

Philippines CPI, Aug 2023

Headline accelerates, driven by higher food inflation

After six consecutive months of slowing, headline inflation rate in Aug 2023 picked up to +5.3% YoY (Jul 2023: +4.7% YoY; consensus: +4.7% YoY; 8M2023: +6.6% YoY) on higher FNAB inflation. Nevertheless, core inflation rate eased further to +6.1% YoY (Jul 2023: +6.7% YoY; 8M2023: +7.4% YoY). With the re-acceleration of headline inflation in Aug 2023, we adjust upward our 2023 headline inflation rate forecast to +6.0% from +5.5% previously.

Headline re-accelerated, core decelerated further

Headline inflation rate in Aug 2023 ended the six consecutive months of deceleration from the peak of +8.7% YoY peak in Jan 2023, as it picked up to +5.3% YoY (Jul 2023: +4.7 YoY; 8M2023: +6.6% YoY; 2022: +5.8%); mainly on higher costs for food & non-alcoholic beverages (FNAB). FNAB costs picked up to +8.1% YoY (Jul 2023: +6.3% YoY; 8M2023: +8.4% YoY) on higher costs for rice, fish and vegetables. Housing, Water, Electricity, Gas and Other Fuel (HWEGOF) inflation eased to +2.5% YoY (Jul 2023: +4.5% YoY; 8M2023: +6.3% YoY) on decline in electricity and gas costs, while water supply (Fig. 18) and rental paid for housing remained elevated (Fig. 19). MoM, headline inflation was up +1.1% (Jul 2023: +0.1%).

Rice prices increased +8.7% YoY during the month (Jul 2023: +4.2% YoY; 8M2023: +3.8% YoY; 2022: +2.1%); mainly due to lower rice production and higher import prices following export bans by rice exporters such as India and Myanmar. Vegetable inflation rose to +31.9% YoY (Jul 2023: +21.8% YoY) due to losses from weather disruptions such as Super Typhoon Egay.

Meanwhile, core inflation stays on easing mode, decelerated to +6.1% YoY (Jul 2023: +6.7% YoY; 8M 2023: +7.4% YoY; 2022: +3.9%); in line with the easing domestic demand growth.

Revised upward our headline inflation forecast to +6.0% from +5.5% previously

With the re-acceleration in headline inflation in Aug 2023, we adjusted upward our 2023 headline inflation rate forecast to +6.0% from +5.5% previously (2022: +5.8%). The headline inflation underscores the upside risk to inflation due to several factors. Firstly, the onset of El Nino and export ban on rice and other food items, which raise the risk of disruption in agricultural production and thus upward pressures on food prices. Secondly, while the recently announced PHP40 hike in daily minimum wage for NCR is unlikely to affect inflation significantly, the proposed PHP150 daily nationwide minimum wage hike could put further upside risk to inflation outlook. Thirdly, possible further rise in transport costs, following the recent hike in LRT fares and retail diesel and gasoline prices due to the firm global crude oil prices.

Expect BSP rate to stay at 6.25% till end-2023

The re-acceleration in headline inflation underscores the upside risk to consumer prices amid factors like El Nino, rice export ban, transport fare hike and potential nationwide minimum wage hike. But we expect BSP to keep interest rate at 6.25% for the rest of this year as core inflation continues to ease. The next BSP monetary policy meeting is on 21 Sep 2023.

Analysts

Dr Zamros Dzulkafli (603) 2082 6818 zamros.d@maybank-ib.com

Suhaimi Ilias (603) 2297 8682 suhaimi_ilias@maybank-ib.com

Fatin Nabila Mohd Zaini (603) 2297 8685 fatinnabila.mohdzaini@maybank-ib.com

Figure 1: Consumer Price Index (2018=100)

% YoY	May-23	, Jun-23	Jul-23	Aug-23	3Q-22	4Q-22	1Q-23	2Q-23	8M2023	2022
CPI-All Items	6.1	5.4	4.7	5.3	6.5	7.9	8.3	6.0	6.6	5.8
Food & Non Alcoholic Beverages (FNAB)	7.4	6.7	6.3	8.1	6.8	9.9	10.2	7.4	8.4	5.9
Alcoholic Beverages & Tobacco	12.3	11.6	10.9	10.1	9.2	10.6	11.4	12.2	11.5	7.9
Clothing and Footwear	5.1	5.1	4.8	4.8	2.7	3.5	4.7	5.1	4.9	2.6
Housing & Utilities	6.5	5.6	4.5	2.5	6.6	7.1	8.2	6.2	6.3	6.4
Furnishing, Household,										
Equipment & Routine	6.2	6.0	5.8	5.6	3.3	4.4	5.8	6.1	5.9	3.2
Maintenance										
Health	4.1	3.9	3.9	3.9	2.4	2.8	3.7	4.0	3.9	2.6
Transport	(0.5)	(3.1)	(4.7)	0.2	15.7	12.2	8.4	(0.3)	2.5	12.9
Information & Communication	0.7	0.7	0.7	0.7	0.5	0.6	0.7	0.7	0.7	0.6
Recreation, Sports & Culture	4.9	4.8	4.7	4.9	2.4	3.4	4.4	4.8	4.6	2.3
Education Services	3.6	3.6	3.7	2.9	2.6	3.5	3.6	3.6	3.6	1.8
Restaurant & Accommodation Services	8.3	8.2	7.9	7.1	4.1	6.4	8.0	8.4	8.0	4.1
Financial Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Personal Care, &										
Miscellaneous Goods & Services	5.7	5.8	5.6	5.5	3.2	4.1	5.3	5.7	5.5	3.0
Core Inflation	7.7	7.4	6.7	6.1	4.3	6.4	7.7	7.7	7.4	3.9

Source: PSA, CEIC

Food cost a key inflation upside risk factor

"Food & Non Alcoholic Beverages (FNAB)" inflation accelerated to +8.1% YoY in Aug 2023 (Jul 2023: +6.3% YoY; 8M2023: +8.4% YoY) with prices rose MoM by +2.4% (Jul 2023: +0.5%). Accordingly, food inflation rose to +8.2% YoY in Aug 2023 (Jul 2023: +6.3% YoY; 8M2023: +8.5% YoY) with percentage share of contribution to CPI rising to 44.9% in Aug 2023 from 36.3% in 2022 (Fig. 4 & 5). We now expect FNAB costs to remain elevated in the near term as global food price inflation continue to stay firm, in addition to elevated fertilizer and feedmeal costs (Fig. 11 & 12) as well as potential agriculture damage from weather disturbances i.e. typhoons and El Nino. India's recent decision to ban exports of non-basmati rice also brings further upside risk to elevated rice inflation.

Meanwhile, Transport costs was up +0.2% YoY in Aug 2023 (Jul 2023: -4.7% YoY; 8M2023: +2.5% YoY) as Transport inflation posted smaller surge by +14.6% YoY in Aug last year vs. +18.1% YoY in Jul 2022, in response to the surge in global crude oil prices last year (Aug 2023: USD86.2/bbl; 8M2023: USD80.6/bbl; Aug 2022: USD99.8/bbl; Jul 2022: USD113.3/bbl). Domestic diesel price posted smaller decline at -16.1% YoY in Aug 2023 (Jul 2023: -33.9% YoY) and similarly, gasoline price at -8.7% YoY (Jul 2023: -23.2% YoY); as retail diesel and gasoline prices were raised during the month. On MoM basis, "Transport" cost was up by +2.3% in Aug 2023 (Jul 2023: +0.1%).

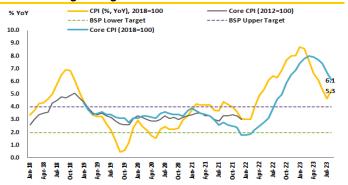
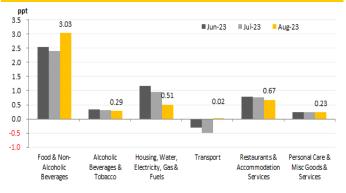


Figure 2: Headline inflation, core inflation and BSP's inflation target range

Figure 3: Contributions to inflation rate (percentage point of % YoY change in CPI)



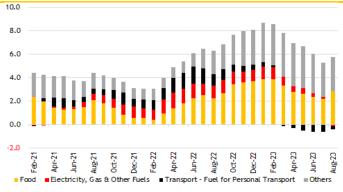
Sources: CEIC, Maybank IBG Research

Figure 4: Inflation - "Food, Utilities/Energy, Fuel" vs "Others"

Period	%	YoY	ppt contribu	ution to CPI	<u>% share of contribution to CPI</u>			
	2022	8M2023	2022	8M2023	2022	8M2023		
Headline Inflation	5.8	6.6	5.8	6.6	100.0	100.0		
Food	6.1	8.5	2.1	3.0	36.3	44.9		
Electricity, Gas & Other Fuels	15.8	7.7	1.1	0.5	18.4	7.9		
Transport - Fuels & Lubricants	39.1	(12.0)	0.9	(0.3)	16.1	(4.3)		
Others	3.0	6.1	1.7	3.4	29.2	51.6		

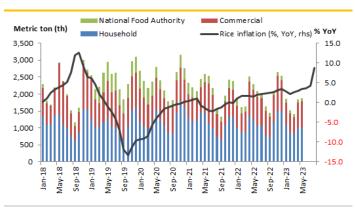
Source: Maybank IBG Research

Figure 5: Contributions to % YoY Inflation Rate (percentage point)



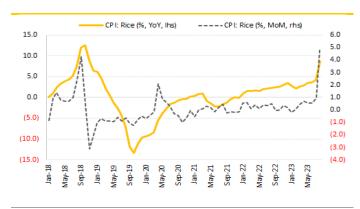
Sources: CEIC, Maybank IBG Research





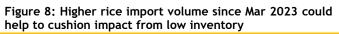
Source: PSA, CEIC

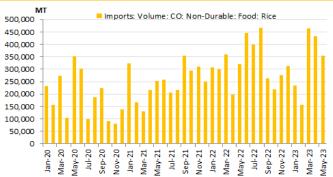
Figure 6: Spike in rice price



Sources: CEIC

Sources: CEIC





Source: PSA, CEIC

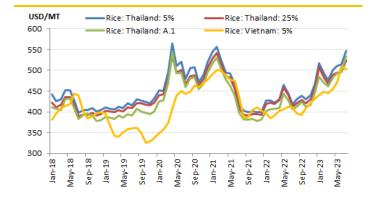
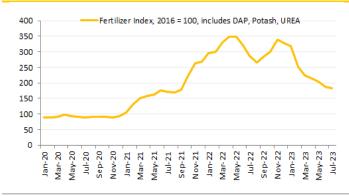


Figure 9: Rising global rice prices

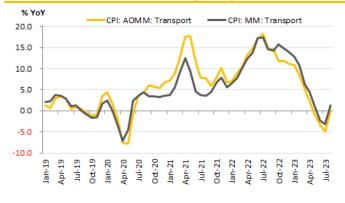
Source: World Bank, CEIC

Figure 11: Global fertilizer off the peak in Apr 2022



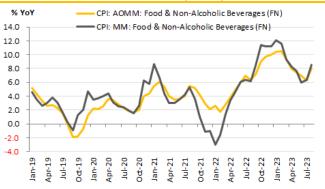
Sources: IMF, CEIC

Figure 13: Monthly transport inflation for Metro Manila (MM) and Areas Outside Metro Manila (AOMM)



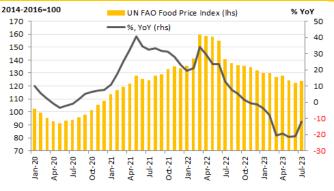
Source: PSA, CEIC

Figure 10: Monthly FNAB inflation for Metro Manila (MM) and Areas Outside Metro Manila (AOMM)



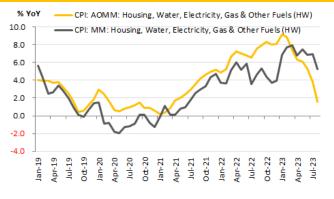
Source: PSA, CEIC

Figure 12: Global food price index gradually easing but stays elevated



Sources: FAO, CEIC

Figure 14: Monthly Housing & Utilities inflation for Metro Manila (MM) and Areas Outside Metro Manila (AOMM)



Source: PSA, CEIC

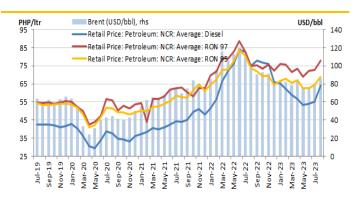


Figure 15: Average retail fuel prices (NCR)

Source: Department of Energy, CEIC

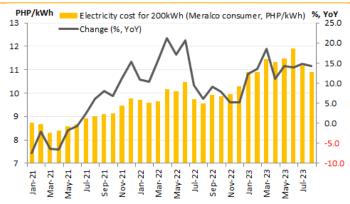
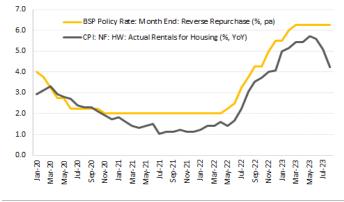


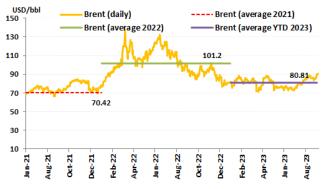
Figure 17: Meralco electricity costs

Figure 19: Elevated rental costs on aggressive BSP's policy rate hikes



Source: PSA, CEIC





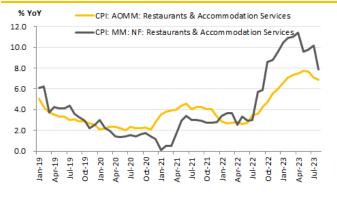
Source: Bloomberg





Source: PSA, CEIC

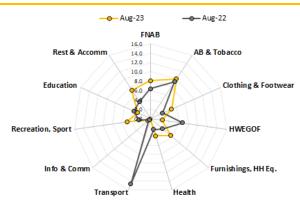
Figure 20: Smaller gap in Restaurants & Accommodation Services inflation pace in MM and areas outside MM



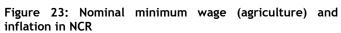


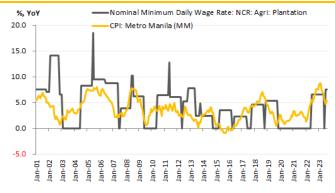
Sources: Meralco, news reports

Figure 21: Monthly headline inflation (%, YoY); Aug 2023 vs. Aug 2022

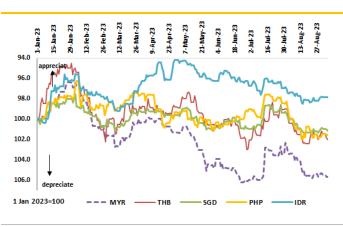


Source: CEIC

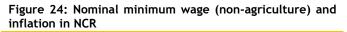


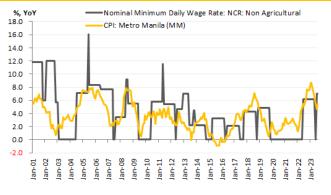






Source: Bloomberg





Source: CEIC

Source: CEIC

Figure 3	25: A	griculture	losses in	Philippines	caused by	El Nino	phenomenon	(1994-2016)
				· · · · · · · · · · · · · · · · · · ·	,		F	(

El-Nino period	No. of month	Category	Total area	Production loss (volume, MT)					
			affected (ha)	Total	Rice	Maize			
1994-1995 (Aug-Apr)	9	Moderate	183,572	405,775	230,515	175,260			
1997-1998 (Apr-May)	14	Strong	677,441	1,056,743	684,262	372,481			
2002-2003 (Apr-Mar)	12	Moderate	159,043	340,938	247,254	93,684			
2004-2005 (Jun-Feb)	9	Weak	204,688	349,762	34,651	315,111			
2006-2007 (Aug-Feb)	7	Weak	224,419	321,164	25,411	292,072			
2009-2010 (Jun-May)	12	Strong	555,102	1,180,000	540,469	623,579			
2016 (Feb-Jul)	6	Strong	556,721	1,480,672	491,238	510,457			

Source: Striking a Balance: Managing El Niño and La Niña in Philippines' Agriculture (World Bank, 2019)

Figure 26: Agriculture damage from major natural disasters and FNAB inflation during disaster at month t

Month Disaste	Disastor	Name	Agriculture														
	Disaster	name	damage (PHP m)	t-1	t	t+1	t+2	t+3	t+4	t+5	t+6	t+7	t+8	t+9	t+10	t+11	t+12
Oct-10	Typhoon	Juan	11,528	4.3	3.5	3.9	4.0	4.8	5.9	6.2	6.3	6.2	6.0	5.7	5.2	5.0	5.7
Sep-11	Typhoon	Pedring	13,458	5.2	5.0	5.7	4.8	4.1	3.1	1.5	1.5	1.9	1.9	2.1	2.5	3.6	3.7
Dec-12	Typhoon	Pablo	33,470	2.5	2.5	2.7	2.9	2.7	2.0	2.2	2.1	1.9	1.3	2.2	2.9	3.3	4.2
Nov-13	Typhoon	Yolanda	25,248	2.9	3.3	4.2	4.5	4.8	5.0	5.3	5.8	6.4	7.2	7.5	6.6	6.0	5.4
Jul-14	Typhoon	Glenda	33,849	6.4	7.2	7.5	6.6	6.0	5.4	4.6	4.5	4.0	3.5	3.3	2.5	1.6	0.9
Oct-15	Typhoon	Lando	10,910	0.1	0.2	1.0	1.1	0.9	0.9	1.0	0.8	1.4	1.9	1.7	1.5	1.9	2.3
Sep-18	Tropical Cyclone	Ompong	31,648	8.6	10.2	9.6	8.1	6.5	5.0	4.1	3.2	2.8	2.9	2.4	1.5	0.0	-1.8
Oct/Nov 2020	Typhoon	Gang of 6 (4Q 2020)	16,600	2.2	4.4	4.6	5.9	6.2	5.3	3.8	3.5	3.6	3.9	5.5	5.0	3.7	2.2
Oct-21	Typhoon	Maring	1,700	5.0	3.7	2.2	1.6	1.7	1.2	2.6	3.8	4.9	6.0	6.9	6.3	7.4	9.4
Dec-21	Typhoon	Odette/Rai	17,700	2.2	1.6	1.7	1.2	2.6	3.8	4.9	6.0	6.9	6.3	7.4	9.4	10.0	10.2
Sep-22	Typhoon	Karding	3,000	6.3	7.4	9.4	10.0	10.2	10.7	10.8	9.3	7.9	7.4	6.7	6.3	8.1	n.a.
Oct-22	Tropical Cyclone	Paeng	7,214	7.4	9.4	10.0	10.2	10.7	10.8	9.3	7.9	7.4	6.7	6.3	8.1	n.a.	n.a.

Source: National Disaster Risk Reduction and Management Council (NDRRMC), NEDA, CEIC, Dept of Agriculture

Research Offices

ECONOMICS

Suhaimi ILIAS Chief Economist Malaysia | Philippines | Global (603) 2297 8682 suhaimi_ilias@maybank-ib.com

CHUA Hak Bin Regional Thematic Macroeconomist (65) 6231 5830 chuahb@maybank.com

Dr Zamros DZULKAFLI Malaysia | Philippines (603) 2082 6818 zamros.d@maybank-ib.com

Erica TAY China | Thailand (65) 6231 5844 erica.tay@maybank.com

Brian LEE Shun Rong Indonesia | Singapore | Vietnam (65) 6231 5846 brian.lee1@maybank.com

Fatin Nabila MOHD ZAINI (603) 2297 8685 fatinnabila.mohdzaini@maybank-ib.com

Luong Thu Huong (65) 6231 8467 hana.thuhuong@maybank.com

FΧ

Saktiandi SUPAAT Head of FX Research (65) 6320 1379 saktiandi@maybank.com

Fiona LIM (65) 6320 1374 fionalim@maybank.com

Alan LAU (65) 6320 1378 alanlau@maybank.com

Shaun LIM (65) 6320 1371 shaunlim@maybank.com

STRATEGY Anand PATHMAKANTHAN ASEAN (603) 2297 8783 anand, pathmakanthan@maybank-ib.com

FIXED INCOME Winson PHOON, FCA Head of Fixed Income (65) 6340 1079 winsonphoon@maybank.com

SE THO Mun Yi, CFA (603) 2074 7606 munyi.st@maybank-ib.com

PORTFOLIO STRATEGY ONG Seng Yeow (65) 6231 5839 ongsengyeow@maybank.com

MIBG SUSTAINABILITY RESEARCH

Jigar SHAH Head of Sustainability Research (91) 22 4223 2632 jigars@maybank.com

Neerav DALAL (91) 22 4223 2606 neerav@maybank.com REGIONAL EQUITIES

Anand PATHMAKANTHAN Head of Regional Equity Research (603) 2297 8783 anand.pathmakanthan@maybank-ib.com

WONG Chew Hann, CA Head of ASEAN Equity Research (603) 2297 8686 wchewh@maybank-ib.com

MALAYSIA

Anand PATHMAKANTHAN Head of Research (603) 2297 8783 anand.pathmakanthan@maybank-ib.com Strategy

WONG Chew Hann, CA (603) 2297 8686 wchewh@maybank-ib.com • Non-Bank Financials (stock exchange) • Construction & Infrastructure

Desmond CH'NG, BFP, FCA (603) 2297 8680 desmond.chng@maybank-ib.com • Banking & Finance

ONG Chee Ting, CA (603) 2297 8678 ct.ong@maybank-ib.com • Plantations - Regional

YIN Shao Yang, CPA (603) 2297 8916 samuel.y@maybank-ib.com • Gaming - Regional • Media • Aviation • Non-Bank Financials

TAN Chi Wei, CFA (603) 2297 8690 chiwei.t@maybank-ib.com • Power • Telcos

WONG Wei Sum, CFA (603) 2297 8679 weisum@maybank-ib.com • Property • Glove

Jade TAM (603) 2297 8687 jade.tam@maybank-ib.com • Consumer Staples & Discretionary

Nur Farah SYIFAA (603) 2297 8675 nurfarahsyifaa.mohamadfuad@maybank-ib.com • Renewable Energy • REITs

LOH Yan Jin (603) 2297 8687 lohyanjin.loh@maybank-ib.com • Ports • Shipping • Automotive

Arvind JAYARATNAM (603) 2297 8692 arvind.jayaratnam@maybank.com • Petrochemicals • Technology

TEE Sze Chiah Head of Retail Research (603) 2082 6858 szechiah.t@maybank-ib.com • Retail Research

Nik Ihsan RAJA ABDULLAH, MSTA, CFTe (603) 2297 8694 nikmohdihsan.ra@maybank-ib.com • Chartist

Amirah AZMI (603) 2082 8769 amirah.azmi@maybank-ib.com • Retail Research

SINGAPORE

Thilan WICKRAMASINGHE Head of Research (65) 6231 5840 thilanw@maybank.com • Banking & Finance - Regional • Consumer

Eric ONG (65) 6231 5849 ericong@maybank.com • Healthcare • Transport • SMIDs

Kelvin TAN (65) 6231 5837 kelvin.tan1@maybank.com • Telcos • Industrials

LI Jialin (65) 6231 5845 jialin.li@maybank.com • REITs

Jarick SEET (65) 6231 5848 jarick.seet@maybank.com • Technology

Krishna GUHA (65) 6231 5842 krishna.guha@maybank.com • REITs

PHILIPPINES

Jacqui de JESUS Head of Research (63) 2 8849 8840 jacqui.dejesus@maybank.com • Strategy • Conglomerates

Rachelleen RODRIGUEZ, CFA (63) 2 8849 8843 rachelleen.rodriguez@maybank.com • Banking & Finance • Transport • Telcos

Daphne SZE (63) 2 8849 8847 daphne.sze@maybank.com • Consumer

Fiorenzo de JESUS (63) 2 8849 8846 fiorenzo.dejesus@maybank.com • Utilities

Alexa Mae CARVAJAL (63) 2 8849 8838 alexamae.carvajal@maybank.com • Consumer • Gaming • Property • REITs

THAILAND Chak REUNGSINPINYA Head of Research (66) 2658 5000 ext 1399 chak.reungsinpinya@maybank.com • Strategy • Energy

Jesada TECHAHUSDIN, CFA (66) 2658 5000 ext 1395 jesada.t@maybank.com • Banking & Finance

Wasu MATTANAPOTCHANART (66) 2658 5000 ext 1392 wasu.m@maybank.com • Telcos • REITs

Surachai PRAMUALCHAROENKIT (66) 2658 5000 ext 1470 Surachai.p@maybank.com • Auto • Conmat • Contractor • Steel

Suttatip PEERASUB (66) 2658 5000 ext 1430 suttatip.p@maybank.com • Food & Beverage • Commerce

INDONESIA

Jeffrosenberg CHENLIM Head of Research (62) 21 8066 8680 Jeffrosenberg.lim@maybank.com • Strategy • Banking & Finance • Property

Willy GOUTAMA (62) 21 8066 8500 willy.goutama@maybank.com • Consumer

Etta Rusdiana PUTRA (62) 21 8066 8683 etta.putra@maybank.com • Telcos

William Jefferson W (62) 21 8066 8563 william.jefferson@maybank.com • Property

Adi WICAKSONO (62) 21 8066 8686 Adi.Wicaksono@maybank.com • Plantations

Satriawan HARYONO, CEWA, CTA (62) 21 8066 8682 satriawan@maybank.com • Chartist

VIETNAM

Quan Trong Thanh Head of Research (84 28) 44 555 888 ext 8184 thanh.quan@maybank.com • Strategy • Banks

Hoang Huy, CFA (84 28) 44 555 888 ext 8181 hoanghuy@maybank.com • Strategy • Technology

Le Nguyen Nhat Chuyen (84 28) 44 555 888 ext 8082 chuyen.le@maybank.com • Oil & Gas • Logistics

Nguyen Thi Sony Tra Mi (84 28) 44 555 888 ext 8084 trami.nguyen@maybank.com • Consumer Discretionary

Tran Thi Thanh Nhan (84 28) 44 555 888 ext 8088 nhan.tran@maybank.com • Consumer Staples

Nguyen Le Tuan Loi (84 28) 44 555 888 ext 8182 loi.nguyen@maybank.com • Property

Nguyen Thanh Hai (84 28) 44 555 888 ext 8081 thanhhai.nguyen@maybank.com • Industrials

Nguyen Thanh Lam (84 28) 44 555 888 ext 8086 thanhlam.nguyen@maybank.com • Retail Research

APPENDIX I: TERMS FOR PROVISION OF REPORT, DISCLAIMERS AND DISCLOSURES

DISCLAIMERS

This research report is prepared for general circulation and for information purposes only and under no circumstances should it be considered or intended as an offer to sell or a solicitation of an offer to buy the securities referred to herein. Investors should note that values of such securities, if any, may fluctuate and that each security's price or value may rise or fall. Opinions or recommendations contained herein are in form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from the relevant jurisdiction's stock exchange in the equity analysis. Accordingly, investors' returns may be less than the original sum invested. Past performance is not necessarily a guide to future performance. This report is not intended to provide personal investment advice and does not take into account the specific investment objectives, the financial situation and the particular needs of persons who may receive or read this report. Investors should therefore seek financial, legal and other advice regarding the appropriateness of investing in any securities or the investment strategies discussed or recommended in this report.

The information contained herein has been obtained from sources believed to be reliable but such sources have not been independently verified by Maybank Investment Bank Berhad, its subsidiary and affiliates (collectively, "Maybank IBG") and consequently no representation is made as to the accuracy or completeness of this report by Maybank IBG and it should not be relied upon as such. Accordingly, Maybank IBG and its officers, directors, associates, connected parties and/or employees (collectively, "Representatives") shall not be liable for any direct, indirect or consequential losses or damages that may arise from the use or reliance of this report. Any information, opinions or recommendations contained herein are subject to change at any time, without prior notice.

This report may contain forward looking statements which are often but not always identified by the use of words such as "anticipate", "believe", "estimate", "intend", "plan", "expect", "forecast", "predict" and "project" and statements that an event or result "may", "will", "can", "should", "could" or "might" occur or be achieved and other similar expressions. Such forward looking statements are based on assumptions made and information currently available to us and are subject to certain risks and uncertainties that could cause the actual results to differ materially from those expressed in any forward looking statements. Readers are cautioned not to place undue relevance on these forward-looking statements. Maybank IBG expressly disclaims any obligation to update or revise any such forward looking statements to reflect new information, events or circumstances after the date of this publication or to reflect the occurrence of unanticipated events.

Maybank IBG and its officers, directors and employees, including persons involved in the preparation or issuance of this report, may, to the extent permitted by law, from time to time participate or invest in financing transactions with the issuer(s) of the securities mentioned in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. One or more directors, officers and/or employees of Maybank IBG may be a director of the issuers of the securities mentioned in this report to the extent permitted by law.

This report is prepared for the use of Maybank IBG's clients and may not be reproduced, altered in any way, transmitted to, copied or distributed to any other party in whole or in part in any form or manner without the prior express written consent of Maybank IBG and Maybank IBG and its Representatives accepts no liability whatsoever for the actions of third parties in this respect.

This report is not directed to or intended for distribution to or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. This report is for distribution only under such circumstances as may be permitted by applicable law. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Without prejudice to the foregoing, the reader is to note that additional disclaimers, warnings or qualifications may apply based on geographical location of the person or entity receiving this report.

Malaysia

Opinions or recommendations contained herein are in the form of technical ratings and fundamental ratings. Technical ratings may differ from fundamental ratings as technical valuations apply different methodologies and are purely based on price and volume-related information extracted from Bursa Malaysia Securities Berhad in the equity analysis.

Singapore

This report has been produced as of the date hereof and the information herein may be subject to change. Maybank Research Pte. Ltd. ("MRPL") in Singapore has no obligation to update such information for any recipient. For distribution in Singapore, recipients of this report are to contact MRPL in Singapore in respect of any matters arising from, or in connection with, this report. If the recipient of this report is not an accredited investor, expert investor or institutional investor (as defined under Section 4A of the Singapore Securities and Futures Act), MRPL shall be legally liable for the contents of this report, with such liability being limited to the extent (if any) as permitted by law.

Thailand

Except as specifically permitted, no part of this presentation may be reproduced or distributed in any manner without the prior written permission of Maybank Securities (Thailand) Public Company Limited. (MST") accepts no liability whatsoever for the actions of third parties in this respect.

Due to different characteristics, objectives and strategies of institutional and retail investors, the research products of MST Institutional and Retail Research departments may differ in either recommendation or target price, or both. MST reserves the rights to disseminate MST Retail Research reports to institutional investors who have requested to receive it. If you are an authorised recipient, you hereby tacitly acknowledge that the research reports from MST Retail Research are first produced in Thai and there is a time lag in the release of the translated English version.

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey may be changed after that date. MST does not confirm nor certify the accuracy of such survey result.

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, MST does not confirm, verify, or certify the accuracy and completeness of the assessment result.

This third-party research report is distributed in the United States ("US") to Major US Institutional Investors (as defined in Rule 15a-6 under the Securities Exchange Act of 1934, as amended) only by Wedbush Securities Inc. ("Wedbush"), a broker-dealer registered in the US (registered under Section 15 of the Securities Exchange Act of 1934, as amended). All responsibility for the distribution of this report by Wedbush in the US shall be borne by Wedbush. This report is not directed at you if Wedbush is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Wedbush is permitted to provide research material concerning investments to you under relevant legislation and regulations. All U.S. persons receiving and/or accessing this report and wishing to effect transactions in any security mentioned within must do so with: Wedbush Securities Inc. 1000 Wilshire Blvd, Los Angeles, California 90017, +1 (646) 604-4232 and not with the issuer of this report.

UK

This document is being distributed by Maybank Securities (London) Ltd ("MSUK") which is authorized and regulated, by the Financial Conduct Authority and is for Informational Purposes only. This document is not intended for distribution to anyone defined as a Retail Client under the Financial Services and Markets Act 2000 within the UK. Any inclusion of a third party link is for the recipients convenience only, and that the firm does not take any responsibility for its comments or accuracy, and that access to such links is at the individuals own risk. Nothing in this report should be considered as constituting legal, accounting or tax advice, and that for accurate guidance recipients should consult with their own independent tax advisers.

DISCLOSURES

Legal Entities Disclosures

Malaysia: This report is issued and distributed in Malaysia by Maybank Investment Bank Berhad (15938- H) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets and Services License issued by the Securities Commission in Malaysia. Singapore: This report is distributed in Singapore by MRPL (Co. Reg No 198700034E) which is regulated by the Monetary Authority of Singapore. Indonesia: PT Maybank Sekuritas Indonesia ("PTMSI") (Reg. No. KEP-251/PM/1992) is a member of the Indonesia Stock Exchange and is regulated by the Financial Services Authority (Indonesia). Thailand: MST (Reg. No.0107545000314) is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. Philippines: Maybank Securities Inc (Reg. No.01-2004-00019) is a member of the Philippines Stock Exchange and is regulated by the Securities and Exchange Commission. Vietnam: Maybank Securities Limited (License Number: 117/GP-UBCK) is licensed under the State Securities Commission of Vietnam. Hong Kong: MIB Securities (Hong Kong) Limited (Central Entity No AAD284) is regulated by the Securities and Futures Commission. India: MIB Securities India Private Limited ("MIBSI") is a participant of the National Stock Exchange of India Limited and the Bombay Stock Exchange and is regulated by Securities and Exchange Board of India ("SEBI") (Reg. No. INX000010538). MIBSI is also registered with SEBI as Category 1 Merchant Banker (Reg. No. INM 000011708) and as Research Analyst (Reg No: INH000000057). UK: Maybank Securities (London) Ltd (Reg No 2377538) is authorized and regulated by the Financial Conduct Authority.

Disclosure of Interest

Malaysia: Maybank IBG and its Representatives may from time to time have positions or be materially interested in the securities referred to herein and may further act as market maker or may have assumed an underwriting commitment or deal with such securities and may also perform or seek to perform investment banking services, advisory and other services for or relating to those companies.

Singapore: As of 5 September 2023, Maybank Research Pte. Ltd. and the covering analyst do not have any interest in any companies recommended in this research report.

Thailand: MST may have a business relationship with or may possibly be an issuer of derivative warrants on the securities /companies mentioned in the research report. Therefore, Investors should exercise their own judgment before making any investment decisions. MST, its associates, directors, connected parties and/or employees may from time to time have interests and/or underwriting commitments in the securities mentioned in this report.

Hong Kong: As of 5 September 2023, MIB Securities (Hong Kong) Limited and the authoring analyst do not have any interest in any companies recommended in this research report.

India: As of 5 September 2023, and at the end of the month immediately preceding the date of publication of the research report, MIBSI, authoring analyst or their associate / relative does not hold any financial interest or any actual or beneficial ownership in any shares or having any conflict of interest in the subject companies except as otherwise disclosed in the research report.

In the past twelve months MIBSI and authoring analyst or their associate did not receive any compensation or other benefits from the subject companies or third party in connection with the research report on any account what so ever except as otherwise disclosed in the research report.

Maybank IBG may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment and may receive compensation for the services provided from the companies covered in this report.

OTHERS

Analyst Certification of Independence

The views expressed in this research report accurately reflect the analyst's personal views about any and all of the subject securities or issuers; and no part of the research analyst's compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in the report.

Reminder

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct its own analysis of the product and consult with its own professional advisers as to the risks involved in making such a purchase.

No part of this material may be copied, photocopied or duplicated in any form by any means or redistributed without the prior consent of Maybank IBG.

Definition of Ratings

Maybank IBG Research uses the following rating system

- BUY Return is expected to be above 10% in the next 12 months (including dividends)
- HOLD Return is expected to be between 0% to 10% in the next 12 months (including dividends)
- SELL Return is expected to be below 0% in the next 12 months (including dividends)

Applicability of Ratings

The respective analyst maintains a coverage universe of stocks, the list of which may be adjusted according to needs. Investment ratings are only applicable to the stocks which form part of the coverage universe. Reports on companies which are not part of the coverage do not carry investment ratings as we do not actively follow developments in these companies.

🌏 Malaysia

Maybank Investment Bank Berhad (A Participating Organisation of Bursa Malaysia Securities Berhad) 33rd Floor, Menara Maybank, 100 Jalan Tun Perak, 50050 Kuala Lumpur Tel: (603) 2059 1888; Fax: (603) 2078 4194

Stockbroking Business: Level 8, Tower C, Dataran Maybank, No.1, Jalan Maarof 59000 Kuala Lumpur Tel: (603) 2297 8888 Fax: (603) 2282 5136

📀 Sales Trading

Indonesia Helen Widjaja helen.widjaja@maybank.com (62) 21 2557 1188

Philippines Keith Roy keith_roy@maybank.com Tel: (63) 2 848-5288 📀 Singapore

Maybank Securities Pte Ltd Maybank Research Pte Ltd 50 North Canal Road Singapore 059304

Tel: (65) 6336 9090

👩 Indonesia

PT Maybank Sekuritas Indonesia Sentral Senayan III, 22nd Floor Jl. Asia Afrika No. 8 Gelora Bung Karno, Senayan Jakarta 10270, Indonesia

Tel: (62) 21 2557 1188 Fax: (62) 21 2557 1189

👩 Thailand

Maybank Securities (Thailand) PCL 999/9 The Offices at Central World, 20th - 21st Floor, Rama 1 Road Pathumwan, Bangkok 10330, Thailand

Tel: (66) 2 658 6817 (sales) Tel: (66) 2 658 6801 (research)

London Greg Smith gsmith@maybank.com Tel: (44) 207-332-0221

India Sanjay Makhija sanjaymakhija@maybank.com Tel: (91)-22-6623-2629 📀 London

Maybank Securities (London) Ltd PNB House 77 Queen Victoria Street London EC4V 4AY, UK

Tel: (44) 20 7332 0221 Fax: (44) 20 7332 0302

🌏 India

MIB Securities India Pte Ltd 1101, 11th floor, A Wing, Kanakia Wall Street, Chakala, Andheri -Kurla Road, Andheri East, Mumbai City - 400 093, India

Tel: (91) 22 6623 2600 Fax: (91) 22 6623 2604

👩 Vietnam

Maybank Securities Limited Floor 10, Pearl 5 Tower, 5 Le Quy Don Street, Vo Thi Sau Ward, District 3 Ho Chi Minh City, Vietnam

Tel : (84) 28 44 555 888 Fax : (84) 28 38 271 030

📀 Hong Kong

MIB Securities (Hong Kong) Limited 28/F, Lee Garden Three, 1 Sunning Road, Causeway Bay, Hong Kong

Tel: (852) 2268 0800 Fax: (852) 2877 0104

👩 Philippines

Maybank Securities Inc 17/F, Tower One & Exchange Plaza Ayala Triangle, Ayala Avenue Makati City, Philippines 1200

Tel: (63) 2 8849 8888 Fax: (63) 2 8848 5738

www.maybank.com/investment-banking www.maybank-keresearch.com