MIRAE ASSET Securities

Equity Research
September 11, 2026

Mirae Asset Sekuritas Indonesia
Andreas Saragih
andreas.saragih@miraeasset.co.id

Overweight/Maintain

Poultry

Record Prices as Local Money Steps In

Broiler sets a record, DOC at a two-year high

The average monthly market price for DOC surged to IDR7,275/chick in August 2026 (+37.6% MoM, +22.5% YoY), the highest monthly price since July 2024. Broiler price climbed to IDR24,351/kg (+30.5% MoM, +30.1% YoY), the highest since we started tracking it in January 2014. Corn edged up to IDR6,573/kg (+1.3% MoM, +22.4% YoY). We attribute the DOC gain to firm broiler prices, which we believe stem from lower oversupply against strong demand from the nutritious free meal (MBG) program. The elevated corn price reflects strong demand against stable supply, with El Nino a further risk to the crop.

8M26 averages hold above FY25 as MBG spending feeds through

The DOC price averaged IDR5,992/chick in 8M26, up 18.7% YoY and 6% above the FY25 average. The broiler average rose to IDR20,652/kg (+15.1% YoY and 7.2% above FY25), while corn averaged IDR6,586/kg (+36.6% YoY and 27.6% above FY25 average). Firm output and input prices point to resilient poultry demand, supported by huge MBG spending. Corn is running ahead of both output prices, but we believe the higher volumes that come with MBG demand more than cover the faster input cost growth.

Third straight month of foreign outflows, CPIN hit by MSCI rebalancing

JPFA rose 2.3% MoM in August but lagged the JCI, which gained 4.6%, while CPIN underperformed the index by 14.1ppt. Both names recorded net foreign outflows during the month, at IDR89bn for JPFA and IDR953bn for CPIN. That was the third consecutive monthly outflow for both, and we attribute the size of CPIN figure to MSCI rebalancing. Cumulatively, JPFA holds net inflows of IDR298bn in 8M26 and IDR1tr over the last twelve months, while CPIN has turned negative on both counts, at IDR696bn and IDR471bn of net outflows.

Local investors take the other side at both names

JPFA local ownership rose 0.8ppt MoM to 20.4%, up from the 12-month low of 18.5% in June 2026. Local individuals remain the largest local holder at 11.1% (+0.3ppt), followed by local insurance at 4.4% (+0.5ppt), while local mutual funds (MF) declined 0.1ppt to 3.6%. Foreign IB stayed the top holder at 25.2% (-0.8ppt), with foreign corporates at 22.9% (-0.1ppt) and foreign MF at 17.9% (+0.2ppt). At CPIN, local ownership rose 1.3ppt to 14.0%, its largest monthly gain in a year, led by local individuals at 5.1% (+1.1ppt), a twelve-month high. Local insurance held at 6.3% and local MF added 0.2ppt to 0.9%, positioning for the post MSCI downgrade. Foreign IB remains the largest at 38.1% (-0.2ppt), with foreign corporates at 18.9% (-0.6ppt) and foreign MF at 13.5% (+0.3ppt).

Maintain Overweight, downgrade CPIN to Hold

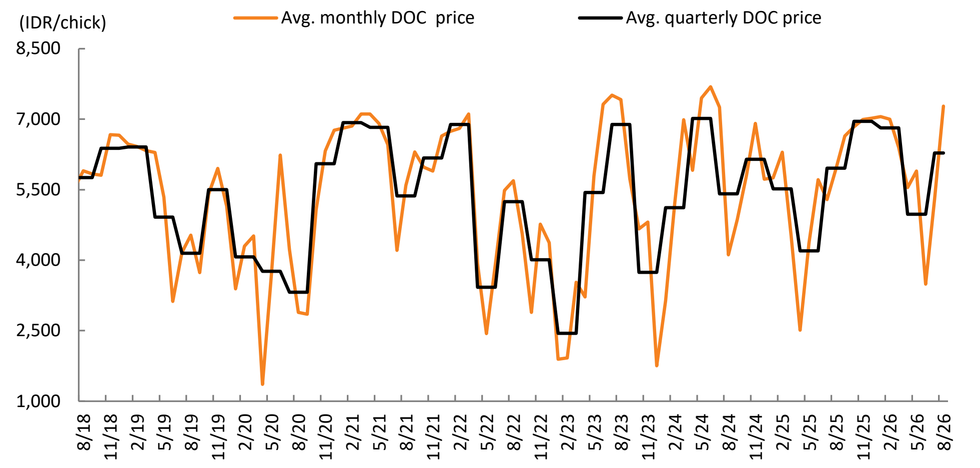
We maintain our Overweight rating on the sector, given the sustained strength in DOC and broiler prices following the resumption of the MBG program. We nevertheless downgrade CPIN to Hold from Trading Buy on lower upside potential. Both names trade at attractive valuations, CPIN at 1.5 S.D. below its five-year EV/EBITDA mean and JPFA at 1 S.D. below. 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	53,785	Hold	3,280	3,550	8.2	7.9	7.3	5.0	4.6	16.9	16.4
Japfa Comfeed Indonesia Tbk	JPFA	27,206	Buy	2,320	3,300	42.2	5.3	4.7	4.1	3.6	21.7	21.2

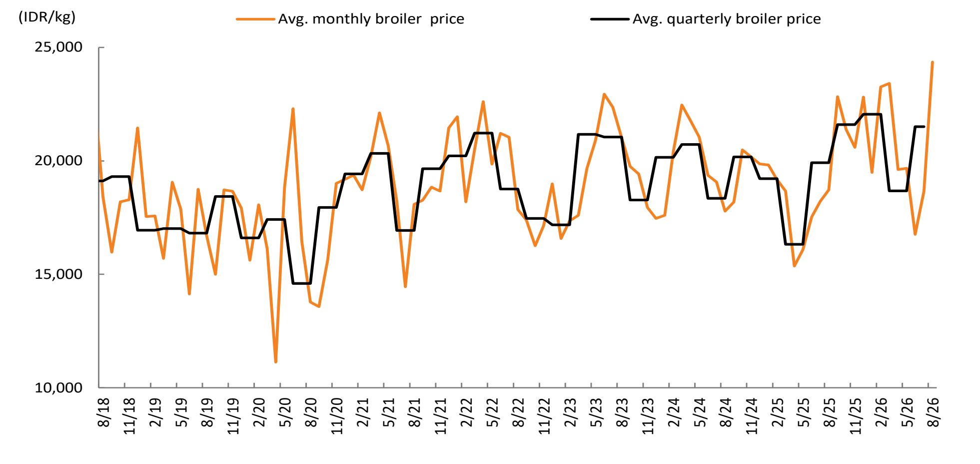
Note: Data as of September 10, 2026
Source: Company Data, Mirae Asset Sekuritas Indonesia Research

Figure 1. Average market price for DOC in West Java



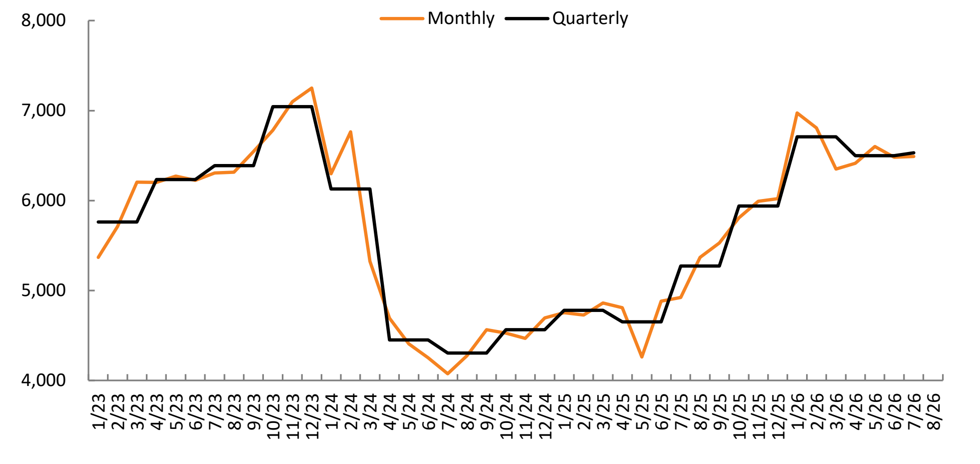
Source: Mirae Asset Sekuritas Indonesia Research

Figure 2. Average market price for Broiler in West Java



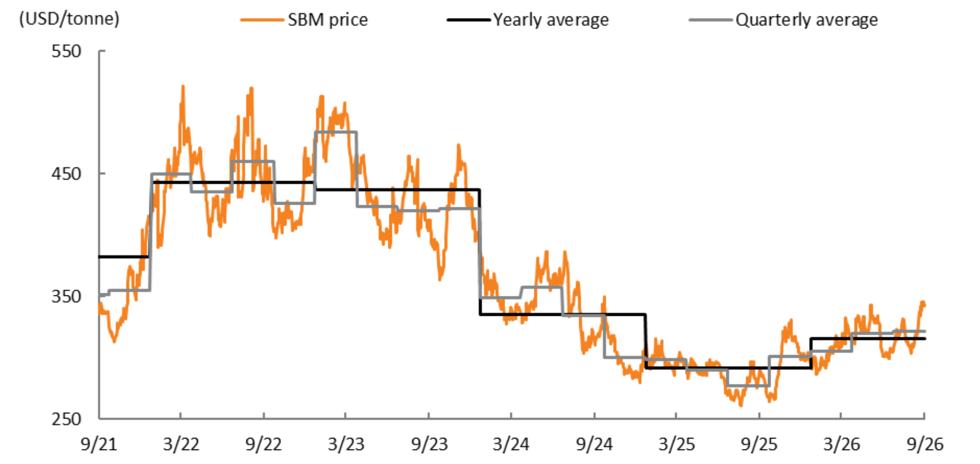
Source: Mirae Asset Sekuritas Indonesia Research

Figure 3. Average monthly domestic corn price



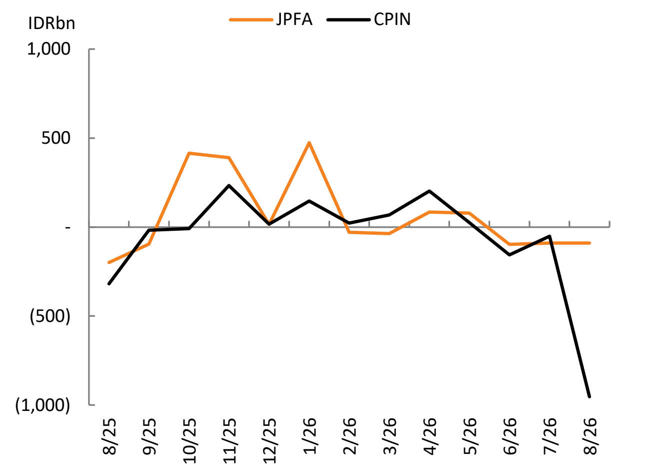
Source: Mirae Asset Sekuritas Indonesia Research

Figure 4. Average monthly SBM price



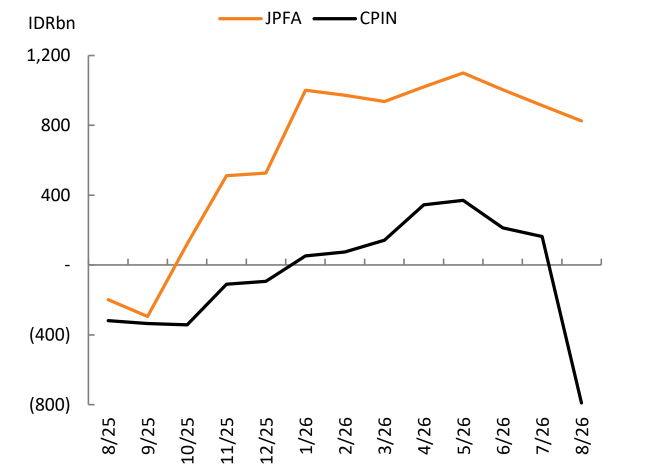
Source: Mirae Asset Sekuritas Indonesia Research

Figure 5. Foreign flow - Monthly



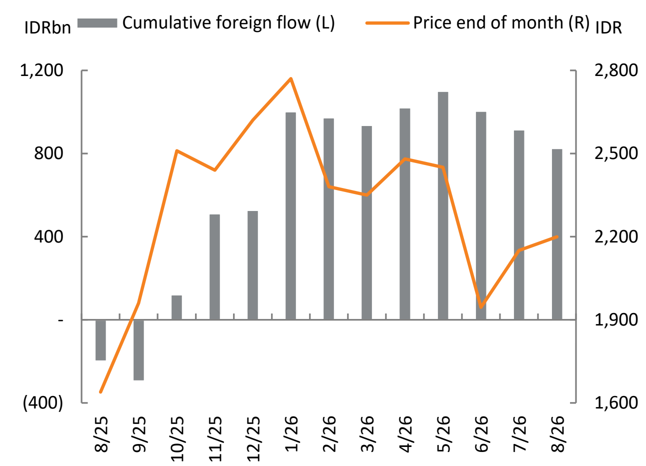
Source: Mirae Asset Sekuritas Indonesia Research

Figure 6. Foreign flow - Cumulative



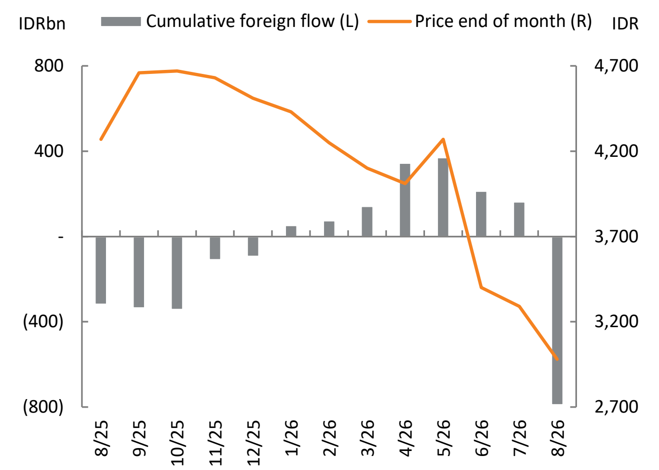
Source: Mirae Asset Sekuritas Indonesia Research

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



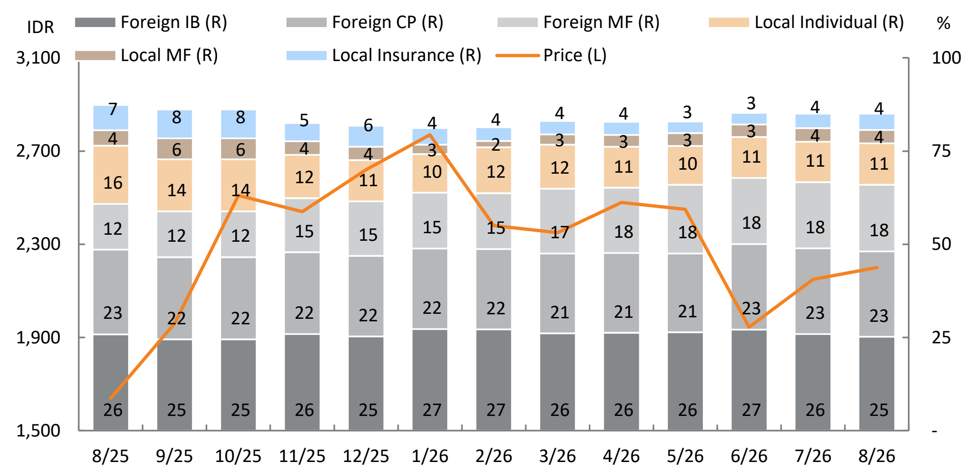
Source: Mirae Asset Sekuritas Indonesia Research

Figure 8. Cumulative foreign flow vs. share price - CPIN



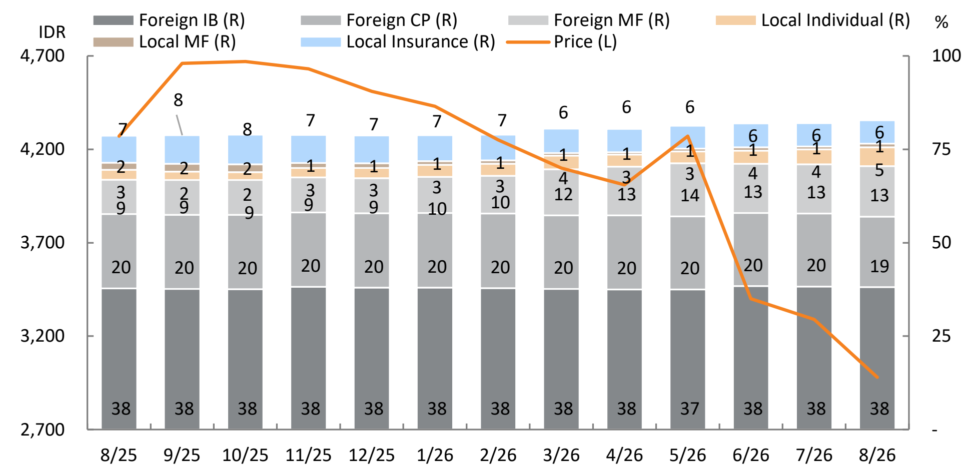
Source: Mirae Asset Sekuritas Indonesia Research

Figure 9. Tradeable Shares Ownership - JPFA



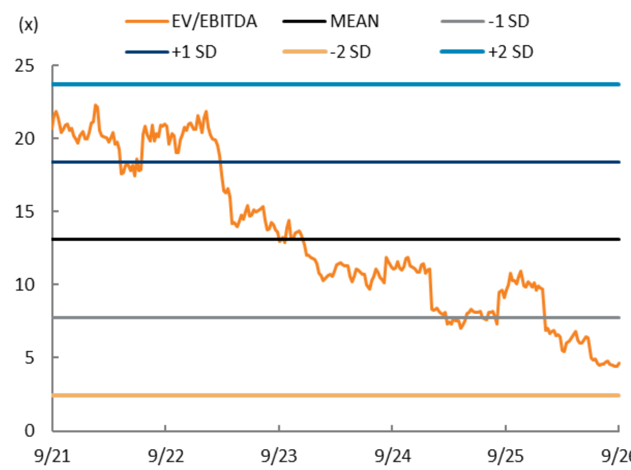
Source: KSEI, Mirae Asset Sekuritas Indonesia Research

Figure 10. Tradeable Shares Ownership - CPIN



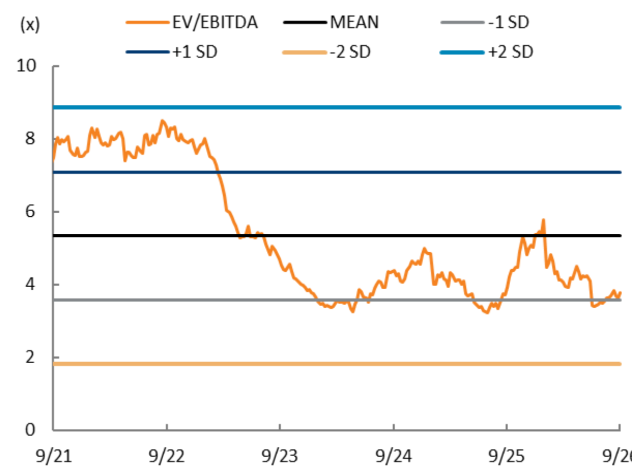
Source: Mirae Asset Sekuritas Indonesia Research

Figure 11. EV/EBITDA CPIN



Source: Mirae Asset Sekuritas Indonesia Research

Figure 12. 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

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**

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

Key valuation metrics/ratios

	2024	2025	2026F	2027F
P/E (x)	14.5	9.5	7.9	7.3
P/B (x)	1.8	1.6	1.4	1.3
EV/EBITDA (x)	7.8	5.9	5.0	4.6
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 (%)	3.3	5.2	6.3	6.8
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**	**72,224**	**77,038**
COGS	-44,583	-47,524	-56,352	-59,885
Gross profit	**11,218**	**13,191**	**15,872**	**17,153**
Opex	-6,005	-7,042	-8,089	-8,474
Operating profit	**5,213**	**6,150**	**7,783**	**8,679**
Other income / (expenses)	-152	72	-2	-2
Finance income	50	67	80	84
Finance cost	-870	-805	-885	-930
Profit before income tax	**4,241**	**5,484**	**6,975**	**7,832**
Income tax expenses	-1,029	-1,202	-1,535	-1,723
Minority interest	193	277	354	428
Net profit	**3,019**	**4,004**	**5,087**	**5,681**
EBITDA	**6,393**	**7,429**	**9,121**	**10,151**

Margin (%)	12/24	12/25	12/26F	12/27F
Gross margin	20.1	21.7	22.0	22.3
Operating margin	9.3	10.1	10.8	11.3
Net margin	5.4	6.6	7.0	7.4
EBITDA margin	11.5	12.2	12.6	13.2

Growth (%)	12/24	12/25	12/26F	12/27F
Revenue	9.0	8.8	19.0	6.7
Operating profit	49.3	17.6	20.3	8.1
EPS	224.7	32.6	27.1	11.7
EBITDA	89.6	16.2	22.8	11.3

Balance sheet (summarized)

(IDRbn)	2024	2025	2026F	2027F
Current assets				
Cash & equivalents	1,354	3,550	3,867	3,571
Receivables	2,761	3,198	4,328	4,235
Inventories	9,311	9,600	12,250	12,657
Others	3,744	5,029	5,175	5,525
Total current assets	**17,169**	**21,376**	**25,621**	**25,988**
Non-current assets				
Fixed assets - net	13,754	14,995	16,972	18,426
Others	3,527	3,445	3,625	3,625
Total non-current assets	**17,497**	**18,684**	**20,865**	**22,346**
Total assets	**34,666**	**40,060**	**46,487**	**48,334**
Current liabilities				
ST bank loans and CM	3,273	9,772	10,293	6,287
Account payables	4,636	4,752	5,692	5,113
Other current liabilities	1,387	1,994	1,916	1,643
Total current liabilities	**9,296**	**16,517**	**17,901**	**13,044**
Non-current liabilities				
Long-term financial liabilities	**7,471**	**2,090**	**4,037**	**7,139**
Others non-current liabilities	1,323	1,428	1,428	1,428
Total non-current liabilities	8,798	3,524	5,465	8,567
Total liabilities	18,094	20,041	23,366	21,611
Shareholders' equity	**15,477**	**18,664**	**21,561**	**24,931**
Minority interests	**1,096**	**1,355**	**1,558**	**1,792**
Total liabilities and equity	**34,666**	**40,060**	**46,486**	**48,334**

Cash flow statement (summarized)

(IDRbn)	2024	2025	2026F	2027F
Cash Flows from Op. Activities	**4,060**	**3,640**	**3,088**	**5,324**
Net profit	3,019	4,004	5,087	5,681
Depreciation	883	924	1,066	1,157
Change in Working Capital	-271	-957	-3,083	-1,293
Others	429	-331	17	-221
Cash Flows from Inv. Activities	**-1,490**	**-2,111**	**-3,238**	**-2,638**
Capex	-1,243	-2,165	-3,033	-2,612
Others	-247	54	-204	-27
Cash Flows from Fin. Activities	**-2,720**	**667**	**467**	**-2,982**
Change in financial liabilities	-2,102	1,118	2,468	-904
Change in Equity	183	409	214	234
Dividends paid	-814	-1,372	-1,819	-2,312
Others	13	512	-396	0
Increase (Decrease) in Cash	**-150**	**2,196**	**317**	**-296**
Beginning balance	1,503	1,354	3,550	3,867
Ending balance	**1,353**	**3,550**	**3,867**	**3,571**

Source: Company Data, Mirae Asset Sekuritas Indonesia Research Estimates

Key valuation metrics/ratios

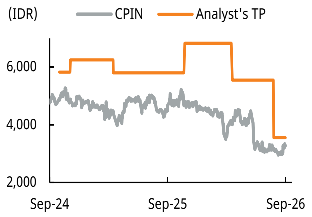
	2024	2025	2026F	2027F
P/E (x)	8.9	6.7	5.3	4.7
P/B (x)	1.7	1.4	1.3	1.1
EV/EBITDA (x)	5.7	4.7	4.1	3.6
EPS (IDR)	260	345	438	489
BPS (IDR)	1,332	1,606	1,855	2,145
DPS (IDR)	140	157	199	222
Payout Ratio (%)	53.9	45.4	45.4	45.4
Dividend Yield (%)	6.0	6.7	8.6	9.6
Receivable Turnover (x)	20.9	20.4	19.2	18.0
Inventory Turnover (x)	4.7	5.0	5.2	4.8
Payable Turnover (x)	9.4	10.1	10.8	11.1
ROA (%)	8.8	10.7	11.8	12.0
ROE (%)	21.0	23.5	25.3	24.4
Current Ratio (%)	184.7	129.4	143.1	199.2
Net gearing (x)	0.6	0.4	0.5	0.4
Interest coverage ratio (x)	6.0	7.6	8.8	9.3

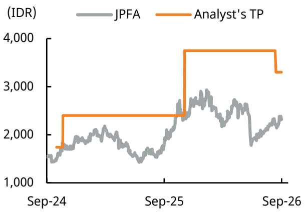
Appendix 1

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)	9/11/2026	Hold	3,550	Japfa Comfeed Indonesia (JPFA IJ)	9/11/2026	Buy	3,300
	8/11/2026	Trading Buy	3,550		8/24/2026	Buy	3,300
	8/5/2026	Buy	3,550		8/11/2026	Buy	3,750
	7/9/2026	Buy	5,550		7/9/2026	Buy	3,750
	6/10/2026	Buy	5,550		6/10/2026	Buy	3,750
	5/5/2026	Buy	5,550		5/20/2026	Buy	3,750
	3/30/2026	Buy	5,550		3/13/2026	Buy	3,750
	3/13/2026	Buy	6,825		3/2/2026	Buy	3,750
	2/11/2026	Buy	6,825		2/11/2026	Buy	3,750
	1/26/2026	Buy	6,825		1/26/2026	Buy	3,750
	11/3/2025	Buy	6,825		11/13/2025	Buy	3,750
	9/18/2025	Trading Buy	5,800		9/18/2025	Buy	2,400
	8/5/2025	Buy	5,800		8/4/2025	Buy	2,400
	6/12/2025	Trading Buy	5,800		6/12/2025	Buy	2,400
	3/27/2025	Buy	5,800		3/27/2025	Trading Buy	2,400
	2/20/2025	Buy	6,250		2/20/2025	Buy	2,400
	1/20/2025	Buy	6,250		1/20/2025	Buy	2,400
	12/12/2024	Buy	6,250		12/12/2024	Buy	2,400
	11/14/2024	Buy	6,250		11/14/2024	Buy	2,400
	10/11/2024	Trading Buy	5,825		10/31/2024	Buy	2,400
					10/11/2024	Trading Buy	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 for 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 (HK) Ltd.
Units 8501, 8507-8508, 85/F
International Commerce Centre
1 Austin Road West
Kowloon
Hong Kong
Tel: 852-2845-6332

Mirae Asset Securities (UK) Ltd.
41st Floor, Tower 42
25 Old Broad Street,
London EC2N 1HQ
United Kingdom

Tel: 44-20-7982-8000

Mirae Asset Securities (USA) Inc.
810 Seventh Avenue, 37th Floor
New York, NY 10019
USA

Tel: 1-212-407-1000

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

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 (Singapore) Pte. Ltd.
6 Battery Road, #11-01
Singapore 049909
Republic of Singapore

Tel: 65-6671-9845

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)

Mirae Asset Securities Mongolia UTsK LLC
#406, Blue Sky Tower, Peace Avenue 17
1 Khoroo, Sukhbaatar District
Ulaanbaatar 14240
Mongolia

Tel: 976-7011-0806

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

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)

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

Tel: 86-21-5013-6392

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 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