RISK FLASHES FOR
2019

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2019 Global Risk Index

Measure impact of 22 threats on cities that contribute to 41% of global GDP

Number of Cities: 279
GDP: $36.8 trn (2019)
Outlook Period: 3 years

Annual update of GDP@Risk:


Annual GDP@Risk: $577 bn
Percent GDP@Risk: 1.57% of 2019 GDP

Number of Cities: 279
GDP: $36.8 trn (2019)
Outlook Period: 3 years
GDP@Risk - Methodology

City GDP Projection
Oxford Economics (OEM)

Threat Assessment
Evidence Base

Threat Vulnerability
Evidence Base

Rate of Recovery
INFORM, Sigma, OEM

= Expected GDP@Risk Loss
GDP@Risk - Methodology

City GDP Projection

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Expected GDP@Risk Loss

Oxford Economics (OEM)

% GDP Change 2019

-7% 0% 14%

Top Cities by % GDP Change

Top 5
1. Tripoli, Libya
2. Bangalore, India
3. Hyderabad, India
4. Surat, India
5. Chennai, India

Bottom 5
1. Caracas, Venezuela
2. Maracaibo, Venezuela
3. Maracaibo, Venezuela
4. Buenos Aires, Argentina
5. Konya, Turkey
GDP@Risk - Methodology

City GDP Projection
Oxford Economics (OEM)

Threat Assessment
Evidence Base

- Earthquake
- Tsunami
- Volcano
- Drought

Threat Vulnerability
Evidence Base

- Windstorm
- Freeze
- Flood
- Heatwave

Rate of Recovery
INFORM, Sigma, OEM

- Market Crash
- Sovereign Default
- Commodity Price Shock

Expected GDP@Risk Loss

- Interstate War
- Civil Conflict
- Terrorism
- Social Unrest
- Power Outage
- Cyber Attack
- Solar Storm
- Nuclear Accident
- Human Pandemic
- Plant Epidemic
GDP@Risk - Methodology

- Each city is assigned a rate of recovery score based on three core components
- Threat vulnerability + Rate of recovery = Resilience

<table>
<thead>
<tr>
<th>Resilience</th>
<th>Rate of Recovery</th>
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</thead>
<tbody>
<tr>
<td>Threat Vulnerability (CRS)</td>
<td>Socio-Economic</td>
</tr>
<tr>
<td>Vulnerability (INFORM)</td>
<td>Lack of Coping Capacity (INFORM)</td>
</tr>
</tbody>
</table>

- Development deprivation
- Inequality
- Aid dependency
- Upward people
- Other fragile groups
- Disaster Risk Reduction
- Governance
- Communication
- Physical infrastructure
- Access to health systems
- City GDP per capita (OEM)
- Non-Life Insurance Penetration (Sigma)
GDP@Risk - Methodology

City GDP Projection
Oxford Economics (OEM)

Threat Assessment
Evidence Base

Threat Vulnerability
Evidence Base

Rate of Recovery
INFORM, Sigma, Fiscal

= Expected GDP@Risk Loss

City GDP

City GDP Projections

Threat Assessment
Expected Loss
GDP@Risk

Threat Vulnerability

Rate of Recovery

2018 2019 2020 2021 2022 2023 2024