



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

The Global Risks Report 2017

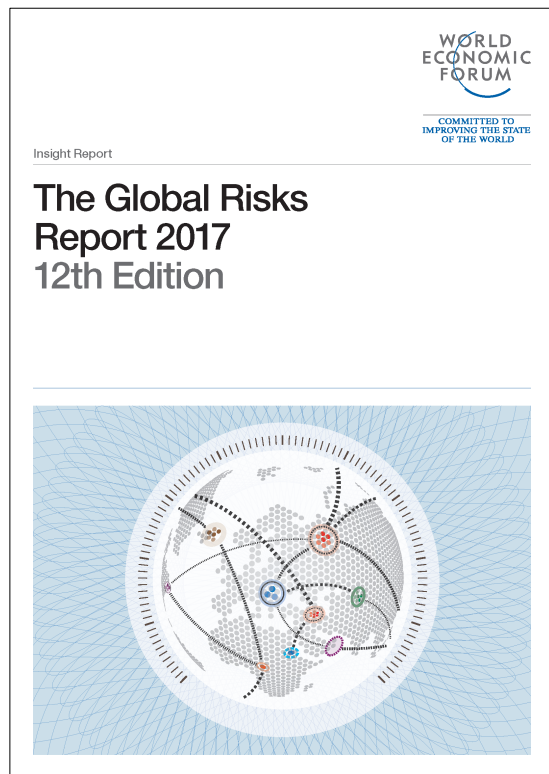
Luxembourg Association of Risk Managers

Aengus Collins | 03.07.2017

1. An overview of our approach
2. Headline risk perception results
3. Two thematic deep-dives
4. Looking ahead to 2018

An overview of our approach

Our current framework



- **The Global Risks Report**
 - Annual since 2006
 - Partners: Zurich Insurance; Marsh & McLennan
- **An annual snapshot of global risk perceptions**
 - Likelihood
 - Impact
 - Interconnections
 - Drivers
- **A series of articles on risks (or broad areas) of concern**
 - More scope for nuanced discussion, particularly with regard to complexity, uncertainty and ambiguity
 - This year we focused on:
 - social/political challenges
 - emerging technologies

The 30 global risks that we track



ECONOMIC

SOCIETAL

ENVIRONMENTAL

GEOPOLITICAL

TECHNOLOGICAL

- Asset bubbles in a major economy
- Deflation in a major economy
- Failure of a major financial mechanism or institution
- Failure/shortfall of critical infrastructure
- Fiscal crises in key economies
- High structural unemployment or underemployment
- Illicit trade (e.g. illicit financial flow, tax evasion, human trafficking, organized crime, etc.)
- Severe energy price shock (increase or decrease)
- Unmanageable inflation

The 30 global risks that we track



ECONOMIC
SOCIAL
ENVIRONMENTAL
GEOPOLITICAL
TECHNOLOGICAL

- Failure of urban planning
- Food crises
- Large-scale involuntary migration
- Profound social instability
- Rapid and massive spread of infectious diseases
- Water crises

The 30 global risks that we track



ECONOMIC
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- Extreme weather events (e.g. floods, storms, etc.)
- Failure of climate-change mitigation and adaptation
- Major biodiversity loss and ecosystem collapse
- Major natural disasters (e.g. earthquake, tsunami)
- Man-made environmental disasters (e.g. oil spills)

The 30 global risks that we track



ECONOMIC
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- Failure of national governance
- Interstate conflict with regional consequences
- Failure of regional or global governance
- Large-scale terrorist attacks
- State collapse or crisis (e.g. civil conflict, military coup)
- Weapons of mass destruction

The 30 global risks that we track



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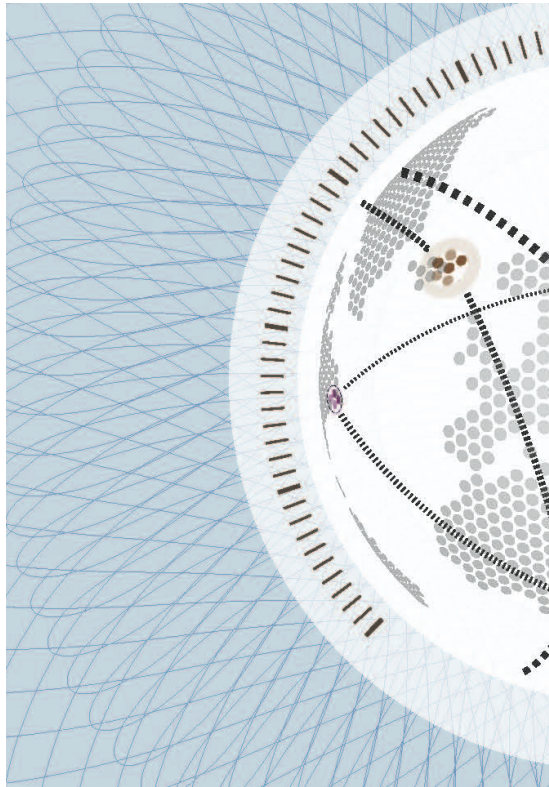
- Adverse consequences of technological advances
- Breakdown of critical information infrastructure
- Large-scale cyberattacks
- Massive incident of data fraud/theft

The 13 trends driving the global risk landscape



- Ageing population
- Changing landscape of international governance
- Changing climate
- Degrading environment
- Growing middle class in emerging economies
- Increasing national sentiment
- Increasing polarization of societies
- Rising chronic diseases
- Rising cyber dependency
- Rising geographic mobility
- Rising income and wealth disparity
- Rising urbanization
- Shifting power

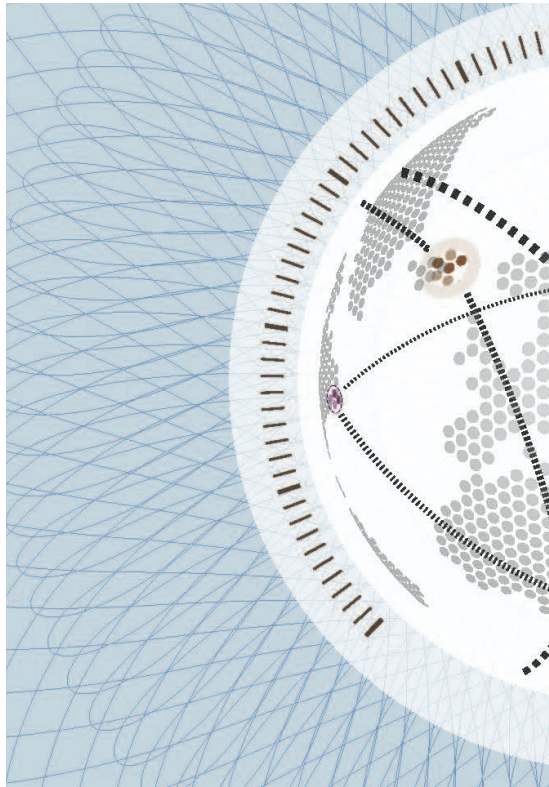
Thinking beyond individual risks



- **Isolated** **Individual risks**
Typically assessed for likelihood and impact
- **Connected** **Risk interconnections and drivers**
Opens up consideration of cascading risks
- **Complex** **Uncertainty, feedback loops, tipping points, spillovers, trade-offs, etc**
Systems as more than the sum of their parts

The global financial crisis and the UK's vote to leave the EU serve as useful illustrations of some of these complexity dynamics

Potential blind spots



1. Static processes
2. Weak signals
3. “In the day of prosperity, adversity is forgotten”

Headline risk perception results

Individual risks: environmental concerns moving to the forefront



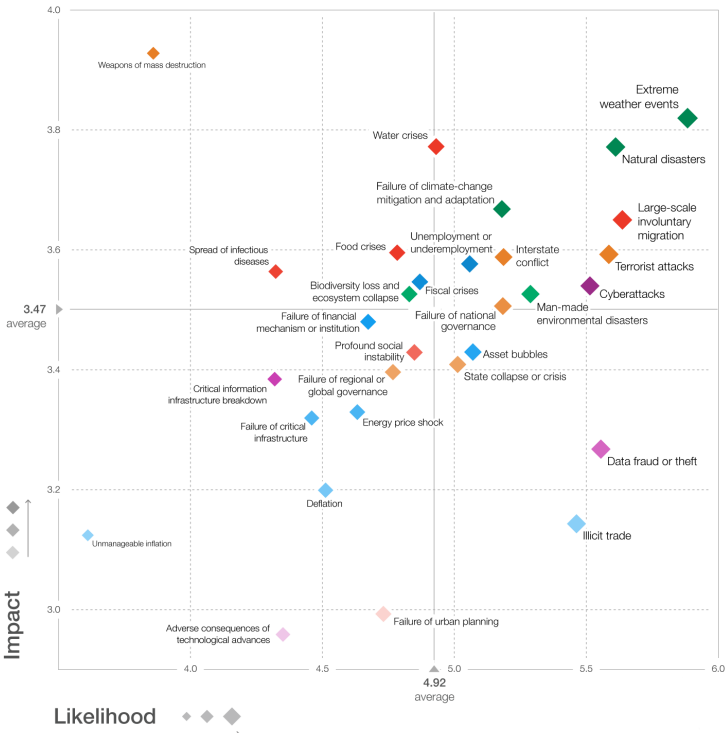
Risks assessed by likelihood and impact over a 10-year horizon

Top five by likelihood

- 1 Extreme weather events
- 2 Large-scale migration
- 3 Major natural disasters
- 4 Terrorist attacks
- 5 Massive data breach

Top five by impact

- 1 Weapons of mass destruction
- 2 Extreme weather events
- 3 Water crises
- 4 Major natural disasters
- 5 Failure of climate-change response



On the face of it, economic risks have faded



The evolution of the top-five risks

Top 5 Global Risks in Terms of Likelihood

	2007	2008	2009	2010
1st	Breakdown of critical information infrastructure	Asset price collapse	Asset price collapse	Asset price collapse
2nd	Chronic disease in developed countries	Middle East instability	Slowing Chinese economy (<8%)	Slowing Chinese economy (<6%)
3rd	Oil price shock	Failed and failing states	Chronic disease	Chronic disease
4th	China economic hard landing	Oil and gas price spike	Global governance gaps	Fiscal crises
5th	Asset price collapse	Chronic disease, developed world	Retrenchment from globalization (emerging)	Global governance gaps

Top 5 Global Risks in Terms of Impact

	2007	2008	2009	2010
1st	Asset price collapse	Asset price collapse	Asset price collapse	Asset price collapse
2nd	Retrenchment from globalization	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)
3rd	Interstate and civil wars	Slowing Chinese economy (<8%)	Oil and gas price spike	Oil price spikes
4th	Pandemics	Oil and gas price spike	Chronic disease	Chronic disease
5th	Oil price shock	Pandemics	Fiscal crises	Fiscal crises

■ Economic
 ■ Environmental
 ■ Geopolitical
 ■ Societal
 ■ Technological

This was the first year without an economic risk in either top five

But looking at the interconnections reveals economic concerns



The most frequently cited risk interconnections

Top five risk interconnections	
1	<ul style="list-style-type: none"> • Unemployment • Social instability
2	<ul style="list-style-type: none"> • Involuntary migration • State collapse or crisis
3	<ul style="list-style-type: none"> • Failure of climate-change response • Water crises
4	<ul style="list-style-type: none"> • Failure of national governance • Social instability
5	<ul style="list-style-type: none"> • Interstate conflict • Involuntary migration

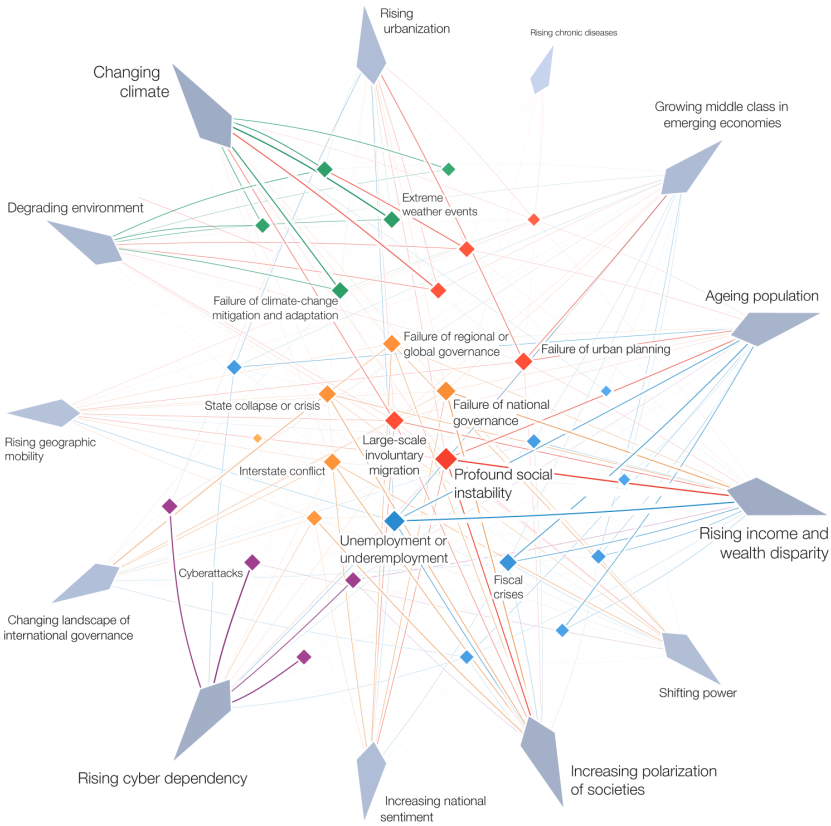


Inequality has overtaken climate change as the key driver



The trends expected to drive global events over the next 10 years

Top five trends driving developments	
1	Rising income and wealth disparity
2	Changing climate
3	Increasing polarization
4	Rising cyber dependency
5	Ageing population



Two thematic deep dives

Three chapters on emerging technologies

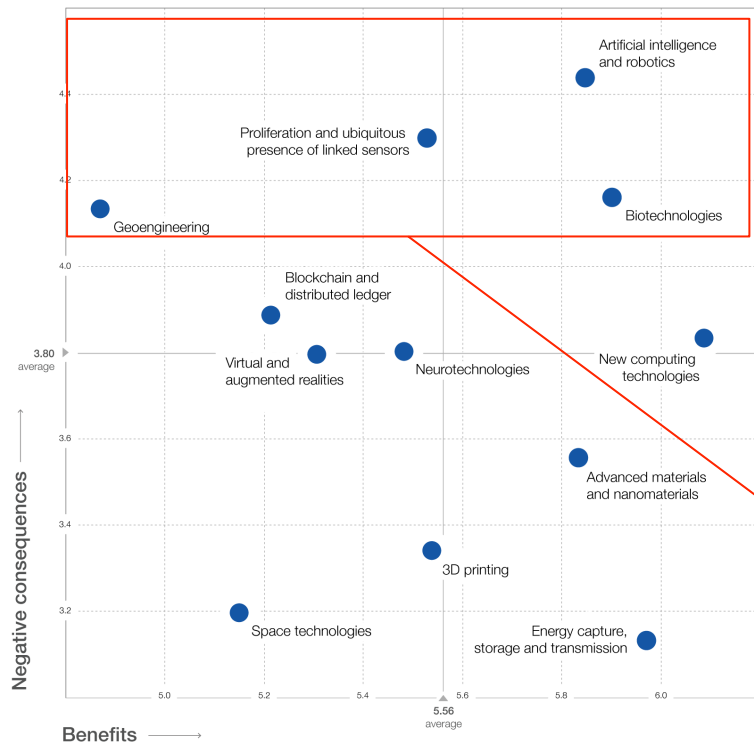


1. Understanding the Technology Risks Landscape
 - Blind spots, pace of change, etc
 - The need for new governance models

A new technology module points to optimism and uncertainty

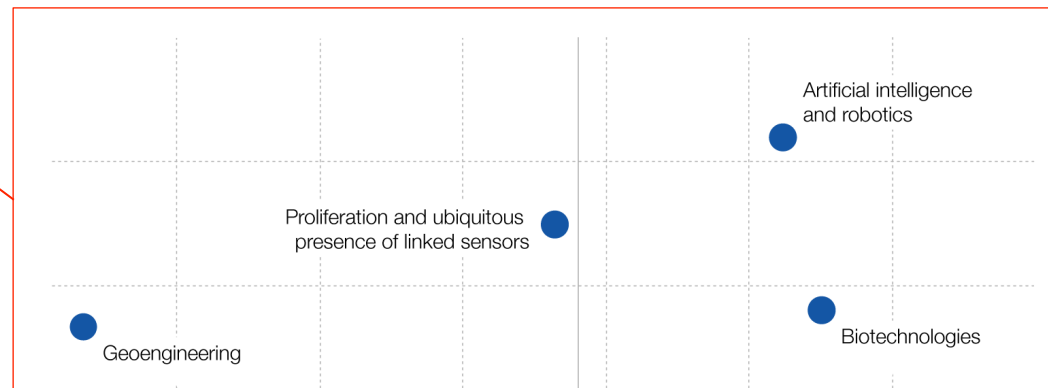


Respondents assessed 12 new technologies for benefits and negative consequences



Which emerging technologies require better governance?

- AI/robotics: 46%
- Biotech: 42%
- Average of the rest: 16%



Three chapters on emerging technologies



1. **Understanding the Technology Risks Landscape**
 - Blind spots, pace of change, etc
 - The need for new governance models

2. **Assessing the Risks of Artificial Intelligence**
 - Governance issues again, and the increasing importance of value alignment
 - Under-explored risks in the area of warfare and military strategy

3. **Evolving Physical Infrastructure Needs and Vulnerabilities**
 - Growing risk of cascading failures, particularly focused on electricity networks
 - Intensifying network complexity makes risk mapping/assessment more difficult

Three chapters on socio-political challenges



1. Western Democracy in Crisis?

- Dangers: polarization, insecurity, the post-truth turn
- Challenges: inclusive growth, long-term focus, identity/community

2. The Closing Space for Civil Society

- An under-appreciated trend over the past decade

3. The Future of Social Protection Systems

- Huge changes: technology, work, demographics, migration, interest rates
- New flexible systems needed for increasingly diverse life and career paths

Looking ahead to 2018

Building a new-look Global Risks Report



1. The traditional core of the report remains intact
2. Using the survey to generate more timely insights
3. A greater focus on sources of rapid and dramatic disruption
4. Revisiting some of the risks we have previously covered
5. More space for fresh thinking about risk

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