

Malaysia Banking

POSITIVE

[Unchanged]

Financial Stability Report 1H23

Fundamentals remain strong

The 1H23 Financial Stability Report highlights a still-resilient household sector, and while headwinds persist across several business sectors, business credit quality generally remains sound. Banks' fundamentals remain strong with comfortable provision levels (115.8% loan loss coverage including regulatory reserves end-June 2023). POSITIVE maintained on the banking sector, with BUYs on PBK, CIMB, HLBK, HLFG and ABMB.

Analyst

Desmond Ch'ng, BFP, FCA
(603) 2297 8680
desmond.chng@maybank-ib.com

Headwinds but a still resilient business sector

Challenges persist for businesses amid high input costs and weak external demand. BNM highlights the ongoing vulnerability of the SME segment, particularly those in the wholesale/retail (high overheads and intense competition), construction (elevated material and labour costs as well as tighter credit terms from suppliers) as well as the agriculture sector (lower production, labour shortages and higher input costs). Positively though, business credit quality remains sound and the overall business loan impairment ratio was unchanged at 2.8% of business loans or 1% of total banking system loans. Impaired SME loans rose to 3% of total SME loans from 2.9% end-Dec 2022, but account for just 0.5% of total system loans.

Stable HH debt-to-GDP ratio

Household (HH) debt expanded 5.1% YoY end-June 2023 versus 5.5% in 2H22, and the HH debt-to-GDP ratio was relatively unchanged at 81.9% against 81% in Dec 2022. Households continued to hold financial assets in excess of debt, with the aggregate value of financial assets to total household debt stable at 2.1x. The HH loan impairment ratio was slightly higher at 1.3% versus 1.2% end-Dec 2022, driven by households whose incomes have yet to fully recover after the pandemic, but BNM is of the view that there is limited evidence of new pockets of vulnerabilities.

Easing housing oversupply conditions

The housing oversupply condition has continued to ease, with the number of unsold housing units declining to 141,855 from a peak of 183,918 in 4Q21. This compares against a 2015-2019 average of 130,210. House prices expanded 4.8% YoY in 1Q23 against 3.9% in 4Q22. Housing affordability remains an issue, with the median house price relative to median income continuing to fall within the 'seriously unaffordable' range at 4.3x as at end-2022 (2020: 4.7x).

Banking Sector - Peer Valuation Summary

Stock	Rec	Shr px (MYR)	Mkt cap (MYR m)	TP (MYR)	PER (x) CY23E	PER (x) CY24E	P/B (x) CY23E	P/B (x) CY24E	ROAE (%) CY23E	ROAE (%) CY24E	Net yield CY23E	Net yield CY24E
Maybank *	NR	8.80	106,009	NR	11.9	11.6	1.3	1.3	10.4	10.9	7.2	7.4
Public Bank	BUY	4.03	78,807	5.05	11.7	11.2	1.5	1.4	13.0	12.7	4.7	4.7
CIMB	BUY	5.42	57,912	6.50	8.9	8.3	0.9	0.8	9.8	10.0	6.1	6.5
HL Bank	BUY	19.24	42,271	23.00	10.3	10.0	1.2	1.1	11.5	12.0	3.2	3.5
RHB Bank	HOLD	5.50	23,275	6.20	9.0	8.7	0.8	0.8	8.9	9.1	6.9	7.2
HLFG	BUY	17.30	20,311	21.70	7.0	6.8	0.7	0.7	10.5	10.0	2.4	3.2
AMMB	HOLD	3.80	3,314	4.20	8.0	7.7	0.7	0.6	8.6	8.4	4.4	4.5
BIMB	HOLD	2.17	4,850	2.20	9.9	9.6	0.7	0.7	7.1	7.1	6.0	6.3
ABMB	BUY	3.34	5,233	4.10	8.0	7.7	0.7	0.7	9.4	9.2	6.3	6.5
Simple avg			341,982		9.4	9.0	0.9	0.9	9.9	9.9	5.2	5.5
MC-wtd					10.5	10.1	1.1	1.1	10.9	11.0	5.6	5.8

* Consensus estimates Source: Maybank IBG Research

A summary of key points from the FSR 1H23

Market risk - orderly financial market conditions

Retail participation declined from the pandemic highs and averaged 26.9% in Apr-Sep 2023, versus 27.3% YTD to 20 March 2023. This compares against a peak of 40.3% in 2020 and an average of 18.5% from 2015-2019.

Household loans to purchase quoted shares amount to just 0.5% of total banking system loans.

Non-resident holdings in government bonds increased to 23.0% from 22.2% in Dec 2022 (2015-2019 average of 27.0%).

The average 1-month USD/MYR implied volatility for the year stood above levels recorded in recent periods at 5.4% (2022: 4.5%, 3-year average 4.8%) but is well below the peak recorded during the pandemic of 8.1% in Mar 2020.

Conversion of foreign currency export proceeds into Ringgit in 1H23 was stable within the long-term average range of 60-70% of total proceeds.

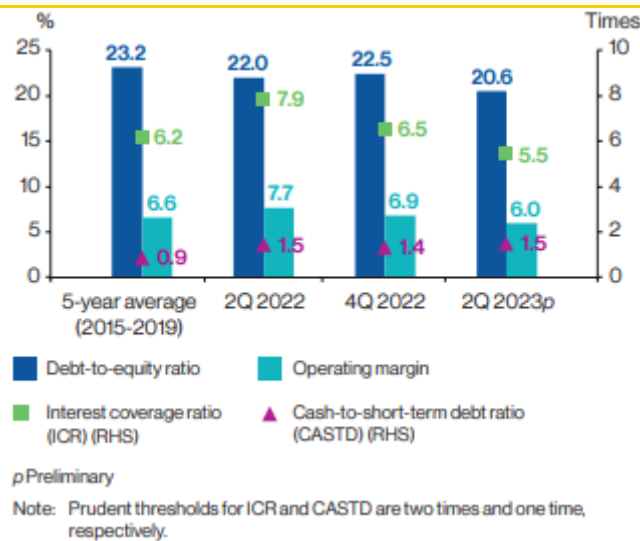
Credit risk (businesses) - persistent headwinds

Businesses continued to face a challenging operating environment amid elevated input costs and weak external demand, in particular those in the manufacturing and construction sectors.

The median cost of goods sold ratio for the construction and manufacturing sectors remained above pre-pandemic levels at 77.8% in 2Q23 versus a 2015-2019 average of 75.9%.

Some property developers reported cashflow challenges due to delayed payments from contract awarders, while persistent oversupply in the commercial real estate sector continued to suppress occupancy and rental rates for office and retail space.

Business sector: Key financial performance indicators



Source: BNM Financial Stability Report 1H23

Business loans expanded at a pace of just 0.7% in 1H23 (3.5% in Dec 2022) due to lower demand from large corporates, particularly from export-oriented firms.

SME financing, however, grew at a faster pace of 6.4% versus 5.8% in Dec 2022.

Credit quality remained sound and the overall business loan impairment ratio was unchanged at 2.8% of business loans (2015-2019 average of 2.6%) or 1% of total banking system loans.

Impaired SME loans rose to 3% of total SME loans from 2.9% end-Dec 2022, but accounted for just 0.5% of total banking system loans.

BNM sees emerging signs of financial vulnerabilities among pockets of SME borrowers.

In the wholesale and retail sector, small and micro-SMEs are faced with higher overhead costs and intense competition from larger retail chain stores.

In the construction sector, profit margins of SMEs are affected by elevated material costs, higher labour costs (competing for foreign labour with the palm oil, manufacturing & F&B sectors), as well as delayed payments from contract awarders, coupled with tighter credit terms by suppliers.

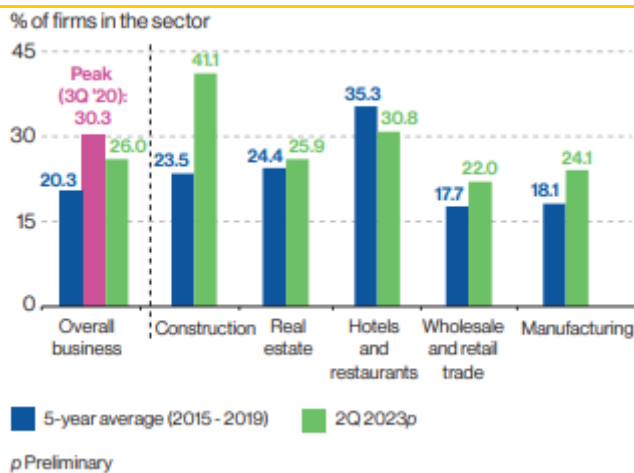
In the agriculture sector, SMEs have been affected by lower production (from ageing oil palm trees, hot weather conditions and a decline in average selling prices), labour shortages and higher input costs (due to a weaker Ringgit).

More SMEs were observed to have sought early assistance from the Small Debt Resolution Scheme (SDRS). Applications for SDRS in 1H23 increased 20% (+254 applicants) YoY though accounting for just 0.03% of total SME loan accounts.

Positively, the share of SME loans under Stage 2 has improved to 12.4% from 12.8% in Dec 2022 but further improvements could be modest given that more than 40% of Stage 2 SME loans are associated with borrowers in the vulnerable sectors highlighted (in wholesale/retail, construction, agriculture).

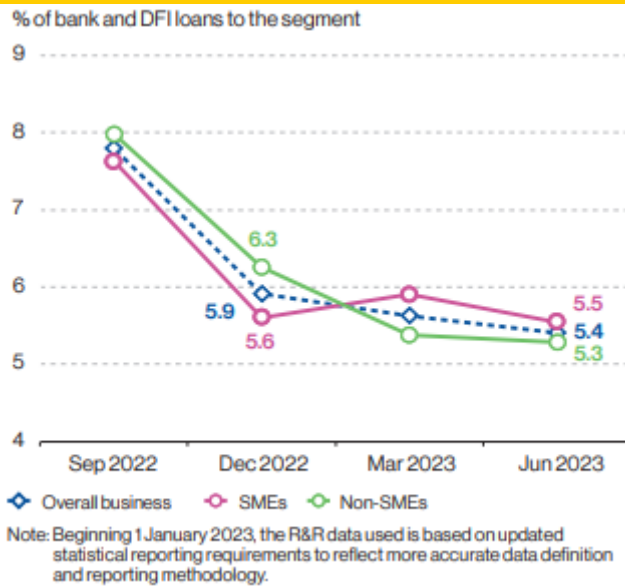
Share of SME loans under repayment assistance programme has declined to 5.5% of total SME loans or 0.9% of total banking system and DFI loans, while new enrolments remain limited at 0.1% of total SME loans.

Business sector: Firms-at-risk for selected sectors



Source: BNM Financial Stability Report 1H23

Business sector: Share of R&R loans by segment



Source: BNM Financial Stability Report 1H23

Business sector ratios (%)

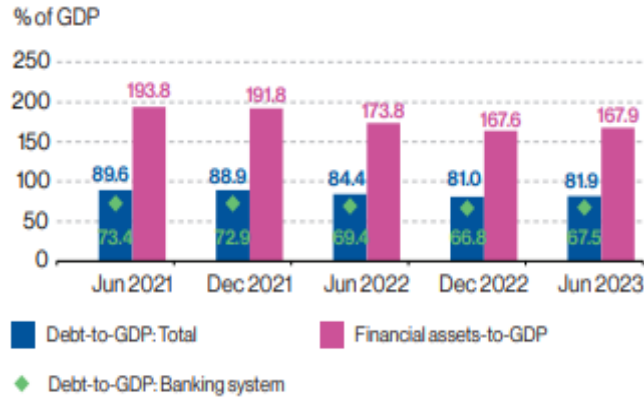
	2H20	1H21	2H21	1H22	2H22	1H23p
Return on assets	1.1	2.2	2.5	2.7	2.5	2.1
Return on equity	2.2	4.1	4.2	4.6	4.5	3.4
Debt-to-equity Ratio	22.6	22.7	22.9	22.0	22.5	20.6
Interest cover (x)	4.8	7.0	7.3	7.9	6.5	5.5
Operating margin	5.5	7.6	7.4	7.7	6.9	6.0
Impaired loans ratio	2.6	2.9	2.8	3.0	2.8	2.8

Source: BNM Financial Stability Report 1H23

Credit risk (households) - pace maintained

Household (HH) debt expanded 5.1% YoY end-June 2023 versus 5.5% in 2H22, and the HH debt-to-GDP ratio was stable at 81.9% against 81% in Dec 2022.

Household sector: Key ratios



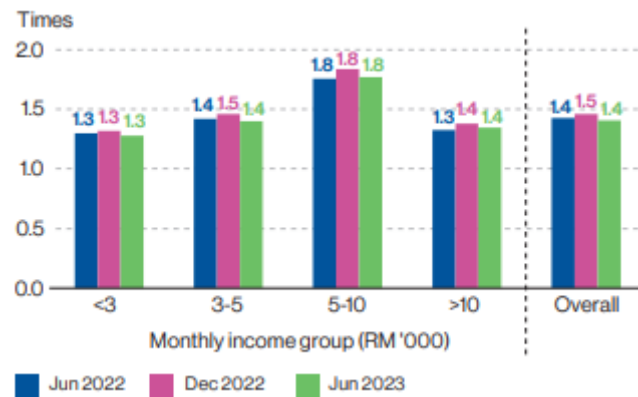
Source: BNM Financial Stability Report 1H23

The median debt-to-income (DTI) ratio remained stable at 1.4x in June 2023 versus 1.5x in Dec 2022.

The median debt service ratios (DSRs) of newly approved and outstanding household loans in 1H23 remained prudent at 42% and 36% respectively (43% and 37% respectively in Dec 2022).

2/3s of newly approved loans in 1H23 had DSRs below 60% (a proportion unchanged since 2018).

Household sector: Median debt-to-income ratios by income group



Source: BNM Financial Stability Report 1H23

As at July 2023, 2.7% of eligible EPF members had obtained financing under the first phase of the EPF Account 2 Support Facility (FSA2) programme. This amounts to 56,849 loan accounts (0.24% of total HH loan accounts) with a total value of MYR1.15b (0.08% of total HH loans). 70% of these borrowings have prudent DSRs below 60%.

The median DSR of new housing loans was stable at 54% end-June 2023 versus 53.3% end-Dec 2022.

The overall approval rate for housing loans was a higher 77.6% in 1H23 versus 75.8% in 2022, driven by higher approvals for first-time homebuyers (June 2023: approval rate of 72% versus 70.1% in Dec 2022).

Owner-occupiers accounted for 75.8% of the increase in housing debt and the median loan-to-value (LTV) ratio of outstanding housing loans was 65.9% versus 65.5% end-Dec 2022.

82.9% of new housing loans were to individual property investors earning more than MYR5k per month, while the LTV ratio of outstanding housing loans of individual property investors was low at 62.3% (62.0% end-Dec 2022).

The HH loan impairment ratio was slightly higher at 1.3% end-June 2023 versus 1.2% end-Dec 2022, driven by households whose incomes have yet to fully recover after the pandemic, but BNM is of the view that there is limited evidence of new pockets of vulnerabilities.

The share of HH borrowings under repayment assistance reduced to 1.7% end-June 2023 from 1.9% end-Dec 2022.

Newly restructured or rescheduled (R&R) HH loans stood at just MYR3.4b or 0.15% of total banking system and DFI loans, of which exposures with no prior history of repayment assistance totalled just MYR1.2b or 0.05% of total banking system and DFI loans.

Households continued to hold financial assets in excess of debt, with the aggregate value of financial assets to total household debt stable at 2.1x.

Household debt ratios (%)

	2014	2015	2016	2017	2018	2019	2020	2021	1H22	2H22	1H23p
HH debt (MYR'b)	952.7	1,023.2	1,080.5	1,133.8	1,186.7	1,251.8	1,320.6	1,376.4	1,409.1	1,451.4	1,481.0
<i>Chg in HH debt</i>	8.6%	7.4%	5.6%	4.9%	4.7%	5.5%	5.5%	4.2%	5.3%	5.5%	5.1%
HH fin assets (MYR'b)	2,015	2,119	2,232	2,421	2,544	2,709	2,901	2,971	2,902	3,002	3,036
HH debt/GDP	86.1	88.4	87.8	83.8	82.0	82.9	93.1	88.9	84.4	81.0	81.9
HH fin assets/HH debt	211.5	207.1	206.6	213.5	214.3	216.4	219.7	215.9	205.9	206.8	205.0
HH liquid fin assets/HH debt	148.7	143.4	141.4	145.7	143.4	143.2	145.2	144.0	137.5	135.4	133.2
Impaired loans ratio	1.7	1.5	1.5	1.4	1.2	1.2	1.2	1.1	1.3	1.2	1.3

Source: BNM Financial Stability Report 1H23

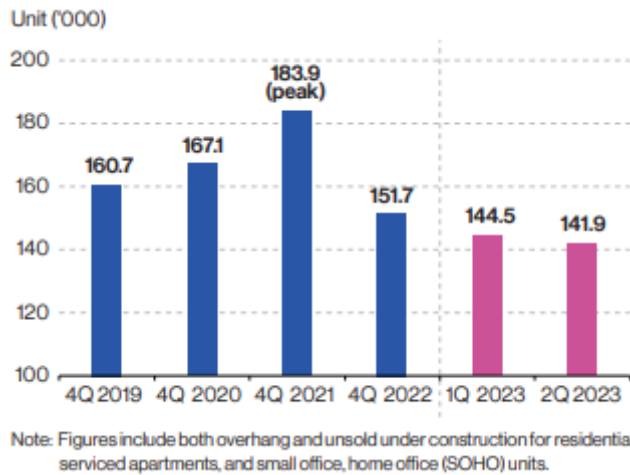
Developments in the residential property market

Houses priced MYR500k and below accounted for almost 80% of total transactions in 1H23.

The oversupply condition has continued to ease, with the number of unsold housing units declining to 141,855 from a peak of 183,918 in 4Q21. This compares against a 2015-2019 average of 130,210.

The share of incoming supply of newly launched residential properties priced MYR500k and below was sharply lower at 58% of total newly launched units versus 71.1% in 2022.

Property market: Volume of unsold housing units



Source: National Property Information Centre (NAPIC)

House prices expanded 4.8% YoY in 1Q23 against 3.9% in 4Q22 - this compares against a long-term average of 5.3% from 2015-2019.

House prices in all states in Malaysia remain well above the affordability levels of most households, with the median house price relative to median income continuing to fall within the 'seriously unaffordable' range at 4.3x as at end-2022 (2020: 4.7x).

Housing unaffordability remains a major barrier for households to access home financing, with 86.1% of loan rejections attributable to high house prices (and therefore loan values) that are beyond their financial means even with the availability of loan guarantee schemes.

Soundness and resilience of the banking sector

The funding position of the banking system remained strong with an aggregate Liquidity Coverage Ratio and Net stable Funding Ratio of 154.4% and 117.0% respectively, end-June 2023.

Funding costs increased for banks with the shift in deposits back to fixed deposits, with average cost of funds rising 40bps to 2.85% between Dec 2022 and June 2023.

The risk associated with bank's external debt remained low, with the bulk (79.2%) of external debt exposures being related counterparties or in the form of long-term stable debt.

Risk from foreign currency mismatches as measured by the overall forex net open position, remained manageable at 3.8% of total capital end-June 2023, against 3.4% in Dec 2022 and a 2020-22 average of 4.2%.

Banks maintained more than adequate foreign currency liquid asset buffers of 2.4x total foreign currency external debt-at-risk.

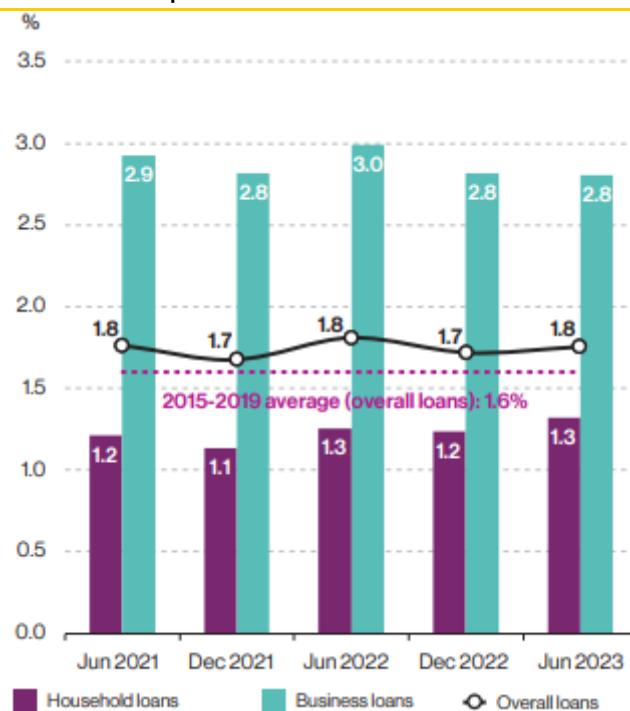
Banks' exposures to property developers in China account for just 0.1% of total loans and bonds, and are well covered by provisions.

The banking system's gross impaired loans ratio stood at 1.8% of total loans end-June 2023, rising slightly from 1.7% end-Dec 2022.

Loan loss coverage including regulatory reserves amounted to 115.8% in June 2023 from 118.6% in Dec 2022.

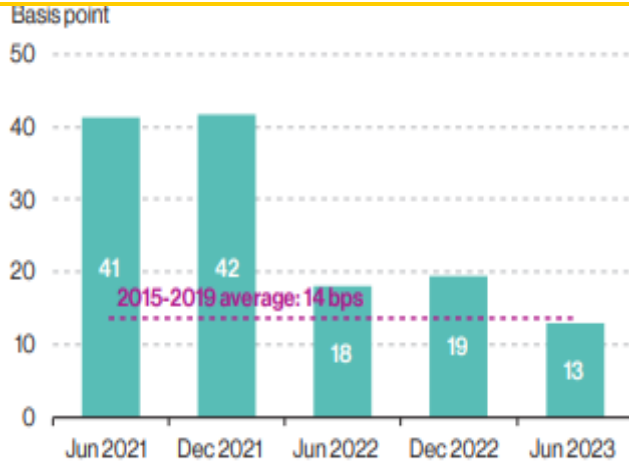
Annualized credit costs remained low due to high levels of pre-existing provision buffers. Credit costs averaged 13bps in 1H23 against 18-19bps in 2022 and 41-42bps in 2021.

Banking system: Gross impaired loans ratio



Source: BNM Financial Stability Report 1H23

Banking system: Annualised credit cost ratio

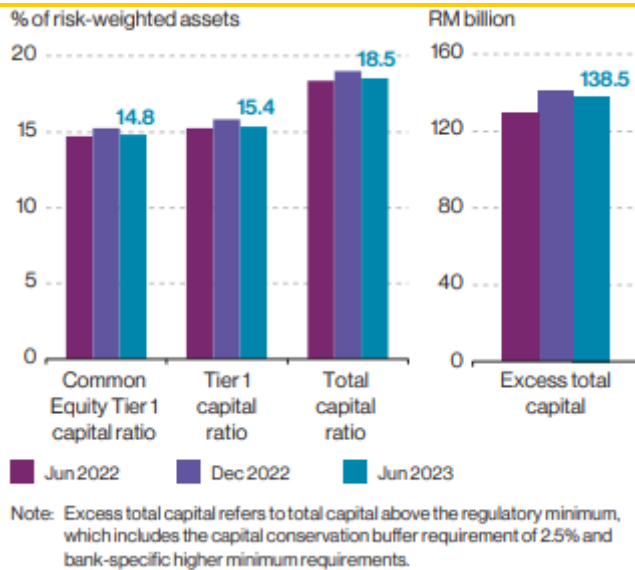


Source: BNM Financial Stability Report 1H23

ROA and ROE of the banking system declined to 1.3% and 11.6% respectively in 1H23 against 1.4% and 12.3% respectively in 2H22.

The banking system’s total capital ratio remained strong at 18.5% end-June 2023 (18.5% end-Dec 2022), with capital buffers of MYR138.5b in excess of the regulatory minimum.

Banking system: Capitalization



Source: BNM Financial Stability Report 1H23

Risk statement

Upside risks: (i) Stronger-than-expected GDP growth, which would contribute to stronger loan growth and lower credit risks; as well as (ii) improved liquidity, which would help to sustain interest margins.

Downside risks: (i) Weaker-than-expected GDP growth, which could lead to slower loan growth and asset quality issues; (ii) potential interest rate cuts that could negatively impact interest margins in the short term; and (iii) a slowdown in CASA growth, which could exacerbate deposit competition.

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 DZULKAFI
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

FX

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
ongsenyeow@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
• Equity Strategy
• 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 • Automotive • Technology (EMS)

Arvind JAYARATNAM
(603) 2297 8692
arvind.jayaratnam@maybank.com
• Technology (Semicon & Software)

Jeremie YAP
(603) 2297 8688
jeremie.yap@maybank-ib.com
• Oil & Gas Services • Petrochemicals

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
• Utilities

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

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 • Internet • Construction

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. 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.

US

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. INZ000010538). 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 10 October 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 10 October 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 10 October 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

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

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

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

London

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

India

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

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