

Annual Outlook 2024

Asia - The world's growth engine
in a turbulent year



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Executive summary

In a world marked by geopolitical uncertainty, conflict and climate change, Asian economies will be the global growth engine in 2024, buoyed by regional trade and advances in digital technology and green finance.

From robots to blockchain applications, Asian economies are embracing the artificial intelligence (AI) revolution, with several countries positioning themselves as future leaders in generative AI.

Asia's technological leap forward will drive productivity and innovation as countries invest in smart cities, renewable technology and digitalisation of trade, all with the aim of becoming more sustainable and interconnected.

China's economic slowdown remains a concern, though it should still register a resilient growth rate alongside its regional neighbours, particularly if Beijing manages to introduce critical domestic reforms and stabilise the property market.

After the world agreed to transition away from fossil fuels during the COP28 climate talks in December 2023, Asian economies will seek to entrench growth in green finance in order to propel investment in renewable energy and sustainable manufacturing.

The growth in trade between the Middle East and Asia continues to be one of the defining geopolitical and geo-economic shifts of our time. Asia's economic importance to the Gulf is growing and shifting geopolitics.

As the world grapples with modest growth, weaker trade, and subdued business and consumer confidence, Asia will again buck the global trend by posting annual economic growth of circa 5 per cent

Rising incomes and a dynamic drive towards digitalisation across multiple sectors will stimulate regional trade, underpinning economic growth in an increasingly integrated region with strong macroeconomic fundamentals.

Digital innovation and resurgent green finance will enable economies to become more productive and achieve higher levels of income and welfare.

The application of blockchain and AI technologies is likely to grow in breadth and in scale, particularly in the field of generative AI. It is worth noting, however, that the positive effects of digitalisation on productivity may take some time to materialise.

The availability and use of green finance, which slowed in 2023 amid restrictive financial conditions, is poised to expand. Financing conditions for local currency bonds and green bonds are likely to be more favourable. This will facilitate investment in renewable energy and sustainable manufacturing.



Sri Mulyani Indrawati, Indonesia's Minister of Finance, with Asia House Chief Executive Michael Lawrence OBE at a series of high-level briefings in Washington DC for Asia House Corporate Members.

Nonetheless, there is significant uncertainty around the prospect of further shocks, particularly those stemming from US dollar-denominated assets, a sharper than expected slowdown in China, or any unexpected debt-defaults. Downward corrections in financial markets could also affect sentiment and economic activity.

Amid continued geopolitical uncertainty, intermittent de-risking and downward price corrections in financial markets could occur. Some of Asia's central banks will have to balance growth and inflation amid the possibility of resurgent food costs and volatility in global energy markets. This has been driven partly by the Russia-Ukraine conflict, the Israel-Gaza conflict, and the recent escalation of hostilities in the Red Sea, which in January 2024 saw the US and UK conduct airstrikes against Houthi targets in Yemen.

Global political developments will be critical in 2024, dubbed a 'super-election year', in which 2.6 billion people will cast votes. There are key polls in Indonesia, India, Russia and the United States. Results in the US will shape the relationship between Washington and Beijing.

Uncertainties remain in Cross-Strait relations. Following the Democratic Progressive Party's electoral win in Taiwan, the general consensus is that the status quo will continue.

The upcoming elections in Asia are unlikely to cause significant policy shifts regionally, but the US election will be a focal point, particularly if there are any unexpected developments, and it will dominate the geopolitical climate throughout 2024.

Looking at individual countries, Vietnam and the Philippines will enjoy standout growth, with India and Indonesia also showing robust expansion. Japan's economy will slow, although the yen may offer support.

To summarise, Asia's economic outlook will be marked by strong economic growth; above-trend expansion in trade and green investment; and productivity gains from digital technology across multiple sectors, including trade finance and digital currencies.

Introduction

2024 will be another challenging year for the global economy. Possible supply-chain disruptions, geopolitical risk, elevated food prices and volatile energy markets are likely to mean restrictive global financial conditions throughout the year, but Asian economies are nonetheless likely to prove resilient.

Asia's outlook will be defined by strong growth despite the turbulent global conditions. While China's economy will slow, much of Asia will register accelerated or stable growth. This will likely lead to a widening growth divergence (Figure 1).

Key risks to Asia's outlook include depreciating currencies, broadly elevated interest rates and the possibility of disrupted portfolio flows. However, the investment environment is likely to remain resilient, thanks to the implementation of monetary, digital and investment policies that will foster growth. Just how resilient each country proves to be will depend on structural reforms to boost productivity, and on available policy buffers, such as reserves, as highlighted in the recent World Bank Global Economic Prospects report.

Elevated primary commodity and energy prices could continue to be inflationary nearly everywhere, including in Asia, where the impacts on the terms of trade – the change in export prices compared to import prices – are particularly significant. Asia's primary energy consumption far outpaces energy consumption in North America and Europe. This suggests that inflationary pressures could continue to be a risk, particularly where exchange rates are depreciating. Resource exporters, such as Indonesia, will benefit but will also need to step up efforts to diversify in the event of a reversal in resource goods prices.

Asia's financial systems will remain strong and flexible. Regional banks are expected to hold generally robust balance sheets; they have typically relied on domestic

funding, with foreign-currency funding either hedged or offset by liquid foreign currency assets (BIS, 2023). This has helped cushion domestic financial systems from external shocks. More generally, the region's resilience has been enhanced by banks' increased capital and liquidity buffers and growing levels of forex reserves (ibid.). Asia's debt burden, however, will edge higher, mirroring the broader global trend (George, 2023; IIF, 2023), with pockets of vulnerability (Ferranini, 2023) seen where interest rates are higher and exchange rates weaker.

Exchange-rate depreciations will take on increased importance in 2024. These are likely to have three knock-on impacts: inflationary pressure, competitiveness of exports and more expensive foreign currency debt. And yet, limited external debt, well-functioning financial markets, adequate forex reserves and a deeper domestic investor base will cushion any shocks.

Asia's central banks are likely to be particularly active in 2024 as they strive to balance unexpected shifts in the growth/inflation mix in individual economies. Central banks could also use currency interventions to cushion against excessive currency volatility. There are likely to be more forex-related interventions to prevent any capital outflows, especially in thin or illiquid markets or where exposures are poorly hedged by investors.

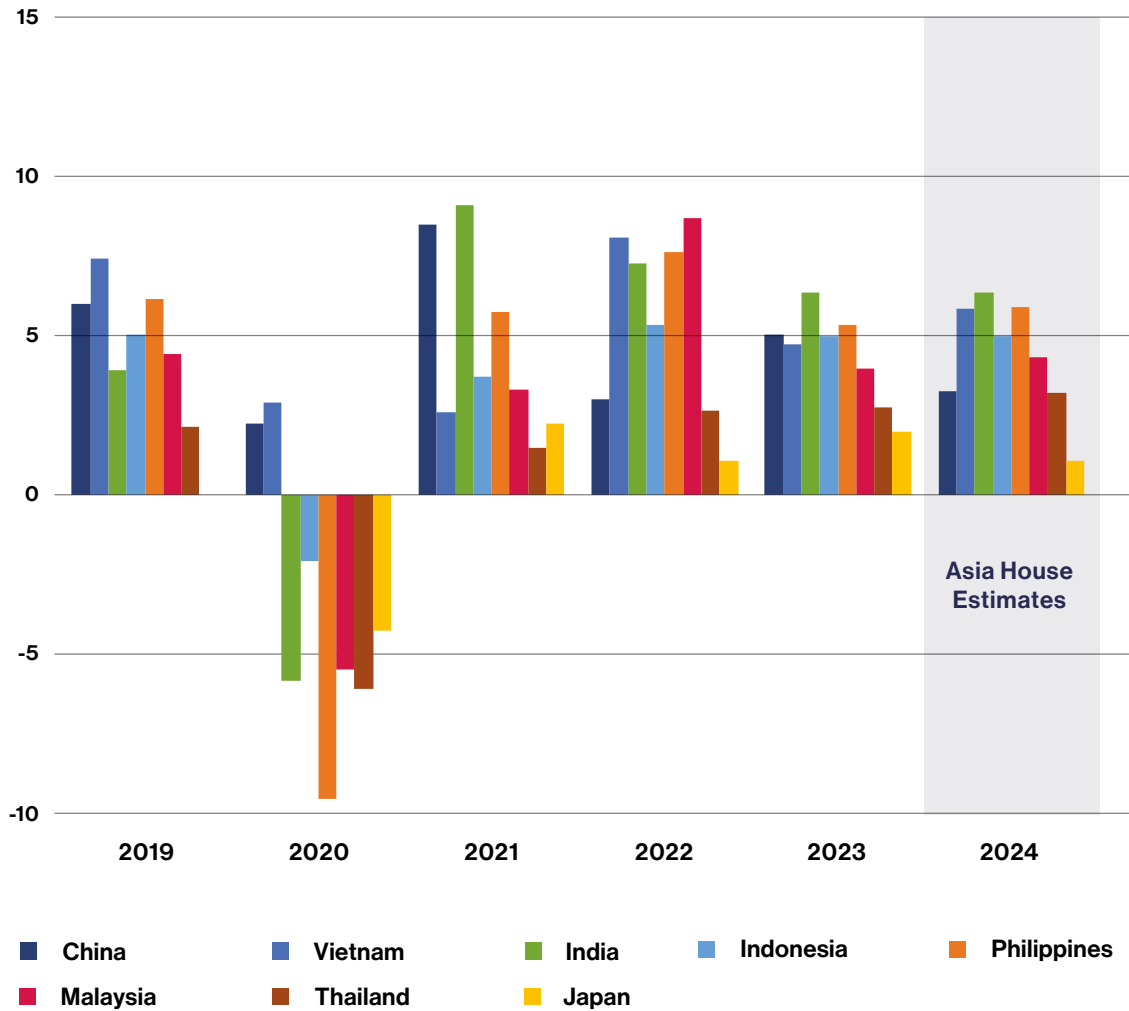
Asia's central banks will also continue to expand climate and digital initiatives, growing their toolkits in the process. Despite the lively debate about whether monetary policy can effectively tackle climate change¹, central banks will be more active in this sphere and will also expand their remit to support the digital economy through the expanded use of digital currencies. A broader focus in both the digital and climate spaces is warranted, particularly given the impact of both on inflation (Chen et al., 2021), and it aligns with the use of policy tools to support sustainable growth.

¹ Advocates of a greater role for central banks in tackling climate change include Schnabel (2021), Mann (2023) and Lagarde (2022). Others, including US Federal Reserve chair Jerome Powell, have stated that the Federal Reserve will not be a 'climate policymaker' – see: <https://www.federalreserve.gov/newsevents/pressreleases/powell-statement-20231024b.htm>

Figure 1

Asia's widening growth divergence in 2024

Annual GDP growth (% year-on-year)



Source: International Monetary Fund and Asia House Research

Section 1

Home truths: Regional resilience rooted in domestic strengths

Asia's comparative resilience in 2024 will be rooted in the strength of domestic economies and bolstered by deep regional trade ties. Domestic structural factors, cyclical slowdowns in individual economies, and the availability of policy buffers will shape country outcomes at a time of multiple global uncertainties.

- **Asia's structural economic factors**, such as individual countries' dependence on commodities, are likely to continue to shift. One key factor will be how reliant countries are on fertiliser, food and fuel imports, which continue to trade at elevated levels (Figure 2). The most affected countries will range from energy exporters, like Malaysia, to countries that export food but import energy, like Thailand, to major energy importers, such as China and India, to countries that import energy but are self-sufficient in food, such as Vietnam, and those, like Japan and South Korea, which are heavily dependent on both food and energy imports.
- **Domestic cyclical factors**, or the state of each country's economy and financial system, will be particularly influenced by the level and composition of debt², house-price inflation, foreign investment in domestic bond and equity markets, and commercial banks' exposure to liquidity and solvency risks. In China, debt overhang constitutes a risk to household consumption and corporate investment, despite comparatively low domestic borrowing costs. Elsewhere in Asia, high (and in some cases, still rising) interest rates could be a risk factor.

- **The availability of policy buffers**³ will enhance the capacity of policymakers to respond to negative shocks and crises with existing tools and /or new measures. For example, if a country has a high level of foreign currency reserves, or access to emergency liquidity, these can be used to mitigate speculative and disorderly exchange-rate dynamics, though past experience has shown that the deployment of reserves to stabilise a currency has limited long-term effectiveness. Additional buffers include access to foreign currency liquidity, including bilateral swap arrangements.

The interaction between these three forces will shape Asia's constituent economies' outlooks, not least for inflation. Structural factors in price-setting can boost or dampen the impact of policy decisions and influence the effectiveness of policy buffers. For example, the extent to which cost shocks are passed through to inflation depends on domestic competition. The composition of Asia's labour force⁴ also influences, and to a degree mitigates, second-round inflationary effects.

Economies that rely heavily on food and energy imports are very likely to see a strong inflationary effect if global food and energy prices rise quickly. Exporters may also benefit from this effect, as their prices are subject to the same pressures. The impact of Asian economies' trade on inflation and output will also hinge on the nature of its participation in global value chains, its import diversification and the breadth of its export destinations (BIS, 2023; de Soyres and Franco, 2019).

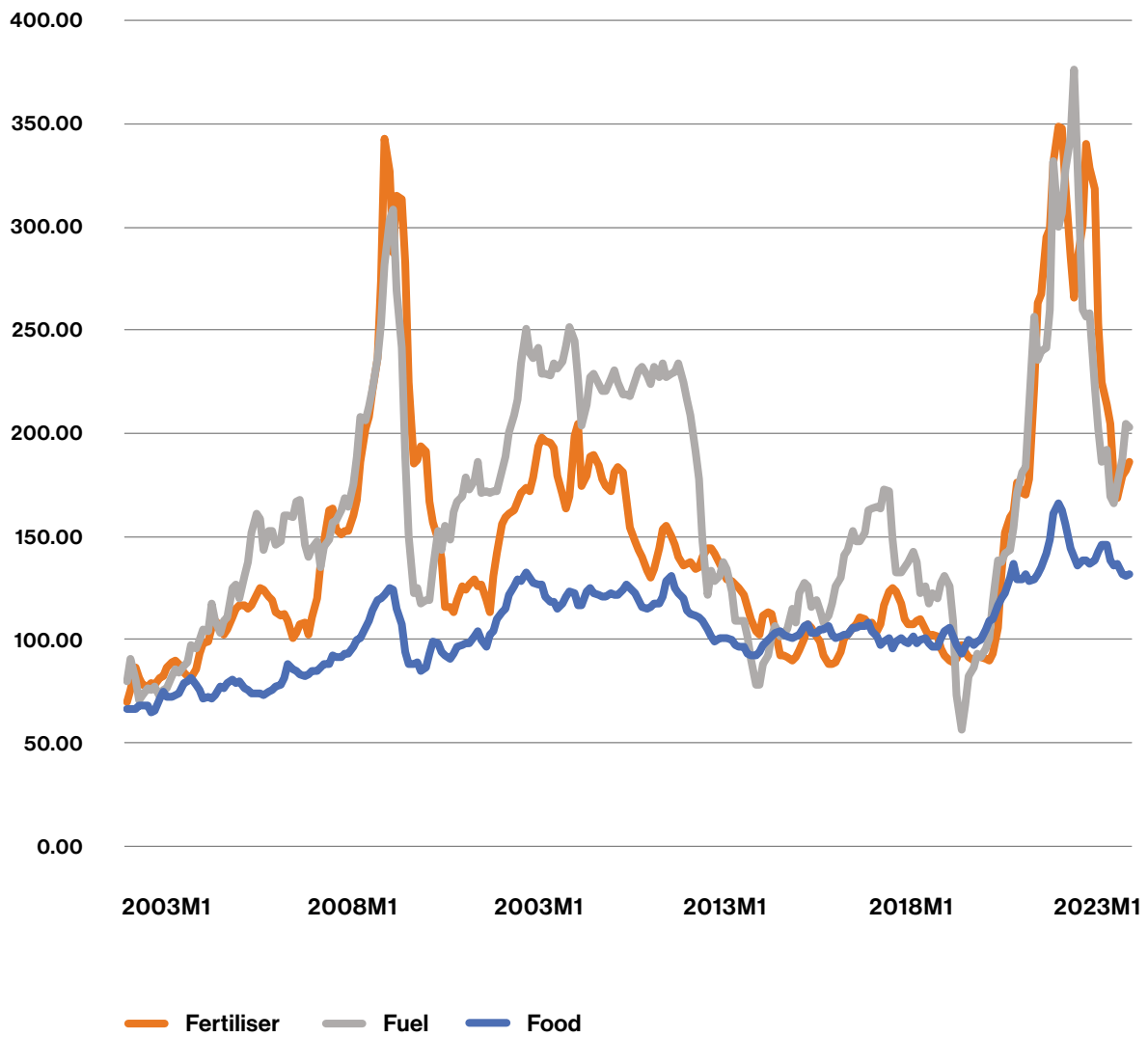
² Asia's increase in public and private debt-to-GDP ratios can largely be explained by COVID-19 support measures and a prolonged period of low interest rates.

³ 'Policy buffer' here refers to policymakers' capacity to respond to shocks; see Saporta (2022).

⁴ This includes migrant or foreign workers, who may have lower bargaining power, and the strength of trade unions (ILO, 2023; 2020).

Figure 2

The triple challenge of food, fertiliser and fuel prices (index values)



Source: Food and Agriculture Organization and Asia House Research

Financial-market depth will determine how resilient an economy may be to reversals in investment, or risk events like downward asset-price corrections. At the time of writing, Thailand and Vietnam have, for example, seen capital inflows that are primarily longer-term in nature, constituting foreign direct investment (FDI) rather than speculative portfolio flows. Moreover, in deep financial markets, FDI inflows typically bring positive knowledge spillovers and this holds true in Asia.⁵ Ultimately inward FDI will make Asia's economies more resilient to reversals in global risk sentiment and in portfolio flows.

As with the rest of the world, Asia will continue to feel the impact of higher interest rates, notwithstanding the – at the time of writing – re-pricing of US interest-rate expectations for rate reductions. This will affect interest rate-sensitive sectors throughout the year. The transmission of past rate hikes thus far may have been postponed in part, thanks to extensions on the repayment of corporation and household debt and COVID-related accumulated savings (IMF, 2023a). The proportion of firms with low cash-to-interest-expense ratios – weaker firms with fewer buffers – has rebounded as companies face tighter domestic funding costs (ibid., 2023a).

1.1. Asia's growth will remain robust despite China's slowdown

China's importance in the global economy, and within Asia, has increased dramatically over the past few decades, particularly because of its participation in global and regional value chains. Consequently, there are concerns that its economic slowdown could impact its neighbours (White and Ruehl, 2023). China's domestic reform drive, its ability to manage its slowdown and regional geopolitical developments will be decisive in 2024. The country's risks are likely to remain idiosyncratic rather than systemic.

We have examined the following three scenarios, presented in Figure 3:

- **Upside scenario for China's domestic reforms:** This scenario sees reform-enhancing productivity and growth in China and the rest of Asia, particularly in smaller, more open economies with strong economic ties to China. Reforms would target productivity at State-owned enterprises (SOEs), leading to further liberalisation (IMF, 2023b). Asia's economies would also benefit from the trade diversion resulting from 'friend-shoring' by China⁶ as it transfers its business from geopolitical rivals. Productivity should also be boosted by the growth in digital trade with China. Furthermore, the boost to growth from productivity spillovers is typically larger for countries that are further from the technological frontier and those with stronger trade ties to China (ibid., 2023b).
- **A sharper downside scenario:** This could arise if there is an unexpected scaling back in bilateral investment and trade between China and a number of OECD (Organisation for Economic Co-operation and Development) economies. Policy missteps or geopolitical tensions could inadvertently trigger a more pronounced slowdown in trade, notably for high-quality inputs, such as semiconductors and associated products, rare earth minerals and environmental goods. The European Union's Green Deal Industrial Plan and export restrictions on minerals could increase the risk of fragmentation (Patey 2023; WTO, 2023). A rise in bankruptcies in China's estimated US\$3 trillion shadow banking sector also constitutes a significant risk.⁷
- **Asia House's base case scenario of moderate growth in China:** This outlook assumes that downside risks in China are successfully contained, but growth is not reinvigorated. In this scenario, trade tariffs likely continue to harm China's external balance-of-payments position, as will the comparatively high and uncompetitive level of the trade-weighted renminbi vis-à-vis its regional neighbours. Any protracted drop in

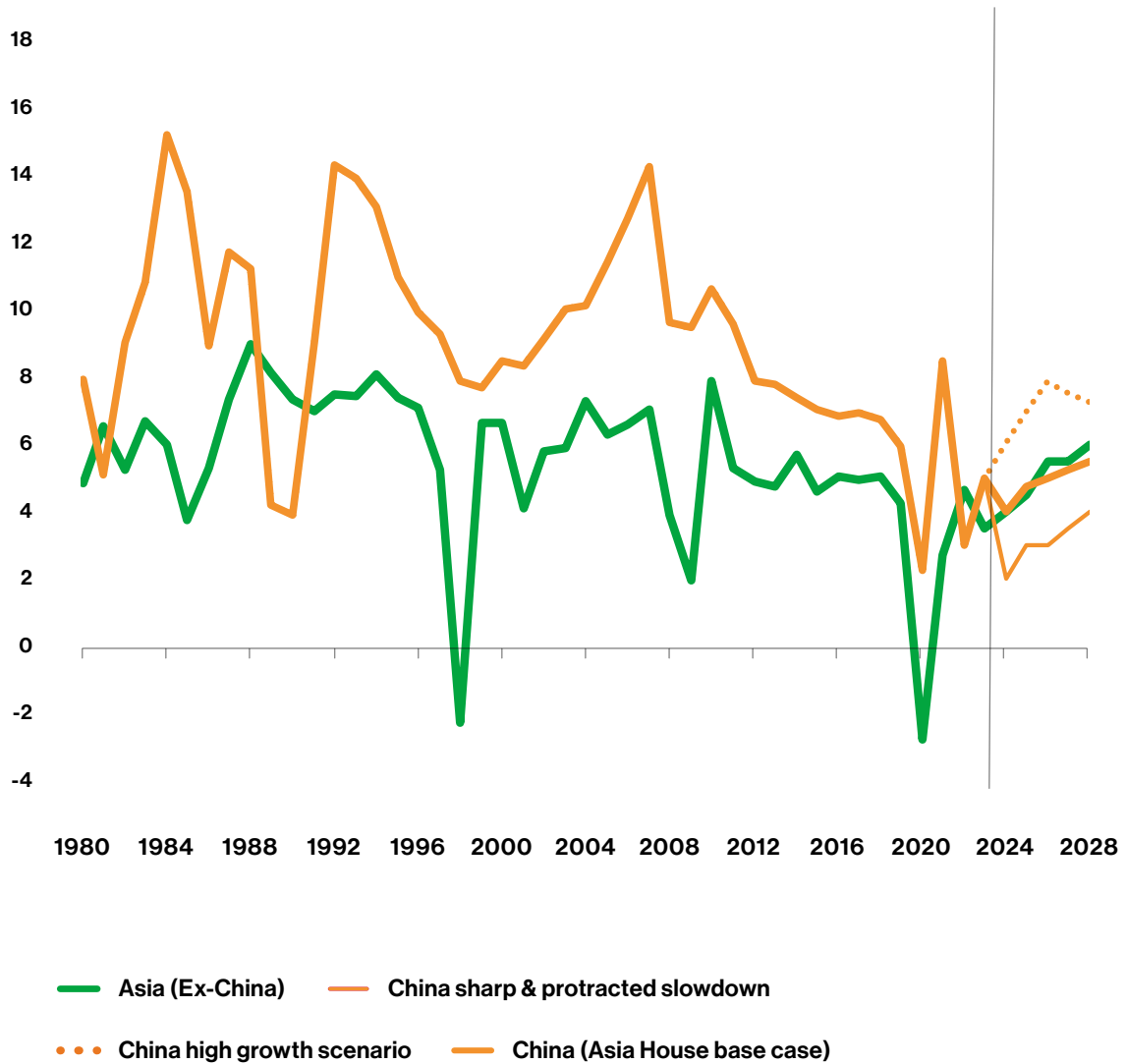
⁵ See: <https://www.oecd-ilibrary.org/sites/51a9f5d3-en/index.html?itemId=/content/component/51a9f5d3-en>

⁶ Friend-shoring here is defined as the degree to which countries seek to rely on domestic, local and regional sourcing from allies, while sourcing away from geopolitical rivals. See: <https://www.wita.org/blogs/friend-shoring-deliver/>

⁷ <https://www.straitstimes.com/business/china-s-collapsed-shadow-bank-zhongzhi-warns-of-41-billion-hole>

Figure 3

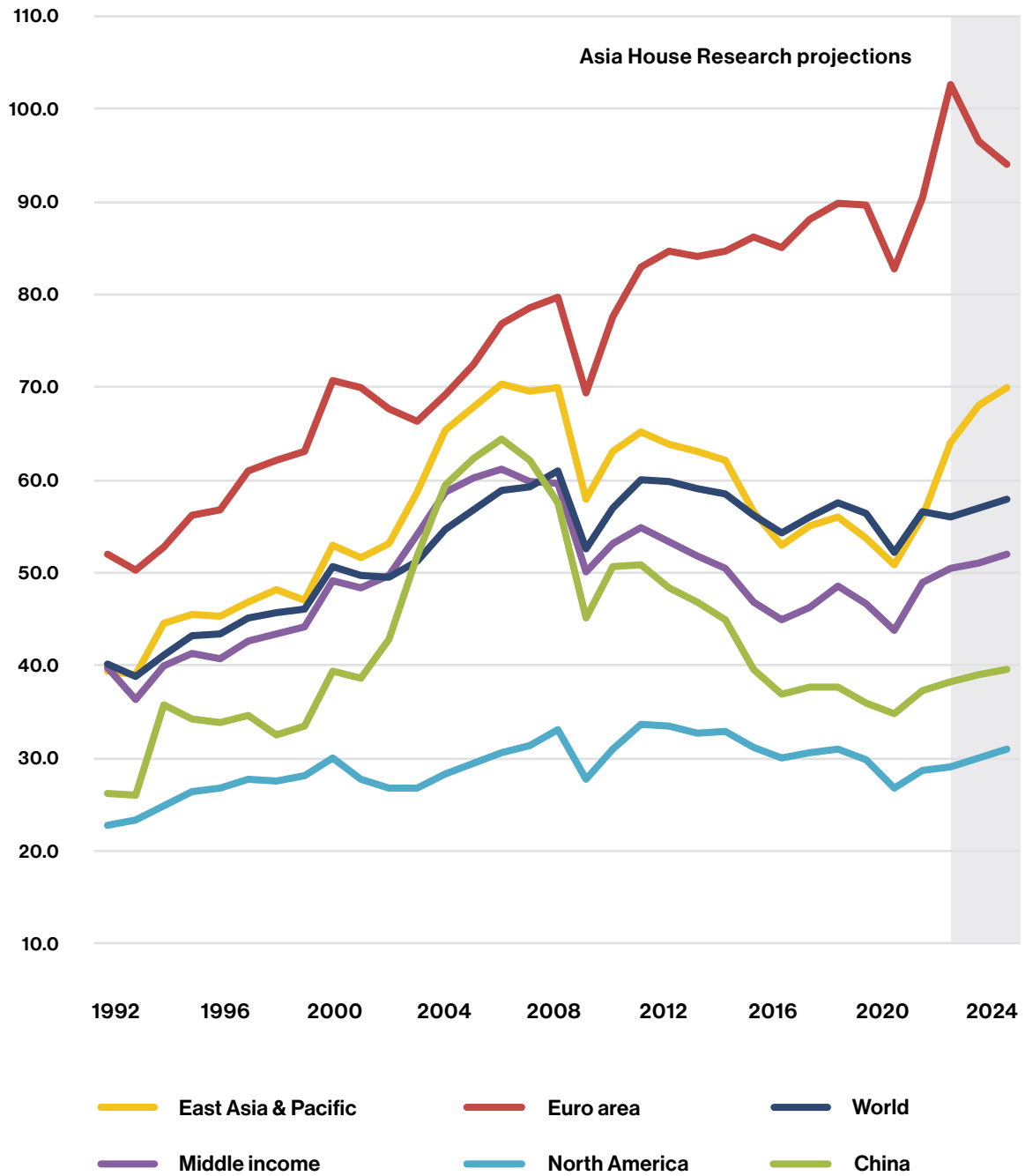
Figure 3. China's economic growth trajectories (Annual GDP growth, % year-on-year)



Source: International Monetary Fund and Asia House Research

Figure 4

Asia's trade to outpace other regions (Trade, % GDP)



Source: World Bank and Asia House Research

China's foreign exchange reserves, amid ongoing efforts to support the economy, would be of concern. Moody's downgrade of China's debt position is, in part, an illustration of this.⁸

1.2. Trade growth to bolster Asia's economies in 2024

With Asia's share of global trade likely to expand in 2024, trade growth will outpace several other regions (Figure 4), driven by fast-growing economies such as Vietnam and Thailand (Figure 5). Regional coordination and enhanced digitalisation will drive this trend by reducing the effective cost of trade finance and overall risks.

Notwithstanding this, a key downside risk could be shocks to firms' costs: international trade volumes are typically responsive to shocks. This is due to cost structures that drive firms to modify orders for foreign inputs before scaling back (or increasing) their demand for domestic inputs (Novy and Taylor, 2020).

Despite these downside risks, trade flows will pick up in Asia in 2024, owing to digital innovations that will reduce the cost of finance.⁹ The expansion of digital contracts will continue to foster a pivot to greater usage of letters of credit, one of the core four means of financing (Auboin et al., 2022).¹⁰

- **Increased working capital for trade finance.** Asian firms' working capital has continued to grow on account of improved risk management, the extension of repayment terms, and trade credit

insurance. Therefore, improved risk management alongside the digital scaling of finance will continue to improve access to capital and help mitigate the risk of non-payment. End-to-end digitalisation remains far off, Asia's trade finance gap¹¹ continues to grow, and Asia's SMEs have seen their debt levels rise¹² which will continue to be a challenge.

- **Scaled-up trade finance to boost resilience.** During the 2008 financial crisis, a decline in trade finance was one of the reasons for the collapse in cross-border trade. However, during the COVID-19 pandemic, bank-intermediated trade finance, such as letters of credit, proved more resilient to the pandemic shock (Demir and Javorcik, 2020). The use of letters of credit is key to mitigating risk, as exports revenues tend to be more resilient with the risks being transferred to banks under this financing mechanism (Crozet, Demir and Javorcik, 2022).
- **Exchange-rate dynamics could favour Asia's exports.** With commodity prices expected to stay broadly elevated, Asia's economies that are net commodity exporters are likely to largely benefit from US dollar-invoiced export revenue. Rising food, energy and commodity prices will also support resource-exporting economies. Most of Asia's currencies are likely to remain competitive in trade-weighted terms, particularly compared with China. Increased access to finance and greater digitalisation will mean above-trend regional trade growth in 2024.

8 <https://www.reuters.com/world/china/moodys-cuts-chinas-credit-outlook-negative-2023-12-05/>

9 Financial costs and risks of non-delivery constitute two main costs in trade finance (Auboin et al., 2022). Counterfactual experiments in Africa show that greater availability of letters of credit and trade loans increase regional trade in four ECOWAS countries by about 11 per cent (ibid.).

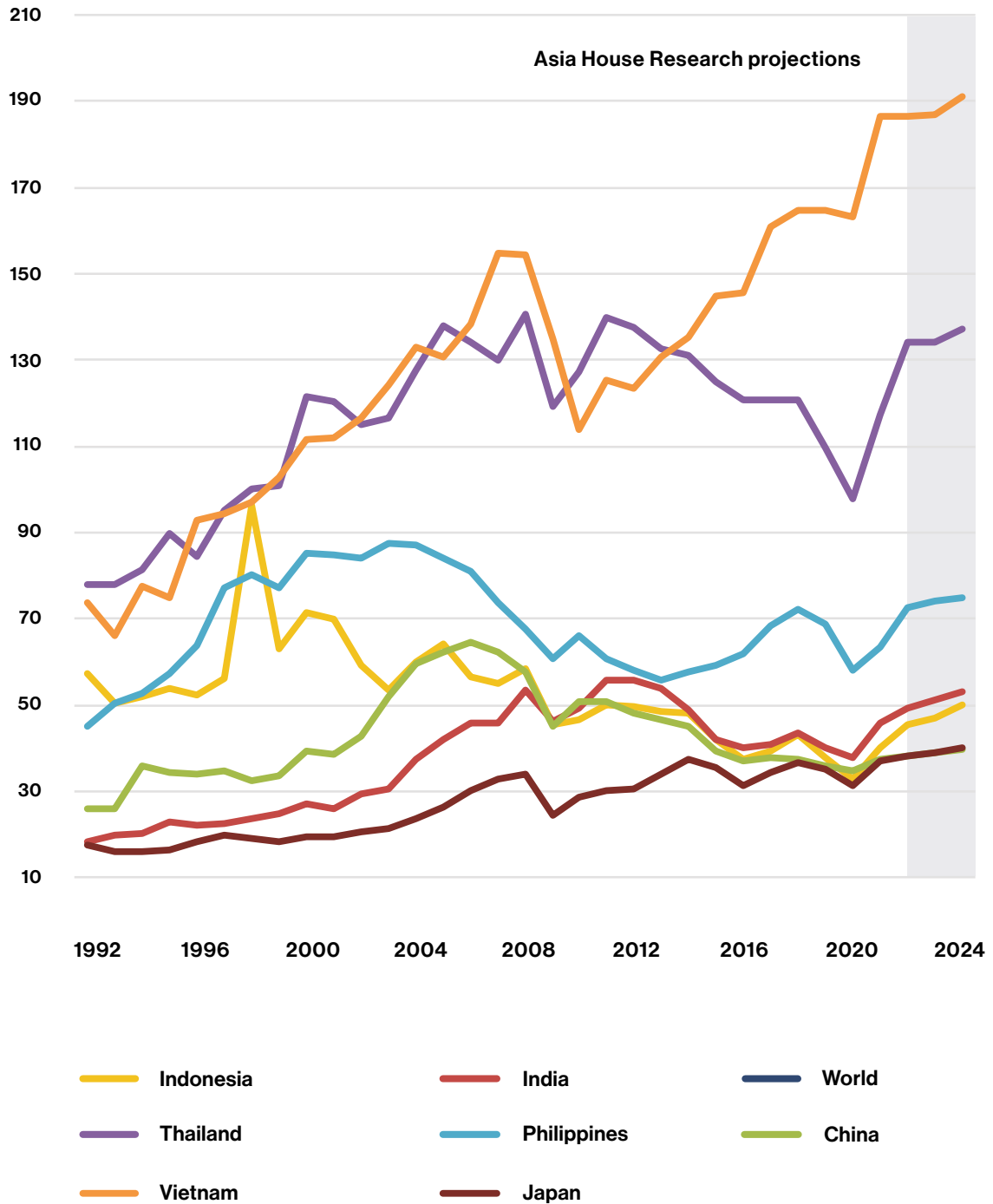
10 These include cash-in-advance, trade loans, letters of credit and the deployment of a firm's internal working capital.

11 The Asian Development Bank's latest estimate for the trade finance gap, i.e. the difference between requests and approvals for financing to support imports and exports, is US\$2.5 trillion in 2022. See: <https://www.adb.org/publications/2023-trade-finance-gaps-growth-jobs-survey>

12 Bank for International Settlements data for total credit to the private non-financial sector indicates that, as of June 2023, several economies have credit ratios that are at or above 200 per cent of GDP. Notable among those economies is China, with its private non-financial sector debt at 228 per cent of GDP. See: https://data.bis.org/topics/TOTAL_CREDIT/data/BIS,PDQ_F2_1.1.0

Figure 5

Asia's trade by country breakdown (Trade, % GDP)



Source: World Bank and Asia House Research

1.3. Prices, politics and policy:

Asia's top challenges

The global financial environment poses the main risk to the region, with US dollar-related risks particularly pertinent. Volatility in US interest rate expectations, combined with global risk aversion and uncertainty, will largely send capital flows into US dollar-denominated assets. While many Asian economies can cope with this type of reallocation because of strong fundamentals, we see the following major macroeconomic challenges in Asia:

- **Sharp, disorderly or persistent currency depreciation** could trigger further inflationary pressures in a number of economies with high import shares. At the same time, some currency depreciations could boost competitiveness. Much will depend on how individual countries participate in global and regional value chains (Georgiadis and Grab, 2019). In Asian economies, around two thirds of overall trade is embedded in global and regional value chains. In some instances, export competitiveness gains are also offset by higher import prices (ADB, 2023).
- **Commodity price volatility** could hit some of Asia's export revenues and affect inflation. With around 40 per cent of global commodities priced in US dollars (Gopinath and Gourinchas, 2022; Georgiadis et al., 2021), imports become more expensive in local currency terms in economies whose currencies have depreciated, raising the spectre of higher inflation. If external demand (for Asia's goods) is weak too, the beneficial effect of a currency depreciation on exports will be limited. A (commodity price-driven) terms-of-trade shock and higher interest rates could also destabilise debt dynamics.
- **US dollar-denominated debt** could pose a threat to economies with a sustained re-acceleration in the US dollar's value. The region's US dollar-

denominated reserves would mitigate such a risk. Additionally, there are greater challenges with Asia's floating-rate debt. In Malaysia, for instance, most outstanding loans are floating rather than fixed-rate (BNM, 2022) and emerging market banks typically use interest-rate derivatives and other financial instruments less frequently to hedge risk (Caballero et al., 2023).

- **Increased and intermittent uncertainty in shipping costs, and in transport times**, will affect goods trade volumes and prices. At the time of writing, the escalation in the Middle East geopolitical conflict is spilling over into maritime trade with reported attacks on international maritime vessels in the Red Sea.¹³ The prospect of higher shipping costs, and continued disruption to maritime trade and transport times, will hurt trade growth, as will any associated rise in the oil price. Broader challenges could also include regulation-related costs (Lee, 2023) and the transition to alternative fuel sources.
- **Unexpected defaults amid a rise in corporate debt** could be a risk. Public, corporate, household and financial debt are climbing (Gaspar et al., 2023) and with central banks keeping rates at a generally elevated level to tame inflation, financial conditions will be broadly restrictive.¹⁴ Asia's construction and property sectors will be particularly sensitive to this, because of the rapid build-up of debt when interest rates were lower. China, India and Thailand have high and rising concentrations of corporate debt with a growing number of firms with interest coverage ratios below one¹⁵, signalling some default risk.
- **Climate shocks are also likely to affect trade.** Following COP28, scaled-up finance will need to be committed to achieve climate-change goals. Climate shocks are already having an effect on trade: the Panama Canal is seeing intermittent

¹³ <https://www.reuters.com/world/middle-east/yemens-houthis-target-vessel-red-sea-yemeni-military-source-told-al-jazeera-2024-01-09/>

¹⁴ <https://www.imf.org/en/Blogs/Articles/2023/05/24/asia-must-monitor-rising-corporate-debt-amid-higher-interest-rates>

¹⁵ Interest coverage ratios measure the degree to which corporate earnings can cover debt interest payments. See Helbling et al., 2023.

closure due to low sea levels caused by drought and a severe El Niño weather system.¹⁶ Continued closures would add to increased volatility in shipping costs, a decline in business sentiment and a poorer economic outlook. This would also cause severe bottlenecks, pushing costs higher. The impacts of climate change on ports alone, from damage to disruption, could cost the shipping industry up to US\$10 billion annually by 2050.¹⁷

- **Financial market corrections and geopolitical tensions** could also hit trade. In addition to the current conflict in the Middle East, the economic and welfare costs of any regional conflict in Asia would be particularly high, and this should discourage bellicose acts, including the prolonged closure of any sea lane. Tensions, mostly centred on the South China Sea, will likely continue, notwithstanding an improvement in US-China

communications. The average welfare loss from the disruption of regional maritime trade typically ranges from 6.2 to 12.4 per cent of gross domestic product for East Asia and South East Asia (Cosar and Thomas, 2020).

- **Macroeconomic missteps during the 2024 ‘super-election year’** are a risk. A series of major elections could redefine and shift the policy landscape in a decisive manner at a time when economies are already trying to manage an economic slowdown that could get worse as the world slips deeper into poly-crisis. Leadership elections in the US, Indonesia, India and Russia could yield unexpected and disruptive outcomes and more systemic shifts in the geopolitical landscape. Unexpected outcomes in the US election would particularly disrupt global economic sentiment.

¹⁶ <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/103123-interview-panama-canal-faces-prolonged-impact-from-el-nino-climate-change>

¹⁷ <https://www.cnn.com/2023/10/30/climate-change-to-cost-shipping-industry-10-billion-a-year-by-2050.html>

Section 2

Digital dividend: AI and tech to drive trade and growth

The expansion of digitalisation in Asia will drive trade in 2024. Asia's economic history has been marked by technological and digital innovation and production, particularly when it comes to semiconductors. Looking to 2024 and beyond, technological innovation is essential, because it will catalyse the productivity gains and income growth necessary to create higher levels of income. The use of innovations, such as AI, will continue to impact Asia's trade and investment prospects.

2.1. Blockchain and digitalisation to boost trade, but regulation is also key

Digital trade¹⁸ will be key for Asia's economic growth in 2024. There will be many benefits, including the facilitation of cross-border trade. The following pathways and channels will be of particular importance for growth:

- **Blockchain technology** and its use in specific areas will bring improved efficiency. Notably, blockchain technology has leveraged its superior features to remodel the relationships between logistics partners. It can be particularly useful in cross-border clearance, stakeholder coordination, payment processing and trade finance, trade-risk management, and trade data reporting and

management. It will also improve the traceability of value chains and transparency of supply chains.

- Blockchain technology has already been tested in these areas with general proofs of concept and under targeted pilot programmes. Its use is also growing among governments and the private sector, revealing successes and challenges (UNCTAD, 2023). Blockchain is being used in credit management, purchase-order financing, invoice financing, letters of credit, financial supply chains, insurance processing and trade-risk management.
- **Enhanced data-sharing and digitalisation** can reduce processing times, costs and risks by reducing friction and increasing transparency. Enhanced, richer data offers greater insight into supply chains, helping make trade finance more efficient and transparent.
- Data-sharing and digitalisation can promote greater financial inclusion¹⁹ by enabling more corporates – notably small and medium-sized enterprises (SMEs) – to access trade finance. However, effective digitisation can only be achieved when it is rolled out hand in hand with standardisation and legal harmonisation; technology on its own is not enough.

¹⁸ While there is no single recognised and accepted definition of digital trade, there is a growing consensus that it encompasses digitally enabled transactions of trade in goods and services that can be delivered either digitally or physically, and that involve consumers, firms and governments. See: <https://www.oecd.org/trade/topics/digital-trade/>

¹⁹ Informational asymmetry raises costs and bank charges to compensate for unknown risks. This discourages access to finance. As banks rely on established banking relationships, financial statements and collateral to screen borrowers, SMEs find it difficult to meet loan requirements. Therefore, high-risk assessment for developing economies, as well as banks and borrowers in these economies, requires high-risk premiums. This limits expansion of trade finance provision to SMEs that need it (Kim et al., 2022).

Box 1

Asia's blockchain breakthroughs: Selected country developments

Vietnam: A leader in crypto-currency adoption and in blockchain projects, Vietnam is estimated to have more than 200 active blockchain projects and has been deploying blockchain technology for a number of functions, including for credit guarantees in trade and supply-chain finance.²⁰ The deployment of blockchain in Vietnam's logistics sector, particularly in Ho Chi Minh City, is also a strategic focus. The rate of technological acceptance and uptake (under the framework of Unified Theory of Acceptance and Use of Technology) indicates positive impacts (Nguyen et al., 2023).

China: The Ministry of Science and Technology recently approved the establishment of the National Blockchain Technology Innovation Centre, based in Beijing (Shen, 2023). The centre will focus on fundamental theory, software and hardware, with the aim of developing related key technologies and industrial applications. Its trading partners, including, notably, Malaysia, stands to gain from China's use of blockchain technology in the Preferential Certificate of Origin (PCO) system, which will facilitate trade.²¹ With a single window framework, the proposed system will improve trade facilitation, reduce technical barriers and offer more efficient and secure processing of goods.

India: India's initiatives for the digitalisation of trade have been notable²² in the realms of transparency, institutional cooperation and paperless trade. One example of these advances is the Turant Customs²³ programme, India's single-window interface for the facilitation of trade, pre-arrival data processing and coordinated border management. The public-policy think tank NITI Aayog launched a blockchain module under India's flagship initiative to promote broader-based innovation and entrepreneurship in the domestic economy. The flagship has instituted Atal Tinkering Labs (ATL) in more than 10,000 schools.

Japan: The Securities Clearing Corporation is using blockchain technology in the settlement by delivery of rubber futures.²⁴ Blockchain is being deployed and applied to digitise paperwork, with the delivery method migrating online through the use of a token that records delivery order information. Additionally, digitalisation of assets using blockchain technology has already occurred in relation to assets that are less liquid (including in real estate and certain types of bond securities). Institutionally, Japan's Securities Clearing Corporation has also strengthened its capacity in trading, clearing and in settlement.²⁵

²⁰ See: <https://www.adb.org/news/adb-conducts-its-first-credit-guarantee-using-distributed-ledger-technology-trade-finance>

²¹ <https://english.news.cn/20230404/29dc9cbfbf5240b391bdb553ff42b4ae/c.html>

²² <https://www.unescap.org/our-work/trade-investment-innovation/untf-survey>

²³ <https://pib.gov.in/PressReleasePage.aspx?PRID=1633525>

²⁴ <https://www.marketsmedia.com/japan-implements-blockchain-for-settling-rubber-futures/>

²⁵ <https://www.risk.net/derivatives/7956370/jssc-and-the-future-of-clearing-and-settling-yen-denominated-trades>

Indonesia: In the summer of 2023, the government stated that it had launched a national crypto asset exchange²⁶ to provide regulators with transaction records and to better protect crypto investors.²⁷ The launch of the 'bourse' by the Commodities Futures Trading Regulatory Agency (Bappebti) indicates that the government aims to boost international trade. The government is also working with various blockchain-focused associations to conduct blockchain technology experiments to understand the implications in different sectors.

2.2. AI in Asia: A catalytic force

AI has transformed almost all aspects of economic life, particularly in Asia's major economies. The main sectors using AI applications include the automobile industry, with the expansion of driverless cars; the media and communication sectors; telecommunications; and businesses that influence consumers' buying decisions. The degree to which generative AI²⁸ will actually increase productivity and incomes will be key.

During past periods of industrial innovation, inequality initially increased and actual productivity declined, indicating that there is a lag in impacts from new technology. This could also be the case with AI (Bootle, 2020), and also in Asia. However, applications of AI are likely to increase productivity more rapidly in certain key sectors, such as telecommunications and agriculture.

AI provides a significant opportunity to bring China's public and private sectors together, not least to counter the challenges that technological change inevitably creates (Microsoft, 2023). In close competition with US firms, Chinese companies have developed AI-driven text-to-image generators, leading to applications such as Alibaba's Tongyi Wanxiang; this will improve compelling images over time (ibid.) and will likely contribute to economic and technological competition with the US.

There will be capacity-building in this area across the region and the cost of AI-enabled products will be driven lower. Overall, the Asia-Pacific region lags behind developed regions such as North America

in this area but the availability of a large pool of user data suggests that the region will jump ahead at some point, given its resources and talent allocation (Haseeb et al., 2019).

2.3. Banking on the future: Central banks look to digital currencies

The importance of central bank digital currencies (CBDCs) is growing, particularly in Asia; digital currencies will catalyse financial inclusion for SMEs, which account for a significant share of employment and output in Asia but can struggle to obtain affordable trade finance. The growth of digital currencies will help the region outperform in terms of growth.

This section examines country-specific developments in CBDCs and examines their importance for trade growth.

- **China:** The People's Bank of China digital currency, also known as the eCNY, is an alternative to other platforms, such as Alipay, and a replacement for physical cash, which has long been replaced by digital payments domestically. China is progressing with plans to use the eCNY for international trade (Interesse, 2023). If successful, it could lead to currency multipolarity. PetroChina completed the first international crude-oil trade using the eCNY when it bought 1 million barrels of crude oil and settled in eCNY at the Shanghai Petroleum and Natural Gas Exchange.

²⁶ <https://www.reuters.com/technology/indonesia-launches-new-crypto-bourse-clearing-house-2023-07-21/>

²⁷ This ground-breaking initiative aims to furnish regulatory authorities with comprehensive transaction records, enhancing their oversight capabilities. It is a pioneering instance of a government-supported crypto-currency exchange.

²⁸ Generative AI is defined here as learning models that generate high-quality text, images and other content, based on the data on which they were trained. See: <https://research.ibm.com/blog/what-is-generative-ai>



Kono Taro, Japan's Digital Minister, who has briefed Asia House Corporate Members on Japan's role in a changing global order.

- **Japan:** The Bank of Japan has set up a forum²⁹, in partnership with 60 companies, to pilot the digital yen, the DCJPY, using a network that will include banks generating deposits as digital currency on the blockchain. Aozora Bank is the lead DCJPY issuer and the digital currency is expected to be backed by deposits in Japanese yen. Additionally, Binance, the operator of the largest cryptocurrency exchange, and Mitsubishi UFJ Trust and Banking Corporation are exploring the issuance of a yen stablecoin³⁰, a crypto currency designed to have a relatively stable price through being pegged to a commodity or currency or having its supply determined by an algorithm.
- **India:** The digital rupee has been promoted by the Reserve Bank of India (RBI), which has called on more lenders to offer it (Nayak, 2023). India's commercial banks are also engaged in trading domestic assets, including domestic bonds, using RBI's e-rupee (Roy and Sircar, 2022). The pilot of the wholesale digital currency, known as the Digital Rupee-Wholesale (e-W), has been launched and the RBI has already rolled out a pilot of the retail version, the e-R, which is in the form of a digital token that represents legal tender. The RBI is showcasing various digital initiatives in the financial sector, including Public Tech Platform for Frictionless Credit, UPI One World, RuPay On-The-Go and Bharat Bill Payment System.
- **Bank Indonesia (BI)** has launched a consultation for the first phase of its digital currency initiative – Project Garuda. This involves a three-stage

²⁹ See: https://www.boj.or.jp/en/paym/digital/d_forum/dfo230720e.pdf

³⁰ <https://www.bloomberg.com/news/articles/2023-09-26/binance-seeks-to-launch-stablecoins-in-japan-with-mufg-unit>



HE Zheng Zeguang, Chinese Ambassador to the UK, speaking at Asia House's Western Returned Scholars Symposium with Asia House Chief Executive Michael Lawrence OBE.

approach for a basic wholesale CBDC (wCBDC), a more advanced wCBDC, and a retail CBDC. The first iteration of a wholesale CBDC will have the basic functionality of issuance, redemption and transfer, including integration with the real-time gross settlement system. The digital rupiah will use a permissioned blockchain network and will not be limited to banks.³¹ BI will potentially directly serve end users in more remote areas.

- **Vietnam.** Compared with other countries in the region, Vietnam's efforts to develop its own digital currency started late and, so far, there has been relatively little progress. A digital currency would be particularly useful for Vietnam, given the importance of trade to its

economy. China's progress in implementing the digital renminbi (eCNY) has placed greater pressure on policymakers in Vietnam to move forward with the design and future implementation of a Vietnamese CBDC.

- **Thailand:** The Bank of Thailand (BOT) pilot has included a collaboration between Siam Commercial Bank, Bank of Ayudhya and 2C2P Thailand to develop an application for the digital baht. The app will combine digital payment services, know-your-customer verification and top-up procedures. However, the BOT does not have immediate plans to launch a digital currency. The ongoing retail pilot complements the BOT's work on a wholesale

³¹ Wholesalers will be responsible for distributing a future retail digital rupiah, and the central bank will specify qualification requirements for wholesalers.

CBDC. The BOT aims to facilitate financial inclusion and financial innovations within a fully digitised financial system.³²

- **Malaysia:** Malaysia's plans for cross-border use of a ringgit-denominated CBDC, and stablecoins, through the multi-country Project Dunbar³³ will have spill-over effects. A widespread adoption of a multiple CBDC platform might heighten currency substitution risk, undermine monetary stability and amplify capital flow volatility risk, give the possibility of flight to foreign CBDC and stablecoins. The project aims to promote interoperability between CBDC platforms and existing payment infrastructures to facilitate seamless payment flows, ensuring parity and proportionality to support innovation, and establishing the necessary safeguards, where required.
- **The Philippines:** The Bureau of the Treasury wants to team up with the central bank to

expand the use of digital currency in the sale of government securities using blockchain technology. The Philippines instituted its first-ever tokenised Treasury bonds, utilising the blockchain-based Distributed Ledger Technology Registry. And it is moving forward with plans for a wholesale CBDC, partnering with Hyperledger Fabric, an open-source blockchain framework, for its first digital peso pilot. The pilot programme aims to enhance large cross-border foreign currency transfers and mitigate settlement risks.

Looking ahead, the mBridge³⁴ project, or Multiple CBDC Bridge to develop wholesale CBDC for cross-border transfers, will be essential. The platform will continue to make cross-border transactions more efficient using multi-currency CBDCs. This should reduce cross-border transfer times from days to seconds and foster direct peer-to-peer links between participating banks, which could also lower costs. The platform will also reduce settlement risk and support the use of local currencies in international payments.

³² <https://www.bot.or.th/en/financial-innovation/digital-finance/central-bank-digital-currency/Whatarethebenefits/developmentofcbdc.html>

³³ Project Dunbar is a collaboration between the Reserve Bank of Australia, Bank Negara Malaysia, Monetary Authority of Singapore, South African Reserve Bank and BIS Innovation Hub. It aims to test wholesale CBDCs for international settlements via a shared platform. See: https://www.bis.org/publ/bppdf/bispap123_n.pdf

³⁴ The Multiple CBDC Bridge Project is a collaborative project between the Bank of Thailand, Hong Kong Monetary Authority, the Digital Currency Institute of the People's Bank of China, Central Bank of the United Arab Emirates and Bank for International Settlements Innovation Hub in Hong Kong.

Section 3

Green finance to boost renewables and carbon markets

Throughout 2024, and despite the global risks to growth and generally elevated interest rates, Asia's ecosystem for green finance will improve, owing to the policies in place, the outperformance of green bonds and the importance of SOEs in the region. This will have positive knock-on impacts on renewable energy investment and Asia's carbon markets. Asia has been a leader in developing carbon trading (Babu, 2023; Lee, 2023), although its carbon markets still cover approximately 14 per cent of the region's emissions.

3.1. Green growth essentials: Stability, investment and SOEs

Asia's ecosystem for green finance, particularly for green bonds, will improve through 2024. The key enabling factors will be financial stability, inward FDI and enhanced regional policy coordination, which will also enable an expansion of blended finance – the use of both public and private funds to spur private investment. The pricing benefits of green bonds are extensive and growing in scale, and they have also tended to outperform³⁵ compared with their traditional vanilla equivalents in secondary market trading.

Here are some of these enabling factors.

- Macroprudential policies aimed at mitigating global systemic financial risks have become part of the policy toolkit in many emerging markets and some advanced countries. These policies will continue to reduce the vulnerability of sovereign bonds to global spill-over risk in the ASEAN-4 countries (of Indonesia, Malaysia, the Philippines and Thailand). Markets with tighter prudential policies have significantly lower risk of shock transmission, including from US Treasury bond yield shocks (Aizenman et al., 2023).³⁶
- Asia on the whole has low sovereign debt risk and banking-sector related risk. Sovereign debt

risk is closely related to bank risk (Li and Zinna, 2018), which remains low in the Asian region. This implies a comparatively high level of domestic and regional financial stability. Macroprudential policies, including adequate liquidity buffers, reduce debt and bank risk, while also mitigating broader financial system vulnerabilities.

- Asia's policy coordination to enhance green finance will increase and this will benefit the flow of both catalytic and transition finance – the type of financing that seeks to create positive social and environmental impacts. Scaled-up high-level coordination between the private and public sectors is likely to bring a paradigm change in Asia, in particular, given the increased policy momentum on transition finance³⁷ and in blended finance through and within ASEAN.³⁸

State-owned enterprises (SOEs) are key to the development of Asia's green finance ecosystem. They account for 55 per cent of infrastructure investments and 40 per cent of domestic output, and are present in energy, transport and water, as well as driving innovation (ADB, 2023). Given the size and importance of SOEs, the expansion of SOE financing in commercial terms could include additional blended finance capacity to boost green-bond issuance, green use of proceeds and, crucially, transition bonds. The green premium – the gains for an issuer of a green bond on the associated coupon payment because the bond is green – could also incentivise government and investor interest.

3.2. Harnessing the wind and sun to boost renewable power

Rapid urbanisation, industrialisation and the consequent soaring energy demand will continue to define the landscape in Asia. Throughout 2024 and beyond, it is likely that growth in renewable energy investment will accelerate significantly. By 2030,

³⁵ <https://www.climatebonds.net/2022/03/green-bonds-offer-pricing-benefits-both-issuers-and-investors>

³⁶ This study investigates the spillover-risk network of bond markets in four ASEAN markets (Indonesia, Malaysia, the Philippines and Thailand); three non-ASEAN Asian markets (India, Japan and the PRC, abbreviated to regional markets); and three developed markets (the EU, the UK and the US, abbreviated to global markets).

³⁷ <https://www.eria.org/news-and-views/3rd-asia-green-growth-partnership-ministerial-meeting-aggpmp/>

³⁸ <https://www.eco-business.com/press-releases/asean-dialogue-partners-scale-up-collaboration-for-sustainable-development/>



Asia House and Standard Chartered Bank held a conference in London in February 2023 on Carbon markets and the drive to net zero in Asia.

the world will have enough renewable energy resources to meet the annual target for achieving net zero emissions by 2050 (IEA, 2023a). Inward investment from international investors will push this acceleration.

The global drop in the cost of renewable technologies is likely to translate into a reduction of (still comparatively high) solar- and wind-project costs in South East Asia. Falling costs will align with new and innovative supply chains that will promote the spread of renewable energy and the innovations and investment required to facilitate it (Figure 6). This would be in line with projections of another record year in the global deployment of renewable energy technologies (IEA, 2023a,b).

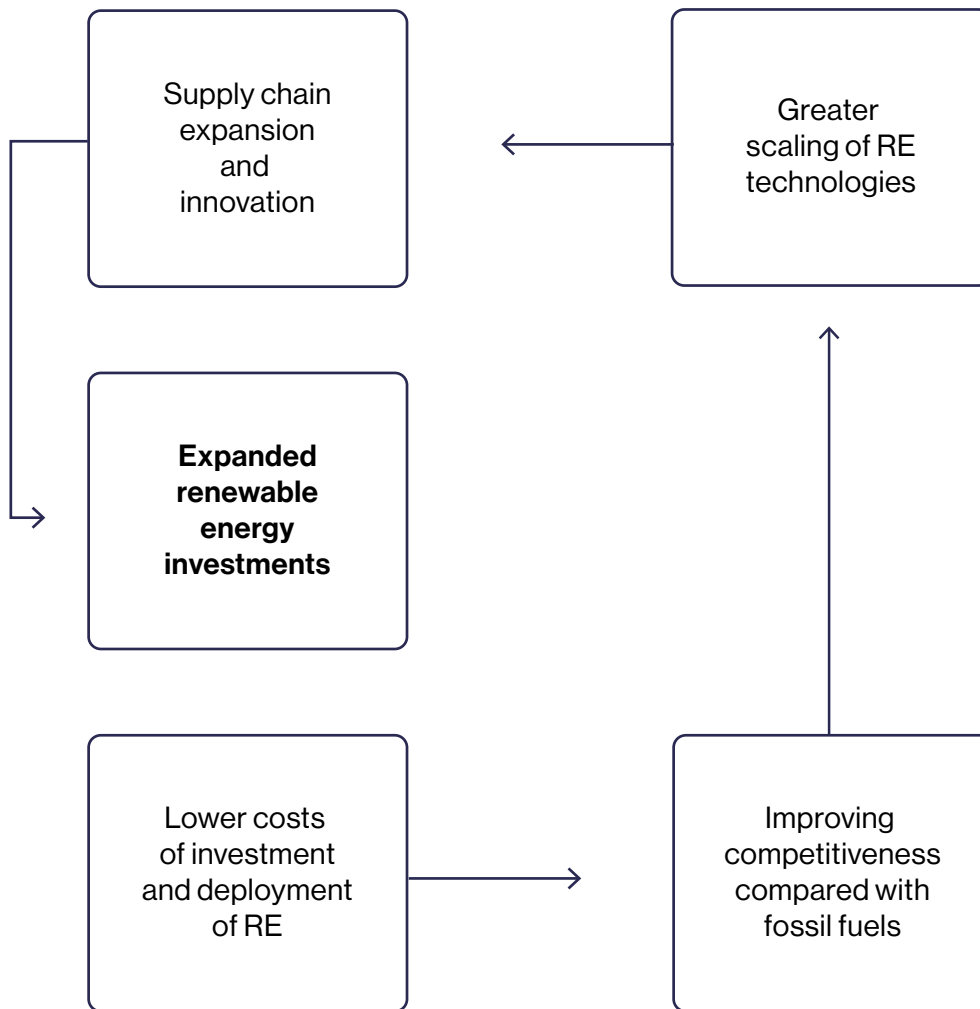
China and India will lead in the acceleration of renewable energy, with other Asian economies also increasing the deployment of renewables to reduce greenhouse gas emissions and move away from fossil fuels.

- **Solar-panel production capacity** will likely double in 2024. Smaller-scale solar-panel applications are expected to account for approximately half the deployment of solar panels, also known as photovoltaics (PVs).³⁹ China will play a driving role, not least by commissioning delayed PV projects, according to the International Energy Agency (IEA). Declining module prices, greater uptake of distributed solar PV systems and a policy push for large-scale deployment will continue to drive demand.

³⁹ <https://www.iea.org/reports/renewable-energy-market-update-june-2023/executive-summary>

Figure 6

Pathways of impact for Asia's renewable energy revolution



Source: IEA and Asia House Research

- **Wind power's manufacturing growth** in 2024 will depend on whether governments address issues around permits and auctions through policy support. Wind-turbine supply chains won't be able to meet the growing renewable generation demand in the medium term.⁴⁰ Although global onshore wind additions are expected to fall from 2023 levels, China's wind-energy additions will continue to increase in 2024 (IEA, 2023a).

Overall, cumulative global renewable capacity is forecast to reach more than 4,500 GW at the end of 2024, equal to the total power capacity of China and the United States combined (ibid, 2023). This is mainly due to a more rapid deployment of residential and commercial PV installations and assumes a faster implementation of recent policies and incentives, quicker permitting, faster construction and the timely connection of projects under development to the grid (IEA, 2023a).

The structural improvement in how competitive renewable energy is compared with fossil-fuel alternatives will be key and is likely to outweigh the dampening effect of rising interest rates. This will start to shift Asia's supply-chain challenges. Investors and policymakers are likely to continue to expand domestic diversification into alternatives, not least because of high electricity prices caused by the global energy crisis. Renewables will be seen as ensuring better energy security.

3.3. Asia's carbon markets: Rapid development that's gathering Gaining momentum

Asian carbon markets have doubled in size since 2020 and the region has been quicker than others to launch, plan and develop new carbon market systems (Lee, 2023; Shi et al., 2019). But Asia's carbon markets currently cover only 14 per cent of the world's

emissions, while the region produces nearly half of the total.⁴¹ Low carbon prices have disincentivised companies' decarbonisation. Developing carbon markets could catalyse government efforts, even amid multiple economic shocks.

- In **China**, the Department of Ecology and Environment of Guangdong Province (DEEG) inaugurated the largest pilot in terms of emissions and trading volume in August 2023. The scheme – Implementation Plan of Guangdong Emissions Trading to Support Peaking Carbon Emissions and Achieving Carbon Neutrality (2023–2030)⁴² – runs in parallel with the national Emissions Trading Scheme (ETS). China plans to expand the Guangdong ETS to ensure 75 per cent of total emissions from intra-province energy sources are covered by 2030. DEEG will expand coverage to textiles, ceramics, data centres, transportation and construction, focusing especially on sectors covered by the European Union's carbon border adjustment mechanism.⁴³ The plan encourages new financial products for carbon trading.

In **Japan**, the Tokyo Stock Exchange started trade and market-making in carbon credits in October 2023.⁴⁴ Following the start of the scheme, the number of tradable credits must now be increased if Japan's carbon credit market is to grow in scale and depth. Additionally, to attain net zero greenhouse gas emissions by 2050, the government must take more action for economic transformation, while promoting technological and market innovations to improve production efficiency.

India is expected to start its carbon trading from 2025.⁴⁵ The proposed national carbon market will build links to international registries and there are additional plans to enlist international verifiers in the process of establishing and expanding its market scheme. Additionally, a steering committee with

⁴⁰ <https://www.energy-transitions.org/new-insights-briefing-clean-energy-supply-chains-better-faster-cleaner/>

⁴¹ See: <https://www.imf.org/en/Publications/fandd/issues/2021/09/asia-climate-emergency-role-of-fiscal-policy-IMF-dabla> and: <https://time.com/6325755/asia-carbon-trading-growth/>

⁴² Guangdong Province is one of seven regional ETS pilots initiated by the Chinese national government between 2013 and 2014, designed to provide practical experience for the now operational national ETS.

⁴³ See: <https://icapcarbonaction.com/en/ets/china-guangdong-pilot-ets>

⁴⁴ <https://www.reuters.com/sustainability/tokyo-stock-exchange-kicks-off-carbon-credit-trading-2023-10-11/>

⁴⁵ <https://www.reuters.com/sustainability/climate-energy/india-set-emission-reduction-mandates-4-sectors-start-carbon-trading-2025-2023-09-26/>

personnel from ministries and government agencies will be set up as a governing mechanism.⁴⁶ India also plans to set carbon emission intensity benchmarks and reduction targets for three years for companies in four fossil fuel-dependent sectors: petrochemicals, iron and steel, cement, and pulp and paper.

Indonesia launched its first carbon emissions trading programme in 2023 with a view to reaching net zero emissions by 2060. Crucially, carbon trading is now open to coal plants that generate at least 100 megawatts of power and are linked to the State's central electricity grid; this accounts for about 86 per cent of coal capacity.⁴⁷ Although there have been challenging aspects⁴⁸ to the programme's launch, including in relation to market depth and scale, the expected growth of the market complements other climate policies, making Indonesia's overarching policy framework conducive to its green transition.

Vietnam plans to pilot its carbon market from 2025 to 2027, with operations starting officially from 2028. The domestic carbon market operates under a 'cap and trade' mechanism, in which the primary participants are GHG-emitting firms. These participants will engage in transactions that involve the exchange of reduced GHG quantities through GHG emission quotas and carbon credits. The World Bank has partnered with Vietnam to develop efficient low-carbon programmes since 2016, as part of the joint Partnership for Market Readiness

(PMR) programme, which has set the foundation for the development of Vietnam's domestic carbon-pricing mechanism.

The **Thailand** Greenhouse Gas Management Organization (TGO)⁴⁹ has teamed up with environmental, social and governance (ESG) fintech STACS to boost transparency in the functioning of the country's carbon market. The collaboration will use STACS's ESGpedia digital registry platform, which also powers the Monetary Authority of Singapore's Greenprint ESG Registry. The TGO has also developed the Thailand Voluntary Emission Reduction Programme (T-VER), a national standard carbon-crediting mechanism designed to encourage voluntary participation in GHG emission reduction across all sectors.

In **Malaysia**, the Bursa Carbon Exchange (BCX),⁵⁰ a voluntary carbon market exchange, is an essential part of the nation's commitment to achieve net zero emissions as early as 2050. BCX is the world's first sharia-compliant voluntary carbon exchange and facilitates the trading of high-quality carbon credits through standardised carbon contracts between counterparties. Corporates may purchase these credits to offset their carbon footprint, while the sale of carbon credits, in return, will finance and drive the development of domestic emission reduction, GHG removal solutions and renewable energy and transition projects.

⁴⁶ <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/063023-indias-national-carbon-market-to-seek-links-with-international-registries>

⁴⁷ <https://icapcarbonaction.com/en/ets/indonesia>

⁴⁸ <https://www.climatechangenews.com/2023/11/20/slow-start-for-indonesias-much-hyped-carbon-market/>

⁴⁹ TGO is an autonomous governmental organisation under the supervision of the Ministry of Natural Resources and Environment; it is responsible for managing and expediting GHG reduction. See: <https://unfccc.int/about-us/regional-collaboration-centres/rcc-bangkok/unfccc-and-tgo-cooperation-climate-action-in-thailand>

⁵⁰ See: <https://bcx.bursamalaysia.com/web>

Section 4

Risks to Asia: Political, economic and price volatility at play

The multiple risks facing Asia are likely to be mitigated by the region's economic resilience. These risks are both political and economic. A series of key elections around the world in 2024 stands to reshape the geopolitical landscape, with some of the most notable votes set to take place in the United States, Indonesia and India. China's political outlook, too, will be of particular importance amid its economic slowdown (see Box 2).

Additionally, amid the global slowdown, the risk of one or more downward corrections in financial markets is ever-present. Finally, commodity prices and primary energy- and food-price volatility are likely to keep policymakers alert, while Asia's expanding economic and investment ties with the Middle East will have a positive impact (see Box 3). GCC-Asia trade is expected to increase as Asia's economies and its energy demand expand.

4.1. Decision time: Global elections have potential to surprise

In what has been called a 'super-election year'⁵¹ several key ballots will influence and possibly reshape the macroeconomic and geopolitical landscape in 2024 and beyond. Past experience shows that unexpected outcomes, or unforeseen consequences of political outcomes, will be important. We examine four leadership elections that will be decisive in reshaping the macroeconomic landscape, particularly if there are unexpected outcomes.

- **Indonesia:** Indonesia will hold simultaneous presidential and legislative elections on 14 February (Jaffrey, 2023). Defence Minister Prabowo Subianto and his running mate, the eldest son of President Joko Widodo⁵², are expected to win the presidency, with Prabowo leading in

the polls at the time of writing. Key factors to consider include the risks of a polarised election (Arifianto, 2019; Triwibowo, 2019); the preferences of millennial and Gen Z voters, who make up more than half of eligible voters (Sood, 2023; Strangio, 2023); and sentiment in East Java, a region that has been decisive in previous elections (Octavia, 2023).

- **India:** Economic recovery, particularly in rural areas, following the COVID-19 lockdowns (Balakrishnan and Parameswaran, 2023; Zubrzycky, 2023) and food prices, will be key factors to watch ahead of national elections expected between April and May. Despite high inflation and unemployment, Prime Minister Narendra Modi's Bharatiya Janata Party (BJP) is currently on track to win a third term⁵³ with the opposition alliance 'INDIA' challenging the incumbent administration (Rajesh, 2023). A lot is at stake: India is on course to become the world's third-largest economy; unexpected and populist politics are detrimental to this (Varma and Nandi, 2019) and to India's financial markets.⁵⁴
- **Russia:** There are likely to be few surprises in the March presidential election.⁵⁵ The Russia-Ukraine war will continue to disrupt energy, commodity and currency markets, with sustained pressure on food, fertiliser and energy prices. Financial spill over from the conflict will also persist, particularly given the requirement that Russian exporters in energy, metals, agriculture, chemicals and timber convert any foreign currency revenue out of US dollars (Prokopenko, 2023). Amid the continued restrictions on Russia's oil sector, the increase in renminbi-denominated trade, alongside a continuation (or acceleration) in current currency policies, will boost the renminbi.

⁵¹ UNESCO cites 2024 as a super election year. See: <https://www.unesco.org/en/articles/ahead-super-election-year-unesco-appeals-governments-around-world-protect-journalists-rights>

⁵² <https://www.aljazeera.com/news/2023/10/23/prabowo-picks-jokowis-son-as-running-mate-in-indonesia-presidential-bid>

⁵³ <https://www.reuters.com/world/india/inflation-hurting-modi-still-likely-win-indias-2024-polls-survey-2023-08-25/>

⁵⁴ India's equity market registered significant declines in the wake of the 2004 election outcome. See: <https://edition.cnn.com/2004/BUSINESS/04/21/india.economy/index.html>

⁵⁵ See Vinogradov, 2023.

- **The United States:** At the time of writing, with President Joe Biden's disapproval rating estimated at 54.5 per cent⁵⁶ and former president Donald Trump leading Republican candidates, there is a potential for change at the November election. Any unexpected developments, including the emergence of a new independent candidate, would cause disruption in multiple financial markets. US-China relations will feature heavily, with candidates across the political spectrum likely to adopt a hawkish stance, notwithstanding the 2023 raft of bilateral meetings, including between President Biden and President Xi Jinping⁵⁷ (Gramer and Lu, 2023).

The slew of elections in 2024 will be particularly consequential, as they are taking place during a global slowdown, with uncertainty surrounding the degree of global price stability, continued labour market scarring

and decelerating real income growth in a number of developed economies. Additionally, cost-of-living pressures will persist, despite some signs that inflation pressures are softening. This combination of growth and elevated inflation could lead to unexpected political outcomes, as we have seen in Argentina⁵⁸ and in the Netherlands.⁵⁹

In 2024, the Chinese government will continue to balance the need for economic growth with the desire to maintain stability and security by prioritising domestic challenges. Stability and economic issues are firmly intertwined, and the government recognises the interconnectedness of these challenges. The need to urgently boost economic growth following lower-than-expected growth in Q2 2023 will influence both China's domestic and foreign policy as the country embarks on a charm offensive to facilitate its growth agenda.

⁵⁶ <https://projects.fivethirtyeight.com/biden-approval-rating/>

⁵⁷ <https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/15/readout-of-president-joe-bidens-meeting-with-president-xi-jinping-of-the-peoples-republic-of-china-2/>

⁵⁸ <https://www.economist.com/the-americas/2023/10/23/argentinas-presidential-election-delivers-a-surprise-result>

⁵⁹ <https://www.politico.eu/article/far-right-leader-geert-wilders-wins-dutch-election-exit-poll/>

Box 2

China's delicate balancing act

Dr Zhouchen Mao, Asia House

In the past months, significant adjustments have been made to the domestic economic policy agenda, including the introduction of measures to bolster confidence in the private sector and among foreign investors. Regulatory oversights have also been softened to reflect the need to stimulate the economy. The greatest economic risks are centred on the property sector, elevated local government debts, and lacklustre domestic consumption. Substantial policy support is expected in 2024 to help boost growth.

Looking at foreign policy, China will likely avoid escalating external confrontations, given the economic challenges at home. At the same time, Beijing will seek to underscore China's importance to Europe, Asia and the Global South in order to bolster its economic recovery. However, it is possible that Beijing might lean towards more assertive stances on certain issues.

First, US-China bilateral relations will enter a holding pattern in 2024, following revived efforts to stabilise the relationship in 2023. As the election nears, US diplomacy will likely be superseded by domestic political posturing. In China, policymakers will continue to reduce their vulnerability to US-led economic pressures, regardless of who wins in November.

Further curbs on trade and investment restrictions imposed by the United States will exacerbate tensions, while China's employment of regulatory measures, including the Unreliable Entity List and Foreign Relations Law, to counter US actions in the past years, suggests there will be legal and regulatory uncertainty as Beijing strengthens its legal system.

Second, while China's economic imperative led to a revival of bilateral engagement with the European Union in 2023 – seen in increased interactions, agreements and reciprocal leadership visits – the EU has also introduced a variety of policies, such as the European Chips Act, the European Economic Security Strategy and the Anti-Coercion Instrument, with significant implications for China. The EU's double-sided approach to China – cooperation and competition – suggests the bilateral relationship will reach a critical juncture in 2024.

The Taiwan Strait represents the single most sensitive and volatile issue for China. The general consensus is that following the election victory by Lai Ching-te of the Democratic Progressive Party (DPP) on 13 January, the status quo will remain.

There are two factors that could mitigate the risk of escalating tensions. There are reports⁶⁰ that Beijing is formulating a new approach to enable high-level dialogue that could result in a politically viable way to engage Taipei. Additionally, despite winning the election, the DPP lost its majority in the legislative Yuan, meaning that the DPP must work with the opposition on key legislative issues. This may make drastic policy changes less likely, thereby reducing the risk of escalation.

⁶⁰ Sources include: <https://asia.nikkei.com/Editor-s-Picks/China-up-close/Analysis-Xi-puts-top-brain-in-charge-of-Taiwan-unification-strategy> and <https://www.taiwannews.com.tw/en/news/4791717>

Box 3

The Middle East Pivot to Asia: Soaring trade reshapes global landscape

Freddie Neve, Senior Middle East Associate, Asia House

In December 2023, Asia House published the latest edition of its Middle East Pivot to Asia report, which tracks the most significant trade, investment and political developments in Gulf-Asia ties over the past year.

Asia House's research shows that Gulf-Emerging Asia trade has surged by 34.7 per cent, increasing from US\$383 billion in 2021 to a record US\$516 billion in 2022. At current growth rates, trade between the Gulf countries and Emerging Asia is expected to overtake trade with the United States, United Kingdom and western Europe combined in 2026 and reach US\$757 billion by 2030 – almost doubling in value from 2021.

Growth can be attributed to higher average oil prices in 2022 than 2021, but trade expansion extends beyond oil. Non-oil sectors, particularly technology sectors that are vital for the Gulf's economic diversification and digitalisation, have played a significant role. Sustainable cooperation between the Gulf and Asia, with a particular emphasis on China, is also rising. Synergies in renewables, hydrogen, electric vehicles (EVs) and green construction have propelled this collaboration. The COP28 climate talks – which took place in the United Arab Emirates (UAE) in December 2023 – are expected to further encourage Gulf-Asia sustainable cooperation.

China is a key driver of this trade growth. UAE-China trade has accelerated by around 37 per cent over the past year, rising from US\$78 billion in 2021 to US\$107 billion in 2022 and, for the second year running, has surpassed the UAE's combined trade with the US, UK and western Europe. Saudi-China trade has similarly jumped by 28 per cent to US\$105 billion between 2021 and 2022. Trade is expected to benefit even further from Chinese President Xi Jinping's visit in December 2022, which resulted in 35 deals worth US\$50 billion.

The continued internationalisation of the renminbi (RMB) as a global trade currency could further enhance China's economic sway in the region. RMB use in trade settlement has tripled in the last three years. It now accounts for about 6 per cent of global trade, surpassing the euro. China is making progress in persuading the Gulf States to accept payment for their oil in RMB. Further progress will accelerate the RMB's internationalisation. China's expanding economic influence in the Gulf is leading to greater involvement in regional politics, potentially reducing US influence. Saudi Arabia and the UAE's accession into the BRICS (Brazil, Russia, India, China, and South Africa) group in 2024 will place them closer to Chinese decision-making and strategic thinking on global affairs.

The Gulf's trade ties with India and the ASEAN bloc have also grown. October's inaugural ASEAN-GCC (Gulf Cooperation Council) summit in Riyadh, as well as the UAE's Comprehensive Economic Partnership Agreements (CEPAs) with India and Indonesia, and forthcoming CEPAs with Thailand, Vietnam and Malaysia, underscore enhanced cooperation.

While there are risks facing Gulf-Asia ties – such as an expansion of the Israel-Gaza conflict and a deterioration in US-China relations leading to increased pressure on Gulf states to curtail economic



HE Dr. Thani Al Zeyoudi, the UAE's Minister of State for Foreign Trade, in a briefing with Asia House Corporate Members in Jakarta, moderated by Asia House Chief Executive Michael Lawrence OBE.

relations with one side in favour of the other – Asia House believes the long-term growth prospect for Gulf-Asia trade are robust.

Asia House expects Gulf-Asia trade to increase as Asia's economies, middle-class populations and energy demand expand over the next decade. The Gulf states' efforts to diversify their economies and develop non-oil sectors will further drive cooperation. The Gulf's economic and social reforms, capital market expansion and growing focus on Asia by Gulf Sovereign Wealth Funds are also expected to attract greater investment from Asia and drive trade growth.

Asia's growing economic importance to the Gulf is leading to greater political engagement and cooperation, shifting global geopolitics. As trade and investment ties with Asia increase, we will likely see Asian viewpoints carry more weight in the strategic decision-making of Gulf rulers, and a waning of western influence. The Middle East pivot to Asia continues to be one of the defining geopolitical and geo-economic shifts of our time and is worthy of greater attention and focus from global business and political leaders to capitalise on this growing opportunity.

4.2. China: High rates, China's property sector and market corrections

Globally, and across Asia, monetary policy will continue to remain largely restrictive through 2024, with the possibility of rates peaking and, increasingly, expectations for rate cuts in a number of economies. US interest rates are likely to remain comparatively high, and this will broadly translate into dollar strength, notwithstanding short-term corrections and profit-taking. This strength will come at the expense of currencies deemed to be higher risk. Elevated global interest rates will also pressure economies with higher levels of sovereign and corporate debt.

Asset market corrections could be driven by the following factors, that would have particular implications for Asia:

- **Volatility in US interest rate expectations** could create uncertain financial conditions in economies with high levels of US dollar debt. In the past, interest-rate volatility tended to increase when inflation was still running high after the end of rate hikes, such as in late 1970s and 1980s. A similar dynamic now could be evident: at the time of writing, the Federal Reserve's preferred core inflation measure is still above its long-term average (Saraiva and Yoo, 2023). This could lead to re-pricing corrections in sectors that are over-leveraged, interest rate-sensitive, or exposed to the US dollar.
- **China's property price correction** could exacerbate the economic slowdown, and this could spill over to trading partners. Despite some recent easing of monetary policy and expansion of the People's Bank of China policy⁶¹ toolkit, concerns about sluggish economic growth and financial stability have restrained business confidence. To the extent that this accelerates, it could affect China's neighbours and other overindebted emerging markets along the Belt and Road Initiative (BRI) (Ashraf et al., 2022).

China's looser monetary policy implies wider interest-rate spreads and may result in higher and more uncompetitive currencies in BRI economies (Chen et al., 2023).

- **A decline in credit and monetary growth** is typically associated with financial market corrections and higher recessionary risks. The contraction in total credit to non-bank borrowers in US dollars has been particularly sharp across emerging markets and particularly in China (Figure 7). This implies further downward corrections in equity markets and in corporate bond prices. Historically, equities, including those in Asia, tend to underperform after the end of a tightening cycle in a more inflationary environment (IMF, 2023a; BIS 2022; Ha et al., 2022). Corporate bond currency and duration mismatch⁶² persists in Asia (Cheung Ho, 2023; Davies and Sebastian, 2022).

4.3. Middle East tensions increase oil market volatility

Oil and natural gas prices have largely continued to trade within the average range of the past five years, at the time of writing. Other primary commodity prices remain high, including for food and fertiliser. Throughout 2024, the potential for price volatility in the oil and natural gas markets is ever-present given the current geopolitical tensions and would significantly exacerbate the deteriorating growth-inflation mix, both globally and in Asia.

The outbreak of the Israel-Gaza conflict in October 2023 has injected greater volatility in global energy markets. Production at Israel's offshore Tamar gas field has resumed after shutting down for a month following Hamas' October 7 attack against Israel⁶³, but there is likely to be continued and intermittent uncertainty, including in relation to Egypt's LNG (liquid natural gas) exports (Elliott, 2023; Nadig, 2023; Rashad and El Safty, 2023) in the medium- to long-term. Recent Houthi attacks against commercial

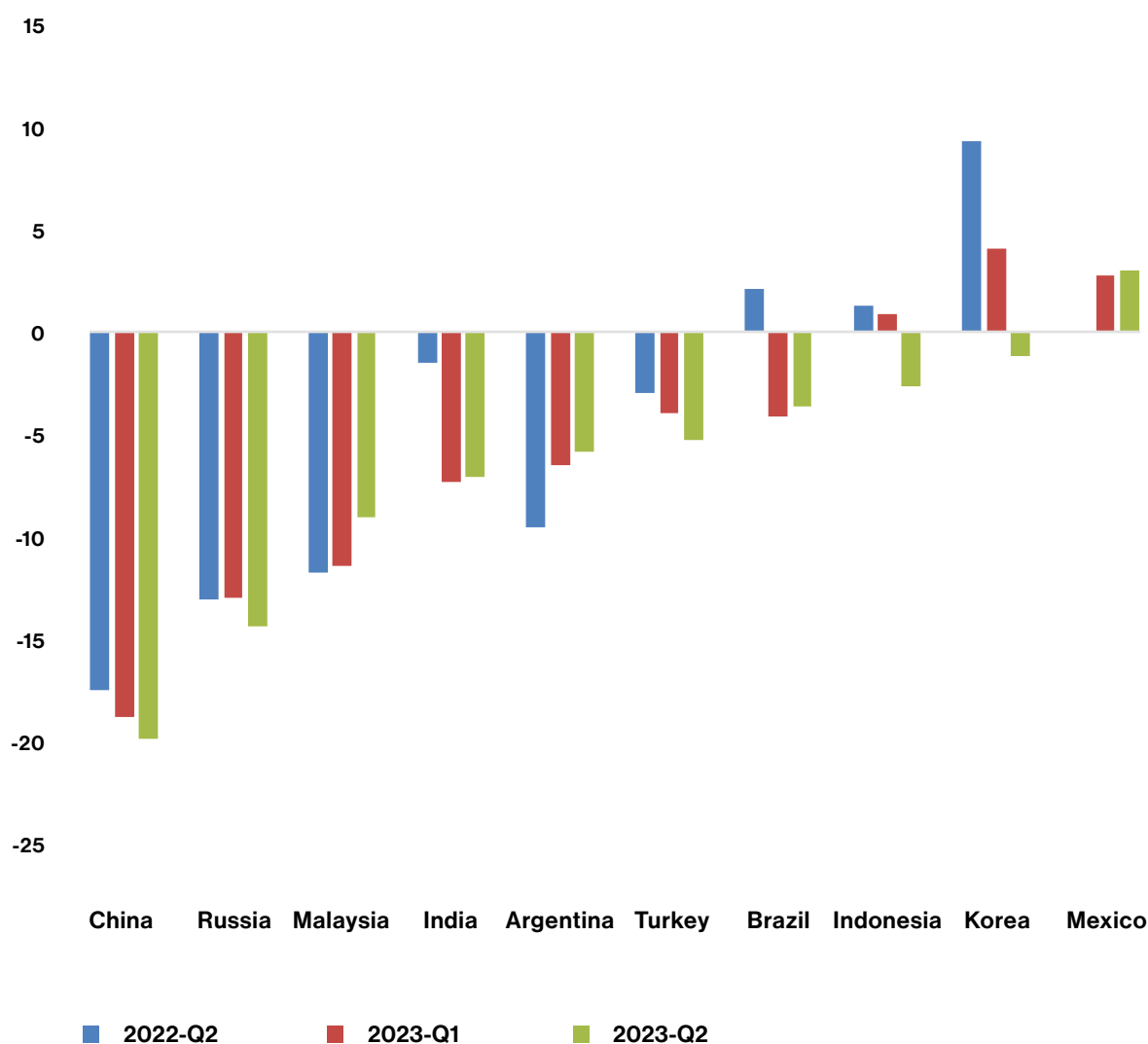
⁶¹ <https://www.reuters.com/article/china-economy-pboc-idUSKBN31P10S/>

⁶² Currency mismatch is defined here as an event where a sudden or prolonged change in the value of an exchange rate causes an adverse mismatch between a firm's assets and its liabilities. Duration, or maturity, mismatch is defined here as a scenario when a firm's liabilities exceed its ability to hedge them adequately with financial instruments. See: https://www.bis.org/ifc/events/ifc_eccbso_cbrt_conf/ifc_eccbso_cbrt_31pap.pdf

⁶³ <https://www.reuters.com/business/energy/chevron-says-resumes-supplying-customers-tamar-natgas-gas-field-2023-11-13/>

Figure 7

Credit contraction: Selected emerging economies (Annual changes, %, in US dollar credit to non-bank borrowers)



Source: Bank for International Settlements and Asia House Research

shipping in the Red Sea further increases this volatility and risks disrupting global trade, including in energy. Houthi attacks have pushed many firms to suspend shipments through the Red Sea, opting to divert trade around South Africa's Cape of Good Hope. This puts upwards pressure on costs associated with both commercial and energy shipments.

A further escalation in geopolitical risk in the Middle East, a region accounting for more than one third of the world's seaborne oil trade, would also be detrimental to the global economic outlook, with knock-on effects in Asia. The attack by Hamas on Israel on 7 October saw a risk premium of US\$3–4/ barrel priced into the oil price (IEA, 2023b). While there has been no direct impact on physical supply, markets will see continued volatility as the crisis unfolds (ibid.,

2023b). In January 2024, the US and UK carried out air strikes against the Houthis in response to their attacks in the Red Sea. At the time of writing there is a risk that the Houthis could continue to escalate tensions in the Red Sea, increasing volatility within global energy markets. That said, global oil prices have declined since October 7 due to perceived over-supply in the market. Some global financial institutions have revised their forecasts for Brent crude downwards for the year ahead. Citi Research has lowered its 2024 Brent price downwards by US\$1 to US\$74 per barrel, whereas Barclays has lowered its Brent crude prices by US\$8 to US\$85 per barrel.⁶⁴ There remains a risk that continued instability in the Middle East or a broadening of the Israel-Gaza conflict could cause a spike in prices.

⁶⁴ <https://www.reuters.com/business/energy/oil-prices-regain-ground-after-falling-six-month-lows-2023-12-07/>

Section 5

Tech titans and green giants: Asia's 2024 country outlooks

Asia's economic outlook for 2024 will likely be defined by the growing economic divergence between China and its neighbours. The trade-weighted renminbi will likely depreciate and narrow the divergence with its neighbours mainly because of China's comparatively looser monetary policy and continued headwinds, and risks, in the domestic economy through 2024.

Across Asia, productivity gains will be made thanks to digital innovation in multiple sectors. This will augur well for growth and resilience to future shocks. Similarly, a likely increase in home bias and friend-shoring, or near-shoring, will mean that Asia's ecosystem for green finance will be conducive to expanded issuance of green bonds and new digital forms of trade finance.

5.1. China: Debt levels and property woes to weigh on growth

In 2024, China is unlikely to be Asia's top-performing economy, owing, in large part, to some of the continued effects of the COVID-19 pandemic and high levels of domestic debt. That said, China's economy is still likely to grow, with an average forecast in the order of 4.6 per cent. Employment contraction and wage cuts continue, particularly for young workers, alongside slowing economic growth (Qian, 2023). The property market will have to stabilise to ensure financial stability. Monetary policy easing and an expansion of the People's Bank of China policy toolkit are likely to mitigate the slowdown but will not be enough to stem it entirely.

The renminbi is likely to continue to face downward pressure, both in broad trade-weighted terms and against the US dollar, alongside intermittent corrections in China's domestic equity markets. Disinflationary pressures are also likely to persist, with the People's Bank of China likely to ease policy further. Further stimulus measures may be announced

to restore confidence among businesses and consumers. Notably, the real estate and construction sectors will remain unstable; home sales volumes are still low, and this will weigh on investment as prices decline (Gao and Woo, 2023).

5.1.1. China's AI dynamism to continue through 2024

Chinese start-ups are attracting billions in venture capital and China has the world's highest number of smartphone users (approximately 1 billion⁶⁵), giving local firms such as Baichuan AI, Minimax and Zhipu AI the opportunity to lead in AI development⁶⁶. AI-related patent submissions in China continue to grow and are now estimated to exceed those of the US⁶⁷.

Amid the likely slowdown in the domestic economy, of particular interest will be whether this spills over into the digital economy, with, for example, job losses in tech or associated sectors, such as law and finance.

Regulatory developments are also designed to promote AI. On 15 August 2023, a pioneering law designed to regulate generative AI came into force – the latest in a series of regulations (Latham & Watkins, 2023). It includes new regulations for companies providing AI services to consumers, specifically targeting the data used and the outputs produced.

China is likely to continue to strengthen its basic AI research capacity to target and solve key technology hurdles. There is likely to be a continued and rapid improvement in the use of generative AI systems and infrastructure. If generative AI proves as transformational as is expected, it could position China firmly at the frontier of tech innovation and heighten its economic advantages.

5.1.2. China's green finance to expand, despite slowdown

The outlook for China's green finance ecosystem is positive. Environmental, social, and governance investing will become further embedded in China's

⁶⁵ <https://www.statista.com/statistics/321482/smartphone-user-penetration-in-china>

⁶⁶ <https://www.chinamoneynetwork.com/2023/11/13/chinese-generative-ai-startups-secure-substantial-funding-in-race-to-replicate-openai-success>

⁶⁷ <https://www.bloomberg.com/news/articles/2023-10-24/china-widens-lead-over-us-in-ai-patents-after-beijing-tech-drive#xj4y7vzkg>

institutional mechanisms, with an emphasis on environmental and social factors in project construction and operations. Additionally, the average default rate of green loans issued by China's major commercial banks is lower than that of all types of domestic loans, including 'brown' or high emissions loans (Cui et al., 2018). Trading in brown loans when attention to climate change is high results in lower prices in secondary markets (Hackenberg et al., 2023).

China's climate investment projects will continue to contribute to the country's sustainable green future, particularly by expanding renewable energy. Additionally, green finance is of growing importance along the Belt and Road Initiative and for the sustainable development of countries along the BRI. The Green Investment Principles for the BRI (GIP)⁶⁸ will play an increasingly important role, given that China's financial institutions can finance green BRI projects and satisfy green investment demands of BRI countries.

As an example of green investments, the Bank of China's funding of a combined cooling, heat and power station in the megacity of Chongqing will raise energy efficiency for nearby businesses. As a climate investment, this financing is subject to a preferential interest rate offered by Chongqing's government-bank-business platform, which will reduce annual financing costs. Both businesses and banks have access to Chongqing's platform. It works as follows: businesses upload materials relating to climate investments, which are then subject to approval by China's environmental bureau before banks select projects to fund (Mengnan, 2023).

5.2. Japan: Investors to defy growth slowdown

With export and industrial output growth affected by the global slowdown, Japan's GDP growth is likely to slow significantly in 2024. However, the competitive level of the yen is likely to be supportive of its growth prospects. Strong corporate profits and business sentiment will also be a positive development and

will support employment and income in the domestic economy. At the time of writing, private consumption has increased steadily at a moderate pace, despite price rises. Encouragingly, Japan's output gap is expected to remain positive, albeit moderately (Bank of Japan, 2023).

The investment outlook remains bright: in terms of its domestic financial markets, there is renewed interest in Japan by international investors (Lewis and Inagaki, 2023). Inward investment is also being driven by a pivot away from China (ibid., 2023). Tense US-China relations, intermittent disputes over semiconductors, decoupling and friend-shoring are expected to work in Japan's favour. Asia-focused global investment funds and firms have been rotating out of China and into Tokyo stocks, real estate and other assets (Cheng and Hsu, 2023), and this trend is likely to continue.

5.2.1. Smart cities and robots define Japan's AI revolution

Japan's policymakers are committed to developing AI capacity, with a particular focus on medical technology and industrial processes. The latest trends are veering towards the production of robots, self-driving cars, drones, smart cities and factories, and the development of AI for the service industries. This follows on from the long-held expectations that AI in Japan will see exponential growth and that by the year 2035, half of all jobs in Japan could be performed by AI robots.⁶⁹ This is set to catalyse further digital transformation.

Japan is building its own version of ChatGPT to capture the intricacies of Japanese language and culture (Hornyak, 2022). ChatGPT is being used and deployed by municipalities and, as the population shrinks, AI, and robotics in particular, will be used to maintain productivity. Japan's research centres, such as the National Institute of Advanced Industrial Science and Technology (AIST) and RIKEN, the country's largest comprehensive research institution, have been instrumental in developing innovative AI projects.

⁶⁸ <http://www.pbc.gov.cn/english/130721/3822583/index.html>

⁶⁹ This estimate was first cited in 2015 – see: <https://www.wsj.com/articles/BL-JRTB-21236>

In 2024, smart cities in Japan will offer further proof of how AI can reshape the economic landscape. These are among the country's most ambitious AI projects. The Ministry of Economy, Trade and Industry has been increasingly investing in smart-city projects since 2010, alongside independently financed projects. Smart cities have boosted research and innovation in renewable energy and in energy efficiency and are helping to support Japan's ageing demographic (ASEAN, 2023; Hornyak, 2022).

5.2.2. Japan's financial ecosystem to spur green transition bonds

Given Japan's goal to reach net zero emissions by 2050, its role as the only Asian member in the G7 and the domestic growth of its social and green bonds, Tokyo, in particular, has been well positioned as a global hub for sustainability innovators. This development has also been encouraged by the level of entrepreneurship (Shorter and Kamino, 2023) and the depth, breadth and scale of Japan's financial market.

In May 2023, Japan unveiled plans to issue the world's first sovereign transition bond.⁷⁰ The Green Transformation, or GX, bond aims to support domestic decarbonisation efforts. Japan's Green Fund is capitalised by a portion of the revenue of the Tax for Climate Change Mitigation, a carbon tax on fossil-fuel consumption that was established in 2012.

More broadly, Japan's transition finance market reached approximately 1 trillion yen (US\$6.7 billion)⁷¹, a fraction of the 150 trillion yen needed for the next ten years for transition finance.⁷² This was driven by Chinese and Japanese heavy-industry issuers entering the market to raise funds under their respective national transition finance programmes. Transition bond deals arose predominantly from heavy-industry sectors.

Additionally, Japan's high level of digitalisation could facilitate the government's ESG goals. This is because

digitalisation is essential to analyse and organise significant amounts of data that are the building blocks of sustainable efforts. An illustration of this can be found in Arabesque which uses AI, big data and ESG metrics to assess the performance and sustainability of listed companies, covering 97 per cent of global market capitalisation.

5.3. India: Bright outlook in a 'super-election' year

India, which is set to become the world's third-largest economy, has one of the brightest economic outlooks in Asia. However, inflation pressures are also likely to persist, and this could shape public opinion in an election year. Prime Minister Modi's administration is likely to continue to be responsive to food-price shocks, including through tariffs on onion exports, restrictions on the stockpiling of certain crops and export bans on several varieties of rice, wheat and sugar (World Bank, 2023a). The Reserve Bank of India's interventions to tame inflation have been notable (ibid., 2023).

India's financial markets will continue to show resilience through 2024 amid strong corporate earnings. However, there will likely be intermittent corrections, given the global economic uncertainty and, in particular, if there is a sharper than expected slowdown in the US economy. For example, when Fitch Ratings downgraded US credit⁷³ in August 2023, this unsettled the Sensex and Nifty 50 blue-chip indices. In terms of additional downside risks, there may be lower export demand from India's key markets – the EU, US and ASEAN economies – for its chemicals, base metals and textiles. Taken together, these goods account for more than a third of India's goods exports.

5.3.1. India seeks to lead in AI talent development

India's goal of maximising and scaling technology for broad-based innovation is rooted in plans to build out

⁷⁰ https://www.mof.go.jp/english/policy/jgbs/publication/newsletter/jgb2023_11e.pdf

⁷¹ End-of-year figures for 2022.

⁷² https://www.meti.go.jp/english/policy/energy_environment/transition_finance/index.html

⁷³ <https://www.fitchratings.com/research/sovereigns/fitch-downgrades-united-states-long-term-ratings-to-aa-from-aaa-outlook-stable-01-08-2023>



Indian High Commissioner to the UK, HE Vikram Doraiswami, in a briefing with Asia House Corporate Members, moderated by Asia House Chief Executive Michael Lawrence OBE.

platforms and digital infrastructure in its key economic sectors.⁷⁴ India has the second-largest AI talent pool in the world⁷⁵ and inward investment has also been catalytic. An illustration of this has been ARTPARK which created a US\$100 million venture fund to invest in AI and robotics start-ups. Notably, Jensen Huang, CEO of US chipmaker NVIDIA, has also emphasised the role of India as a significant AI hub (Kaur, 2023).

Agri-tech is one of the key areas for Indian investors focusing on AI. It contributes more than 18 per cent to the Indian economy and employs more than 50 per cent of its population. Innovation can target supply-chain functioning and scaling up crop yields. AI could

also help India engage in economic diversification beyond agriculture: 60 per cent of AI's gross value added in India's GDP is expected to be driven by industry by 2025, despite some of the challenges and lags in labour force adoption of AI systems.

India's data-centre sector is also due to accelerate, driven by the transition to 5G networks. The government is prioritising stable data centre infrastructure to ensure uninterrupted, broader and scaled-up internet access, data security and cloud computing. To encourage investment, incentives and new data centres have been introduced⁷⁶. Meanwhile, emerging regulatory frameworks require data

⁷⁴ <https://www.imf.org/en/Publications/fandd/issues/2023/12/POV-unlocking-india-potential-with-AI-Nilekani-Bhojwani>

⁷⁵ <https://www.expresscomputer.in/artificial-intelligence-ai/age-of-ai-india-reproducing-a-jobless-generation-or-set-to-become-the-global-talent-capital/104852/>

⁷⁶ India is ranked the 13th-largest data-centre market in the world, with 138 data centres. Additionally, 45 new data centres, with a combined 13 million square feet and 1,015 MW of capacity, are scheduled to be developed by the end of 2025 (Cyril, 2023).

localisation⁷⁷, which will boost demand in the data market. Crucially, the Indian data sector is growing well but will need to see an improvement in broadband availability.

5.3.2. India's green bond issuance to grow amid push for renewables

India is particularly susceptible to extreme weather and this is likely to intensify. Encouragingly, India has announced a raft of sustainable finance measures, notwithstanding signs that its use of coal has risen (Kemp, 2023). For green investment to expand, key conditions need to be met – ensuring clean water, air and energy, building real resilience to mounting climate shocks and accelerating the drive to net zero emissions. India has untapped potential for job creation in renewables, electric scooters, buses, trains, cars, low-cost and efficient housing, natural farming and net zero-industrialisation⁷⁸.

India's first green sovereign bond issuance at the start of 2023 raised US\$1 billion in revenue and was more than four times oversubscribed (Climate Bonds Initiative, 2023). Despite these positive developments, India's large green financing gap persists. More than US\$10 trillion is needed for renewable power, green hydrogen and electric vehicles alone if India is to meet its target of net zero emissions by 2070.⁷⁹ The sheer breadth of this transition and the investment required mean international financing will have to be in the trillions, with active involvement of multiple institutions, including the Reserve Bank of India (ORF, 2023).

India's sovereign green bond issuance is indicative of its commitment to expand renewable energy production and reduce carbon intensity by supporting funding for renewable energy and electrification of transport systems⁸⁰. Investments in these sectors are particularly important, as they represent nearly half of

India's GHG emissions and are expected to account for two thirds of emissions by 2050 as the economy continues to grow. The approval of US\$1.5 billion in World Bank financing⁸¹ to scale up renewable energy efforts and green hydrogen must be boosted through inward private investment.

5.4. Indonesia: Robust growth despite downside risks for exports

In this election year, Indonesia's economy is likely to see resilience in its GDP growth, and in the constituent drivers of its economic growth, thanks to both domestic demand and demand for Indonesia's primary commodity exports. But China's slowdown creates downside risks for its exports. Inflation pressures are expected to soften in 2024 to stand below Asia's average.⁸² Given this, combining macroeconomic stability with reforms will promote competitiveness and alleviate any unforeseen policy constraints.

As is the case with other emerging market currencies, Bank Indonesia (BI) is likely to continue to use its currency reserves to stabilise the rupiah in the event of global market volatility. The deployment of its foreign exchange reserves will be of particular importance in economic diversification in the event there is a downward correction in resource prices, to underpin growth (World Bank, 2023b). Although global supply-chain disruptions have abated, and global shipping conditions have normalised, subdued global demand could also weigh on Indonesia's exports.

5.4.1. A digital leader with vast potential in generative AI

Indonesia is estimated to have the largest digital economy in South East Asia, with the continued

⁷⁷ Data localisation is defined here in relation to data sovereignty, in that the data regarding the citizens of a particular country is initially collected, processed and stored within that country, before being transferred overseas. See, for example: <https://www.imperiva.com/learn/data-security/data-localization/>

⁷⁸ A Skills Council for green jobs has also been established: <https://sscgi.in/>

⁷⁹ From the Council on Energy, Environment and Water: <https://www.ceew.in>

⁸⁰ <https://blogs.worldbank.org/climatechange/india-incorporates-green-bonds-its-climate-finance-strategy>

⁸¹ <https://www.worldbank.org/en/news/press-release/2023/06/29/world-bank-approves-1-5-billion-in-financing-to-support-india-s-low-carbon-transition>

⁸² <https://www.adb.org/news/indonesia-economy-looking-robust-2023-and-2024-ADB>



Deputy Governor of Bank Indonesia, Dody Budi Waluyo in a briefing with Asia House Corporate Members moderated by Asia House Director of Corporate Affairs Charlie Humphreys.

development of AI holding particular promise for economic growth in multiple sectors. The Indonesian government has, for some time, consistently supported digital investments through its National Strategy on AI 2020–2045, which outlines a plan to develop domestic digital infrastructure, workforce skills, and data ethics and regulation.

Generative AI could potentially unlock US\$243.5 billion of productive capacity in Indonesia, roughly equivalent to 20 per cent of its GDP in 2022.⁸³ Indonesia's innovative generative AI applications are increasingly being deployed by businesses and consumers. Generative AI is expected to bolster the creative economy and data management, as its potential stems from how it can catalyse investors and innovators to achieve greater creativity.

Indonesia is likely to continue its efforts to create an enabling policy environment for AI, given the breadth and depth of its digital economy. AI creates fresh employment opportunities, including such roles as data analysts, data scientists and machine-learning engineers. But there will be losses in other sectors. The Ministry of Manpower has encouraged college students to acquire digital technology skills.

5.4.2. Foreign and blended funds needed to grow green ecosystem

Indonesia is highly vulnerable to climate change and yet the limited depth and scale of its financial markets and products mean that international funds will be essential to boost its climate finance. Under the US\$20 billion Just Energy Transition Partnership

⁸³ See: <https://accesspartnership.com/the-economic-impact-of-generative-ai-the-future-of-work-in-indonesia/>

(JETP),⁸⁴ Indonesia has committed, among other pledges, to increase its share of renewable energy generation; coal-fired power plants operated by industries are excluded from the plan.

Indonesia's green bond issuance is likely to accelerate in 2024 and beyond. Green bonds from Bank Rakyat Indonesia raised 6 trillion rupiah (US\$383.7 million), with the funds to be used to support renewable energy, energy efficiency, transportation and, crucially, sustainable SME financing. Cumulatively since 2019, the Indonesian government has issued a domestic retail green 'sukuk' (Islamic bond) equivalent to US\$1.4 billion.⁸⁵ The growth of Indonesia's blended finance is also encouraging: the International Finance Corporation's landmark investment of up to US\$500 million in Bank BTPN, for green bond issuance, is significant (Salna et al., 2023).

Looking ahead, the treatment of coal in climate proposals will be pivotal. Indonesia's plans to make (coal-fired) power plants supplying electric vehicle-battery manufacturers eligible for green financing (Reuters, 2023) is likely to lead to continued expansion of coal power. This could impede funding from the JETP. Counterbalancing this, Beijing and Jakarta launched the Indonesia-China Energy Transition Cooperation dialogue in October 2023, underscoring the expanded focus on sustainability in BRI cooperation and its constituent loans and investments (Simanjuntak, 2023).

5.5. Malaysia: Solid growth underpinned by investment in digital

Malaysia is likely to see economic growth of at least 5 per cent in 2024, roughly in line with Asia's overall growth rate. The global slowdown and generally restrictive financial conditions constitute a downside

risk. China's slowdown, lower commodity prices and fluctuating global semiconductor demand could also weigh on sentiment. And yet, Malaysia's economic growth will be supported by investment in the high-value digital industry and tourism. Malaysia is also likely to benefit from trade diversion and 'China Plus One' strategies.⁸⁶

The financial sector remains healthy but warrants increased monitoring, especially in relation to highly leveraged non-bank financial institutions, because of increased risks from elevated interest rates. Malaysia's interest rates are considered a key regional bellwether for other economies' borrowing costs. In the year ahead, the central bank, Bank Negara Malaysia (BNM), will continue to proactively monitor global and domestic financial conditions and cushion against market volatility. Malaysia's credit growth to the private non-financial sector has moderated, driven by slower growth in business loans.

5.5.1. Government backs generative AI to bolster economy

Under Malaysia's New Investment Policy (NIP), the government aims to direct investment and digitalisation efforts towards key strategic sectors, improve incentive packages for consumers and firms, and strengthen ESG practices. The aim of the NIP is to increase sustainable growth, create high-value jobs and, crucially, to catalyse clustering.⁸⁷ The New Industrial Master Plan 2030 (NIMP) aims to revitalise the industrial sector and drive new economic growth.⁸⁸

Generative AI is expected to unlock an estimated US\$113.4 billion – one quarter of Malaysia's 2022 GDP – in productive capacity, potentially propelling Malaysia to reach high-income status. Deputy

⁸⁴ The partnership provides financing for a portfolio of equity investments, grants and concessionary loans from Group of Seven (G7) members, multilateral banks and private lenders. This is aimed at helping developing countries shift to cleaner energy in the power sector (Nangoy, 2023). See: <https://jetp-id.org/cipp>

⁸⁵ <https://en.antaranews.com/news/299598/indonesia-raises-14-blm-from-retail-green-sukuk-for-climate-projects>

⁸⁶ The 'China Plus One' strategy has been adopted by mainland China-based companies aiming to establish production facilities in other countries – first as a cost minimisation and now, increasingly, as a means to ensure supply-chain resilience. See IMF Article IV consultation for Malaysia: <https://www.imf.org/en/News/Articles/2023/05/31/pr23191-malaysia-imf-executive-board-concludes-2023-article-iv-consultation-with-malaysia>

⁸⁷ Clusters are defined here as geographically delineated critical masses of unusually competitive success in particular sectors; they are geographic concentrations of interconnected companies and institutions in linked industries (Porter, 1998).

⁸⁸ Keynote address by Ms Norhana Endut, Assistant Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the RHB Fixed Income Seminar 2023, Kuala Lumpur, 8 August 2023. See <https://www.bis.org/review/r230816c.pdf>



Malaysia's Minister of Investment, Trade and Industry, HE Tengku Zafrul Aziz, in a briefing with Asia House Corporate Members, moderated by Asia House Chief Executive Michael Lawrence OBE.

Economy Minister Hanifah Hajar Taib said generative AI will facilitate greater productivity and innovation. This stands to have exponential, non-linear effects on multiple aspects of the economy and could fuel Malaysia's fourth industrial revolution (Shahzad et al., 2023).

Like Japan and other Asian economies, Malaysia is increasing the breadth and scale of its digital economy through its network of smart cities. The Malaysia Smart City Framework provides a reference for local authorities and state government and industry to develop smart cities sustainably. Smart cities enable economic agglomeration, making production cheaper for business and helping ensure a further expansion of the government's sustainability model.⁸⁹

⁸⁹ <https://www.malaysia.gov.my/portal/content/30947>

⁹⁰ <https://www.msfi.com.my/>

5.5.2. Malaysia seeks leading role in Islamic and sustainable finance

Malaysia has made steady progress in reducing its carbon emissions through the expansion of its green finance ecosystem. Growth has been driven by three types of sustainable financial products – green 'sukuk', social bonds and sustainability bonds. All of these instruments, which are most widely issued and traded in Malaysia, have seen momentum. The Malaysian Sustainable Finance Initiative⁹⁰ and its associated stakeholders in the financial sector have been steadily working to support, coordinate and elevate sustainable finance to help reach net zero targets.

Malaysia requires significant investment and technological support to achieve its aims: the



Vietnam's Vice Minister for Industry and Trade, HE Dang Hoang An, in a briefing with Asia House Corporate Members, moderated by Asia House Chief Executive Michael Lawrence OBE.

development of green taxonomy, development of secondary markets and regulatory support.⁹¹ The National Energy Transition Roadmap has detailed 10 flagship catalyst projects and initiatives. During Malaysia's transition phase, SMEs and businesses will need funding to pivot to sustainable business models through the adoption of new financing mechanisms.

Through the continued expansion of its sharia-compliant sustainable and responsible investment products, Malaysia will be able to strengthen its position both in Islamic finance and sustainable finance. Greater breadth and depth in Malaysia's financial sector will be essential for climate finance (ADB, 2022a). In greening finance, financial institutions are expected to build their own capability to strengthen resilience against climate

and environmental risks. This entails enhancing assessment, climate risk disclosure and capacity-building, and targeting products and services to finance transition and adaptation (ibid., 2023).

5.6. Vietnam: Outperforming investor darling dogged by weak dong

Vietnam's economy is likely to continue to outperform its regional neighbours through 2024, with its manufacturing and export industries drawing significant inward investment, given the openness of the economy and the strength of its fundamentals. In the first ten months of 2023, FDI in manufacturing projects was roughly US\$18 billion, or 73 per cent of total FDI inflows registered in the same period

⁹¹ Keynote address by Ms Norhana Endut, Assistant Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the RHB Fixed Income Seminar 2023, Kuala Lumpur, 8 August 2023. See: <https://www.bis.org/review/r230816c.pdf>

(UNCTAD, 2023). Additionally, foreign investors will increasingly turn to Vietnam to diversify their supply chains away from China.⁹²

In terms of Vietnam's financial stability, the key risk is chronic currency weakness. The weakness in the dong has prompted intervention by the central bank in line with interventions from other regional central banks in relation to their respective currencies. Competitiveness in the dong exchange rate could aid SMEs, which account for more than 90 per cent of firms in Vietnam. (Thanh Doan, 2020). However, the associated decline in purchasing power could prevent some of these firms from diversifying into higher value-added production, given the cost of imported inputs.

5.6.1. AI expansion with banks driving digital transformation

Vietnam's digital transformation programme aims to situate its domestic tech firms as global players (Chuc and Anh, 2023). Vietnam has a thriving tech start-up environment and there has been significant public investment in AI. The National Innovation Centre supports tech breakthroughs in multiple sectors, while the banking sector is very active in AI testing and application. VPBank has applied AI in currency transactions, personal credit and digital banking, while Vietcombank has cooperated with FPT Smart Cloud to develop a customer chatbot platform, called VCB Digibot.⁹³

Vietnam will continue to leverage blockchain technology to boost efficiency in the logistics industry, with a particular focus on firms in Ho Chi Minh City (Nguyen et al., 2023). *The Make in Vietnam*⁹⁴ programme, in which homegrown businesses manufacture globally competitive products, will scale growth in multiple sectors, including in tech. A strong labour market (69 per cent of the population are of working age) will aid this growth. More than

50 colleges offer AI-related specialisms, alongside a number of AI centres of excellence and AI research institutions that support collaboration with industry. Smart cities will also drive growth in knowledge and digital economies.⁹⁵

In 2024, AI will reshape multiple sectors in Vietnam's economy and boost inward productive investment. By collaborating with educational institutions and actively participating in the development of AI infrastructure, inward investment can catalyse positive economic spill overs – both horizontally and vertically. As a major agricultural producer, Vietnam will benefit from inward investment in precision agriculture, AI monitoring and analysis to optimise yields and fertiliser use. AI can also be used to collect data on soil conditions, weather, crop growth and water usage, while sensors and drones can also provide key data. This can influence decisions on seed planting, fertilisation, pest management and other agronomic procedures.

5.6.2. Green finance nurtured by economic dynamism and openness

Economic dynamism, resilient fundamentals and the openness of Vietnam's economy augur well for its green finance ecosystem. Regulatory incentives to encourage a shift to financing the green economy will be key in 2024 and beyond. The continued promotion and scaling of incentives to attract and channel green finance – with the engagement of domestic financial institutions – will spur Vietnam's energy transition and help build resilience against climate shocks.

The Bank for Investment and Development of Vietnam became the first bank to issue green bonds with the proceeds used to finance green, energy-saving, emission-reducing and environmental protection projects.⁹⁶ This was the first domestic green bond issuance in the Vietnamese capital market scored by Moody's. This is also the first senior, unsecured and unguaranteed green bond issue in Vietnam. Additional

⁹² On 23 September 2023, Japan-based tech company Kyocera Document Solutions announced its plans to invest US\$237 million to expand its machine and equipment factory in Hai Phong, which comprises a significant industrial park (Duc, 2023).

⁹³ <https://fpt.ai/fpt-smart-cloud-partners-vietcombank-successfully-initiate-ai-virtual-assistant-vcb-digibot>

⁹⁴ <https://english.mic.gov.vn/Pages/TinTuc/146720/VN-tech-firms-and-the--Make-in-Vietnam--program.html>

⁹⁵ <https://www.arup.com/perspectives/driving-the-new-economy-how-smart-cities-are-preparing-vietnam-for-the-future>

⁹⁶ https://bidv.com.vn/bidv_en/tin-tuc/thong-tin-bao-chi/bidv-tien-phong-ban-hanh-khung-khoan-vay-ben-vung



Thailand's then Finance Minister, Arkhom Termpittayapaisith, in a briefing with Asia House Corporate Members, moderated by Asia House Chief Executive Michael Lawrence OBE in Washington DC.

efforts to scale green bond issuance will create pathways for more issuance and deliver more depth and breadth in the green ecosystem.

Vietnam's blended green finance initiatives – such as the Asian Development Bank blended finance loan supporting wind energy (ADB, 2022b) – is particularly effective in supporting Vietnam's adaptation to climate risks and supporting renewable energy. As is the case in neighbouring South East Asian economies, climate finance mechanisms need to be calibrated to mitigate risk and to promote risk-sharing, particularly when channelling sustainable finance to Vietnam's smallholder farmers and SMEs. Equity-based investments offer risk-sharing and risk mitigation, as well as giving farmers greater financial flexibility during periods of low yield or unforeseen shocks.

For example, Corteva Agriscience crop insurance allows farmers to repurchase discounts if storms damage crops.⁹⁷

5.7. Thailand: Private investment and manufacturing key for growth

Thailand's prospects will continue to be determined by its export-led model, which pushed growth higher in 2024. However, FDI inflows have shown signs of moderating despite strong macroeconomic fundamentals (Wood and Tan, 2023). Private investment and manufacturing growth will be crucial to reduce dependency on tourism and will be supported by recent investment policy reforms enabling foreign inward investment.

⁹⁷ <https://www.corteva.com/who-we-are/outlook/sowing-the-sustainable-mindset.html>

Thailand's financial stability will be a focus for policymakers. The Bank of Thailand will be interventionist on this front, particularly in the light of its experience with past crises. Thailand's labour market conditions will continue to improve, as reflected in increases in the number of insured people in the social security system, in both the service and manufacturing sectors. Structural change, including the need for economic diversification, remains key both in Thailand and regionally.⁹⁸

5.7.1. Government pushing AI as it moves towards Thailand 4.0

Thailand has seen a rapid acceleration in its digital economy. By 2027, it plans to have an effective ecosystem for developing and applying AI⁹⁹ with a particular focus on high-performance computing infrastructure. Other key priority areas for AI are the government sector, food and agriculture, and the healthcare sector. Notably, the 2024–2027 phase of implementation will target education, logistics and transportation, security, energy and environment, the creative economy, tourism, trade, finance and manufacturing.

Thailand's overarching strategy to promote the use of AI in both the public and private sectors is in sync with its development of smart cities, such as the one in Chonburi¹⁰⁰ (Santhika, 2023). The creation of sandboxes – a testing environment in a computer system in which new or untested technology can be run securely – and other mechanisms for business innovation, with a special focus on AI start-ups, will boost the digital ecosystem. Thailand's Digital Economy Promotion Agency has become essential in promoting the creation of projects leading to Thailand's fourth industrial wave, including the Smart City Promotion Zone Incubation Project.¹⁰¹

Thailand's robust community of experts, who interact frequently with academia and industry, can bolster its AI ecosystem. Future AI professionals are trained through formal academic programmes embedded in Thai universities. This will drive higher level of AI usage within the private sector. Alongside targeted government support for smart cities, enhanced education and vocational programmes in AI literacy will lead to further clustering with virtuous cycles of innovation and productivity.

5.7.2. Financial sector key to green funds but expansion needed

Thailand's CO2 emissions and energy use have typically grown faster than real GDP per capita, implying an over-employment of its natural resources in pursuing economic growth and prompting concern around natural resource degradation (UNICEF, 2022; Manorom 2020; Chansarn, 2013). For example, plastic pollution on land, in river systems and along coastlines erodes prospects for sustainable growth and has led to the creation of public-private-people mechanisms for waste segregation and increased circularity. The Bank of Thailand has taken a proactive role in the promotion of sustainability¹⁰² and its efforts need to be mirrored in domestic institutions.

Thailand is a widely cited development success story¹⁰³ not least because its financial sector has been essential in creating and channelling green funds domestically for investment. The Working Group on Sustainable Finance includes the Fiscal Policy Office, the Bank of Thailand, the Securities and Exchange Commission, the Office of Insurance Commission, and the stock exchange. Thailand's leading banks, with the support of the International Finance Corporation (IFC), have successfully issued green bonds¹⁰⁴ and these efforts need to be scaled further to boost investment in renewable energy and a

⁹⁸ See, for example, the OECD Assessment: <https://www.oecd-ilibrary.org/sites/a21090a7-en/index.html?itemId=/content/component/a21090a7-en>

⁹⁹ On 26 July 2022, the cabinet approved the (Draft) Thailand National AI Strategy and Action Plan (2022–2027).

¹⁰⁰ <https://www.nationthailand.com/business/property/40033257>

¹⁰¹ <https://www.depa.or.th/en/digitalservice/digital-startup-fund/digital-enterprise-development-and-incubation-system-started>

¹⁰² <https://www.bot.or.th/en/financial-innovation/sustainable-finance.html>

¹⁰³ <https://www.worldbank.org/en/country/thailand/overview>

¹⁰⁴ <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=18347>

green transition, which includes implementing a green taxonomy¹⁰⁵ (Redgrave, 2023).

Blended finance is also likely to play a key role in driving green finance. Thai financial institutions and foreign investment funds are going to play an increasingly important role in 2024 and beyond. Despite the perception of risk and high transaction costs, green finance is likely to be taken up by large Thai banks keen to maintain competitiveness in the growing clean-energy marketplace (Vivatpinyo, 2022). This increased investment will enable banks to gain more income from higher loan applications and reduce greenhouse gas emissions as commercial buildings and factories increase their energy security.

5.8. Philippines: Stellar economic growth ahead as exports boom

The Philippine economy is expected to grow robustly in 2024, outpacing a number of its regional trading partners to become one of the fastest growing emerging market economies. The structural expansion of the Philippines export base is an essential part of its growth story. Downside economic and geopolitical risks will shape its outlook, however, particularly when it comes to inward financial investments. Financial shocks from global markets could also be transmitted through the depreciation of the peso.

Policy frameworks will aim to boost domestic growth in order to build reserves and a resilient external balance-of-payments position to protect against shocks. Concerns about the Philippines' sovereign wealth fund's viability (Serapio, 2023), and the liquidity of two state-run banks are of particular note, with the central bank, Bangko Sentral ng Pilipinas, providing support and remaining vigilant.

5.8.1. Generative AI in the Philippines could unlock productivity

Economic dynamism throughout 2024 and beyond is likely to lead to significant expansion in the Philippines' digital economy in multiple sectors. In particular, generative AI can potentially unlock US\$79.3 billion¹⁰⁶ and unleashing the creative economy. The Philippine Creative Industries Development Act includes a pipeline of projects to upskill, train and certify online creative freelancers and bolster innovation.

With an enabling policy environment, there are three main channels through which generative AI will trigger economic transformation in the Philippines: restructuring tasks, expanding the knowledge economy¹⁰⁷ and unleashing the creative economy. The Philippine Creative Industries Development Act includes a pipeline of projects to upskill, train and certify online creative freelancers and bolster innovation.

Against this background, AI and its applications in multiple sectors will drive productivity growth and accessibility of key sectors, such as affordable finance and digital health applications. This will be supported by new business models based on generative AI being introduced alongside innovative new applications. Generative AI is expected to transform the banking industry, with some analysts predicting a 'digital banking revolution' (Shibli, 2023). Policymakers' efforts to harness the potential of generative AI will depend on new skills, expanded digital architecture and smart cities.

5.8.2. Foreign investment key to green finance, renewable expansion

The Philippines' location in the typhoon belt in the Pacific Ocean means that an estimated 60 per cent of its land area and 74 per cent of its population are exposed to multiple climate hazards.¹⁰⁸ The government's facilitation of inward investment could lead to a paradigm shift in climate finance, because renewable energy projects are open to

¹⁰⁵ <https://www.bot.or.th/en/financial-innovation/sustainable-finance/green/Thailand-Taxonomy.html>

¹⁰⁶ <https://frontiertec.net/en/2023/11/08/artificial-intelligence-will-unlock-us79-3-billion-in-philippine-production-capacity/>

¹⁰⁷ <https://accesspartnership.com/the-economic-impact-of-generative-ai-the-future-of-work-in-the-philippines/>

¹⁰⁸ <https://climateknowledgeportal.worldbank.org/country/philippines/vulnerability>



HE Alfredo E. Pascual, Secretary of the Department of Trade and Industry of the Philippines, in a briefing with Asia House Corporate Members moderated by Asia House Chief Executive Michael Lawrence OBE.

foreign ownership in the Philippines.¹⁰⁹ This could be instrumental in bolstering renewables to 35 per cent of power generation by 2030, and 50 per cent by 2040.

Central bank incentives for sustainable and green project financing have been widespread and have included credit accommodation, guarantees to finance sustainable projects, such as transition activities, until 31 December 2030, and a zero-per-cent requirement rate for sustainable bonds. The reserve requirement rate has been reduced to zero per cent for existing and new issuances of green, social and other sustainable bonds until 31 December 2025 (Medina and Phuong, 2023). The IFC has invested US\$250 million into the Bank of

the Philippine Island's (BPI) green bond – to finance renewable energy and electric-vehicle projects.

Equity financing is also being used to empower smallholder farmers, enhance resilience and promote inclusive agriculture¹¹⁰. A range of capital¹¹¹ funds are offering investments. This is particularly important, because climate change threatens the livelihoods of smallholder farmers, who rely on traditional bank finance. Farmers risk high indebtedness, especially amid climate-induced crop failure and high and rising interest payments. Equity financing mechanisms, if scaled up in the Philippines and elsewhere, would help mitigate risks and build resilience against future shocks (Caparas and Melati, 2023).

¹⁰⁹ The Philippines has opened its renewable energy sector to foreign ownership, representing a significant shift in policy. See: <https://www.aseanbriefing.com/news/philippines-opens-renewable-energy-to-full-foreign-ownership>

¹¹⁰ <https://www.sei.org/perspectives/climate-finance-equity-for-smallholder-farmers/>

¹¹¹ MEDA Risk Capital Fund is an apt example: <https://www.meda.org/meda-risk-capital-fund/>

Section 6

Conclusion: Strong growth as Asia goes green and goes digital



HE Tun Dr Mahathir bin Mohamad, Former Prime Minister of Malaysia at a private briefing for Asia House Corporate Members, with Asia House Chief Executive Michael Lawrence OBE and Lord Green of Hurstpierpoint, Chairman of Asia House.

The outlook for Asia in 2024 will continue to be characterised by impressive economic growth in contrast to the rest of the global economy.

As an increasingly integrated region with strong macroeconomic fundamentals, Asia will see significant progress in digitalisation and in green finance, and these advances will enable economies to become more productive and transition to higher levels of income and welfare.

Digitalisation will continue to drive productivity gains, innovation and efforts to become more sustainable and regionally interconnected. The development of central bank digital currencies and mechanisms for generative AI will drive new frontiers in digitalisation. The deployment of digital technologies is becoming more widespread and is being used to bolster human capital, a key driver of long-term growth.

Asia's ecosystem for green finance continues to improve, with strong investment in renewables and expanded issuance of transition, social and green bonds. However, a more coordinated policy effort is needed, particularly around blended finance and regional initiatives, to expand the availability of climate finance. Central bank initiatives incentivising green finance will be critical, despite the ongoing debate in relation to the effectiveness of such action.

On the downside, the global economy, and Asia in particular, could face more shocks caused by geopolitical tensions. The risks of global economic slowdown, and a scaling back in global trade, remain high, notwithstanding the improvement in US-China cooperation in the second half of 2023.

There is significant uncertainty also around shocks stemming from the US dollar and, relatedly, US dollar-denominated assets, the possibility of a sharper-than-expected slowdown in China, or any unexpected debt-defaults. Downward corrections in one or more financial markets would also affect sentiment and economic activity in Asia.

Asia's central banks will have to balance growth and inflation amid high and potentially volatile oil prices and resurgent food costs – both driven partly by conflicts elsewhere, notably in Ukraine and in Israel-Gaza.

On the geopolitical front, the sheer number of elections, and in particular the US election in November, risk being disruptive.

Nonetheless, Asia's macroeconomic fundamentals and policies geared to digitalisation and sustainability are likely to hold it in good stead compared with the rest of the world. Even a string of negative shocks – another pandemic, continued conflicts, climate events, the cost-of-living crisis and geopolitical events – seem unlikely to derail Asia's acceleration.

Section 7

References

- ADB (2023), *Green Finance for Asian State-Owned Enterprises: An Opportunity to Accelerate the Green Transition*, Asia Development Bank, June 2023.
- ADB (2022a), *Green Bond Market Survey for Malaysia: Insights on the Perspectives of Institutional Investors and Underwriters*, Asian Development Bank, November 2022.
- ADB (2022b), 'ADB, BIM Wind Sign \$107 Million Financing Package to Support Wind Energy in Viet Nam', News Release, Asian Development Bank, 21 December 2022.
- Aizenman, J., Uddin, G.S., Luo, T., Jayasekera, R. and Park, D. (2023), 'Effect of Macroprudential Policies on Sovereign Bond Markets: Evidence from the ASEAN-4 Countries', Asia Development Bank Economics Working Paper Series, No. 696, October 2023.
- Arifianto, A.R. (2019), 'Indonesia's Election Leaves a Polarised Nation', East Asia Forum, 1 May 2019. Association of Southeast Asian Nations, 26 October 2023.
- ASEAN (2023), 'Secretary-General of ASEAN attends ASEAN-Japan Smart Cities Network High Level Meeting.
- Ashraf, J., Luo, L. and Khan, M.A. (2022), 'The Spillover Effects of Institutional Quality and Economic Openness on Economic Growth for the Belt and Road Initiative (BRI) Countries', *Spatial Statistics*, Volume 47, March 2022.
- Auboin, M., Bekkers, E. and De Quart, D. (2022), 'A Novel Framework to Evaluate Changes in Access to and Costs of Trade Finance', WTO Staff Working Paper ERSD-2023-01, 23 January 2023.
- Babu, D. (2023), *Road to Net Zero: State of the Voluntary Carbon Market in Asia*, Climate Action Data Trust, 12 October 2023.
- Balakrishnan, P. and Parameswaran, M. (2023), 'Modi-nomics' Fails to Buck the Trend', *Hindu Times*, 12 October 2023.
- Bank of Japan (2023), *Outlook for Economic Activity and Prices*, Bank of Japan, October 2023.
- Baranauskaitė L. and Jurevičienė D. (2023), 'Import Risks of Agricultural Products in Foreign Trade', *Economies*, 2021; 9(3):102.
- BIS (2023), Inflation, *External Financial Conditions and Macro-Financial Stability Frameworks in Asia-Pacific*, report by a Working Group established by the Asian Consultative Council of the Bank for International Settlements, 10 October 2023.
- BIS (2022), 'Markets Jolted', *BIS Quarterly Review*, Bank for International Settlements, March 2022.
- BNM (2022), *Financial Stability Review: Second Half 2022*, Bank Negara Malaysia, Central Bank of Malaysia. [PDF] Accessed at: https://www.bnm.gov.my/documents/20124/10150236/fsr22h2_en_book.pdf
- Bootle, R. (2020), *The AI Economy: Work, Wealth and Welfare in the Robot Age*, Nicholas Brealey Publishing, 2020.
- Caballero, J., Maurin, A., Wooldridge, P. and Xia, D. (2023), 'Interest Rate Risk Management by EME banks', *BIS Quarterly Review*, Bank for International Settlements, September 2023.
- Caparas, C. and Melati, K. (2023), 'Getting Climate Finance Right for Smallholder Farmers: Lessons from the Philippines, Vietnam and India', *SEI / Perspectives*, 23 June 2023.
- Chansarn, S. (2013), 'Assessing the Sustainable Development of Thailand', *Procedia Environmental Sciences*, Volume 17, 2013, pp. 611–619.

- Chen, Y., Liu, D. and Zhuang, Z. (2023), 'The Spillover Effects of China's Monetary Policy Shock: Evidence from B&R Countries', *Emerging Markets Review*, Volume 55, June 2023.
- Chen, C., Pan, D., Huang, Z. and Bleischwitz, R. (2021), 'Engaging Central Banks in Climate Change? The Mix of Monetary and Climate Policy', *Energy Economics*, Volume 103, November 2021.
- Cheng, J. and Hsu, W. (2023), 'China is Losing out as Global Funds Chase Returns in Japan Stocks', *The Japan Times*, 6 August 2023.
- Cheung Ho, E.H. and Law, K. (2023), 'Challenges in Promoting Local Currency Corporate Bonds in Asia: Evidence from International Business Relationships', *Journal of International Money and Finance*, Volume 138, November 2023.
- Chuc, N.D. and Anh, D.T. (2023), 'Digital Transformation in Vietnam: Policies, Results and Recommendations', *Journal of Southeast Asian Economies*, Volume 40, No.1, Special Issue: *Digital Transformation in Southeast Asia* (April 2023), pp. 127-144.
- Climate Bonds Initiative (2023), 'India's Debut in the Sovereign Green Bond Market: First Deal Landed a Greenium!', 6 March 2023.
- Cosar, K. and Thomas, B.D. (2020), 'The Geopolitics of International Trade in Southeast Asia', NBER Working Paper No. 28048.
- Cui, Y., Geobey, S., Weber, O. and Lin, H. (2018), 'The Impact of Green Lending on Credit Risk in China', *Sustainability*. 2018; 10(6): 2018.
- Cyril, M. (2023), 'India's Data Center Sector: Market Outlook and Regulatory Frameworks', India Briefing, Dezan Shira & Associates, 15 September 2023.
- Davies, M. and Sebastian, F. (2022), *A Practical Guide to Addressing Asian Insurers' Interest-Rate Risk*, Wellington Management, November 2022.
- de Soyres, F. and Franco, S. (2019), 'Inflation Dynamics and Global Value Chains', Background Paper, World Bank Policy Research Working Paper 9090, December 2019.
- Duc, T. (2023), 'Hai Phong City Okays Projects of \$1 bln from Asian Firms', *The Investor*, 23 September 2023.
- Elliot, S. (2023), 'Loss of Tamar Gas Supplies from Israel to Impact Egyptian LNG Exports: IEA', *S&P Global Commodity Insights*, 10 October 2023.
- Ferrarini, B., Dagli, S. and Mariano, P. (2023), 'Sovereign Debt Vulnerabilities in Asia and the Pacific', ADB Economics Working Paper Series, No. 680, April 2023.
- Gao, L. and Woo, R. (2023), 'China's Falling Property Sales, Investment Weigh on Recovery', Reuters, 18 October 2023.
- Gaspar, V., Poplawski-Ribeiro, M. and Yoo, J. (2023), 'Global Debt is Returning to its Rising Trend: Although Global Debt Recorded Another Significant Decline in 2022, it is Still High, With Debt Sustainability Remaining a Concern', IMF Blog, International Monetary Fund, 13 September 2023.
- George, L. (2023), 'Global Debt Edges to Fresh Record, Populism Could Push it Higher – IIF', Reuters, 16 November 2023.
- Georgiadis, G. and Grab, J. (2019), 'Global Value Chain Participation and Exchange Rate Pass-Through to Export and Import Prices', *ECB Economic Bulletin*, Issue 5/2019. European Central Bank, Frankfurt.

- Georgiadis, G., Le Mezo, H., Mehl, A. and Tille, C. (2021), 'Fundamentals vs. Policies: Can the US Dollar's Dominance in Global Trade Be Denied?' ECB Working Paper Series, European Central Bank, Frankfurt.
- Gopinath, G. and Gourinchas, P-O. (2022), 'How Countries Should Respond to the Strong Dollar: Policy Responses to Currency Depreciation Pressures Should Focus on the Drivers of the Exchange-Rate Moves and Signs of Market Disruptions', IMF Blog, International Monetary Fund, 14 October 2022.
- Gramer, R. and Lu, C. (2023), 'Republican Hopefuls Flock to Asia to Burnish Anti-Chin Creds: China Hawks Spread Their Wings Ahead of the 2024 Election Season', *Foreign Policy*, 28 April, 2023.
- Ha, J., Kose, M.A. and Ohnsorge, F. (2022), 'From Low to High Inflation: Implications for Emerging Market and Developing Economies', 4 April 2022.
- Hackenberg, K., Klaus, V. and Sondershaus, T. (2023), 'CLOs' Trading of Brown Loans When Climate Change Draws Attention', 31 January 2023. Available at: <https://ssrn.com/abstract=4344497>
- Hang Nga, L.T. and Le Thy Thuong, N. (2021), 'India-China Competition in South Asia Under Prime Minister Narendra Modi's Administration', *The Journal of Indian and Asian Studies*, Volume 2, No. 1, January 2021.
- Haseeb, M., Sasmoko, Mihardjo, L.W.W., Gill, A. R. and Jermisittiparsert, K. (2019), 'Economic Impact of Artificial Intelligence: New Look for the Macroeconomic Assessment in Asia-Pacific Region', *International Journal of Computational Intelligence Systems*, Volume 12 (2), 2019, pp. 1295–1310.
- Helbling, T., Peiris, S.J. and Petrescu, M. (2023), 'Asia Must Monitor Rising Corporate Debt Amid Higher Interest Rates: Elevated Borrowing Costs are Adding to Risks that some Companies May Default on their Debt as Central Banks Keep Interest Rates Higher for Longer to Contain Inflation', IMF Blog, International Monetary Fund, 24 May 2023.
- Hetzner, C. (2023), 'Goldman Sachs Warns that Russia and Saudi Cuts Could Send Oil Prices Above \$100 a Barrel by the End of 2024, Just in Time for Election Day', *Fortune*, 7 September 2023.
- Hornyak, T. (2022), 'Why Japan is Building Smart Cities from Scratch', *Nature*, 'Spotlight', 17 August 2022.
- Hussain, F.I. and Dill, H. (2023), 'India Incorporates Green Bonds into its Climate Finance Strategy', World Bank Blogs, 12 June 2023.
- IEA (2023a), *Renewable Energy Market Update: Outlook for 2023 and 2024*, International Energy Agency, June 2023.
- IEA (2023b), *Oil Market Report – October 2023*, International Energy Agency.
- IIF (2023), *Global Debt Monitor: Politics and Climate Finance in a High-Debt World*, Institute of International Finance, 16 November 2023.
- ILO (2023), *Beyond the Numbers: Exploring the Relationship Between Collective Bargaining Coverage and Inequality*, International Labour Organization, 28 April 2023.
- ILO (2020), *United Nations Sustainable Development Cooperation and the Decent Work Agenda*, International Labour Organization, 2020.
- IMF (2023a), *Global Financial Stability Report: Financial and Climate Policies for a High-Interest Era*, International Monetary Fund, October 2023.

- IMF (2023b), *Regional Economic Outlook – Asia and Pacific*, International Monetary Fund, 13 October 2023.
- Inagaki, K. (2023), 'Japan's PM Fumio Kishida Bets on \$113bn Stimulus to Tackle Inflation and Low Polling', *Financial Times*, 2 November 2023.
- Interesse, G. (2023), 'China's Digital Yuan App Gets a Boost: New Features Enhance Convenience for Foreign Users', *China Briefing*, 27 September 2023.
- Jaffrey, S. (2023), 'Indonesia's 2024 Presidential Election Could Be the Last Battle of the Titans', Carnegie Endowment for International Peace, 5 October 2023.
- Kemp, J. (2023), 'India Turns to Coal as Hydro Generation Falls', Reuters, 30 November 2023.
- Kim, K., Ardaniel, Z. and Endriga, B. (2022), 'Driving Inclusive Digitalization in Trade and Trade Finance', *ADB Briefs*, No. 238, December 2022.
- Lagarde, C. (2022), 'Monetary Policy in a New Environment', Speech by Christine Lagarde, President of the ECB, at the European Banking Congress, 18 November 2022.
- Latham & Watkins (2023), 'China's New AI Regulations', Client Alert Commentary, 16 August 2023. [PDF] Accessed at: <https://www.lw.com/en/admin/upload/SiteAttachments/Chinas-New-AI-Regulations.pdf>
- Lee, H. (2023), 'Carbon Pricing Efforts Accelerate in Asia', Time, 19 October 2023.
- Lewis, L. and Inagaki, K. (2023), 'Japan's Prime Minister Kishida Says: 'Reassess our Economy'', *Financial Times*, 2 October 2023.
- Li, J., and Zinna, G., (2018), "How Much of Bank Credit Risk Is Sovereign Risk? Evidence from Europe," *Journal of Money, Credit and Banking*, Blackwell Publishing, vol. 50(6), pp.1225-1269, September.
- Maihold, G. (2022), 'A New Geopolitics of Supply Chains: The Rise of Friend-Shoring', SWP Comment, Berlin: Stiftung Wissenschaft und Politik – Deutsches Institut für Internationale Politik und Sicherheit, 45/2022.
- Mann, C.L. (2023), 'Climate Policy and Monetary Policy: Interactions and Implications', Speech by Catherine L. Mann, University of Oxford, 13 November 2023.
- Manorom, K. (2020), 'Thailand's Water Shortage and Inequality Crisis', East Asia Forum, 20 March 2020.
- Medina, A.F. and Phuong, L.H. (2023), 'Philippines Central Bank to Introduce Incentives for Green Financing', ASEAN Briefing, 15 September 2023.
- Mengnan, J. (2023), 'Climate Finance in China: How Are 23 Pilot Cities Doing?' *China Dialogue*, 28 November 2023.
- Microsoft (2023), *Governing AI: A Blueprint for the Future*, Microsoft, 25 May 2023. [PDF] Accessed at: <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RW14Gtw>.
- Nadig, S. (2023), 'What Are the Implications of Israel-Palestine War on the Global Oil and Gas Markets?', *Offshore Technology*, 20 November 2023.
- Nangoy, F. (2023), 'Indonesia Sets Emission Target for G7 Funding, Lays out Investment Map,' Reuters, 1 November 2023.
- Nguyen, L-T., Nguyen, D-T., Nguyen Ngoc, K. N. & Duc, D. T. V (2023), 'Blockchain Adoption in Logistics Companies in Ho Chi Minh City, Vietnam', *Cogent Business & Management*, 10:2.

- Octavia, J. (2023), 'Three's a Party: the Politics of Personality, Power, and Patronage in Indonesia's 2024 Elections', Asia House research post, 25 October 2023.
- ORF (2023), *Powering India's Future: Towards a People-Positive Energy Transition*, Observer Research Foundation. [PDF] Accessed at: https://www.orfonline.org/wp-content/uploads/2023/11/ORF_Monograph_PoweringIndiasFuture.pdf
- Pastpipatkul, Pathairat, Petchaluck, Boonyakunakorn and Kanyaphon Phetsakda (2020), 'The Impact of Thailand's Openness on Bilateral Trade Between Thailand and Japan: Copula-Based Markov Switching Seemingly Unrelated Regression Model', *Economies*, 8 (1), 1–13.
- Patey, L. 'Europe Can Go Green and Rely Less on China at the Same Time', *Nikkei*, 28 September 2023.
- Porter, M.E. (1998), 'Clusters and the New Economics of Competition', *Harvard Business Review*, December 1998.
- Prokopenko, A. (2023), 'Russia's Capital Controls Are Designed to Aid Putin's 2024 Re-Election', Carnegie Endowment for International Peace, 19 October 2023.
- Qian, N. (2023), 'Zero-COVID's Long Tail', Project Syndicate, 17 November 2023.
- Rajesh, Y.P. (2023), 'India Opposition Parties Form 'INDIA' Alliance', Reuters, 18 July 2023.
- Rashad, M. and El Safty, S. (2023), 'Mideast Conflict Dims Prospect of More Egyptian LNG Exports to Europe', Reuters, 9 November 2023.
- Ramos, T.P., Lorenzo, P.J.M., Ancheta, J.A. and Ballestros, M.M. (2023), 'Are Philippine Cities Ready to Become Smart Cities?' Philippine Institute for Development Studies, 26 June 2023.
- Redgrave, G. (2023), 'Thai Regulator Looks to Taxonomy to Boost Green Bond Issuance', *Environmental Finance*, 14 August 2023.
- Reuters (2023), 'Indonesia Considers Labelling Green Financing for Coal-Fired Power Plants that Supply EV Battery Makers', Reuters, 5 September 2023.
- Roy, A. and Sircar, S. (2022), 'India's Central Bank Starts Pilot Digital Currency Program', Bloomberg, 1 November 2022.
- Salna, K., Pernama, N. and Darusman, A. (2023), 'IFC and Bank BTPN Partner in Landmark Social and Green Bond Deal to Strengthen Climate Action and Boost Inclusive Development in Indonesia', International Finance Corporation, 22 June 2023.
- Santhika, E. (2023), 'Thailand Prepares Three Projects to Accelerate Smart City Development', OpenGovAsia, 8 March 2023.
- Saporta, V. (2022), 'Capital and (for a Change) Liquidity Buffers', Speech by Victoria Saporta, Executive Director, Prudential Policy, Bank of England, 14 July 2022.
- Saraiva, A. and Yoo, K. (2023), 'Economists See Stubborn US Core Inflation Keeping Rates Higher', *Bloomberg Economics*, 27 November 2023.
- Schnabel, I. (2021), *Climate Change and Monetary Policy*, IMF Finance and Development, September 2021.
- Serapio, M. (2023), 'Philippines' Marcos Says Sovereign Wealth Fund Will Proceed', Bloomberg, 19 October 2023.
- Shahzad, A., bin Zakaria, M.S.A., Kotzab, H. et al. (2023), 'Adoption of Fourth Industrial Revolution 4.0 Among Malaysian Small and Medium Enterprises (SMEs)', *Humanities and Social Sciences Communications*, 10, 693 (2023).

- Shen, A. (2023), 'China Approves Blockchain Research Centre in Beijing, Aiming to Make Breakthroughs While Maintaining Cryptocurrency Ban', *South China Morning Post*, 9 February 2023.
- Shi, Y., Paramati, S.R. and Ren, X. (2023), 'The Growth of Carbon Markets in Asia: The Potential Challenges For Future Development', ADBI Working Paper Series, No. 987, Asian Development Bank Institute.
- Shibli, A. (2023), 'Philippines Poised for a Digital Banking Revolution', *The Banker*, 22 November 2023.
- Shorter, T. and Kamino, C. (2023), 'Tokyo's Dynamic Ecosystem for a Start-up Company and its Global Impact', *Plug and Play*, 7 July 2023.
- Simanjuntak, U. (2023), 'Indonesia-China Energy Transition Cooperation, First of its Kind High-Level Dialogue', Institute for Essential Services Reform, 5 October 2023.
- Sood, A. (2023), 'Indonesia Election 2024: As Prabowo Dances his Way up the Polls, Can he Keep in the Groove until Voting Day?' *South China Morning Post*, 25 November 2023.
- Strangio, S. (2023), 'Prabowo Maintains Narrow Lead in Indonesian Presidential Polls', *The Diplomat*, 23 October 2023.
- Thanh Doan, H.T. (2020), 'Multiproduct Firms, Tariff Liberalization, and Product Churning in Vietnamese Manufacturing' in *Trade Adjustment in Asia: Past Experiences and Lessons Learned* (Eds) Bacchetta, M. and Helble, M. World Trade Organization, ADB Institute, 2020.
- Triwibowo, D. (2019), 'The Complicated Legacy of Indonesia's Elections', Open Society Foundations, 6 May 2019. UNCTAD (2023), *Global Report on Blockchain and its Implications on Trade Facilitation Performance*, United Nations Conference on Trade and Development, Geneva, 2023.
- UNICEF (2022), *Impact Assessment of Climate Change and Environmental Degradation on Children in Thailand* [PDF] Accessed at: <https://thailand.un.org/sites/default/files/2023-04/Climate%20Change%20Impact%20Assessment%20-%20Full%20report.pdf>
- Varma, S. and Nandi, A. (2019), 'India: the 'Frown Curve' – why Politics and Economics don't Always Smile', *Nomura Economics*, March 2019.
- Vinogradov, M. (2023), 'Russia's Predetermined Elections Are Still Enough to Rattle the Elites', Carnegie Endowment for International Peace, 22 November 2023.
- Vivatpinyo, A. (2022), 'Thai Financial Institutions Open a New Era for Energy Efficiency Financing in Thailand', Asia Clean Energy Partners, 10 November 2022.
- White, E. and Ruehl, M. (2023), 'Asia Faces One of the Worst Economic Outlooks in Half a Century, World Bank Warns', *Financial Times*, 2 October 2023.
- Wood, A. and Tan, K. (2023), 'Thailand "BBB+/A-2" Ratings Affirmed; Outlook Stable', S&P Global Ratings, 28 November 2023.
- World Bank (2023a), *India Development Update*, World Bank, October 2023.
- World Bank (2023b), 'The Invisible Toll of COVID-19 on Learning', *Indonesia Economic Prospects*, World Bank, June 2023.
- WTO (2023), *World Trade Report 2023: Re-globalization for a Secure, Inclusive and Sustainable Future*, World Trade Organization.
- Zubrzycki, J. (2023), *The Shortest History of India*, Notaries House, Great Britain, 2023.

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