Lloyd’s City Risk Index

Launch event

6 June 2018, London
Lloyd’s City Risk Index

Inga Beale, CEO, Lloyd’s

6 June 2018, London
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Lloyd’s City Risk Index explained

Trevor Maynard, Head of Innovation, Lloyd’s

6 June 2018, London
What is the Lloyd’s City Risk Index?

• A unique partnership with University of Cambridge’s Centre for Risk Studies
• Measures the impact of 22 risks on the GDP of 279 major cities across the world, which together generate 41% of global economic output
• Shows policymakers, businesses, and communities how risk events could affect the economy of their city
• Provides brokers and risk managers with a compelling argument for the value of insurance
Why is it important?

- Wealth is concentrating in urban environments
- More than half of the world’s population now live in cities
- Cities account for 80% of global GDP
- Perils which strike cities can also have serious national economic consequences
What is the index measuring?

- **GDP@Risk**
  - is the average annual loss (also known as the ‘expected loss’) to a selected location’s economic output from each threat or threat category

- **Total GDP@Risk**
  - is the expected loss to a selected city/country/region’s economic output from all 22 threats

- **% of GDP@Risk**
  - is the percentage of annual GDP@Risk in a city as a proportion of its projected annual GDP
Key findings

- Total GDP@Risk from all threats $546.5bn
- Man-made threats account for 59% of all global GDP@Risk; natural threats 41%
- Market crash is the largest single threat at $103.3bn
- The majority of risk is concentrated in a few cities: just 10 cities account for almost a quarter of all GDP@Risk
- Tokyo has the largest GDP@Risk $24.3bn
- Climate-related risks together account for $123.0bn GDP@Risk
- Stronger resilience could prevent cities from losing $73.4bn
Exploring Lloyd’s City Risk Index

Welcome to Lloyd’s City Risk Index

The Lloyd’s City Risk Index shows how much economic output 279 cities would lose annually (GDP(Risk)) from 22 man-made and natural threats. Watch the video to find out more and click on the Explore tab to see the results.

Latest news

Man-made risks forecast to cost world’s cities £320bn each year on average
Building resilience to human pandemics
Water shortages put cities under pressure

lloyds.com/cityriskindex
Building resilience – next steps

• Improved resilience could save $73.4bn each year
• Insurance is part of the solution by providing cash injection following a catastrophic event
• Risk mitigation pre-event is important
• Insurers and brokers must invest in developing new products
• While no city can be completely risk free, the index shows active risk management can minimise the effect on GDP
Methodology behind the numbers

Dr Andrew Coburn,
Director of Advisory Board, Cambridge Centre for Risk Studies
World’s cities by GDP 2018
GDP growth rates
## Threats

### Finance, economics and trade
- Market crash
- Sovereign crisis
- Commodity prices

### Natural catastrophe and climate
- Earthquake
- Tropical windstorm
- Temperate windstorm
- Tsunami
- Flood
- Volcanic eruption
- Drought
- Freeze
- Heatwave

### Technology and space
- Nuclear accident
- Power outage
- Cyber attack
- Solar storm

### Geopolitics and security
- Interstate conflict
- Terrorism
- Civil conflict
- Social unrest

### Health and humanity
- Human pandemic
- Plant epidemic
Threat mapping

- Earthquake
- Volcano
- Windstorm
- Flood
- Interstate war
- Terrorism
- Cyber attack
- Social unrest
- Market crash
- Sovereign default
- Human epidemic
- Solar storm
How a catastrophe impacts a city’s economy
GDP@Risk
Change in risk over time
How risk is changing

- Increasing threat of geopolitical risk in many parts of the world
- Threat of civil conflict to emerging economies
- Potential for interstate war is higher than at any time post-WWII
- Technology threat – cyber risk – is spreading to all the advanced economies
- Market risk has been decreasing, with regulatory compliance, but is re-emerging with potential Eurozone crises and democratic popularism on the rise
- Health risks are reducing, relative to exposure increase, because of better disease surveillance and pandemic preparedness measures
Risk reduction from improving resilience
Lloyd’s City Risk Index

Panel discussion / Q&A

Chaired by Trevor Maynard, Head of Innovation, Lloyd’s, with panellists:

- Tina Kirby, Head of Innovation and Product Development, Beazley Group
- Elizabeth Mercer, Chief Strategy Officer, 100 Resilient Cities
- Prof Daniel Ralph, Academic Director, Cambridge Centre for Risk Studies
- Jo da Silva, Director of International Development, Arup
Closing remarks

Trevor Maynard, Head of Innovation, Lloyd’s