

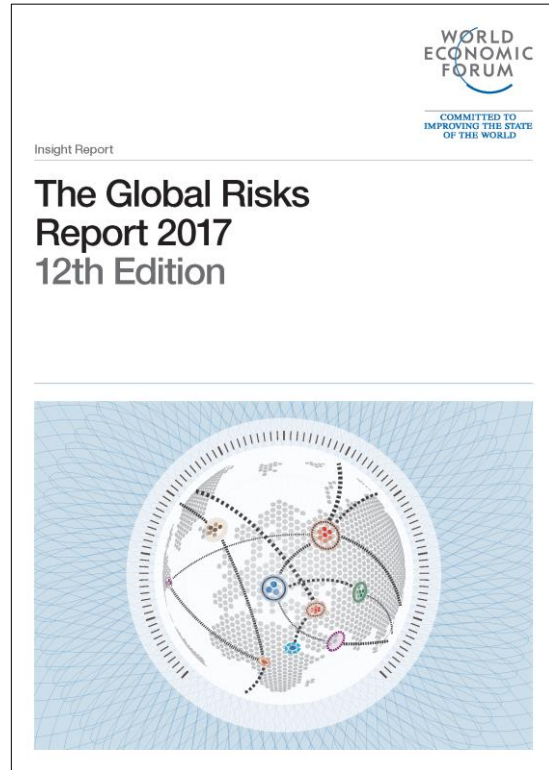


COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

The Global Context of Interconnected Risks and Challenges in a Fast Moving World: Implications for CBD

Dominic Waughray: Head of Public Private Partnership, World Economic Forum
2nd Bogis Bossy Dialogue for Biodiversity Chexbres Switzerland 4th March

The World Economic Forum Global Risks Report



- **The Global Risks Report**
 - Annual since 2006
 - Partners: Marsh & McLennan; Zurich Insurance
- **An annual snapshot of global risk perceptions**
 - Likelihood
 - Impact
 - Interconnections
 - Drivers
- **Encourages view of risks as not individual but interconnected into systems (or broad areas) of concern**
 - Enables 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

- 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

SOCIETAL

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

ENVIRONMENTAL

- 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)

TECHNOLOGICAL

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

GEOPOLITICAL

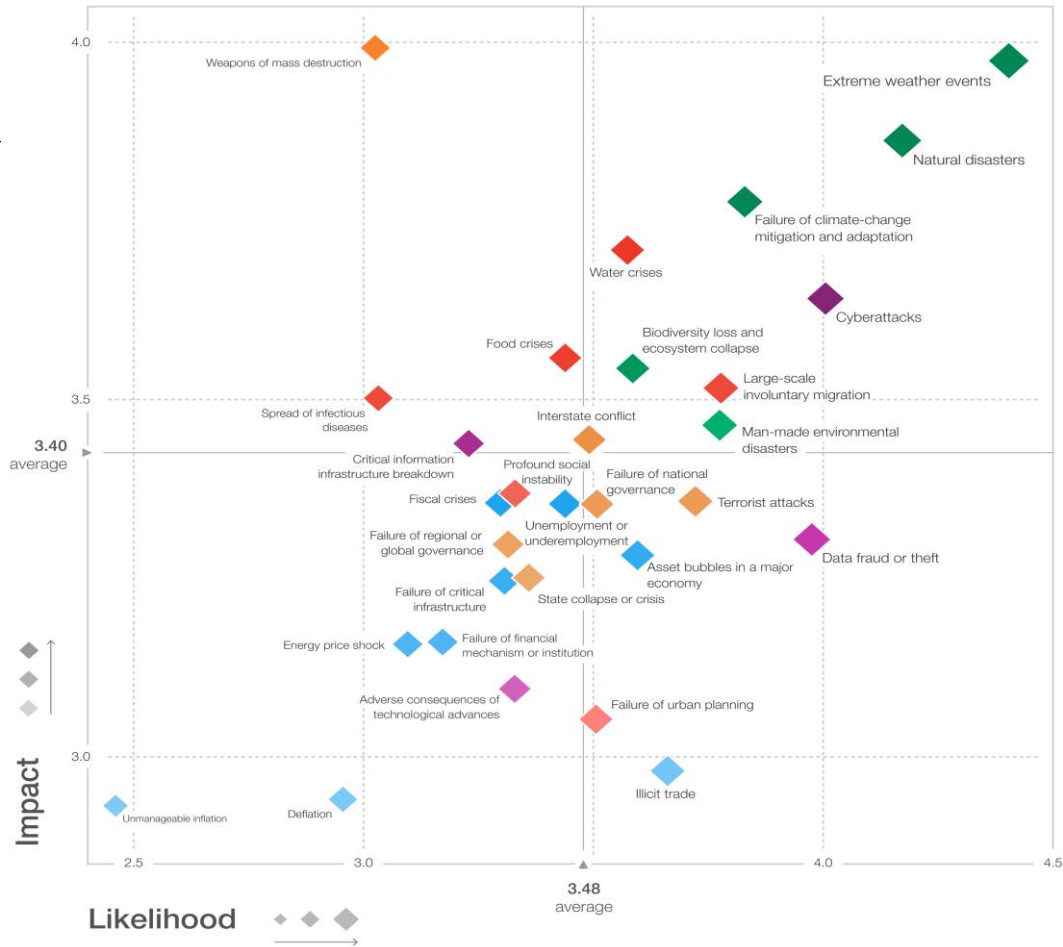
- Failure of national governance
- Interstate conflict with regional consequences
- Failure of regional or global governance
- Large-scale terrorist attacks
- State collapse or crisis (e.g. civil conflict, military coup)
- Weapons of mass destruction

The 13 trends driving the global risk landscape

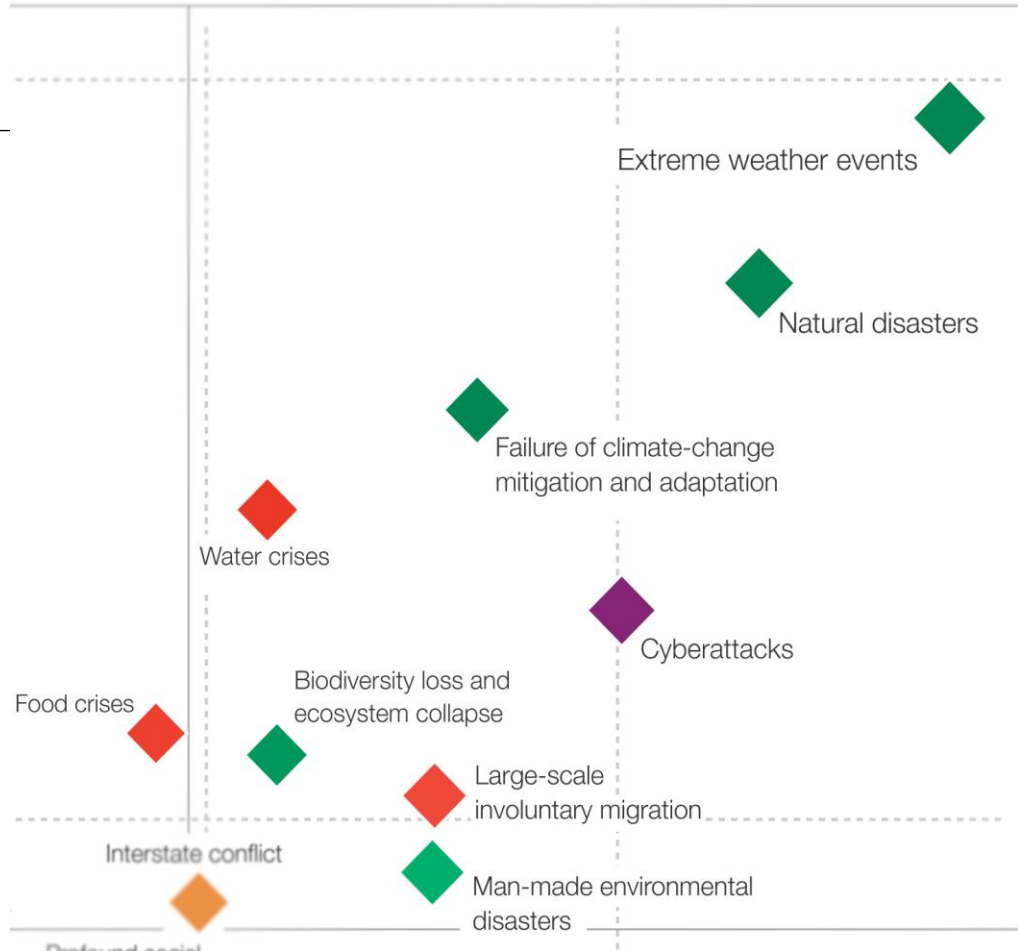


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- Ageing population
-
- Changing landscape of international governance
-
- **Changing climate**
-
- **Degrading environment**
-
- Growing middle class in emerging economies
-
- Increasing national sentiment
-
- Increasing polarization of societies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

Global Risk Landscape 2018



Global
Risk
Landscape
2018: top
right hand
quadrant



Global Risks Report

The 5 risks most likely to happen in the next 10 years

	rank
Extreme weather events	1
Natural disasters	2
Cyber attacks	3
Data fraud or theft	4
Failure of climate change mitigation & adaptation	5

Global Risks Report

The 5 risks that will have the biggest impact in the next 10 years

	rank
Weapons of mass destruction	1
Extreme weather events	2
Natural disasters	3
Failure of climate change mitigation & adaptation	4
Water crises	5

Top 5 Global Risks in Terms of Likelihood

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1st	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	Large-scale involuntary migration	Extreme weather events	Extreme weather events
2nd	Middle East instability	Slowing Chinese economy (<6%)	Slowing Chinese economy (<6%)	Flooding	Chronic fiscal imbalances	Chronic fiscal imbalances	Extreme weather events	Extreme weather events	Extreme weather events	Large-scale involuntary migration	Natural disasters
3rd	Failed and failing states	Chronic disease	Chronic disease	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions	Unemployment and underemployment	Failure of national governance	Failure of climate-change mitigation and adaptation	Major natural disasters	Cyberattacks
4th	Oil and gas price spike	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises	Climate change	State collapse or crisis	Interstate conflict with regional consequences	Large-scale terrorist attacks	Data fraud or theft
5th	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	Major natural catastrophes	Massive incident of data fraud/theft	Failure of climate-change mitigation and adaptation

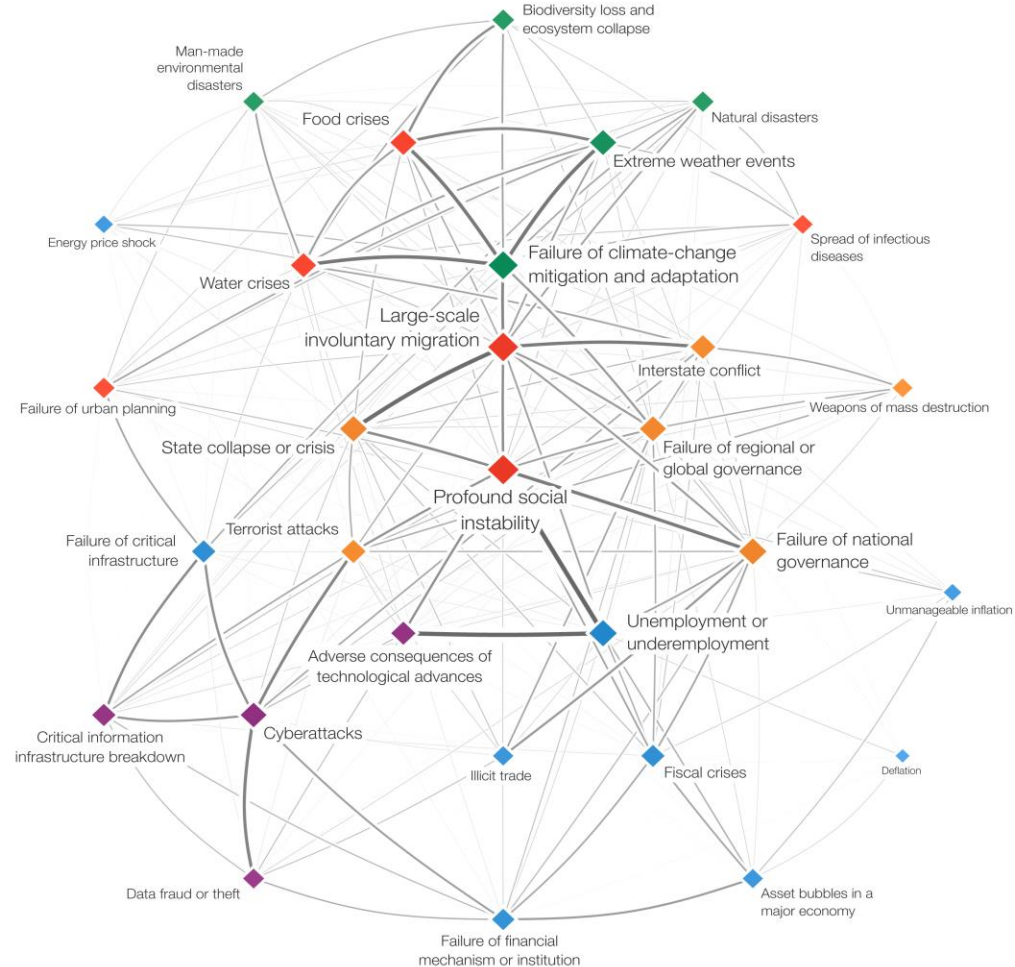
Top 5 Global Risks in Terms of Impact

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1st	Asset price collapse	Asset price collapse	Asset price collapse	Fiscal crises	Major systemic financial failure	Major systemic financial failure	Fiscal crises	Water crises	Failure of climate-change mitigation and adaptation	Weapons of mass destruction	Weapons of mass destruction
2nd	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	Weapons of mass destruction	Extreme weather events	Extreme weather events
3rd	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	Water crises	Water crises	Natural disasters
4th	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	Large-scale involuntary migration	Major natural disasters	Failure of climate-change mitigation and adaptation

The most frequently cited risk interconnections

Top five risk interconnections

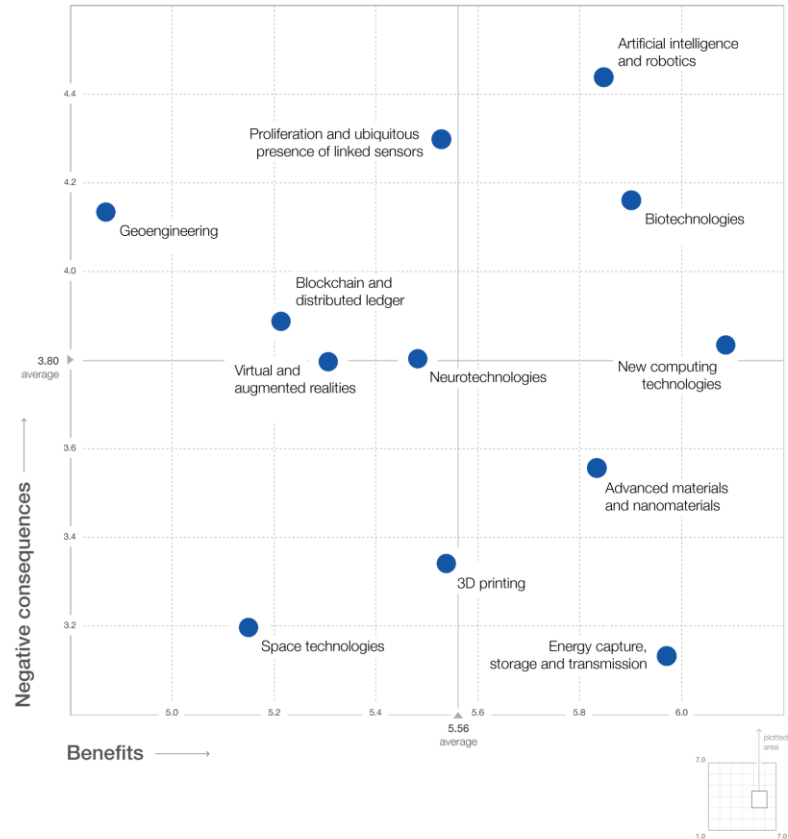
- | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <ul style="list-style-type: none"> Biodiversity loss and ecosystem collapse Food crises |
| 2 | <ul style="list-style-type: none"> Extreme weather events Failure of climate change mitigation and adaptation |
| 3 | <ul style="list-style-type: none"> Water crises Large-scale involuntary migration |
| 4 | <ul style="list-style-type: none"> Interstate conflict Profound social instability Failure of national governance |
| 5 | <ul style="list-style-type: none"> Unemployment or underemployment Adverse consequences of technological advances |



Fourth Industrial Revolution points to optimism and uncertainty

Respondents assessed 12 new technologies for benefits and negative consequences

- **AI, Robotics and Biotechnologies**
 - Offer biggest opportunities but biggest risks
 - Opens a door for policy
- **Anecdotal evidence**
 - Pace and complexity of technological change is overwhelming
- **Low-hanging fruit?**
 - Energy storage – a renewable energy revolution for farmers?



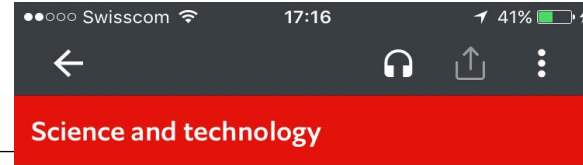
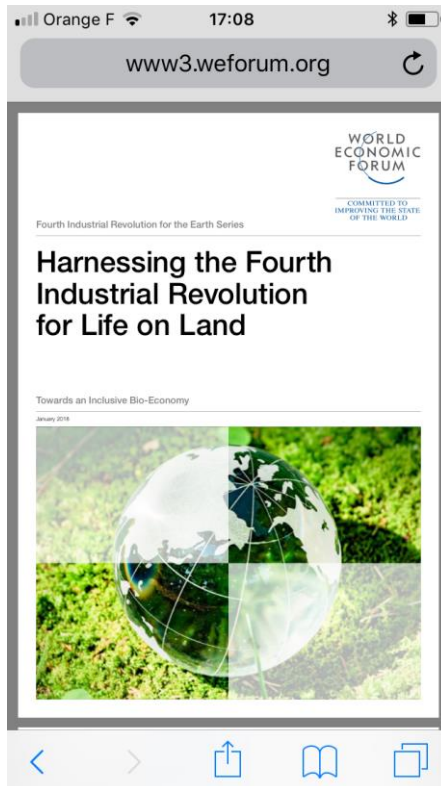
“Climate and tech pose the biggest risks to our world in 2018”

[Alison Martin](#) Group Chief Risk Officer, Zurich Insurance Group

Meat: The Future



Fourth Industrial Revolution and the Bio-economy



Genomics Sequencing the world

WASHINGTON, DC

An ambitious effort to map, store and disseminate genetic information about much of life on Earth gets under way



IN NOVEMBER 2015, 23 of biology's bigwigs met up at the Smithsonian Institution, in

The Internal Combustion Engine was King – until it wasn't.





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Thank you

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