

Overweight/Maintain

Poultry

DOC Leads Rebound as MBG Resumes

DOC posts its strongest monthly gain since May 2025

The average monthly market price for DOC recovered to IDR5,286/chick in July 2026 (+51.5% MoM, -0.1% YoY). Broiler price rose to IDR18,661/kg (+11.4% MoM, +2.5% YoY), still below the IDR19,500/kg floor targeted under the national poultry price stabilization program signed on June 29, 2026. Corn was little changed at IDR6,490/kg (+0.1% MoM, +31.9% YoY). We attribute the sharp DOC recovery to the broiler price rebound, which we believe reflects the joint commitment among poultry companies, associations, the Directorate General of Livestock and Animal Health Services (Dirjen PKH) and the Indonesian National Police (POLRI), alongside the resumption of the MBG program. The elevated corn price reflects strong demand against stable supply.

7M26 averages hold well above FY25 on MBG-driven demand

The DOC price averaged IDR5,809/chick in 7M26, up 18.1% YoY and 2.7% above the FY25 average. The broiler average rose to IDR20,124/kg (+12.8% YoY and 4.5% above FY25), while corn averaged IDR6,588/kg (+38.8% YoY and 27.7% above FY25). Firm output prices point to resilient poultry demand, supported by heavy MBG spending, which reached IDR101.1tr in 1H26 against IDR5tr in the same period last year.

JPFA tracks the JCI, while CPIN lags, but 7M26 flows stay positive

JPFA moved in line with the JCI, which gained 10.5% MoM in July, while CPIN underperformed the index by 13.7%. Both names recorded net foreign outflows during the month, at IDR90bn for JPFA and IDR51bn for CPIN. Cumulatively, though, both remain in positive territory: IDR387bn of net inflows in 7M26 and IDR914bn over the last twelve months for JPFA, versus IDR257bn and IDR163bn for CPIN.

Local investors add to both names as foreign IB trims

JPFA local ownership rose 1ppt MoM to 19.5%, up from the 12-month low of 18.5% in June. Local individuals remain the largest local holder at 10.8% despite trimming 0.2ppt, while local insurance added 0.8ppt to 3.9% and local mutual funds (MF) 0.3ppt to 3.7%. Foreign IB stayed the top holder at 26.0% after cutting 1.2ppt, with foreign corporates and foreign MF flat at 23.0% and 17.7%. At CPIN, local ownership extended its uptrend, up 0.3ppt to 12.6%. Local individuals lifted their stake by 0.5ppt to 4.0%, a twelve-month high, while local insurance and local MF each shed 0.1ppt, to 6.2% and 0.8%. Foreign IB remains the largest at 38.3% after a 0.1ppt cut, with foreign corporates and foreign MF flat at 19.5% and 13.2%. We read this as domestic money capitalizing on poultry price recovery led by local insurance at JPFA and by local individuals at CPIN, while foreign IB takes profit after the July run. With both names still showing net foreign inflows in 7M26, we view the foreign trimming as tactical rather than a change in stance.

Maintain Overweight

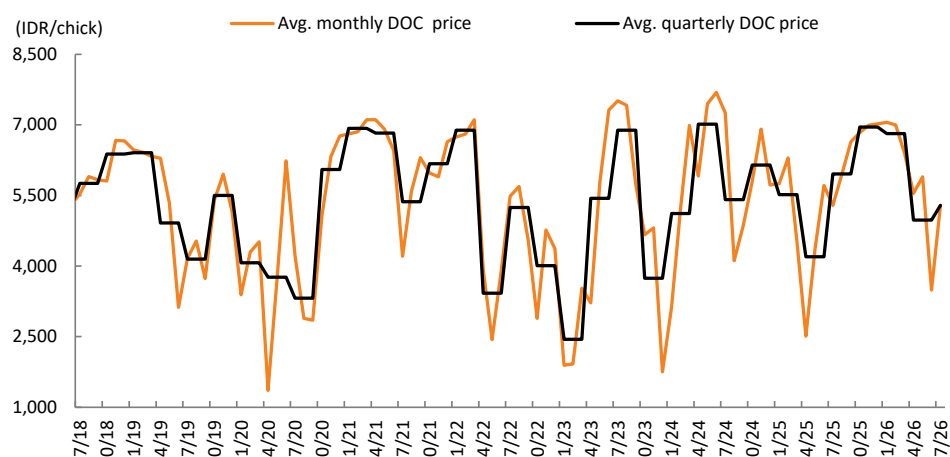
We maintain our Overweight rating on the sector, given the continued recovery in DOC and broiler prices following the resumption of the MBG program. The downside risks to our call include: 1) lower than expected DOC and broiler prices, 2) higher than estimated input costs, and 3) lower than expected impact from the MBG program.

Table 1. Key investment metrics

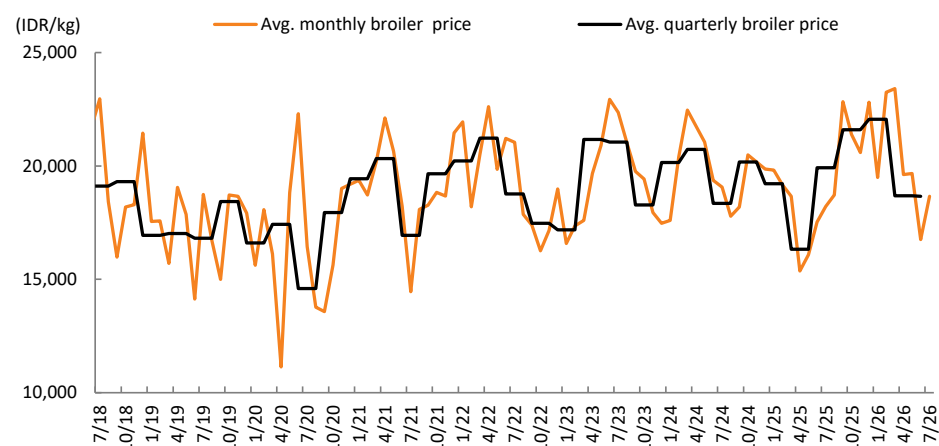
Company	Ticker	Market cap* (IDRbn)	Rating	Last price* (IDR)	Target price (IDR)	Upside (%)	P/E (x)		EV/EBITDA (x)		ROE (%)	
							2026F	2027F	2026F	2027F	2026F	2027F
Charoen Pokphand Indonesia Tbk	CPIN	50,506	Trading Buy	3,080	3,550	15.3	7.4	6.9	4.7	4.3	16.9	16.4
Japfa Comfeed Indonesia Tbk	JPFA	25,916	Buy	2,210	3,750	69.7	6.0	5.5	4.1	3.6	21.7	21.2

Note: Data as of August 10, 2026

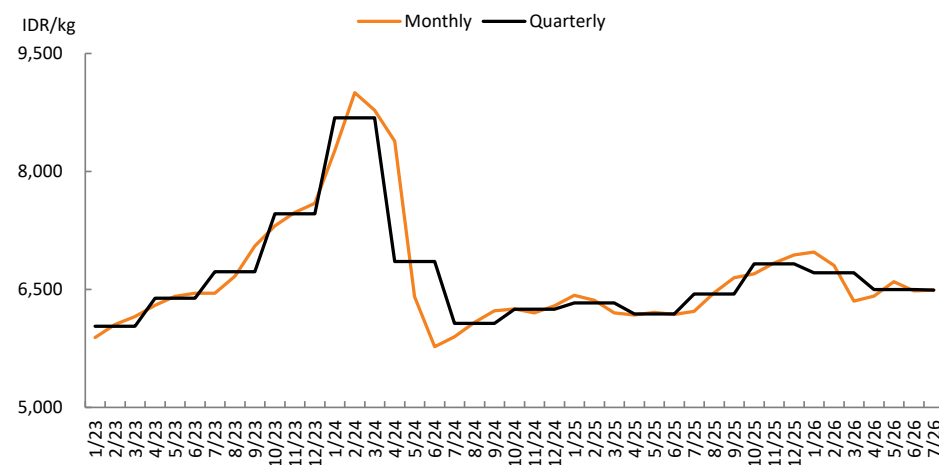
Source: Company Data, Mirae Asset Sekuritas Indonesia Research

Figure 1. Average market price for DOC in West Java

Source: Mirae Asset Sekuritas Indonesia Research

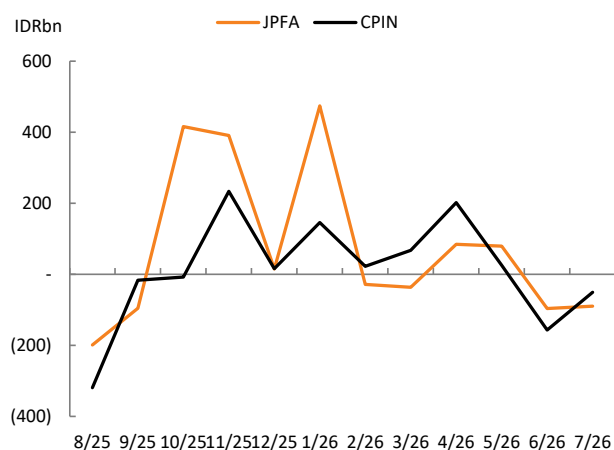
Figure 2. Average market price for Broiler in West Java

Source: Mirae Asset Sekuritas Indonesia Research

Figure 3. Average monthly domestic corn price

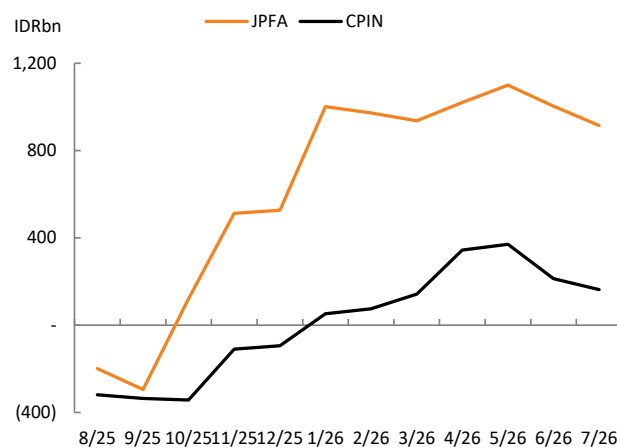
Source: Mirae Asset Sekuritas Indonesia Research

Figure 4. Foreign flow - Monthly



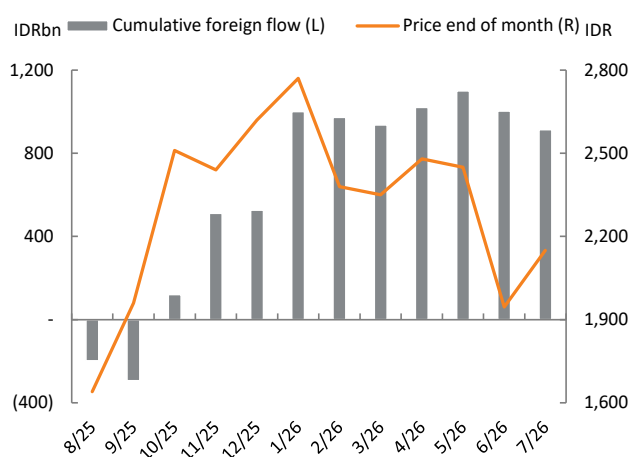
Source: Mirae Asset Sekuritas Indonesia Research

Figure 5. Foreign flow - Cumulative



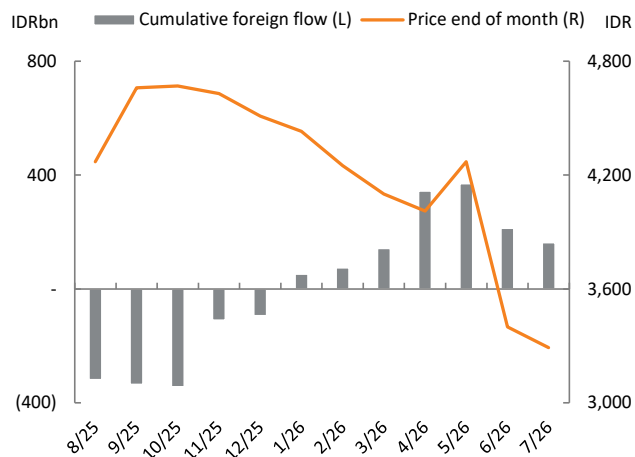
Source: Mirae Asset Sekuritas Indonesia Research

Figure 6. Cumulative foreign flow vs. share price - JPFA



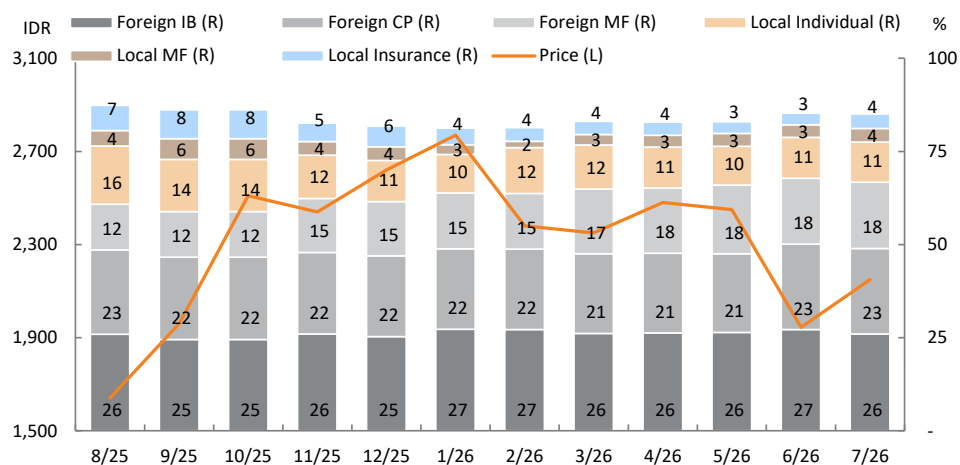
Source: Mirae Asset Sekuritas Indonesia Research

Figure 7. Cumulative foreign flow vs. share price - CPIN



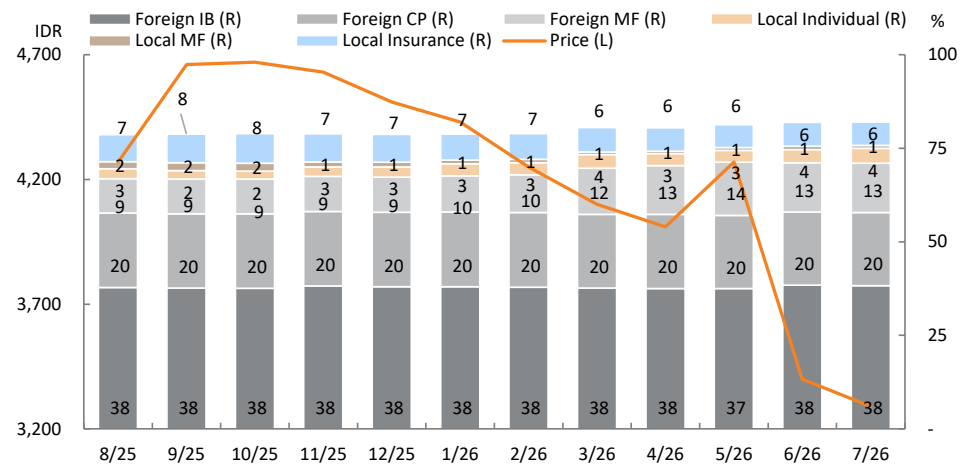
Source: Mirae Asset Sekuritas Indonesia Research

Figure 8. Tradeable Shares Ownership - JPFA



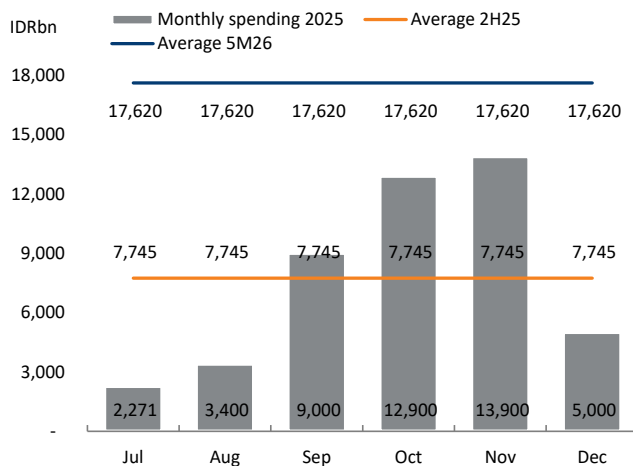
Source: KSEI, Mirae Asset Sekuritas Indonesia Research

Figure 9. Tradeable Shares Ownership - CPIN



Source: Mirae Asset Sekuritas Indonesia Research

Figure 10. MBG Spending 2H25 vs. 5M26



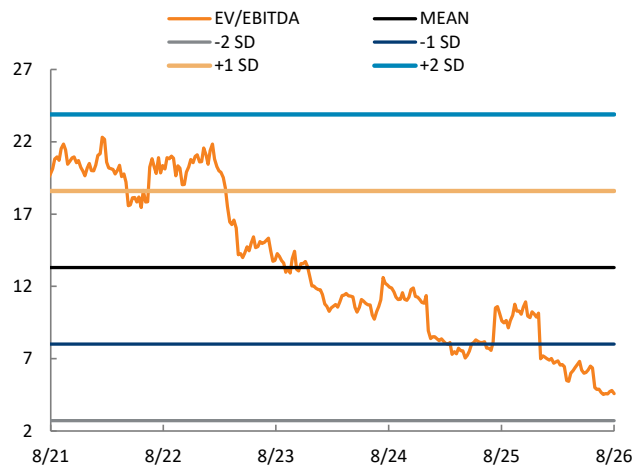
Source: Mirae Asset Sekuritas Indonesia Research

Figure 11. Scenario of MBG Spending in 2H26

Description	Value (IDRbn)	Growth
Spending 1H25	5,029	
Spending 2H25	46,471	
MBG Realization FY25	51,500	
Average spending 1H25	838	
Average spending 2H25	7,745	
Average spending FY25	8,583	
Spending 5M26	88,100	
Average spending 5M26	17,620	
Scenario 1 (Jun: IDR10tr + similar spending with 2H25)		
Spending Jun-Dec 2026	56,471	
Total spending FY26F	144,571	
Average spending FY26F	12,048	40%
Scenario 2 (Jun: IDR10tr + 50% average spending 5M26)		
Spending Jun-Dec 2026	62,860	
Total spending FY26F	150,960	
Average spending FY26F	12,580	47%
FY27 budget growth		
Scenario 1	174,000	20%
Scenario 2	174,000	15%

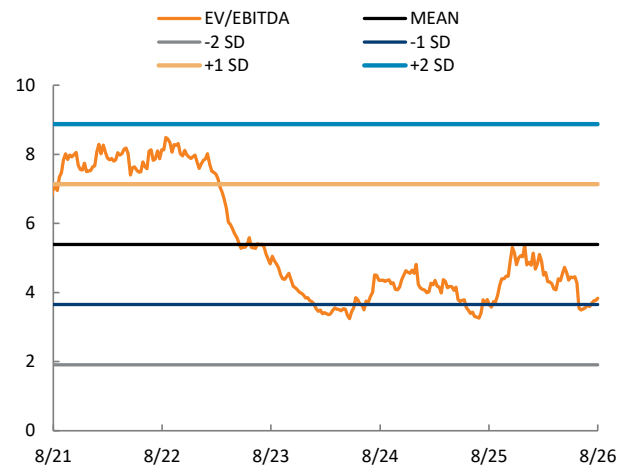
Source: Mirae Asset Sekuritas Indonesia Research

Figure 12. EV/EBITDA CPIN



Source: Mirae Asset Sekuritas Indonesia Research

Figure 13. EV/EBITDA JPFA



Source: Mirae Asset Sekuritas Indonesia Research

Charoen Pokphand Indonesia (CPIN)

Income statement (summarized)

(IDRbn)	2024	2025	2026F	2027F
Revenue	67,478	70,705	80,273	85,091
COGS	-57,058	-58,285	-65,674	-69,580
Gross profit	10,420	12,420	14,599	15,511
Opex	-4,433	-4,287	-5,238	-5,521
Operating profit	5,987	8,133	9,360	9,990
Other income / (expenses)	-43	23	100	10
Finance income	44	117	25	25
Finance cost	-732	-560	-445	-368
Profit before income tax	5,256	7,713	9,040	9,656
Income tax expenses	-1,545	-2,069	-2,260	-2,318
Minority interest	-1	0	-2	-2
Net profit	3,713	5,644	6,782	7,341
EBITDA	7,383	9,427	10,553	11,379
Margin (%)	12/24	12/25	12/26F	12/27F
Gross margin	15.4	17.6	18.2	18.2
Operating margin	8.9	11.5	11.7	11.7
Net margin	5.5	8.0	8.4	8.6
EBITDA margin	10.9	13.3	13.1	13.4
Growth (%)	12/24	12/25	12/26F	12/27F
Revenue	9.5	4.8	13.5	6.0
Operating profit	63.8	35.8	15.1	6.7
EPS	60.1	52.0	20.2	8.2
EBITDA	51.6	27.7	11.9	7.8

Cash flow statement (summarized)

(IDRbn)	2024	2025	2026F	2027F
Cash Flows from Op. Activities	3,627	4,419	6,705	5,456
Net profit	3,713	5,644	6,782	7,341
Depreciation	1,299	1,138	1,165	1,389
Change in Working Capital	-1,341	-2,483	-733	-3,279
Others	-44	119	-510	5
Cash Flows from Inv. Activities	-105	-914	-1,219	-1,528
Capex	-537	-1,573	-1,605	-1,702
Others	432	659	386	174
Cash Flows from Fin. Activities	-1,404	-3,490	-4,232	-4,278
Change in financial liabilities	-1,044	-1,871	-1,558	-1,000
Change in Equity	-1	0	1	1
Dividends paid	-492	-1,771	-2,822	-3,391
Others	133	152	147	113
Increase (Decrease) in Cash	2,118	14	1,254	-350
Beginning balance	2,328	4,446	4,461	5,715
Ending balance	4,446	4,461	5,715	5,365

Source: Company data, Mirae Asset Sekuritas Indonesia Research estimates

Balance sheet (summarized)

(IDRbn)	2024	2025	2026F	2027F
Current assets				
Cash & equivalents	4,446	4,461	5,715	5,365
Receivables	2,182	2,791	2,799	3,799
Inventories	9,375	11,406	11,748	13,529
Others	5,337	5,973	7,590	8,501
Total current assets	21,340	24,631	27,852	31,194
Non-current assets				
Fixed assets - net	16,928	17,363	17,803	18,115
Others	4,523	3,865	3,478	3,304
Total non-current assets	21,451	21,227	21,281	21,419
Total assets	42,791	45,858	49,133	52,613
Current liabilities				
ST bank loans and CM	5,400	3,480	2,818	2,266
Account payables	2,420	3,154	3,580	3,816
Other current liabilities	770	1,007	1,209	1,390
Total current liabilities	8,590	7,641	7,607	7,472
Non-current liabilities				
Long-term financial liabilities	2,794	2,824	2,287	1,839
Others non-current liabilities	817	980	1,127	1,240
Total non-current liabilities	3,913	4,066	3,414	3,078
Total liabilities	12,502	11,707	11,021	10,550
Shareholders' equity	30,274	34,136	38,097	42,047
Minority interests	15	15	15	16
Total liabilities and equity	42,791	45,858	49,133	52,613

Key valuation metrics/ratios

	2024	2025	2026F	2027F
P/E (x)	13.6	8.9	7.4	6.9
P/B (x)	1.7	1.5	1.3	1.2
EV/EBITDA (x)	7.3	5.6	4.7	4.3
EPS (IDR)	226	344	414	448
BPS (IDR)	1,846	2,082	2,323	2,564
DPS (IDR)	108	172	207	224
Payout Ratio (%)	47.7	50.0	50.0	50.0
Dividend Yield (%)	3.5	5.6	6.7	7.3
Receivable Turnover (x)	33.7	28.4	28.7	25.8
Inventory Turnover (x)	6.1	5.6	5.7	5.5
Payable Turnover (x)	21.5	20.9	19.5	18.8
ROA (%)	8.9	12.7	14.3	14.4
ROE (%)	13.0	17.5	18.8	18.3
Current Ratio (%)	248.4	322.3	366.1	417.5
Net gearing (x)	0.12	0.05	Net cash	Net cash
Interest coverage ratio (x)	10.1	16.8	23.7	30.9

Japfa Comfeed Indonesia (JPFA)

Income statement (summarized)

(IDRbn)	2024	2025	2026F	2027F
Revenue	55,801	60,716	64,459	68,745
COGS	-44,583	-47,524	-50,942	-54,503
Gross profit	11,218	13,191	13,516	14,241
Opex	-6,005	-7,042	-7,090	-7,356
Operating profit	5,213	6,150	6,426	6,886
Other income / (expenses)	-152	72	-2	-2
Finance income	50	67	55	58
Finance cost	-870	-805	-666	-599
Profit before income tax	4,241	5,484	5,814	6,343
Income tax expenses	-1,029	-1,202	-1,279	-1,395
Minority interest	193	277	257	257
Net profit	3,019	4,004	4,278	4,691
EBITDA	6,393	7,429	8,066	8,689
Margin (%)	12/24	12/25	12/26F	12/27F
Gross margin	20.1	21.7	21.0	20.7
Operating margin	9.3	10.1	10.0	10.0
Net margin	5.4	6.6	6.6	6.8
EBITDA margin	11.5	12.2	12.5	12.6
Growth (%)	12/24	12/25	12/26F	12/27F
Revenue	9.0	8.8	6.2	6.6
Operating profit	49.3	17.6	2.5	5.4
EPS	224.7	32.6	6.8	9.6
EBITDA	89.6	16.2	8.6	7.7

Cash flow statement (summarized)

(IDRbn)	2024	2025	2026F	2027F
Cash Flows from Op. Activities	4,060	3,640	5,045	5,863
Net profit	3,019	4,004	4,278	4,691
Depreciation	883	924	1,041	1,133
Change in Working Capital	-271	-957	-218	172
Others	429	-331	-57	-132
Cash Flows from Inv. Activities	-1,490	-2,111	-2,251	-2,638
Capex	-1,243	-2,165	-2,321	-2,612
Others	-247	54	69	-27
Cash Flows from Fin. Activities	-2,720	667	-2,533	-1,628
Change in financial liabilities	-2,102	1,118	-532	83
Change in Equity	183	409	214	234
Dividends paid	-814	-1,372	-1,819	-1,944
Others	13	512	-396	0
Increase (Decrease) in Cash	-150	2,196	260	1,597
Beginning balance	1,503	1,354	3,550	3,810
Ending balance	1,353	3,550	3,810	5,407

Source: Company data, Mirae Asset Sekuritas Indonesia Research estimates

Balance sheet (summarized)

(IDRbn)	2024	2025	2026F	2027F
Current assets				
Cash & equivalents	1,354	3,550	3,810	5,407
Receivables	2,761	3,198	3,303	3,199
Inventories	9,311	9,600	9,797	9,552
Others	3,744	5,029	5,175	5,335
Total current assets	17,169	21,376	22,085	23,494
Non-current assets				
Fixed assets - net	13,754	14,995	16,284	17,763
Others	3,527	3,445	3,351	3,351
Total non-current assets	17,497	18,684	19,904	21,410
Total assets	34,666	40,060	41,989	44,904
Current liabilities				
ST bank loans and CM	3,273	9,772	9,293	9,274
Account payables	4,636	4,752	5,145	5,113
Other current liabilities	1,387	1,994	1,774	1,658
Total current liabilities	9,296	16,517	16,213	16,045
Non-current liabilities				
Long-term financial liabilities	7,471	2,090	2,037	2,139
Others non-current liabilities	1,323	1,428	1,428	1,428
Total non-current liabilities	8,798	3,524	3,465	3,567
Total liabilities	18,094	20,041	19,678	19,612
Shareholders' equity	15,477	18,664	20,752	23,499
Minority interests	1,096	1,355	1,558	1,792
Total liabilities and equity	34,666	40,060	41,989	44,903

Key valuation metrics/ratios

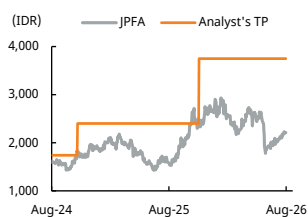
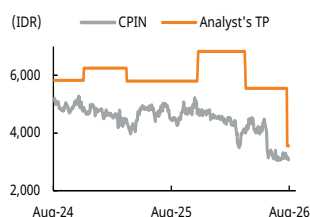
	2024	2025	2026F	2027F
P/E (x)	8.5	6.4	6.0	5.5
P/B (x)	1.7	1.4	1.2	1.1
EV/EBITDA (x)	5.5	4.6	4.1	3.6
EPS (IDR)	260	345	368	404
BPS (IDR)	1,332	1,606	1,786	2,022
DPS (IDR)	140	157	167	183
Payout Ratio (%)	53.9	45.4	45.4	45.4
Dividend Yield (%)	6.3	7.1	7.6	8.3
Receivable Turnover (x)	20.9	20.4	19.8	21.1
Inventory Turnover (x)	4.7	5.0	5.3	5.6
Payable Turnover (x)	9.4	10.1	10.3	10.6
ROA (%)	8.8	10.7	10.4	10.8
ROE (%)	21.0	23.5	21.7	21.2
Current Ratio (%)	184.7	129.4	136.2	146.4
Net gearing (x)	0.6	0.4	0.3	0.2
Interest coverage ratio (x)	6.0	7.6	9.7	11.5

Appendix 1

Important disclosures and disclaimers

Two-year rating and TP history

Company	Date	Rating	TP (IDR)	Company	Date	Rating	TP (IDR)
Charoen Pokphand Indonesia (CPIN IJ)	8/11/2026	Trading Buy	3,550	Japfa Comfeed Indonesia (JPFA IJ)	8/11/2026	Buy	3,750
	8/5/2026	Buy	3,550		7/9/2026	Buy	3,750
	7/9/2026	Buy	5,550		6/10/2026	Buy	3,750
	6/10/2026	Buy	5,550		5/20/2026	Buy	3,750
	5/5/2026	Buy	5,550		3/13/2026	Buy	3,750
	3/30/2026	Buy	5,550		3/2/2026	Buy	3,750
	3/13/2026	Buy	6,825		2/11/2026	Buy	3,750
	2/11/2026	Buy	6,825		1/26/2026	Buy	3,750
	1/26/2026	Buy	6,825		11/13/2025	Buy	3,750
	11/3/2025	Buy	6,825		9/18/2025	Buy	2,400
	9/18/2025	Trading Buy	5,800		8/4/2025	Buy	2,400
	8/5/2025	Buy	5,800		6/12/2025	Buy	2,400
	6/12/2025	Trading Buy	5,800		3/27/2025	Trading Buy	2,400
	3/27/2025	Buy	5,800		2/20/2025	Buy	2,400
	2/20/2025	Buy	6,250		1/20/2025	Buy	2,400
	1/20/2025	Buy	6,250		12/12/2024	Buy	2,400
	12/12/2024	Buy	6,250		11/14/2024	Buy	2,400
	11/14/2024	Buy	6,250		10/31/2024	Buy	2,400
	10/11/2024	Trading Buy	5,825		10/11/2024	Trading Buy	1,740
	8/14/2024	Trading Buy	5,825		8/14/2024	Hold	1,740



Stock ratings

Buy	Expected 12-month performance: +20% or greater
Trading Buy	Expected 12-month performance: +10% to +20%
Hold	Expected 12-month performance: -10% to +10%
Sell	Expected 12-month performance: -10% or worse

Sector ratings

Overweight	Expected to outperform the market over 12 months
Neutral	Expected to perform in line with the market over 12 months
Underweight	Expected to underperform the market over 12 months

Rating and TP history: Share price (—), TP (—), Not Rated (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆)

* Our investment rating is a guide to the expected return of the stock over the next 12 months.

* Outside of the official ratings of PT Mirae Asset Sekuritas Indonesia, analysts may call trading opportunities should technical or short-term material developments arise.

* The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.

* TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Disclosures

As of the publication date, PT Mirae Asset Sekuritas Indonesia ("MASID") and/or its affiliates do not have any special interest in the subject company and do not own 1% or more of the subject company's shares outstanding.

Analyst certification

The research analysts who prepared this report (the "Analysts") are certified to the Indonesia Financial Services Authority and are subject to Indonesian Capital Market regulations. They are neither registered as research analysts in any other jurisdiction nor subject to the laws or regulations thereof. Each Analyst responsible for the preparation of this report certifies that (i) all views expressed in this report accurately reflect the personal views of the Analyst about any and all of the issuers and securities named in this report; (ii) no part of the compensation of the Analyst was, is, or will be directly or indirectly related to the specific recommendations or views contained in this report; and (iii) The report does not contain any material non-public information. Except as otherwise specified herein, the Analysts have not received any compensation or any other benefits from the subject companies in the past 12 months and have not been promised the same in connection with this report. Like all employees of MASID, the Analysts receive compensation that is determined by overall firm profitability, which includes revenues from, among other business units, the institutional equities, investment banking, proprietary trading, and etc. At the time of publication of this report, the Analysts do not know or have reason to know of any actual, material conflict of interest of the Analyst or MASID except as otherwise stated herein.

Disclaimers

This report was prepared by MASID, a broker-dealer registered in the Republic of Indonesia and a member of the Indonesia Stock Exchange; on behalf of

MASID and its affiliated companies and is provided for information purposes only. Information and opinions contained herein have been compiled in good faith and from sources believed to be reliable, but such information has not been independently verified and MASID (including but not limited to the Analyst, respective employees who owns the expertise) makes no guarantee, representation or warranty, express or implied, as to the fairness, accuracy, completeness, or correctness of the information and opinions contained herein or of any translation into English from the Indonesia language or as to any information contained in this report or any other such information or opinions remaining unchanged after the issue thereof. In case of an English translation of a report prepared in the Indonesia language, the original Indonesian language report may have been made available to investors in advance of this report. The intended recipients of this report are sophisticated institutional investors who have substantial knowledge of the local business environment, its common practices, laws, and accounting principles, and no person whose receipt or use of this report would violate any laws or regulations or subject MASID or any of its affiliates to registration or licensing requirements in any jurisdiction shall receive or make any use hereof.

This report is for general information purposes only and is not and shall not be construed as an offer or a solicitation of an offer to effect transactions in any securities or other financial instruments. The report does not constitute investment advice to any person, and such person shall not be treated as a client of MASID by virtue of receiving this report. This report does not take into account the particular investment objectives, financial situations, or needs of individual clients. The report is not to be relied upon in substitution for the exercise of independent judgment. Information and opinions contained herein are as of the date hereof and are subject to change without notice. The price and value of the investments referred to in this report and the income from them may depreciate or appreciate, and investors may incur losses on investments. Past performance is not a guide to future performance. Future returns are not guaranteed, and a loss of original capital may occur. Please note that the graphs, charts, formulae, or other devices set out or referred to in this document cannot, in and of itself, be used to determine in deciding which securities to buy or sell, or when to buy or sell a securities. MASID, its affiliates, and their directors, officers, employees, and agents do not accept any liability (express or implied) for any loss arising out of the use hereof and howsoever arising (including, but not limited to any claims, proceeding, action, suits, losses, expenses, damages or costs) which may be brought against or suffered by any person as a result of acting in reliance upon the whole or any part of the contents of this report.

MASID may have issued other reports that are inconsistent with, and reach different conclusions from, the opinions presented in this report. The reports may reflect different assumptions, views, and analytical methods of the analysts who prepared them. MASID may make investment decisions that are inconsistent with the opinions and views expressed in this research report. MASID, its affiliates, and their directors, officers, employees, and agents may have long or short positions in any of the subject securities at any time and may make a purchase or sale, or offer to make a purchase or sale, of any such securities or other financial instruments from time to time in the open market or otherwise, in each case either as principals or agents. MASID and its affiliates may have had, or may be expecting to enter into, business relationships with the subject companies to provide investment banking, market-making, or other financial services as are permitted under the applicable laws and regulations. In considering any investments you should make your own independent assessment and seek your own professional financial and legal advisors. Should you choose not to seek such advice, you should consider carefully whether the securities is suitable for you.

No part of this document may be copied or reproduced in any manner or form or redistributed or published, in whole or in part, without the prior written consent of MASID. The media is not allowed to quote this report in any article whether in full or in parts without permission from MASID. For further information regarding company-specific information as it pertains to the representations and disclosures in this Appendix 1, please contact researchteam@miraeasset.co.id or +62 (21) 5088-7000.

Distribution

United Kingdom: This report is being distributed by Mirae Asset Securities (UK) Ltd. in the United Kingdom only to (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), and (ii) high net worth companies and other persons to whom it may lawfully be communicated, falling within Article 49(2)(A) to (E) of the Order (all such persons together being referred to as "Relevant Persons"). This report is directed only at Relevant Persons. Any person who is not a Relevant Person should not act or rely on this report or any of its contents.

United States: MASID is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This report is distributed in the U.S. by Mirae Asset Securities (USA) Inc., a member of FINRA/SIPC, to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6(b)(4) under the U.S. Securities Exchange Act of 1934, as amended. All U.S. persons that receive this document by their acceptance hereof represent and warrant that they are a major U.S. institutional investor and have not received this report under any express or implied understanding that they will direct commission income to MASID or its affiliates. Any U.S. recipient of this document wishing to effect a transaction in any securities discussed herein should contact and place orders with Mirae Asset Securities (USA) Inc. Mirae Asset Securities (USA) Inc. accepts responsibility for the contents of this report in the U.S., subject to the terms hereof, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor. Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments through MASID. The securities described in this report may not have been registered under the U.S. Securities Act of 1933, as amended, and, in such case, may not be offered or sold in the U.S. or to U.S. persons absent registration or an applicable exemption from the registration requirements.

Hong Kong: This report is distributed in Hong Kong by Mirae Asset Securities (HK) Limited, which is regulated by the Hong Kong Securities and Futures Commission. The contents of this report have not been reviewed by any regulatory authority in Hong Kong. This report is for distribution only to professional investors within the meaning of Part I of Schedule 1 to the Securities and Futures Ordinance of Hong Kong (Cap. 571, Laws of Hong Kong) and any rules made thereunder and may not be redistributed in whole or in part in Hong Kong to any person.

India: This report is being distributed by Mirae Asset Capital Markets (India) Private Limited ("MACM") in India to the customers based in India and is personal information only for those authorised recipient(s). MACM is inter alia a Securities and Exchange Board of India ("SEBI") registered Research Analyst in India and is not registered outside India. MACM and Mirae Asset, Korea are group entities. MACM makes no guarantee, representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information and opinions contained herein. The user assumes the entire risk of any use made of this information. This report has been provided for assistance only and is not intended to be and must not alone be taken as the basis for an investment decision. Recipient must read the entire Appendix 1 to the report carefully for Important Disclosures & Disclaimers.

All other jurisdictions: Customers in all other countries who wish to effect a transaction in any securities referenced in this report should contact MASID or its affiliates only if distribution to or use by such customer of this report would not violate applicable laws and regulations and not subject MASID and its affiliates to any registration or licensing requirement within such jurisdiction.

Mirae Asset Securities International Network

Mirae Asset Securities Co., Ltd. (Seoul)

One-Asia Equity Sales Team
Mirae Asset Center 1 Building
26 Eulji-ro 5-gil, Jung-gu, Seoul 04539
Korea

Tel: 82-2-3774-2124

Mirae Asset Securities (USA) Inc.

810 Seventh Avenue, 37th Floor
New York, NY 10019
USA

Tel: 1-212-407-1000

Mirae Asset Securities (Singapore) Pte. Ltd.

6 Battery Road, #11-01
Singapore 049909
Republic of Singapore

Tel: 65-6671-9845

Mirae Asset Investment Advisory (Beijing) Co., Ltd

2401B, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699

Ho Chi Minh Representative Office

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3910-7715

Mirae Asset Securities (HK) Ltd.

Units 8501, 8507-8508, 85/F
International Commerce Centre
1 Austin Road West
Kowloon
Hong Kong
Tel: 852-2845-6332

Mirae Asset Wealth Management (Brazil) CCTVM

Rua Funchal, 418, 18th Floor, E-Tower Building
Vila Olimpia
Sao Paulo - SP
04551-060
Brazil
Tel: 55-11-2789-2100

Mirae Asset Securities (Vietnam) LLC

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3911-0633 (ext.110)

Beijing Representative Office

2401A, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699 (ext. 3300)

Mirae Asset Capital Markets (India) Pvt Ltd

1st Floor, Tower 4, Equinox Business Park,
LBS Marg, Off BKC, Kurla (West), Mumbai - 400 070
India

Tel: 91-22-62661300 / 48821300

Mirae Asset Securities (UK) Ltd.

41st Floor, Tower 42
25 Old Broad Street,
London EC2N 1HQ
United Kingdom

Tel: 44-20-7982-8000

PT. Mirae Asset Sekuritas Indonesia

District 8, Treasury Tower Building Lt. 50
Sudirman Central Business District
Jl. Jend. Sudirman, Kav. 52-54
Jakarta Selatan 12190
Indonesia
Tel: 62-21-5088-7000

Mirae Asset Securities Mongolia UTsk LLC

#406, Blue Sky Tower, Peace Avenue 17
1 Khoroo, Sukhbaatar District
Ulaanbaatar 14240
Mongolia

Tel: 976-7011-0806

Shanghai Representative Office

38T31, 38F, Shanghai World Financial Center
100 Century Avenue, Pudong New Area
Shanghai 200120
China

Tel: 86-21-5013-6392