782	10,935,411
Construction	400,376	394,729	410,157	419,075	421,949	437,561	438,505	439,685
Wholesale and retail trade; repair of motor vehicles and motorcycles	2,187,129	2,379,660	2,580,986	2,744,078	2,647,753	2,629,208	2,678,556	2,833,934
Transportation and storage	864,556	920,641	955,066	983,945	751,580	744,455	819,788	899,287
Accommodation and food service activities	696,810	817,326	922,803	1,031,231	605,245	515,304	742,502	958,759
Information and communication	337,483	361,815	388,297	431,414	434,607	458,397	489,319	506,195
Financial and insurance activities	1,120,954	1,181,246	1,240,877	1,267,132	1,289,551	1,347,525	1,456,324	1,592,889
Real estate activities	354,175	377,355	400,066	417,700	428,205	436,434	449,736	458,462
Professional, scientific and technical activities	254,947	274,638	284,835	290,689	275,419	274,215	293,051	306,943
Administrative and support service activities	240,493	251,605	263,242	270,719	211,981	201,703	220,546	239,099
Public administration and defence; compulsory social security	881,905	917,355	957,152	992,291	1,026,559	1,054,309	1,076,627	1,104,582
Education	612,300	629,952	651,304	674,770	691,825	707,105	737,921	757,330
Human health and social work activities	307,429	328,165	351,182	370,891	387,897	409,889	445,208	472,872
Arts, entertainment and recreation	81,153	91,070	102,411	116,694	102,293	108,489	112,659	118,249
Other service activities	193,690	204,434	216,334	222,968	202,788	193,492	206,743	214,931
Activities of households as employers	28,103	27,423	27,370	28,066	28,855	28,564	30,297	32,194
Gross Domestic Product, (GDP)	14,590,337	15,488,664	16,373,340	16,889,169	15,661,294	16,186,633	17,378,002	17,954,667
Plus: Net primary income from the rest of the world	-685,365	-693,851	-791,255	-620,914	-347,199	-562,295	-553,723	-449,493
Gross National Income, (GNI) ^{1/}	13,904,972	14,794,813	15,582,085	16,268,255	15,314,095	15,624,338	16,824,279	17,505,174
Less: Consumption of fixed capital	2,488,386	2,628,663	2,775,404	2,912,542	2,974,143	3,040,598	3,129,572	3,168,244
Net National Income, (NNI)	11,416,586	12,166,150	12,806,681	13,355,713	12,339,952	12,583,740	13,694,707	14,336,930
Per capita GDP (Baht)	213,553	225,126	236,927	243,658	225,313	232,273	248,787	256,345
Per capita GNI (Baht)	203,521	215,041	225,478	234,700	220,318	224,204	240,860	249,928
Population (1,000 Heads)	68,322	68,800	69,107	69,315	69,509	69,688	69,851	70,041

Note: ^{1/} GNI = GNP (Gross National Products)

**Table 4 Gross domestic product
at Basic Price by economic activities**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	1,250,723	1,308,459	1,343,972	1,378,392	1,373,993	1,423,772	1,515,230	1,537,382
Agriculture, forestry and fishing	1,250,723	1,308,459	1,343,972	1,378,392	1,373,993	1,423,772	1,515,230	1,537,382
Non-agriculture	11,961,019	12,727,911	13,465,530	13,905,215	12,877,343	13,354,499	14,485,182	14,815,537
Industrial	4,078,889	4,297,176	4,480,541	4,429,246	4,042,378	4,519,308	5,092,844	4,718,778
Mining and quarrying	339,827	327,535	352,859	345,108	264,783	298,903	325,483	295,797
Manufacturing	3,338,965	3,543,163	3,676,400	3,604,702	3,344,090	3,769,819	4,216,834	3,837,245
Electricity, gas, steam and air conditioning supply	343,285	366,288	388,165	412,784	367,183	379,720	476,716	508,926
Water supply; sewerage, waste management and remediation activities	56,812	60,190	63,117	66,652	66,322	70,866	73,811	76,810
Services	7,882,130	8,430,735	8,984,989	9,475,969	8,834,965	8,835,191	9,392,338	10,096,759
Construction	364,974	357,783	371,386	377,963	384,069	399,816	393,019	390,865
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,797,344	1,963,063	2,144,936	2,300,691	2,280,020	2,242,978	2,254,669	2,398,591
Transportation and storage	854,196	906,724	942,239	970,534	740,721	728,429	797,666	876,872
Accommodation and food service activities	681,032	798,506	902,522	1,010,769	594,993	506,913	724,418	930,403
Information and communication	323,425	345,691	367,711	408,987	419,065	439,417	466,508	471,193
Financial and insurance activities	1,072,090	1,131,842	1,190,033	1,212,367	1,235,901	1,293,504	1,395,592	1,504,829
Real estate activities	319,807	340,455	360,374	378,743	392,831	397,506	407,829	411,331
Professional, scientific and technical activities	219,995	238,257	247,614	253,336	238,729	239,509	251,609	276,162
Administrative and support service activities	186,270	197,610	207,984	216,468	163,386	150,370	159,269	190,634
Public administration and defence; compulsory social security	881,905	917,355	957,152	992,291	1,026,559	1,054,309	1,076,627	1,104,582
Education	612,192	629,843	651,116	674,578	691,654	706,894	737,615	756,674
Human health and social work activities	307,055	327,781	350,758	370,378	387,407	409,336	444,431	471,602
Arts, entertainment and recreation	55,907	60,503	66,527	77,856	66,195	63,534	69,773	74,475
Other service activities	177,835	187,899	197,267	202,942	184,580	174,112	183,016	206,352
Activities of households as employers	28,103	27,423	27,370	28,066	28,855	28,564	30,297	32,194
Gross Domestic Product at Basic Price	13,211,742	14,036,370	14,809,502	15,283,607	14,251,336	14,778,271	16,000,412	16,352,919

**Table 5 Gross domestic product
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	608,753	638,106	677,010	670,375	649,198	663,776	679,846	693,717
Agriculture, forestry and fishing	608,753	638,106	677,010	670,375	649,198	663,776	679,846	693,717
Non-agriculture	9,320,993	9,704,832	10,097,962	10,339,413	9,687,425	9,831,386	10,086,568	10,289,872
Industrial	3,308,253	3,378,509	3,476,652	3,472,213	3,272,520	3,395,057	3,415,010	3,350,485
Mining and quarrying	246,599	231,893	225,099	228,914	208,020	200,603	175,905	173,797
Manufacturing	2,730,588	2,809,907	2,907,210	2,882,594	2,729,756	2,857,174	2,894,782	2,815,918
Electricity, gas, steam and air conditioning supply	286,156	291,273	297,762	311,536	286,663	287,437	297,215	310,025
Water supply; sewerage, waste management and remediation activities	46,681	49,776	52,716	55,682	56,075	58,620	61,066	64,133
Services	6,032,560	6,348,319	6,645,434	6,894,937	6,440,561	6,462,956	6,701,847	6,982,311
Construction	289,919	281,274	287,681	292,174	295,932	302,539	295,439	293,521
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,423,314	1,514,519	1,610,858	1,682,047	1,626,590	1,651,159	1,705,091	1,772,274
Transportation and storage	639,932	691,372	718,049	737,410	572,017	558,716	602,883	655,858
Accommodation and food service activities	542,053	600,672	648,597	697,935	440,306	374,133	504,531	601,779
Information and communication	479,365	497,972	541,729	603,743	612,488	646,386	679,751	703,955
Financial and insurance activities	698,410	744,929	772,489	786,463	827,899	874,561	854,140	866,177
Real estate activities	368,471	393,071	414,466	430,113	436,760	443,923	455,004	461,888
Professional, scientific and technical activities	194,998	207,217	212,968	216,952	206,347	199,998	202,103	208,624
Administrative and support service activities	172,062	177,330	183,491	187,600	147,248	135,711	142,261	151,936
Public administration and defence; compulsory social security	509,645	513,565	521,430	528,249	536,568	538,373	532,571	537,143
Education	323,600	324,971	328,186	333,378	337,240	338,217	342,896	344,926
Human health and social work activities	214,831	223,611	234,365	243,165	250,730	259,706	273,348	284,433
Arts, entertainment and recreation	80,861	90,652	101,747	116,455	101,477	107,208	108,049	110,298
Other service activities	144,950	151,937	158,319	162,608	149,774	141,137	142,934	146,654
Activities of households as employers	17,564	17,072	16,633	16,535	16,989	16,974	16,887	17,066
Gross domestic product (sum up)	10,018,752	10,451,119	10,910,805	11,183,928	10,488,077	10,656,351	10,966,702	11,214,122
Residual (GDP (sum up) - GDP CVM)	170,250	191,178	217,601	264,609	229,380	238,423	279,952	311,740
% Residual (GDP sum up) to GDP CVM	1.7	1.9	2.0	2.4	2.2	2.3	2.6	2.9
Gross domestic product, (CVM)^{1/}	9,848,502	10,259,941	10,693,204	10,919,319	10,258,697	10,417,928	10,686,750	10,902,382
Gross National Income (GNI), CVM^{2/}	9,384,589	9,791,579	10,163,879	10,500,600	10,010,533	10,024,953	10,308,938	10,588,377

Note: ^{1/} Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

^{2/} GNI = GNP (Gross National Products)

**Table 5.1 Gross domestic product
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	121.4	127.2	135.0	133.7	129.5	132.4	135.6	138.3
Agriculture, forestry and fishing	121.4	127.2	135.0	133.7	129.5	132.4	135.6	138.3
Non-agriculture	176.9	184.2	191.7	196.3	183.9	186.6	191.5	195.3
Industrial	168.6	172.2	177.2	177.0	166.8	173.0	174.1	170.8
Mining and quarrying	180.0	169.2	164.3	167.1	151.8	146.4	128.4	126.8
Manufacturing	166.0	170.8	176.7	175.2	165.9	173.7	176.0	171.2
Electricity, gas, steam and air conditioning supply	187.3	190.7	194.9	203.9	187.6	188.1	194.5	202.9
Water supply; sewerage, waste management and remediation activities	173.3	184.8	195.7	206.7	208.2	217.6	226.7	238.1
Services	182.5	192.0	201.0	208.5	194.8	195.5	202.7	211.2
Construction	173.9	168.7	172.6	175.3	177.5	181.5	177.2	176.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	157.2	167.2	177.9	185.7	179.6	182.3	188.3	195.7
Transportation and storage	171.5	185.3	192.5	197.7	153.3	149.8	161.6	175.8
Accommodation and food service activities	250.0	277.0	299.1	321.9	203.0	172.5	232.7	277.5
Information and communication	338.3	351.4	382.3	426.1	432.2	456.1	479.7	496.8
Financial and insurance activities	252.5	269.3	279.3	284.3	299.3	316.2	308.8	313.1
Real estate activities	160.2	170.9	180.2	187.0	189.9	193.0	197.8	200.8
Professional, scientific and technical activities	199.0	211.5	217.4	221.4	210.6	204.1	206.3	212.9
Administrative and support service activities	178.5	184.0	190.3	194.6	152.8	140.8	147.6	157.6
Public administration and defence; compulsory social security	149.6	150.8	153.1	155.1	157.5	158.1	156.4	157.7
Education	150.7	151.4	152.9	155.3	157.1	157.5	159.7	160.7
Human health and social work activities	180.3	187.7	196.7	204.1	210.5	218.0	229.4	238.7
Arts, entertainment and recreation	339.2	380.2	426.8	488.5	425.6	449.7	453.2	462.6
Other service activities	169.9	178.0	185.5	190.5	175.5	165.4	167.5	171.9
Activities of households as employers	99.8	97.0	94.5	93.9	96.5	96.4	95.9	96.9
Gross domestic product, (GDP)	170.7	177.8	185.3	189.3	177.8	180.6	185.2	189.0
Gross National Income (GNI), CVM	168.6	175.9	182.6	188.6	179.8	180.1	185.2	190.2

**Table 5.2 Growth rate of gross domestic product
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	-1.2	4.8	6.1	-1.0	-3.2	2.2	2.4	2.0
Agriculture, forestry and fishing	-1.2	4.8	6.1	-1.0	-3.2	2.2	2.4	2.0
Non-agriculture	3.9	4.1	4.1	2.4	-6.3	1.5	2.6	2.0
Industrial	2.2	2.1	2.9	-0.1	-5.8	3.7	0.6	-1.9
Mining and quarrying	0.8	-6.0	-2.9	1.7	-9.1	-3.6	-12.3	-1.2
Manufacturing	2.3	2.9	3.5	-0.8	-5.3	4.7	1.3	-2.7
Electricity, gas, steam and air conditioning supply	2.9	1.8	2.2	4.6	-8.0	0.3	3.4	4.3
Water supply; sewerage, waste management and remediation activities	7.5	6.6	5.9	5.6	0.7	4.5	4.2	5.0
Services	4.8	5.2	4.7	3.8	-6.6	0.3	3.7	4.2
Construction	8.0	-3.0	2.3	1.6	1.3	2.2	-2.3	-0.6
Wholesale and retail trade; repair of motor vehicles and motorcycles	6.2	6.4	6.4	4.4	-3.3	1.5	3.3	3.9
Transportation and storage	5.3	8.0	3.9	2.7	-22.4	-2.3	7.9	8.8
Accommodation and food service activities	9.3	10.8	8.0	7.6	-36.9	-15.0	34.9	19.3
Information and communication	2.4	3.9	8.8	11.4	1.4	5.5	5.2	3.6
Financial and insurance activities	7.0	6.7	3.7	1.8	5.3	5.6	-2.3	1.4
Real estate activities	7.0	6.7	5.4	3.8	1.5	1.6	2.5	1.5
Professional, scientific and technical activities	-2.2	6.3	2.8	1.9	-4.9	-3.1	1.1	3.2
Administrative and support service activities	1.5	3.1	3.5	2.2	-21.5	-7.8	4.8	6.8
Public administration and defence; compulsory social security	0.4	0.8	1.5	1.3	1.6	0.3	-1.1	0.9
Education	-0.2	0.4	1.0	1.6	1.2	0.3	1.4	0.6
Human health and social work activities	3.0	4.1	4.8	3.8	3.1	3.6	5.3	4.1
Arts, entertainment and recreation	21.3	12.1	12.2	14.5	-12.9	5.6	0.8	2.1
Other service activities	3.9	4.8	4.2	2.7	-7.9	-5.8	1.3	2.6
Activities of households as employers	-0.1	-2.8	-2.6	-0.6	2.7	-0.1	-0.5	1.1
Gross domestic product, (GDP)	3.4	4.2	4.2	2.1	-6.1	1.6	2.6	2.0
Gross National Income (GNI), CVM	3.8	4.3	3.8	3.3	-4.7	0.1	2.8	2.7

**Table 5.3 Contributions to growth rate of gross domestic product
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Agriculture	-0.1	0.4	0.5	-0.1	-0.3	0.2	0.2	0.2
Agriculture, forestry and fishing	-0.1	0.4	0.5	-0.1	-0.3	0.2	0.2	0.2
Non-agriculture	3.5	3.8	3.7	2.2	-5.8	1.4	2.4	1.8
Industrial	0.7	0.7	0.9	0.0	-1.8	1.1	0.2	-0.6
Mining and quarrying	0.0	-0.2	-0.1	0.0	-0.2	-0.1	-0.3	0.0
Manufacturing	0.6	0.8	0.9	-0.2	-1.4	1.2	0.4	-0.7
Electricity, gas, steam and air conditioning supply	0.1	0.0	0.1	0.1	-0.2	0.0	0.1	0.1
Water supply; sewerage, waste management and remediation activities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Services	2.8	3.1	2.8	2.2	-4.0	0.2	2.2	2.5
Construction	0.2	-0.1	0.1	0.0	0.0	0.1	-0.1	0.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.9	1.0	1.0	0.7	-0.5	0.3	0.5	0.6
Transportation and storage	0.3	0.5	0.2	0.2	-1.3	-0.1	0.4	0.4
Accommodation and food service activities	0.4	0.5	0.4	0.4	-2.3	-0.6	1.1	0.8
Information and communication	0.1	0.1	0.2	0.3	0.0	0.2	0.1	0.1
Financial and insurance activities	0.5	0.5	0.3	0.1	0.4	0.5	-0.2	0.1
Real estate activities	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.0
Professional, scientific and technical activities	0.0	0.1	0.0	0.0	-0.1	-0.1	0.0	0.1
Administrative and support service activities	0.0	0.1	0.1	0.0	-0.3	-0.1	0.1	0.1
Public administration and defence; compulsory social security	0.0	0.0	0.1	0.1	0.1	0.0	-0.1	0.1
Education	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Human health and social work activities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Arts, entertainment and recreation	0.1	0.1	0.1	0.1	-0.1	0.0	0.0	0.0
Other service activities	0.1	0.1	0.1	0.0	-0.1	-0.1	0.0	0.0
Activities of households as employers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross domestic product, (GDP)	3.4	4.2	4.2	2.1	-6.1	1.6	2.6	2.0

**Table 6 Gross domestic product originating from agriculture, forestry and fishing
at current market prices**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Crop and animal production, hunting and related service activities	1,114,435	1,179,168	1,214,255	1,242,584	1,228,879	1,267,372	1,366,480	1,390,995
Forestry and logging	12,626	11,897	12,279	12,058	12,285	13,079	13,456	13,506
Fishing and aquaculture	109,920	110,976	116,377	118,206	121,815	126,639	135,330	132,917
Total value added	1,236,981	1,302,041	1,342,911	1,372,848	1,362,979	1,407,090	1,515,266	1,537,418

**Table 7 Gross domestic product originating from agriculture, forestry and fishing
chain volume measures (reference year = 2002)**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Crop and animal production, hunting and related service activities	470,305	497,229	528,655	523,427	503,934	517,629	532,095	541,982
Forestry and logging	8,741	8,059	8,234	7,973	8,228	8,565	8,198	8,271
Fishing and aquaculture	102,575	99,617	103,751	103,072	105,265	102,421	101,783	105,848
Total value added	608,753	638,106	677,010	670,375	649,198	663,776	679,846	693,717

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 7.1 Gross domestic product originating from agriculture, forestry and fishing
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Crop and animal production, hunting and related service activities	121.7	128.7	136.8	135.5	130.4	134.0	137.7	140.3
Forestry and logging	129.7	119.6	122.2	118.3	122.1	127.1	121.7	122.8
Fishing and aquaculture	94.6	91.9	95.7	95.1	97.1	94.5	93.9	97.6
Total value added	121.4	127.2	135.0	133.7	129.5	132.4	135.6	138.3

**Table 7.2 Growth rate of gross domestic product originating from agriculture, forestry and fishing
chain volume measures (reference year = 2002)**

(Percent)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Crop and animal production, hunting and related service activities	-1.4	5.7	6.3	-1.0	-3.7	2.7	2.8	1.9
Forestry and logging	7.9	-7.8	2.2	-3.2	3.2	4.1	-4.3	0.9
Fishing and aquaculture	0.7	-2.9	4.2	-0.7	2.1	-2.7	-0.6	4.0
Total value added	-1.2	4.8	6.1	-1.0	-3.2	2.2	2.4	2.0

**Table 8 Gross domestic product originating from mining and quarrying
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Mining of coal and lignite	12,155	12,034	11,865	10,575	10,275	10,331	10,016	9,318
Extraction of crude petroleum and natural gas	309,723	302,890	336,604	330,239	246,835	274,232	303,610	267,157
Mining of metal ores	5,302	1,347	79	53	62	105	130	139
Other mining and quarrying	72,573	69,882	68,443	70,953	66,970	72,893	74,641	75,305
Total value added	399,753	386,153	416,991	411,820	324,142	357,561	388,397	351,919

**Table 9 Gross domestic product originating from mining and quarrying
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Mining of coal and lignite	5,721	5,786	5,805	5,086	4,770	4,749	4,678	4,381
Extraction of crude petroleum and natural gas	199,318	188,646	182,984	186,718	168,098	157,946	132,907	131,869
Mining of metal ores	1,342	349	22	15	16	23	26	28
Other mining and quarrying	37,570	35,771	35,253	36,116	34,094	35,808	35,602	34,813
Total value added	246,599	231,893	225,099	228,914	208,020	200,603	175,905	173,797

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 9.1 Gross domestic product originating from mining and quarrying
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Mining of coal and lignite	76.5	77.4	77.6	68.0	63.8	63.5	62.6	58.6
Extraction of crude petroleum and natural gas	193.2	182.8	177.3	181.0	162.9	153.1	128.8	127.8
Mining of metal ores	59.8	15.5	1.0	0.7	0.7	1.0	1.2	1.2
Other mining and quarrying	155.7	148.3	146.1	149.7	141.3	148.4	147.6	144.3
Total value added	180.0	169.2	164.3	167.1	151.8	146.4	128.4	126.8

**Table 9.2 Growth rate of gross domestic product originating from mining and quarrying
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Mining of coal and lignite	4.6	1.1	0.3	-12.4	-6.2	-0.4	-1.5	-6.3
Extraction of crude petroleum and natural gas	0.3	-5.4	-3.0	2.0	-10.0	-6.0	-15.9	-0.8
Mining of metal ores	18.7	-74.0	-93.7	-31.8	6.7	43.8	13.0	7.7
Other mining and quarrying	2.2	-4.8	-1.4	2.4	-5.6	5.0	-0.6	-2.2
Total value added	0.8	-6.0	-2.9	1.7	-9.1	-3.6	-12.3	-1.2

**Table 10 Gross domestic product originating from manufacturing
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Food products	601,977	604,140	627,095	609,703	617,415	676,964	734,114	719,696
Beverages	285,269	275,400	277,742	310,486	293,878	295,725	315,768	327,763
Tobacco products	51,333	42,766	35,674	33,199	32,529	31,361	29,813	27,725
Textiles	110,144	106,749	103,433	96,072	79,555	78,155	80,578	71,962
Wearing apparel	85,596	94,177	101,437	102,869	87,186	79,881	81,230	68,140
Leather and related products	42,606	45,321	47,692	48,819	40,018	42,232	55,901	49,773
Wood and products of wood and cork	46,817	47,218	46,199	47,410	49,984	54,586	60,464	63,562
Paper and paper products	53,440	55,370	58,410	57,450	57,657	62,289	60,496	60,056
Printing and reproduction of recorded media	11,554	11,748	11,720	11,058	10,307	10,422	10,599	11,056
Coke and refined petroleum products	395,980	440,648	498,049	491,302	373,577	458,658	621,685	569,112
Chemicals and chemical products	318,854	355,497	394,976	370,756	339,394	400,639	404,203	400,189
Basic pharmaceutical products and pharmaceutical preparations	38,528	41,181	45,971	49,877	54,883	57,857	64,842	65,716
Rubber and plastics products	281,080	326,847	301,555	286,816	268,554	291,682	303,875	278,853
Non-metallic mineral products	148,880	144,229	150,891	156,291	149,857	154,526	162,943	159,160
Basic metals	63,163	67,621	67,814	59,446	57,375	79,219	77,434	64,222
Fabricated metal products, except machinery and equipment	118,874	127,883	136,728	138,419	135,338	142,574	146,208	141,248
Computer, electronic and optical products	332,931	381,791	397,084	390,918	386,777	411,815	376,768	314,005
Electrical equipment	199,390	193,466	196,948	204,887	209,069	226,051	224,485	214,795
Machinery and equipment not elsewhere classified	162,307	176,644	185,179	183,358	182,019	191,733	186,937	174,065
Motor vehicles, trailers and semi-trailers	326,952	341,363	379,324	364,671	274,133	323,950	358,061	367,950
Other transport equipment	95,928	108,568	109,982	112,105	96,300	97,585	103,292	103,399
Furniture	32,783	35,272	35,401	34,906	34,747	43,019	39,022	34,758
Other manufacturing	153,770	158,476	162,278	164,154	169,563	182,035	195,436	195,744
Repair and installation of machinery and equipment	2,281	1,858	2,201	2,304	2,180	1,975	1,993	1,998
Total value added	3,960,437	4,184,233	4,373,783	4,327,276	4,002,295	4,394,933	4,696,147	4,484,947

Table 11 Gross domestic product originating from manufacturing chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Food products	338,054	340,421	366,610	354,590	338,768	350,590	376,239	375,212
Beverages	208,408	209,788	201,398	220,838	204,914	203,785	211,989	209,861
Tobacco products	30,631	25,467	21,251	19,721	19,321	18,255	16,310	15,220
Textiles	91,136	87,916	85,287	78,979	65,360	63,471	64,246	58,121
Wearing apparel	80,333	77,873	81,100	79,934	68,007	62,283	61,887	51,300
Leather and related products	39,368	41,116	43,184	45,504	37,305	39,164	51,625	46,251
Wood and products of wood and cork	35,247	37,788	36,374	37,132	38,693	40,463	42,553	44,769
Paper and paper products	46,314	46,837	48,468	48,412	50,255	51,214	47,651	46,967
Printing and reproduction of recorded media	7,588	7,712	7,916	7,758	7,171	7,222	7,271	7,347
Coke and refined petroleum products	127,933	134,169	139,825	133,345	130,331	128,129	136,205	141,205
Chemicals and chemical products	170,222	178,020	186,075	188,809	189,391	201,729	189,576	186,004
Basic pharmaceutical products and pharmaceutical preparations	36,536	39,003	43,535	47,093	51,784	55,040	62,624	63,779
Rubber and plastics products	158,628	171,973	165,114	157,574	146,443	151,585	149,744	143,271
Non-metallic mineral products	114,513	113,828	117,080	120,704	115,495	118,046	119,674	113,570
Basic metals	51,525	53,820	53,981	48,941	46,720	56,714	50,603	46,464
Fabricated metal products, except machinery and equipment	86,220	92,443	98,696	99,831	97,627	101,999	101,877	97,931
Computer, electronic and optical products	309,642	341,204	361,098	361,880	363,993	387,380	344,443	289,337
Electrical equipment	143,175	137,635	140,748	147,527	150,837	162,066	158,314	152,067
Machinery and equipment not elsewhere classified	141,831	154,327	162,187	161,290	160,609	168,911	163,286	153,098
Motor vehicles, trailers and semi-trailers	285,774	291,873	317,978	301,667	226,793	265,454	292,880	302,588
Other transport equipment	84,655	83,230	84,986	87,576	75,614	80,998	85,344	81,731
Furniture	24,685	26,483	26,512	26,147	26,041	32,181	28,422	24,955
Other manufacturing	81,684	81,233	83,721	83,588	81,530	86,897	90,851	90,544
Repair and installation of machinery and equipment	1,778	1,749	2,057	2,132	2,003	1,798	1,799	1,795
Total value added	2,730,588	2,809,907	2,907,210	2,882,594	2,729,756	2,857,174	2,894,782	2,815,918

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 11.1 Gross domestic product originating from manufacturing chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Food products	154.3	155.4	167.3	161.9	154.6	160.0	171.7	171.3
Beverages	184.0	185.3	177.9	195.0	181.0	180.0	187.2	185.3
Tobacco products	88.5	73.6	61.4	57.0	55.8	52.8	47.1	44.0
Textiles	77.4	74.6	72.4	67.0	55.5	53.9	54.5	49.3
Wearing apparel	78.7	76.3	79.5	78.3	66.6	61.0	60.6	50.3
Leather and related products	106.2	111.0	116.5	122.8	100.7	105.7	139.3	124.8
Wood and products of wood and cork	180.6	193.6	186.4	190.2	198.2	207.3	218.0	229.4
Paper and paper products	120.5	121.9	126.2	126.0	130.8	133.3	124.0	122.2
Printing and reproduction of recorded media	95.8	97.4	99.9	97.9	90.5	91.2	91.8	92.8
Coke and refined petroleum products	107.6	112.8	117.6	112.1	109.6	107.8	114.5	118.8
Chemicals and chemical products	198.8	207.9	217.3	220.5	221.2	235.6	221.4	217.3
Basic pharmaceutical products and pharmaceutical preparations	190.8	203.7	227.4	246.0	270.5	287.5	327.1	333.2
Rubber and plastics products	175.7	190.5	182.9	174.5	162.2	167.9	165.8	158.7
Non-metallic mineral products	142.5	141.6	145.7	150.2	143.7	146.9	148.9	141.3
Basic metals	116.4	121.6	122.0	110.6	105.6	128.2	114.4	105.0
Fabricated metal products, except machinery and equipment	142.0	152.3	162.6	164.4	160.8	168.0	167.8	161.3
Computer, electronic and optical products	253.7	279.5	295.8	296.4	298.2	317.3	282.2	237.0
Electrical equipment	222.3	213.7	218.5	229.0	234.2	251.6	245.8	236.1
Machinery and equipment not elsewhere classified	253.3	275.6	289.6	288.0	286.8	301.6	291.6	273.4
Motor vehicles, trailers and semi-trailers	332.7	339.8	370.1	351.2	264.0	309.0	340.9	352.2
Other transport equipment	209.5	205.9	210.3	216.7	187.1	200.4	211.2	202.2
Furniture	131.1	140.7	140.8	138.9	138.3	170.9	151.0	132.6
Other manufacturing	120.4	119.7	123.4	123.2	120.1	128.1	133.9	133.4
Repair and installation of machinery and equipment	240.6	236.7	278.3	288.5	271.0	243.3	243.4	242.9
Total value added	166.0	170.8	176.7	175.2	165.9	173.7	176.0	171.2

Table 11.2 Growth rate of gross domestic product originating from manufacturing chain volume measures (reference year = 2002)

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Food products	1.5	0.7	7.7	-3.3	-4.5	3.5	7.3	-0.3
Beverages	-0.6	0.7	-4.0	9.7	-7.2	-0.6	4.0	-1.0
Tobacco products	-9.1	-16.9	-16.6	-7.2	-2.0	-5.5	-10.7	-6.7
Textiles	-3.7	-3.5	-3.0	-7.4	-17.2	-2.9	1.2	-9.5
Wearing apparel	-6.2	-3.1	4.1	-1.4	-14.9	-8.4	-0.6	-17.1
Leather and related products	4.1	4.4	5.0	5.4	-18.0	5.0	31.8	-10.4
Wood and products of wood and cork	8.0	7.2	-3.7	2.1	4.2	4.6	5.2	5.2
Paper and paper products	1.6	1.1	3.5	-0.1	3.8	1.9	-7.0	-1.4
Printing and reproduction of recorded media	-3.9	1.6	2.6	-2.0	-7.6	0.7	0.7	1.0
Coke and refined petroleum products	0.9	4.9	4.2	-4.6	-2.3	-1.7	6.3	3.7
Chemicals and chemical products	3.2	4.6	4.5	1.5	0.3	6.5	-6.0	-1.9
Basic pharmaceutical products and pharmaceutical preparations	8.3	6.8	11.6	8.2	10.0	6.3	13.8	1.8
Rubber and plastics products	2.6	8.4	-4.0	-4.6	-7.1	3.5	-1.2	-4.3
Non-metallic mineral products	-0.2	-0.6	2.9	3.1	-4.3	2.2	1.4	-5.1
Basic metals	6.0	4.5	0.3	-9.3	-4.5	21.4	-10.8	-8.2
Fabricated metal products, except machinery and equipment	8.0	7.2	6.8	1.1	-2.2	4.5	-0.1	-3.9
Computer, electronic and optical products	1.7	10.2	5.8	0.2	0.6	6.4	-11.1	-16.0
Electrical equipment	6.1	-3.9	2.3	4.8	2.2	7.4	-2.3	-3.9
Machinery and equipment not elsewhere classified	1.0	8.8	5.1	-0.6	-0.4	5.2	-3.3	-6.2
Motor vehicles, trailers and semi-trailers	7.3	2.1	8.9	-5.1	-24.8	17.0	10.3	3.3
Other transport equipment	11.6	-1.7	2.1	3.0	-13.7	7.1	5.4	-4.2
Furniture	-1.4	7.3	0.1	-1.4	-0.4	23.6	-11.7	-12.2
Other manufacturing	0.5	-0.6	3.1	-0.2	-2.5	6.6	4.6	-0.3
Repair and installation of machinery and equipment	12.2	-1.6	17.6	3.6	-6.1	-10.2	0.1	-0.2
Total value added	2.3	2.9	3.5	-0.8	-5.3	4.7	1.3	-2.7

Table 12 Gross domestic product originating from electricity, gas, steam and air conditioning supply at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Electric power generation, transmission and distribution	342,598	355,233	379,630	422,913	387,281	387,557	469,622	533,042
Manufacture of gas; distribution of gaseous fuels through mains	30,440	41,224	42,404	23,569	9,895	20,121	34,693	32,579
Total value added	373,038	396,457	422,034	446,482	397,176	407,678	504,315	565,621

Table 13 Gross domestic product originating from electricity, gas, steam and air conditioning supply chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Electric power generation, transmission and distribution	264,165	267,519	274,669	288,480	265,676	266,825	279,628	291,358
Manufacture of gas; distribution of gaseous fuels through mains	18,291	19,684	19,364	19,564	17,726	16,646	12,740	13,488
Total value added	286,156	291,273	297,762	311,536	286,663	287,437	297,215	310,025

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 13.1 Gross domestic product originating from electricity, gas, steam and air conditioning supply chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Electric power generation, transmission and distribution	180.6	182.9	187.8	197.2	181.6	182.4	191.1	199.2
Manufacture of gas; distribution of gaseous fuels through mains	282.3	303.8	298.9	302.0	273.6	256.9	196.6	208.2
Total value added	187.3	190.7	194.9	203.9	187.6	188.1	194.5	202.9

Table 13.2 Growth rate of gross domestic product originating from electricity, gas, steam and air conditioning supply chain volume measures (reference year = 2002)

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Electric power generation, transmission and distribution	2.2	1.3	2.7	5.0	-7.9	0.4	4.8	4.2
Manufacture of gas; distribution of gaseous fuels through mains	13.6	7.6	-1.6	1.0	-9.4	-6.1	-23.5	5.9
Total value added	2.9	1.8	2.2	4.6	-8.0	0.3	3.4	4.3

**Table 14 Gross domestic product originating from water supply; sewerage, waste management and remediation activities
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Water collection and supply	45,240	47,110	47,821	49,910	47,263	48,514	48,895	51,558
Waste collection, treatment and disposal activities; materials recovery	13,385	15,256	17,718	19,170	20,932	24,207	27,200	27,793
Total value added	58,625	62,366	65,539	69,080	68,195	72,721	76,095	79,351

**Table 15 Gross domestic product originating from water supply; sewerage, waste management and remediation activities
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Water collection and supply	35,039	36,758	37,896	39,641	38,569	39,556	40,392	42,641
Waste collection, treatment and disposal activities; materials recovery	12,218	13,742	15,750	17,071	18,700	20,387	22,080	22,970
Total value added	46,681	49,776	52,716	55,682	56,075	58,620	61,066	64,133

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 15.1 Gross domestic product originating from water supply; sewerage, waste management and remediation activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Water collection and supply	146.1	153.3	158.0	165.3	160.8	164.9	168.4	177.8
Waste collection, treatment and disposal activities; materials recovery	413.9	465.5	533.5	578.3	633.5	690.6	748.0	778.1
Total value added	173.3	184.8	195.7	206.7	208.2	217.6	226.7	238.1

**Table 15.2 Growth rate of gross domestic product originating from water supply; sewerage, waste management and remediation activities
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Water collection and supply	5.2	4.9	3.1	4.6	-2.7	2.6	2.1	5.6
Waste collection, treatment and disposal activities; materials recovery	16.1	12.5	14.6	8.4	9.5	9.0	8.3	4.0
Total value added	7.5	6.6	5.9	5.6	0.7	4.5	4.2	5.0

**Table 16 Gross domestic product originating from construction
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private construction	159,667	159,848	168,730	172,204	166,277	167,163	168,687	172,655
Public construction	240,709	234,881	241,427	246,871	255,672	270,398	269,818	267,030
Total value added	400,376	394,729	410,157	419,075	421,949	437,561	438,505	439,685

**Table 17 Gross domestic product originating from construction
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private construction	116,279	114,607	119,032	120,551	117,077	116,035	114,057	115,745
Public construction	172,088	165,195	167,182	170,125	177,258	184,815	179,742	176,184
Total value added	289,919	281,274	287,681	292,174	295,932	302,539	295,439	293,521

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 17.1 Gross domestic product originating from construction
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private construction	176.7	174.1	180.9	183.2	177.9	176.3	173.3	175.9
Public construction	170.5	163.7	165.7	168.6	175.7	183.2	178.1	174.6
Total value added	173.9	168.7	172.6	175.3	177.5	181.5	177.2	176.1

**Table 17.2 Growth rate of gross domestic product originating from construction
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private construction	0.7	-1.4	3.9	1.3	-2.9	-0.9	-1.7	1.5
Public construction	13.4	-4.0	1.2	1.8	4.2	4.3	-2.7	-2.0
Total value added	8.0	-3.0	2.3	1.6	1.3	2.2	-2.3	-0.6

Table 18 Gross domestic product originating from wholesale and retail trade; repair of motor vehicles and motorcycles at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Trade and repair of motor vehicles and motorcycles	170,733	186,515	207,316	216,855	200,252	217,924	211,982	210,449
Trade, except of motor vehicles and motorcycles	2,016,396	2,193,145	2,373,670	2,527,223	2,447,501	2,411,284	2,466,574	2,623,485
Total value added	2,187,129	2,379,660	2,580,986	2,744,078	2,647,753	2,629,208	2,678,556	2,833,934

Table 19 Gross domestic product originating from wholesale and retail trade; repair of motor vehicles and motorcycles chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Trade and repair of motor vehicles and motorcycles	167,968	176,957	197,451	205,950	188,828	201,445	210,070	217,041
Trade, except of motor vehicles and motorcycles	1,253,798	1,335,258	1,414,243	1,476,868	1,434,573	1,450,174	1,496,191	1,555,944
Total value added	1,423,314	1,514,519	1,610,858	1,682,047	1,626,590	1,651,159	1,705,091	1,772,274

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 19.1 Gross domestic product originating from wholesale and retail trade; repair of motor vehicles and motorcycles chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Trade and repair of motor vehicles and motorcycles	194.5	204.9	228.6	238.4	218.6	233.2	243.2	251.3
Trade, except of motor vehicles and motorcycles	153.1	163.0	172.6	180.3	175.1	177.0	182.6	189.9
Total value added	157.2	167.2	177.9	185.7	179.6	182.3	188.3	195.7

Table 19.2 Growth rate of gross domestic product originating from wholesale and retail trade; repair of motor vehicles and motorcycles chain volume measures (reference year = 2002)

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Trade and repair of motor vehicles and motorcycles	3.7	5.4	11.6	4.3	-8.3	6.7	4.3	3.3
Trade, except of motor vehicles and motorcycles	6.4	6.5	5.9	4.4	-2.9	1.1	3.2	4.0
Total value added	6.2	6.4	6.4	4.4	-3.3	1.5	3.3	3.9

**Table 20 Gross domestic product originating from transportation and storage
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Land transport and transport via pipelines	354,305	376,326	384,590	399,606	334,914	327,529	353,113	377,751
Water transport	151,448	154,991	160,123	163,791	149,867	142,876	144,369	143,426
Air transport	167,223	182,292	181,421	174,099	67,416	48,781	74,792	104,782
Warehousing and support activities for transportation	160,545	170,138	185,903	197,374	140,028	142,690	161,752	184,390
Postal and courier activities	31,035	36,894	43,029	49,075	59,355	82,579	85,762	88,938
Total value added	864,556	920,641	955,066	983,945	751,580	744,455	819,788	899,287

**Table 21 Gross domestic product originating from transportation and storage
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r		
Land transport and transport via pipelines	200,460	214,880	218,757	222,983	184,903	180,045	188,018	196,640
Water transport	119,062	120,224	125,020	125,736	123,437	115,679	115,829	116,070
Air transport	200,281	237,820	238,529	238,288	88,986	59,488	94,041	134,437
Warehousing and support activities for transportation	111,538	115,776	126,499	134,491	100,292	100,456	109,162	122,375
Postal and courier activities	20,284	23,611	27,620	31,388	37,645	52,145	54,341	56,771
Total value added	639,932	691,355	718,049	737,410	572,017	558,716	602,883	655,858

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 21.1 Gross domestic product originating from transportation and storage
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Land transport and transport via pipelines	115.6	123.9	126.2	128.6	106.6	103.8	108.4	113.4
Water transport	243.5	245.9	255.7	257.2	252.5	236.6	236.9	237.4
Air transport	206.9	245.7	246.4	246.2	91.9	61.5	97.2	138.9
Warehousing and support activities for transportation	247.9	257.3	281.2	298.9	222.9	223.3	242.6	272.0
Postal and courier activities	225.5	262.5	307.1	348.9	418.5	579.7	604.1	631.1
Total value added	171.5	185.3	192.5	197.7	153.3	149.8	161.6	175.8

**Table 21.2 Growth rate of gross domestic product originating from transportation and storage
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Land transport and transport via pipelines	2.2	7.2	1.8	1.9	-17.1	-2.6	4.4	4.6
Water transport	3.8	1.0	4.0	0.6	-1.8	-6.3	0.1	0.2
Air transport	14.2	18.7	0.3	-0.1	-62.7	-33.1	58.1	43.0
Warehousing and support activities for transportation	3.1	3.8	9.3	6.3	-25.4	0.2	8.7	12.1
Postal and courier activities	14.3	16.4	17.0	13.6	19.9	38.5	4.2	4.5
Total value added	5.3	8.0	3.9	2.7	-22.4	-2.3	7.9	8.8

**Table 22 Gross domestic product originating from accommodation and food service activities
at current market prices**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Accommodation	311,783	368,051	417,365	455,149	165,368	89,709	185,442	331,453
Food and beverage service activities	385,027	449,275	505,438	576,082	439,877	425,595	557,060	627,306
Total value added	696,810	817,326	922,803	1,031,231	605,245	515,304	742,502	958,759

**Table 23 Gross domestic product originating from accommodation and food service activities
chain volume measures (reference year = 2002)**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Accommodation	265,235	291,193	312,081	332,503	167,828	109,288	206,458	299,391
Food and beverage service activities	281,625	314,425	341,587	370,566	270,708	250,227	308,924	342,001
Total value added	542,053	600,672	648,597	697,935	440,306	374,133	504,531	601,779

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 23.1 Gross domestic product originating from accommodation and food service activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Accommodation	333.1	365.7	391.9	417.6	210.8	137.2	259.3	376.0
Food and beverage service activities	205.2	229.1	248.9	270.1	197.3	182.4	225.1	249.2
Total value added	250.0	277.0	299.1	321.9	203.0	172.5	232.7	277.5

**Table 23.2 Growth rate of gross domestic product originating from accommodation and food service activities
chain volume measures (reference year = 2002)**

(Percent)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Accommodation	8.4	9.8	7.2	6.5	-49.5	-34.9	88.9	45.0
Food and beverage service activities	9.9	11.6	8.6	8.5	-26.9	-7.6	23.5	10.7
Total value added	9.3	10.8	8.0	7.6	-36.9	-15.0	34.9	19.3

**Table 24 Gross domestic product originating from information and communication
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Publishing activities	17,441	15,972	14,471	14,199	13,569	12,665	12,697	13,218
Motion picture, video and television programme production, sound recording and music publishing activities	8,751	8,770	9,024	9,261	7,619	6,538	6,806	7,117
Programming and broadcasting activities	27,223	27,571	27,750	28,214	27,705	28,246	29,897	30,361
Telecommunications	183,855	202,056	222,792	262,298	264,144	278,551	287,975	290,748
Computer programming, consultancy and related activities	96,750	103,565	109,601	112,091	115,453	125,423	143,720	156,178
Information service activities	3,463	3,881	4,659	5,351	6,117	6,974	8,224	8,573
Total value added	337,483	361,815	388,297	431,414	434,607	458,397	489,319	506,195

**Table 25 Gross domestic product originating from information and communication
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Publishing activities	15,401	14,222	13,105	12,887	12,309	11,426	11,339	11,645
Motion picture, video and television programme production, sound recording and music publishing activities	6,162	6,149	6,301	6,416	5,205	4,406	4,423	4,564
Programming and broadcasting activities	19,335	19,432	19,361	19,547	19,342	19,380	19,342	19,403
Telecommunications	381,929	398,348	452,172	537,235	544,969	580,685	608,294	621,141
Computer programming, consultancy and related activities	70,004	74,361	77,883	79,092	82,145	87,902	94,753	101,639
Information service activities	2,503	2,783	3,306	3,771	4,345	4,868	5,413	5,573
Total value added	479,365	497,972	541,729	603,743	612,488	646,386	679,751	703,955

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 25.1 Gross domestic product originating from information and communication
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Publishing activities	143.5	132.5	122.1	120.0	114.7	106.4	105.6	108.5
Motion picture, video and television programme production, sound recording and music publishing activities	132.5	132.2	135.5	138.0	111.9	94.8	95.1	98.2
Programming and broadcasting activities	130.3	131.0	130.5	131.8	130.4	130.6	130.4	130.8
Telecommunications	393.9	410.8	466.3	554.1	562.0	598.9	627.4	640.6
Computer programming, consultancy and related activities	508.2	539.8	565.4	574.2	596.3	638.1	687.9	737.9
Information service activities	333.7	371.1	440.8	502.8	579.3	649.1	721.7	743.1
Total value added	338.3	351.4	382.3	426.1	432.2	456.1	479.7	496.8

**Table 25.2 Growth rate of gross domestic product originating from information and communication
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Publishing activities	6.2	-7.7	-7.9	-1.7	-4.5	-7.2	-0.8	2.7
Motion picture, video and television programme production, sound recording and music publishing activities	0.2	-0.2	2.5	1.8	-18.9	-15.4	0.4	3.2
Programming and broadcasting activities	-2.4	0.5	-0.4	1.0	-1.0	0.2	-0.2	0.3
Telecommunications	1.4	4.3	13.5	18.8	1.4	6.6	4.8	2.1
Computer programming, consultancy and related activities	4.9	6.2	4.7	1.6	3.9	7.0	7.8	7.3
Information service activities	14.6	11.2	18.8	14.1	15.2	12.0	11.2	3.0
Total value added	2.4	3.9	8.8	11.4	1.4	5.5	5.2	3.6

**Table 26 Gross domestic product originating from financial and insurance activities
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Financial service activities	872,096	916,368	953,970	977,826	1,009,548	1,047,395	1,155,526	1,291,779
Insurance, reinsurance and pension funding	204,467	216,709	234,198	238,101	229,683	237,394	244,565	249,281
Activities auxiliary to financial service and insurance activities	44,391	48,169	52,709	51,205	50,320	62,736	56,233	51,829
Total value added	1,120,954	1,181,246	1,240,877	1,267,132	1,289,551	1,347,525	1,456,324	1,592,889

**Table 27 Gross domestic product originating from financial and insurance activities
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Financial service activities	513,978	549,750	564,571	577,653	621,743	657,447	647,962	661,015
Insurance, reinsurance and pension funding	147,399	155,011	165,748	167,306	162,224	164,641	160,010	161,436
Activities auxiliary to financial service and insurance activities	31,993	34,446	37,296	35,972	35,531	43,498	36,782	33,556
Total value added	698,410	744,929	772,489	786,463	827,899	874,561	854,140	866,177

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 27.1 Gross domestic product originating from financial and insurance activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Financial service activities	247.3	264.5	271.6	277.9	299.2	316.3	311.8	318.0
Insurance, reinsurance and pension funding	280.9	295.4	315.9	318.8	309.1	313.8	304.9	307.6
Activities auxiliary to financial service and insurance activities	196.2	211.2	228.7	220.6	217.9	266.7	225.6	205.8
Total value added	252.5	269.3	279.3	284.3	299.3	316.2	308.8	313.1

**Table 27.2 Growth rate of gross domestic product originating from financial and insurance activities
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Financial service activities	4.4	7.0	2.7	2.3	7.6	5.7	-1.4	2.0
Insurance, reinsurance and pension funding	18.7	5.2	6.9	0.9	-3.0	1.5	-2.8	0.9
Activities auxiliary to financial service and insurance activities	10.7	7.7	8.3	-3.5	-1.2	22.4	-15.4	-8.8
Total value added	7.0	6.7	3.7	1.8	5.3	5.6	-2.3	1.4

**Table 28 Gross domestic product originating from real estate activities
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Real estate activities with own or leased property	316,689	339,204	358,931	377,313	392,719	404,142	417,655	426,962
Real estate activities on a fee or contract basis	37,486	38,151	41,135	40,387	35,486	32,292	32,081	31,500
Total value added	354,175	377,355	400,066	417,700	428,205	436,434	449,736	458,462

**Table 29 Gross domestic product originating from real estate activities
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Real estate activities with own or leased property	340,437	364,679	383,979	401,184	413,374	424,654	437,191	445,871
Real estate activities on a fee or contract basis	27,623	28,429	30,362	29,638	25,958	23,255	22,510	21,467
Total value added	368,471	393,071	414,466	430,113	436,760	443,923	455,004	461,888

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 29.1 Gross domestic product originating from real estate activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Real estate activities with own or leased property	157.5	168.7	177.6	185.6	191.2	196.4	202.2	206.2
Real estate activities on a fee or contract basis	199.6	205.4	219.4	214.1	187.5	168.0	162.6	155.1
Total value added	160.2	170.9	180.2	187.0	189.9	193.0	197.8	200.8

**Table 29.2 Growth rate of gross domestic product originating from real estate activities
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Real estate activities with own or leased property	7.2	7.1	5.3	4.5	3.0	2.7	3.0	2.0
Real estate activities on a fee or contract basis	6.0	2.9	6.8	-2.4	-12.4	-10.4	-3.2	-4.6
Total value added	7.0	6.7	5.4	3.8	1.5	1.6	2.5	1.5

Table 30 Gross domestic product originating from professional, scientific and technical activities at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Legal and accounting activities	14,539	15,499	16,022	16,417	15,570	15,021	15,057	15,388
Activities of head offices; management consultancy activities	173,651	188,049	197,146	202,015	185,102	180,560	194,266	202,581
Architectural and engineering activities; technical testing and analysis	17,095	17,927	18,361	18,248	17,151	15,750	15,070	15,413
Scientific research and development	23,569	26,151	26,780	27,219	30,319	35,537	39,117	41,699
Advertising and market research	13,040	14,046	14,108	14,224	14,486	14,486	15,435	16,711
Other professional, scientific and technical activities	12,321	12,039	11,307	11,236	11,384	11,224	12,275	13,059
Veterinary activities	732	927	1,111	1,330	1,407	1,637	1,831	2,092
Total value added	254,947	274,638	284,835	290,689	275,419	274,215	293,051	306,943

Table 31 Gross domestic product originating from professional, scientific and technical activities chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Legal and accounting activities	10,658	11,200	11,464	11,721	11,105	10,411	9,972	10,158
Activities of head offices; management consultancy activities	127,233	135,822	140,976	144,137	132,891	125,965	127,811	131,376
Architectural and engineering activities; technical testing and analysis	12,523	12,945	13,128	13,018	12,226	10,910	9,974	10,187
Scientific research and development	17,279	18,898	19,167	19,438	21,628	24,634	25,652	26,872
Advertising and market research	9,556	10,147	10,088	10,148	10,329	10,036	10,217	10,859
Other professional, scientific and technical activities	19,262	18,853	17,935	17,992	18,159	18,088	18,509	18,988
Veterinary activities	647	809	958	1,138	1,216	1,418	1,626	1,879
Total value added	194,998	207,217	212,968	216,952	206,347	199,998	202,103	208,624

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 31.1 Gross domestic product originating from professional, scientific and technical activities chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Legal and accounting activities	155.5	163.4	167.2	171.0	162.0	151.9	145.5	148.2
Activities of head offices; management consultancy activities	171.7	183.3	190.2	194.5	179.3	170.0	172.4	177.3
Architectural and engineering activities; technical testing and analysis	207.7	214.7	217.8	216.0	202.8	181.0	165.5	169.0
Scientific research and development	4,193.9	4,586.9	4,652.2	4,718.0	5,249.5	5,979.1	6,226.2	6,522.3
Advertising and market research	156.9	166.6	165.6	166.6	169.6	164.8	167.7	178.3
Other professional, scientific and technical activities	446.2	436.7	415.5	416.8	420.6	419.0	428.7	439.8
Veterinary activities	428.5	535.8	634.4	753.6	805.3	939.1	1,076.8	1,244.4
Total value added	199.0	211.5	217.4	221.4	210.6	204.1	206.3	212.9

Table 31.2 Growth rate of gross domestic product originating from professional, scientific and technical activities chain volume measures (reference year = 2002)

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Legal and accounting activities	8.1	5.1	2.4	2.2	-5.3	-6.2	-4.2	1.9
Activities of head offices; management consultancy activities	-2.3	6.8	3.8	2.2	-7.8	-5.2	1.5	2.8
Architectural and engineering activities; technical testing and analysis	0.1	3.4	1.4	-0.8	-6.1	-10.8	-8.6	2.1
Scientific research and development	-2.4	9.4	1.4	1.4	11.3	13.9	4.1	4.8
Advertising and market research	-3.2	6.2	-0.6	0.6	1.8	-2.8	1.8	6.3
Other professional, scientific and technical activities	-13.4	-2.1	-4.9	0.3	0.9	-0.4	2.3	2.6
Veterinary activities	17.4	25.0	18.4	18.8	6.9	16.6	14.7	15.6
Total value added	-2.2	6.3	2.8	1.9	-4.9	-3.1	1.1	3.2

**Table 32 Gross domestic product originating from administrative and support service activities
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Rental and leasing activities	73,670	73,324	76,163	77,554	73,222	68,415	70,543	73,193
Employment activities	11,938	12,370	12,761	13,242	12,091	12,675	13,815	14,056
Travel agency, tour operator, reservation service and related activities	44,155	52,294	57,401	61,069	14,580	4,207	12,433	25,521
Security and investigation activities	14,824	15,346	16,410	16,805	15,754	15,915	16,425	16,986
Services to buildings and landscape activities	18,850	19,558	20,230	20,792	19,593	19,591	20,980	21,332
Office administrative, office support and other business support activities	77,056	78,713	80,277	81,257	76,741	80,900	86,350	88,011
Total value added	240,493	251,605	263,242	270,719	211,981	201,703	220,546	239,099

**Table 33 Gross domestic product originating from administrative and support service activities
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Rental and leasing activities	53,963	52,945	54,425	55,152	52,247	47,292	46,817	47,866
Employment activities	8,750	8,938	9,124	9,422	8,569	8,703	9,106	9,130
Travel agency, tour operator, reservation service and related activities	27,334	31,807	34,449	36,305	8,660	2,399	6,629	13,371
Security and investigation activities	10,860	11,082	11,727	11,951	11,157	10,919	10,819	11,025
Services to buildings and landscape activities	13,805	14,120	14,454	14,783	13,872	13,439	13,817	13,844
Office administrative, office support and other business support activities	56,476	56,870	57,395	57,813	54,947	56,117	57,506	57,761
Total value added	172,062	177,330	183,491	187,600	147,248	135,711	142,261	151,936

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 33.1 Gross domestic product originating from administrative and support service activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Rental and leasing activities	141.8	139.1	143.0	144.9	137.2	124.2	123.0	125.7
Employment activities	433.0	442.3	451.5	466.2	424.0	430.6	450.6	451.8
Travel agency, tour operator, reservation service and related activities	181.5	211.2	228.8	241.1	57.5	15.9	44.0	88.8
Security and investigation activities	359.4	366.7	388.1	395.5	369.2	361.3	358.0	364.8
Services to buildings and landscape activities	211.7	216.6	221.7	226.7	212.8	206.1	211.9	212.3
Office administrative, office support and other business support activities	178.1	179.4	181.0	182.3	173.3	177.0	181.4	182.2
Total value added	178.5	184.0	190.3	194.6	152.8	140.8	147.6	157.6

**Table 33.2 Growth rate of gross domestic product originating from administrative and support service activities
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Rental and leasing activities	-1.3	-1.9	2.8	1.3	-5.3	-9.5	-1.0	2.2
Employment activities	4.9	2.1	2.1	3.3	-9.1	1.6	4.6	0.3
Travel agency, tour operator, reservation service and related activities	8.1	16.4	8.3	5.4	-76.1	-72.3	176.3	101.7
Security and investigation activities	6.6	2.0	5.8	1.9	-6.6	-2.1	-0.9	1.9
Services to buildings and landscape activities	6.6	2.3	2.4	2.3	-6.2	-3.1	2.8	0.2
Office administrative, office support and other business support activities	-1.8	0.7	0.9	0.7	-5.0	2.1	2.5	0.4
Total value added	1.5	3.1	3.5	2.2	-21.5	-7.8	4.8	6.8

**Table 34 Gross domestic product originating from arts, entertainment and recreation
at current market prices**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Creative, arts and entertainment activities	2,117	2,138	2,183	2,218	2,069	1,980	2,027	2,093
Libraries, archives, museums and other cultural activities	415	430	412	376	277	206	194	201
Gambling and betting activities	48,192	57,255	66,911	79,687	71,144	82,518	87,738	91,398
Sport activities and amusement and recreation activities	30,429	31,247	32,905	34,413	28,803	23,785	22,700	24,557
Total value added	81,153	91,070	102,411	116,694	102,293	108,489	112,659	118,249

**Table 35 Gross domestic product originating from arts, entertainment and recreation
chain volume measures (reference year = 2002)**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Creative, arts and entertainment activities	2,021	2,040	2,080	2,098	1,956	1,875	1,917	1,971
Libraries, archives, museums and other cultural activities	498	520	519	472	334	255	265	266
Gambling and betting activities	38,507	45,432	52,549	62,753	55,709	64,406	65,440	65,743
Sport activities and amusement and recreation activities	46,162	47,862	51,156	54,035	44,874	36,805	36,027	39,011
Total value added	80,861	90,652	101,747	116,455	101,477	107,208	108,049	110,298

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 35.1 Gross domestic product originating from arts, entertainment and recreation
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Creative, arts and entertainment activities	323.9	326.9	333.3	336.2	313.5	300.5	307.2	315.9
Libraries, archives, museums and other cultural activities	146.5	152.9	152.6	138.8	98.2	75.0	77.9	78.2
Gambling and betting activities	306.3	361.3	418.0	499.1	443.1	512.3	520.5	522.9
Sport activities and amusement and recreation activities	448.0	464.5	496.5	524.4	435.5	357.2	349.6	378.6
Total value added	339.2	380.2	426.8	488.5	425.6	449.7	453.2	462.6

**Table 35.2 Growth rate of gross domestic product originating from arts, entertainment and recreation
chain volume measures (reference year = 2002)**

(Percent)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Creative, arts and entertainment activities	-4.0	0.9	2.0	0.9	-6.8	-4.1	2.2	2.8
Libraries, archives, museums and other cultural activities	6.6	4.4	-0.2	-9.1	-29.2	-23.7	3.9	0.4
Gambling and betting activities	34.8	18.0	15.7	19.4	-11.2	15.6	1.6	0.5
Sport activities and amusement and recreation activities	5.4	3.7	6.9	5.6	-17.0	-18.0	-2.1	8.3
Total value added	21.3	12.1	12.2	14.5	-12.9	5.6	0.8	2.1

**Table 36 Gross domestic product originating from other service activities
at current market prices**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Activities of membership organizations	29,155	30,280	31,797	31,984	30,476	28,828	29,732	30,268
Repair of computers and personal and household goods	88,027	94,195	99,540	103,771	100,453	101,418	106,778	109,925
Other personal service activities	76,508	79,959	84,997	87,213	71,859	63,246	70,233	74,738
Total value added	193,690	204,434	216,334	222,968	202,788	193,492	206,743	214,931

**Table 37 Gross domestic product originating from other service activities
chain volume measures (reference year = 2002)**

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Activities of membership organizations	20,634	21,288	22,116	22,091	21,186	19,707	19,132	19,217
Repair of computers and personal and household goods	67,661	72,047	74,672	77,946	77,081	77,126	76,951	78,321
Other personal service activities	56,211	58,199	61,084	62,186	51,399	44,513	47,004	49,244
Total value added	144,950	151,937	158,319	162,608	149,774	141,137	142,934	146,654

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 37.1 Gross domestic product originating from other service activities
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Activities of membership organizations	241.1	248.8	258.5	258.2	247.6	230.3	223.6	224.6
Repair of computers and personal and household goods	252.7	269.1	278.9	291.1	287.9	288.1	287.4	292.5
Other personal service activities	112.4	116.4	122.1	124.4	102.8	89.0	94.0	98.5
Total value added	169.9	178.0	185.5	190.5	175.5	165.4	167.5	171.9

**Table 37.2 Growth rate of gross domestic product originating from other service activities
chain volume measures (reference year = 2002)**

(Percent)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Activities of membership organizations	1.2	3.2	3.9	-0.1	-4.1	-7.0	-2.9	0.4
Repair of computers and personal and household goods	5.4	6.5	3.6	4.4	-1.1	0.1	-0.2	1.8
Other personal service activities	3.2	3.5	5.0	1.8	-17.3	-13.4	5.6	4.8
Total value added	3.9	4.8	4.2	2.7	-7.9	-5.8	1.3	2.6

Gross Domestic Product
(Expenditure)

**Table 38 Composition of private final consumption expenditure
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Individual consumption expenditure of households	8,310,892	8,811,307	9,237,852	9,676,340	8,384,805	8,321,782	9,583,022	10,732,768
Food and non-alcoholic beverages	2,092,483	2,119,622	2,154,253	2,276,723	2,361,719	2,430,897	2,630,916	2,785,264
<i>Food</i>	1,879,424	1,904,808	1,931,169	2,047,776	2,132,553	2,203,666	2,391,265	2,524,045
Cereals and cereal products	387,110	386,122	394,248	419,529	444,552	446,898	470,552	505,974
Meat	221,986	222,618	218,083	230,891	245,115	252,675	307,447	299,231
Fish and other seafood	208,266	215,204	215,800	222,767	231,665	233,400	245,196	258,706
Milk, other dairy products and eggs	156,420	160,182	165,029	167,217	174,474	183,035	202,786	224,700
Oils and fats	83,462	85,254	82,732	82,142	88,148	99,873	112,506	101,876
Fruits and nuts	171,016	178,307	187,984	199,970	203,664	210,914	217,775	236,020
Vegetables	449,152	446,836	446,885	489,669	503,616	525,108	565,747	610,698
Sugar, confectionery and desserts	86,397	88,144	90,830	96,154	94,745	97,929	108,007	115,107
Ready-made food and other food products n.e.c.	115,615	122,141	129,578	139,437	146,574	153,834	161,249	171,733
<i>Non-alcoholic beverages</i>	213,059	214,814	223,084	228,947	229,166	227,231	239,651	261,219
Alcoholic beverages, tobacco and narcotics	281,891	287,214	289,185	291,797	278,123	275,265	286,087	296,767
<i>Alcoholic beverages</i>	181,524	180,667	176,742	181,263	169,946	167,775	175,179	185,312
<i>Tobacco and narcotic</i>	100,367	106,547	112,443	110,534	108,177	107,490	110,908	111,455
Clothing and footwear	363,291	371,313	382,155	392,566	318,840	290,982	300,841	310,896
<i>Clothing</i>	329,347	336,777	346,893	356,545	288,926	264,795	273,327	283,056
<i>Footwear</i>	33,944	34,536	35,262	36,021	29,914	26,187	27,514	27,840
Housing, water, electricity, gas and other fuels	737,130	766,719	799,986	839,689	857,802	885,338	949,004	1,007,905
<i>Housing and water</i>	512,892	542,686	566,643	586,248	600,007	616,663	632,713	648,620
<i>Electricity, gas and other fuels</i>	224,238	224,033	233,343	253,441	257,795	268,675	316,291	359,285
Furnishings, households equipment and routine household maintenance	334,813	342,918	359,610	369,194	353,630	355,717	364,607	362,463
<i>Furniture and furnishings, and loose carpets</i>	26,572	27,117	28,798	29,101	27,918	27,731	28,976	28,691
<i>Households equipment and routine maintenance of the house</i>	308,241	315,801	330,812	340,093	325,712	327,986	335,631	333,772
Health	324,513	335,562	352,323	369,143	393,023	431,069	475,633	494,714
Transport	1,075,733	1,198,706	1,305,141	1,323,027	1,053,471	1,068,805	1,279,760	1,334,453
<i>Purchase of vehicles</i>	307,901	369,883	420,017	422,130	340,213	327,826	370,873	391,497
<i>Operation of personal transport equipment</i>	407,383	453,057	494,504	496,773	433,056	492,293	611,388	597,753
<i>Passenger transport services</i>	354,494	369,214	383,792	397,076	272,815	240,045	288,529	335,538
<i>Transport services of goods</i>	5,955	6,552	6,828	7,048	7,387	8,641	8,970	9,665
Information and communication	221,586	234,039	243,280	254,443	258,358	252,081	254,776	263,237
Recreation, sport and culture	392,078	420,807	447,294	456,712	345,578	341,242	361,933	386,571
<i>Recreational durables</i>	7,638	9,346	8,089	7,863	7,824	8,734	9,549	8,336
<i>Other recreation and entertainment</i>	329,380	358,375	386,338	396,960	287,417	284,269	303,736	328,041
<i>Newspapers, books and stationery</i>	55,060	53,086	52,867	51,889	50,337	48,239	48,648	50,194
Education services	105,648	110,988	117,825	123,425	121,942	122,426	125,098	128,834
Restaurants and accommodation services	1,355,958	1,538,632	1,634,145	1,770,920	898,596	715,056	1,329,635	2,034,779
Insurance and financial services	489,460	505,023	537,738	553,109	548,315	561,611	592,486	664,375
Personal care, social protection and miscellaneous goods and services	536,308	579,764	614,917	655,592	595,408	591,293	632,246	662,510
<i>Personal care</i>	176,784	189,010	194,441	208,141	209,506	218,822	232,097	249,262
<i>Other personal effects</i>	238,174	258,206	280,564	302,373	261,741	254,456	274,745	284,686
<i>Other services</i>	121,350	132,548	139,912	145,078	124,161	118,015	125,404	128,562
Individual consumption expenditure of non-profit institution serving households (NPISHs)	145,949	149,527	152,836	158,180	149,535	144,290	150,675	153,375
<i>Health, education, and social protection</i>	77,148	82,240	84,225	86,678	84,661	82,736	86,269	88,560
<i>Other services n.e.c.</i>	68,801	67,287	68,611	71,502	64,874	61,554	64,406	64,815
Private final consumption Expenditure in the Domestic Market	8,456,841	8,960,834	9,390,688	9,834,520	8,534,340	8,466,072	9,733,697	10,886,143
Plus: Expenditure of Residents Abroad	290,023	321,458	353,053	344,332	117,886	93,286	211,061	369,954
Less: Expenditure of Non-residents in the Country	1,450,311	1,703,558	1,739,056	1,772,468	344,285	103,516	462,458	935,501
Private final consumption Expenditure	7,296,553	7,578,734	8,004,685	8,406,384	8,307,941	8,455,842	9,482,300	10,320,596

Table 39 Composition of private final consumption expenditure
chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Individual consumption expenditure of households	5,790,378	6,096,278	6,333,308	6,567,024	5,718,483	5,619,082	6,120,103	6,704,765
Food and non-alcoholic beverages	981,667	1,005,594	1,029,405	1,056,236	1,080,776	1,113,223	1,150,713	1,192,456
<i>Food</i>	814,383	835,891	854,988	877,034	900,932	930,898	962,644	994,602
Cereals and cereal products	183,787	185,853	186,584	188,851	194,675	205,332	217,181	227,535
Meat	119,880	123,365	123,638	124,188	126,224	128,470	131,803	137,889
Fish and other seafood	100,142	101,294	101,410	102,553	105,734	106,408	108,522	110,920
Milk, other dairy products and eggs	98,984	102,512	105,663	105,908	110,474	115,453	120,964	125,031
Oils and fats	44,769	46,172	48,875	50,708	51,468	53,126	54,165	53,850
Fruits and nuts	45,035	47,157	50,851	53,164	54,879	56,746	57,988	59,318
Vegetables	103,192	106,571	108,583	112,485	115,496	119,120	122,359	126,777
Sugar, confectionery and desserts	54,558	55,476	55,852	58,260	57,317	58,905	62,207	64,613
Ready-made food and other food products n.e.c.	93,047	96,284	102,865	110,476	115,014	118,698	121,089	122,269
<i>Non-alcoholic beverages</i>	179,119	180,267	185,865	191,160	188,735	188,711	194,288	207,303
Alcoholic beverages, tobacco and narcotics	200,545	199,364	195,514	199,590	191,186	188,139	191,878	197,242
<i>Alcoholic beverages</i>	142,333	141,439	137,818	142,618	133,596	131,318	135,729	141,899
<i>Tobacco and narcotic</i>	56,795	56,500	56,012	55,949	55,534	54,747	54,662	54,679
Clothing and footwear	295,165	301,582	305,269	310,666	252,344	229,432	235,856	243,259
<i>Clothing</i>	261,923	267,684	270,733	275,428	223,243	203,752	209,049	216,079
<i>Footwear</i>	35,384	36,066	36,800	37,573	31,166	27,286	28,602	28,863
Housing, water, electricity, gas and other fuels	650,267	677,519	699,037	727,794	751,869	771,334	781,927	809,762
<i>Housing and water</i>	486,145	512,493	532,225	548,854	562,383	577,706	591,106	604,113
<i>Electricity, gas and other fuels</i>	159,462	161,664	164,158	174,854	184,048	188,231	186,728	198,454
Furnishings, households equipment and routine household maintenance	303,079	312,442	328,431	338,755	329,851	332,908	336,127	333,796
<i>Furniture and furnishings, and loose carpets</i>	26,325	27,387	29,402	30,057	29,108	28,796	29,362	28,868
<i>Households equipment and routine maintenance of the house</i>	275,988	284,290	298,291	307,906	299,951	303,245	305,921	304,062
Health	287,041	294,308	308,493	323,558	344,097	375,083	410,525	426,648
Transport	772,344	836,175	885,380	895,920	741,399	696,922	758,094	791,127
<i>Purchase of vehicles</i>	270,019	323,503	366,266	368,051	297,396	287,500	322,957	341,044
<i>Operation of personal transport equipment</i>	230,114	236,067	240,373	243,366	233,140	223,599	232,001	234,173
<i>Passenger transport services</i>	260,524	272,857	282,593	287,899	196,099	170,581	195,082	214,553
<i>Transport services of goods</i>	4,945	5,440	5,611	5,716	5,991	7,081	7,413	7,804
Information and communication	300,143	317,170	329,667	345,536	351,398	343,191	345,203	359,034
Recreation, sport and culture	347,543	371,947	391,655	398,574	302,542	298,419	315,330	335,368
<i>Recreational durables</i>	2,830	3,496	3,155	3,120	2,976	3,166	2,956	2,506
<i>Other recreation and entertainment</i>	297,335	321,023	342,389	350,059	254,853	251,907	269,606	289,998
<i>Newspapers, books and stationery</i>	48,449	48,001	47,420	46,825	45,277	43,581	43,530	44,854
Education services	95,520	98,169	103,198	107,705	106,335	108,003	110,068	111,670
Restaurants and accommodation services	964,206	1,066,211	1,111,947	1,196,611	621,349	505,624	848,729	1,243,981
Insurance and financial services	319,608	329,099	345,062	353,228	357,737	366,440	354,664	372,360
Personal care, social protection and miscellaneous goods and services	371,202	400,579	426,212	449,155	395,069	383,063	386,981	395,001
<i>Personal care</i>	140,568	149,703	152,578	162,845	163,341	170,121	178,164	188,733
<i>Other personal effects</i>	135,049	146,750	162,424	171,611	137,865	128,025	125,845	124,880
<i>Other services</i>	86,930	94,323	98,515	101,435	87,369	81,663	81,688	82,626
Individual consumption expenditure of non-profit institution serving households (NPISHs)	103,575	105,411	106,570	109,521	104,201	98,874	97,194	97,614
<i>Health, education, and social protection</i>	55,040	58,282	59,039	60,332	59,307	56,994	55,943	56,661
<i>Other services n.e.c.</i>	48,529	47,148	47,552	49,207	44,933	41,924	41,294	41,001
Private final consumption Expenditure in the Domestic Market	5,893,801	6,201,593	6,439,833	6,676,514	5,822,485	5,717,833	6,217,315	6,802,485
Plus: Expenditure of Residents Abroad	218,529	240,634	261,522	253,229	87,252	67,994	144,451	250,852
Less: Expenditure of Non-residents in the Country	1,107,338	1,294,920	1,314,276	1,326,724	265,203	88,337	363,262	693,666
Private final consumption Expenditure	5,051,411	5,207,385	5,445,589	5,661,562	5,617,440	5,651,378	6,000,444	6,412,379

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 39.1 Composition of private final consumption expenditure chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Individual consumption expenditure of households	172.8	181.9	189.0	196.0	170.7	167.7	182.7	200.1
Food and non-alcoholic beverages	131.6	134.8	138.0	141.6	144.9	149.3	154.3	159.9
<i>Food</i>	123.9	127.2	130.1	133.4	137.1	141.6	146.4	151.3
Cereals and cereal products	123.6	125.0	125.5	127.0	131.0	138.1	146.1	153.1
Meat	138.4	142.4	142.7	143.4	145.7	148.3	152.2	159.2
Fish and other seafood	127.0	128.5	128.6	130.0	134.1	134.9	137.6	140.7
Milk, other dairy products and eggs	129.0	133.6	137.7	138.0	144.0	150.4	157.6	162.9
Oils and fats	214.4	221.1	234.1	242.8	246.5	254.4	259.4	257.9
Fruits and nuts	82.7	86.6	93.3	97.6	100.7	104.2	106.4	108.9
Vegetables	117.8	121.6	123.9	128.4	131.8	135.9	139.6	144.7
Sugar, confectionery and desserts	140.4	142.8	143.7	149.9	147.5	151.6	160.1	166.3
Ready-made food and other food products n.e.c.	130.5	135.1	144.3	155.0	161.3	166.5	169.9	171.5
<i>Non-alcoholic beverages</i>	189.1	190.3	196.2	201.8	199.3	199.2	205.1	218.9
Alcoholic beverages, tobacco and narcotics	116.6	115.9	113.7	116.1	111.2	109.4	111.6	114.7
<i>Alcoholic beverages</i>	123.3	122.6	119.4	123.6	115.8	113.8	117.6	123.0
<i>Tobacco and narcotic</i>	100.4	99.9	99.0	98.9	98.2	96.8	96.6	96.6
Clothing and footwear	124.3	127.0	128.5	130.8	106.2	96.6	99.3	102.4
<i>Clothing</i>	118.6	121.2	122.6	124.7	101.1	92.3	94.7	97.9
<i>Footwear</i>	211.7	215.8	220.1	224.8	186.4	163.2	171.1	172.7
Housing, water, electricity, gas and other fuels	171.1	178.3	184.0	191.5	197.9	203.0	205.8	213.1
<i>Housing and water</i>	164.4	173.3	179.9	185.6	190.1	195.3	199.9	204.3
<i>Electricity, gas and other fuels</i>	189.3	191.9	194.9	207.6	218.5	223.4	221.7	235.6
Furnishings, households equipment and routine household maintenance	195.2	201.2	211.5	218.2	212.5	214.4	216.5	215.0
<i>Furniture and furnishings, and loose carpets</i>	184.9	192.3	206.5	211.1	204.4	202.2	206.2	202.7
<i>Households equipment and routine maintenance of the house</i>	103.9	107.1	112.3	116.0	113.0	114.2	115.2	114.5
Health	223.0	228.7	239.7	251.4	267.4	291.4	319.0	331.5
Transport	202.1	218.8	231.6	234.4	194.0	182.3	198.3	207.0
<i>Purchase of vehicles</i>	137.0	164.2	185.9	186.8	150.9	145.9	163.9	173.1
<i>Operation of personal transport equipment</i>	287.9	295.3	300.7	304.4	291.6	279.7	290.2	292.9
<i>Passenger transport services</i>	130.1	136.3	141.1	143.8	97.9	85.2	97.4	107.2
<i>Transport services of goods</i>	193.8	213.2	219.9	224.0	234.8	277.5	290.5	305.8
Information and communication	234.3	247.6	257.3	269.7	274.3	267.9	269.5	280.2
Recreation, sport and culture	263.8	282.3	297.3	302.5	229.7	226.5	239.4	254.6
<i>Recreational durables</i>	120.5	148.9	134.4	132.9	126.8	134.9	125.9	106.7
<i>Other recreation and entertainment</i>	241.8	261.0	278.4	284.7	207.2	204.8	219.2	235.8
<i>Newspapers, books and stationery</i>	208.3	206.3	203.8	201.3	194.6	187.3	187.1	192.8
Education services	166.1	170.7	179.5	187.3	184.9	187.8	191.4	194.2
Restaurants and accommodation services	221.2	244.6	255.1	274.5	142.5	116.0	194.7	285.4
Insurance and financial services	237.0	244.1	255.9	262.0	265.3	271.8	263.0	276.2
Personal care, social protection and miscellaneous goods and services	213.9	230.9	245.6	258.8	227.7	220.8	223.0	227.6
<i>Personal care</i>	217.6	231.7	236.2	252.0	252.8	263.3	275.8	292.1
<i>Other personal effects</i>	267.9	291.2	322.3	340.5	273.5	254.0	249.7	247.8
<i>Other services</i>	191.7	208.1	217.3	223.7	192.7	180.1	180.2	182.3
Individual consumption expenditure of non-profit institution serving households (NPISHs)	128.7	131.0	132.4	136.1	129.5	122.9	120.8	121.3
<i>Health, education, and social protection</i>	167.4	177.3	179.6	183.5	180.4	173.3	170.1	172.3
<i>Other services n.e.c.</i>	198.6	192.9	194.6	201.4	183.9	171.6	169.0	167.8
Private final consumption Expenditure in the Domestic Market	137.7	144.9	150.5	156.0	136.1	133.6	145.3	159.0
Plus: Expenditure of Residents Abroad	447.6	492.9	535.7	518.7	178.7	139.3	295.9	513.8
Less: Expenditure of Non-residents in the Country	256.5	299.9	304.4	307.3	61.4	20.5	84.1	160.7
Private final consumption Expenditure	127.2	131.2	137.2	142.6	141.5	142.4	151.1	161.5

Table 39.2 Growth rate of composition of private final consumption expenditure
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	(Percent) 2023p
Individual consumption expenditure of households	3.9	5.3	3.9	3.7	-12.9	-1.7	8.9	9.6
Food and non-alcoholic beverages	2.4	2.4	2.4	2.6	2.3	3.0	3.4	3.6
<i>Food</i>	2.6	2.6	2.3	2.6	2.7	3.3	3.4	3.3
Cereals and cereal products	2.2	1.1	0.4	1.2	3.1	5.5	5.8	4.8
Meat	2.7	2.9	0.2	0.4	1.6	1.8	2.6	4.6
Fish and other seafood	1.2	1.2	0.1	1.1	3.1	0.6	2.0	2.2
Milk, other dairy products and eggs	1.7	3.6	3.1	0.2	4.3	4.5	4.8	3.4
Oils and fats	-4.8	3.1	5.9	3.8	1.5	3.2	2.0	-0.6
Fruits and nuts	0.7	4.7	7.8	4.5	3.2	3.4	2.2	2.3
Vegetables	5.8	3.3	1.9	3.6	2.7	3.1	2.7	3.6
Sugar, confectionery and desserts	-0.2	1.7	0.7	4.3	-1.6	2.8	5.6	3.9
Ready-made food and other food products n.e.c.	7.2	3.5	6.8	7.4	4.1	3.2	2.0	1.0
<i>Non-alcoholic beverages</i>	0.6	0.6	3.1	2.8	-1.3	0.0	3.0	6.7
Alcoholic beverages, tobacco and narcotics	-3.3	-0.6	-1.9	2.1	-4.2	-1.6	2.0	2.8
<i>Alcoholic beverages</i>	-3.7	-0.6	-2.6	3.5	-6.3	-1.7	3.4	4.5
<i>Tobacco and narcotic</i>	-2.5	-0.5	-0.9	-0.1	-0.7	-1.4	-0.2	0.0
Clothing and footwear	2.4	2.2	1.2	1.8	-18.8	-9.1	2.8	3.1
<i>Clothing</i>	2.4	2.2	1.1	1.7	-18.9	-8.7	2.6	3.4
<i>Footwear</i>	2.1	1.9	2.0	2.1	-17.1	-12.4	4.8	0.9
Housing, water, electricity, gas and other fuels	4.2	4.2	3.2	4.1	3.3	2.6	1.4	3.6
<i>Housing and water</i>	4.0	5.4	3.9	3.1	2.5	2.7	2.3	2.2
<i>Electricity, gas and other fuels</i>	4.7	1.4	1.5	6.5	5.3	2.3	-0.8	6.3
Furnishings, households equipment and routine household maintenance	0.4	3.1	5.1	3.1	-2.6	0.9	1.0	-0.7
<i>Furniture and furnishings, and loose carpets</i>	-1.1	4.0	7.4	2.2	-3.2	-1.1	2.0	-1.7
<i>Households equipment and routine maintenance of the house</i>	0.5	3.0	4.9	3.2	-2.6	1.1	0.9	-0.6
Health	3.5	2.5	4.8	4.9	6.3	9.0	9.4	3.9
Transport	4.3	8.3	5.9	1.2	-17.2	-6.0	8.8	4.4
<i>Purchase of vehicles</i>	1.5	19.8	13.2	0.5	-19.2	-3.3	12.3	5.6
<i>Operation of personal transport equipment</i>	7.2	2.6	1.8	1.2	-4.2	-4.1	3.8	0.9
<i>Passenger transport services</i>	3.6	4.7	3.6	1.9	-31.9	-13.0	14.4	10.0
<i>Transport services of goods</i>	-1.8	10.0	3.1	1.9	4.8	18.2	4.7	5.3
Information and communication	1.3	5.7	3.9	4.8	1.7	-2.3	0.6	4.0
Recreation, sport and culture	19.6	7.0	5.3	1.8	-24.1	-1.4	5.7	6.4
<i>Recreational durables</i>	-6.8	23.5	-9.8	-1.1	-4.6	6.4	-6.6	-15.2
<i>Other recreation and entertainment</i>	25.5	8.0	6.7	2.2	-27.2	-1.2	7.0	7.6
<i>Newspapers, books and stationery</i>	-4.2	-0.9	-1.2	-1.3	-3.3	-3.7	-0.1	3.0
Education services	1.5	2.8	5.1	4.4	-1.3	1.6	1.9	1.5
Restaurants and accommodation services	5.3	10.6	4.3	7.6	-48.1	-18.6	67.9	46.6
Insurance and financial services	3.9	3.0	4.9	2.4	1.3	2.4	-3.2	5.0
Personal care, social protection and miscellaneous goods and services	3.0	7.9	6.4	5.4	-12.0	-3.0	1.0	2.1
<i>Personal care</i>	3.0	6.5	1.9	6.7	0.3	4.2	4.7	5.9
<i>Other personal effects</i>	3.1	8.7	10.7	5.7	-19.7	-7.1	-1.7	-0.8
<i>Other services</i>	3.0	8.5	4.4	3.0	-13.9	-6.5	0.0	1.1
Individual consumption expenditure of non-profit institution serving households (NPISHs)	1.6	1.8	1.1	2.8	-4.9	-5.1	-1.7	0.4
<i>Health, education, and social protection</i>	0.5	5.9	1.3	2.2	-1.7	-3.9	-1.8	1.3
<i>Other services n.e.c.</i>	2.8	-2.8	0.9	3.5	-8.7	-6.7	-1.5	-0.7
Private final consumption Expenditure in the Domestic Market	3.8	5.2	3.8	3.7	-12.8	-1.8	8.7	9.4
Plus: Expenditure of Residents Abroad	20.6	10.1	8.7	-3.2	-65.5	-22.1	112.4	73.7
Less: Expenditure of Non-residents in the Country	12.2	16.9	1.5	0.9	-80.0	-66.7	311.2	91.0
Private final consumption Expenditure	2.9	3.1	4.6	4.0	-0.8	0.6	6.2	6.9

Table 40 Composition of private final consumption expenditure by type and durability at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Individual consumption expenditure of households	8,310,892	8,811,307	9,237,852	9,676,340	8,384,805	8,321,782	9,583,022	10,732,768
Food and non-alcoholic beverages	2,092,483	2,119,622	2,154,253	2,276,723	2,361,719	2,430,897	2,630,916	2,785,264
Non-durable goods	2,092,483	2,119,622	2,154,253	2,276,723	2,361,719	2,430,897	2,630,916	2,785,264
Alcoholic beverages, tobacco and narcotics	281,891	287,214	289,185	291,797	278,123	275,265	286,087	296,767
Non-durable goods	281,891	287,214	289,185	291,797	278,123	275,265	286,087	296,767
Clothing and footwear	363,291	371,313	382,155	392,566	318,840	290,982	300,841	310,896
Semi-durable goods	309,778	316,030	321,750	332,418	273,319	249,543	261,813	270,259
Services	53,513	55,283	60,405	60,148	45,521	41,439	39,028	40,637
Housing, water, electricity, gas and other fuels	737,130	766,719	799,986	839,689	857,802	885,338	949,004	1,007,905
Non-durable goods	265,714	266,507	276,479	297,907	301,506	312,577	361,561	406,532
Services	471,416	500,212	523,507	541,782	556,296	572,761	587,443	601,373
Furnishings, households equipment and routine household maintenance	334,813	342,918	359,610	369,194	353,630	355,717	364,607	362,463
Durable goods	73,860	74,124	75,945	77,421	73,905	72,281	72,498	70,849
Semi-durable goods	169,988	174,784	185,967	191,243	181,821	184,259	189,567	188,321
Non-durable goods	51,101	53,220	55,523	57,204	55,119	56,829	58,871	59,089
Services	39,864	40,790	42,175	43,326	42,785	42,348	43,671	44,204
Health	324,513	335,562	352,323	369,143	393,023	431,069	475,633	494,714
Durable goods	6,819	6,781	7,504	8,154	7,598	8,089	8,504	8,529
Non-durable goods	106,961	112,833	113,564	119,287	128,923	140,684	153,417	155,611
Services	210,733	215,948	231,255	241,702	256,502	282,296	313,712	330,574
Transport	1,075,733	1,198,706	1,305,141	1,323,027	1,053,471	1,068,805	1,279,760	1,334,453
Durable goods	307,901	369,883	420,017	422,130	340,213	327,826	370,873	391,497
Semi-durable goods	31,889	33,161	34,582	35,297	32,453	34,359	35,760	34,931
Non-durable goods	317,948	358,449	396,246	397,528	347,260	404,793	520,226	506,319
Services	417,995	437,213	454,296	468,072	333,545	301,827	352,901	401,706
Information and communication	221,586	234,039	243,280	254,443	258,358	252,081	254,776	263,237
Durable goods	57,232	59,854	60,210	64,329	66,045	58,753	60,833	63,030
Services	164,354	174,185	183,070	190,114	192,313	193,328	193,943	200,207
Recreation, sport and culture	392,078	420,807	447,294	456,712	345,578	341,242	361,933	386,571
Durable goods	8,357	10,025	8,747	8,414	8,371	9,293	10,169	8,988
Semi-durable goods	41,715	39,866	39,774	39,970	39,547	38,295	38,494	38,433
Non-durable goods	39,547	41,255	42,955	40,793	40,464	39,869	41,669	43,921
Services	302,459	329,661	355,818	367,535	257,196	253,785	271,601	295,229
Education services	105,648	110,988	117,825	123,425	121,942	122,426	125,098	128,834
Services	105,648	110,988	117,825	123,425	121,942	122,426	125,098	128,834
Restaurants and accommodation services	1,355,958	1,538,632	1,634,145	1,770,920	898,596	715,056	1,329,635	2,034,779
Services	1,355,958	1,538,632	1,634,145	1,770,920	898,596	715,056	1,329,635	2,034,779
Insurance and financial services	489,460	505,023	537,738	553,109	548,315	561,611	592,486	664,375
Services	489,460	505,023	537,738	553,109	548,315	561,611	592,486	664,375
Personal care, social protection and miscellaneous goods and services	536,308	579,764	614,917	655,592	595,408	591,293	632,246	662,510
Durable goods	173,172	192,099	209,547	227,339	188,424	185,059	201,241	208,892
Semi-durable goods	136,714	147,033	150,597	161,593	172,295	186,754	197,437	211,555
Non-durable goods	65,149	66,305	71,314	75,295	73,700	69,767	73,811	76,207
Services	161,273	174,327	183,459	191,365	160,989	149,713	159,757	165,856
Individual consumption expenditure of non-profit institution serving households (NPISHs)	145,949	149,527	152,836	158,180	149,535	144,290	150,675	153,375
Semi-durable goods	1,091	1,020	977	971	924	889	945	978
Non-durable goods	25,915	26,637	27,115	27,879	26,986	26,537	27,907	28,926
Services	118,943	121,870	124,744	129,330	121,625	116,864	121,823	123,471
Private final consumption Expenditure in the Domestic Market	8,456,841	8,960,834	9,390,688	9,834,520	8,534,340	8,466,072	9,733,697	10,886,143
Plus: Expenditure of Residents Abroad	290,023	321,458	353,053	344,332	117,886	93,286	211,061	369,954
Less: Expenditure of Non-residents in the Country	1,450,311	1,703,558	1,739,056	1,772,468	344,285	103,516	462,458	935,501
Private final consumption Expenditure	7,296,553	7,578,734	8,004,685	8,406,384	8,307,941	8,455,842	9,482,300	10,320,596
Durable goods	627,341	712,766	781,970	807,787	684,557	661,301	724,118	751,785
Semi-durable goods	691,174	711,894	733,647	761,492	700,358	694,098	724,015	744,477
Non-durable goods	3,246,708	3,332,042	3,426,635	3,584,413	3,613,801	3,757,219	4,154,465	4,358,637
Services	2,731,330	2,822,032	3,062,433	3,252,692	3,309,225	3,343,224	3,879,702	4,465,697

Table 41 Composition of private final consumption expenditure by type and durability
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
(Million Baht)								
Individual consumption expenditure of households	5,790,378	6,096,278	6,333,308	6,567,024	5,718,483	5,619,082	6,120,103	6,704,765
Food and non-alcoholic beverages	981,667	1,005,594	1,029,405	1,056,236	1,080,776	1,113,223	1,150,713	1,192,456
Non-durable goods	981,667	1,005,594	1,029,405	1,056,236	1,080,776	1,113,223	1,150,713	1,192,456
Alcoholic beverages, tobacco and narcotics	200,545	199,364	195,514	199,590	191,186	188,139	191,878	197,242
Non-durable goods	200,545	199,364	195,514	199,590	191,186	188,139	191,878	197,242
Clothing and footwear	295,165	301,582	305,269	310,666	252,344	229,432	235,856	243,259
Semi-durable goods	248,538	253,807	253,978	259,546	213,510	194,234	202,563	209,039
Services	46,892	48,059	51,819	51,564	38,932	35,275	33,103	34,011
Housing, water, electricity, gas and other fuels	650,267	677,519	699,037	727,794	751,869	771,334	781,927	809,762
Non-durable goods	194,248	197,074	200,296	212,077	222,240	226,506	225,480	238,877
Services	450,718	476,559	495,608	511,367	524,111	539,580	552,368	563,934
Furnishings, households equipment and routine household maintenance	303,079	312,442	328,431	338,755	329,851	332,908	336,127	333,796
Durable goods	76,537	77,954	80,650	83,374	81,425	80,004	79,250	77,363
Semi-durable goods	166,707	173,023	185,537	191,969	186,457	189,892	193,103	192,558
Non-durable goods	37,988	39,600	41,081	42,188	40,696	41,868	42,371	42,189
Services	25,316	25,550	25,770	26,257	26,027	25,802	25,998	25,990
Health	287,041	294,308	308,493	323,558	344,097	375,083	410,525	426,648
Durable goods	7,307	7,059	7,803	8,472	7,848	8,123	8,353	8,263
Non-durable goods	100,030	104,507	104,906	110,587	119,146	128,173	137,494	140,893
Services	180,698	183,836	196,630	205,484	218,066	239,623	265,320	277,988
Transport	772,344	836,175	885,380	895,920	741,399	696,922	758,094	791,127
Durable goods	270,019	323,503	366,266	368,051	297,396	287,500	322,957	341,044
Semi-durable goods	24,980	25,551	26,245	26,745	24,841	25,725	26,235	25,246
Non-durable goods	170,730	174,487	176,869	179,313	175,647	166,368	173,211	175,078
Services	302,560	317,176	328,675	333,996	236,590	211,984	237,307	257,973
Information and communication	300,143	317,170	329,667	345,536	351,398	343,191	345,203	359,034
Durable goods	74,854	78,168	79,020	84,986	87,729	78,194	80,443	84,884
Services	228,506	242,459	254,388	264,343	267,459	269,050	268,755	278,247
Recreation, sport and culture	347,543	371,947	391,655	398,574	302,542	298,419	315,330	335,368
Durable goods	3,750	4,541	4,126	4,038	3,852	4,071	3,809	3,301
Semi-durable goods	35,935	35,607	35,039	35,458	35,099	33,867	33,080	32,896
Non-durable goods	37,421	38,969	40,665	38,736	38,416	37,824	39,170	41,280
Services	269,517	291,361	310,854	319,284	224,671	221,900	238,867	258,504
Education services	95,520	98,169	103,198	107,705	106,335	108,003	110,068	111,670
Services	95,520	98,169	103,198	107,705	106,335	108,003	110,068	111,670
Restaurants and accommodation services	964,206	1,066,211	1,111,947	1,196,611	621,349	505,624	848,729	1,243,981
Services	964,206	1,066,211	1,111,947	1,196,611	621,349	505,624	848,729	1,243,981
Insurance and financial services	319,608	329,099	345,062	353,228	357,737	366,440	354,664	372,360
Services	319,608	329,099	345,062	353,228	357,737	366,440	354,664	372,360
Personal care, social protection and miscellaneous goods and services	371,202	400,579	426,212	449,155	395,069	383,063	386,981	395,001
Durable goods	93,371	103,459	114,101	118,627	90,615	85,001	83,599	82,040
Semi-durable goods	110,807	118,792	121,384	130,163	138,377	149,707	156,636	166,061
Non-durable goods	49,090	50,590	56,636	62,627	57,930	52,421	51,392	52,630
Services	116,169	124,734	129,177	133,649	112,828	103,355	104,615	106,709
Individual consumption expenditure of non-profit institution serving households (NPISHs)	103,575	105,411	106,570	109,521	104,201	98,874	97,194	97,614
Semi-durable goods	1,076	1,007	962	955	908	877	931	961
Non-durable goods	19,852	20,283	20,335	20,542	19,688	19,179	19,603	19,883
Services	82,638	84,093	85,213	87,920	83,516	78,767	76,683	76,823
Private final consumption Expenditure in the Domestic Market	5,893,801	6,201,593	6,439,833	6,676,514	5,822,485	5,717,833	6,217,315	6,802,485
Plus: Expenditure of Residents Abroad	218,529	240,634	261,522	253,229	87,252	67,994	144,451	250,852
Less: Expenditure of Non-residents in the Country	1,107,338	1,294,920	1,314,276	1,326,724	265,203	88,337	363,262	693,666
Private final consumption Expenditure	5,051,411	5,207,385	5,445,589	5,661,562	5,617,440	5,651,378	6,000,444	6,412,379
Durable goods	542,985	616,668	678,672	694,231	577,829	551,898	583,629	597,490
Semi-durable goods	587,626	607,299	621,187	642,797	594,496	588,144	607,046	622,292
Non-durable goods	1,769,890	1,808,783	1,844,667	1,897,073	1,921,854	1,952,135	2,011,425	2,078,475
Services	2,192,995	2,229,671	2,381,867	2,519,274	2,581,490	2,606,028	2,877,173	3,230,988

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 41.1 Composition of private final consumption expenditure by type and durability chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Individual consumption expenditure of households	172.8	181.9	189.0	196.0	170.7	167.7	182.7	200.1
Food and non-alcoholic beverages	133.0	136.3	139.5	143.1	146.5	150.9	156.0	161.6
Non-durable goods	133.0	136.3	139.5	143.1	146.5	150.9	156.0	161.6
Alcoholic beverages, tobacco and narcotics	116.6	115.9	113.7	116.1	111.2	109.4	111.6	114.7
Non-durable goods	116.6	115.9	113.7	116.1	111.2	109.4	111.6	114.7
Clothing and footwear	124.2	126.9	128.5	130.8	106.2	96.6	99.3	102.4
Semi-durable goods	138.1	141.0	141.1	144.2	118.6	107.9	112.5	116.1
Services	81.4	83.4	90.0	89.5	67.6	61.2	57.5	59.0
Housing, water, electricity, gas and other fuels	171.1	178.3	184.0	191.5	197.9	203.0	205.8	213.1
Non-durable goods	188.7	191.5	194.6	206.0	215.9	220.1	219.1	232.1
Services	162.7	172.0	178.9	184.6	189.2	194.7	199.4	203.5
Furnishings, households equipment and routine household maintenance	195.2	201.2	211.5	218.2	212.4	214.4	216.5	215.0
Durable goods	247.3	251.9	260.6	269.4	263.1	258.5	256.1	250.0
Semi-durable goods	227.3	236.0	253.0	261.8	254.3	259.0	263.3	262.6
Non-durable goods	158.1	164.8	171.0	175.6	169.4	174.2	176.3	175.6
Services	93.9	94.8	95.6	97.4	96.5	95.7	96.4	96.4
Health	199.9	204.9	214.8	225.3	239.6	261.2	285.9	297.1
Durable goods	555.2	536.4	592.9	643.8	596.4	617.2	634.7	627.9
Non-durable goods	231.8	242.1	243.1	256.2	276.1	297.0	318.6	326.5
Services	182.3	185.5	198.4	207.3	220.0	241.7	267.7	280.4
Transport	168.7	182.7	193.4	195.7	162.0	152.3	165.6	172.8
Durable goods	206.5	247.4	280.2	281.5	227.5	219.9	247.0	260.9
Semi-durable goods	163.5	167.2	171.8	175.0	162.6	168.4	171.7	165.2
Non-durable goods	141.6	144.7	146.6	148.7	145.6	137.9	143.6	145.2
Services	158.3	166.0	172.0	174.8	123.8	110.9	124.2	135.0
Information and communication	202.6	214.1	222.6	233.3	237.2	231.7	233.1	242.4
Durable goods	121.3	126.7	128.0	137.7	142.1	126.7	130.3	137.5
Services	264.5	280.6	294.4	305.9	309.6	311.4	311.1	322.0
Recreation, sport and culture	291.1	311.5	328.0	333.8	253.4	249.9	264.1	280.9
Durable goods	217.9	263.9	239.7	234.6	223.8	236.5	221.3	191.8
Semi-durable goods	131.8	130.6	128.5	130.0	128.7	124.2	121.3	120.6
Non-durable goods	217.9	226.9	236.7	225.5	223.6	220.2	228.0	240.3
Services	368.0	397.9	424.5	436.0	306.8	303.0	326.2	353.0
Education services	167.9	172.5	181.4	189.3	186.9	189.8	193.4	196.3
Services	167.9	172.5	181.4	189.3	186.9	189.8	193.4	196.3
Restaurants and accommodation services	224.7	248.4	259.1	278.8	144.8	117.8	197.8	289.9
Services	224.7	248.4	259.1	278.8	144.8	117.8	197.8	289.9
Insurance and financial services	244.2	251.5	263.7	269.9	273.4	280.0	271.0	284.5
Services	244.2	251.5	263.7	269.9	273.4	280.0	271.0	284.5
Personal care, social protection and miscellaneous goods and services	203.9	220.0	234.1	246.7	217.0	210.4	212.5	216.9
Durable goods	212.1	235.0	259.2	269.5	205.8	193.1	189.9	186.4
Semi-durable goods	223.7	239.9	245.1	262.8	279.4	302.3	316.3	335.3
Non-durable goods	778.5	802.3	898.1	993.1	918.6	831.3	815.0	834.6
Services	141.3	151.7	157.1	162.6	137.2	125.7	127.2	129.8
Individual consumption expenditure of non-profit institution serving households (NPISHs)	180.7	183.9	185.9	191.1	181.8	172.5	169.6	170.3
Semi-durable goods	474.0	443.6	423.8	420.7	400.0	386.3	410.1	423.3
Non-durable goods	400.4	409.1	410.1	414.3	397.1	386.8	395.4	401.0
Services	158.5	161.3	163.5	168.6	160.2	151.1	147.1	147.4
Private final consumption Expenditure in the Domestic Market	172.9	182.0	189.0	195.9	170.9	167.8	182.4	199.6
Plus: Expenditure of Residents Abroad	192.2	211.7	230.1	222.8	76.8	59.8	127.1	220.7
Less: Expenditure of Non-residents in the Country	356.8	417.3	423.5	427.5	85.5	28.5	117.1	223.5
Private final consumption Expenditure	157.3	162.2	169.6	176.3	174.9	176.0	186.9	199.7
Durable goods	200.8	228.0	250.9	256.7	213.7	204.1	215.8	220.9
Semi-durable goods	170.0	175.7	179.7	186.0	172.0	170.2	175.6	180.0
Non-durable goods	144.0	147.2	150.1	154.4	156.4	158.8	163.7	169.1
Services	160.5	163.2	174.4	184.4	189.0	190.8	210.6	236.5

Table 41.2 Growth rate of composition of private final consumption expenditure by type and durability
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
	(Percent)							
Individual consumption expenditure of households	3.9	5.3	3.9	3.7	-12.9	-1.7	8.9	9.6
Food and non-alcoholic beverages	2.4	2.4	2.4	2.6	2.3	3.0	3.4	3.6
Non-durable goods	2.4	2.4	2.4	2.6	2.3	3.0	3.4	3.6
Alcoholic beverages, tobacco and narcotics	-3.3	-0.6	-1.9	2.1	-4.2	-1.6	2.0	2.8
Non-durable goods	-3.3	-0.6	-1.9	2.1	-4.2	-1.6	2.0	2.8
Clothing and footwear	2.4	2.2	1.2	1.8	-18.8	-9.1	2.8	3.1
Semi-durable goods	2.4	2.1	0.1	2.2	-17.7	-9.0	4.3	3.2
Services	2.5	2.5	7.8	-0.5	-24.5	-9.4	-6.2	2.7
Housing, water, electricity, gas and other fuels	4.2	4.2	3.2	4.1	3.3	2.6	1.4	3.6
Non-durable goods	4.2	1.5	1.6	5.9	4.8	1.9	-0.5	5.9
Services	4.3	5.7	4.0	3.2	2.5	3.0	2.4	2.1
Furnishings, households equipment and routine household maintenance	0.4	3.1	5.1	3.1	-2.6	0.9	1.0	-0.7
Durable goods	-0.3	1.9	3.5	3.4	-2.3	-1.7	-0.9	-2.4
Semi-durable goods	-0.8	3.8	7.2	3.5	-2.9	1.8	1.7	-0.3
Non-durable goods	4.8	4.2	3.7	2.7	-3.5	2.9	1.2	-0.4
Services	1.4	0.9	0.9	1.9	-0.9	-0.9	0.8	0.0
Health	3.5	2.5	4.8	4.9	6.3	9.0	9.4	3.9
Durable goods	1.8	-3.4	10.5	8.6	-7.4	3.5	2.8	-1.1
Non-durable goods	7.9	4.5	0.4	5.4	7.7	7.6	7.3	2.5
Services	1.5	1.7	7.0	4.5	6.1	9.9	10.7	4.8
Transport	4.3	8.3	5.9	1.2	-17.2	-6.0	8.8	4.4
Durable goods	1.5	19.8	13.2	0.5	-19.2	-3.3	12.3	5.6
Semi-durable goods	2.3	2.3	2.7	1.9	-7.1	3.6	2.0	-3.8
Non-durable goods	7.7	2.2	1.4	1.4	-2.0	-5.3	4.1	1.1
Services	3.9	4.8	3.6	1.6	-29.2	-10.4	11.9	8.7
Information and communication	1.3	5.7	3.9	4.8	1.7	-2.3	0.6	4.0
Durable goods	-1.3	4.4	1.1	7.5	3.2	-10.9	2.9	5.5
Services	2.3	6.1	4.9	3.9	1.2	0.6	-0.1	3.5
Recreation, sport and culture	19.6	7.0	5.3	1.8	-24.1	-1.4	5.7	6.4
Durable goods	-6.3	21.1	-9.1	-2.1	-4.6	5.7	-6.4	-13.3
Semi-durable goods	3.0	-0.9	-1.6	1.2	-1.0	-3.5	-2.3	-0.6
Non-durable goods	-7.0	4.1	4.4	-4.7	-0.8	-1.5	3.6	5.4
Services	28.0	8.1	6.7	2.7	-29.6	-1.2	7.6	8.2
Education services	1.5	2.8	5.1	4.4	-1.3	1.6	1.9	1.5
Services	1.5	2.8	5.1	4.4	-1.3	1.6	1.9	1.5
Restaurants and accommodation services	5.3	10.6	4.3	7.6	-48.1	-18.6	67.9	46.6
Services	5.3	10.6	4.3	7.6	-48.1	-18.6	67.9	46.6
Insurance and financial services	3.9	3.0	4.9	2.4	1.3	2.4	-3.2	5.0
Services	3.9	3.0	4.9	2.4	1.3	2.4	-3.2	5.0
Personal care, social protection and miscellaneous goods and services	3.0	7.9	6.4	5.4	-12.0	-3.0	1.0	2.1
Durable goods	1.9	10.8	10.3	4.0	-23.6	-6.2	-1.6	-1.9
Semi-durable goods	2.7	7.2	2.2	7.2	6.3	8.2	4.6	6.0
Non-durable goods	6.1	3.1	12.0	10.6	-7.5	-9.5	-2.0	2.4
Services	3.3	7.4	3.6	3.5	-15.6	-8.4	1.2	2.0
Individual consumption expenditure of non-profit institution serving households (NPISHs)	1.6	1.8	1.1	2.8	-4.9	-5.1	-1.7	0.4
Semi-durable goods	-1.7	-6.4	-4.5	-0.7	-4.9	-3.4	6.2	3.2
Non-durable goods	0.1	2.2	0.3	1.0	-4.2	-2.6	2.2	1.4
Services	1.9	1.8	1.3	3.2	-5.0	-5.7	-2.6	0.2
Private final consumption Expenditure in the Domestic Market	3.8	5.2	3.8	3.7	-12.8	-1.8	8.7	9.4
Plus: Expenditure of Residents Abroad	20.6	10.1	8.7	-3.2	-65.5	-22.1	112.4	73.7
Less: Expenditure of Non-residents in the Country	12.2	16.9	1.5	0.9	-80.0	-66.7	311.2	91.0
Private final consumption Expenditure	2.9	3.1	4.6	4.0	-0.8	0.6	6.2	6.9
Durable goods	1.0	13.6	10.1	2.3	-16.8	-4.5	5.7	2.4
Semi-durable goods	1.7	3.3	2.3	3.5	-7.5	-1.1	3.2	2.5
Non-durable goods	2.8	2.2	2.0	2.8	1.3	1.6	3.0	3.3
Services	3.8	1.7	6.8	5.8	2.5	1.0	10.4	12.3

Table 42 Composition of general government final consumption expenditure at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
By type of expenditure								
Compensation of employees	1,350,895	1,402,532	1,462,566	1,524,086	1,582,089	1,628,234	1,687,446	1,742,535
Consumption of fixed capital	273,413	286,657	300,641	310,087	317,952	325,420	334,513	338,871
Purchases from enterprises and abroad	716,827	716,662	794,731	805,540	808,402	829,946	857,022	852,312
Less: Purchases by households and enterprises	140,669	151,516	177,879	187,973	210,792	232,985	246,896	261,132
Social transfers in kind - purchased market production	260,220	270,068	268,161	279,132	289,258	401,045	447,124	310,849
General government final consumption expenditure	2,460,686	2,524,403	2,648,220	2,730,872	2,786,909	2,951,660	3,079,209	2,983,435
By classification of the functions of government (COFOG)								
General public services	359,128	359,444	369,985	387,918	380,899	393,897	400,632	407,392
Defence	259,016	261,422	293,445	295,914	302,201	290,049	281,909	268,008
Public order and safety	221,432	223,976	230,987	241,102	248,199	253,845	254,765	259,395
Economic affairs	300,753	313,662	330,934	340,239	334,021	333,007	359,492	373,608
Environmental protection	34,291	35,203	34,434	36,092	39,964	40,982	40,071	38,874
Housing and community amenities	74,870	78,184	83,474	85,027	80,035	83,062	82,980	85,129
Health	409,936	438,968	466,348	491,951	542,478	681,209	761,054	619,665
Recreation, culture and religion	39,906	41,032	42,952	41,525	39,437	41,879	41,750	43,606
Education	727,979	743,047	763,298	780,732	791,579	808,220	831,516	863,391
Social protection	33,375	29,465	32,363	30,372	28,096	25,510	25,040	24,367
General government final consumption expenditure	2,460,686	2,524,403	2,648,220	2,730,872	2,786,909	2,951,660	3,079,209	2,983,435
By type of services								
Collective consumption expenditure	1,249,398	1,269,543	1,344,055	1,385,984	1,385,905	1,395,668	1,419,787	1,431,480
Individual consumption expenditure	1,211,288	1,254,860	1,304,165	1,344,888	1,401,004	1,555,992	1,659,422	1,551,955
General government final consumption expenditure	2,460,686	2,524,403	2,648,220	2,730,872	2,786,909	2,951,660	3,079,209	2,983,435

Table 43 Composition of general government final consumption expenditure chain volume measures (reference year = 2002)

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
By type of expenditure								
Compensation of employees	718,298	721,366	730,680	743,430	757,074	760,391	760,802	769,649
Consumption of fixed capital	172,031	177,500	183,700	186,569	189,032	190,637	192,866	194,328
Purchases from enterprises and abroad	588,705	582,674	637,395	647,509	663,851	668,737	652,765	643,565
Less: Purchases by households and enterprises	118,027	125,813	145,602	154,192	176,507	191,031	191,867	202,304
Social transfers in kind - purchased market production	208,932	215,823	212,526	219,667	229,092	311,741	326,690	224,089
General government final consumption expenditure	1,526,168	1,530,150	1,571,045	1,595,583	1,617,299	1,676,834	1,678,580	1,600,203
By classification of the functions of government (COFOG)								
General public services	235,823	230,097	231,536	239,269	233,064	235,350	230,133	230,160
Defence	159,047	156,081	170,854	169,683	172,506	161,800	150,553	140,421
Public order and safety	140,702	138,144	138,695	142,113	144,699	144,466	139,420	139,299
Economic affairs	192,987	197,067	203,825	206,458	201,436	197,240	205,731	211,308
Environmental protection	21,918	22,018	21,097	21,849	24,157	24,270	22,819	21,847
Housing and community amenities	48,530	49,734	52,138	52,456	49,108	50,005	48,419	49,183
Health	278,809	292,727	304,930	317,186	348,971	429,039	454,969	364,361
Recreation, culture and religion	29,310	29,658	30,531	29,348	27,999	29,115	27,840	28,832
Education	398,935	398,523	401,102	403,508	404,903	405,131	402,015	410,298
Social protection	24,134	20,834	22,394	20,774	19,215	17,051	16,021	15,361
General government final consumption expenditure	1,526,168	1,530,150	1,571,045	1,595,583	1,617,299	1,676,834	1,678,580	1,600,203
By type of services								
Collective consumption expenditure	864,119	861,053	895,288	914,222	913,079	905,657	893,763	895,383
Individual consumption expenditure	662,542	668,478	677,529	684,253	704,045	761,260	771,732	703,671
General government final consumption expenditure	1,526,168	1,530,150	1,571,045	1,595,583	1,617,299	1,676,834	1,678,580	1,600,203

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 43.1 Composition of general government final consumption expenditure
chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
By type of expenditure								
Compensation of employees	158.8	159.5	161.5	164.4	167.4	168.1	168.2	170.2
Consumption of fixed capital	149.9	154.7	160.1	162.6	164.7	166.1	168.0	169.3
Purchases from enterprises and abroad	324.0	320.7	350.8	356.4	365.4	368.1	359.3	354.2
Less: Purchases by households and enterprises	554.6	591.1	684.1	724.5	829.3	897.6	901.5	950.5
Social transfers in kind - purchased market production	643.2	664.4	654.2	676.2	705.2	959.7	1,005.7	689.8
General government final consumption expenditure	200.8	201.3	206.7	209.9	212.8	220.6	220.9	210.6
By classification of the functions of government (COFOG)								
General public services	210.0	204.9	206.1	213.0	207.5	209.5	204.9	204.9
Defence	170.0	166.8	182.6	181.3	184.3	172.9	160.9	150.1
Public order and safety	192.2	188.7	189.5	194.1	197.7	197.3	190.4	190.3
Economic affairs	161.0	164.4	170.0	172.2	168.0	164.5	171.6	176.2
Environmental protection	403.9	405.8	388.8	402.7	445.2	447.3	420.5	402.6
Housing and community amenities	240.7	246.7	258.6	260.2	243.6	248.0	240.1	243.9
Health	290.6	305.1	317.8	330.6	363.7	447.2	474.2	379.8
Recreation, culture and religion	179.2	181.3	186.7	179.4	171.2	178.0	170.2	176.3
Education	183.7	183.6	184.7	185.9	186.5	186.6	185.2	189.0
Social protection	402.8	347.8	373.8	346.8	320.7	284.6	267.4	256.4
General government final consumption expenditure	200.8	201.3	206.7	209.9	212.8	220.6	220.9	210.6
By type of services								
Collective consumption expenditure	197.8	197.1	205.0	209.3	209.0	207.3	204.6	205.0
Individual consumption expenditure	205.0	206.9	209.7	211.7	217.9	235.6	238.8	217.7
General government final consumption expenditure	200.8	201.3	206.7	209.9	212.8	220.6	220.9	210.6

Table 43.2 Growth rate of composition of general government final consumption expenditure
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
	(Percent)							
By type of expenditure								
Compensation of employees	0.3	0.4	1.3	1.7	1.8	0.4	0.1	1.2
Consumption of fixed capital	1.0	3.2	3.5	1.6	1.3	0.8	1.2	0.8
Purchases from enterprises and abroad	5.8	-1.0	9.4	1.6	2.5	0.7	-2.4	-1.4
Less: Purchases by households and enterprises	9.4	6.6	15.7	5.9	14.5	8.2	0.4	5.4
Social transfers in kind - purchased market production	6.6	3.3	-1.5	3.4	4.3	36.1	4.8	-31.4
General government final consumption expenditure	2.2	0.3	2.7	1.6	1.4	3.7	0.1	-4.7
By classification of the functions of government (COFOG)								
General public services	0.4	-2.4	0.6	3.3	-2.6	1.0	-2.2	0.0
Defence	5.3	-1.9	9.5	-0.7	1.7	-6.2	-7.0	-6.7
Public order and safety	1.4	-1.8	0.4	2.5	1.8	-0.2	-3.5	-0.1
Economic affairs	-2.8	2.1	3.4	1.3	-2.4	-2.1	4.3	2.7
Environmental protection	6.0	0.5	-4.2	3.6	10.6	0.5	-6.0	-4.3
Housing and community amenities	4.2	2.5	4.8	0.6	-6.4	1.8	-3.2	1.6
Health	4.8	5.0	4.2	4.0	10.0	22.9	6.0	-19.9
Recreation, culture and religion	4.7	1.2	2.9	-3.9	-4.6	4.0	-4.4	3.6
Education	2.5	-0.1	0.6	0.6	0.3	0.1	-0.8	2.1
Social protection	0.7	-13.7	7.5	-7.2	-7.5	-11.3	-6.0	-4.1
General government final consumption expenditure	2.2	0.3	2.7	1.6	1.4	3.7	0.1	-4.7
By type of services								
Collective consumption expenditure	1.6	-0.4	4.0	2.1	-0.1	-0.8	-1.3	0.2
Individual consumption expenditure	2.7	0.9	1.4	1.0	2.9	8.1	1.4	-8.8
General government final consumption expenditure	2.2	0.3	2.7	1.6	1.4	3.7	0.1	-4.7

**Table 44 Gross capital formation
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	1,223,405	1,212,414	1,268,279	1,297,493	1,311,650	1,361,718	1,368,430	1,376,626
Private	524,010	526,729	561,595	571,075	555,311	559,878	566,998	589,091
Public	699,395	685,685	706,684	726,418	756,339	801,840	801,432	787,535
Equipment	2,236,496	2,366,763	2,462,590	2,514,892	2,323,718	2,443,403	2,691,401	2,740,596
Private	2,005,331	2,126,771	2,211,535	2,278,324	2,072,424	2,185,364	2,439,405	2,513,226
Public	231,165	239,992	251,055	236,568	251,294	258,039	251,996	227,370
Gross fixed capital formation	3,459,901	3,579,177	3,730,869	3,812,385	3,635,368	3,805,121	4,059,831	4,117,222
Private	2,529,341	2,653,500	2,773,130	2,849,399	2,627,735	2,745,242	3,006,403	3,102,317
Public	930,560	925,677	957,739	962,986	1,007,633	1,059,879	1,053,428	1,014,905
Change in inventories	-380,535	-26,962	398,424	209,730	85,035	835,432	781,402	-84,511
Gross capital formation	3,079,366	3,552,215	4,129,293	4,022,115	3,720,403	4,640,553	4,841,233	4,032,711

**Table 45 Gross capital formation
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	846,807	829,249	855,607	868,819	884,812	904,868	885,022	880,443
Private	365,590	362,390	380,325	382,539	374,711	372,362	366,820	376,966
Public	478,040	463,837	472,272	483,174	506,834	529,089	514,881	500,257
Equipment	1,559,793	1,621,990	1,692,106	1,729,422	1,587,318	1,644,115	1,721,661	1,757,666
Private	1,402,885	1,459,315	1,520,199	1,568,029	1,415,956	1,471,508	1,562,310	1,612,171
Public	158,061	163,885	173,159	162,620	172,461	173,723	160,524	146,785
Gross fixed capital formation	2,418,543	2,463,149	2,560,080	2,610,781	2,486,963	2,564,183	2,621,719	2,653,494
Private	1,768,279	1,821,464	1,900,267	1,950,187	1,792,248	1,845,330	1,930,375	1,990,433
Public	641,321	632,869	650,678	651,385	685,129	708,961	681,443	652,766
Change in inventories	-340,739	-68,590	258,420	117,390	127,759	289,706	238,095	-7,902
Gross capital formation	2,188,290	2,428,351	2,823,330	2,728,418	2,600,031	2,933,298	2,710,704	2,292,843

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 45.1 Gross capital formation
chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	178.6	174.9	180.4	183.2	186.6	190.8	186.6	185.6
Private	183.9	182.3	191.3	192.5	188.5	187.3	184.5	189.7
Public	173.5	168.4	171.4	175.4	184.0	192.0	186.9	181.6
Equipment	197.5	205.3	214.2	218.9	200.9	208.1	217.9	222.5
Private	207.8	216.1	225.1	232.2	209.7	217.9	231.4	238.8
Public	137.8	142.8	150.9	141.7	150.3	151.4	139.9	127.9
Gross fixed capital formation	191.3	194.8	202.5	206.5	196.7	202.8	207.4	209.9
Private	202.3	208.4	217.4	223.1	205.1	211.1	220.9	227.7
Public	164.3	162.2	166.7	166.9	175.6	181.7	174.6	167.3
Change in inventories								
Gross capital formation	166.8	185.1	215.2	207.9	198.1	223.5	206.6	174.7

Table 45.2 Growth rate of gross capital formation
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
	(Percent)							
Construction	8.0	-2.1	3.2	1.5	1.8	2.3	-2.2	-0.5
Private	1.1	-0.9	4.9	0.6	-2.0	-0.6	-1.5	2.8
Public	13.8	-3.0	1.8	2.3	4.9	4.4	-2.7	-2.8
Equipment	0.2	4.0	4.3	2.2	-8.2	3.6	4.7	2.1
Private	0.4	4.0	4.2	3.1	-9.7	3.9	6.2	3.2
Public	-1.7	3.7	5.7	-6.1	6.1	0.7	-7.6	-8.6
Gross fixed capital formation	2.9	1.8	3.9	2.0	-4.7	3.1	2.2	1.2
Private	0.6	3.0	4.3	2.6	-8.1	3.0	4.6	3.1
Public	9.6	-1.3	2.8	0.1	5.2	3.5	-3.9	-4.2
Change in inventories								
Gross capital formation	-3.8	11.0	16.3	-3.4	-4.7	12.8	-7.6	-15.4

**Table 46 Gross fixed capital formation by type of capital goods
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	1,223,405	1,212,414	1,268,279	1,297,493	1,311,650	1,361,718	1,368,430	1,376,626
Private	524,010	526,729	561,595	571,075	555,311	559,878	566,998	589,091
Dwellings	293,168	297,375	313,067	309,458	286,823	281,578	297,315	306,492
Non-dwelling construction	147,773	150,369	154,736	165,039	156,228	160,442	184,109	194,655
Other construction	65,225	61,007	74,370	77,657	95,683	102,736	70,479	73,124
Costs of ownership transfer	17,844	17,978	19,422	18,921	16,577	15,122	15,095	14,820
Public	699,395	685,685	706,684	726,418	756,339	801,840	801,432	787,535
Dwellings	16,185	15,368	15,166	17,374	11,695	13,791	16,311	18,335
Non-dwelling construction	128,549	133,582	134,742	139,027	129,065	133,322	128,355	132,714
Other construction	554,660	536,735	556,776	570,017	615,579	654,727	656,766	636,486
Machinery and other equipment	2,236,496	2,366,763	2,462,590	2,514,892	2,323,718	2,443,403	2,691,401	2,740,596
Transport equipment	837,349	937,170	1,004,674	1,026,667	912,477	865,252	980,217	991,537
Road motor equipment	731,921	799,668	867,410	890,031	798,055	755,218	860,769	859,015
Other vehicles	105,428	137,502	137,264	136,636	114,422	110,034	119,448	132,522
Machinery and equipment	1,399,147	1,429,593	1,457,916	1,488,225	1,411,241	1,578,151	1,711,184	1,749,059
Industrial machinery	757,497	760,681	778,924	792,588	722,431	810,581	862,531	826,095
Office equipment	641,650	668,912	678,992	695,637	688,810	767,570	848,653	922,964
Gross fixed capital formation	3,459,901	3,579,177	3,730,869	3,812,385	3,635,368	3,805,121	4,059,831	4,117,222

**Table 47 Gross fixed capital formation by type of capital goods
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	846,807	829,249	855,607	868,819	884,812	904,868	885,022	880,443
Private	365,590	362,390	380,325	382,539	374,711	372,362	366,820	376,966
Dwellings	203,129	203,346	210,722	204,554	190,819	184,775	190,077	193,937
Non-dwelling construction	103,664	104,006	105,438	108,762	103,875	104,954	116,899	122,167
Other construction	43,317	39,830	47,695	52,784	65,541	69,416	46,417	47,771
Costs of ownership transfer	14,497	14,384	15,315	15,016	13,223	11,887	11,387	10,855
Public	478,040	463,837	472,272	483,174	506,834	529,089	514,881	500,257
Dwellings	10,950	10,376	10,083	11,362	8,084	9,465	10,715	11,898
Non-dwelling construction	85,783	88,792	88,713	88,850	87,026	87,371	81,398	82,764
Other construction	381,412	364,606	373,452	382,968	412,151	432,707	423,295	406,075
Machinery and other equipment	1,559,793	1,621,990	1,692,106	1,729,422	1,587,318	1,644,115	1,721,661	1,757,666
Transport equipment	666,776	754,905	810,671	824,408	725,905	670,184	724,811	729,760
Road motor equipment	565,417	630,559	677,426	696,693	619,141	567,273	623,132	608,709
Other vehicles	101,403	126,746	135,774	128,211	106,070	103,117	99,520	121,696
Machinery and equipment	893,733	880,003	900,367	923,388	871,284	965,861	993,229	1,022,014
Industrial machinery	499,358	479,014	491,664	509,460	461,497	513,637	517,941	491,264
Office equipment	390,521	396,221	403,917	409,321	403,815	445,772	467,798	519,622
Gross fixed capital formation	2,418,543	2,463,149	2,560,080	2,610,781	2,486,963	2,564,183	2,621,719	2,653,494

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

Table 47.1 Gross fixed capital formation by type of capital goods
chain indices (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Construction	178.6	174.8	180.4	183.2	186.6	190.8	186.6	185.6
Private	183.9	182.3	191.3	192.5	188.5	187.3	184.5	189.7
Dwellings	195.2	195.4	202.5	196.6	183.4	177.6	182.7	186.4
Non-dwelling construction	161.5	162.0	164.2	169.4	161.8	163.5	182.1	190.3
Other construction	190.5	175.2	209.8	232.2	288.3	305.4	204.2	210.1
Costs of ownership transfer	186.7	185.2	197.2	193.4	170.3	153.1	146.6	139.8
Public	173.5	168.4	171.4	175.4	184.0	192.0	186.9	181.6
Dwellings	135.5	128.4	124.8	140.6	100.0	117.1	132.6	147.3
Non-dwelling construction	233.4	241.6	241.4	241.8	236.8	237.8	221.5	225.2
Other construction	165.4	158.1	161.9	166.0	178.7	187.6	183.5	176.0
Machinery and other equipment	197.5	205.3	214.2	218.9	200.9	208.1	217.9	222.5
Transport equipment	294.5	333.4	358.1	364.1	320.6	296.0	320.2	322.3
Road motor equipment	318.7	355.4	381.8	392.6	348.9	319.7	351.2	343.1
Other vehicles	207.1	258.9	277.3	261.9	216.6	210.6	203.3	248.5
Machinery and equipment	158.6	156.2	159.8	163.9	154.6	171.4	176.2	181.4
Industrial machinery	154.1	147.8	151.7	157.2	142.4	158.5	159.8	151.6
Office equipment	163.1	165.4	168.7	170.9	168.6	186.1	195.3	217.0
Gross fixed capital formation	191.3	194.8	202.5	206.5	196.7	202.8	207.4	209.9

Table 47.2 Growth rate of gross fixed capital formation by type of capital goods
chain volume measures (reference year = 2002)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
(Percent)								
Construction	8.0	-2.1	3.2	1.5	1.8	2.3	-2.2	-0.5
Private	1.1	-0.9	4.9	0.6	-2.0	-0.6	-1.5	2.8
Dwellings	2.3	0.1	3.6	-2.9	-6.7	-3.2	2.9	2.0
Non-dwelling construction	-4.1	0.3	1.4	3.2	-4.5	1.0	11.4	4.5
Other construction	8.0	-8.0	19.7	10.7	24.2	5.9	-33.1	2.9
Costs of ownership transfer	5.4	-0.8	6.5	-2.0	-11.9	-10.1	-4.2	-4.7
Public	13.8	-3.0	1.8	2.3	4.9	4.4	-2.7	-2.8
Dwellings	-12.1	-5.2	-2.8	12.7	-28.9	17.1	13.2	11.0
Non-dwelling construction	-10.9	3.5	-0.1	0.2	-2.1	0.4	-6.8	1.7
Other construction	22.9	-4.4	2.4	2.5	7.6	5.0	-2.2	-4.1
Machinery and other equipment	0.2	4.0	4.3	2.2	-8.2	3.6	4.7	2.1
Transport equipment	-7.2	13.2	7.4	1.7	-11.9	-7.7	8.2	0.7
Road motor equipment	-5.3	11.5	7.4	2.8	-11.1	-8.4	9.8	-2.3
Other vehicles	-18.6	25.0	7.1	-5.6	-17.3	-2.8	-3.5	22.3
Machinery and equipment	5.1	-1.5	2.3	2.6	-5.6	10.9	2.8	2.9
Industrial machinery	2.2	-4.1	2.6	3.6	-9.4	11.3	0.8	-5.2
Office equipment	8.4	1.5	1.9	1.3	-1.3	10.4	4.9	11.1
Gross fixed capital formation	2.9	1.8	3.9	2.0	-4.7	3.1	2.2	1.2

**Table 48 Gross fixed capital formation by type of assets
at current market prices**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Tangible fixed assets	3,335,363	3,442,805	3,586,677	3,677,927	3,503,091	3,655,364	3,875,481	3,941,000
<i>Dwellings</i>	309,353	312,743	328,233	326,832	298,518	295,369	313,626	324,827
<i>Other buildings and structures</i>	821,420	811,325	843,312	879,497	933,425	981,152	945,637	957,497
<i>Machinery and equipment</i>	2,198,316	2,311,151	2,404,830	2,459,968	2,261,401	2,368,091	2,602,300	2,644,277
<i>Cultivated assets</i>	6,274	7,586	10,302	11,630	9,747	10,752	13,918	14,399
Intangible fixed assets	106,694	118,393	124,770	115,537	115,700	134,635	169,255	161,402
<i>Mineral exploration</i>	63,234	68,805	75,725	70,666	60,363	66,584	89,414	74,918
<i>Computer software</i>	43,460	49,588	49,045	44,871	55,337	68,051	79,841	86,484
Costs of ownership transfer	17,844	17,978	19,422	18,921	16,577	15,122	15,095	14,820
Gross fixed capital formation	3,459,901	3,579,177	3,730,869	3,812,385	3,635,368	3,805,121	4,059,831	4,117,222

**Table 49 Gross fixed capital formation by type of assets
chain volume measures (reference year = 2002)**

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Tangible fixed assets	2,326,421	2,366,570	2,461,180	2,509,530	2,382,357	2,451,054	2,495,670	2,532,162
<i>Dwellings</i>	213,871	213,501	220,569	215,702	198,680	193,964	200,466	205,476
<i>Other buildings and structures</i>	631,292	617,836	636,865	652,110	694,156	719,998	680,406	682,263
<i>Machinery and equipment</i>	1,463,364	1,512,762	1,578,654	1,615,692	1,474,316	1,521,698	1,591,085	1,619,301
<i>Cultivated assets</i>	32,424	39,647	48,145	53,261	44,868	47,971	59,601	60,031
Intangible fixed assets	81,313	86,183	87,676	90,351	96,480	107,768	123,359	118,435
<i>Mineral exploration</i>	50,015	50,653	52,354	57,377	54,405	57,937	71,144	58,757
<i>Computer software</i>	32,759	36,967	36,773	34,181	42,939	50,402	53,587	59,501
Costs of ownership transfer	14,497	14,384	15,315	15,016	13,223	11,887	11,387	10,855
Gross fixed capital formation	2,418,543	2,463,149	2,560,080	2,610,781	2,486,963	2,564,183	2,621,719	2,653,494

Note: Chain volume series are not additive. The sum of the components will thus not be equal to the shown totals.

**Table 49.1 Gross fixed capital formation by type of assets
chain indices (reference year = 2002)**

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Tangible fixed assets	186.4	189.6	197.2	201.1	190.9	196.4	200.0	202.9
<i>Dwellings</i>	190.7	190.4	196.7	192.3	177.2	173.0	178.8	183.2
<i>Other buildings and structures</i>	180.0	176.1	181.6	185.9	197.9	205.3	194.0	194.5
<i>Machinery and equipment</i>	187.9	194.2	202.7	207.4	189.3	195.4	204.3	207.9
<i>Cultivated assets</i>	515.0	629.7	764.7	846.0	712.7	762.0	946.7	953.5
Intangible fixed assets	972.8	1,031.0	1,048.9	1,080.9	1,154.2	1,289.3	1,475.8	1,416.9
<i>Mineral exploration</i>	6,011.4	6,088.1	6,292.5	6,896.3	6,539.1	6,963.6	8,551.0	7,062.1
<i>Computer software</i>	435.2	491.1	488.5	454.1	570.5	669.6	711.9	790.5
Costs of ownership transfer	186.7	185.3	197.2	193.4	170.3	153.1	146.7	139.8
Gross fixed capital formation	191.3	194.8	202.5	206.5	196.7	202.8	207.4	209.9

**Table 49.2 Growth rate of gross fixed capital formation by type of assets
chain volume measures (reference year = 2002)**

	(Percent)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Tangible fixed assets	2.4	1.7	4.0	2.0	-5.1	2.9	1.8	1.5
<i>Dwellings</i>	1.4	-0.2	3.3	-2.2	-7.9	-2.4	3.4	2.5
<i>Other buildings and structures</i>	3.6	-2.1	3.1	2.4	6.4	3.7	-5.5	0.3
<i>Machinery and equipment</i>	2.0	3.4	4.4	2.3	-8.8	3.2	4.6	1.8
<i>Cultivated assets</i>	31.2	22.3	21.4	10.6	-15.8	6.9	24.2	0.7
Intangible fixed assets	22.4	6.0	1.7	3.1	6.8	11.7	14.5	-4.0
<i>Mineral exploration</i>	80.8	1.3	3.4	9.6	-5.2	6.5	22.8	-17.4
<i>Computer software</i>	-17.8	12.8	-0.5	-7.0	25.6	17.4	6.3	11.0
Costs of ownership transfer	5.4	-0.8	6.5	-2.0	-11.9	-10.1	-4.2	-4.7
Gross fixed capital formation	2.9	1.8	3.9	2.0	-4.7	3.1	2.2	1.2

National income

Table 50 Distribution of the national income
at current market prices

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Compensation of employees	4,711,391	4,855,252	5,044,149	5,170,262	5,006,559	5,065,907	5,409,628	5,618,954
Wages and salaries	4,141,598	4,252,535	4,409,000	4,481,694	4,325,433	4,358,833	4,640,593	4,770,633
Employers' social contributions	569,793	602,717	635,149	688,568	681,126	707,074	769,035	848,321
Employers' actual social contributions	176,570	182,437	194,909	203,300	185,576	171,382	186,428	222,039
Employers' imputed social contributions	393,223	420,280	440,240	485,268	495,550	535,692	582,607	626,282
Households and NPISHs mixed income and operating surplus	2,741,607	2,970,159	3,137,568	3,418,171	3,098,905	2,976,431	3,355,708	3,979,089
Households and NPISHs property income receivable	1,048,132	1,036,818	1,102,916	1,149,120	1,093,672	1,120,805	1,203,039	1,292,224
Interest	252,739	236,594	239,911	256,541	235,613	209,267	218,836	281,381
Distributed income of corporations	539,754	533,305	580,027	595,898	544,871	607,307	670,187	679,469
Investment income disbursements	173,698	184,944	198,072	210,150	224,484	214,464	221,576	234,941
Rent	81,941	81,975	84,906	86,531	88,704	89,767	92,440	96,433
General government property income receivable	221,074	235,433	253,472	255,136	212,675	241,841	235,331	231,195
Interest	44,193	44,185	42,500	42,040	39,035	35,839	44,479	41,233
Distributed income of corporations	121,228	130,150	145,396	154,281	115,037	145,814	128,931	118,508
Investment income disbursements	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Rent	12,247	15,716	18,038	9,094	12,756	12,464	13,397	18,030
Appropriated corporation profit	1,771,393	2,083,544	2,191,815	2,274,106	2,062,652	2,335,131	2,653,016	2,208,569
Savings of corporations	1,286,907	1,573,381	1,575,165	1,647,327	1,482,862	1,723,212	1,985,750	1,567,100
Corporate current taxes on income	644,309	649,281	748,882	750,435	634,175	671,222	801,896	803,232
Corporate transfer payments	-159,823	-139,118	-132,232	-123,656	-54,385	-59,303	-134,630	-161,763
Received by general government	4,366	22,475	20,781	20,584	26,859	39,953	37,890	34,438
Received by households and NPISHs	23,322	23,680	25,827	25,840	24,144	28,736	29,224	29,130
Received by Row (net)	-187,511	-185,273	-178,840	-170,080	-105,388	-127,992	-201,744	-225,331
Households and NPISHs property income payable	319,842	329,753	345,612	364,406	352,852	352,303	353,876	380,341
Interest	237,901	247,778	260,706	277,875	264,148	262,536	261,436	283,908
Rent	81,941	81,975	84,906	86,531	88,704	89,767	92,440	96,433
General government property income payable	210,711	211,771	221,909	232,209	224,225	244,246	245,924	282,318
Interest	167,300	166,382	174,366	182,481	178,373	196,519	197,398	228,892
Investment income disbursements	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Rent	5	7	5	7	5	3	2	2
Taxes on production and imports less subsidies	1,453,542	1,526,468	1,644,282	1,685,533	1,442,566	1,440,174	1,437,785	1,669,558
Net National Income (NNI)	11,416,586	12,166,150	12,806,681	13,355,713	12,339,952	12,583,740	13,694,707	14,336,930
Plus: Consumption of fixed capital	2,488,386	2,628,663	2,775,404	2,912,542	2,974,143	3,040,598	3,129,572	3,168,244
Gross National Income, (GNI)^{1/}	13,904,972	14,794,813	15,582,085	16,268,255	15,314,095	15,624,338	16,824,279	17,505,174
Less: Primary income from the rest of the world, net	-685,365	-693,851	-791,255	-620,914	-347,199	-562,295	-553,723	-449,493
Gross Domestic Product (GDP)	14,590,337	15,488,664	16,373,340	16,889,169	15,661,294	16,186,633	17,378,002	17,954,667

Note: ^{1/} GNI = GNP (Gross National Products)

Table 51 Savings and gross capital formation

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Private sector	2,529,341	2,653,500	2,773,130	2,849,399	2,627,735	2,745,242	3,006,403	3,102,317
Public sector	930,560	925,677	957,739	962,986	1,007,633	1,059,879	1,053,428	1,014,905
Change in inventories	-380,535	-26,962	398,424	209,730	85,035	835,432	781,402	-84,511
Gross domestic capital formation	3,079,366	3,552,215	4,129,293	4,022,115	3,720,403	4,640,553	4,841,233	4,032,711
Net savings	1,899,923	2,318,468	2,412,537	2,441,957	1,434,463	1,414,375	1,451,943	1,378,349
Private sector	1,837,751	2,234,486	2,281,901	2,326,907	2,236,250	2,482,428	1,900,348	1,233,305
Households and NPISHs	760,266	898,033	910,530	932,827	932,945	998,717	217,097	146,446
Corporations and cooperatives	1,077,485	1,336,453	1,371,371	1,394,080	1,303,305	1,483,711	1,683,251	1,086,859
Public sector	62,172	83,982	130,636	115,050	-801,787	-1,068,053	-448,405	145,044
General government	-147,250	-152,946	-73,158	-138,197	-981,344	-1,307,554	-750,904	-335,197
Public corporations and government enterprises	209,422	236,928	203,794	253,247	179,557	239,501	302,499	480,241
Provision for consumption of fixed capital	2,488,386	2,628,663	2,775,404	2,912,542	2,974,143	3,040,598	3,129,572	3,168,244
Less: Statistical discrepancy	-225,673	-95,682	144,669	150,952	33,514	160,293	342,489	247,159
Gross savings	4,613,982	5,042,813	5,043,272	5,203,547	4,375,092	4,294,680	4,239,026	4,299,434
Less: Surplus of the nation on current account	1,534,616	1,490,598	913,979	1,181,432	654,689	-345,873	-602,207	266,723
Finance of gross domestic capital formation	3,079,366	3,552,215	4,129,293	4,022,115	3,720,403	4,640,553	4,841,233	4,032,711

Table 52 General government income account

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Income								
Primary income receivable	2,016,359	2,110,215	2,266,982	2,310,483	2,056,471	2,132,706	2,216,068	2,327,329
Gross operation surplus	273,413	286,657	300,641	310,087	317,952	325,420	334,513	338,871
Taxes on production and imports	1,521,872	1,588,125	1,712,869	1,745,260	1,525,844	1,565,445	1,646,224	1,757,263
Property income	221,074	235,433	253,472	255,136	212,675	241,841	235,331	231,195
Interest	44,193	44,185	42,500	42,040	39,035	35,839	44,479	41,233
Dividends	121,228	130,150	145,396	154,281	115,037	145,814	128,931	118,508
Investment income payable on pension entitlements ^{1/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Rent	12,247	15,716	18,038	9,094	12,756	12,464	13,397	18,030
Secondary income receivable	2,206,884	2,296,417	2,395,181	2,477,684	2,275,015	2,367,963	2,471,599	2,576,264
Current taxes on income, wealth, etc.	945,045	940,953	1,053,244	1,082,561	947,276	975,264	1,161,921	1,186,397
Taxes on income	908,726	897,742	1,004,085	1,032,703	897,716	925,438	1,106,213	1,131,184
Other current taxes	36,319	43,211	49,159	49,858	49,560	49,826	55,708	55,213
Social contributions	510,514	542,202	573,014	615,765	590,017	599,282	656,977	751,459
Other current transfers	751,325	813,262	768,923	779,358	737,722	793,417	652,701	638,408
Non-life insurance claims	1	1	-	17	17	14	16	16
Current transfers within general government	701,203	762,526	710,498	724,119	682,805	733,736	601,475	588,222
Current international cooperation	3,009	2,572	3,180	2,673	3,255	4,509	2,173	3,067
Miscellaneous current transfers	47,112	48,163	55,245	52,549	51,645	55,158	49,037	47,103
Total income receivable	4,223,243	4,406,632	4,662,163	4,788,167	4,331,486	4,500,669	4,687,667	4,903,593
Use of income								
Primary income uses	279,041	273,428	290,496	291,936	307,503	369,517	454,363	370,023
Property income	210,711	211,771	221,909	232,209	224,225	244,246	245,924	282,318
Interest	167,300	166,382	174,366	182,481	178,373	196,519	197,398	228,892
Investment income payable on pension entitlements ^{1/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Rent	5	7	5	7	5	3	2	2
Subsidies	68,330	61,657	68,587	59,727	83,278	125,271	208,439	87,705
Secondary income uses	1,222,223	1,330,631	1,346,773	1,439,699	1,783,259	2,058,074	1,469,665	1,417,683
Social benefits other than social transfers in kind	421,938	459,179	526,108	578,218	652,269	679,948	713,790	756,098
Social security benefits in cash	36,394	38,769	45,333	51,242	87,141	83,206	74,262	79,996
Other social insurance benefits	294,198	316,394	335,134	365,699	388,673	409,690	451,224	480,743
Social assistance benefits in cash	91,346	104,016	145,641	161,277	176,455	187,052	188,304	195,359
Other current transfers	800,285	871,452	820,665	861,481	1,130,990	1,378,126	755,875	661,585
Net non-life insurance premiums	184	251	279	296	306	364	386	377
Current transfers within general government	701,203	762,526	710,498	724,119	682,805	733,736	601,475	588,222
Current international cooperation	2,548	1,985	2,008	1,430	1,480	1,345	1,611	1,661
Miscellaneous current transfers	96,350	106,690	107,880	135,636	446,399	642,681	152,403	71,325
Total income payable	1,501,264	1,604,059	1,637,269	1,731,635	2,090,762	2,427,591	1,924,028	1,787,706
Gross disposable income	2,721,979	2,802,573	3,024,894	3,056,532	2,240,724	2,073,078	2,763,639	3,115,887
Final consumption expenditure	2,460,686	2,524,403	2,648,220	2,730,872	2,786,909	2,951,660	3,079,209	2,983,435
Adjustment for the change in pension entitlement	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778
Consumption of fixed capital	273,413	286,657	300,641	310,087	317,952	325,420	334,513	338,871
Net saving	-147,250	-152,946	-73,158	-138,197	-981,344	-1,307,554	-750,904	-335,197
Total use of gross disposable income	2,721,979	2,802,573	3,024,894	3,056,532	2,240,724	2,073,078	2,763,639	3,115,887

Note: - is zero or rounded to zero

^{1/} Governmental funds consist of social security fund (In the case of child allowance and old age), Bangkok Metropolitan Administration pension fund and local administration pension fund.

Table 53 Households and NPISHs income account

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Income								
Primary income receivable	8,695,314	9,067,594	9,493,280	9,947,256	9,410,300	9,388,147	10,199,963	11,124,717
Compensation of employees	4,711,391	4,855,252	5,044,149	5,170,262	5,006,559	5,065,907	5,409,628	5,618,954
Gross mixed income and operating surplus	2,935,791	3,175,524	3,346,215	3,627,874	3,310,069	3,201,435	3,587,296	4,213,539
Property income receivable	1,048,132	1,036,818	1,102,916	1,149,120	1,093,672	1,120,805	1,203,039	1,292,224
Secondary income receivable	656,654	736,624	817,791	941,764	1,337,717	1,603,078	1,174,038	1,160,538
Social benefits other than social transfers in kind	421,938	459,179	526,108	578,218	652,269	679,948	713,790	756,098
Other current transfers	234,716	277,445	291,683	363,546	685,448	923,130	460,248	404,440
<i>from corporate</i>	23,322	23,680	25,827	25,840	24,144	28,736	29,224	29,130
<i>from general government</i>	68,835	95,688	93,017	120,707	435,305	640,618	150,384	69,082
<i>from the rest of the world</i>	142,559	158,077	172,839	216,999	225,999	253,776	280,640	306,228
Total income receivable	9,351,968	9,804,218	10,311,071	10,889,020	10,748,017	10,991,225	11,374,001	12,285,255
Use of income								
Primary income payable	319,842	329,753	345,612	364,406	352,852	352,303	353,876	380,341
Property income payable	319,842	329,753	345,612	364,406	352,852	352,303	353,876	380,341
Secondary income payable	916,253	936,792	990,788	1,129,470	1,060,322	1,062,911	1,189,961	1,332,200
Current taxes on income, wealth, etc.	300,736	291,672	304,362	332,126	313,101	304,042	360,025	383,165
Net social security contribution	510,514	542,202	573,014	615,765	590,017	599,282	656,977	751,459
Other current transfers	105,003	102,918	113,412	181,579	157,204	159,587	172,959	197,576
<i>to general government</i>	15,048	14,436	19,322	16,757	13,403	12,792	8,758	10,061
<i>to the rest of the world</i>	89,955	88,482	94,090	164,822	143,801	146,795	164,201	187,515
Total income payable	1,236,095	1,266,545	1,336,400	1,493,876	1,413,174	1,415,214	1,543,837	1,712,541
Gross Disposable income	8,115,873	8,537,673	8,974,671	9,395,144	9,334,843	9,576,011	9,830,164	10,572,714
Final consumption expenditure	7,296,553	7,578,734	8,004,685	8,406,384	8,307,941	8,455,842	9,482,300	10,320,596
Less : Adjustment for the change in pension entitlement ^{1/}	135,130	144,459	149,191	153,770	117,207	103,552	100,821	128,778
Consumption of fixed capital	194,184	205,365	208,647	209,703	211,164	225,004	231,588	234,450
Net saving	760,266	898,033	910,530	932,827	932,945	998,717	217,097	146,446
Total use of gross disposable income	8,115,873	8,537,673	8,974,671	9,395,144	9,334,843	9,576,011	9,830,164	10,572,714
Per capita net disposable income (Baht)	115,946	121,109	126,847	132,517	131,259	134,184	137,415	147,603
Per capita final consumption expenditure (Baht)	106,797	110,156	115,830	121,278	119,523	121,339	135,750	147,351
Per capita net saving (Baht)	11,128	13,053	13,176	13,458	13,422	14,331	3,108	2,091
Population (1,000 Heads)	68,322	68,800	69,107	69,315	69,509	69,688	69,851	70,041

Note: ^{1/} Governmental funds consist of social security fund (In the case of child allowance and old age), private teacher aid fund, Bangkok Metropolitan Administration pension fund and local administration pension fund.

Table 54 Compensation of employees

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Domestic	4,689,364	4,845,989	5,040,726	5,245,584	5,076,977	5,125,009	5,440,021	5,646,239
Agriculture	189,600	196,631	202,856	208,436	208,107	217,191	232,111	238,058
Agriculture, forestry and fishing	189,600	196,631	202,856	208,436	208,107	217,191	232,111	238,058
Non-Agriculture	4,499,764	4,649,358	4,837,870	5,037,148	4,868,870	4,907,818	5,207,910	5,408,181
Industrial	1,387,537	1,413,015	1,468,439	1,497,751	1,418,137	1,433,734	1,563,265	1,566,219
Mining and quarrying	28,541	29,309	31,087	31,042	27,611	31,541	34,153	33,697
Manufacturing	1,250,049	1,267,083	1,312,854	1,332,154	1,270,924	1,284,728	1,400,758	1,399,138
Electricity, gas, steam and air conditioning supply	98,177	104,875	112,452	120,745	106,433	103,698	113,775	117,881
Water supply; sewerage, waste management and remediation activities	10,770	11,748	12,046	13,810	13,169	13,767	14,579	15,503
Services	3,112,227	3,236,343	3,369,431	3,539,397	3,450,733	3,474,084	3,644,645	3,841,962
Construction	204,327	200,897	202,241	205,893	207,623	208,277	214,525	227,075
Wholesale and retail trade; repair of motor vehicles and motorcycles	449,858	474,971	489,851	522,165	510,338	507,652	549,465	584,940
Transportation and storage	171,335	182,890	191,887	203,935	167,867	159,309	170,680	181,384
Accommodation and food service activities	146,888	166,060	182,710	199,646	132,215	110,870	148,576	191,514
Information and communication	73,325	74,004	75,570	83,282	76,925	77,800	77,430	77,327
Financial and insurance activities	319,428	326,894	341,666	365,190	359,201	366,363	362,264	376,777
Real estate activities	50,840	53,029	54,713	57,435	58,616	57,265	59,212	61,980
Professional, scientific and technical activities	74,718	76,717	79,715	80,045	78,201	76,364	78,345	81,952
Administrative and support service activities	59,561	61,426	64,130	66,575	54,663	52,021	55,720	60,560
Public administration and defence; compulsory social security	653,625	678,517	705,506	732,278	760,539	782,100	797,385	821,934
Education	572,680	586,792	613,999	638,580	650,184	665,026	689,516	708,455
Human health and social work activities	259,597	275,474	286,333	300,487	312,297	330,737	357,139	379,649
Arts, entertainment and recreation	11,764	12,494	13,155	13,273	12,336	11,638	12,247	12,307
Other service activities	36,178	38,755	40,585	42,547	40,873	40,098	41,844	43,914
Activities of households as employers	28,103	27,423	27,370	28,066	28,855	28,564	30,297	32,194
The rest of the world	22,027	9,263	3,423	-75,322	-70,418	-59,102	-30,393	-27,285
Receive	78,732	69,943	68,310	36,434	32,241	36,369	32,286	31,261
Payment	56,705	60,680	64,887	111,756	102,659	95,471	62,679	58,546
Total	4,711,391	4,855,252	5,044,149	5,170,262	5,006,559	5,065,907	5,409,628	5,618,954

Table 55 Households and NPISHs mixed income and operating surplus

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Farm income	751,775	782,799	809,540	824,700	822,063	847,503	913,381	930,713
Other	1,989,832	2,187,360	2,328,028	2,593,471	2,276,842	2,128,928	2,442,327	3,048,376
Total	2,741,607	2,970,159	3,137,568	3,418,171	3,098,905	2,976,431	3,355,708	3,979,089

Table 56 Households and NPISHs property income receivable

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Rent	81,941	81,975	84,906	86,531	88,704	89,767	92,440	96,433
Actual rent	16,051	16,053	16,626	16,945	17,253	17,525	17,746	18,570
Imputed rent	65,890	65,922	68,280	69,586	71,451	72,242	74,694	77,863
Interest	252,739	236,594	239,911	256,541	235,613	209,267	218,836	281,381
Interest paid by banks	220,082	208,606	208,751	222,234	203,550	175,653	181,642	239,103
Government bond interest	13,095	7,456	9,120	8,149	8,136	9,686	11,584	13,970
Interest received from the rest of the world	591	959	1,641	4,113	2,872	3,373	3,177	3,166
Others	18,971	19,573	20,399	22,045	21,055	20,555	22,433	25,142
Distributed income of corporations	539,754	533,305	580,027	595,898	544,871	607,307	670,187	679,469
Dividends from private corporations	460,236	445,691	487,100	498,972	455,900	511,760	568,556	575,625
Dividends from cooperatives	69,151	74,817	80,259	83,924	82,799	84,889	89,422	85,714
Dividends from public corporations	10,367	12,797	12,668	13,002	6,172	10,658	12,209	18,130
Investment income disbursements	173,698	184,944	198,072	210,150	224,484	214,464	221,576	234,941
Beneficiaries from provident fund	19,189	18,537	19,105	20,487	16,622	13,949	15,160	20,618
Beneficiaries from government pension fund	21,851	21,793	23,068	23,733	23,507	24,346	28,281	29,703
Investment income payable on pension entitlement ^{1/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Investment income attributable to insurances policy holder	89,252	99,232	108,361	116,209	138,508	128,445	129,611	131,196
Total	1,048,132	1,036,818	1,102,916	1,149,120	1,093,672	1,120,805	1,203,039	1,292,224

Note: ^{1/} Governmental funds consist of social security fund (In the case of child allowance and old age), private teacher aid fund, Bangkok Metropolitan Administration pension fund and local administration pension fund.

Table 57 Household and NPISHs property income payable

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Interest	237,901	247,778	260,706	277,875	264,148	262,536	261,436	283,908
Interest paid to banks	128,885	131,835	139,581	154,636	142,071	142,240	144,813	166,838
Pawnshop interest	6,515	6,841	6,718	6,270	5,980	5,538	5,612	6,128
Interest on loan from life insurance policy	1,201	1,344	1,521	1,736	1,710	1,617	1,577	1,635
Interest paid to cooperatives	94,874	99,749	105,234	107,928	106,973	104,856	100,220	101,085
Interest paid to the rest of the world	536	520	495	476	359	653	1,097	1,363
Others	5,890	7,489	7,157	6,829	7,055	7,632	8,117	6,859
Rent	81,941	81,975	84,906	86,531	88,704	89,767	92,440	96,433
Total	319,842	329,753	345,612	364,406	352,852	352,303	353,876	380,341

Table 58 Saving of corporations

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Saving of private corporation	1,066,605	1,325,151	1,360,048	1,381,697	1,293,740	1,474,498	1,675,974	1,078,345
Saving of public corporation and government enterprises	209,422	236,928	203,794	253,247	179,557	239,501	302,499	480,241
Saving of cooperatives	10,880	11,302	11,323	12,383	9,565	9,213	7,277	8,514
Total	1,286,907	1,573,381	1,575,165	1,647,327	1,482,862	1,723,212	1,985,750	1,567,100

Table 59 Corporate transfer payments received by household and NPISHs

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Transfer from private corporation	20,835	20,682	22,226	21,275	20,200	23,539	24,473	24,740
Transfer from public corporation and government enterprises	1,982	2,451	2,583	2,990	1,781	2,684	2,484	2,105
Transfer from cooperatives	505	547	1,018	1,575	2,163	2,513	2,267	2,285
Total	23,322	23,680	25,827	25,840	24,144	28,736	29,224	29,130

Table 60 Taxes

	(Million Baht)							
	2016	2017	2018	2019	2020	2021r	2022r	2023p
Taxes								
Current taxes on income, wealth, etc.	945,045	940,953	1,053,244	1,082,561	947,276	975,264	1,161,921	1,186,397
Taxes on income	908,726	897,742	1,004,085	1,032,703	897,716	925,438	1,106,213	1,131,184
From corporation	623,236	622,758	717,834	717,422	601,970	639,447	767,066	770,869
From households	285,490	274,984	286,251	315,281	295,746	285,991	339,147	360,315
Other current taxes	36,319	43,211	49,159	49,858	49,560	49,826	55,708	55,213
From corporation	21,073	26,523	31,048	33,013	32,205	31,775	34,830	32,363
From households	15,246	16,688	18,111	16,845	17,355	18,051	20,878	22,850
Taxes on production and imports	1,521,872	1,588,125	1,712,869	1,745,260	1,525,844	1,565,445	1,646,224	1,757,263
Taxes on products	1,422,778	1,489,791	1,607,673	1,640,638	1,464,830	1,504,491	1,558,537	1,662,037
Value added type taxes (VAT) ^{1/}	557,872	594,433	637,347	643,313	599,416	625,470	718,013	720,941
Taxes and duties on imports excluding VAT	194,093	206,278	212,773	217,757	158,465	167,511	191,099	192,580
Import duties	103,471	103,506	107,067	104,008	90,708	102,067	111,597	109,048
Taxes on imports excluding VAT and duties	90,622	102,772	105,706	113,749	67,757	65,444	79,502	83,532
Export taxes	83	103	170	202	158	237	63	45
Taxes on products except VAT, import and export taxes	670,730	688,977	757,383	779,366	706,791	711,273	649,362	748,471
Other taxes on production	99,094	98,334	105,196	104,622	61,014	60,954	87,687	95,226
Total taxes	2,466,917	2,529,078	2,766,113	2,827,821	2,473,120	2,540,709	2,808,145	2,943,660
Subsidies								
Subsidies on products	44,183	37,497	43,835	35,076	54,872	96,129	180,947	60,289
Import subsidies	962	1,272	1,742	944	1,766	3,650	9,665	2,687
Export subsidies	8,987	7,912	9,293	8,294	6,646	6,366	8,192	9,334
Other subsidies on products	34,234	28,313	32,800	25,838	46,460	86,113	163,090	48,268
Other subsidies on production	24,147	24,160	24,752	24,651	28,406	29,142	27,492	27,416
Total subsidies	68,330	61,657	68,587	59,727	83,278	125,271	208,439	87,705
Total taxes on production and imports less subsidies	1,453,542	1,526,468	1,644,282	1,685,533	1,442,566	1,440,174	1,437,785	1,669,558

Note: ^{1/} VAT originated from 1992

Table 61 Social contributions and social transfers

(Million Baht)

	2016	2017	2018	2019	2020	2021r	2022r	2023p
Social contributions	510,514	542,202	573,014	615,765	590,017	599,282	656,977	751,459
Employers' actual social contributions ^{1/}	80,297	84,466	87,621	92,019	70,904	61,777	70,720	100,843
Employers' imputed social contributions	294,198	316,394	335,134	365,699	388,673	409,690	451,224	480,743
Households' actual social contributions ^{1/}	92,613	95,960	102,721	108,326	84,593	80,091	86,509	116,449
Households' social contributions supplements ^{1/}	43,406	45,382	47,538	49,721	45,847	47,724	48,524	53,424
Social benefits other than social transfers in kind	421,938	459,179	526,108	578,218	652,269	679,948	713,790	756,098
Social security benefits in cash ^{1/}	36,394	38,769	45,333	51,242	87,141	83,206	74,262	79,996
Other social insurance benefits	294,198	316,394	335,134	365,699	388,673	409,690	451,224	480,743
Social assistance benefits in cash	91,346	104,016	145,641	161,277	176,455	187,052	188,304	195,359
Social transfers in kind	1,211,288	1,254,859	1,304,166	1,344,888	1,401,003	1,555,992	1,659,422	1,551,955
Social transfers in kind - non-market production	951,068	984,792	1,036,005	1,065,756	1,111,745	1,154,947	1,212,298	1,241,106
Social transfers in kind - purchased market production	260,220	270,067	268,161	279,132	289,258	401,045	447,124	310,849
<i>Social security benefits, reimbursements ^{1/}</i>	<i>5,847</i>	<i>6,329</i>	<i>5,568</i>	<i>7,192</i>	<i>7,796</i>	<i>7,770</i>	<i>8,280</i>	<i>8,620</i>
<i>Other social security benefits in kind ^{1/}</i>	<i>40,888</i>	<i>43,075</i>	<i>45,428</i>	<i>49,907</i>	<i>52,680</i>	<i>83,226</i>	<i>94,110</i>	<i>59,521</i>
<i>Social assistance benefits in kind</i>	<i>213,485</i>	<i>220,663</i>	<i>217,165</i>	<i>222,033</i>	<i>228,782</i>	<i>310,049</i>	<i>344,734</i>	<i>242,708</i>

Note: ^{1/} The government social security plans included in government account comprise 6 funds as below:

- 1) Social security fund
- 2) The Workmen's Compensation fund
- 3) Private teacher aid fund (the former name is headmaster and private school teacher welfare fund)
- 4) The national health security fund
- 5) Bangkok Metropolitan Administration pension fund
- 6) Local administration pension fund

ผู้ประสานงาน

สำหรับรายละเอียดเพิ่มเติม กรุณาสอบถามได้ที่ e-mails ด้านล่าง หรือ โทร. 0-2280-4085

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National Accounts Director: Peeranat Dangskul Tel: 0-2280-4085 ต่อ / ext. 6521 e-mail: peeranat@nesdc.go.th

ตาราง / Tables	ผู้ประสานงาน / Coordinators	e-mail address	ต่อ / Ext.
Main Accounts			
Account 1 Production account	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
	Mattanee Phumklai	mattanee@nesdc.go.th	6523
Account 2 Generation of income account	Thanapat Suntivong	thanapat@nesdc.go.th	6513
	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Account 3 Allocation of primary income account	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
	Santi Srisomboon	santi@nesdc.go.th	6526
Account 4 Secondary distribution of income account	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Account 5 Use of disposable income account	Phirunthip Sukneongbung	phirunthip@nesdc.go.th	6505
	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Account 6 Redistribution of income in kind account	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Account 7 Use of adjusted disposable income account	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Account 8 External income account	Santi Srisomboon	santi@nesdc.go.th	6526
Gross Domestic Product			
Table 1 - 2.3	Mattanee Phumklai	mattanee@nesdc.go.th	6523
Change in Inventories	Patamawadee Bunjusuph	patamawadee@nesdc.go.th	6544
Gross Domestic Product (Production)			
Table 3, 5 - 5.3, 14 - 15.2, 18 - 19.2, 34 - 35.2	Mattanee Phumklai	mattanee@nesdc.go.th	6523
Table 4	Rattikan Ligkachai	rattikan@nesdc.go.th	6542
Table 6 - 7.2, 12 - 13.2, 22 - 23.2, 28 - 29.2, 30 - 33.2, 36 - 37.2	Nuttakorn Ajchariyasakunchai	nuttakorn@nesdc.go.th	6535
Table 8 - 9.2, 20 - 21.2, 24 - 25.2	Nathicha Singnoi	nathicha@nesdc.go.th	6527
Table 10 - 11.2	Kittiya Rujinarong	kittiya@nesdc.go.th	6543
Table 16 - 17.2	Jindarat Shibue	jindarat-s@nesdc.go.th	6509
Table 26 - 27.2	Udomsuk Khieopong	udomsuk@nesdc.go.th	6506
Gross Domestic Product (Expenditure)			
Private Final Consumption Expenditure			
Table 38 - 41.2	Phirunthip Sukneongbung	phirunthip@nesdc.go.th	6505
	Kittisak Sirikhun	kittisak-s@nesdc.go.th	6538
General Government Final Consumption Expenditure			
Table 42 - 43.2	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Gross Fixed Capital Formation			
Table 44 - 49.2	Jindarat Shibue	jindarat-s@nesdc.go.th	6509
	Kritchasorn Jarupasin	kritchasorn@nesdc.go.th	6534
	Supaporn Wareerat	supaporn_c@nesdc.go.th	6510
National Income			
Table 50 - 51	Santi Srisomboon	santi@nesdc.go.th	6526
	Kullatree Kitjaruwong	kullatree@nesdc.go.th	6524
Table 52	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Table 53 - 54	Santi Srisomboon	santi@nesdc.go.th	6526
	Kullatree Kitjaruwong	kullatree@nesdc.go.th	6524
Table 55 - 59	Santi Srisomboon	santi@nesdc.go.th	6526
Table 60	Jaruwan Poolsuk	jaruwan@nesdc.go.th	6514
Table 61	Kanokphit Phuthamma	kanokphit@nesdc.go.th	6503

กองทุนประชาชาติ
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๙๖๒ ถนนกรุงเกษม เขตป้อมปราบศัตรูพ่าย กรุงเทพฯ ๑๐๑๐๐
โทร. ๐-๒๒๘๐ ๔๐๘๕ โทรสาร. ๐-๒๒๘๑ ๒๔๖๖

