



**Asia-Pacific
Economic Cooperation**

2019/EPWG/DIA/011

Agenda Item: 8.2

Insurance for Disaster Risk Management

Submitted by: Japan



**APEC Resilience Week
Taipei, Chinese Taipei
30 September - 2 October 2019**

Policy Dialogue 2

– Global Value Chain and Supply Chain Resilience through Public Private Partnership

Insurance for Disaster Risk Management

APEC Resilience Week

30th September 2019



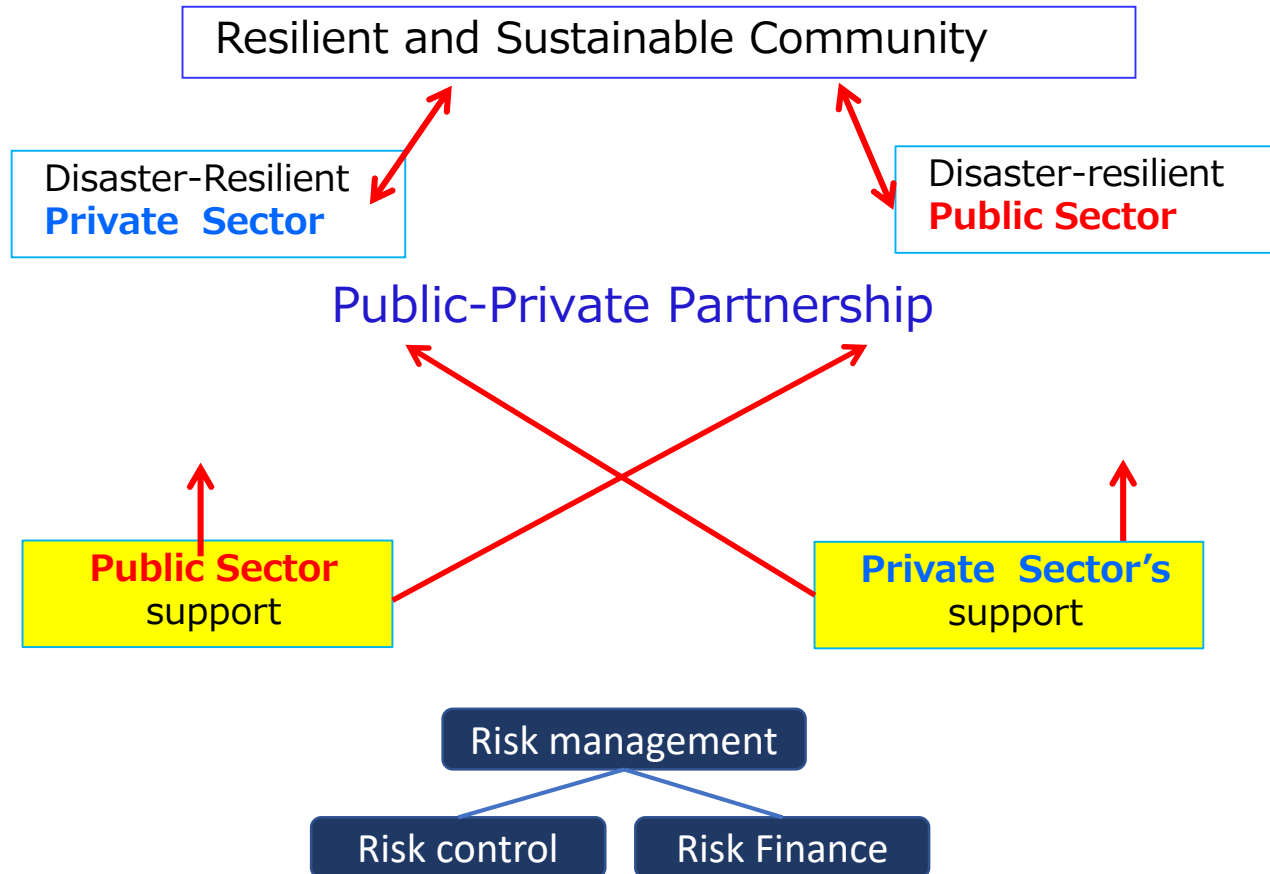
Mitsubishi Corporation Insurance Co., Ltd.



Asian Disaster Reduction Center (ADRC)

Takahiro ONO

Public-Private Partnership - for Sustainable Community



Insurance Market in Japan

1996 New Insurance Act

Market Liberalization start

Competition intensify

Market reorganized

Insurance Company
domestic 30 / foreign 22

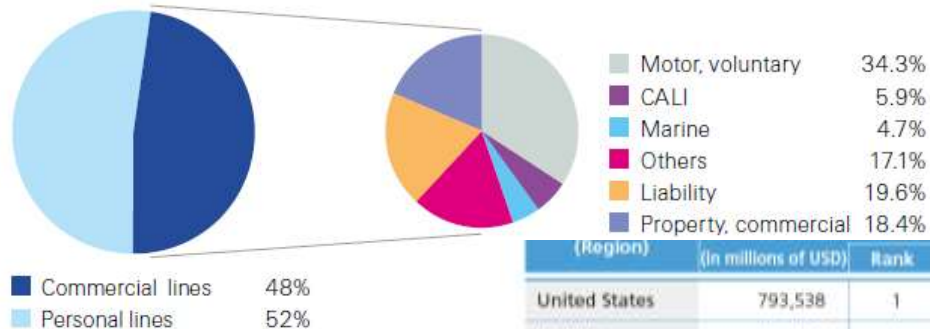


Insurance Agents 630,000 (1996) ⇒ 190,000 (2016)

Car Dealers 52% / Pro Agent 19% / Real Estates 12% / Travel Agent 1% / Banking 1%

Direct premiums:
9,279.0 billion yen

Net premiums:
8,380.6 billion yen



(Region)	(In millions of USD)	Rank	Share (%)
United States	793,538	1	37.52
PR China	203,515	2	9.62
Germany	120,360	3	5.69
Japan	117,243	4	5.54
United Kingdom	104,839	5	4.96

Historical Event for Insurance Market

1995 Jan

Great Hanshin Awaji Earthquake/ Kobe Earthquake

78 bill JPY



2011 March

Great East Japan Earthquake

1,283 bill JPY



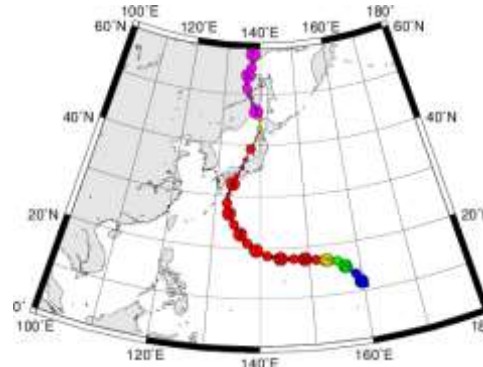
1991 Sep
Typhoon No.19
【Mireille】

568 bill JPY



2018 Aug
Typhoon No.21
【Jebi】

1,068 bill JPY



Historical Event for Insurance Market

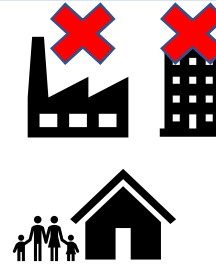
No.	Earthquake	Date	Amount Bil. JPY
1	Great East Japan Earthquake	11 th March 2011	1,283
2	Kumamoto Earthquake	14 th April 2016	386
3	North Osaka Earthquake	18 th June 2018	107
4	Great Hanshin Awaji Earthquake	17 th Jan. 1995	78
5	Hokkaido East Earthquake	6 th Sep. 2018	39

No.	Hydrological	Area	Date	Amount Bil. JPY
1	Typhoon No.21	Osaka, Kyoto, Hyogo	Sep. 2018	1,068
2	Typhoon No.19	All Japan	Sep. 1991	568
3	Typhoon No.18	All Japan	Sep. 2004	387
4	Heavy Snow	Kanto region	Feb. 2014	322
5	Typhoon No.18	Kyushu region	Sep. 1999	314
6	Typhoon No.24	Tokyo, Kanagawa, Shizuoka	Sep. 2018	306
7	Heavy Rain	Okayama, Hiroshima	July 2018	196

Public Support for Personal Line / Community

Earthquake Insurance

1964 Niigata Earthquake lead to Earthquake Insurance Law
 Funded by government. Only for Personal Residence and Property
 Additional coverage with FIRE INSURANCE
 Amount Insured 30%-50%
 If your house amounts 10Mill JPY EQ covers 3-5Mill JPY



Fire	Fire
Lightning	
Explosion	
Snow	
Wind	
Flood	
	Earthquake
	Earthquake
	Tsunami
	Volcanic eruption

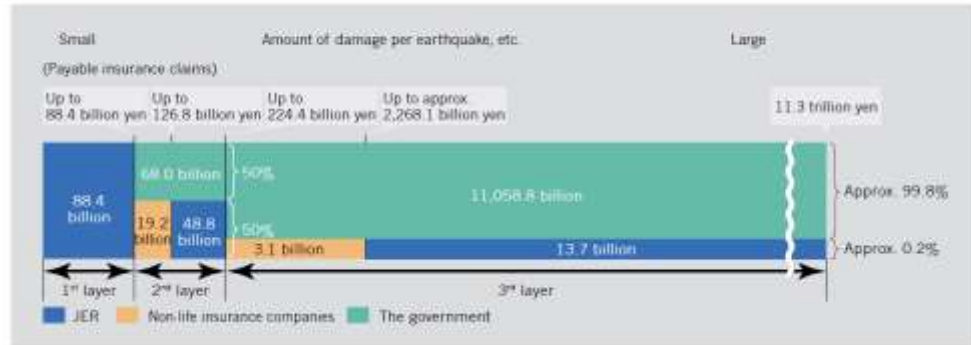
Payment 4 types (Total loss 100%, Large half loss 60%, Small half loss 30%, Partial Loss 5%)
 Rate depends on the region and building structure.

Location classification	Non wooden	Wooden
1	6,800	11,400
	8,100	15,300
	7,400	14,900
2	9,500	18,400
	12,000	23,800
	13,200	23,800
3	17,100	28,900
	13,500	27,900
	15,600	27,900
	13,500	31,900
	22,500	36,300



Wooden Tokyo house is most expensive

REINSURANCE SCHEME (APPLICABLE TO EARTHQUAKE, ETC. THAT TAKE PLACE AFTER APRIL 1, 2017)

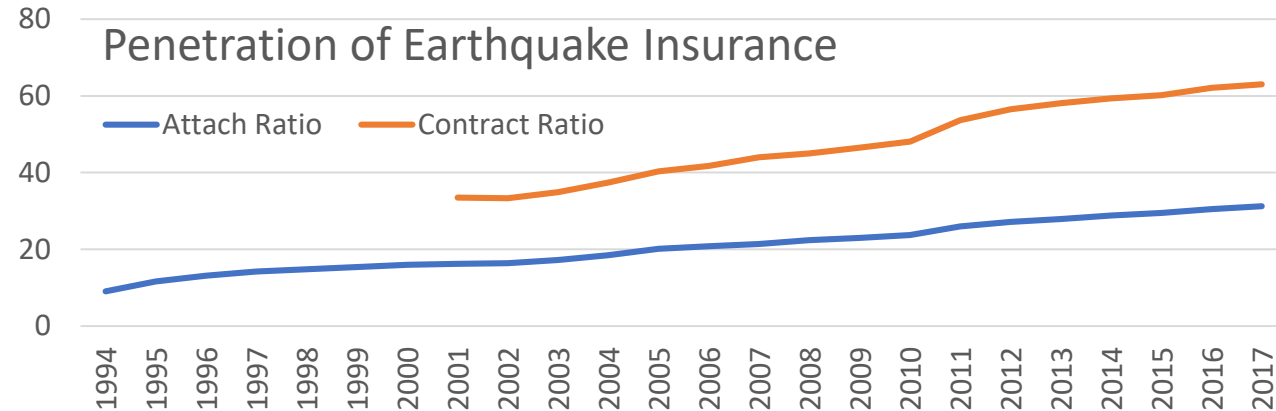


Earthquake Insurance

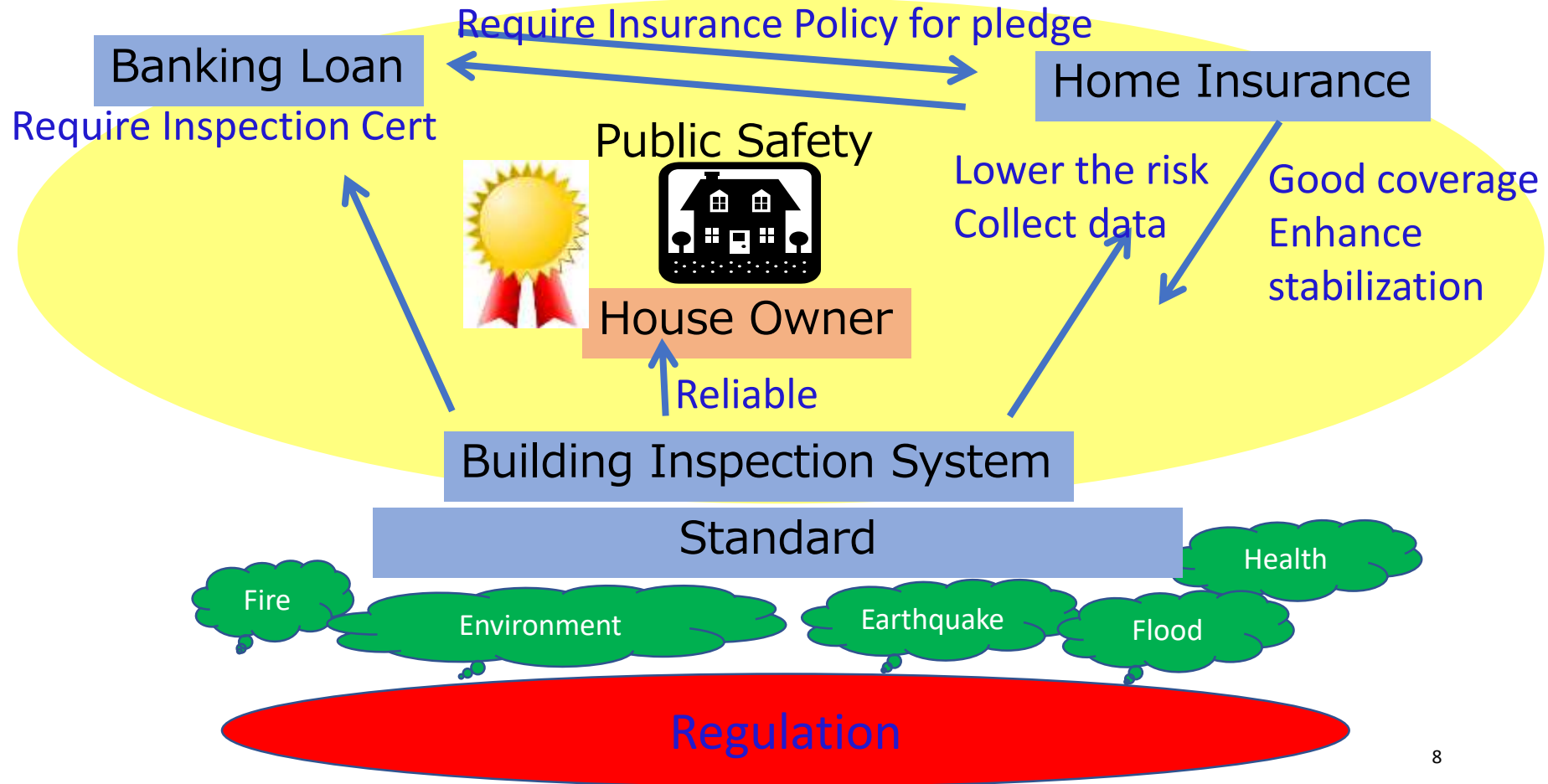
20 Largest Claims Paid for Earthquake Insurance on Dwelling Risks (in billions of yen)

	Earthquake (Region name)	Date	Claims Paid *1
1	The 2011 off the Pacific coast of Tohoku *2 812,000 houses	Mar. 11, 2011	1,279.5
2	The 2016 Kumamoto 206,000 houses	Apr. 14, 2016	382.4
3	Hyogo-ken Nanbu 65,000 houses	Jan. 17, 1995	78.3
4	Miyagi-ken-oki *2 31,000 houses	Apr. 7, 2011	32.4
5	Fukuoka-ken Seihō-oki 22,000 houses	Mar. 20, 2005	17.0
6	Geiyo	Mar. 24, 2001	16.9
7	Niigata-ken Chuetsu	Oct. 23, 2004	14.9
8	Niigata-ken Chuetsu-oki	Jul. 16, 2007	8.2
9	Fukuoka-ken Seihō-oki	Apr. 20, 2005	6.4
10	Tokachi-oki	Sep. 26, 2003	6.0

Help households reconstruct their livelihoods.
Especially avoid double loan situation.



Public Safety enhanced by Building Inspection System



As for Commercial Line

Automobile



Property / Fire



Fire/flood/wind

Liability



Workers
Compensation



Earthquake
Cover



Eruption
Tsunami

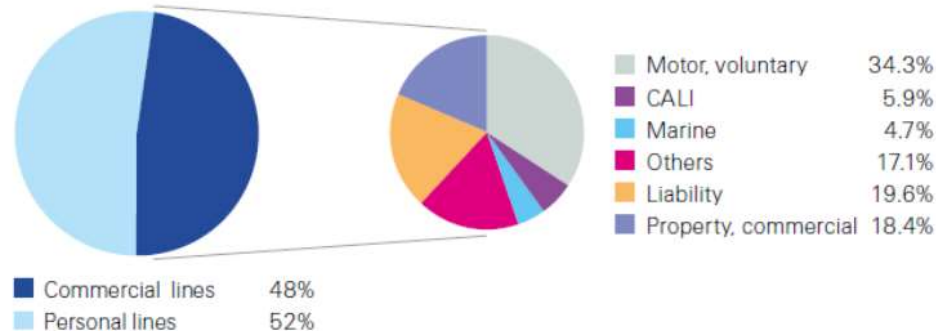
Business
Interruption



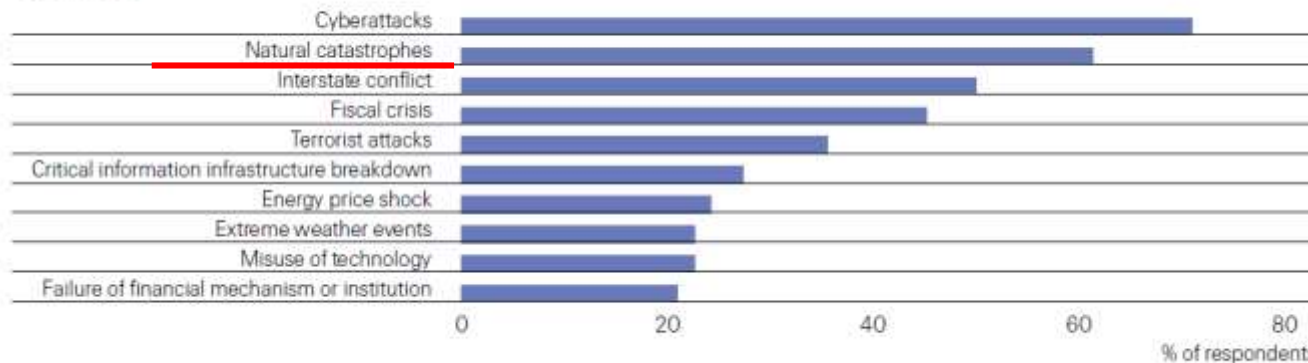
Errors &
Omissions



Directors &
Officers



Top risk concerns doing business in Japan, 2018

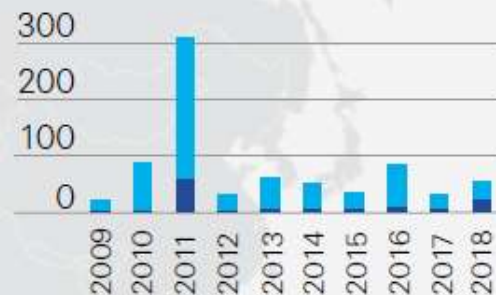


Source: World Economic Forum

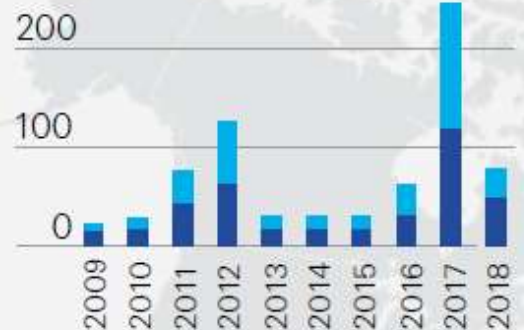
Figure 4

Insured vs uninsured losses,
1970–2018, in USD billion at
2018 prices

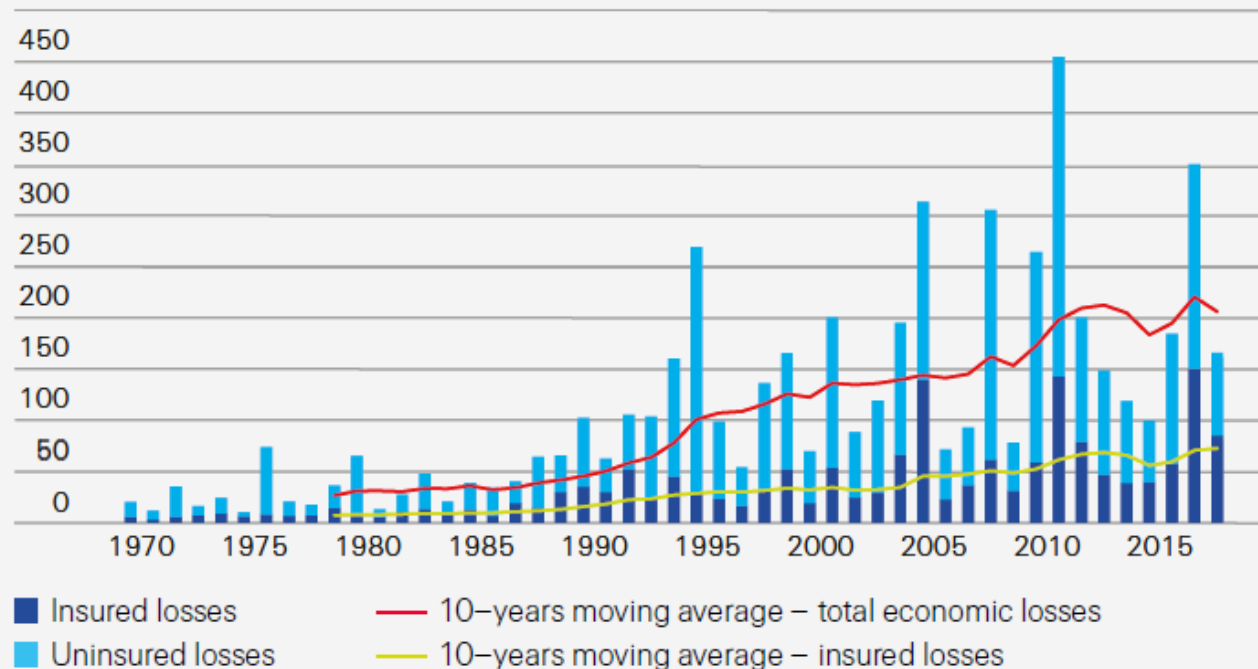
Asia



North America



Insured vs Uninsured Loss



Economic losses = insured + uninsured losses

Source: Swiss Re Institute

Natural catastrophe risk

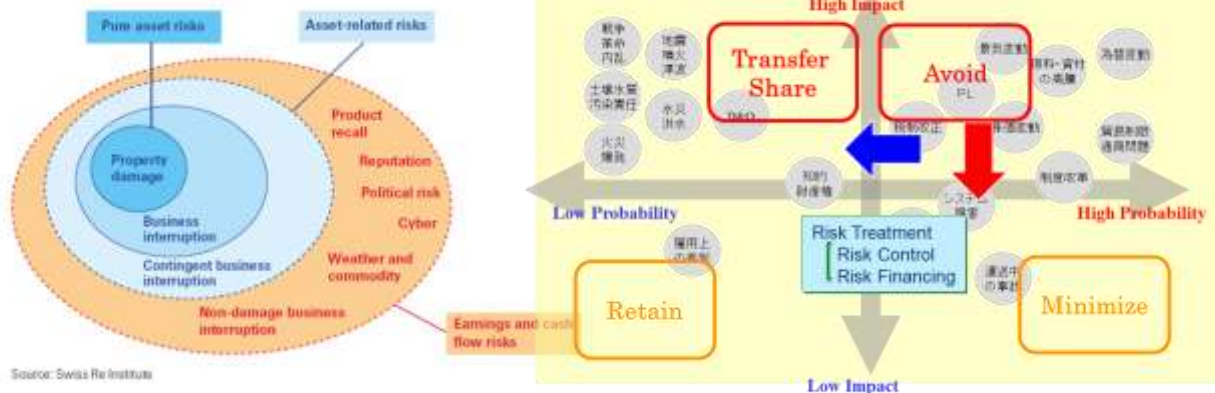
Risk management

Risk control

Retro fit
Alternative site
BCP / BCM
Diverse

Risk Finance

Insurance
Derivatives
Cat bond
Commitment line



Major issue for Commercial Line remain at the core of property risks.

Asset losses or disruption to production can reduce reliability and credit might lead to bankruptcy.

In addition to human and property loss, disruption to business operations and loss of output, **Business Interruption risk** has become a major concern for businesses.

While earthquake cover was supported by government for personal lines, insurance company provide the coverage very limited and in high rate of premium.

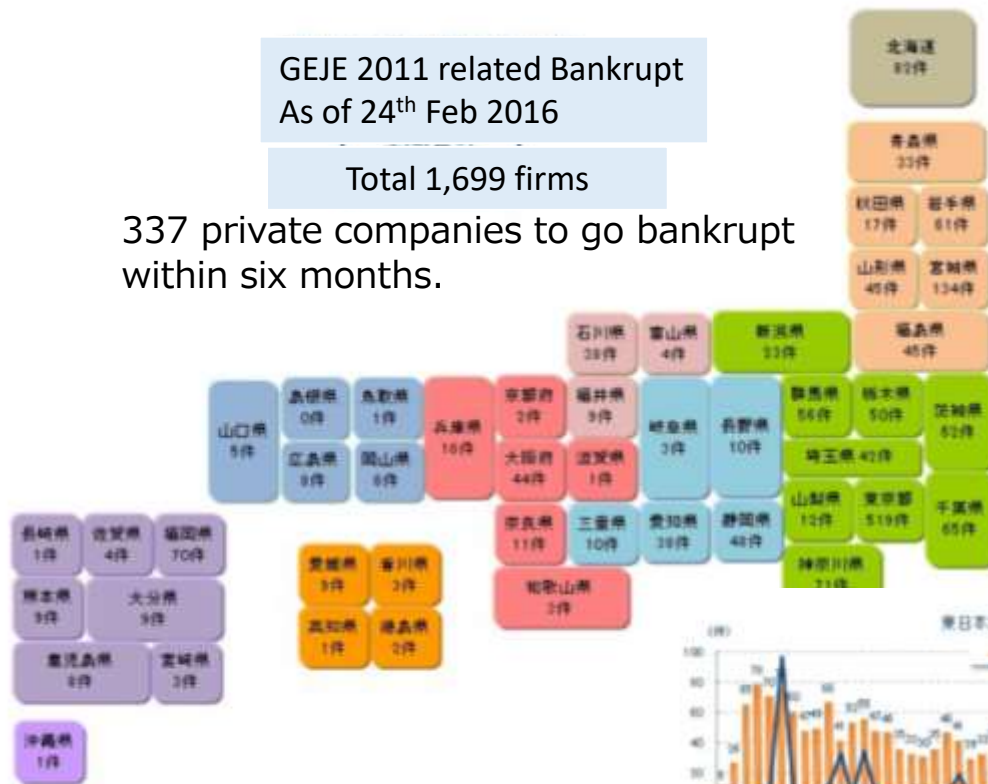
Therefore the coverage of EQ and BI for the commercial line is very low in Japan.

Supply Chain Reaction by Indirect Losses

GEJE 2011 related Bankrupt
As of 24th Feb 2016

Total 1,699 firms

337 private companies to go bankrupt
within six months.



X
X
X
X
X
X

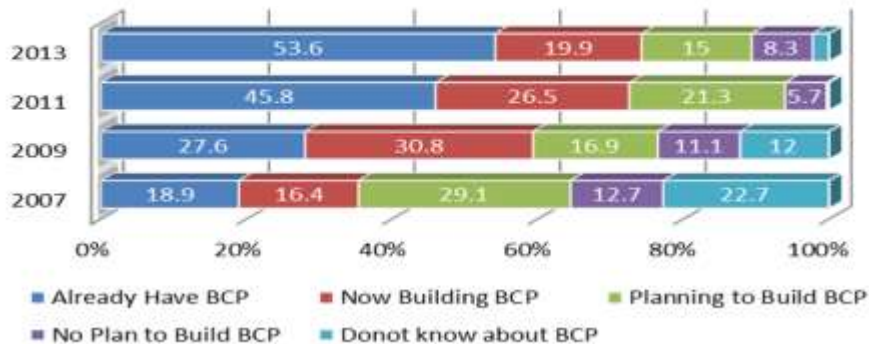


http://www.tsr-net.co.jp/news/analysis/20160225_01.html

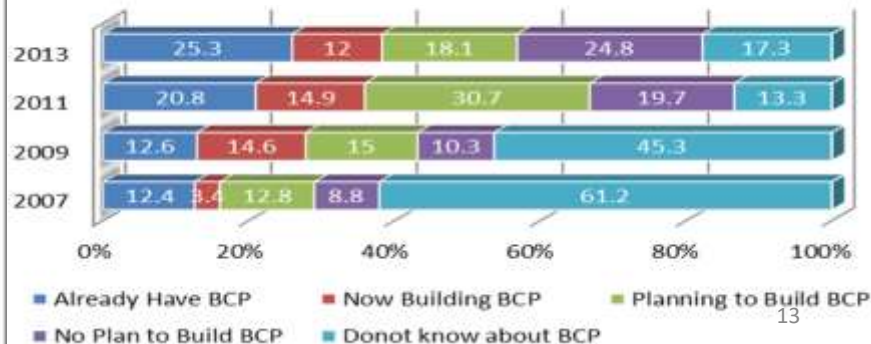
- ◆ Raise Business Continuity Planning adoption ratio
 - Large scale companies 18.9%(2007) → 100%
 - Medium scale companies 12.4%(2007) → 50%
- ◆ Cabinet Office published several guidelines
 - e.g. “BCM Guideline (2005)” >>> version 3 published in 2014
 - http://www.bousai.go.jp/kyoiku/kigyoku/keizoku/sk_04.html
- ◆ ISO22301/22313 Business Continuity Management System (2012)
- ◆ JIS Q 22301/ JIS Q 22313 Business Continuity Management System (2012)



Large Scale Companies



Medium Scale Companies



- ◆ Establish framework to certify BCPs of SME and to raise awareness and strengthen disaster response ability.

Implementation plan will be

- ✓ **Recognize natural hazard may affected your company**
- ✓ **Organize internal structure**
- ✓ **Safety confirmation, damage assessment, contact method to supplier and customer**
- ✓ **Necessary equipment**
- ✓ **Necessary working capital, preparation of appropriate insurance**
- ✓ **Agreement on alternative production and support with other companies**
- ✓ **Education and training for employees**

- ◆ SMEs are able to
 - Participate study workshop how to develop BCPs
 - Get support from experts/consultants
 - Tax merit when installing Disaster Risk Reduction facilities (depreciation)
 - Low interest rate loan, Subsidy, Credit guarantee

- ◆ How to measure the level of BCP/BCM?
- ◆ Is ISO Certification enough?

The solution of BCM rating

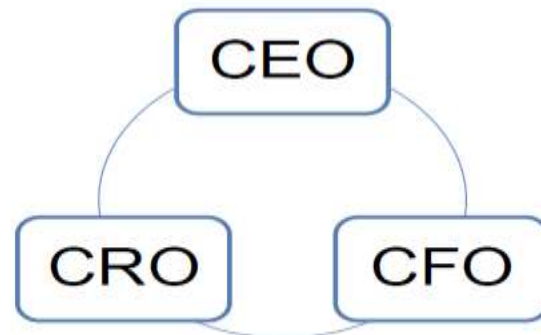
Rating and communication ; 100 questions

Disaster Risk Reduction

- A Corporate disaster prevention system
- B Life and safety preservation measures
- C Contribution to community and regional disaster prevention efforts
- D Disaster drills (emergency response, initial response, etc.)
- E Outstanding disaster prevention initiatives
- F Compliance

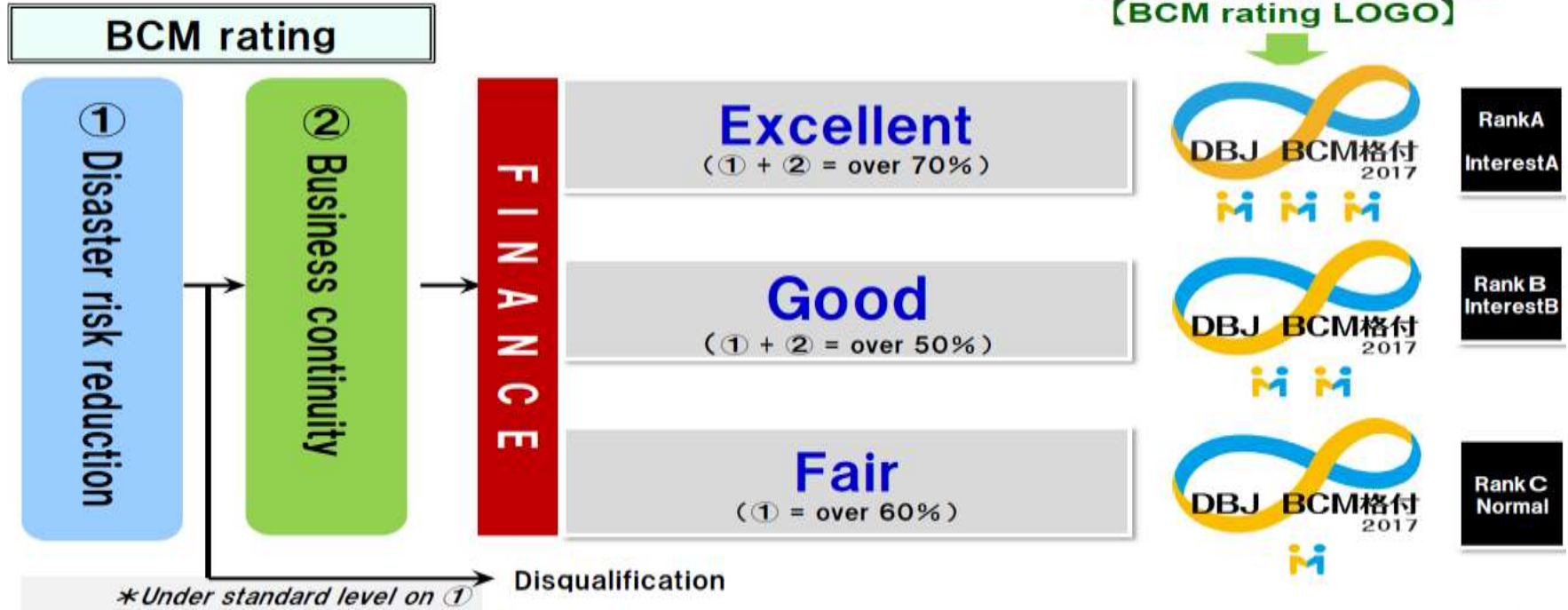
Business Continuity Management

- G Preparation of basic policy, business continuity framework, business continuity risk assessment
- H Business impact analysis (BIA)
- I Strategic thinking on business continuity
- J Outstanding components of business continuity plan
- K Risk management for supply chain and value chain
- L Business continuity education: training and review
- M Cooperation on BCM with others in industry
- N Communication and publicity activity on risk and risk management
- O Outstanding initiatives in business continuity management



The solution of BCM rating

Product design, rating process



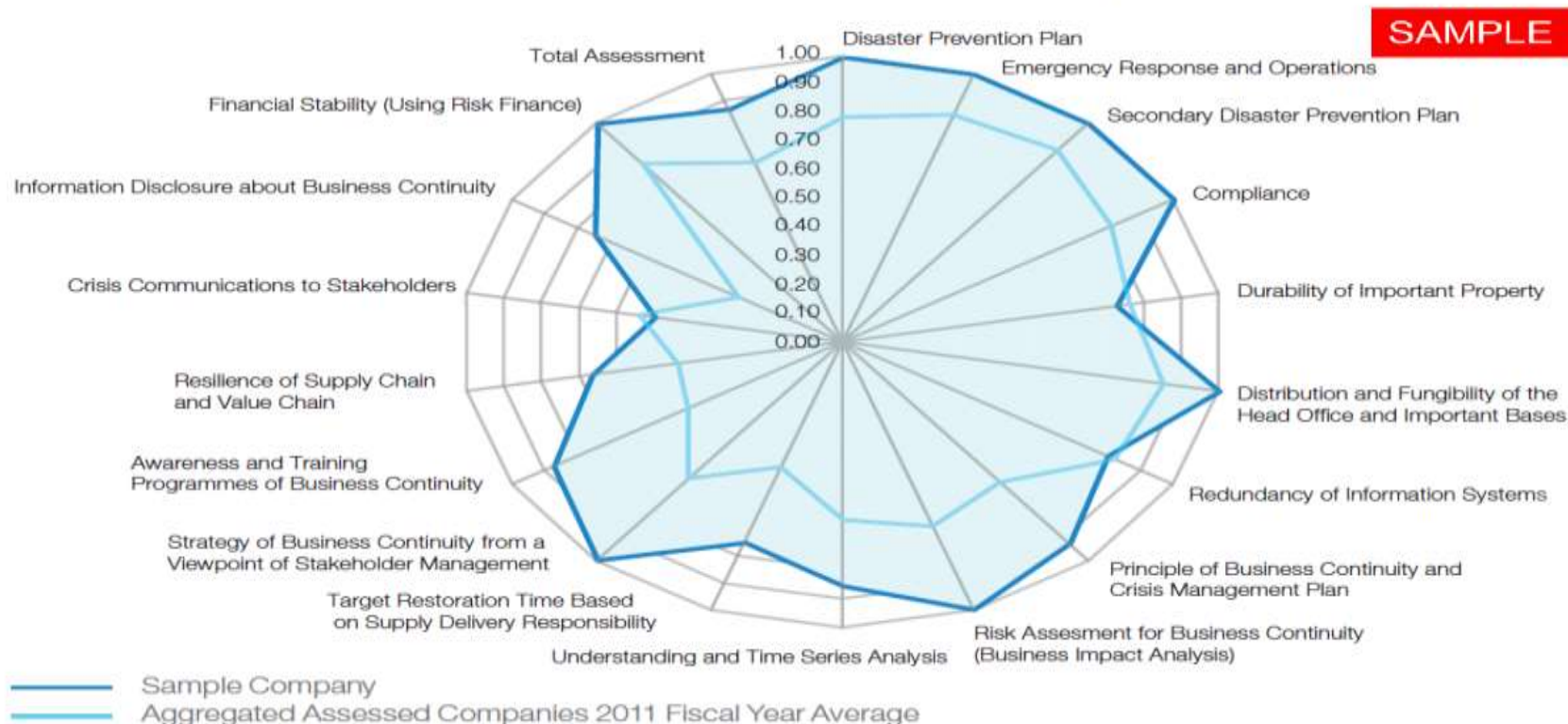
The solution of BCM rating

Track records : 277deals & 29.9USDbillion (2012FY-2016FY)

 アルプス電気 様	 藤田観光 様	 日陸 様	 ハローズ 様	 TOTO 様	 大成建設 様	 ケンディクス不動産投資法人 様	 昭和産業 様
 日本空港ビルデング 様	 鉄道情報システム 様	 ダイフク 様	 SGホールディングス 様	 西部瓦斯 様	 西川ゴム工業 様	 鈴与 様	 清和綜合建物 様
 三ツ星ベルト 様	 大建工業 様	 昭和電工 様	 日清ものつくりホールディングス 様	 戸田工業 様	 興和 様	 日本水産 様	 オプトエレクトロニクス 様
 長島観光開発 様	 日本曹達 様	 博慈会 様	 東洋エンジニアリング 様	 東海ゴム工業 様	 関西スーパーマーケット 様	 ダイユーエイト 様	 ヒューリック 様
 リンコーコーポレーション 様	 センコン物流 様	 東海ガス 様	 旭硝子 様	 東銀リース 様	 東陽倉庫 様	 日本化薬 様	 上越ケーブルビジョン 株式会社 様
 西武ホールディングス 様	 サンシャインシティ 様	 神奈川中央交通 様	 近畿日本鉄道 様	 九州通信ネットワーク 様	 三菱UFJリース 様	 太平洋セメント 様	 日本自動車ターミナル株式会社 様
 ニッポン高度紙工業 様	 山崎電気工業株式会社 様	 東洋合成工業 様	 ケーブルメディアワイワイ 様	 ホテル、ニューグランド 様	 マイヤ 様	 藤崎 様	 白旗蒲餅店 様

The solution of BCM rating

Feedback: The communication tool to CEO,CRO and CFO



Export Credit Insurance (Guarantee)

- Marine Insurance / Cargo Insurance / Hull Insurance
Cover losses incurred from damage to exported cargo during voyage.

- Export Credit Insurance

Covers risks that arise from trade transactions and overseas investment which not covered by marine insurance.

- Political Risks war, revolution, natural disasters, Restriction/prohibition of imports etc.
- Commercial Risks Buyer's bankrupt

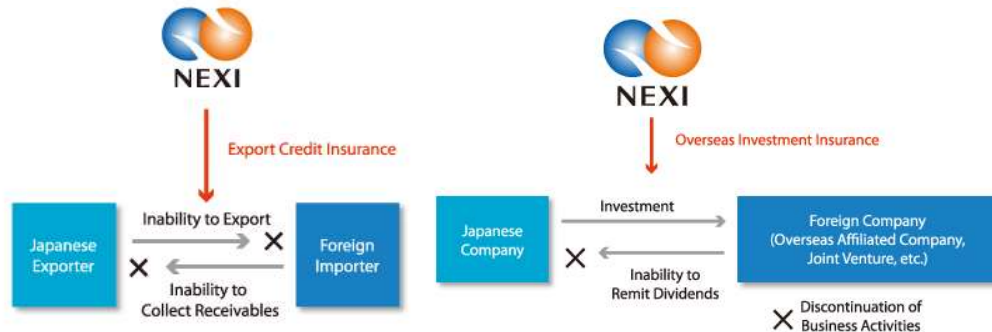
- Role

- Trade and Investment Insurance Act Established NEXI

Providing Sense of Security

The company will be able to continue conducting business activities without suffering great damages.

Not only protects business activities but contributes to the stable development of industries.



Way Forward

- ✓ Personal Line (Community)
 - Regulation and standard with conformity assessment
- ✓ Commercial Line (Private Sector)
 - Consider coverage of Earthquake Insurance
 - Consider coverage of Business Interruption to secure supply chain
 - Promote effective BCPs
- ✓ Risk Control is the only way to reduce likelihood of the risk, not Risk Finance.



Thank you for your attention

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