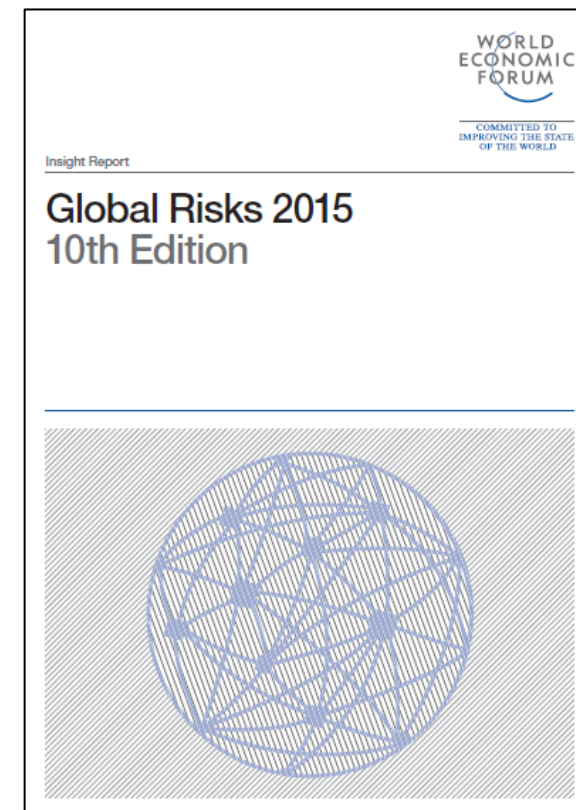


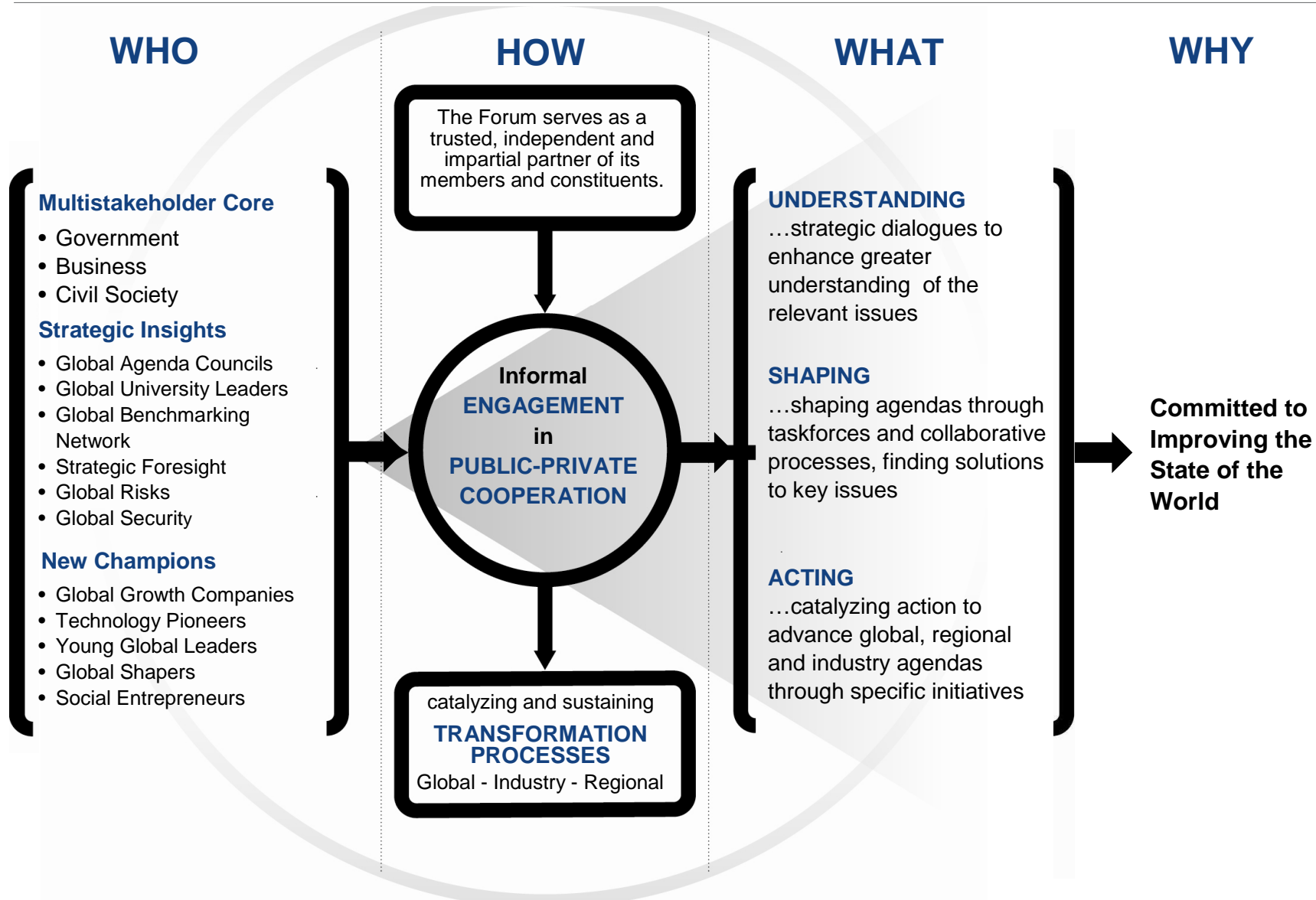
The *Global Risks 2015* report

Luxembourg 17.06.2015



The World Economic Forum

An International Institution



The *Global Risks 2015* report

History

❖ **Launched** :15 January 2015

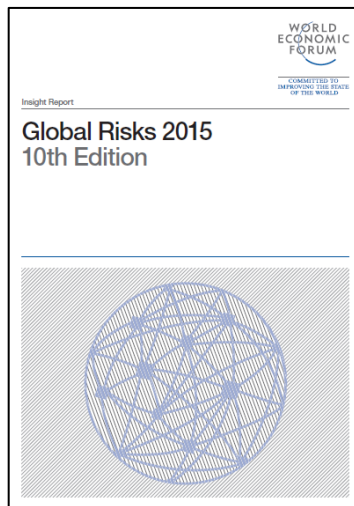
❖ First published in 2006 – currently in its **10th edition**

❖ Increased focus from **risk identification to risk anticipation and mitigation**

❖ Explore the data and the report at:
www.weforum.org/risks



The *Global Risks 2015* report



The 10th edition of the Global Risks report completes a decade of highlighting the most significant long-term global risks, drawing on the perspectives of experts and decision-makers.

The Global Risks 2015 report is produced in collaboration with:

Our Strategic Partners:

❖ Marsh & McLennan Companies

❖ Zurich Insurance Group

Our Academic Advisers:

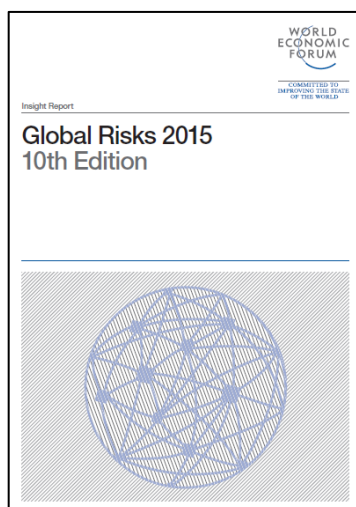
❖ National University of Singapore

❖ Oxford Martin School, University of Oxford

❖ Wharton Risk Management and Decision Processes Center, University of Pennsylvania

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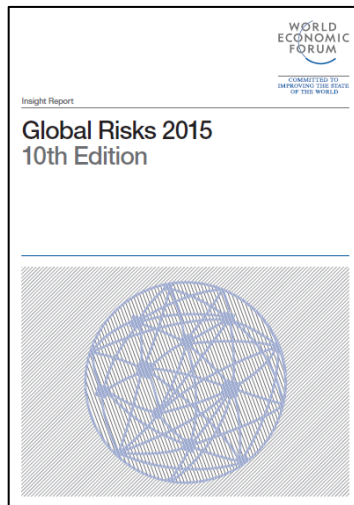
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The *Global Risks 2015* report

Structure



❖ Part 1: Global Risks 2015

❖ Part 2: Risks in Focus

- Global Risks Arising from the Accelerated Interplay between Geopolitics and Economics
- City Limits: The Risks of Rapid and Unplanned Urbanization in Developing Countries
- Engineering the Future: How Can the Risks and Rewards of Emerging Technologies Be Balanced?

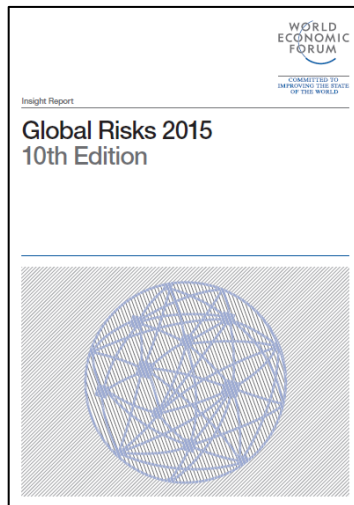
❖ Part 3: Good Practices on Risk Management and Risk Resilience

Part 1: Global Risks 2015

Main results

The *Global Risks 2015* report

A revised methodology - definitions



*“A **global risk** is an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next 10 years”*

*“A **trend** is defined as a long-term pattern that is currently taking place and that could amplify global risks and/or alter the relationship between them”*

The *Global Risks 2015* report

The 28 Global Risks

Economic	Asset bubble in a major economy
	Deflation in a major economy
	Energy price shock to the global economy
	Failure of a major financial mechanism or institution
	Failure/shortfall of critical infrastructure
	Fiscal crises in key economies
	High structural unemployment or underemployment
	Unmanageable inflation
Environmental	Extreme weather events (e.g. floods, storms, etc.)
	Failure of climate-change adaptation
	Major biodiversity loss and ecosystem collapse (land or ocean)
	Major natural catastrophes (e.g. earthquake, tsunami, volcanic eruption, geomagnetic storms)
	Man-made environmental catastrophes (e.g. oil spill, radioactive contamination, etc.)
Geopolitical	Failure of national governance (e.g. corruption, illicit trade, organized crime, impunity, political deadlock, etc.)
	Interstate conflict with regional consequences
	Large-scale terrorist attacks
	State collapse or crisis (e.g. civil conflict, military coup, failed states, etc.)
	Weapons of mass destruction

Societal	Failure of urban planning
	Food crises
	Large-scale involuntary migration
	Profound social instability
	Rapid and massive spread of infectious diseases
Water crises	
Technological	Breakdown of critical information infrastructure and networks
	Large-scale cyber attacks
	Massive incident of data fraud/theft
	Massive and widespread misuse of technologies (e.g. 3D printing, artificial intelligence, geo-engineering, synthetic biology, etc.)

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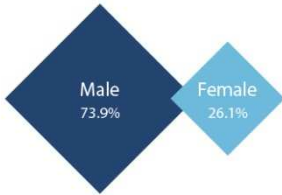
Global Risks Perception Survey



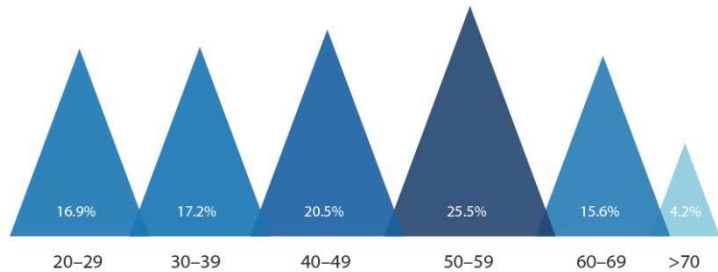
Number of participants

896

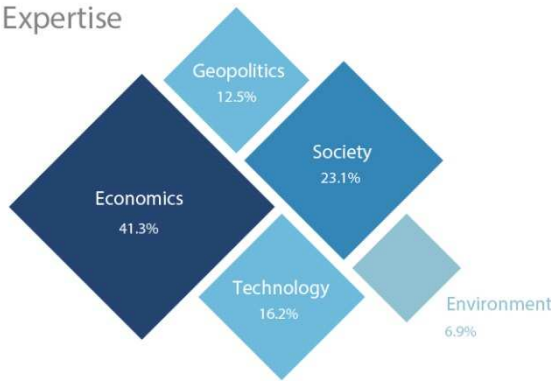
Gender



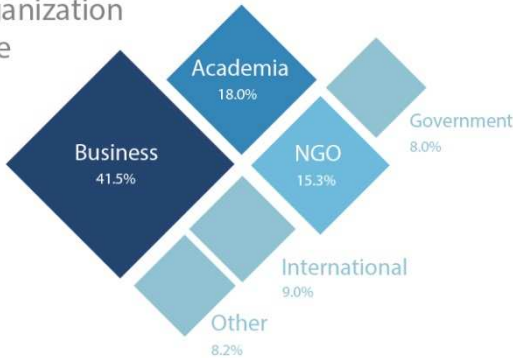
Age distribution



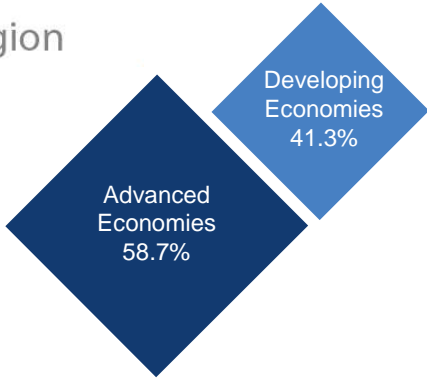
Expertise



Organization type

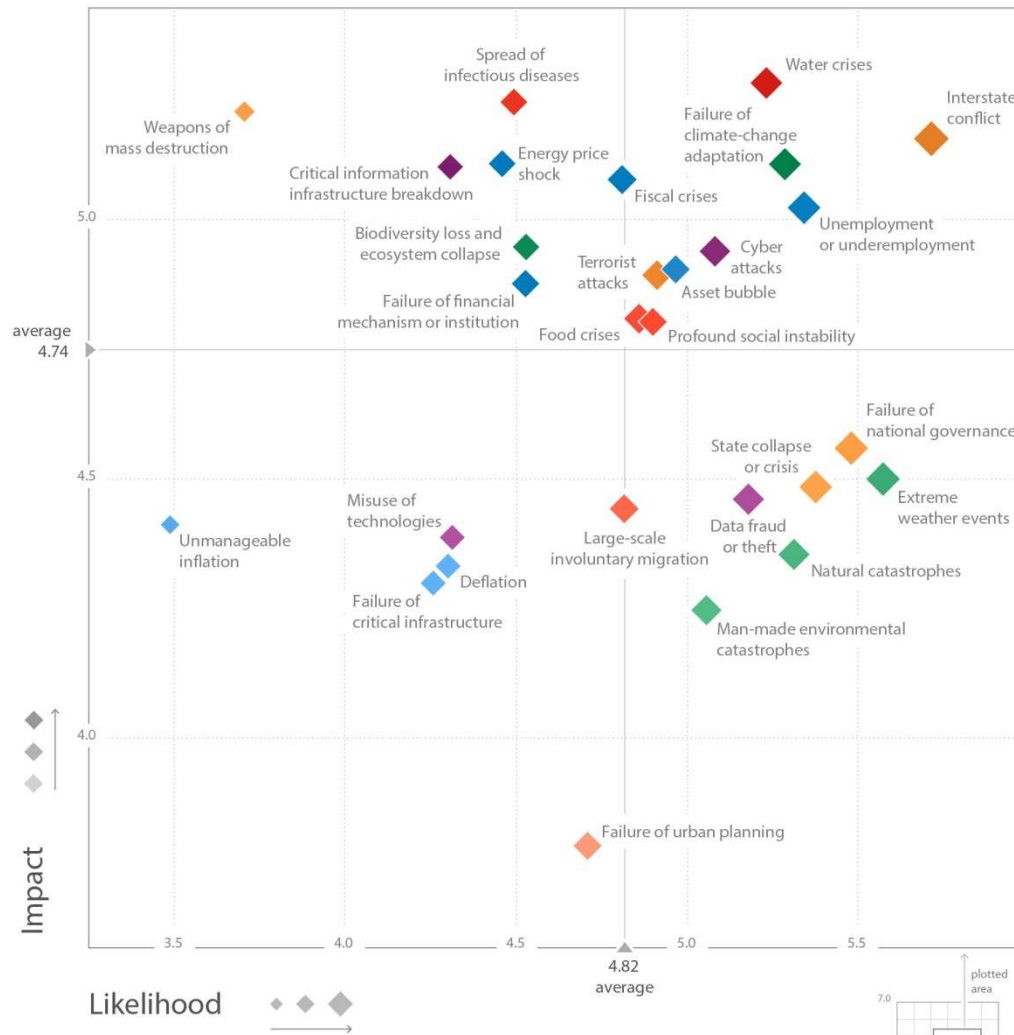


Region



The *Global Risks 2015* report

The Global Risks Landscape 2015



Top 10 risks in terms of Likelihood

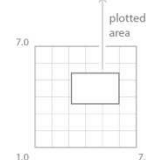
- 1 Interstate conflict
- 2 Extreme weather events
- 3 Failure of national governance
- 4 State collapse or crisis
- 5 Unemployment or underemployment
- 6 Natural catastrophes
- 7 Failure of climate-change adaptation
- 8 Water crises
- 9 Data fraud or theft
- 10 Cyber attacks

Top 10 risks in terms of Impact

- 1 Water crises
- 2 Spread of infectious diseases
- 3 Weapons of mass destruction
- 4 Interstate conflict
- 5 Failure of climate-change adaptation
- 6 Energy price shock
- 7 Critical information infrastructure breakdown
- 8 Fiscal crises
- 9 Unemployment or underemployment
- 10 Biodiversity loss and ecosystem collapse

Categories

- ◆ Economic
- ◆ Environmental
- ◆ Geopolitical
- ◆ Societal
- ◆ Technological



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The Evolution of Global Risks

	2007	2008	2009	2010	2011	2012	2013	2014	2015
1st	Breakdown of critical information infrastructure	Asset price collapse	Asset price collapse	Asset price collapse	Storms and cyclones	Severe income disparity	Severe income disparity	Income disparity	Interstate conflict with regional consequences
2nd	Chronic disease in developed countries	Middle East instability	Slowing Chinese economy (<6%)	Slowing Chinese economy (<6%)	Flooding	Chronic fiscal imbalances	Chronic fiscal imbalances	Extreme weather events	Extreme weather events
3rd	Oil price shock	Failed and failing states	Chronic disease	Chronic disease	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions	Unemployment and underemployment	Failure of national governance
4th	China economic hard landing	Oil and gas price spike	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises	Climate change	State collapse or crisis
5th	Asset price collapse	Chronic disease, developed world	Retrenchment from globalization (emerging)	Global governance gaps	Climate change	Water supply crises	Mismanagement of population ageing	Cyber attacks	High structural unemployment or underemployment

Likelihood

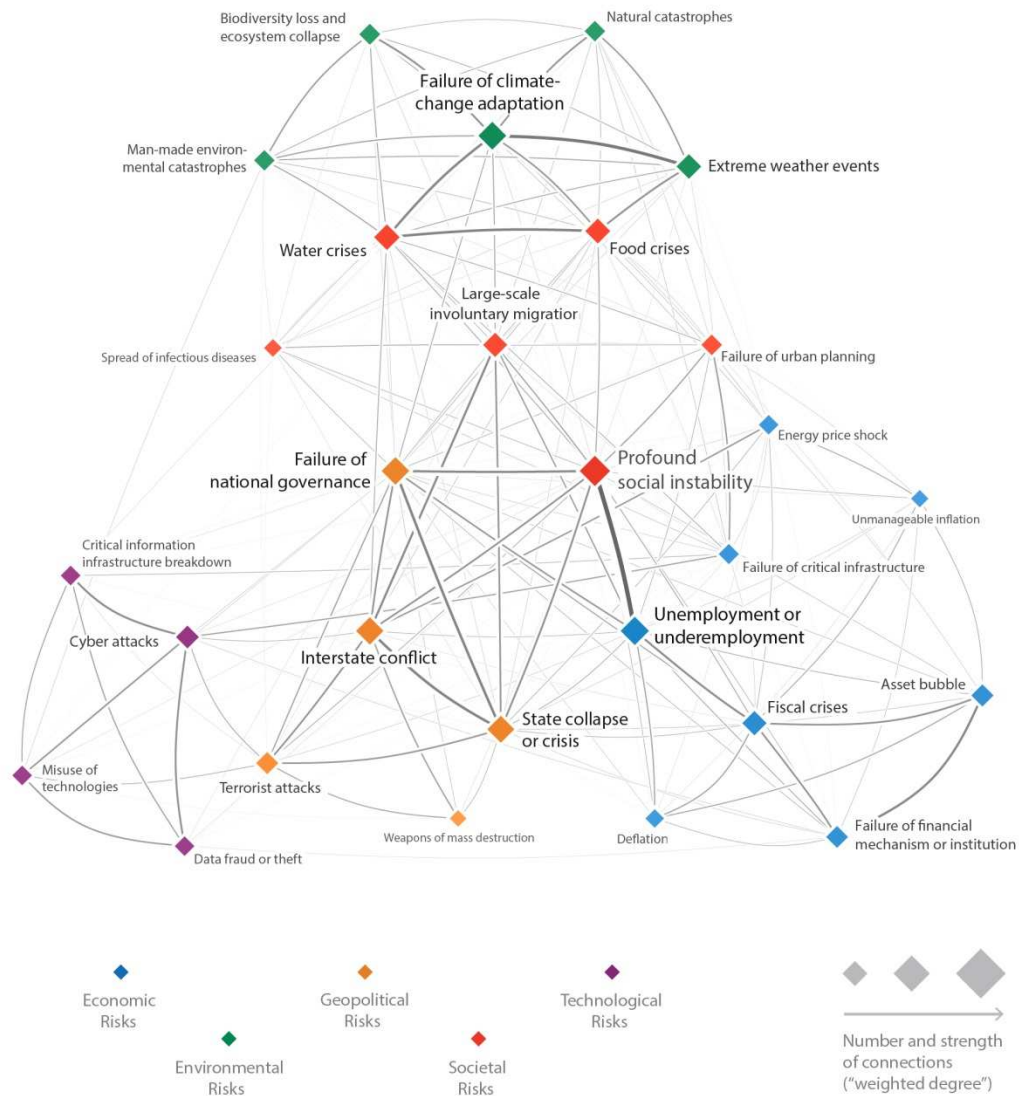
	2007	2008	2009	2010	2011	2012	2013	2014	2015
1st	Asset price collapse	Asset price collapse	Asset price collapse	Asset price collapse	Fiscal crises	Major systemic financial failure	Major systemic financial failure	Fiscal crises	Water crises
2nd	Retrenchment from globalization	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Climate change	Water supply crises	Water supply crises	Climate change	Rapid and massive spread of infectious diseases
3rd	Interstate and civil wars	Slowing Chinese economy (<6%)	Oil and gas price spike	Oil price spikes	Geopolitical conflict	Food shortage crises	Chronic fiscal imbalances	Water crises	Weapons of mass destruction
4th	Pandemics	Oil and gas price spike	Chronic disease	Chronic disease	Asset price collapse	Chronic fiscal imbalances	Diffusion of weapons of mass destruction	Unemployment and underemployment	Interstate conflict with regional consequences
5th	Oil price shock	Pandemics	Fiscal crises	Fiscal crises	Extreme energy price volatility	Extreme volatility in energy and agriculture prices	Failure of climate change adaptation	Critical information infrastructure breakdown	Failure of climate-change adaptation

Impact

The *Global Risks 2015* report

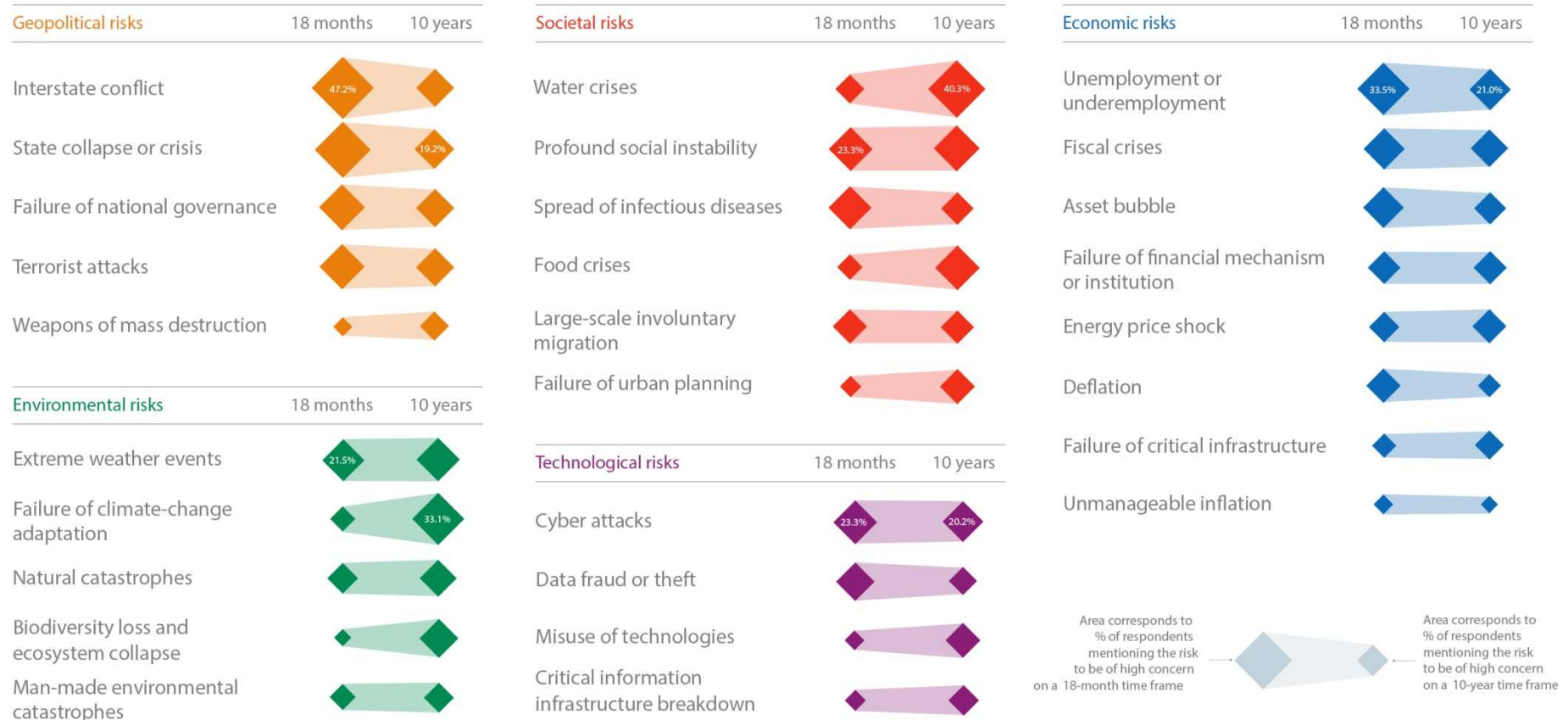
The Global Risks 2015 Interconnections Map

“A better understanding of global risks and the interconnections between them is key to prompting discussion about how to prepare, mitigate and prevent them.”



The *Global Risks 2015* report

Global Risks of Highest Concern



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Global Risks and Progress Made within the Last 10 Years



Least progress made in slow-burning issues – Environmental risks and social instability and migration

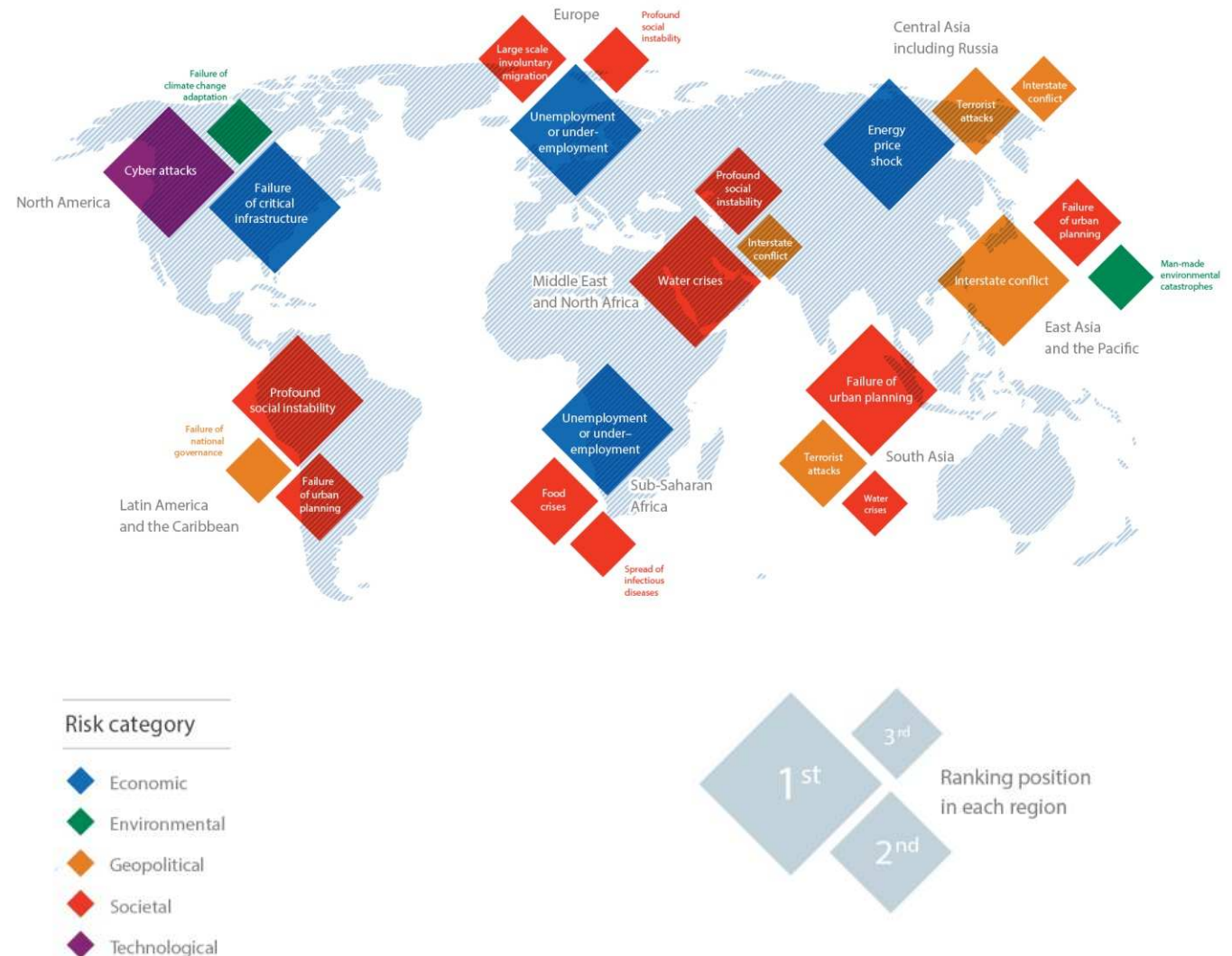


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For Which Global Risks Is Your Region Least Prepared ?

As most efforts to address global risks are undertaken at the national and regional levels, it is important to look at preparedness from a disaggregated perspective.

Societal challenges dominate the list of risks that survey respondents think their region is least well prepared for.



Part 2: Global Risks 2015
Risks in Focus

The *Global Risks 2015* report

Global Risks Arising from the Accelerated Interplay between Geopolitics and Economics

The new global context:

- ❖ The interplay between geopolitics and economics can create, reinforce and alter the nature of the interconnections between global risks affecting many areas of public policy and international cooperation.
- ❖ One of the drivers is the growing direct role of the state in the world economy (e.g. increasing state-led investments in other countries' infrastructure or strategic investments by sovereign wealth funds).

Selected risks:

Protectionist spiral

States are increasingly turning inwards: When countries face political and economic pressures at home, they tend to turn inwards which impacts their international economics policies

More regionalism:

States tend to focus on collaboration with like-minded countries to better pursue their economic and geopolitical goals (e.g. proliferation of regional trade initiatives)

Weakening of global Governance

Weakening collective resilience to global risks, which respect no national borders and require multilateral response (climate change, migration flows, Internet governance)

Challenges:

The potential consequences could be disruptions to international trade, threats to political cooperation and give rise to new global risks.

What can be done:

- ❖ Governments and businesses need to conduct “geopolitical due diligence” not to be caught off guard.
- ❖ Reduce barriers to international collaboration at all levels, business, civil society and political leaders.
- ❖ Strengthening trust is the key element to ensure and foster effective collaboration.

The *Global Risks 2015* report

Engineering the Future: how can the risks and rewards of emerging technologies be balanced?

Context:

- ❖ Accelerated speed and complexity of technological development (google's self-driving cars, speech recognition, drones, do-it-yourself synthetic biology contests)
- ❖ Far-reaching societal, economic and ethical implications

Selected risks:

Artificial Intelligence

- Short-term: Legal challenges (self-driving vehicles, ethical challenges (lethal autonomous weapons))
- Medium-term: Automation and employment (permanent unemployment as AI learns instantly, what skills will be needed, what does it mean for the structure of the economy)?

Synthetic biology

- Adverse effect on the ecosystem— living organisms are robust and invasive
- Leakage of dangerous substances through difficulties of containment
- Small technology => risks of terror

Challenges:

How to safeguard our safeguards –need for a global governance system

1. Timing challenge: Strike balance between precaution and innovation
2. Spatial challenge: National versus international versus supranational level?
3. Who regulates as technologies converge (M-healthcare, autonomous cars)?

What can be done:

- ❖ Evolving and adaptive regulatory systems should be designed in a flexible manner to take into account changing socio-economic conditions, new scientific insights and the discovery of unknown interdependencies.



Students at the iGEM competition 2014

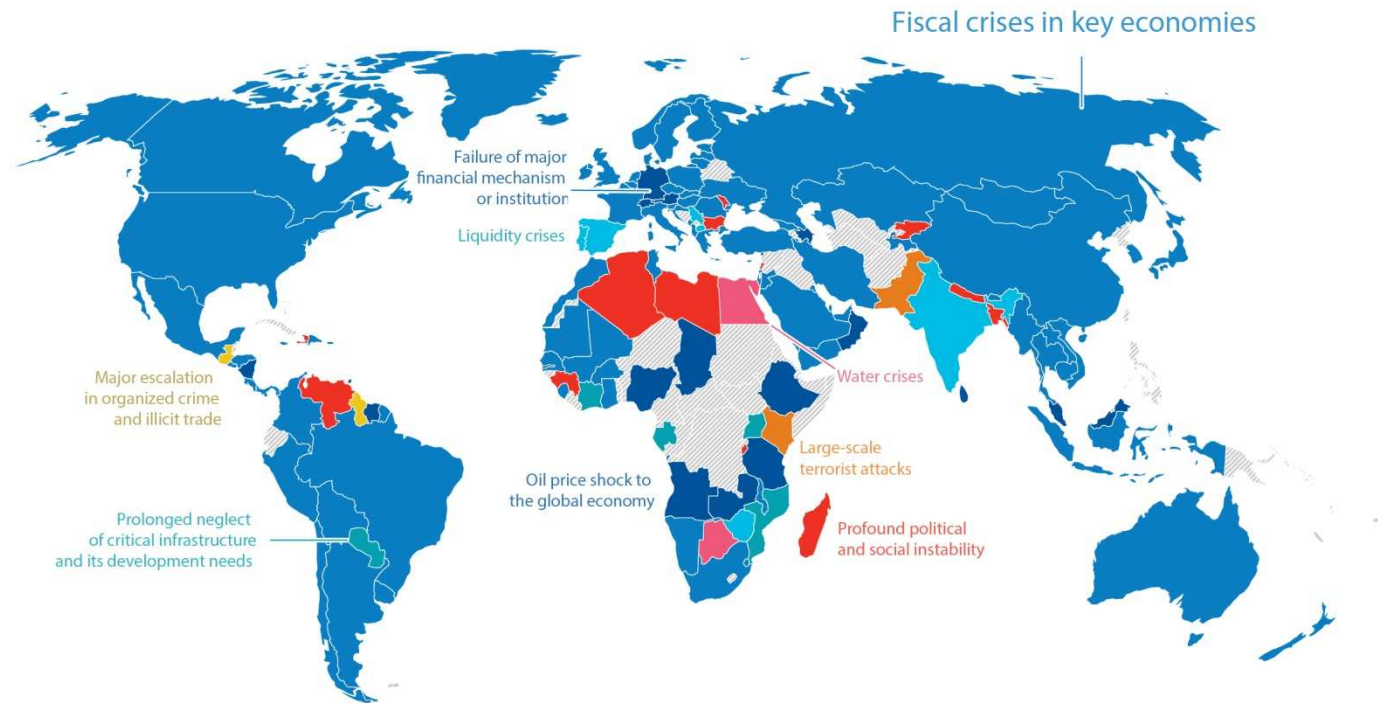
Source: *The New Yorker*, 5 Dec 2014

Part 3: Global Risks 2015
Risks for Doing Business

The *Global Risks 2015* report

Risks for Doing Business

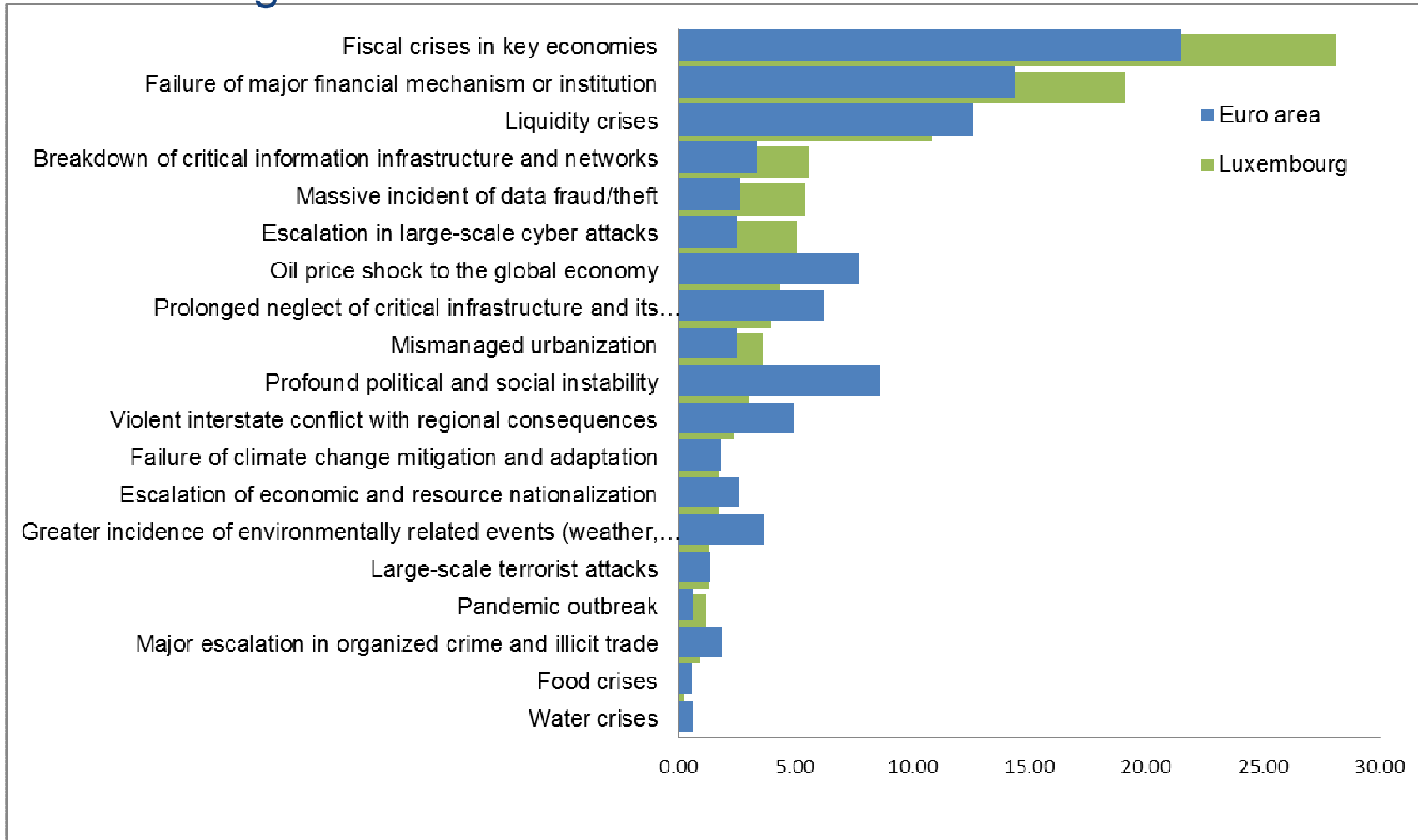
Views of the
Business
Community on the
Impact of Global
Risks on Their
Business



Explore the data at: www.weforum.org/risks

The *Global Risks 2015* report

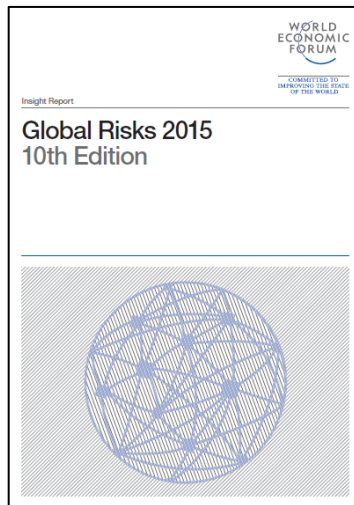
Global Risks of Highest Concern for Doing Business in Luxembourg



From the list of global risks above, respondents were asked to select the five global risks of highest concern for doing business in their economy and to rank them between 1 (most problematic) and 5. Reported scores correspond to the responses weighted according to their rankings.

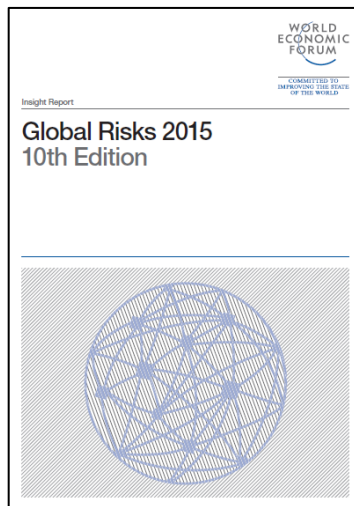
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Key Messages



- ❖ A quarter-century after the fall of the Berlin Wall, **interstate conflict** is once again the key risk in terms of likelihood and impact.
- ❖ **Social stability** is under threat from economic, environmental, technological and geopolitical risks, which are undermining trust and creating a vicious circle making **cooperation** within and between states more difficult.
- ❖ Mitigating risks and strengthening resilience to them is key, in particular through **public-private collaboration**. The year 2015 presents an unprecedented range of **opportunities** to take collective action to address global risks.

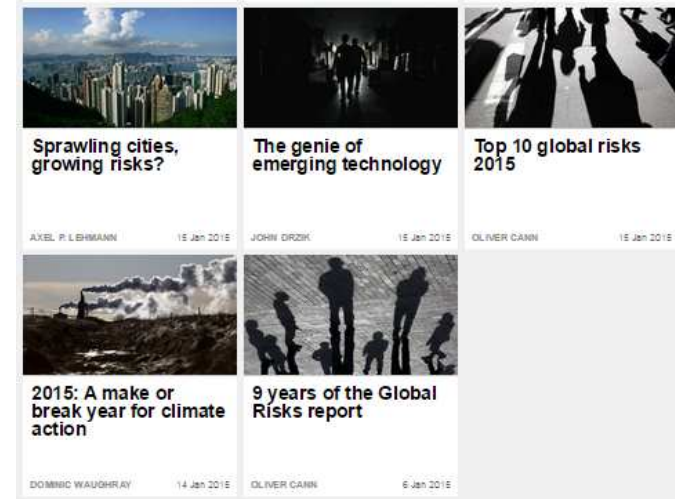
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Thank you !

Visit our website for further information, to explore the data, read the blogs and to download the Report:

www.weforum.org/risks



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City Limits: The Risks of Rapid and Unplanned Urbanization in Developing Countries



Context:

❖ The world is in the middle of a historical and fast transition from predominantly rural to urban living.

Challenges:

❖ Cities are points of convergence of many risks, which make them particularly vulnerable to chain reactions and amplify the interconnection between global risks.

Opportunities:

❖ Cities incubate innovation and drive economic growth
❖ They are considered the backbone of global trade and generate a large majority of the world's GDP.

Selected risks:

Infrastructure:

- Determinant of quality of life, social inclusion and economic opportunities
- Huge investment needed to sustain urban growth (mostly emerging countries)

Urban health

- Rise of infectious diseases (informal settlements)
- Non-communicable diseases and air pollution in urban centre increase the pressure on already fragile healthcare systems

Climate change

- Concentration of people, assets, critical infrastructure and economic activities in cities exacerbates natural catastrophes' damage, especially if informal settlements are involved

Social instability

- ❖ Combination of inequality, competition over scarce resources (e.g. land), and weak city governance increases the risk of violence and potential breakdowns in law and order.

Global Urban Population Growth

