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The Risk Butterfly Effect:

Interconnected risks in Asia



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Foreword



A handwritten signature in black ink that reads "David Jacob".

David Jacob
CEO, Marsh Asia

In Asia, business risk is increasingly interconnected and dynamic, with the potential to amplify across markets, industries, and organisations in ways that demand high-stakes choices and decisive leadership.

The Risk Butterfly Effect: Interconnected risks in Asia report examines ten risk categories and the density of their interconnections in China, Hong Kong SAR, Japan and Singapore, revealing not only where exposures lie, but also how risks interact to shape organisation resilience and exponential performance.

Marsh Asia has supported this independent research with Economist Enterprise to equip business leaders with insight that extends beyond identifying risks in isolation. In a region defined by growth, complexity, and volatility, leaders need clarity on how those threats connect, and the advice to act with confidence.

At Marsh, we turn insight into action. As a leading global professional services firm, we bring together deep expertise and practical solutions across risk, strategy, and people to help organisations anticipate change, strengthen resilience, seize opportunity and drive performance.

In an era of uncertainty shaped by geopolitical fragmentation, regulatory volatility, supply chain disruption, AI reshaping jobs, cyber threats, socioeconomic pressures, and increased scrutiny of capital investments, this report is a reminder that resilience is built not by managing risks in isolation, but by understanding their interdependence and their implications for long-term competitiveness.

I hope this report provides Asia's business leaders with the perspective needed to navigate uncertainty and lead with confidence into what comes next.

About this research

The Risk Butterfly Effect: Interconnected risks in Asia is an Economist Enterprise report supported by Marsh Asia. It examines risk interconnections across political, macroeconomic, infrastructure, trade and financial regimes, and what that implies for business resilience in Asia's markets.

The research draws on correlation analysis of operational risk indicators from EIU (a division of The Economist Group), focusing on four markets in Asia: China, Hong Kong SAR, Japan and Singapore. We complemented the quantitative work with desk research and expert perspectives to interpret some of the strongest risk linkages.

Economist Enterprise thanks the following individuals for their time and insights (in alphabetical order):

- Vivek Agarwal, senior vice president and global head, procurement, manufacturing and technical services, Olam Agri (Olam Group), Singapore
- KG Hairong Gui, director, finance, BYD North America & RIDE Mobility LLC, and researcher, author and PhD holder
- Patrick Ho, head of sustainable development, Swire Properties, Hong Kong SAR
- Wataru Kawasaki, fellow, global regulatory engagement, MUFG Trust Bank, Japan
- Karan Kumar, chief risk officer, Cathay Pacific Airways, Hong Kong SAR
- Philip Langerak, supply chain director at a multinational consumer goods company, Singapore
- Kenichi Ogasawara, associate director, risk management group, compliance and risk management department, Daiichi Sankyo, Japan
- Marc Ronez, chairman and senior adviser, Asia Risk Management Institute, Singapore

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- Melanie Noronha, editorial lead
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Risk indicator glossary

Risk category	Definition
Security risk	Covers risk related to armed conflict, terrorism, violent demonstrations, hostility to foreigners and private property, violent crime, organised crime, kidnapping/extortion and likelihood of cyber-attacks
Political stability risk	Covers risk related to social unrest, orderly transfers of power, opposition stance, excessive executive authority and international tensions
Government effectiveness risk	Covers risk related to policy formulation, quality of bureaucracy, excessive bureaucracy/red tape, vested interests/cronyism, corruption, accountability of public officials, human rights and societal vulnerability to natural disaster risk
Legal and regulatory risk	Covers risk related to fairness of judicial process, enforceability of contracts, speediness of judicial process, discrimination against foreign companies, confiscation/expropriation, unfair competitive practices, protection of intellectual property rights, protection of private property, integrity of accounting practices and price controls
Macroeconomic risk	Covers risk related to exchange rate volatility, recession risk, price instability, crowding out of private investment and interest rate volatility
Foreign trade and payments risk	Covers risk related to trade embargo risk, financial crisis, discriminatory tariffs, excessive protection, capital account, current account convertibility and capital control risks
Financial risk	Covers risk related to devaluation risk, depth of financing, access to local markets, marketable debt, banking sector health and stock market liquidity
Tax policy risk	Covers risk related to regime stability, discriminatory taxes, level of corporate taxation and retroactive taxation
Labour market risk	Covers risk related to trade unions, labour strikes, labour laws, skilled and specialised labour, meritocratic remuneration and freedom of association
Infrastructure risk	Covers risk related to port facilities, air transport facilities, retail and distribution network, telephone network, road and rail network, power network, IT infrastructure, economic exposure to natural disaster risk and cyber-security preparedness

More details available in the Appendix

Executive summary

In a hyper-connected world, shocks rarely stay contained; a local shock can quickly become systemic. Geoeconomic fragmentation, trade and energy shocks, regulatory shifts, cyber threats and labour constraints now interact, raising the odds that trouble in one channel becomes multi-factor stress. Most recently, the Iran conflict and the effective closure of the Strait of Hormuz have shown how regional tensions can disrupt global trade, raise costs and unsettle markets worldwide.

Asian economies are especially exposed. External dynamics ripple through trade and supply-chain links. Domestic volatility presents legal, labour market and infrastructure risks. Using correlation analysis of EIU data, this report maps the strongest risk linkages in four markets: China, Hong Kong SAR, Japan and Singapore. Each market shows a distinct pattern and those patterns continue to shift.

Understanding the strength of these linkages, the underlying drivers and potential triggers will determine how business leaders allocate resources for resilience.

Key definitions:

Risk groups: Our research covers ten risk groups featuring a range of sub-indicators listed in the glossary.









Risk score: Quantifies the risk to business profitability in each market on a scale of 0 to 100. The higher the score, the higher the risk to business profitability (see Appendix for detailed methodology).

Correlation: Measures the extent to which two risks move together on a scale of 0 to 1. A higher score means they are more likely to rise or fall together.

Key findings of the research:

- **China stands out as the riskiest of the four markets, reflecting heightened political, legal and trade pressures.** Over 2020-25, its average overall risk score was 44, compared with 20 for Japan, the next most exposed market, and 16 for Hong Kong SAR. Singapore, by contrast, remains the least risky, with an average overall risk score of 12 and labour market risk as its principal vulnerability.
- **Hong Kong SAR has the highest density of correlated risks, pointing to greater systemic fragility than its peers.** In 2020-2025, nine of Hong Kong SAR's top ten risk pairs were highly correlated (ie with a correlation of 0.6 or more). China follows, with five such pairs while Japan and Singapore have only three and two, respectively. The governance and economic structures of these markets explain much of this divergence. In China and Hong Kong SAR, executive authority plays a vital role in shaping economic and financial outcomes; in Japan and Singapore, policymaking is more rules-based and institutionalised, which dampens volatility. Japan's economy is large and diversified, whereas Hong Kong SAR is smaller and remains heavily exposed to finance, trade and property.
- **China's fragility stems from several high-risk hubs, rather than one dominant cluster, raising the odds of system-wide cascades.** Foreign trade, political stability and macroeconomic risks sit at the centre of a dense web of correlations. These nodes also carry high risk scores, the combination of which increases fragility. It creates multiple trigger points from which a shock could spread quickly across the network. Specifically in China, rising international tensions trigger tariffs and sanctions, impacting export growth prospects and the macroeconomic outlook.

Table 1: Market snapshots (2020-25)

Market	Average overall risk score	Number of significant risk interconnections (ie risk correlations of 0.6 or more)	Top risk interconnection
China	44	5	 ← 0.85 →  Political stability risk Tax policy risk
Japan	20	3	 ← 0.77 →  Government effectiveness risk Security risk
Hong Kong SAR	16	9	 ← 0.89 →  Legal and regulatory risk Labour market risk
Singapore	12	2	 ← 0.89 →  Government effectiveness risk Infrastructure risk

Source: Economist Enterprise analysis

- In Hong Kong SAR, two clusters emerge: the legal-labour market and the political-security risk cluster.** In the former, greater centralisation and stricter laws since 2020 have curbed openness, denting Hong Kong SAR’s appeal as a place to work and worsening labour shortages. These shortages are most acute in technical and artificial intelligence (AI) roles across sectors. In the second cluster, risk cascades from rising international tensions to cyber risk, two sub-indicators for which scores rose between 2020 and 2025. Geopolitically motivated cyber-attacks are on the rise, made more sophisticated by the use of AI.
- In Japan, the dominant risk cluster links governance, security and infrastructure.** This materialises in Japan in two ways: cyber-security risk and infrastructure exposure to natural disasters. The link between cyber-security and infrastructure is clear: attacks disrupt transport hubs, telecoms networks, payment systems and energy grids, threatening supply-chain and energy security. With natural disasters, the scale of business losses hinges on the speed and reach of government intervention, as the 2024 earthquake showed. Together, cyber-attacks and natural shocks test the state’s capacity and resilience.
- Singapore shows the least systemic fragility of the four markets.** Its chief vulnerability—labour-market risk—is largely self-contained, driven by shortages in specialist roles (including AI and cyber-security skills), rather than domestic policy or macroeconomic conditions. This limits the scope for spillovers. Additionally, the risks that are most tightly correlated, notably infrastructure and foreign trade, carry low underlying scores. Infrastructure risk stands at five out of 100, given the country’s robust

Table 2: Average risk scores (0-100), by group, 2020-2025

Risk Groups	China	Hong Kong SAR	Japan	Singapore
Government risk				
Political stability risk	53	43	13	24
Security risk	36	25	16	16
Government effectiveness risk	60	20	24	15
Legal and regulatory risk	52	18	18	6
Economic risk				
Macroeconomic risk	27	11	40	23
Foreign trade and payments risk	48	7	15	1
Financial risk	36	6	8	0
Tax policy risk	48	0	17	6
Labour risk				
Labour-market risk	46	25	29	29
Infrastructure risk				
Infrastructure risk	31	9	19	5

Source: EIU

aviation and port infrastructure, roads and telecommunication systems; trade risk, on the other hand, is at just one, due to the openness of its trade policies. In other words, the areas most connected within the system are also those that pose the least threat. This combination keeps systemic risk contained.

- Climate and energy security risks, once peripheral, may soon take centre-stage.** Intensifying typhoons and more frequent heatwaves in the region, pose risks to supply chains and energy infrastructure. Compliance costs from evolving sustainability regulation and the energy transition add further strain. At the same time, rapid growth in AI data centres drives up power demand. A sharp rise in consumption, as countries such as Singapore position themselves as digital and AI hubs, could tighten domestic supply

and push up operating costs. Each has the potential to trigger cascades across infrastructure, policy and trade, amplifying systemic risk.

Today’s shocks cascade through regulatory enforcement, payment networks, cloud systems and trade corridors at digital speed. Monitoring risk levels is not enough; the crucial signal lies in how risks move together. Designing resilience frameworks that deliver operational continuity will set firms apart. That includes elevating cyber and energy to board-level concerns, integrating treasury with compliance and geopolitical monitoring, building digital and supplier redundancy and retaining specialist talent. As interconnections shift, firms that adapt their resilience strategies will not merely survive shocks—they will shape the recovery.

Introduction

External shocks, regional transmission

Modern risk is shaped as much by internal vulnerabilities as by external shocks. Asia is unusually exposed because it sits at the heart of integrated global supply chains. Geoeconomic fragmentation is reshaping trade and investment flows and introducing new regulatory and political risks for firms. The Asian Development Bank (ADB) cut its 2025 GDP growth estimate from 4.9% to 4.7% in response to higher tariffs.¹

Recent conflict in Iran has further underscored the region's vulnerability to distant geopolitical shocks. Disruption in and around the Strait of Hormuz has driven up oil prices and raised concerns about food and energy security

and shipping costs, as more than 80% of the oil and gas shipments passing through the strait were destined for Asia in 2025.²

Geopolitically motivated cyber-attacks are becoming more frequent and costly. IBM, a multinational technology firm, estimates that the average cost of a data breach in Southeast Asia reached US\$3.23m in 2024.³

Climate change has regional impacts too: extreme weather, energy transition pressures and environmental regulation are adding new layers of uncertainty for businesses. The ADB's 2024 climate report warns that under a high-emissions scenario, climate change could reduce regional GDP by about 16.9% by 2070⁴, reflecting impacts on infrastructure, labour productivity and supply chains.

This can translate into financial impacts, as Wataru Kawasaki, fellow in global regulatory engagement, MUFG Trust Bank in Japan, explains: "Climate-related physical risks such as heatwaves, floods, and typhoons can raise insurance premiums, create coverage gaps, and contribute to asset value impairments in exposed regions."

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Wataru Kawasaki, fellow, global regulatory engagement, MUFG Trust Bank, Japan

1 Asian Development Outlook July 2025: Slower Growth Amid Tariffs and Uncertainty. ADB.

Available at: <https://www.adb.org/sites/default/files/page/1057471/presentation-ado-july2025-final.pdf>

2 The Middle East and Global Energy Markets. International Energy Agency (IEA). Updated June 2026.

Available at: <https://www.iea.org/topics/the-middle-east-and-global-energy-markets>

3 Cost of a Data Breach Report 2025: The AI Oversight Gap. IBM.

Available at: <https://www.ibm.com/downloads/documents/us-en/131cf87b20b31c91>

4 Asia-Pacific Climate Report 2024: Catalyzing Finance and Policy Solutions. ADB. October 2024.

Available at: <https://www.adb.org/sites/default/files/publication/1008086/asia-pacific-climate-report-2024.pdf>

Domestic risks, systemic spillovers

But Asian markets must also contend with spillovers from domestic risks. In several markets, where government policy plays a central role in shaping economic outcomes, regulatory shifts or uneven crisis responses can reverberate across trade, labour markets, financial stability and business confidence.

Labour shortages are structural in nature—driven by growing demand for AI skills in Hong Kong SAR and Singapore and demographic ageing particularly in Japan and increasingly in China and Singapore. The race for AI supremacy also introduces new regulatory and operational risks while deepening reliance on energy and digital infrastructure. Data-centre power demand in Asia is projected to rise by 165% between 2023 and 2030.⁵

Crucially, today's risk environment is defined not by single events, but by cascading effects. They travel through trade routes, payment networks, digital infrastructure and regulatory regimes that are tightly linked. "In Asia today, the real shift is towards systemic fragility driven by hyper-connectivity across supply chains, digital infrastructure, finance and energy.

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Marc Ronez, chairman and senior adviser at Asia Risk Management Institute

Risks can no longer be managed in separate silos," says Marc Ronez, chairman and senior adviser at Asia Risk Management Institute. "They have become multiplicative where small local shocks can quickly cascade into system-wide disruptions."

For this reason, the right unit of analysis is how risks connect, not how each is assessed and managed in isolation. Resilience strategies must therefore depend less on stand-alone controls than on managing shared dependencies, where small failures can cascade across firms, sectors and borders.

Our approach: reframing risk

This research, *The Risk Butterfly Effect: Interconnected risks in Asia*, by Economist Enterprise and supported by Marsh Asia, reframes the risk discussion. Rather than analysing top risks in isolation, it examines which risks interact or move together. It draws on a large correlation analysis of EIU's risk-indicator scores in the post-pandemic period (2020 to 2025) for four economies: China, Hong Kong SAR, Japan and Singapore. Through our research, we explore three key questions:

- **How do risks move together: are there key nodes and distinct risk clusters or are correlations evenly distributed across risks?**
A system with several high-risk nodes and tightly connected clusters is more vulnerable to systemic risk.
- **How exposed is each market to systemic risk?**
A high density of correlated risks suggests limited diversification and greater systemic fragility.
- **Are there underlying drivers and potential cascading effects that are noteworthy?**
Mapping underlying drivers clarifies how shocks propagate.

⁵ The Asia Data Centre Landscape. KPMG. 2025.
Available at: <https://assets.kpmg.com/content/dam/kpmg/cn/pdf/en/2025/03/the-asia-data-centre-landscape.pdf>

Each market exhibits a distinct pattern, influenced by its political, economic and social structures. Risks in Hong Kong SAR and China are highly correlated, given the central role their governments play in their economies and the interconnectedness of key sectors. In some markets, such as Hong Kong SAR and Japan, distinct clusters emerge. In others, such as China, there is a wide web of high-risk hubs, which increases systemic

fragility. We explore the characteristics in each market in subsequent chapters.

Ultimately, understanding which risks are closely interlinked and which are most likely to trigger systemic risk will help business leaders craft suitable resilience strategies. It will determine where risk management resources should be allocated, and where investment in operational continuity pays off.



Market snapshots

China

Risk landscape: policy volatility and external strain shape China's business risks

China is a large market where policy sets the terms of business. Market access can shift quickly and firms feel the effects as operating constraints rather than background politics. Higher EIU risk scores for China reflect this uncertainty. Between 2020 and 2025, the average score across ten risk groups was 44, compared with 20 in Japan, 16 in Hong Kong SAR and 12 in Singapore.

Government-related risks dominate

The three most acute risks were government-related: government effectiveness, political stability and legal and regulatory risk. Governance, which covers the extent of bureaucracy and accountability of public officials, is a particular challenge. Political stability risk reflects the role of executive authority, rising international tensions and increased uncertainty over succession. Meanwhile, legal risk is linked with the transparency of the judicial process.

Trade and geoeconomic fragmentation amplify domestic weaknesses

External pressures feature prominently in China's risk landscape. The EIU score for foreign trade and payments risk rose to 54 at the end of 2025 (although the average for the 2020-2025 period was 48). This is the highest level since 2006, driven by trade-embargo risk and capital account risk, both scoring three out of four.

Table 3: Average risk scores (0-100) by group in China, 2020-2025

Government risk	Average	Min	Max
Government effectiveness risk	60	56	66
Political stability risk	53	50	55
Legal and regulatory risk	52	50	53
Security risk	36	31	38
Economic risk			
Foreign trade and payments risk	48	43	54
Tax policy risk	48	44	50
Financial risk	36	29	42
Macroeconomic risk	27	0	45
Labour risk			
Labour-market risk	46	43	50
Infrastructure risk			
Infrastructure risk	31	18	50

Source: EIU

The IMF's 2024 Article IV Consultation warns that deeper geoeconomic fragmentation could have large effects, particularly through global asset repricing that amplifies domestic vulnerabilities, such as property sector adjustments, local government debt, disinflation pressures and banking sector risks.⁶

⁶ 2024 Article IV Consultation. IMF, July 2024.

Available at: <https://www.elibrary.imf.org/downloadpdf/view/journals/002/2024/258/article-A001-en.pdf>

Labour risk shifts from workers to skills

In China, labour-market risk (scoring 46 out of 100) goes beyond demographic shifts. These risks point to a deeper skills constraint as China tries to expand into higher-value manufacturing, automation and advanced technologies. KG Hairong Gui, finance director at BYD, a leading electric-vehicle manufacturer, describes China's labour-market challenge as "a structural mismatch". She says, "China still has a large labour pool, but businesses face shortages in more technical and advanced roles." As automation advances, she argues, firms may need fewer workers overall but more specialised skills, creating "another mismatch".

Macroeconomic and infrastructure risks are elevated but contained

Macroeconomic and infrastructure risks are low compared to other risks, yet both remain elevated in absolute value, at around 30 (out of 100). Macroeconomic risk reflects headwinds expected in 2026, although these are predicted to be manageable. Infrastructure risk—which spans ports, roads, energy and digital networks—has risen owing to greater exposure to natural disasters. Flash floods have hit several provinces, while heatwaves and droughts have cut hydropower output and disrupted inland shipping.^{7,8} Even so, the overall impact is likely to be contained, cushioned by strong central-state capacity for disaster response and recovery.

Risk interconnections: foreign trade, political stability and macroeconomic risks anchor China's risk network

The pattern of risk interlinkages reinforces China's position as a high-risk operating environment. Between 2020 and 2025, five of the top ten risk pairs were highly correlated (ie those with

coefficients 0.6 or above). This suggests China's risk environment is interconnected enough for shocks in one area to cascade through the system. This is less dense than in Hong Kong SAR, where nine of the top ten pairs are highly correlated, but remains substantial.

In China, the structure resembles a web with several nodes rather than a single cluster (see Figure 1). Crucially, these nodes also carry high risk scores, magnifying systemic fragility. That means there are multiple trigger points that could precipitate system-wide risk. Political stability, foreign trade risk and macroeconomic risk are among the highly connected nodes to which business leaders must pay close attention.

Foreign trade risk is a key channel

Between 2020 and 2025, foreign trade and payments risk, which includes tariff and non-tariff barrier risk, was highly correlated with political stability, macroeconomic risk and labour market risk. Escalating US–China trade frictions, tighter export controls (on both advanced technologies and critical minerals), investment screenings and rising global protectionism elevated the risk of regulatory scrutiny and undermined export growth prospects. For firms such as BYD, these pressures are already tangible, explains Ms Gui: "rising tariffs, export controls and the risk of decoupling have tightened access to foreign markets and increased operational risk."

The impact was already visible in trade flows: China's exports to the US fell by 20% in 2025, according to customs data.⁹ These pressures in turn increased costs and dampened business confidence, leading to higher unemployment, particularly in export-oriented manufacturing.¹⁰ Combined, these demonstrate how an external trade shock can propagate widely across the Chinese economy, creating political and labour-market pressures.

7 China drought causes Yangtze to dry up, sparking shortage of hydropower. The Guardian. August 22nd 2022.

Available at: <https://www.theguardian.com/world/2022/aug/22/china-drought-causes-yangtze-river-to-dry-up-sparking-shortage-of-hydropower>

8 China races to alleviate drought, power cuts amid record heatwave. August 17th 2022. Reuters.

Available at: <https://www.reuters.com/world/china/china-takes-action-alleviate-drought-record-heatwave-continues-2022-08-17>

9 China Bulletin: February 4th 2026. US-China Economic and Security Review Commission.

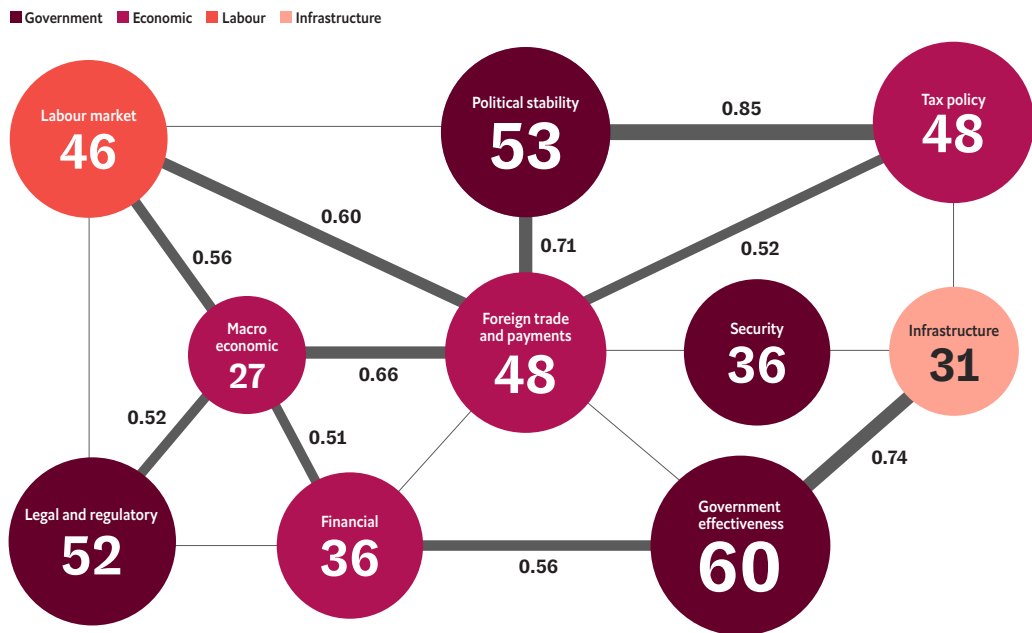
Available at: <https://www.uscc.gov/trade-bulletins/china-bulletin-february-4-2026>

10 China's factory activity slows as US tariffs hit export orders. Reuters. April 30th 2025.

Available at: <https://www.marketscreener.com/news/latest/China-s-factory-activity-slows-as-US-tariffs-hit-export-orders-49762904>

Figure 1: Risk interconnections in China, 2020-2025

Bubble size represents the EIU risk score for each indicator (scores mentioned within each bubble). Line thickness reflects the strength of interconnection (correlation values are labelled on each line).



Source: Economist Enterprise analysis

Political stability and tax policy risks are strongly linked

Political stability risk—driven in part by concentrated executive authority—is closely linked to tax policy risk, which captures changes in corporate tax levels and the stability of the tax regime. The connection is clearest in the property sector. Heavy central intervention to curb leverage and speculation has strained local government finances as land-sale revenues

have fallen.¹¹ This has created fiscal pressures that have, in turn, tightened tax enforcement across provinces and limited scope for further tax cuts, raising costs for firms.^{12,13}

At the same time, rising international tensions—another component of political stability risk—have brought greater scrutiny of foreign companies, which could lead to more frequent tax audits.¹⁴ This has further elevated tax policy risk.

11 Fall in China's \$1.3 trln land sales to test local finances, economy. October 8th 2021. Reuters. Available at: <https://www.reuters.com/world/china/fall-chinas-13-trln-land-sales-test-local-finances-economy-2021-10-07/>
 12 China 2024 fiscal revenue growth shrinks, non-tax income jumps. Reuters. January 24th 2025. Available at: <https://www.reuters.com/world/china/china-2024-fiscal-revenue-grows-13-down-64-year-earlier-2025-01-2>
 13 China goes on hiring spree for tax officials as fiscal pressures mount. January 26th 2026. Financial Times. Available at: <https://www.ft.com/content/fb5940d8-3878-4d0e-abd8-1f732371806a>
 14 Foreign companies in China face growing scrutiny, pressure. April 28th 2023. AP. Available at: <https://apnews.com/article/china-foreign-business-corruption-investigation-technology-113adfa55788aabb11896d8b059b32bc>

Business priorities

As a high-risk market with dense interconnections, China demands close attention. Multiple potential trigger points require sustained monitoring and greater investment in risk management.

Businesses should prioritise the following:

- **Stress-test operations against regulatory and policy shifts**, given the strong influence of government effectiveness, political stability, labour-market risk and legal risk on the operating environment.
- **Maintain active government policy monitoring and engagement**, as regulatory priorities and enforcement intensity can shift quickly and materially affect market access and operating conditions.
- **Track fiscal pressures at the local-government level**, as declining revenues and rising debt burdens may tighten tax enforcement, reduce subsidies and increase scrutiny of foreign firms.
- **Diversify supply chains and enhance supply-chain resilience**, reducing exposure to tariffs, export controls and sanctions linked to US–China tensions or broader geoeconomic fragmentation.
- **Assess climate and energy security risks in production hubs**, as extreme weather and rising electricity demand may lead to power rationing or disrupt logistics and manufacturing.



Hong Kong SAR

Risk landscape: political stability is the main vulnerability

Hong Kong SAR trades in confidence as much as in capital: its role as a financial hub rests on credible rules, specialist talent and reliable market infrastructure. Overall, its operating environment is far less risky than China's. Between 2020 and 2025, the average score across ten risk groups was 16, compared with 44 in China. Japan and Singapore, by comparison, scored 20 and 12, respectively.

Scores for individual risk groups are all 25 or below, with the exception of political stability. It stands out as the most prominent operating risk in Hong Kong SAR with an average score of 43 in 2020-2025. Post-2020 laws and electoral changes have tightened candidate vetting and reduced directly elected seats, reinforcing executive-led governance and narrowing space for opposition.^{15,16}

Rising cyber risk and scarce talent strain the system

Security and labour-market risks are the next most significant, with average scores of 25. Within security, cyber risk dominates: the likelihood of cyber-attacks has carried the maximum score since 2017. In 2025, the Hong Kong Police Force recorded nearly 32,000 technology crime cases, including hacking and ransomware incidents, while the Cyber Security and Technology Crime Bureau identified more than 1.5 m cyber threats targeting Hong Kong.¹⁷ For companies, cyber-security is no longer an

Table 4: Average risk scores (0-100) by group in Hong Kong SAR, 2020-2025

Government risk	Average	Min	Max
Political stability risk	43	35	50
Security risk	25	19	34
Government effectiveness risk	20	16	28
Legal and regulatory risk	18	15	20
Economic risk			
Macroeconomic risk	11	5	20
Foreign trade and payments risk	7	7	11
Financial risk	6	4	8
Tax policy risk	0	0	0
Labour risk			
Labour-market risk	25	18	32
Infrastructure risk			
Infrastructure risk	9	5	15

Source: EIU

occasional compliance task. It is a constant test of resilience. "As attackers are getting more and more sophisticated, you constantly have to review where you are and further upgrade," says Karan Kumar, chief risk officer at Cathay Pacific Airways, observing an uptick in cyber attacks in the aviation sector over the past year. "There aren't many risks that get that kind of attention."

Labour-market risk reflects shortages in skilled and specialised labour. Hiring has grown harder amid demographic ageing, weaker appeal to foreign talent and an outflow of locally born professionals, a trend examined later in this chapter.

¹⁵ Annex II - Method for the Formation of the Legislative Council of the Hong Kong Special Administrative Region and Its Voting Procedures. Basic Law, Hong Kong SAR Special Administrative Region Government. 30 March 2021. Available at: <https://www.basiclaw.gov.hk/en/basiclaw/annex2.html>

¹⁶ Hong Kong: Freedom in the World 2025 Country Report. Freedom House. 2025. Available at: <https://freedomhouse.org/country/hong-kong/freedom-world/2025>

¹⁷ Cybersecurity Report 2025. Hong Kong Police Force. 2025. Available at: https://www.police.gov.hk/ppp_en/04_crime_matters/tcd/cyber-securityreport2025.html

Financial strength and tax clarity underpin stability

Financial and tax policy risks carry the lowest scores in Hong Kong SAR. The territory benefits from a low-tax regime that is clear, simple and predictable, with no sales tax and no capital gains tax. The Hong Kong dollar remains pegged to the US dollar, and banks are well capitalised, supporting financial stability.

Climate risk turns material

Climate risk is becoming harder for businesses in Hong Kong SAR to ignore. Patrick Ho, head of sustainable development at Swire Properties points to recent extreme weather: “In the past few years, Hong Kong has experienced more frequent typhoons, extended periods of black rainstorms, and flooding in various parts of the

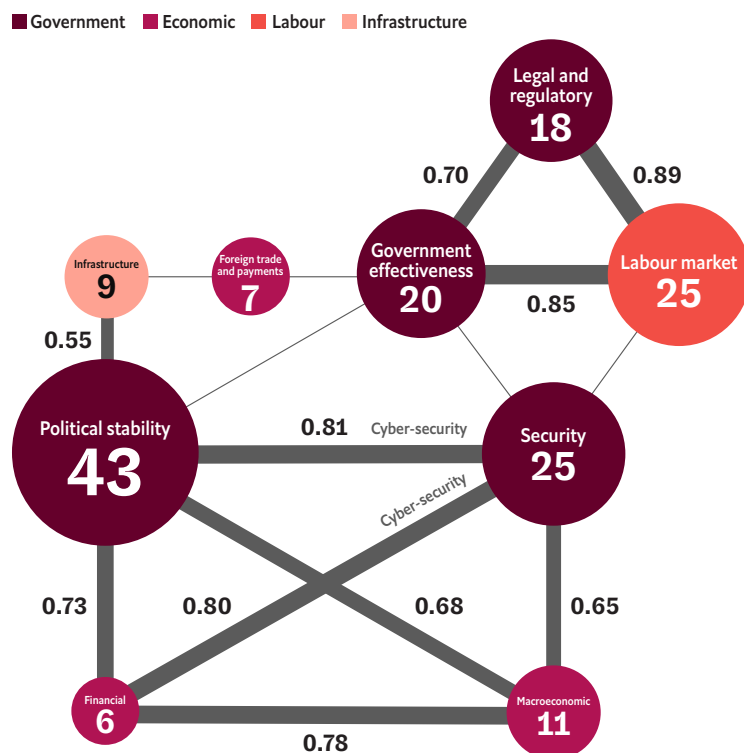
city.” He further adds, “If you own a property by the seashore, these conditions can disrupt your operations and even erode the asset’s value. Therefore, it is important for property owners to assess the risk exposure and incorporate measures to enhance climate resilience.”

Risk interconnections: political and legal risks anchor the tightly connected network

Hong Kong SAR is the most systemically fragile of the four markets. Over the 2020-2025 period, nine of its top ten risk pairs were highly correlated (ie with coefficients of 0.6 or more). This compares with five in China and three or fewer in Japan and Singapore. Two structural features heighten volatility.

Figure 2: Risk interconnections in Hong Kong SAR, 2020-2025

Bubble size represents the EIU risk score for each indicator (scores mentioned within each bubble). Line thickness reflects the strength of interconnection (correlation values are labelled on each line).



Source: Economist Enterprise analysis

First, the degree of government centralisation combined with an elevated political stability risk score amplifies spillovers across sectors. Second, as a small and highly concentrated economy—anchored in trade, finance and property—Hong Kong SAR is more exposed to shocks that transmit through interconnected industries. The network reveals two distinct clusters: one linking legal, governance and labour-market risks; the other binding political, security, macroeconomic and financial risks.

Legal shifts reshape labour dynamics

The strongest link is between labour-market risk and legal and regulatory risk, with a correlation of 0.89. The common driver is tighter laws and greater administrative centralisation since 2020. For a gateway economy dependent on internationally mobile professionals, reduced openness weakens its appeal as a place to live and work. “Hong Kong has become a much less favourable environment than a decade

ago due to multiple geopolitical, regulatory, and strategic constraints,” says Mr Ronez of the Asia Risk Management Institute.

This aligns with Hong Kong SAR’s post-pandemic manpower squeeze. Labour-force participation fell from 58.6% in 2019 to 56.1% in 2022 and Hong Kong SAR experienced net outward migration between 2019 and 2022.¹⁸ A Legislative Council research note attributes the decline to a “significant manpower shortage” as the economy reopened.¹⁹ By 2028, the government expects shortages in technical roles, including AI, data and cyber-security specialists.²⁰ Over the longer term, population ageing will further tighten labour supply, although the government has sought to offset this through talent attraction schemes.²¹ Mr Kumar says those measures are beginning to work: “There has been a big push by the government over the past few years to turn this around. More recently, we have started to see real benefits. Many businesses are moving back, and a lot of talent is coming back too.”

“As attackers are getting more and more sophisticated, you constantly have to review where you are and further upgrade, [observing an uptick in cyber attacks in the aviation sector over the past year].”

Karan Kumar, chief risk officer, Cathay Pacific Airways

18 Manpower: Statistical Highlights. Research Office, Legislative Council Secretariat, Hong Kong SAR. July 4th 2023.

Available at: https://app7.legco.gov.hk/rpdb/en/uploads/2023/ISSH/ISSH13_2023_20230704_en.pdf

19 Manpower: Statistical Highlights. Research Office, Legislative Council Secretariat, Hong Kong SAR. July 4th 2023.

Available at: https://app7.legco.gov.hk/rpdb/en/uploads/2023/ISSH/ISSH13_2023_20230704_en.pdf

20 Report on 2023 Manpower Projection. Labour and Welfare Bureau, The Government of the Hong Kong SAR Special Administrative Region. 14th November 2024. Available at: https://www.lwb.gov.hk/en/highlights/manpower_projection/2023mp_report_en.pdf

21 LCQ20: Safeguarding employment opportunities for local workers. The Government of the Hong Kong SAR Special Administrative Region Press Release. October 8th 2025. Available at: <https://www.info.gov.hk/gia/general/202510/08/P2025100800278.htm>

Political stability spills over into cyber-security and financial risks

In the second cluster, political stability is the key high-risk node, with a score of 43. It is strongly correlated with security (0.81) and financial (0.73) risks, creating two channels through which shocks could spread. The political–security link is especially salient. Between 2020 and 2025, scores rose for key sub-indicators such as international tensions (under political stability) and cyber risk (under security). This creates a critical vulnerability: in a tightly connected system, the likelihood of these risks materialising has risen.

The transmission path is clear. Geopolitical shocks heighten security exposure, particularly cyber risk, which can then spill into the financial system. As Mr Ronez highlights, “Risks are now deeply interconnected, and the point of disruption is not always obvious. Organisations are no longer dealing with a single point of failure, but with multiple systemic bottlenecks particularly across digital architecture, cyber infrastructure, and critical dependencies.” Regulators have drawn the clear lesson. The Hong Kong Monetary Authority treats cyber-resilience as a financial-stability issue and has placed it among the banking system’s supervisory priorities.²² Beyond geopolitical drivers, cyber-attacks are likely to grow in scale and sophistication, aided by AI.

Within this cluster, macroeconomic and financial risks themselves carry much lower scores—11 and 6 respectively—making them less likely to act as primary triggers for systemic cascades.

Business priorities

Although Hong Kong SAR is a relatively low-risk market, its dense web of interconnections makes it a risk-management priority.

Resilience efforts should concentrate on the two main clusters: legal-labour market risks and political stability–cyber-security risks.

Businesses should prioritise the following:

- **Diversify regional business hubs where possible**, maintaining alternative bases for capital, talent and operations in case political or regulatory conditions tighten.
- **Invest in workforce attraction and retention and long-term talent pipelines**, including partnerships with universities and skills development programmes to address persistent shortages in technical and digital roles.
- **Prioritise cyber-resilience and incident response planning**, particularly with a geopolitical lens, as cyber incidents increasingly intersect with political tensions and financial infrastructure risk.
- **Engage proactively with government and regulatory bodies**, as shifts in governance or regulatory frameworks can quickly cascade into labour-market and financial risks.

²² Hong Kong SAR Banking Sector: 2023 Year-end Review and Priorities for 2024. Hong Kong SAR Monetary Authority, 31st January 2024. Available at: <https://www.hkma.gov.hk/media/eng/doc/key-information/speeches/s20240131e1.pdf>

Japan

Risk landscape: global exposure and weak demand shape the issues

As the world’s fourth-largest economy and a leading exporter of vehicles and machinery, Japan’s fortunes are firmly intertwined with global dynamics. Between 2020 and 2025, the average score across ten risk groups was 20, compared with 44 in China, 16 in Hong Kong SAR and 12 in Singapore.

In recent years, growing trade tensions have weighed on external demand, exposing how much the country depends on the world beyond its shores. Home-grown factors also contribute. High living costs and negative real income growth continue to restrain household spending.

Macroeconomic risk leads as higher interest rates test investment

Macroeconomic risk therefore dominates Japan’s risk profile, recording the highest average score among EIU indicators in 2020–2025. This aligns with the country’s forecast of a slowdown in economic growth from 1.2% in 2025 to 0.8% in 2026. In the near term, the risk of crowding out private investment stands out. Since the Bank of Japan’s shift away from negative interest rates in March 2024, funding costs and sovereign yields have risen.²³ Higher borrowing costs risk choking off corporate investment just as policymakers seek to revive growth.

Ageing and skills shortages tighten the labour market

The labour crunch is also a constraint on growth. Labour-market risk ranks among the country’s most pressing concerns, with shortages linked to

Table 5: Average risk scores (0-100) by group in Japan, 2020-2025

Government risk	Average	Min	Max
Government effectiveness risk	24	16	31
Legal and regulatory risk	18	15	20
Security risk	16	9	22
Political stability risk	13	10	20
Economic risk			
Macroeconomic risk	40	25	60
Tax policy risk	17	13	25
Foreign trade and payments risk	15	11	21
Financial risk	8	4	13
Labour risk			
Labour-market risk	29	25	32
Infrastructure risk			
Infrastructure risk	19	15	20

Source: EIU

an ageing population and a historical resistance to large-scale immigration.²⁴ Mr Kawasaki adds, “labour shortages have become a structural constraint, shaping business strategy, investment planning and long-term growth potential across Japan.”

Attempts to offset this shortage with AI-led automation are proving challenging too. Experts suggest that the spread of AI depends not only on technological progress, but also on whether people have the knowledge and confidence to use it. A nationwide study in Japan in 2025 found that only around one in five adult internet users had used generative AI in the previous year.²⁵

23 Changes in the Monetary Policy Framework. Bank of Japan. March 29th 2024. Available at: https://www.boj.or.jp/en/mopo/mpmdeci/mpr_2024/k240319a.pdf

24 Recruiting Immigrant Workers: Japan 2024. OECD. 2024. Available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/06/recruiting-immigrant-workers-japan-2024_0034390d/0e5a10e3-en.pdf

25 Generative AI Use and Non-Use Differences Revealed: A New ‘AI Divide’ Seen in a Survey of 13,000 Internet Users across Japan.” Chiba University. January 13th 2026. Available at: https://www.chiba-u.jp/news/research-collab/ai_13ai.html

Stronger mandate improves policy capacity

Government-effectiveness risk is also material, at 24, stemming from a period where a minority government slowed policymaking. But a resounding victory for the Liberal Democratic Party in recent elections has improved prospects. Prime Minister Takaichi will now leads a government with a very strong parliamentary mandate, well-positioned to pursue an expansive fiscal policy and reinvigorate Japan's manufacturing sector. But investors are nervous: further expenditure will add to an already heavy debt load (of more than 200% of GDP), potentially increasing financial risks.²⁶

Financial strength keeps overall risks low

Financial risk has the lowest score among the main risk groups. Despite high public debt and an ageing population, the country benefits from deep and liquid capital markets, strong domestic savings and a well-capitalised banking system.

“Labour shortages have become a structural constraint, influencing business strategy, investment planning and long-term growth potential across Japan.”

Wataru Kawasaki, fellow, global regulatory engagement, at MUFG Trust Bank, Japan

Risk interconnections: limited links keep systemic risk low

As a large and diversified economy, Japan faces limited systemic risk. Risk groups are loosely connected, with only three highly correlated pairs (ie with coefficients of 0.6 or more). This is far fewer than in Hong Kong SAR, which has nine such pairs, reflecting a smaller, more concentrated economy and stronger government influence.

Macroeconomic risk remains largely isolated

Significantly, Japan's most prominent risk—macroeconomic risk—is not tightly linked to other categories, further limiting systemic spillovers. Japan's macro risk primarily stems from weak external demand, ageing demographics and sluggish productivity growth. These are long-term structural factors that evolve independently of short-term changes in domestic policy, labour regulation or political stability, reducing correlation with other risk groups. Japan's main infrastructure risks (earthquakes, cyber threats and energy policy debates) are exogenous and episodic rather than driven by macroeconomic conditions, which further reduces interlinkages.

A small cluster links government, infrastructure and cyber-security

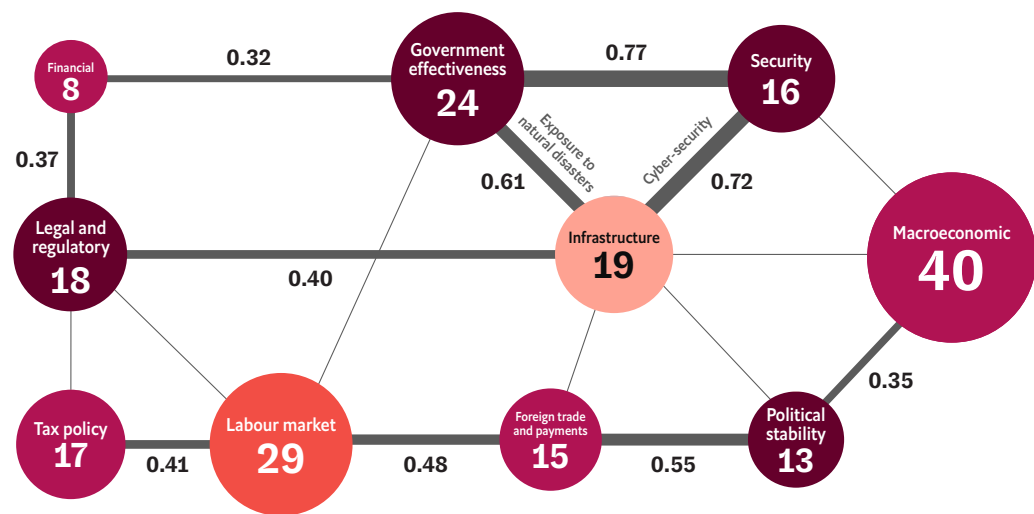
One main cluster emerges in Japan's network, linking government effectiveness, infrastructure and security. It materialises as two risks: cyber-security and exposure to natural disasters. However, the likelihood of these posing serious operating constraints is relatively low, with scores of 16 and 19 for security and infrastructure respectively.

²⁶ Japan's election: why investors are worried. Money Talks podcast, The Economist. February 5th 2026. Available at: <https://www.economist.com/podcasts/2026/02/05/japans-election-why-investors-are-worried>

Figure 3: Risk interconnections in Japan, 2020-2025

Bubble size represents the EIU risk score for each indicator (scores mentioned within each bubble). Line thickness reflects the strength of interconnection (correlation values are labelled on each line).

■ Government ■ Economic ■ Labour ■ Infrastructure



Source: Economist Enterprise analysis

The cyber-security-infrastructure threat

The link between cyber-security and infrastructure is direct. Attacks can disrupt ports and airports, telecommunications networks, payment systems and energy grids. For businesses, this raises supply chain and energy security risks. A serious breach could ripple through the economy, exposing banks, retailers, manufacturers and semiconductor firms to operational and financial shock. “Business structures are highly dependent on information systems,” says Kenichi Ogasawara, associate director, risk management group, at a pharmaceutical company based in Japan. “[This] makes cyber breaches likely to escalate beyond ‘data leaks’ to ‘business stoppages’.”

Japan has already suffered high-profile shocks that demonstrate its cascading impacts. A cyber-attack on a supplier, Kojima Industries, in February 2022

forced Toyota to suspend operations at all 14 of its domestic plants for a day.²⁷ In October 2022, a ransomware attack on Osaka General Medical Centre disrupted systems, delayed clinical services and required a shift to manual procedures.²⁸ As malicious actors deploy AI tools, attacks are likely to become more frequent and sophisticated.

Effective government intervention will be crucial in containing these risks. Because cyber threats cut across sectors and networks, weak co-ordination or slow bureaucratic responses can allow attacks to spread rapidly through supply chains and essential services. Japan has sought to address this by strengthening its cyber governance architecture: its National Security Strategy of 2022 has called for the adoption of “active cyber defence”, signalling a shift toward earlier detection and prevention of cyber-attacks.²⁹

27 Deepening Ties in Difficult Times--1 Year on from Kojima Industries Cyberattack. Toyota Times. March 8th 2023.

Available at: <https://toyotatimes.jp/en/newscast/008.html>

28 Osaka hospital hit by ransomware: report. Healthcare IT News. November 2nd 2022.

Available at: <https://www.healthcareitnews.com/news/asia/osaka-hospital-hit-ransomware-report>

29 National Security Strategy of Japan. December 2022.

Available at: <https://www.cas.go.jp/jp/siryou/221216anzenhoshou/nss-e.pdf>

Natural disasters test infrastructure and policy response

EIU's infrastructure risk measure incorporates economic exposure to natural disasters. Japan has scored two out of four on this indicator since 2017, including throughout 2020–2025, reflecting its persistent exposure to earthquakes. The 7.6-magnitude earthquake that struck Japan in 2024 underscored this vulnerability. Although the damage was localised, it was highly disruptive to the region's population and required government funding for affected households and firms. Exposure to natural disasters is therefore closely linked to government effectiveness. The speed and coherence of policy response, emergency co-ordination and fiscal support determine how far such shocks translate into lasting business losses.

Looking ahead, natural disaster infrastructure risk may be more closely influenced by climate risks. This includes both the physical disruption caused by extreme weather and the costs associated with meeting energy-transition targets. Energy transition is a priority given Japan's heavy reliance on imported fuels. As Mr Kawasaki notes, "Energy security is no longer solely an energy or climate issue, it has become a matter of national resilience. Given Japan's limited domestic resources and heavy reliance on imports, the challenge is not only where energy comes from, but how we build a resilient, low-carbon energy system, and architecture that into investable transition. Aligned with Japan's Green Transformation (GX) policy which is a key economic and industrial strategy - not only a climate policy, we are expected to play a critical role in advancing transition finance that strengthens energy security." Mr Ogasawara also adds, "Energy shocks can rapidly escalate into operational disruptions when constraints or price surges in electricity and fuel supply cascade into manufacturing, logistics, and subcontractor operations."

Effective energy transition depends on policy design and implementation. Recent amendments to Japan's Energy Conservation Act, for example, mandate more detailed energy-consumption reporting. The clarity of reporting standards and scope of enforcement will determine compliance costs for businesses. In this way, climate risk and governance are interlinked: policy choices will determine whether environmental pressures remain manageable or evolve into broader operating constraints.

Business priorities

Japan is a relatively low-risk environment, but key nodes require attention. These include cyber-security and its cascading impacts on infrastructure as well as natural disaster risk, which includes resilience against earthquakes but also climate regulation compliance.

Businesses should prioritise the following:

- **Prioritise cyber-security resilience across critical infrastructure**, including redundancy in IT systems, supply chains and production networks to minimise business stoppages. Stress-testing systems based around various scenarios will also be critical.
- **Conduct scenario analysis against key external macroeconomic risks**, particularly shocks to global demand, trade tensions and rising borrowing costs that could affect investment and growth.
- **Engage proactively with the government on climate and energy regulation**, as evolving reporting standards and transition policies could increase compliance costs and reshape energy usage.
- **Invest in automation and reskilling initiatives to offset structural labour shortages**, driven by demographic ageing and limited immigration.

Singapore

Risk landscape: openness keeps risks low but raises exposure to external shocks

Singapore is a small, highly open hub economy built on flows of trade, capital and talent. Trade in goods and services reached 322% of GDP in 2024.³⁰ Openness spreads risks across markets and dampens routine volatility. This is reflected in EIU scores: between 2020 and 2025, Singapore recorded the lowest average risk score of the four markets at 12, compared with 44 in China, 20 in Japan and 16 in Hong Kong SAR. Low financial and infrastructure risk scores underpin this profile.

Tight labour markets are the main domestic constraint

Labour-market risk is the most persistent domestic constraint, though still modest with a score of 29 out of 100. The problem is a shortage of specialist labour in the control functions that keep complex systems secure and compliant. Singapore still had 1.58 job vacancies for every unemployed person in the fourth quarter of 2025³¹, indicating a tight labour market, while the country’s tech workforce grew to 214,000 in 2024, with expansion led by AI, data and cyber-security roles.^{32,33} At the same time, the share of tech job postings requiring AI skills rose from 11% in 2019 to 14% in 2024, pointing to rising demand for increasingly specialised digital talent.³⁴ Labour market risk in Singapore is also compounded by an ageing population: by 2030, nearly one in four citizens is expected to be over the age of 65.³⁵

Table 6: Average risk scores (0-100) by group in Singapore, 2020-2025

Government risk	Average	Min	Max
Political stability risk	24	20	30
Security risk	16	13	19
Government effectiveness risk	15	9	22
Legal and regulatory risk	6	5	8
Economic risk			
Macroeconomic risk	23	5	40
Tax policy risk	6	6	6
Foreign trade and payments risk	1	0	11
Financial risk	0	0	0
Labour risk			
Labour-market risk	29	25	32
Infrastructure risk			
Infrastructure risk	5	0	13

Source: EIU

Institutional continuity underpins political stability

Political stability risk remains low at 24 out of 100, supported by strong institutional continuity and sustained public trust in the government, reinforcing policy continuity and predictability. Political engagement has increased and isolated protests have occurred, but these pose little challenge to the government’s dominance.

30 Trade (% of GDP). World Bank Group Data. Available at: <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS?locations=SG>

31 Report: Labour Market Fourth Quarter 2025. Ministry of Manpower, Singapore. March 20th 2026.

Available at: <https://stats.mom.gov.sg/Pages/Labour-Market-Report-4Q-2025.aspx>

32 Report: Labour Market Third Quarter 2025. Ministry of Manpower, Singapore. December 11th 2025.

Available at: <https://stats.mom.gov.sg/Pages/Labour-Market-Report-3q-2025.aspx>

33 Annual Report and Singapore Digital Economy Report 2025. Infocomm Media Development Authority, Singapore. October 6th 2025.

Available at: <https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/factsheets/2025/ar-sgde-2025>

34 Singapore Digital Economy Report 2025. Infocomm Media Development Authority, Singapore. October 6th 2025.

Available at: <https://www.imda.gov.sg/-/media/imda/files/about/resources/corporate-publications/annual-report/imda-sgde-report-fy2024-2025.pdf>

35 Soo Fang, Chin. "Singapore's Population Ageing Rapidly: Nearly 1 in 5 Citizens Is 65 Years and Older." The Straits Times. September 27th 2022.

Available at: <https://www.straitstimes.com/singapore/singapores-population-ageing-rapidly-184-of-citizens-are-65-years-and-older>

External dependence shapes macro risk and future pressures

Macroeconomic risk also features among the top three in the market, but with a score of just 23 out of 100. GDP growth is projected at 2.6% in 2026³⁶, supported by a rebound in the global electronics cycle and easier financial conditions, with a small fiscal surplus expected. Nonetheless, Singapore's reliance on imported food and energy exposes it to global price swings. Its trade-dependent model also leaves it vulnerable to external shocks. The IMF's 2024 consultation highlights vulnerability to deepening geoeconomic fragmentation, an external shock that tends to hit a hub first through trade and finance channels rather than household demand.³⁷

Rising heat is an emerging operational risk

Climate risk, covered under infrastructure risk, carries relatively lower scores: economic exposure and social vulnerability to natural disasters both stand at one out of four at the end of 2025. Yet rising temperatures present mounting operational challenges. The past decade was the warmest on record, with a mean temperature of 28°C in 2015–2024. Such temperatures raise cooling costs and increase downtime risk for temperature-sensitive operations, including data centres, cold-chain facilities and precision manufacturing.³⁸ Vivek Agarwal, senior vice president and global head of procurement, manufacturing and technical services at Olam Agri, an agri-commodity trading company, highlights the knock-on operational impacts: “In agriculture, whenever there is a weather or a climate-related event, it triggers concern over food security and a high level of protectionism.” These policies can override contracts and disrupt supply chains.

“In agriculture, whenever there is a weather or a climate-related event, it triggers concern over food security and a high level of protectionism.”

Vivek Agarwal, senior vice president and global head of procurement, manufacturing and technical services at Olam Agri

Risk interconnections: limited linkages reduce systemic vulnerability

In a highly favourable business environment, it is no surprise that Singapore's risk network also presents the least systemic fragility of the four markets covered in this report. Only two of its top ten risk pairs are highly correlated (ie with a correlation of 0.6 or more), compared with nine in Hong Kong SAR, five in China and three in Japan.

Weak links and low-risk nodes limit spillovers

There are two main reasons for this. First, Singapore's most prominent vulnerability—labour-market risk—has weak links to other risk categories, limiting the scope for spillovers. Shortages of specialist labour, as discussed above, stem from the rapid evolution of technical roles, and are less connected with local policy or macroeconomic dynamics. Secondly, the risks that are most tightly correlated—notably governance, infrastructure and foreign trade—carry low underlying scores. In the 2020–2025 period, average infrastructure risk stands at five out of 100 given the country's robust aviation and port infrastructure, roads and telecommunication systems; trade risk is at just one due to the openness of Singapore's trade policies. Despite this, understanding this transmission mechanism and how it may evolve is worth exploring.

³⁶ Singapore growth to slow to 2.6% as UOB warns export boost fades. Singapore Business Review. February 2026.

Available at: <https://sbr.com.sg/economy/in-focus/singapore-growth-slow-26-uob-warns-export-boost-fades>

³⁷ Singapore: 2024 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Singapore. IMF. July 31st 2024.

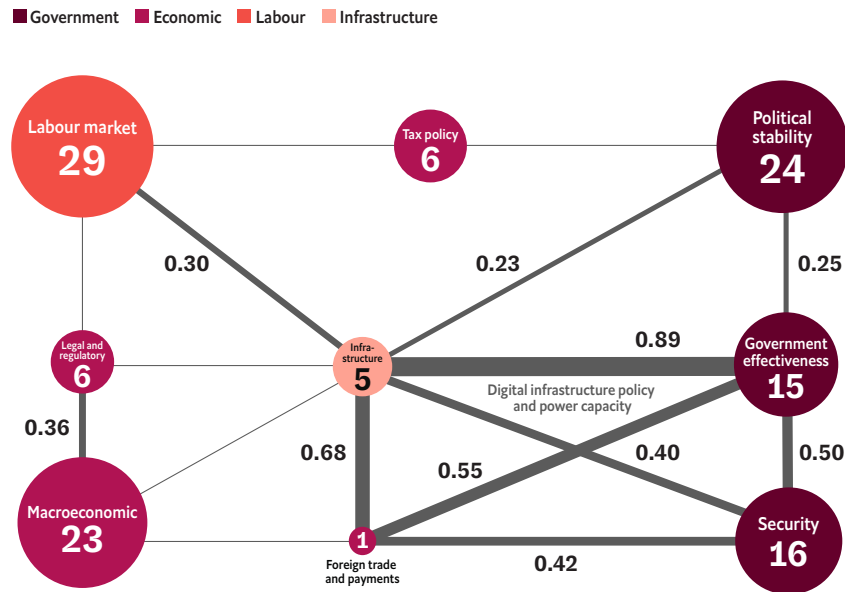
Available at: <https://www.elibrary.imf.org/view/journals/002/2024/255/article-A001-en.xml>

³⁸ Singapore Climate 2024: The Year in Numbers. Meteorological Service Singapore.

Available at: <https://www.weather.gov.sg/wp-content/uploads/2025/01/The-Year-in-Numbers-2024.pdf>

Figure 4: Risk interconnections in Singapore, 2020-2025

Bubble size represents the EIU risk score for each indicator (scores mentioned within each bubble). Line thickness reflects the strength of interconnection (correlation values are labelled on each line).



Source: Economist Enterprise analysis

Digital demand links infrastructure to energy and trade risks

The link between government effectiveness and infrastructure risk is the strongest in Singapore’s network, with a correlation of 0.89. Mr Agarwal explains, “In a market like Singapore, the stability of government policies typically underpins the effectiveness of physical infrastructure. The infrastructure itself functions well because it is supported by practices and policies such as customs procedures, free trade agreements, taxation policies, and established digital standards.”

In the years ahead, this linkage may become most relevant to digital infrastructure, which has

been heavily influenced by government policy. Singapore lifted its three-year moratorium on new data centre construction in 2022. The pilot programme tied approvals to energy-efficiency and sustainability criteria, underlining that digital infrastructure scaling depends as much on policy permissions as on construction.³⁹

This government policy has knock-on impacts on another element of infrastructure: power capacity. Singapore’s ambition to position itself as an AI hub will significantly increase electricity demand for digital infrastructure, potentially straining power generation capacity and grid resilience. But the risks are not only physical.

39 Launch of pilot Data Centre - Call for Application (“DC-CFA”) to support the sustainable growth of DCs. Infocomm Media Development Authority, Singapore. July 20th 2022. Available at: <https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2022/launch-of-pilot-data-centre---call-for-application-to-support-sustainable-growth-of-dcs>

On the physical side, data centres already account for about 7% of Singapore's total power consumption, a share projected to rise to 12% by 2030.⁴⁰ Meanwhile, the Energy Market Authority expects system peak demand to increase from 8.2 GW in 2025 to between 9.4 and 10.8 GW by 2030, with data centres among the drivers of higher demand.⁴¹ Furthermore, as the island state imports nearly all of its energy, primarily natural gas, AI-driven demand for data centres could make it more sensitive to external trade disruptions. The strong correlation of 0.68 between infrastructure and foreign trade risk highlights how easily these can cascade.



Business priorities

Singapore has the lowest overall risk profile and the least systemic fragility among the four markets. Business leaders can therefore concentrate on a few critical nodes and linkages, notably labour, trade and the policy–infrastructure nexus.

Businesses should prioritise the following:

- **Invest in workforce resilience strategies**, focusing on building AI, cyber-security and advanced technical skills through training, reskilling and partnerships with universities.
- **Monitor digital infrastructure and data-centre policies closely**, as government approvals, sustainability criteria and regulatory frameworks will shape the pace of digital expansion.
- **Prepare for rising electricity demand and operating costs**, as AI and data-centre growth increases pressure on power generation capacity and grid resilience.
- **Create a framework to track geopolitical fragmentation**, as Singapore's highly trade-dependent economy transmits external shocks quickly into macroeconomic conditions.
- **Incorporate climate and heat-related operational risks into planning**, particularly for temperature-sensitive infrastructure such as data centres, cold-chain logistics and precision manufacturing.

⁴⁰ Turning the red dot, green: Helping data centres get better at staying cool. Infocomm Media Development Authority. January 28th 2026. Available at: <https://www.imda.gov.sg/resources/blog/blog-articles/2025/02/red-dot-analytics-help-data-centres-be-cool>

⁴¹ Electricity Demand and Supply Outlook (2025). Energy Market Authority, Singapore. November 28th 2025. Available at: <https://www.ema.gov.sg/content/dam/corporate/regulations/policy-papers/pdf-files/EMA-Regulations-Policies-Info-Paper-On-Electricity-Demand-And-Supply-Outlook-2025.pdf>

A new framework for managing risk



Global and regional risks have always been interconnected, but for years, risks were managed in silos. This mattered less when the world was less interconnected. But rapid globalisation in the 2000s deepened interdependencies, enabling shocks to cascade across sectors and borders—as in the 2008 financial crisis. Since then, connectivity has only intensified as systems have gone digital.

It is therefore essential to monitor how risks connect. This research shows how risks cluster and cascade differently across four markets in Asia. China presents dense interconnections and multiple trigger points. Hong Kong SAR combines low average risk with high systemic sensitivity. Japan's risks are more clustered, while Singapore's are contained in specific nodes. Understanding these market-specific dynamics is critical to establishing appropriate resilience frameworks.

For business leaders, three principles stand out.

- **First, factor in linkages, not just individual risk scores.** The most consequential risks are those that combine high severity with strong connections to other categories. These are most likely to trigger systemic spillovers.
- **Second, design integrated operational resilience.** This requires bringing together risk, compliance, operations, IT, human resources, supply-chain and finance teams to develop co-ordinated strategies that address vulnerabilities across functions.
- **Third, prepare for structural pressures.** Demographic ageing in Japan, talent shortages in Singapore and Hong Kong SAR, fiscal strains in China and rising climate exposure across the region are long-term forces. These require sustained investment—in automation, workforce development and climate adaptation—not temporary fixes.

In a region defined by openness and interdependence, risk management is no longer about predicting single events. The right unit of analysis is systemic resilience: understanding where shocks originate, how they travel and where they can be contained. This will enable business leaders to build organisations that can absorb shocks, adapt quickly and continue to operate when systems are under strain.

Appendix: Data sources

EIU's operational risk indicators were used for the correlation analysis (see ten risk categories and their sub-indicators listed below). The indicators quantify the risk to business profitability in each of the markets. The score for each takes into account present conditions and our expectations for the coming two years.

Each of the ten categories is scored on a scale of 0-100, with 0 indicating no risk to business profitability and 100 indicating extremely high risk. Each of the sub-indicators is scored on a scale from 0 (very little risk) to four (very high risk). Each indicator is given the same weight within its category in the standard scores, and the overall assessment is a simple average of the scores for the ten categories.

The ratings and scores for the operational risk model rely on the expert opinion of country analysts working in regional teams. These analysts have a wide range of open and closed sources at their disposal. In addition to detailed, regular information on conditions within a country, the scores are informed by open sources such as central bank reports, statistical yearbooks and country websites. International open sources include publications from the UN, IMF, World Bank, International Labour Organisation, World Economic Forum and Interpol, among others.

EIU operational risk indicators

Indicator	EIU definition
Overall score (0-100)	Average of: security; political stability; government effectiveness; legal and regulatory; macroeconomic; foreign trade and payments; financial; tax policy; labour market; and infrastructure risk scores. Between 0 (minimum risk) and 100 (maximum risk).
Security risk score (0-100)	Assesses whether the physical environment is sufficiently secure
Armed conflict (0-4)	Assesses whether the country is presently subject to armed conflict or if there is at least a moderate risk of such conflict in the two-year outlook period
Terrorism (0-4)	Assesses the likelihood that domestic or foreign terrorists attack with a frequency or severity that causes substantial disruption to business operations
Violent demonstrations (0-4)	Assesses whether violent demonstrations or violent civil/labour unrest are likely to pose a threat to property or the conduct of business
Hostility to foreigners/private property (0-4)	Assesses the extent to which one of the parties in the armed conflict or demonstrations/civil unrest has specifically shown hostility to foreigners or private ownership

Violent crime (0-4)	Assesses the likelihood of violent crime posing a significant problem for government and/or business during the two-year outlook period
Organised crime (0-4)	Assesses the likelihood of organised crime being a problem for government and/or business
Kidnapping/extortion (0-4)	Assesses whether government or business are at risk from kidnapping and/or extortion
Cyber-security, likelihood of attacks (0-4)	Assesses the risks of cyber-attack occurring on a given business or government in the two-year outlook period
Political stability risk score (0-100)	Assesses whether political institutions are sufficiently stable
Social unrest (0-4)	Assesses the risk of significant social unrest during the two-year outlook period
Orderly transfers (0-4)	Assesses whether constitutional mechanisms for the orderly transfer of power from one government to another are clear, established and accepted
Opposition stance (0-4)	Assesses the likelihood of an opposition group or party coming to power and causing a significant deterioration in business operating conditions
Excessive executive authority (0-4)	Assesses whether excessive power is concentrated or likely to be concentrated in the executive so that excessive authority lacks accountability and possesses excessive discretion
International tensions (0-4)	Assesses the threat that international disputes/tensions could negatively affect the economy and/or polity
Government effectiveness risk score (0-100)	Assesses whether the political culture fosters the ability of business to operate effectively
Policy formulation (0-4)	Assesses the likelihood of the present/prospective government to espouse and implement open, liberal and pro-business policies for nationals and foreigners
Quality of bureaucracy (0-4)	Assesses the quality of the bureaucracy across the following criteria: overall competency/training; morale/dedication; and compensation/status
Excessive bureaucracy/red-tape (0-4)	Assesses the pervasiveness of red tape
Vested interests/cronyism (0-4)	Assesses the degree to which vested interests/cronyism distort decision-making in the public and/or private sectors
Corruption (0-4)	Assesses the pervasiveness of corruption among public officials
Accountability of public officials (0-4)	Assesses the accountability of public officials. Considers whether recourse is possible in the case of unfair treatment and whether safeguards/sanctions exist to ensure officials perform competently

Human rights (0-4)	Assesses the risk that the country could be accused of serious human rights abuses
Societal vulnerability to natural disaster risk (0-4)	Assesses the risk that a country's socioeconomic shortcomings will exacerbate the impact of a natural disaster in the two-year outlook period
Legal and regulatory risk score (0-100)	Assesses whether the legal system is likely to safeguard investment
Fairness of judicial process (0-4)	Assesses the extent to which the legal process/the courts can be interfered with or distorted to serve particular interests
Enforceability of contracts (0-4)	Assesses the risk that contract rights will not be enforced
Speediness of judicial process (0-4)	Assesses the extent to which the judicial process is speedy and efficient
Discrimination against foreign companies (0-4)	Assesses the extent to which the authorities favour domestic interest over foreign companies in legal matters
Confiscation/expropriation (0-4)	Assesses the risk of expropriation of foreign assets
Unfair competitive practices (0-4)	Assesses the impact of government policy on the active promotion of competition and curbing unfair business practices.
Protection of intellectual property rights (0-4)	Assesses the degree of protection of intellectual property in the two-year outlook period
Protection of private property (0-4)	Assesses the degree to which private property rights are guaranteed and protected
Integrity of accounting practices (0-4)	Assesses the risk that business financial statements are inconsistent or misleading
Price controls (0-4)	Assesses whether price controls are in place and what is the risk that these would be extended during a crisis
Macroeconomic risk score (0-100)	Assesses whether the economy is stable and predictable
Exchange rate volatility (0-4)	Assesses the risk of exchange rate volatility
Recession risk (0-4)	Assesses the risk that the country will experience a recession in the two-year outlook period
Price instability (0-4)	Assesses the risk that the economy will experience price instability in the two-year outlook period
Crowding out (0-4)	Assesses the risk of crowding out as indicated by the domestic public debt/M2 ratio
Interest rate volatility (0-4)	Assesses the risk of interest rate volatility in financial markets
Foreign trade and payments risk score (0-100)	Assesses the risks in getting inputs/money into or out of country

Trade embargo risk (0-4)	Assesses the risk that the country will be subject to a trade embargo sponsored either by a major international organisation, a significant trading partner or one or more of the G7 countries
Financial crisis (0-4)	Assesses the risk that a financial crisis could curtail access to foreign exchange for direct investors
Discriminatory tariffs (0-4)	Assesses the risk of discriminatory tariffs
Excessive protection (0-4)	Assesses the risk of excessive tariff protection in the two-year outlook period
Current account convertibility (0-4)	Assesses whether investors can make payments for goods and services and access foreign exchange without restriction
Capital controls risk (0-4)	Assesses the risk that capital controls would be applied or, if already in place, tightened in time of economic or financial crisis
Financial risk score (0-100)	Overall score financial risk score
Devaluation risk (0-4)	Assesses the risk of a major devaluation
Depth of financing (0-4)	Assesses the availability and depth of financing in the local market
Access to local markets (0-4)	Assesses whether there are restrictions on foreign companies gaining access to local capital markets
Marketable debt (0-4)	Assesses whether there is a liquid, deep local-currency denominated fixed-rate medium-term (five years or more) bond market in marketable debt
Banking sector health (0-4)	Assesses the risk of a systemic crisis in the banking sector
Stock-market liquidity (0-4)	Assesses the liquidity of the stock market
Tax policy risk score (0-100)	Assesses whether taxes are low, predictable and transparent
Stable regime (0-4)	Assesses whether the tax regime is stable and predictable
Discriminatory taxes (0-4)	Assesses the risk that a company will face discriminatory taxes
Level of corporate taxation (0-4)	Assesses whether the corporate tax rate is low or is the prevailing rate of corporate tax actually paid low
Retroactive taxation (0-4)	Assesses the risk from retroactive taxation
Labour market risk score (0-100)	Assesses whether labour market factors are likely to disrupt business operations
Trade unions (0-4)	Assesses how much power trade unions wield
Labour strikes (0-4)	Assesses how common labour strikes are
Labour laws (0-4)	Assesses how restrictive labour laws will be in the two-year outlook period
Skilled labour (0-4)	Assesses the risk that finding skilled labour will be a problem
Specialised labour (0-4)	Assesses the risk that finding specialised labour skills will be a problem

Meritocratic remuneration (0-4)	Assesses the extent to which increases in wages are directly related to productivity increases
Freedom of association (0-4)	Assesses the risk that the right to freedom of association and collective bargaining will not be respected
Infrastructure risk score (0-100)	Assesses the risk that infrastructure deficiencies may cause a loss of income
Port facilities (0-4)	Assesses the risk that port facilities will prove inadequate to business needs. Evaluates the risk based on three criteria: degree of obsolescence; maintenance; and sufficient supply to meet demand
Air transport facilities (0-4)	Assesses the risk that air transport facilities will prove inadequate to business needs. Evaluates the risk based on three criteria: degree of obsolescence; maintenance; and sufficient supply to meet demand
Retail and distribution network (0-4)	Assesses the risk that the retail and distribution network will prove inadequate to business needs
Telephone network (0-4)	Assesses the risk that the telephone network will prove inadequate to business needs. Evaluates the risk based on three criteria: degree of obsolescence; maintenance; and sufficient supply to meet demand
Road network (0-4)	Assesses the risk that the road network will prove inadequate to business needs. Evaluates the risk based on three criteria: degree of obsolescence; maintenance; and sufficient supply to meet demand
Power network (0-4)	Assesses the risk that power shortages could disrupt business activities
Rail network (0-4)	Assesses the risk that the rail network will prove inadequate to business needs. Evaluates the risk based on three criteria: degree of obsolescence; maintenance; and sufficient supply to meet demand
IT infrastructure (0-4)	Assesses the risk that IT infrastructure will prove inadequate to business needs
Economic exposure to natural disaster risk (0-4)	Assesses the risk that the economy will suffer a major disruption owing to a natural disaster in the two-year outlook period
Cyber-security, preparedness (0-4)	Assesses the risk that the country is not able to withstand cyber-attacks

Economist Enterprise research methodology

Descriptive profiling:

For each market, we calculated and created descriptive statistics to summarise:

- Average risk scores, dispersion, min/max (range) and how often each indicator changed
- Average scores across three sub-periods to reflect regime shifts (2006-2013, 2014-2019, 2020-2025)

Correlation-based interconnectedness:

We computed a correlation matrix for each market using risk indicator scores:

- Full-period correlation (2006–2025): captures long-run structural relationship
- Recent-period correlation (2020–2025): captures the current regime
- Intermediate splits (2006–2013, 2014–2019): used to detect tightening, weakening or directional shifts over time

Identifying “top linkages” for interpretation:

To make results decision-ready, we summarised the strongest relationships in each market across the entire time period and different sub-periods.

Perfect correlations were filtered out to avoid spurious results driven by limited variation.

Using sub-indicators to explain and reduce redundancy: We used sub-indicators to:

- Interpret mechanisms behind aggregate linkages (what is driving the movement)
- Detect redundant signals within a broad risk category (highly correlated sub-indicators often carry overlapping information)

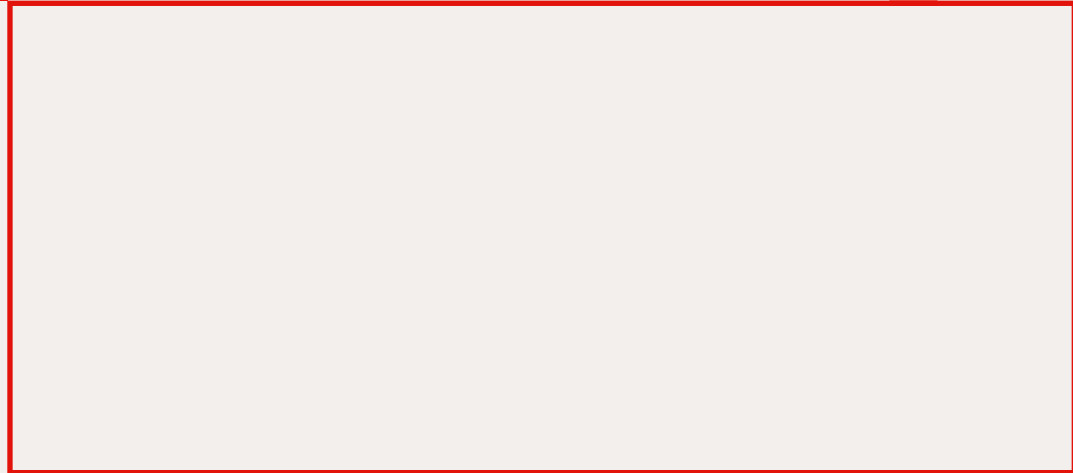
Validation with EIU risk reports:

Linking quantitative patterns with qualitative evidence from EIU operational risk reports and EIU financial risk reports for the four relevant markets

Validation with experts and literature:

Sense-checking the correlation results with the literature and expert insight for the four markets

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