Executive Summary Capital Stock of Thailand in 2024

Overview

1. Gross Capital Stock

Gross capital stock at replacement cost in 2024 stood at 69,369,141 million baht, representing a 2.1% increase, down from 2.9% in 2023. This moderation was mainly driven by a slowdown in private sector stocks, which grew by 1.9%, down from 3.2% in the prior year. Meanwhile, public capital stock rose by 2.6%, following a 2.1% rise in the previous year. In 2024, the gross capital stock was approximately 3.7 times greater than the gross value added, a slight decrease from 3.8 times in the prior year.

In real terms, gross capital stock grew by 0.8%, slower than the 1.6% recorded in the previous year.

1.1 Gross Capital Stock classified by institutions

The private sector held 69.8% of the total gross capital stock. Meanwhile, the public sector accounted for 30.2% of total stocks.

1.2 Gross Capital Stock classified by economic activities

- 1) Agricultural sector: Gross capital stock at replacement cost in 2024 was 5,582,294 million baht, rising by 2.6%, down from 3.9% in 2023. In terms of chain volume measures, gross capital stock increased by 1.7%, decelerating from 2.8% in 2023.
- 2) Non-agricultural sector: Gross capital stock at replacement cost in 2024 was recorded at 63,786,848 million baht, rising by 2.1%, decelerating from 2.8% in 2023. In real terms, it increased by 0.7%, lower than the 1.5% growth rate in 2023. Details of the industrial and service sectors within the non-agricultural sector are as follows:
- Industrial sector: Gross capital stock grew by 2.1%, a deceleration from 2.8% in 2023. Almost all subsectors slowed down, with the exception of assets related to water supply, sewerage, waste management, and remediation activities. In real terms, the gross capital stock of the industrial sector rose by 1.1%, compared with 2.0% in 2023.
- Service sector: Gross capital stock increased by 1.7%, decelerating from 2.7% in 2023. Growth slowed in key subsectors, particularly transportation and storage; information and communication; and real estate activities. In real terms, gross capital stock rose by 0.6%, compared with 1.6% in the previous year.

2. Net Capital Stock

Net capital stock at replacement cost in 2024 was recorded at 41,427,198 million baht, rising by 1.6%, lower than 1.8% in the previous year. The main factor contributing to this result was the private sector, which grew by 1.5%, down from 2.1% in the prior year, while public net capital stock expanded by 2.0%, accelerating from 1.2% in the previous year.

In 2024, net capital stock was approximately 2.2 times greater than gross value added, compared with 2.3 times in the prior year. This was attributable to lower gross fixed capital formation by the private sector in 2024.

In real terms, net capital stock grew by 0.4%, lower than the 0.6% growth in the previous year.

2.1 Net Capital Stock classified by institutions

The private sector owned the majority, accounting for 69.8% of the total net capital stock. Meanwhile, the public sector held the remaining 30.2%.

2.2 Net Capital Stock classified by economic activities

- 1) Agricultural sector: Net capital stock at replacement cost in 2024 was 3,249,430 million baht, which accounted for a rise of 1.4% lower than the 2.9% growth in 2023. In terms of chain volume measures, net capital stock increased by 0.2%, decelerating from 1.5% in 2023.
- 2) Non-agricultural sector: Net capital stock at replacement cost in 2024 was recorded at 38,177,768 million baht, with growth of 1.7%, following 1.7% growth in 2023. In real terms, it increased by 0.4%, slightly lower than the 0.5% rate in previous year. Details of the industrial and service sectors within the non-agricultural sector are as follows:
- Industrial sector: Net capital stock grew by 2.0% at replacement cost, continuing from 1.8% in 2023. Growth was supported by assets related to water supply, sewerage, waste management, and remediation activities, as well as electricity, gas, steam, and air conditioning supply. However, in real terms, net capital stock grew by 0.6%, down from 0.9% in the previous year.
- Service sector: Net capital stock increased by 1.5% at replacement cost, lower than the 1.7% growth in 2023. This was mainly due to a deceleration in assets related to transportation and storage; accommodation and food services; and information and communication. In real terms, net capital stock in the service sector grew by 0.3% in 2024.

3. Capital factor sector analysis and sources of economic growth in 2022

3.1 Incremental Capital Output Ratio: ICOR¹

Overview

ICOR measures the change in a country's output resulting from a change in capital investment. In 2024, ICOR was recorded at 0.39, indicating that a one-unit increase in value added required 0.39 units of additional capital. Compared with the average ICOR of 0.56 during the first two years of the 13th National Economic and Social Development Plan, the capital utilization was more efficient than under the 12th Plan, which recorded an ICOR of 1.11. The following details present ICOR by economic activity:

Agriculture sector: In 2024, the ICOR of the agricultural sector was -0.76. This negative value indicates inefficiency in capital utilization for this year.

Industrial sector: the ICOR of the industrial sector was 1.55, improving from - 1.02 in 2023. This indicates better capital utilization compared with the previous year.

Service sector: the ICOR of the service sector was 0.21, slightly higher than the 0.20 recorded in 2023, suggesting a marginal decline in capital efficiency.

3.2 Capital Productivity: CP²

Overview

In 2024, capital productivity stood at 0.41, up from 0.40 in 2023. This indicates that each unit of capital generated 0.41 units of GDP. A detailed breakdown of capital productivity by economic activity is presented below.

Agricultural sector: In 2024, capital productivity in the agricultural sector was 0.29. It stood at the same rate as in 2023, which recorded 0.29 units. However, this sector demonstrated the lowest efficiency compared with other sectors.

Industrial sector: capital productivity in the industrial sector was 0.46, unchanged from the previous year, which also recorded 0.46 units. Nevertheless, industrial capital productivity has shown a continuous long-term decline since 2016, when it was recorded at 0.50.

Service sector: capital productivity in the service sector was 0.41, a slight improvement from 0.40 in 2023. In the long term, CP in the service sector has grown steadily since 2009, with a record of 0.30.

 $^{2}CP = \frac{\text{GDP}}{\text{Net Capital Stock}}$

 $^{{^{1}}ICOR} = \frac{\Delta NKt}{\Delta GDPt}$ ${^{2}CR}$ ${^{3}CP}$

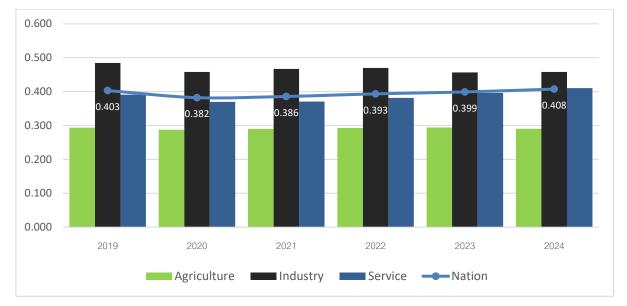


Figure 1 Capital Productivity of Thailand, 2019 - 2024

3.3 Total Factor Productivity: TFP

Overall, the Thai economy grew by 2.54% in 2024, expanding from 2.02% in 2023. Examining the sources of growth, the labor factor contributed 0.16%, down from 0.60% in 2023; the capital factor contributed 0.26%, down from 0.38% in the previous year; and total factor productivity (TFP) contributed 2.13%, up from 1.04% in the prior year. Growth in 2024 was primarily driven by technical and managerial improvements in production, while labor and capital contributions were lower than in 2023. Details of TFP by economic activity are as follows:

Agricultural sector: In 2024, the agricultural sector contracted by 1.06%, compared with 2.04% growth in the previous year. Considering its sources of growth, the labor factor contributed negatively by 0.24%, lower than the 0.22% reduction in the previous year; the capital factor rose by 0.18%, down from 1.21%; the land factor reduced by 0.03%, compared with a 0.02% reduction in 2023; and the TFP factor decreased by 0.98%, down from a 1.07% rise in 2023. This means that the decline in agriculture this year was due to factors related to technology, labor, and land, while the capital factor still expanded this year.

Industrial sector: In 2024, the industrial sector grew by 0.89%, recovering from a contraction of 1.89% in 2023. The sources of growth were as follows: the labor factor contributed 0.08%, down from 0.61%; the capital factor contributed 0.42%, down from 0.61%; and the TFP factor contributed 0.38%, improving from 3.11% down in previous year. This suggests that technological improvements made a greater contribution to production, while labor and capital contributed at lower levels.

Service sector: In 2024, the service sector grew by 3.88%, decelerating from 4.18% in 2023. The labor factor contributed 0.61%, down from 1.36%; the capital factor contributed 0.20%, stable from last year; and the TFP factor contributed 3.07%, up from 2.63%. Growth in the service sector was mainly driven by TFP, while labor factor decelerated and capital factor remained stable.



Figure 2: Decomposition of economic growth by input factors, 2019 - 2024

Table 1 Capital factor analysis and sources of economic growth in 2024

Years	Sectors	ICOR*	CP**	GDP	Source of growth			
				Growth	Labor	Land	Capital	TFP***
2565	Overall	0.59	0.39	2.58	0.67	0.00	0.39	1.53
	◆ Agriculture	2.05	0.29	2.42	0.10	-0.08	1.13	1.28
	Industrial	-0.05	0.47	0.59	0.34	ı	-0.01	0.26
	Services and others	0.54	0.38	3.70	1.15	-	0.45	2.09
2566	Overall	0.72	0.40	2.02	0.60	0.00	0.38	1.04
	◆ Agriculture	2.58	0.29	2.04	-0.22	-0.02	1.21	1.07
	Industrial	-1.02	0.46	-1.89	0.61	ı	0.61	-3.11
	Services and others	0.20	0.40	4.18	1.36	-	0.20	2.63
2567	Overall	0.39	0.41	2.54	0.16	-0.00	0.26	2.13
	◆ Agriculture	-0.76	0.29	-1.06	-0.24	-0.03	0.18	-0.98
	● Industrial	1.55	0.46	0.89	0.08	-	0.42	0.38
	Services and others	0.21	0.41	3.88	0.61	-	0.20	3.07

^{*}Incremental Capital Output Ratio: ICOR

^{**}Capital Productivity: CP

^{***}Total Factor Productivity: TFP

Summary of Thailand's capital stock

	2019	2020	2021	2022	2023	2024p
1. Growth rate of GDP (%)	4.2	2.1	-6.1	1.6	2.5	1.9
2. Net capital stock	38,816,290	38,462,472	38,983,988	40,024,541	40,755,046	41,427,198
at replacement cost (Million Bath)						
• Public	11,322,629	11,634,173	11,913,375	12,117,230	12,258,229	12,508,140
Private	27,493,660	26,828,299	27,070,613	27,907,310	28,496,817	28,919,058
3. Growth rate of Net Capital	1.3	-0.9	0.6	0.6	0.6	0.4
Stock at CVM (%)						
• Public	-0.5	2.4	1.7	-0.5	-0.1	1.0
Private	2.1	-2.3	0.1	1.1	0.9	0.1
4. Structure of Net Capital Stock (%)						
• Public	29.2	30.2	30.6	30.3	30.1	30.2
• Private	70.8	69.8	69.4	69.7	69.9	69.8
5. Net Capital Stock						
at Replacement Cost (Million Bath)						
Agriculture	3,033,192	2,947,371	2,998,248	3,113,276	3,204,868	3,249,430
Industrial	10,422,230	10,410,381	10,655,809	10,863,113	11,063,941	11,289,303
Services and others	25,360,868	25,104,720	25,329,931	26,048,151	26,486,237	26,888,465
6. Growth Rate of Net Capital Stock at CVM (%)						
Agriculture	1.0	-1.2	1.4	1.4	1.5	0.2
Industrial	0.0	-0.2	1.7	-0.0	0.9	0.6
 Services and others 	1.9	-1.2	0.1	0.7	0.3	0.3
7. Incremental Capital	1.57	0.38	1.04	0.59	0.72	0.39
Output Ratio: ICOR						
8. Capital Productivity: CP	0.40	0.38	0.39	0.39	0.40	0.41
Agriculture	0.29	0.29	0.29	0.29	0.29	0.29
Industrial	0.48	0.46	0.47	0.47	0.46	0.46
Services and others	0.39	0.37	0.37	0.38	0.40	0.41
9. Total Factor Productivity: TFP						
 Agriculture 	-1.78	-2.14	1.07	1.28	1.07	-0.98
Industrial	0.07	-5.01	2.41	0.26	-3.11	0.38
 Services and others 	2.37	-6.11	-0.63	2.09	2.63	3.07
• Overall	1.19	-5.41	0.66	1.53	1.04	2.13

Source: National Accounts Division, Office of the National Economic and Social Development Council