

Indonesia Pharmaceutical Industry

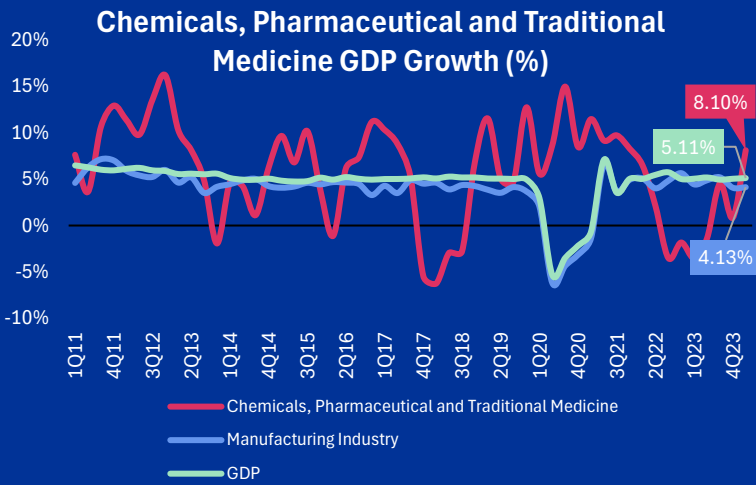
Permata Institute for Economic Research
June 2024



Latest Performance

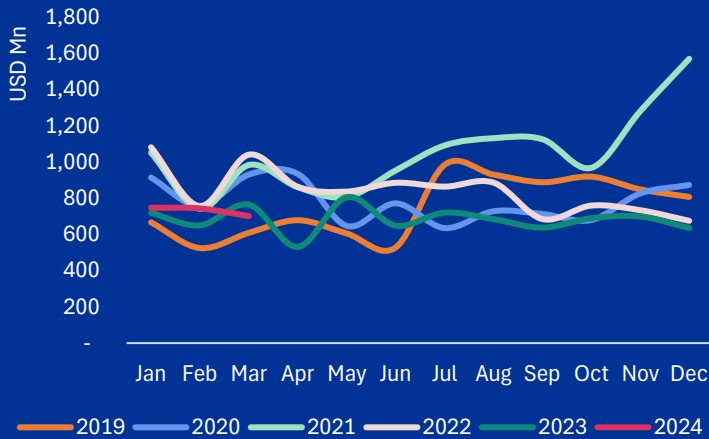
Chemicals, Pharmaceuticals, and Traditional Medicine GDP reached its highest growth since the post-pandemic period. The GDP growth for Chemicals, Pharmaceuticals, and Traditional Medicine in 1Q24 was recorded at 8.10% yoy, surpassing the manufacturing growth of 4.13% yoy and the national GDP growth of 5.11% yoy. The contribution of Chemicals, Pharmaceuticals, and Traditional Medicine to GDP reached 2% in 1Q24, slightly smaller than its highest level in 3Q21 of 2.1%. The exceptional growth in 1Q24 was supported by an increase in demand for chemical products, both from domestic and export markets.

The pharmaceutical industry's imports normalized after the pandemic. The chemicals, pharmaceutical, and traditional medicine sectors cover three distinct industries, and this report will focus primarily on pharmaceutical products. The Indonesian pharmaceutical industry depends on the import of raw materials, which normalized after the pandemic. In 2021, at the height of the COVID-19 pandemic, the import of pharmaceutical raw materials amounted to USD 12.6 billion (bn), surging by 33.5% yoy from USD 9.4 bn to fulfill the domestic demand for medicine. Afterward, the raw materials imports for the pharmaceutical industry gradually decreased by -19.9% yoy and -18.7% in 2022 and 2023, respectively. In 1Q24, the pharmaceutical industry's imports were USD 2.1 bn, or slightly rose by 2.7% yoy from 1Q23, potentially due to increase demand from domestic market.



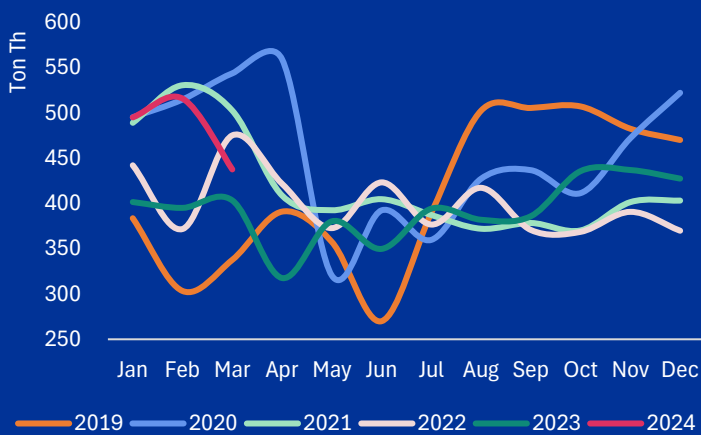
Source: Statistics Indonesia, Permata Institute for Economic Research

Import Value - Pharmaceutical Raw Materials (USD Mn)

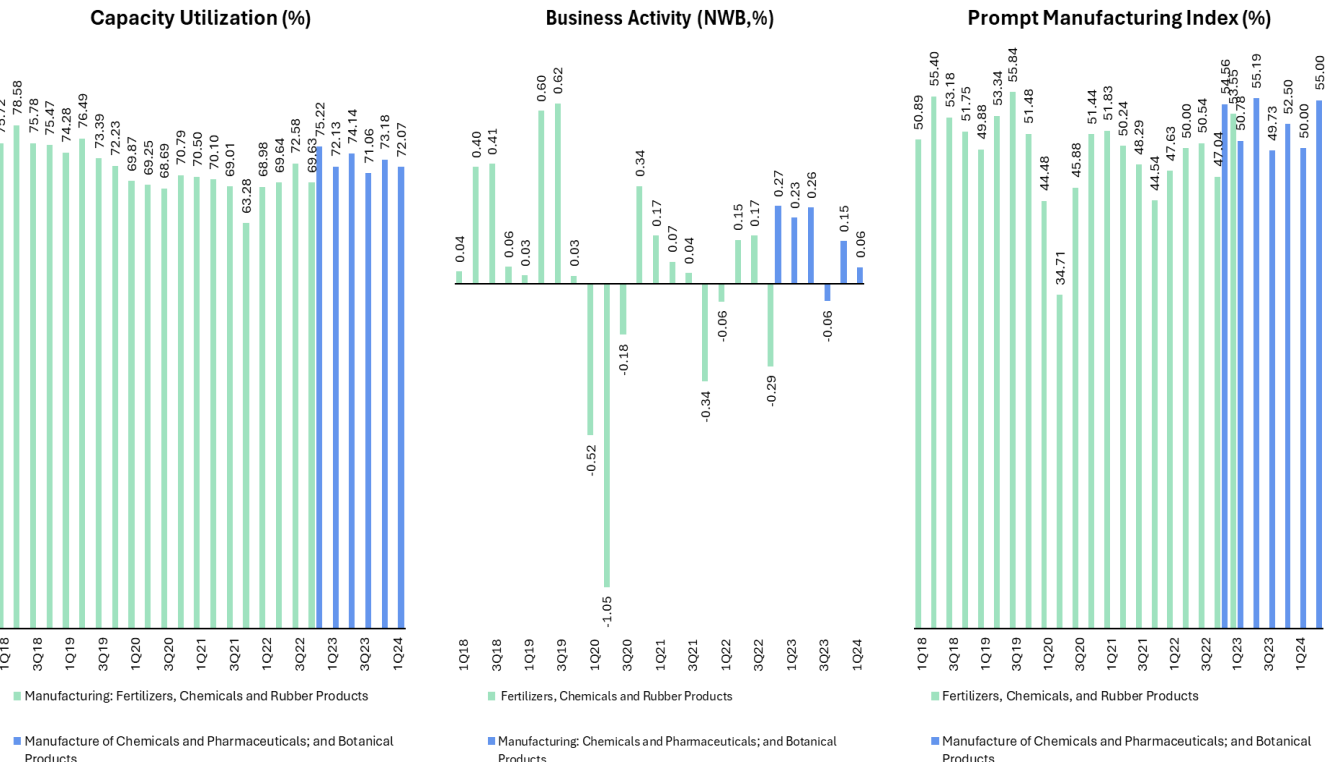


Source: Statistics Indonesia, Permata Institute for Economic Research

Import Volume - Pharmaceutical Raw Materials (Ton Th)



Source: Statistics Indonesia, Permata Institute for Economic Research

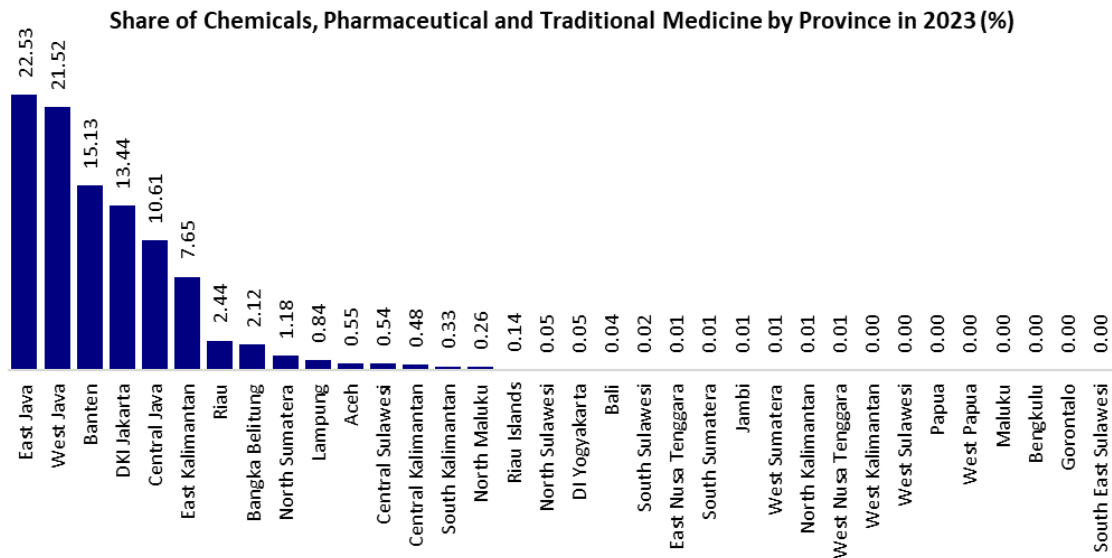


Source: Bank Indonesia, Permata Institute for Economic Research

In 1Q24, capacity utilization for the Manufacture of Chemicals and Pharmaceuticals, and Botanical Products remained stable. Post-pandemic, this sector has seen fluctuations in capacity utilization quarter after quarter. In 1Q24, it slightly contracted to 72.07, down from the previous quarter's 73.18. Over the last six quarters, capacity utilization has not reached its peak of 75.22% from 4Q22. Similarly, business activity within the industry of Chemicals, Pharmaceuticals, and Botanical Products reached a positive value of 0.06%, marking a decrease from the previous period in 4Q23, which was 0.15%. The PMI also decreased to 50.5% from the previous period's 52.5%. However, there is an expectation for 2Q24 that the PMI will increase to 55%, which would be the highest value in the last four quarters, likely due to expectation of a continuation of the trend from 1Q24.

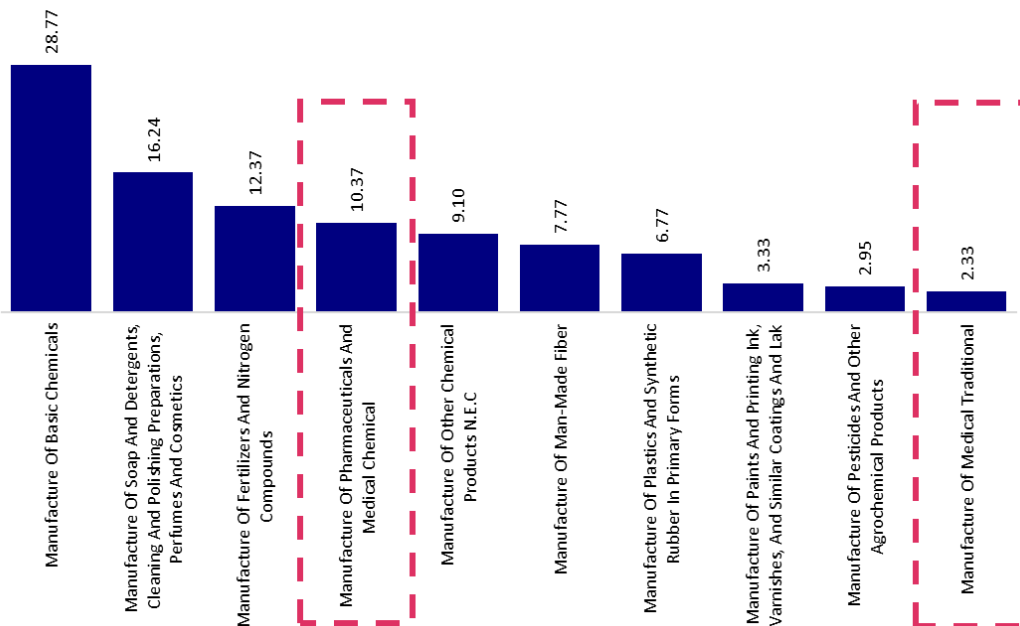
Industry Landscape

Provinces in Java dominating the landscape of chemical, pharmaceutical, and traditional medicine industry. Several provinces in Java accounted for around 83% of Indonesia's chemical, pharmaceutical, and traditional medicine industry in 2023, with East Java has the highest contribution of 22%, surpassing West Java. West Java become the second biggest contributors and followed by Banten with GDP share of 21% and 15%, respectively. Infrastructure readiness, including the availability of gas pipeline and new industrial estates development especially in East Java, become the primary attractor of chemical, pharmaceutical, and traditional medicine manufacturers.



Source: Statistics Indonesia, Permata Institute for Economic Research

Manufacture of Chemicals, Pharmaceutical, and Traditional Medicine's Share by Subsectors 2022 (%)



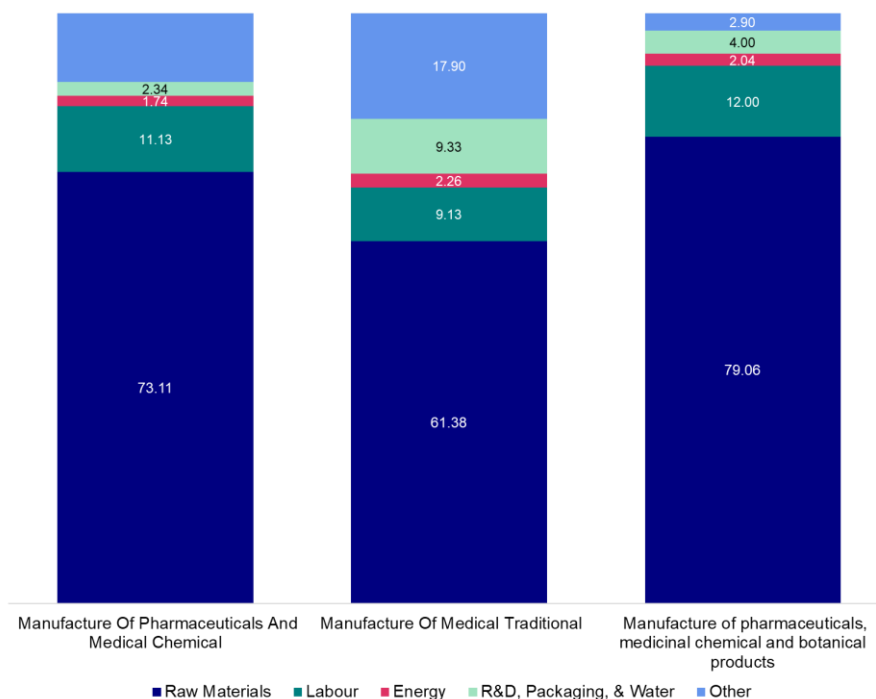
Source: Statistics Indonesia, Permata Institute for Economic Research

Pharmaceutical and traditional medicine industry accounts for only a small contribution to Indonesia's chemical and pharmaceutical manufacturing landscape. According to the 2022 Statistics of Large and Medium Manufacturing, these industries represented approximately 12.7% of the total output of the chemical, pharmaceutical, and traditional medicine manufacturing sectors. Compared to the 2019 data, the share of the pharmaceutical industry slightly dropped from 14.5%, while the contribution from chemical and chemical product manufacturing advanced from 85% to 87%, further dominating the landscape. However, with health-related spending in Indonesia expected to increase, there could be a boost in demand for domestic pharmaceutical products, potentially increasing the pharmaceutical industry's proportion in the near future.

Raw material costs dominate the production expenses in the pharmaceutical industry.

According to the 2022 statistical data from the Large and Medium Manufacturing Industry, the proportion of raw material costs to total production costs for the Pharmaceutical and Traditional Medicine Industry was recorded at around 79%. Specifically, raw material costs accounted for 73.1% in the manufacture of pharmaceuticals and medical chemicals, and 61.4% in the manufacture of traditional medicine. As several raw materials are still dependent on the import market, exchange rate volatility could affect overall production costs.

Moreover, approximately 4% of the total cost is allocated for research and development, packaging, and water costs. In traditional medicine, the combined costs for R&D, packaging, and water amount to 9.3%, which is significantly higher than in the pharmaceutical industry at 1.74%. Nevertheless, these percentages are substantially higher than the industry average of 0.62%, indicating that research and development plays significant role in these industries

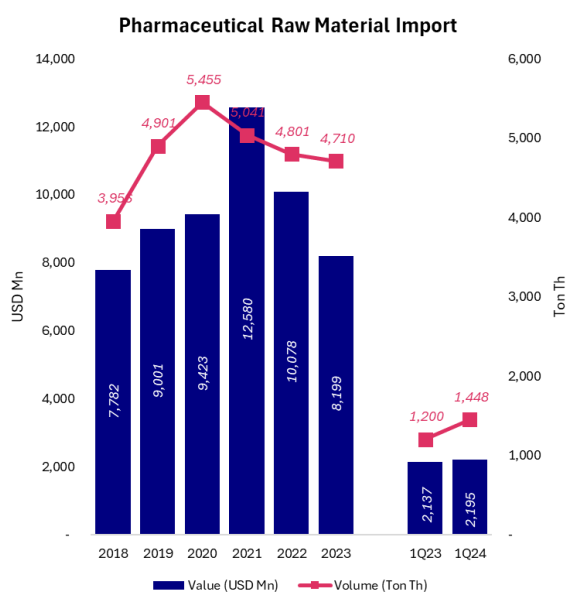


Source: Statistics Indonesia, Permata Institute for Economic Research

The majority of raw materials for the Pharmaceutical and Traditional Medicine industries are sourced from the domestic market. According to the 2016 Indonesian Input-Output data, the main inputs for the pharmaceutical industry include rental and business support services, basic chemicals (except fertilizers), trade, and electricity. Rental and business support services contribute 13.3% of the total raw material input, followed by basic chemicals at 11.1%, and trade (excluding cars and motorcycles) at 6.7%. Of these materials, rental and business support services and basic chemicals have import components of 17% and 47%, respectively. Furthermore, biopharmaceutical plants, trade, and basic chemicals (except fertilizers) are the largest raw materials for traditional medicine, accounting for about 28% of total input. Approximately 63% of the basic chemical raw materials for traditional medicine are acquired from the import market—significantly higher than in the pharmaceutical industry. Therefore, a weakening of the Rupiah could affect the traditional medicine industry to a greater extent than the pharmaceutical industry.

Input Origin by Industry	Input Origin Mapping of Pharmaceutical Industry					
	Pharmaceutical Product			Traditional Medicine		
	Proportion of Total Raw Material Input (%)	%Domestic	%Import	Proportion of Total Raw Material Input (%)	%Domestic	%Import
Rental Services and Business Support Services	13.3%	83%	17%	5.2%	84%	16%
Basic Chemistry Except Fertilizer	11.1%	53%	47%	9.0%	37%	63%
Trade other than Cars and Motorbikes	6.7%	100%	0%	10.7%	100%	0%
Electricity	5.1%	100%	0%	1.8%	100%	0%
Land Transport Services Apart from Rail Transport	4.9%	99%	1%	4.2%	99%	1%
Air Transport Services	3.3%	91%	9%	0.9%	93%	7%
Health Services & Private Social Activities	3.2%	96%	4%	1.3%	96%	4%
Telecommunications Services	2.9%	94%	6%	1.0%	94%	6%
Broadcasting and programming services, Films and Sound Recording Results	2.8%	100%	0%	3.1%	100%	0%
Plastic Items	2.6%	81%	19%	2.8%	40%	60%
Pharmaceutical products	2.6%	73%	27%	8.8%	73%	27%
Biopharmaceutical Plants	0.7%	92%	8%	17.2%	92%	8%
Other Plantation Products	1.5%	97%	3%	6.9%	93%	7%
Banking Financial Services	2.4%	97%	3%	2.1%	97%	3%
Clove	0.7%	95%	5%	2.0%	95%	5%
Others	36.1%	NA	NA	23.0%	NA	NA
Total	100%	84.7%	15.3%	100%	83.0%	17.0%

Source: Statistics Indonesia, Permata Institute for Economic Research



HS Code	Details	2023 - Value (USD Th)	2023 - Volume (Ton Th)
2905	Acyclic alcohols and their halogenated, sulphonated, nitrated or nitrosated derivatives	848,223	1,663
2933	Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms	458,457	123
2915	Prepared binders for foundry moulds or cores; chemical products and preparations for the chemical or allied industries, incl. mixtures of natural products, n.e.s.	311,969	289
2922	Saturated acyclic monocarboxylic acids and their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives	303,469	203
2916	Polymers of styrene, in primary forms	225,454	108
2930	Oxygen-function amino-compounds	196,879	78
2917	Polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives	186,611	162
2941	Dextrins and other modified starches, e.g. pregelatinised or esterified starches; glues based on starches, dextrins or other modified starches (excl. those put up for retail sale and weighing net <= 1 kg)	160,360	3
2918	Heterocyclic compounds with nitrogen hetero-atom[s] only	125,055	75
2936	Amino-resins, phenolic resins and polyurethanes, in primary forms	124,325	13
Others		5,257,767	4,710

Source: Statistics Indonesia, Permata Institute for Economic Research

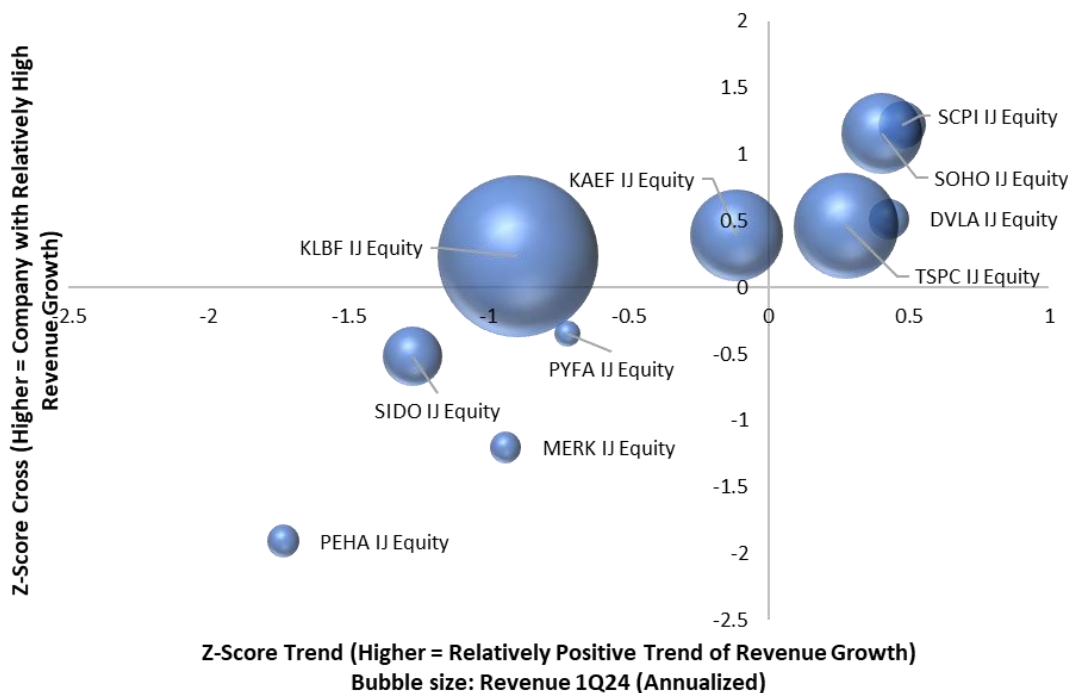
Organic chemicals are the primary imported materials for the pharmaceutical and traditional medicine industry in Indonesia. The manufacturing sectors for these industries import a variety of goods, including inorganic chemicals (HS Code 28), organic chemicals (HS Code 29), pharmaceutical products (HS Code 30), essential oils (HS Code 33), albuminoidal substances and enzymes (HS Code 35), other chemical products (HS Code 38), and plastics and related articles (HS Code 39). Among these, organic chemicals represent the largest share, with an import value of around USD 3.8 billion in 2023. Acyclic alcohols and polyacetals are the sub-groups with the highest import values. However, as the demand for pharmaceutical products has normalized post-pandemic, the import of raw materials for these industries, including organic chemicals, has also gradually decreased.

Output Users by Industry	Pharmaceutical Product			Traditional Medicine		
	Share (%)	Domestic Industry Origin Output (%)	Output of Foreign Industry Origin (%)	Share (%)	Domestic Industry Origin Output (%)	Output of Foreign Industry Origin (%)
Intermediate Consumption	52.2%	76%	24.4%	0.9%	93%	7.4%
Health Services & Private Social Activities	24.3%	74%	26.5%	0.0%	NA	NA
Government Health Services	8.2%	82%	18.3%	0.0%	100%	0.0%
Land Transport Services Apart from Rail Transport	2.3%	73%	27.2%	0.0%	NA	NA
Other Services	2.0%	88%	12.0%	0.0%	100%	0.1%
Poultry and its Products	1.8%	72%	27.6%	0.0%	92%	8.1%
Transportation Support Services	1.3%	72%	27.6%	0.0%	NA	NA
Pharmaceutical products	1.3%	73%	27.2%	0.0%	NA	NA
General Government Services	1.2%	83%	17.0%	0.0%	100%	0.0%
Traditional medicine	1.1%	73%	27.4%	0.0%	NA	NA
Other chemical items	0.8%	73%	27.1%	0.0%	NA	NA
Private Education Services	0.6%	76%	23.9%	0.0%	92%	7.7%
Sea Freight Services	0.6%	73%	27.1%	0.0%	NA	NA
Agricultural, Forestry and Fisheries Services	0.0%	73%	27.1%	0.5%	92%	8.2%
Fish	0.2%	73%	27.1%	0.1%	92%	7.7%
Shrimp and other crustaceans	0.1%	73%	27.1%	0.1%	92%	8.2%
Others	6.6%	NA	NA	0.2%	NA	NA
Final Consumption	47.8%	80%	19.7%	99.1%	92%	7.6%
Household Consumption	36.9%	75%	24.7%	98.3%	92%	7.6%
LNPRT Consumption	0.0%	NA	NA	0.0%	NA	NA
Government Consumption	0.0%	NA	NA	0.0%	NA	NA
Gross Fixed Capital Formation	0.0%	NA	NA	0.0%	NA	NA
Inventory Change	1.2%	75%	24.7%	0.1%	92%	7.6%
Exports of Goods (F.o.b)	9.3%	100%	0.0%	0.5%	100%	0.0%
Services Exports	0.4%	100%	0.0%	0.2%	100%	0.0%

Source: Statistics Indonesia, Permata Institute for Economic Research

Majority of output from the pharmaceutical and traditional medicine industries is consumed by the domestic market. According to the Indonesian Input-Output Table 2016, approximately 90.3% of the pharmaceutical industry's output is utilized domestically, with 52.2% for intermediate consumption and 38.1% for final consumption. Only 9.3% of the output is exported. Meanwhile, the output of the traditional medicine industry is almost entirely used domestically, with about 99.1% allocated for the domestic market. The largest consumers of pharmaceutical industry products are health services, private social activities, and government health services. Only 36.9% of pharmaceutical industry products are directly consumed by consumers. In contrast, for the traditional medicine industry, most of the output, around 98.1%, is directly consumed by consumers.

Aligned with the normalized demand post-pandemic, several major publicly listed pharmaceutical companies also experienced a normalization in their revenue growth. Based on their annualized revenue in 1Q24, Kalbe Farma holds the highest market share, accounting for 42% of the total industry's revenue, followed by Tempo Scan Pacific and Kimia Farma with 17% and 14%, respectively, making them the market leaders. Moreover, these companies still maintained relatively high revenue growth compared to others in similar industries. On the other hand, as demand for pharmaceutical and traditional medicine normalized following the end of the pandemic, several companies, including Kalbe Farma, Kimia Farma, and Sidomuncul, experienced a negative trend in revenue growth. However, it should be noted that this data only accounts for publicly listed companies in the pharmaceutical industry and thus does not provide a complete picture of these industries in Indonesia.



Code	Company Name	Market Share 1Q24*
KLBF IJ Equity	Kalbe Farma Tbk.	42.21%
TSPC IJ Equity	Tempo Scan Pacific Tbk.	17.73%
KAEF IJ Equity	Kimia Farma Tbk.	13.67%
SOHO IJ Equity	Soho Global Health Tbk.	10.64%
SIDO IJ Equity	Industri Jamu dan Farmasi Sido	5.52%
SCPI IJ Equity	Organon Pharma Indonesia Tbk.	3.52%
DVLA IJ Equity	Darya-Varia Laboratoria Tbk.	2.53%
PEHA IJ Equity	Phapros Tbk.	1.64%
MERK IJ Equity	Merck Tbk.	1.54%
PYFA IJ Equity	Pyridam Farma Tbk	1.00%

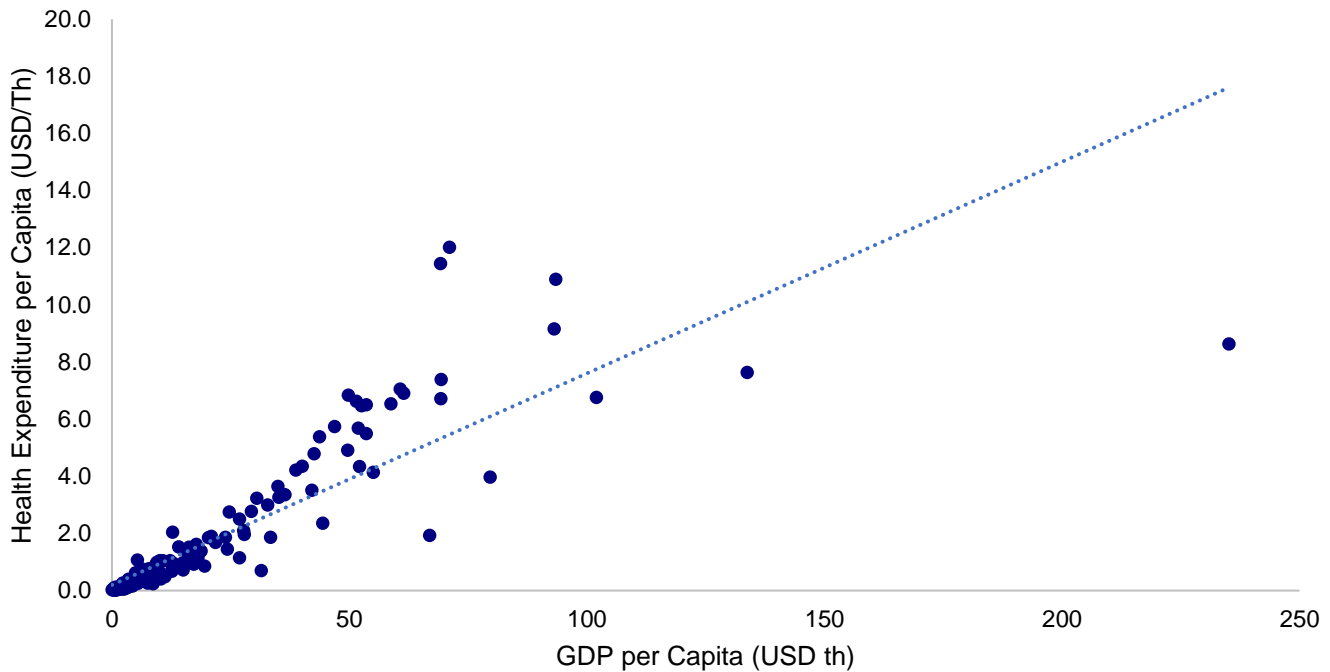
*: Only for publicly listed companies & without Indofarma Tbk

Source: Bloomberg, Permata Institute for Economic Research

Outlook

The outlook for health-related industries in Indonesia, including pharmaceuticals, is expected to continue to grow in line with the improving economy. According to World Bank data, Indonesia's GDP per capita reached USD 4,788 in 2022, with an average GDP per capita growth of 9.3% over the past 20 years. Going forward, Indonesia aims to transition from a middle-income country to a high-income country, with a GDP per capita exceeding USD 10,000 by 2034, or about 10 years from now. An increase in GDP per capita indicates higher national income, which can support increased public spending on health and allow the government to invest more in public healthcare infrastructure. Additionally, with a higher income level, the population will generally demand higher quality and value in public health spending, seeking more comprehensive health services and preventive care, not just treatment. This will further drive healthcare spending in the future.

Healthcare Spending and GDP per Capita Correlation by Country (2022)

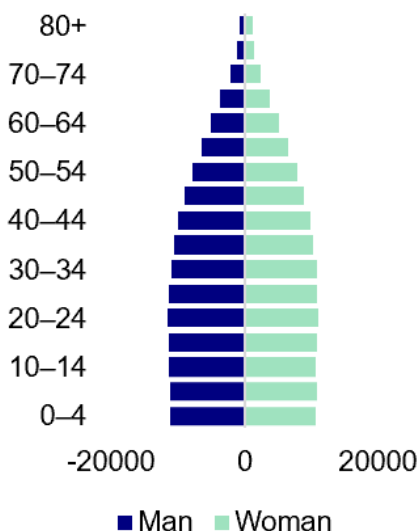


Source: World Bank, Permata Institute for Economic Research

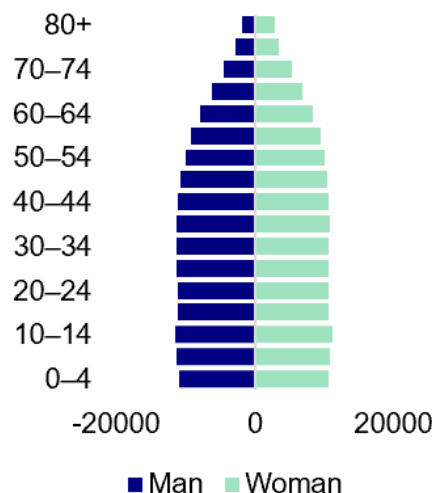
Apart from the increase in per capita income, the pharmaceutical industry in Indonesia would also be positively impacted by the aging population. Over the next 20 years, the increase in the aging population will drive higher demand for healthcare and pharmaceutical services, as this demographic generally has a higher prevalence of chronic diseases. Additionally, the aging population requires long-term care, which will increase the overall demand for both healthcare facilities and supporting medications.

Indonesia Population Structure Forecast

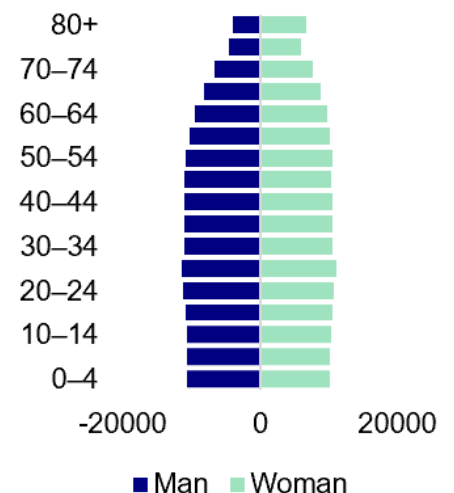
Indonesia Population by Gender and Age Group in 2020 (th)



Indonesia Population Projection by Gender and Age Group in 2035 (th)



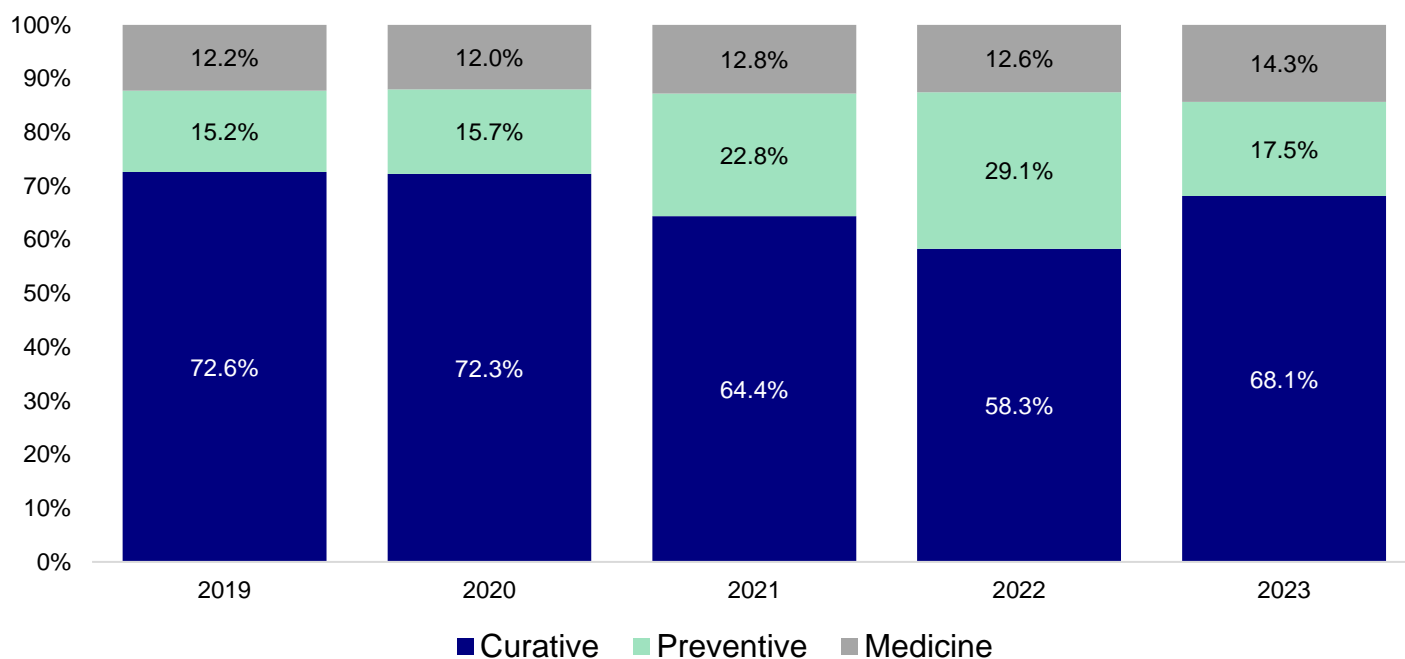
Indonesia Population Projection by Gender and Age Group in 2045 (th)



Source: Statistics Indonesia, Permata Institute for Economic Research

The proportion of health spending in Indonesia for preventive purposes tends to increase in line with the rise in per capita income and public awareness of health. According to The National Socioeconomic Survey (SUSENAS) data released by Statistics Indonesia, the proportion of public spending on prevention reached its highest point in 2022 at 29.1%, but declined again in 2023 to 17.5%. The pandemic accelerated public spending on disease prevention, as public behavior became more cautious about the spread of the Covid-19 virus. In 2023, after community activities returned to normal, the proportion of spending on prevention decreased but remained higher than the pre-pandemic level in 2019, which was only 15.2%.

Indonesia Health Expenditure Proportion by Type

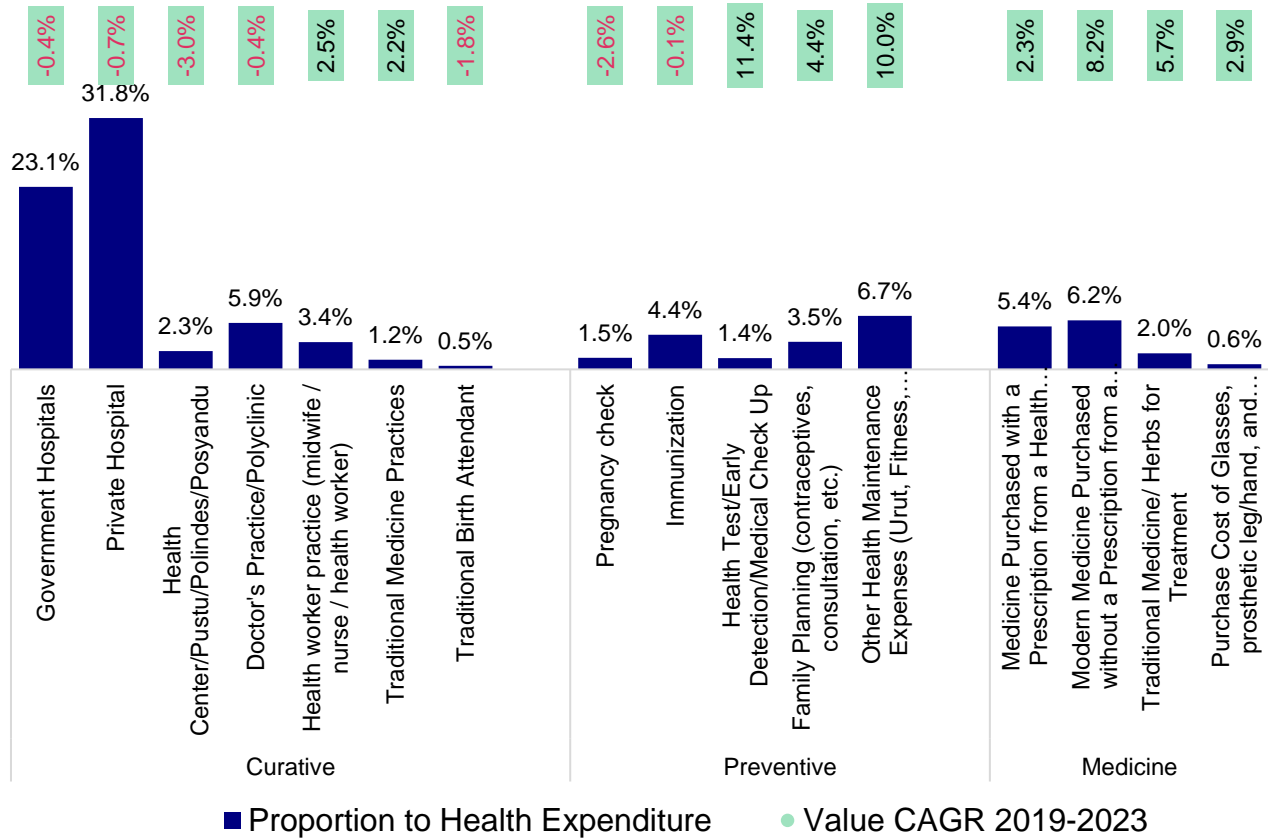


Source: Statistics Indonesia, Permata Institute for Economic Research

In more detail, the largest proportion of expenditure per capita on health is still for curative purposes, albeit it tends to decline. The decline in per capita spending on curative items aligns with the trend among health payers, particularly the Government (BPJS) and insurance companies, who aim to continue saving costs amid rising health expenses. The largest share of curative expenditure is for government and private hospitals, which account for 54.9% of total health expenditure. However, looking at the growth trend over the last five years, spending on hospitals has tended to decline, by -0.4% per year for government hospitals and -0.7% per year for private hospitals. In general, curative public health spending has decreased by -0.48% per year. The decline in curative spending is also evident from the growth of prescription drugs, which recorded the slowest growth compared to non-prescription drugs and traditional medicines. This trend will also impact pharmaceutical companies, as payers increasingly promote the transition from patented drugs to lower-cost generic drugs.

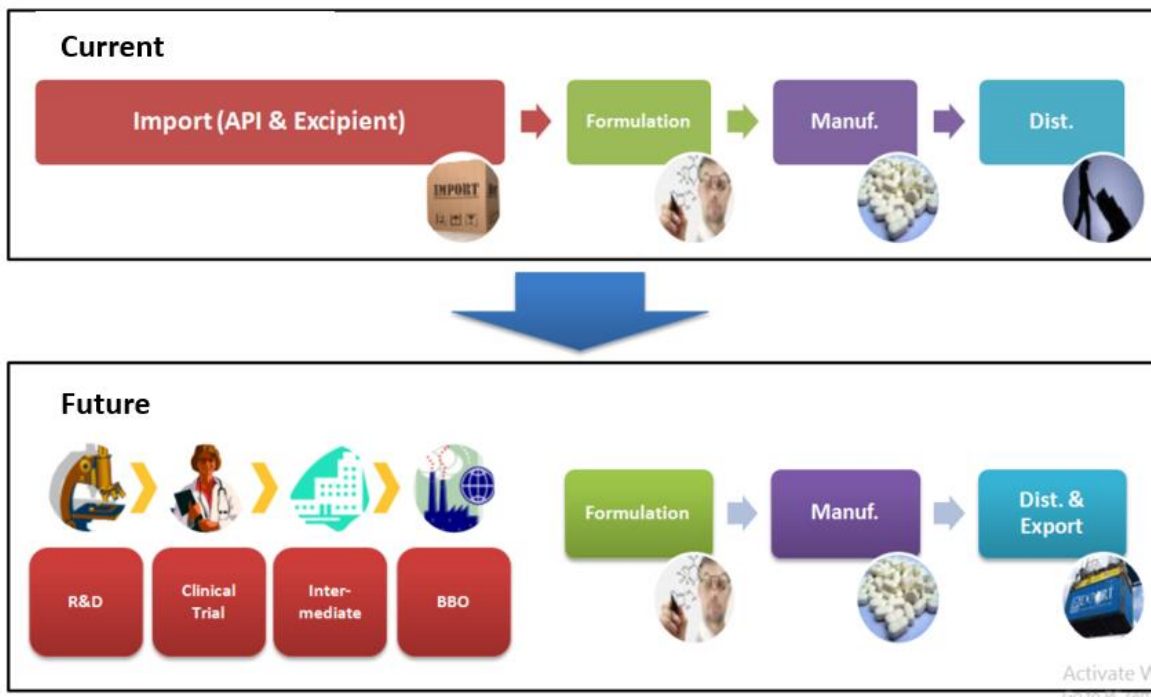
Meanwhile, per capita spending on prevention has tended to increase over the last five years. During the 2019-2023 period, per capita spending on preventive health measures grew by an average of 4.83% per year. The fastest-growing preventive costs include medical check-ups and other health-related expenses such as purchasing vitamins and paying for sports facilities. This indicates a rising public awareness of the importance of maintaining health. This trend presents an opportunity for pharmaceutical companies to meet the increased demand for health supplements. Additionally, there is a relatively high growth trend in spending on non-prescription drugs, which has reached 8.2% per year.

Details of Health Expenditure per Capita Proportion and Its Growth



Source: Statistics Indonesia, Permata Institute for Economic Research

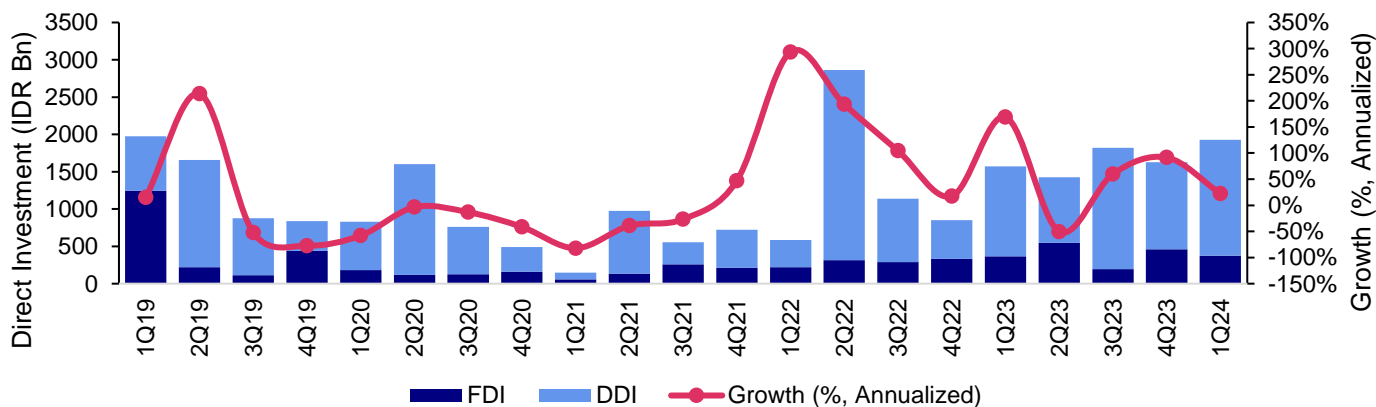
The government plans to increase the capacity of the pharmaceutical industry, shifting from merely formulating products from imported raw materials to covering the entire value chain process. Based on Permenkes No. 17 of 2017 regarding the Action Plan for the Development of the Pharmaceutical Industry and Medical Devices, the domestic pharmaceutical industry is expected to undertake various value chain activities. These include Research and Development (R&D) of raw materials, Phase 1 clinical trials for laboratory-scale Active Pharmaceutical Ingredients (API), production of intermediate raw materials and finished pharmaceutical drugs, and the distribution and export of finished drugs and drug raw materials. This plan main target is to reduce the import dependency, especially raw materials, for pharmaceutical industries in Indonesia.



Source: Permenkes 17/2017

Investment in the pharmaceutical, chemical and traditional medicine industries has been trending upwards after the pandemic, indicating investors' perception of the industry's relatively good prospect. According to data from the Ministry of Investment, the value of direct investment in the Pharmaceutical, Chemical Medicine and Traditional Medicine Industry reached IDR 1.93 trillion, growing 22.5%oy compared to 1Q23, continuing the growth in 4Q23 which reached 91.6%oy. The growth in 1Q24 was driven by the growth of investment from domestic investors which recorded a growth of 28.8%yoy, higher than the growth from foreign investors which amounted to 1.9%oy. Meanwhile, in terms of region, direct investment in the pharmaceutical, chemical and traditional medicine industry sector is still heavily concentrated in Java. The largest recipient of direct investment for this sector is West Java Province, which in the last four quarters received investment of almost IDR 4 trillion.

Pharmaceutical Industry, Chemical Medicine Products and Traditional Medicine Direct Investment (IDR Billion)



Source: Ministry of Investment

FDI and DDI in the last 4 quarter by region (Top 5, IDR Billion)			
Province/Municipal	FDI	Province/Municipal	DDI
Jawa Barat	707.4	Jawa Barat	3256.3
Kota Bandung	143.1	Kota Bandung	1300.3
Kabupaten Bekasi	141.3	Kabupaten Bekasi	495.0
Kabupaten Bogor	103.8	Kabupaten Sukabumi	411.4
Jawa Timur	398.9	Jawa Timur	970.9
Kabupaten Pasuruan	328.8	Kabupaten Sidoarjo	692.4
Kabupaten Malang	70.0	Kabupaten Jombang	171.5
Kabupaten Mojokerto	0.1	Kabupaten Gresik	34.4
Banten	232.4	Banten	324.5
Kabupaten Serang	224.6	Kabupaten Serang	221.1
Kota Tangerang	4.1	Kabupaten Tangerang	63.0
Kabupaten Tangerang	2.4	Kota Tangerang	24.9
Daerah Khusus Ibukota Jakarta	120.8	Sumatera Selatan	243.0
Kota Adm. Jakarta Selatan	70.5	Kota Palembang	243.0
Kota Adm. Jakarta Timur	44.1		
Kota Adm. Jakarta Utara	6.1		
Jawa Tengah	117.5	Daerah Khusus Ibukota Jakarta	207.9
Kabupaten Kendal	44.8	Kota Adm. Jakarta Timur	197.6
Kota Semarang	36.7	Kota Adm. Jakarta Barat	8.4
Kabupaten Demak	27.4	Kota Adm. Jakarta Selatan	1.9

Source: Ministry of Investment

Thank you!

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