



# From Reactive to Resilient: Improving Supply Chain Resilience Through Actionable Insights

**Risk Beyond 2025**

Edward Bimbuain – Business Continuity  
Management Leader ASIA

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## Edward Bimbuain

### Business Continuity Management Lead, Asia

Currently at Marsh Risk Consulting Indonesia, Edward has more than 10 years of experience and is responsible for developing, implementing and maintaining Business Continuity Management and Enterprise Risk Management for Marsh Indonesia's major clients covering various industries.

He started his career as an IT Auditor and Consultant at Ernst & Young (EY) where he was involved with EY major clients covering a wide range of industries such as telecommunications, government, manufacturing, and financial services. He responsible in performing IT Audit supporting the Financial Auditor and IT related consulting for IT Governance, IT Risk Assessment, BCM, and Sarbanes Oxley implementation.

Edward has working experience with a telecommunication company (XL Axiata) where he was responsible for developing and maintaining the Enterprise Risk Management and the Business Continuity Management (BCM) program. Prior to joining Marsh Risk Consulting on May 2016, he was Head of BCM and Operational Risk in Allianz Indonesia. Edward developed and managed the BCM cycle for Allianz Indonesia general and life insurance, also managing operational risk for Allianz Life Operations.

### Professional Qualifications

- M.S Information Technology, Hawaii Pacific University (USA)
- B.A Management Information System, University of Toledo (USA)
- Qualified Chief Risk Officers (QCRO)
- BCM Institute - Business Continuity Certified Specialist (BCCS)

### Specialist Knowledge

- Enterprise Risk Management
- Business Continuity Management
- Cyber Risk

### Years of Experience

- > 15

### Location

- Jakarta, Indonesia, Asia

# One Enterprise: Integrated services to address your needs



 **Marsh**  
Insurance broking and  
risk management solutions

**Risk Management  
Solutions**

**Insurance  
Brokerage**

**Advisory**

 **GuyCarpenter**  
Reinsurance and capital strategies

 **Mercer**  
Health, investment, retirement and  
career consulting and solutions

 **OliverWyman**  
Strategy, economic, and  
brand consulting







\*: In the event that Risk Management services and/or other services provided are unrelated to insurance, then the services can be provided through Marsh's affiliate in Indonesia, namely PT Quantum Support Services.

# Supply Chain Trends



# Several recent events and trends have highlighted the vulnerability of a highly complex and fragmented global supply chains

## Key events and trends affecting global supply chain

Geopolitical tensions	Pandemic/Natural disasters	Economic crises	Infrastructure disruptions	Security & cybersecurity threats	Emission reduction efforts
Disruptions due to political, economic, trade or conflicts	Disruptions instigated by global pandemics or environmental disasters	Disruptions due to financial crisis, recessions, acute inflation, etc.	Disruptions due to infrastructure malfunction (transport, IT, etc.)	Disruptions due to security threats, terrorism, cyberattacks, etc.	Increase in demand for critical minerals in response to sustainability trends
<b>Red sea shipping crisis</b> (2023/24) <i>Delays and higher costs for transportation</i>	<b>Turkey earthquake (2023)</b> <i>Physical damages and disrupted agricultural and industrial sector</i>	<b>Semi-conductor shortage (2021)</b> <i>Severe shortages caused by demand/supply disruptions</i>	<b>Suez Canal blockage (2021)</b> <i>Blocked maritime traffic for 6 days</i>	<b>Colonial pipeline cyberattack (2021)</b> <i>6-day outage of US' largest oil pipeline due to ransomware</i>	<b>UNFCCC net-zero by 2050</b> <i>Forecasted increase in demand for renewable-related minerals</i>
					
<b>Container shipping costs increased by 60%</b>	<b>USD 84+ BN in losses</b>	<b>USD 110 BN in losses</b>	<b>USD 6-10 BN in losses</b>	<b>Acute fuel shortages in several states</b>	<b>Lithium demand to increase by +450% between 2022-30</b>

Source: Refinitiv, Turkonfed, Supply Chain Resilience Report 2021, Reuters, Bloomberg, SCFI, Oliver Wyman analysis

# The financial impact of supply chain disruptions is large & likely to grow

**\$14.5  
trillion**

**5-year global  
economic  
impact**

**\$25  
trillion**

**GDP loss by  
2060**

**20% to  
30%**

**Potential  
annual earning  
losses**

Source: State of the World 2025 publication by OW



# Supply Chain Trends

## Top strategic priorities for board-level management

### Exhibit 3: Top strategic priorities for board-level management



Source: Oliver Wyman analysis

98%

of companies surveyed indicated that they were willing to invest profits in supply chain resiliency

65%

of respondents described themselves as “vulnerable to very vulnerable” to future supply chain risks

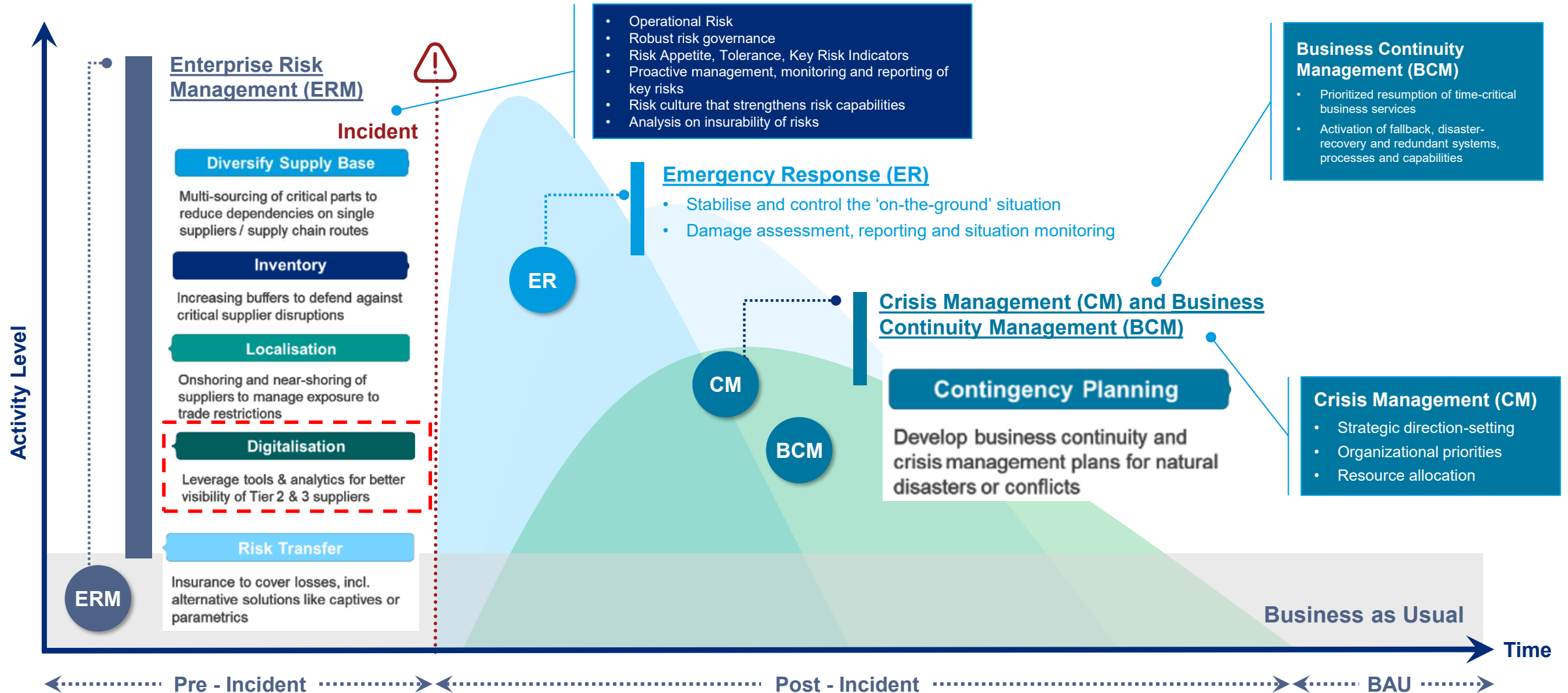
**Getting ahead of disruption  
with integrated resilience  
process**

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# Integrated Risk, Resilience & Crisis Response Framework

Companies can use multiple levers to manage diverse supply chain uncertainties



# Performing the Business Impact Analysis (BIA)

 Definition	<p>Business impact analysis (BIA) is the process of <b>analysing the effect of interruptions</b> to business operations or processes <b>on all business functions</b> within the organization to determine business continuity priorities and requirements.</p>
 Purpose	<ul style="list-style-type: none"><li>Resources are limited, need to prioritize BCM efforts in times of crises</li><li>Assess the financial and non-financial impact on the organization resulting from downtime of critical business functions / processes</li><li>Alignment across the organization on critical business functions / processes</li></ul>
 Outcomes	<div> <b>Critical Business Functions</b> Identify and prioritize critical activities that support the provision of products and services</div> <div> <b>Recovery Timeframes</b> Assess the impact over time resulting from disruption to determine recovery timeframes (i.e. RTO, MAO)</div> <div> <b>Dependencies</b> Determine the dependencies, including partners and suppliers, and interdependencies of critical activities</div> <div> <b>Resources</b> Determine the resources (e.g. manpower, office equipment / supplies, etc.) needed to support critical activities</div>

# Enhancing Supply Chain Resilience with Sentrisk™

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## Map Upstream Suppliers

Map both direct and indirect upstream suppliers, the components they supply, and the trade flows between them.



2

## Measure Tariff Exposure

Analyze a variety of potential tariff scenarios and quantify their financial impacts on each supplied good, supplier, and your organization's P&L

Tariff rate	Tariff exposure	Tariff amount
0	100.00%	100.00%
1	42.136.760	176
2	16.251.140	110
3	10.000.000	100

Supplier ID	Supplier Name	Supplier Country	Supplier Type	Supplier Status	Supplier Address	Supplier Contact	Supplier Email	Supplier Phone	Supplier Fax	Supplier Website	Supplier LinkedIn	Supplier Twitter	Supplier Facebook	Supplier YouTube	Supplier Instagram	Supplier Snapchat	Supplier TikTok	Supplier Other
73 LTD	73 LTD	United States	Manufacturer	Active	1234 Main St, Suite 100, New York, NY 10001	John Doe	john.doe@73ltd.com	212 123 4567	212 123 4568	www.73ltd.com	73LTD	73LTD	73LTD	73LTD	73LTD	73LTD	73LTD	73LTD
128 Co., Ltd.	128 Co., Ltd.	United States	Manufacturer	Active	1234 Main St, Suite 100, New York, NY 10001	John Doe	john.doe@128co.com	212 123 4567	212 123 4568	www.128co.com	128Co	128Co	128Co	128Co	128Co	128Co	128Co	128Co
137 South Mining Filter Co., Ltd.	137 South Mining Filter Co., Ltd.	United States	Manufacturer	Active	1234 Main St, Suite 100, New York, NY 10001	John Doe	john.doe@137smf.com	212 123 4567	212 123 4568	www.137smf.com	137SMF	137SMF	137SMF	137SMF	137SMF	137SMF	137SMF	137SMF
151 WETTEL TECHNOLOGIES CO LTD	151 WETTEL TECHNOLOGIES CO LTD	United States	Manufacturer	Active	1234 Main St, Suite 100, New York, NY 10001	John Doe	john.doe@151wet.com	212 123 4567	212 123 4568	www.151wet.com	151WET	151WET	151WET	151WET	151WET	151WET	151WET	151WET

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## Mitigate Risk and Prepare for Disruption

Implement agile mitigation strategies to ensure supply chain resilience with support from our risk advisors. These include:

- Business continuity and crisis management
- Scenario testing and continuous monitoring
- Targeted insurance solutions
- Site selection and network adjustments
- Third-party risk management
- Adjust risk tolerance and appetite to reflect new capital expenditures

VALUE

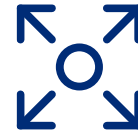
Powered by Sentrisk, Marsh's proprietary supply chain analytics platform, we precisely quantify tariff risks – enabling informed insurance strategies and tailored risk mitigation solutions aligned with your business's evolving risk appetite.



# Key imperatives for building organizational supply chain resilience



Using future probable scenarios to **stress test our supply chain resilience capability**.



Identifying potential **supply chain single point of failure** and its mitigation to enhance resilience.



**Leveraging analytics and AI** for timely indicators, and incident response preparation and insights.



Determining how best to embed **“just-in-case” vs “just-in-time”** recovery strategies.



**Building trust with workforces and stakeholders** as organizations, economies, and societies navigate disruptions and recoveries.

# Thank you!

## Questions?

Reach out to your Marsh executive

or visit

[marshmclennan.com](https://marshmclennan.com)

# Backup Deck

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# Challenges in mitigating supply chain risk in Asia

Reshaping and enhancing supply chain resilience is a complex, time consuming, and costly exercise



## Real-Time Data Challenges:

**Frequent policy changes**, such as tariff levels on China, Mexico, and Canada, **increase uncertainty** regarding current/future risk exposures.



## Hidden Risks Beyond Tier 1 Suppliers:

Direct (Tier 1) suppliers are easily identified, but risks from indirect (Tier 2 & 3) suppliers can be **less visible**, causing concentration risks to **go undetected**.



## Complex Risk Navigation:

Assessing **different types of investees against diverse risks** – such as weather events, cyberattacks, and tariffs – **significantly complicates** evaluation of target entities' risk exposures



## Post-Acquisition Reconfiguration:

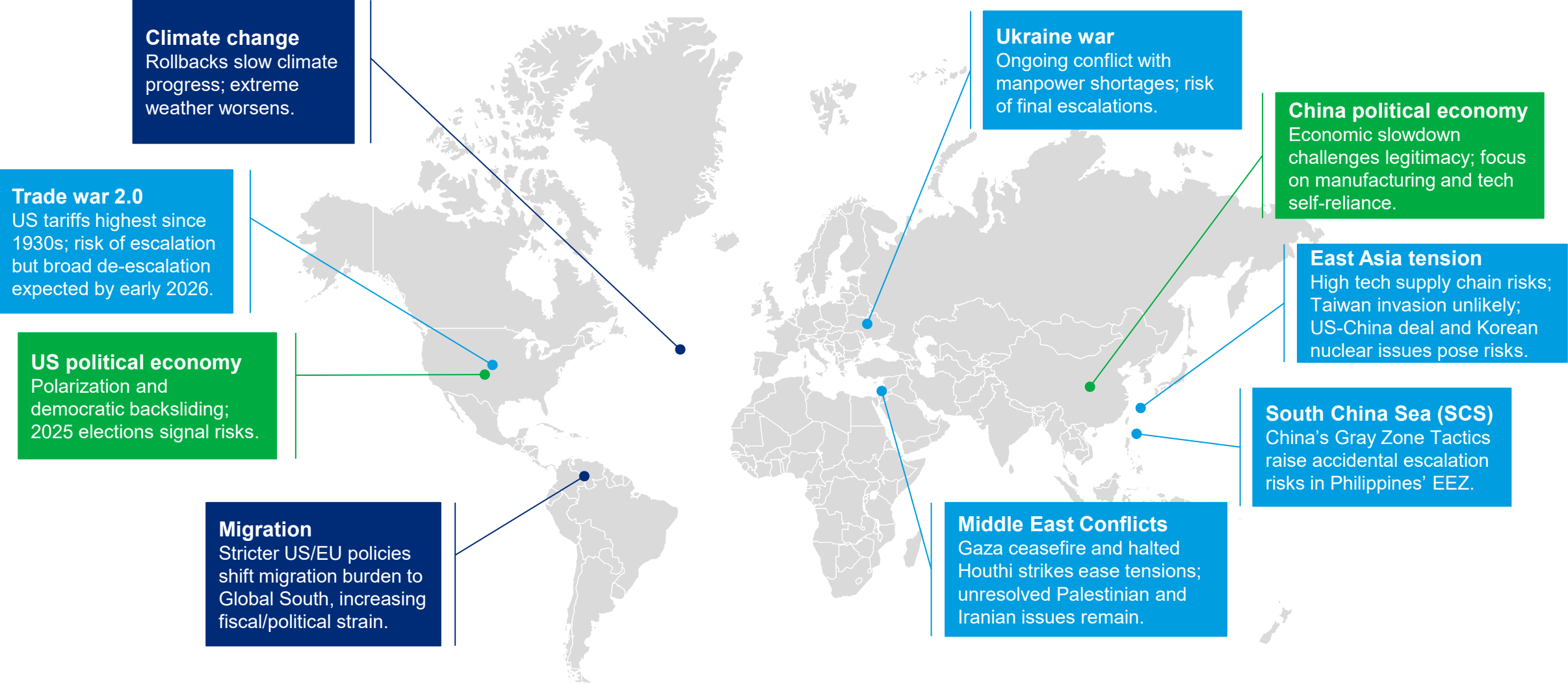
Merged companies can have **overlapping supply chains**, leading to **sub-optimal processes and risks** if supplier relationships are not strategically assessed and reconfigured.

**A data-driven supply chain analysis can identify vulnerabilities faced by target entities and enhance investment decision-making**

**Mapping out the supply chain can support businesses in:**

- **Visualisation:** Identify unknown suppliers, networks, interconnectivities.
- **Evaluation:** Understand size of supply chain risks, single-buyer / geography concentrations.
- **Mitigation:** Determine mitigations to quickly protect the right parts of the value chain.

# Snapshot of major geopolitical risks and developments\*



Category	Armed Conflict / Economic War	Global Risk linked with Geopolitics	Goeconomics
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