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ASEAN+3 FINANCIAL STABILITY REPORT 2023

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Navigating High Debt in Low Visibility The report is produced by the ASEAN+3 Macroeconomic Research Office (AMRO) for the use of the AMRO members. Any interpretations or conclusions expressed are not necessarily those of the AMRO members. By making any designation of or reference to a particular territory or geographical area, or by using the term "member" or "country" in this report, AMRO does not intend to make any judgements as to the legal or other status of any territory or area.

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Message from AMRO Director

The ASEAN+3 region is a bright spot in the world economy despite unprecedented risks and challenges. Having navigated the challenges posed by the Asian Financial Crisis and subsequent headwinds, our region has demonstrated wisdom and resilience through collective efforts aimed at fostering economic and financial stability.

Nonetheless, the risks and challenges are always lurking. The financial environment is changing rapidly and growing in complexity. As global and regional integration deepens, spillovers and contagion risks are on the rise.

Given the swiftly evolving global financial landscape and its substantial reverberations on the region, the significance of financial surveillance in ASEAN+3 cannot be overstated.

Enhancing financial surveillance plays a critical role in crisis prevention by facilitating the detection and assessment of financial vulnerabilities and risks. It reinforces the resilience of financial systems, ensuring the capacity to withstand shocks, in turn fostering economic growth and development within the region.

As the only international organization established under the ASEAN+3 Finance Process, AMRO must step up as a trusted policy advisor to our members, and strongly position itself as a thought leader with regional focus and global influence.

I am pleased to introduce the inaugural issue of AMRO's second flagship report, the ASEAN+3 Financial Stability Report (AFSR). As the pioneer regional financial stability report in the ASEAN+3 region, the AFSR is a unique publication, embodying the principle 'of the region, for the region, and by the region'. Its release underscores our continuous commitment to monitor, protect, and enhance the financial stability of the ASEAN+3 region, a focus sharpened since the Asian Financial Crisis.

This flagship publication underscores our common objective to safeguard the financial stability of our region. It provides an extensive analysis of the current financial sector status, highlights risk factors, and delves into policy measures to address them effectively.

The AFSR launch is a substantial move toward reinforcing our core functions in financial surveillance, aligning with AMRO's Strategic Direction 2030. Under this framework approved by our Executive Committee in 2022, AMRO is set to contribute more significantly to secure the region's macroeconomic and financial resilience and stability. And the AFSR is among our high-priority initiatives in the coming years.

In light of the more complex and challenging financial landscape, we must continue to strengthen our surveillance capabilities, remain vigilant, and be ready to respond swiftly and decisively when needed to new shocks. Only then will we be able to navigate the treacherous journey ahead with confidence. We can expedite this journey by working together and supporting each other along the way.

Finally, I would like to take this opportunity to extend my heartfelt appreciation to AMRO's member authorities, Advisory Panel, and all who have contributed to this pivotal initiative.

As always, I look forward to hearing your feedback.

Kouqing Li AMRO Director

Foreword from the Chief Economist

ASEAN+3 financial systems have been tested on multiple trials during the past two decades after the Global Financial Crisis but have remained resilient given the strengthened macroeconomic fundamentals, and improved regulatory and external buffers since the Asian Financial Crisis in the late 1990s.

Chapter 1 — *Market Conjunctural – Low Visibility of Challenges Ahead* — discusses recent market developments and notes the risks facing the ASEAN+3 economies within an evolving financial landscape. Over the last decade, global financial conditions have oscillated between tightening and easing, driven by factors such as the taper tantrum, Trump election, Brexit, COVID-19 pandemic, supply chain disruptions, rising inflation, and geopolitical events. However, since early 2022, global central banks led by the Federal Reserve, have responded to the escalation in headline inflation by rapidly tightening monetary policy, resulting in a marked shift from a state of "low-for-long interest rate with ample liquidity" to one characterized by "higher-for-longer interest rate with receding liquidity." This has led to spikes in risk aversion, market sell-offs and capital outflows, and large currency depreciation against the US dollar in both advanced and emerging markets, including those in ASEAN+3. Policymakers have responded to these heightened volatilities by intervening judiciously in the markets, providing liquidity as needed to avoid disorderly market conditions and an overshoot of exchange rates and bond yields.

Despite recent disinflation, the persistence or potential resurgence of inflation has raised concerns about prolonged high interest rates and their impact on financial stability. While the spillover effects from the recent banking stress in the US and Europe have been limited, concerns over the health of the banking sector in the US linger. The possible emergence of US dollar funding stress, particularly if investor confidence falters amid global monetary tightening and elevated market volatility, is also an area of concern. Furthermore, accelerated cross-border capital flows, driven by greater financial market integration and digitalization, can rapidly transmit shocks, creating new challenges for policymakers.

Chapters 2 to 4 of the AFSR are thematic studies focusing on more in-depth analysis of the risks facing the region. For this inaugural issue, we have chosen the theme of *Navigating High Debt in Low Visibility* to assess the financial stability implications from higher debt in the region. The zero interest rate and abundant liquidity unleased by the Quantitative Easing policy of the Fed and ECB in the aftermath of the Global Financial Crisis and European Sovereign Debt Crisis, had resulted in a low-for-long interest rate environment which enabled many businesses, households, and governments in this region to take on large amounts of debt at low costs. The exceptionally large monetary and fiscal stimulus measures during the COVID-19 pandemic fueled further increases in debt-to-GDP ratios in ASEAN+3. However, the phasing out of financial relief and regulatory forbearance policies and the shift to a higher interest rate environment, have led to concerns over the risk of financial distress and insolvencies, particularly in the context of the much higher level of debt stock in the region. Furthermore, the resilience of some banks and nonbank financial intermediaries (NBFIs) may be tested and could potentially exacerbate vulnerabilities in the financial market.

The higher debt levels amid tighter monetary conditions have created the potential for financial stability risks to emerge. Addressing these challenges effectively necessitates a well-balanced policy mix across monetary, fiscal, and prudential policy frameworks, with concerted efforts among authorities. Central banks should prioritize price stability while striving to maintain financial stability and support growth. Monetary authorities should stand ready to provide targeted liquidity support to financial institutions with clear communication during times of stress. The soundness of financial intermediaries, including NBFIs, must be ensured through strengthening regulatory, supervisory, and risk management. Furthermore, regional cooperation and external buffers are essential to ensure access to US dollar liquidity in times of crisis and reduce dependence on the US dollar in the long term.

In response to rising nonfinancial private debt and potential systemic financial risks, policymakers can employ macroprudential tools to manage household debt and curb excessive property developer leverage. For corporate debt, it is necessary to promote responsible corporate lending, foster independent ownership, and mitigate credit risks of small and medium enterprises with credit guarantee schemes. To mitigate financial stability risks stemming from high public debt, strategies should include medium-term fiscal consolidation, maintaining a robust debt structure, and diversifying the investor base.

Amid these turbulent times, the internal and external macrofinancial conditions surrounding the ASEAN+3 region are still subject to high uncertainty and volatility. The financial landscape is swiftly changing into a new normal with potentially higher inflation and higher interest rates. In this situation, the region must come together as one and strive for macroeconomic and financial resilience and stability. AMRO holds high hopes that our *ASEAN+3 Financial Stability Report* will play a pivotal role in our collective efforts, making a substantial contribution toward achieving this objective.

Hoe Ee Khor Chief Economist

Acknowledgments

This report provides AMRO staff's assessment of both the conjunctural and structural financial stability issues facing the ASEAN+3 region. It covers the short-term developments, risks, vulnerabilities, and challenges facing member economies, as well as the policy options taken by or that are available to their authorities. It also presents staff's studies on longer-term issues that are pertinent to sustained financial stability in the region.

The analysis in this report was prepared by the Financial Surveillance team led by Kevin C. Cheng. The report was peercommented by economists from AMRO's Country Surveillance, Fiscal Surveillance, Regional Surveillance, Macro-Financial Research, and Policy Review Group. The report was reviewed and cleared by Chief Economist, Hoe Ee Khor. It has also benefited from the guidance of AMRO Director Kouqing Li and other members of the Senior Management team.

Contributors to the report are Benyaporn Chantana, Chiang Yong (Edmond) Choo, Sean R. Craig (Chapters 2 and 4 co-lead), Chenxu Fu, Laura Grace Gabriella, Kimi Xu Jiang (Chapter 1 co-lead), Leilei Lu, Yoki Okawa, Prashant Pande (Chapter 1 co-lead), Eunmi Park (Chapter 3 lead), Siang Leng Wong (Chapters 2 and 4 co-lead), with inputs from Jorge A. Chan-Lau, Aziz Durrani, Ji Ke, Kit Yee Lim, Toàn Long Quách, Alex Liyang Tang, Wanwisa (May) Vorranikulkij and Pim-orn Wacharaprapapong. Jingwei Zhou, Yang Jiao, Junjie Shi, Huisheng Wang and Xiaofan Zhu provided research support.

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Finally, the views expressed in this report are those of AMRO staff and do not necessarily represent those of AMRO member authorities.

Abbreviations

| A+3, ASEAN+3 | ASEAN plus China (including Hong Kong), Japan, and Korea |
|-----------------|------------------------------------------------------------------|
| ADB | Asian Development Bank |
| ADBC | Agricultural Develoment Bank of China |
| AE | Advanced Economy |
| AFSR | ASEAN+3 Financial Stability Report |
| Agrobank | Bank Pertanian Malaysia Berhad |
| AMC | American Multi-Cinema |
| AREO | ASEAN+3 Regional Economic Outlook |
| ASEAN | Association of Southeast Asian Nations |
| ASEAN-4 | Indonesia, Malaysia, the Philippines, and Thailand |
| ASEAN-5 | Indonesia, Malaysia, the Philippines, Thailand, and Singapore |
| ASEAN-6 | ASEAN-5 plus Vietnam |
| AT1 | Additional Tier 1 |
| BAAC | Bank for Agriculture and Agricultural Cooperatives |
| BCLMV | Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Vietnam |
| BDPC | Brunei Darussalam Deposit Protection |
| BICS | Bloomberg Industry Classification Standard |
| BIS | Bank for International Settlements |
| BN | Brunei Darussalam* |
| BNM | Bank Negara Malaysia |
| bps | Basis points |
| BOE | Bank of England |
| BOJ | Bank of Japan |
| ВОК | Bank of Korea |
| BOP | Balance of Payments |
| BSA | Bilateral Swap Agreement |
| BSN | Bank Simpanan Nasional |
| BTFP | Bank Term Funding Program |
| BPMB | Bank Pembangunan Malaysia Berhad |
| BVI | Bank Vulnerability Index |
| | |

| CAR | Capital adequacy ratio |
|----------|------------------------------------------------|
| CDB | China Development Bank |
| CDS | Credit default swap |
| ССВ | Countercyclical capital buffer |
| ССРТ | Climate Change and Principle-Based Taxonomy |
| CEXIM | Export-import Bank of China |
| CGB | China government bond |
| CGS | Credit guarantee scheme |
| CHF | Swiss franc |
| CIV | Collective Investment Vehicles |
| CLMV | Cambodia, Lao PDR, Myanmar, and Vietnam |
| СМІМ | Chiang Mai Initiative Multilateralisation |
| CN | China |
| CNY | Chinese renminbi |
| COVID-19 | 2019 coronavirus disease |
| СР | Commercial paper |
| СРІ | Consumer price index |
| DBJ | Development Bank of Japan Inc. |
| DE | Germany |
| DICJ | Deposit Insurance Corporation of Japan |
| DIV | Deposit Insurance of Vietnam |
| DLP | Digital Leaders Programme |
| DPA | Deposit Protection Agency |
| DPO | Deposit Protection Office |
| D-SIB | Domestic Systemically Important Banks |
| DSR | Debt service ratio |
| DSTI | Debt-Service-to-Income Ratio |
| DXY | US dollar index |
| EA | Euro area |
| EBIT | Earnings before interest and taxes |
| ECB | European Central Bank |
| EEU | Eastern Europe |

* For brevity, "Brunei Darussalam" is referred to as "Brunei" in the text.

| ESGEnvironmental, social, and governanceEUEuropean UnionEUREuroEXIMExport-Import Bank of ThailandFCIFinancial Conditions IndexFCYForeign currenciesFDIForeign direct investmentFedUS Federal ReserveFIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernmentGSBGovernment Savings BankGoSIGlobal Systematically Important BankHAIHousing affordability indexHKIndustrial Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesiaIDICIndonesia Deposit Insurance Corporation | EM | Emerging Market |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------|
| EUREuroEXIMExport-Import Bank of ThailandFCIFinancial Conditions IndexFCYForeign currenciesFDIForeign direct investmentFedUS Federal ReserveFIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*IBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInformation and communications technologyIDIndonesia | ESG | Environmental, social, and governance |
| EXIMExport-Import Bank of ThailandFCIFinancial Conditions IndexFCYForeign currenciesFDIForeign direct investmentFedUS Federal ReserveFIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKIndustrial Bank of KoreaICInterest coverage ratioICRInformation and communications technologyIDIndonesia | EU | European Union |
| FCIFinancial Conditions IndexFCYForeign currenciesFDIForeign direct investmentFedUS Federal ReserveFIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of KoreaICIntvestment companyICRInformation and communications technologyIDIndonesia | EUR | Euro |
| FCYForeign currenciesFD1Foreign direct investmentFedUS Federal ReserveF1Financial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankHAIHousing affordability indexHKHong Kong, China*IBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | EXIM | Export-Import Bank of Thailand |
| FDIForeign direct investmentFedUS Federal ReserveFIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHong Kong, China*IBankIslamic Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FCI | Financial Conditions Index |
| FedUS Federal ReserveFiFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FCY | Foreign currencies |
| FIFinancial InstitutionFIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*IBankIslamic Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FDI | Foreign direct investment |
| FIMAForeign and International Monetary AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKIslamic Bank of KoreaICInvestment companyICRInterest coverage ratioIDIndonesia | Fed | US Federal Reserve |
| AuthorityFMIFinancial Market IntermediaryFOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKIslamic Bank of ThailandIBARkIslamic Bank of KoreaICInterest coverage ratioICRInformation and communications technologyIDIndonesia | FI | Financial Institution |
| FOMCFederal Open Market CommitteeFRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*IBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FIMA | - , |
| FRFranceFSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInformation and communications technologyIDIndonesia | FMI | Financial Market Intermediary |
| FSBFinancial Stability BoardFXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*IBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FOMC | Federal Open Market Committee |
| FXForeign exchangeGBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInterest coverage ratioICTInformation and communications technologyIDIndonesia | FR | France |
| GBPPound sterlingGDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.Government Savings BankGSBGovernment Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | FSB | Financial Stability Board |
| GDPGross domestic productGFCGlobal Financial CrisisGHBGovernment Housing BankGovt.GovernmentGSBGovernment Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*IBAnkIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | FX | Foreign exchange |
| GFCGlobal Financial CrisisGHBGovernment Housing BankGovt.GovernmentGSBGovernment Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | GBP | Pound sterling |
| GHBGovernment Housing BankGovt.GovernmentGSBGovernment Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | GDP | Gross domestic product |
| Govt.GovernmentGSBGovernment Savings BankG-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | GFC | Global Financial Crisis |
| GSBGovernment Savings BankGSBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | GHB | Government Housing Bank |
| G-SIBGlobal Systematically Important BankHAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | Govt. | Government |
| HAIHousing affordability indexHKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | GSB | Government Savings Bank |
| HKHong Kong, China*iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | G-SIB | Global Systematically Important Bank |
| iBankIslamic Bank of ThailandIBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | HAI | Housing affordability index |
| IBKIndustrial Bank of KoreaICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | НК | Hong Kong, China* |
| ICInvestment companyICRInterest coverage ratioICTInformation and communications technologyIDIndonesia | iBank | Islamic Bank of Thailand |
| ICR Interest coverage ratio ICT Information and communications technology ID Indonesia | IBK | Industrial Bank of Korea |
| ICT Information and communications technology ID Indonesia | IC | Investment company |
| ID Indonesia | ICR | Interest coverage ratio |
| | ІСТ | |
| IDIC Indonesia Deposit Insurance Corporation | ID | Indonesia |
| | IDIC | Indonesia Deposit Insurance Corporation |

| IFC | International Finance Corporation/ international financial center |
|-------------|----------------------------------------------------------------------|
| IFI | Independent fiscal institution |
| IFS | IMF International Financial Statistics |
| iMaPP | IMF Integrated Macroprudential Policy database |
| IMF | International Monetary Fund |
| IMF WEO | IMF World Economic Outlook database |
| IMF COFER | IMF Official Foreign Exchange Reserves database |
| ю | International organization |
| JGB | Japanese government bonds |
| JBIC | Japan Bank for International Cooperation |
| JP | Japan |
| JPY | Japanese yen |
| KBW | Keefe, Bruyette, and Woods |
| KDB | Korea Develoment Bank |
| KDIC | Korea Deposit Insurance Corporation |
| KEXIM | Export-Import Bank of Korea |
| кн | Cambodia |
| KLIBOR | Kuala Lumpur interbank offered rate |
| KR | Korea |
| LAT | Latin America |
| LA, Lao PDR | Lao People's Democratic Republic |
| LIBOR | London interbank offer rate |
| LCR | Liquidity coverage ratio |
| LGFV | Local government financing vehicles |
| LLP | Loan loss provision |
| LTV | Loan-to-value ratio |
| MGS | Mutual guarantee scheme |
| ММ | Myanmar |
| MMF | Money market funds |
| MSME | Micro, small and medium sized enterprise |
| MY | Malaysia |
| | |

* For brevity, "Hong Kong, China" is referred to as "Hong Kong" in the text.

| MYRMalaysian ringgitMYORMalaysia overnight rateMACFNational Agricultural Cooperative FederationNARNorth AmericaNBBNayoby BankNBFINohank financial institution/ intermediaryNDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOFROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPLPilippine Deposit Insurance CorporationP/EPice-to-earning ratioPHSchina (including Hong Kong), Japan, KoreaPIPAReal effective exchange rateREERReal effective exchange rateROMReturn on assetsROWStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance CorporationSDStandard deviation | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------|
| NACFNational Agricultural Cooperative FederationNARNorth AmericaNBBNayoby BankNBFINonbank financial institution/ intermediaryNDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOTHOthersPBCPeople's Bank of ChinaPJCPhilippine Deposit Insurance CorporationPFEPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWStandard and Poor'sS&PFC/SBCSmall Business Guarantee and FinanceSBGFC/SBCSmall Business Guarantee and Finance | MYR | Malaysian ringgit |
| Image: PederationNARNorth AmericaNBBNayoby BankNBFINonbank financial institution/ intermediaryNDRCNonbank financial institution/ intermediaryNDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNonfinancial corporateNFFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPILPerbadanan Insurans Deposit MalaysiaPIDMPerbadanan Insurans Deposit MalaysiaPIDRReal effective exchange rateREERReal effective exchange rateROMReturn on assetsROWStandard and Poor'sS&PGFC/SBCSmall Business Guarantee and Finance | MYOR | Malaysia overnight rate |
| NBBNayoby BankNBFINonbank financial institution/ intermediaryNDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOFROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPLPhilippine Deposit Insurance CorporationPFPrice-to-earning ratioPHChina (including Hong Kong), Japan, KoreaPIDAReal effective exchange rateRERReal effective exchange rateROAReturn on assetsROWStandard and Poor'sS&PFC/SBCSmall Business Guarantee and Finance Corporation | NACF | |
| NBFINonbank financial institution/ intermediaryNDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPJICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIDRReal effective exchange rateRRPRest of the worldRRPStandard and Poor'sS&PGFC/SBCSmall Business Guarantee and Finance Corporation | NAR | North America |
| NDRCNational Development and Reform CommisionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPIDMSerbadanan Insurans Deposit MalaysiaPIDSChina (including Hong Kong), Japan, KoreaaPPPRel effective exchange rateROAReturn on assetsROWRest of the worldRRPSandard and Poor'sS&PGFC/SBCSmall Business Guarantee and Finance Corporation | NBB | Nayoby Bank |
| IcommissionNEERNominal effective exchange rateNFCNonfinancial corporateNFCNational Federation of Fisheries CooperativesNIMNet interest marginNIMNet interest marginOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPople's Bank of ChinaPICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHOthia (including Hong Kong), Japan, KoreaPIDSRelaffective exchange rateREERReal effective exchange rateROWReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | NBFI | Nonbank financial institution/ intermediary |
| NFCNonfinancial corporateNFFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIPPQubic-private partnershipREERReal effective exchange rateROMRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | NDRC | - |
| NFFCNational Federation of Fisheries CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIPPublic-private partnershipREERReal effective exchange rateROWRest of the worldRRPStandard and Poor'sS&PC/SBCSmall Business Guarantee and Finance Corporation | NEER | Nominal effective exchange rate |
| CooperativesNIMNet interest marginNPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIDSOthira (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROWRest of the worldRRPStandard and Poor'sS&GFC/SBCSmall Business Guarantee and Finance Corporation | NFC | Nonfinancial corporate |
| NPLNonperforming loanOLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPIPQuici-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&PSmall Business Guarantee and Finance Corporation | NFFC | |
| OLSOrdinary least squares regressionOPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROWRest of the worldRRPStandard and Poor'sS&PSmall Business Guarantee and Finance Corporation | NIM | Net interest margin |
| OPROvernight policy rateOTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROMReturn on assetsROWReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | NPL | Nonperforming loan |
| OTHOthersPBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&PStandard and Poor's | OLS | Ordinary least squares regression |
| PBCPeople's Bank of ChinaPDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&PSimall Business Guarantee and Finance Corporation | OPR | Overnight policy rate |
| PDICPhilippine Deposit Insurance CorporationP/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&PStandard and Poor's | ОТН | Others |
| P/EPrice-to-earning ratioPHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&PStandard and Poor'sBGFC/SBCSmall Business Guarantee and Finance Corporation | PBC | People's Bank of China |
| PHThe PhilippinesPIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPStandard and Poor'sS&GFC/SBCSmall Business Guarantee and Finance Corporation | PDIC | Philippine Deposit Insurance Corporation |
| PIDMPerbadanan Insurans Deposit MalaysiaPlus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | P/E | Price-to-earning ratio |
| Plus-3China (including Hong Kong), Japan, KoreaPPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | PH | The Philippines |
| PPPPublic-private partnershipREERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | PIDM | Perbadanan Insurans Deposit Malaysia |
| REERReal effective exchange rateROAReturn on assetsROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | Plus-3 | China (including Hong Kong), Japan, Korea |
| ROAReturn on assetsROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | PPP | Public-private partnership |
| ROWRest of the worldRRPReverse repo programS&PStandard and Poor'sSBGFC/SBCSmall Business Guarantee and Finance Corporation | REER | Real effective exchange rate |
| RRP Reverse repo program S&P Standard and Poor's SBGFC/SBC Small Business Guarantee and Finance Corporation | ROA | Return on assets |
| S&P Standard and Poor's SBGFC/SBC Small Business Guarantee and Finance Corporation | ROW | Rest of the world |
| SBGFC/SBC Small Business Guarantee and Finance Corporation | RRP | Reverse repo program |
| Corporation | S&P | Standard and Poor's |
| SD Standard deviation | SBGFC/SBC | |
| | SD | Standard deviation |

| SDIC | Singapore Deposit Insurance Corporation |
|--------|--------------------------------------------------------------|
| SFI | Specialized financial institution |
| SFV | Structured finance vehicle |
| SG | Singapore |
| SGD | Singapore dollar |
| SGS | Singapore Government Securities |
| SGSS | Special Singapore Government Securities |
| SIFI | Systemically important financial institutions |
| SIFMA | The Securities Industry and Financial Markets Association |
| SME | Small and medium sized enterprise |
| SOE | State-owned enterprise |
| SOFR | Secured overnight financing rate |
| SSGS | Special Singapore Government Securities |
| SSO | Social Security Office |
| SuNWEI | Systemic Network of World Expected-Losses of Institutions |
| SVB | Silicon Valley Bank |
| TCG | Thai Credit Guarantee Corporation |
| тн | Thailand |
| T-bill | Treasury bill |
| UK | United Kingdom |
| US | United States |
| USD | US dollar |
| VBSP | Vietnam Bank for Social Policies |
| VDB | Vietnam Development Bank |
| VIX | Volatility Index |
| VN | Vietnam |
| WB | World Bank |
| WEU | Western Europe |
| YTD | Year-to-date |
| Δ | Change in |
| | |