

Lloyd's City Risk Index 2015-2025

Lloyds.com/cityriskindex **Understand the risks**

3 September 2015



Geographical spread

- ➤ 301 cities
- 50 cities analysed in greater depth
- Downloadable city factsheets





A range of threats

Three threat types:

- Manmade
- Natural
- Emerging

Beyond natural catastrophes

See

www.lloyds.com/emergingrisks



What is GDP@Risk?

It is:

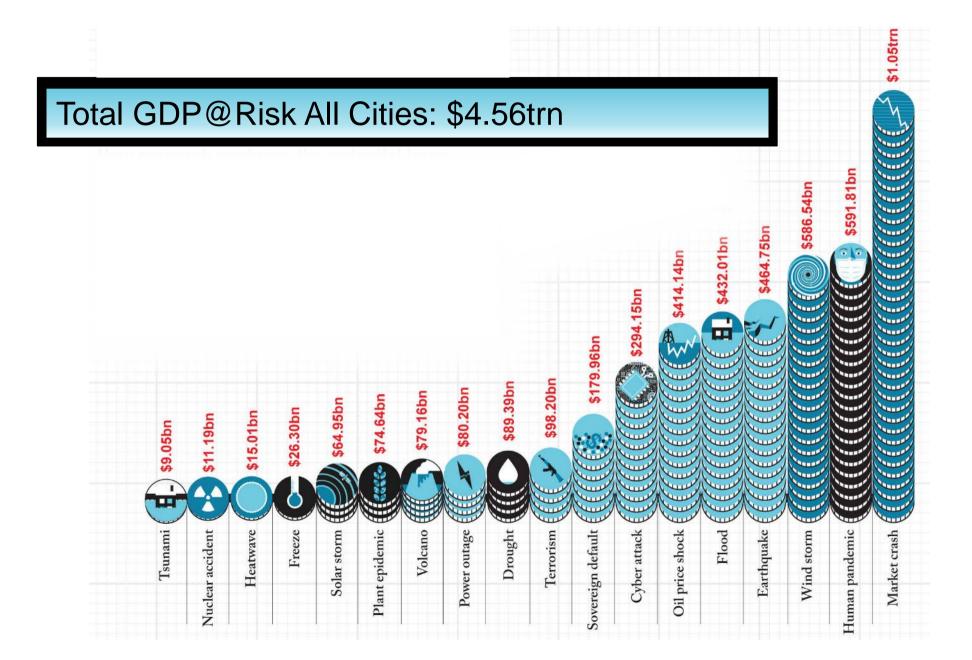
- Risk = Probability x Threat
- An "expectation" (statistical usage, not common usage)
- ► The long run value of the (10 year) average
- Similar to a "technical premium" (ex capital charge)

It is NOT:

- Loss given the event has occurred
- A disaster scenario
- The worst that can happen



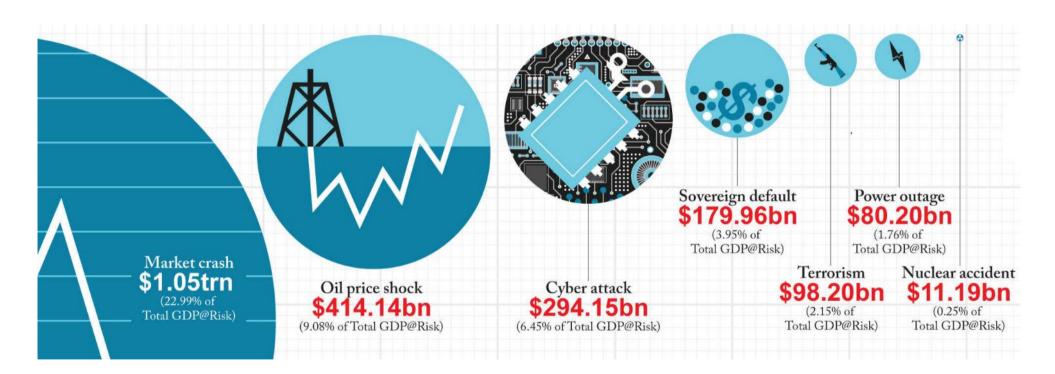
Sum over threats for total GDP@Risk



Key trends

Manmade threats are becoming increasingly significant

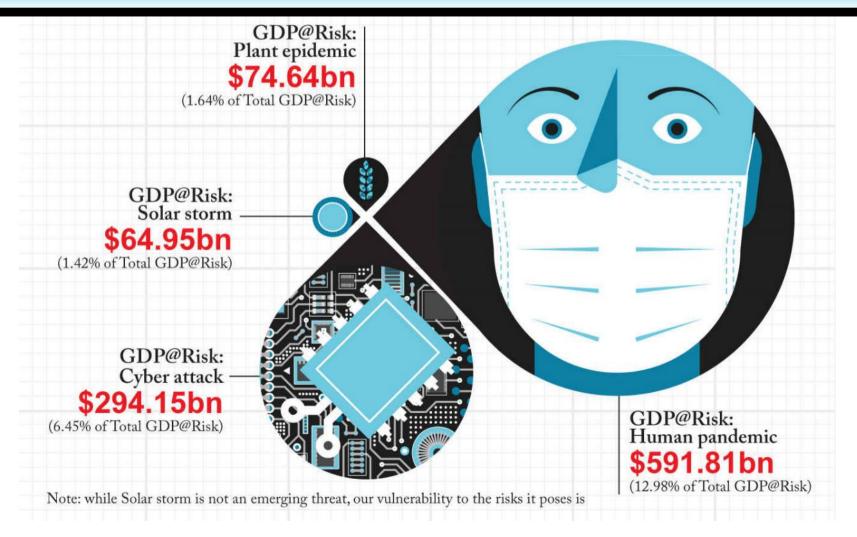
Total GDP@Risk: \$2.13trn



Key trends

New or emerging threats are having a growing impact

Total GDP@Risk: \$1.03trn

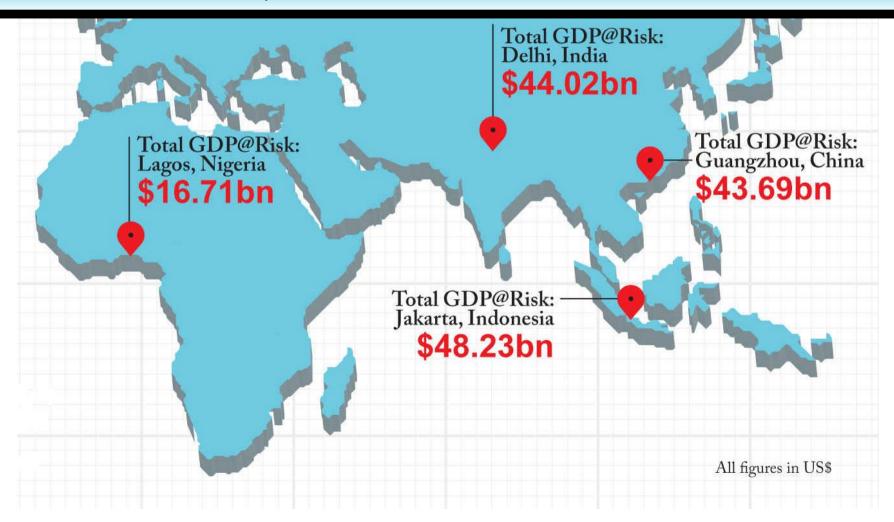




Key trends

Emerging economies have the most to lose

Total GDP@Risk: \$3.26trn





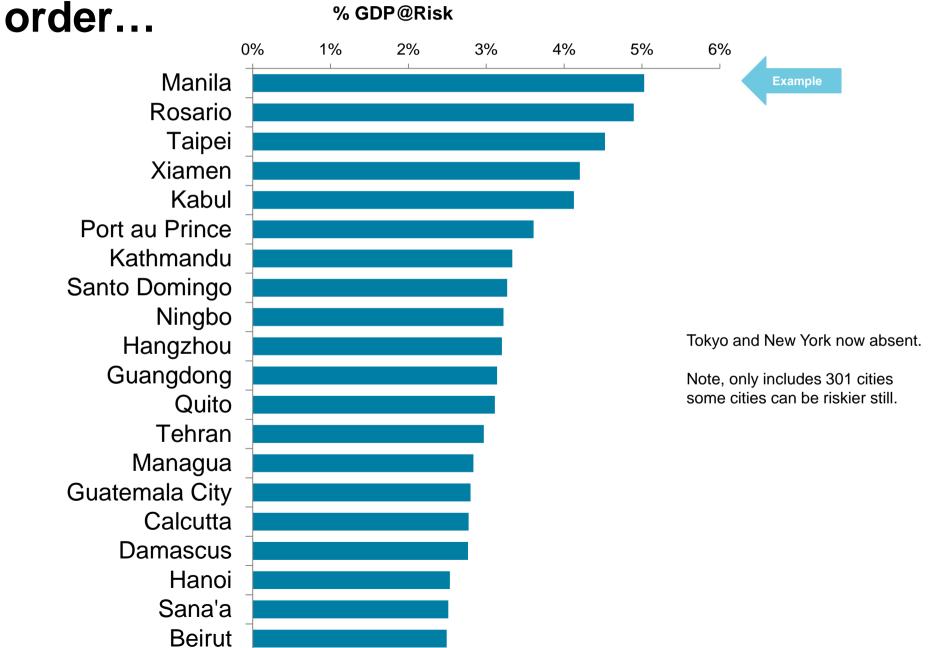
GDP @ Risk – Nominal values gives one

order....

GDP@Risk: Top 20 cities x All threats							
1	Taipei	\$181.20bn					
2	Tokyo	\$153.28bn					
3	Seoul	\$1 03.50bn					
4	Manila	\$1 01.09bn					
5	New York	\$90.36bn					
6	Los Angeles	\$90.32bn					
7	Istanbul	\$82.50bn					
8	Osaka	\$79.32bn					
9	Shanghai	\$78.21bn					
10	Hong Kong	\$74.51bn					
11	Lima	\$69.36bn					
12	Tehran	\$64.14bn					
13	Sao Paulo	\$62.95bn					
14	Mexico City	\$60.74bn					
15	Moscow	\$55.77bn	۱,				
16	Paris	\$54.94bn					
17	London	\$53.43bn					
18	Singapore	\$51.11bn					
19	Buenos Aires	\$50.31bn					
20	Jakarta	\$48.23bn					
Colombia							



GDP @ risk as % of GDP gives a different





Underlying analysis suggests Manila has "weak resilience"



Manila, Philippines categorized as '4: Weak Resilience'

Recovery of the economy after a disaster depends on

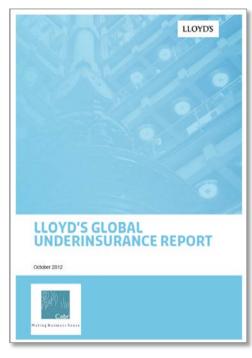
- Access to recovery finance
- Economic spare capacity
- Capital infrastructure
- Social cohesion
- Governance capability

Insurance plays a key role in providing recovery finance

Our previous research highlights considerable underinsurance

Table 3 - Benchmarked insurance coverage (2011)

Rank	Country	Benchmarked insurance coverage	Underinsurance (US\$ bn)	Rank	Country	Benchmarked insurance coverage	Underinsurance (US\$ bn)
1	Netherlands	8.01	-	22	Norway	0.25	-
2	New Zealand	3.05	-	23	Malaysia	0.15	-
3	South Korea	2.55	-	24	United Arab Emirates	0.08	-
4	United States	2.53	-	25	Singapore	0.08	-
5	Canada	2.47	-	26	Hong Kong	-0.03	\$0.08
6	Germany	2.11	-	27	Poland	-0.15	\$0.78
7	Austria	1.67	-	28	Colombia	-0.17	\$0.57
8	United Kingdom	1.60	-	29	Thailand	-0.41	\$1.41
9	Australia	1.39	-	30	Brazil	-0.51	\$12.68
10	Denmark	1.36	-	31	Mexico	-0.67	\$7.78
11	Spain	1.05	-	32	Saudi Arabia	-0.93	\$5.35
12	South Africa	1.02	-	33	Chile	-0.97	\$2.40
13	Taiwan	0.97	-	34	China	-1.09	\$79.57
14	Ireland	0.75	-	35	Nigeria	-1.11	\$2.64
15	Italy	0.62	-	36	India	-1.18	\$19.72
16	Argentina	0.44	-	37	Turkey	-1.31	\$10.23
17	Israel	0.44		38	Egypt	-1.36	\$3.20
18	Sweden	0.44	-	39	Philippines	-1.36	\$2.90
19	Japan	0.43	-	40	Vietnam	-1.38	\$1.69
20	France	0.39	-	41	Indonesia	-1.67	\$14.12
21	Russia	0.34	-	42	Bangladesh	-2.64	\$2.99
	Total underinsurance		-		Total underinsurance		\$168.11



October 2012

Benchmarked insurance coverage = Insurance penetration less expected nat cats less benchmark minimal insurance spend

Source: "EM-DAT", World Bank, Sigma, CEBR analysis



If Manila improved its 'resilience' it's GDP@Risk would fall dramatically

	Total \$GDP@Risk (Bn)	World Ranking by \$GDP@Risk	as % of total GDP 2015-2025	World Ranking by % of GDP
Resilience 'Weak'	\$101.09	4	5.03%	1
Resilience Improved from 'Weak' to 'Moderate'	•		4.40%	2
Resilience Improved from 'Weak' to 'Very Strong'	\$70.41	10	3.50%	5

Improving resilience by one grade: saves **\$12 Bn** of expected economic loss over the next decade

'Moderate resilience' countries include: Thailand, Malaysia, and Colombia



If Manila improved both its 'resilience' and 'economic vulnerability'

	Total \$GDP@Risk (Bn)	World Ranking by \$GDP@Risk	as % of total GDP 2015-2025	World Ranking by % of GDP
Today	\$101.09	4	5.03%	1
Improves resilience and economic vulnerability by one grade	\$58.07	13	2.89%	13
Develops the resilience and economic vulnerability of Los Angeles	\$27.47	42	1.37%	101

Building resilience

Contribution of insurance:

Improves the sustainability of an economy

Leads to greater rates of growth

- ▶ De-risks governments and business
- Takes the financial burden of recovery off the taxpayer

How does the Index help businesses?

Identifies the key catastrophe threats in locations where they do business worldwide

Shows the threat to the economy in each location

Informs contingency planning of operations

How does the Index help city officials?

Identifies the key threats to a city's projected economic output

Highlights value of Risk mitigation

► Efficient Resource deployment

Lloyd's insurance cover

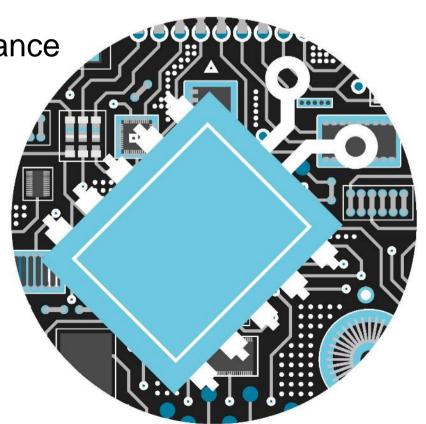
Examples include:

Cyber attack – business interruption

Drought – crop and agriculture insurance

► Flood and earthquake – commercial and residential property insurance

Oil price shock – trade credit insurance



Assumes the final slides are the "fall back" slides that I sent over before — these will only be used if the live link fails

