



**Asia-Pacific
Economic Cooperation**

*BCP status of the
Private Sector in
the APEC Region
2011*

Asian Disaster Reduction Center



APEC Emergency Preparedness Working Group

December 2011

Survey Report on the BCP Status of the Private Sector in the APEC Region

Prepared by

Mr.Takahiro Ono

Asian Disaster Reduction Center

1-5-2 Wakinohamakaigan-dori, Chuo-ku, Kobe, Hyogo, 651-0073, JAPAN

Tel: +81-78-262-5540

E-mail:rep@adrc.asia

Mr Shinji Shibata

Ms.Noriko Yoichi

Tokio Marine Nichio Risk Consulting Co. Ltd.

2-1, Marunouchi, 1-chome, Chiyodaku-ku, Tokyo, 100-0005, JAPAN

Tel: +81-3-5288-6594

E-mail:shinji.shibata@tokiorisk.co.jp

Produced for

Asia Pacific Economic Cooperation Secretariat

35 Heng Mui Keng Terrace Singapore 119616

Tel: (65) 68919 600 Fax: (65) 68919 690 Email: info@apec.org

Website: www.apec.org

© 2011 APEC Secretariat

APEC Publication Number APEC#211-EM-01.5

Contents

1. Executive Summary	2
2. Introduction	4
2.1 Background	4
2.2 Purpose	4
2.3 Methodology	5
2.4 Survey coverage	6
3. Survey Results and Findings	11
3.1 Potential Threats and Disaster Experiences	11
3.2 Adoption and Awareness	13
3.3 Process of BCP Development	18
3.4 BCP Implementation	21
4. Discussion	25
Questionnaires and Raw Results	27

1. Executive Summary

The purpose of this report is to summarize the findings from a 2011 regional survey conducted by the Asian Disaster Reduction Center (ADRC) on the private sector preparedness among APEC economies. This survey is part of an APEC Emergency Preparedness Working Group (EPWG) project aimed at promoting best practices in private sector emergency preparedness and encouraging adoption of business continuity plan (BCP) among APEC economies. The following are key conclusions drawn from the survey's findings:

- **BCP development and awareness varies by economy and company size**
 - Only 15.9% of SME respondents have a written BCP* while that figure is 52.0% for large-scale respondents. Furthermore, 46.9% of SME respondents and 16.5% of large-scale respondents do not know about BCP.
 - In some economies, such as Japan, Singapore, and the United States, the majority of respondents have a written BCP, whereas in economies such as Malaysia or Viet Nam, over 50% of respondents DO NOT even know about BCP.
 - * A written BCP : documented plans or manuals that detail how the organization will manage a disruptive event and how it will recover or maintain its activities to a predetermined level.
- **Public support is used in the process of BCP development**
 - A total of 41.9% of respondents indicated that public organizations have support systems for BCP development. This figure is 51.6% among SME respondents.
 - Providing knowledge and information, such as disaster information or training support, through public organizations has been useful to many respondents in developing their BCPs.
- **Bottlenecks identified for BCP development**
 - The main obstacles for many respondents which don't have a written BCP are "lack of company BCP knowledge and expertise," "lack of human resources," and "lack of information needed for BCP development."

- Strengthen coordination with suppliers and communities
 - Among respondents who have or are in the process of creating a written BCP, 71.8% coordinate with their suppliers on emergency operations. On the other hand, only 46.2 % of respondents who have or are in the process of creating a written BCP know their suppliers' BCP status.
 - Among respondents who have a written BCP, 61.5% coordinate with their communities in preparation for widespread disasters.

2. Introduction

2.1 Background

The APEC region accounts for approximately 40% of the global land area, more than 40% of the world's population, and around half of global GDP, yet regrettably sustains almost 70% of the world's natural disasters. One lesson learned from past catastrophic events such as the Great Hanshin-Awaji Earthquake, Hurricane Katrina, and the Great East Japan Earthquake, is that the private sector plays an important role in reducing economic damage and regional impacts when they are well prepared for disasters.

As its supply chains are closely intertwined, a single disaster could affect the economic activities of the entire region. APEC therefore needs to strengthen the private sector's capacity for disaster preparedness and recovery by promoting BCP among APEC member economies.

This survey was conducted to understand the current status of BCP adoption and the level of BCP awareness in the private sector in the APEC region. Considerable contributions were made to this effort by the APEC Business Advisory Council (ABAC) and the outcomes will be used to determine appropriate next steps to enhance and promote private sector resilience.

2.2 Purpose

Objective

- Understand the current BCP status of the private sector in the APEC region.

Expected Outcome

- Understand the current situation by economy, industrial sector, and company size.
- Identify and clarify the bottlenecks and problems for BCP development and implementation.
- Gather the information that policy makers need to enhance future strategies.
- Share knowledge and better practices throughout the region.

2.3 Methodology

Survey method

- Web-based online survey in English

Survey period

- June 14 to August 30, 2011

The image displays two screenshots of the APEC BCP Survey interface. The left screenshot shows question Q7: "What threats have the potential to cause serious disruption to your company?" with a list of 15 options including Earthquake, Tsunami, Hurricane / Wind storm, Flood, Snow, Fire, Wild fire, Volcano eruption, Drought, Insect Infestation, Pandemic / Epidemic, Blackout, Terrorism, Nuclear, and other. The right screenshot shows question Q6: "Is your company listed or unlisted?" with radio buttons for "Listed" and "Unlisted". Both screenshots include the APEC logo and the text "APEC BCP SURVEY In the Asia Pacific Region".

Questionnaire Content

Q1-Q6	General information
Q7-Q8	Potential threats and disaster experiences
Q9-Q10	BCP adoption and awareness
Q11-Q12	Reasons for BCP development
Q13-	Public support for building a BCP
Q14-	How to build a BCP
Q15-Q16	Coordination with suppliers
Q17-	Obstacles to BCP development
Q18-	Related plans
Q19-	Coordination with community
Q20	Standards and certification
Q21	Risk management/Finance
Q22-23	Situation of BCP implementation
Q24	Obstacles to BCP implementation

2.4 Survey coverage

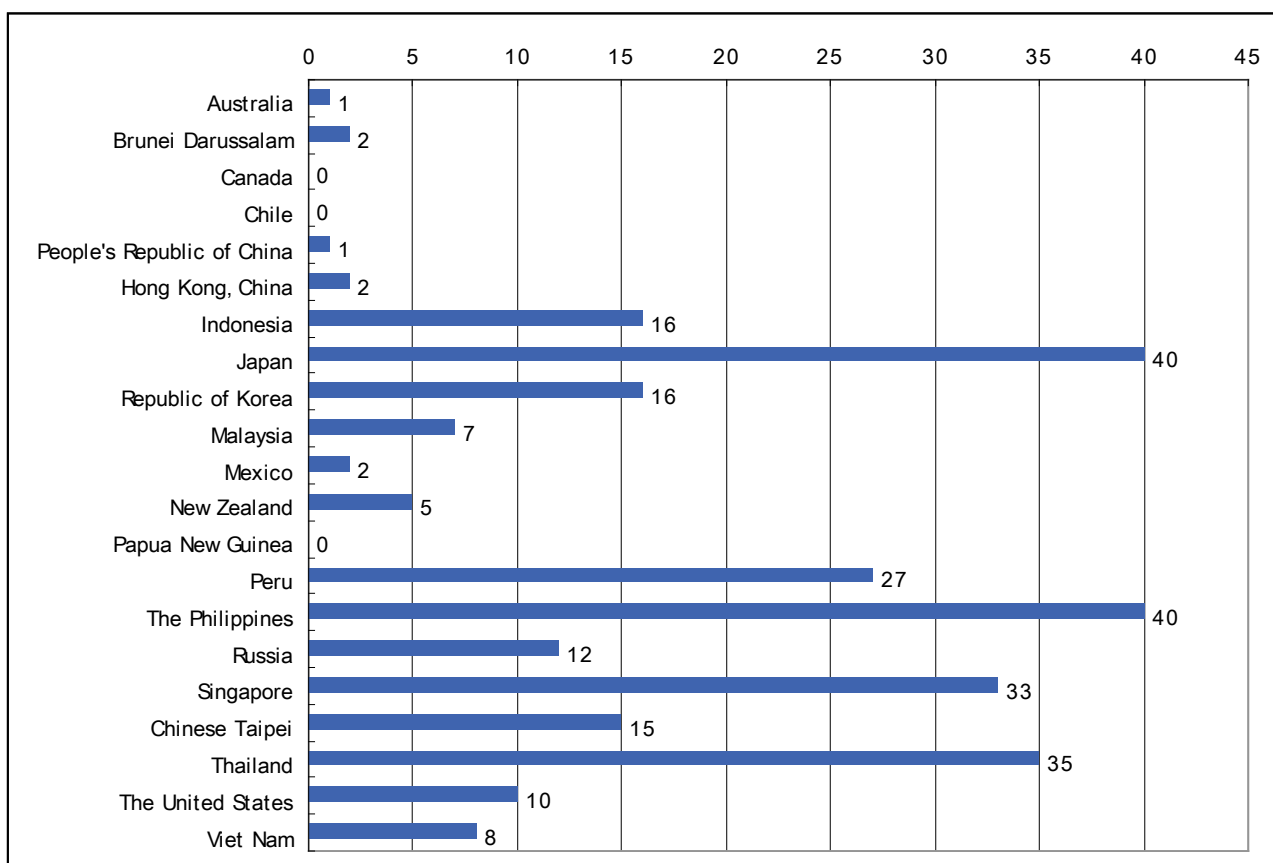
- Responses received: 272 responses from 18 economies
- Considerable assistance was provided by the APEC Business Advisory Council (ABAC) in conducting this survey. The contributing organizations are as follows.

Economies and Contributing Organizations

Economy	Contributed Organizations
Australia	Australian Industry Group
Brunei Darussalam	National Chamber of Commerce and Industry Brunei Darussalam
Canada	Canadian Chamber of Commerce
Chile	Federation of Chilean Industry (SOFOFA)
People's Republic of China	China Council for the Promotion of International Trade (CCPIT) Chamber of Commerce in Guangdong Province
Hong Kong, China	Hong Kong General Chamber of Commerce
Indonesia	Indonesian Chamber of Commerce and Industries
Japan	Support Council for ABAC Japan Tokyo Chamber of Commerce and Industry Osaka Chamber of Commerce and Industry Japan Machinery Center for Trade and Investment
Republic of Korea	Federation of Korean Industries Korea Chamber of Commerce and Industry
Malaysia	Federation of Malaysian Manufacturers
Mexico	Cámara Nacional de Manufacturas Eléctricas Cámara Nacional de la Industria de Productos Cosméticos Cámara Nacional de la Industria Molinera de Trigo Cámara Nacional de la Industria del Vestido Cámara Nacional de Industriales de la Leche
New Zealand	Business NZ
Papua New Guinea	Manufacturers' Council of PNG
Peru	Sociedad de Comercio Exterior del Peru (COMEX-PERU)
The Philippines	Makati Business Club Philippine Chamber of Commerce and Industry

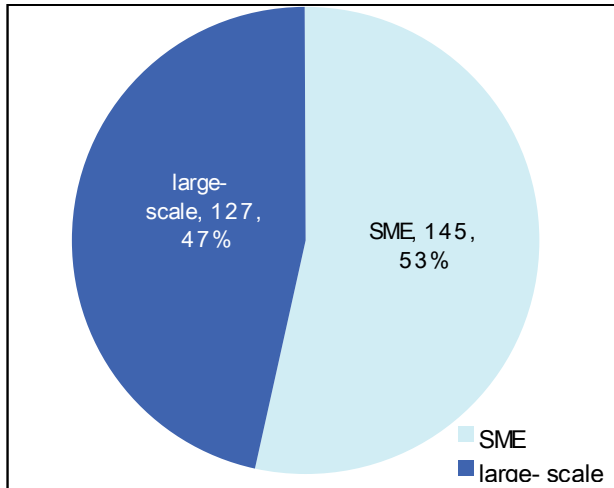
Russia	Chamber of Commerce and Industry of the Russian Federation
Singapore	Singapore Business Federation
Chinese Taipei	Chinese National Association of Industry and Commerce Chinese National Federation of Industries
Thailand	Thai Chamber of Commerce
The United States	National Center for APEC US Chamber of Commerce
Viet Nam	Vietnam Chamber of Commerce and Industry

Number of Respondents by Economy



Company Size of Respondents

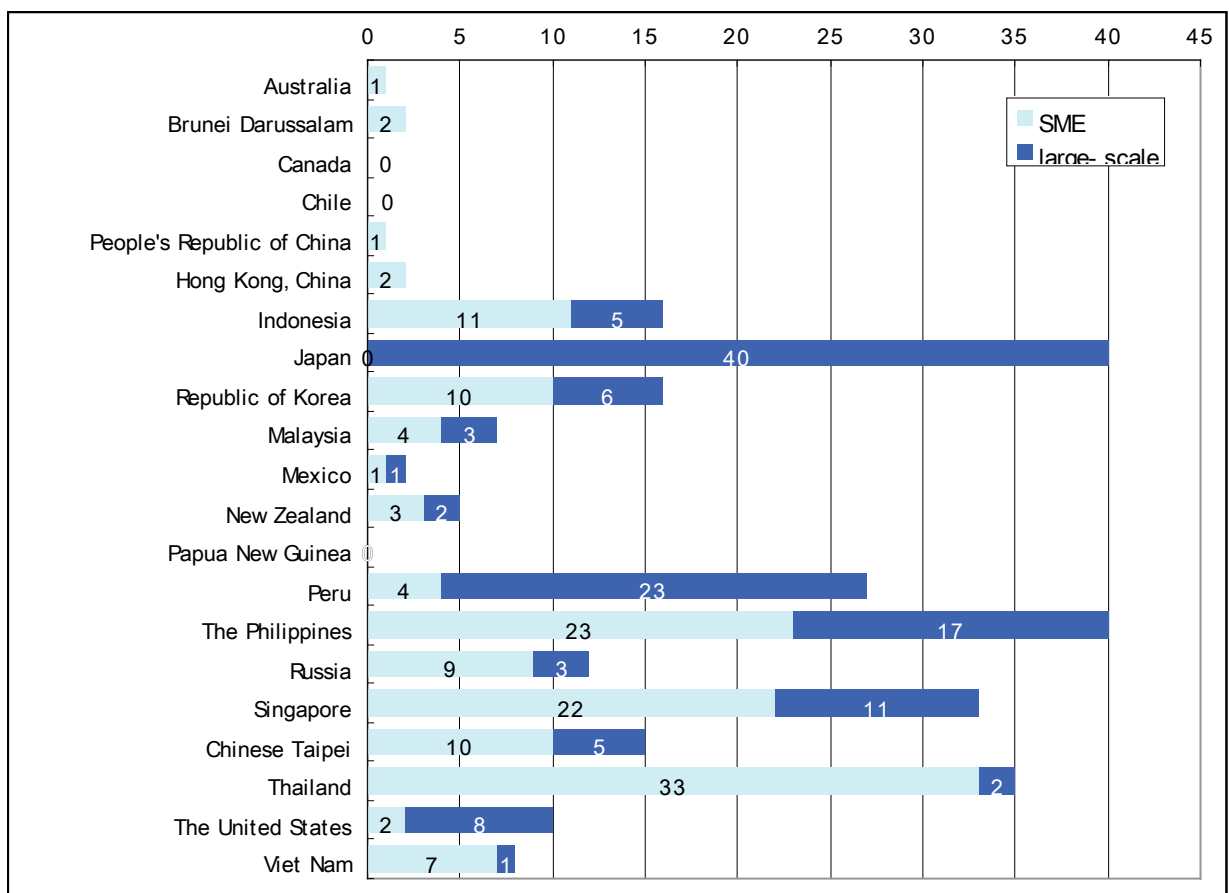
- Total



Large-scale: number of employees > 300

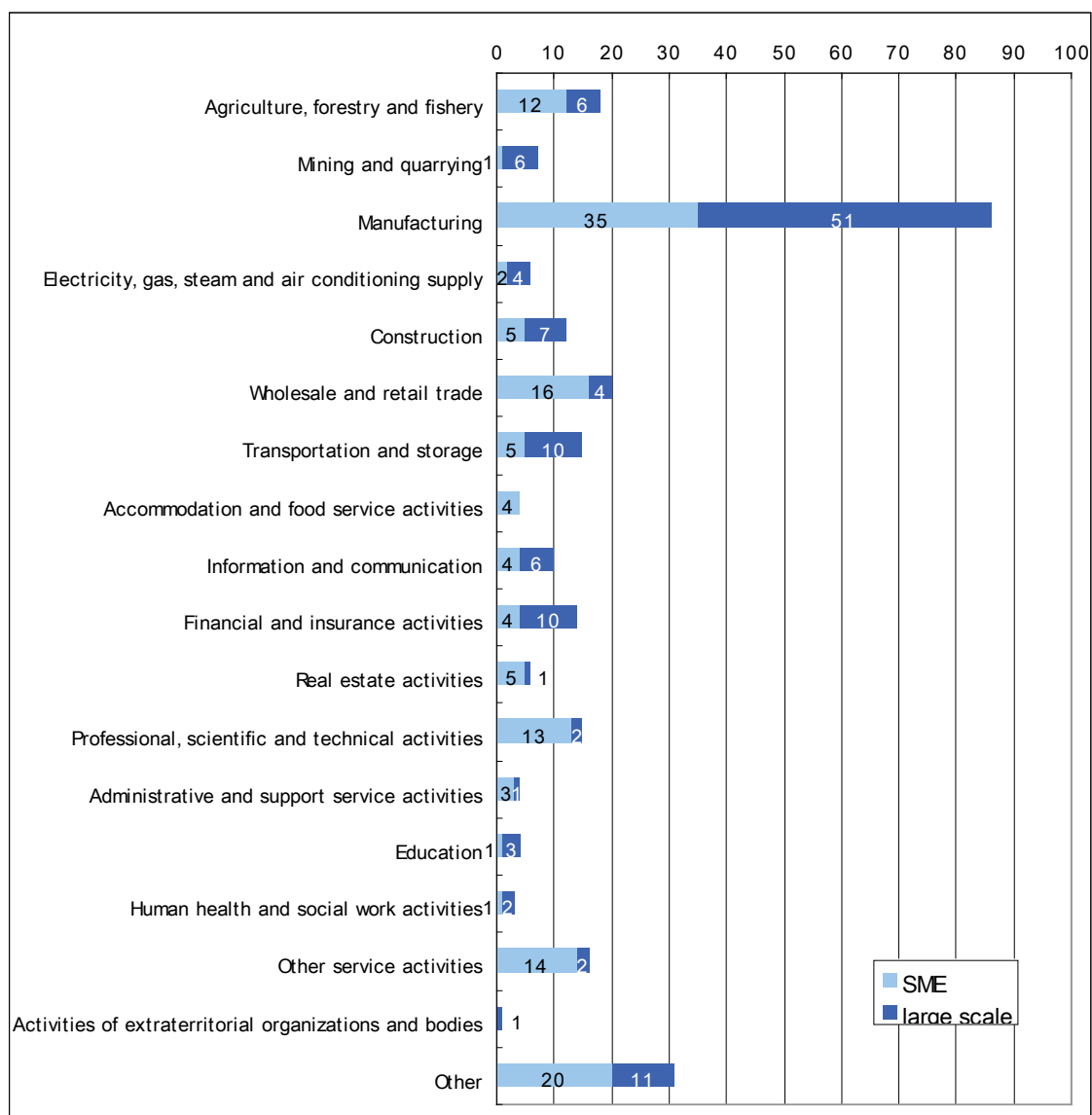
SME: number of employees ≤ 300

- By economy



Industrial Sectors of Respondents

- Total



- By economy

	Agriculture, forestry and fishery	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Construction	Wholesale and retail trade	Transportation and storage	Accommodation and food service activities	Information and communication	Financial and insurance activities
Australia										
Brunei Darussalam	1									
People's Republic of China										
Hong Kong, China			1							
Indonesia		1	2							1
Japan	1		25	1	3	1	4			1
Republic of Korea			8		2	3	2			
Malaysia			7							
Mexico			2							
New Zealand	3									
Peru	4	3	5	2		1	3			1
The Philippines	3		8	2	2	3	1	2	5	4
Russia	1		2			1	1			
Singapore			5		2	2			4	3
Chinese Taipei			12							1
Thailand	3	1	7	1	2	9	3	2		
The United States			1	2			1			2
Viet Nam	2	1			1				1	1
total	18	7	86	6	12	20	15	4	10	14

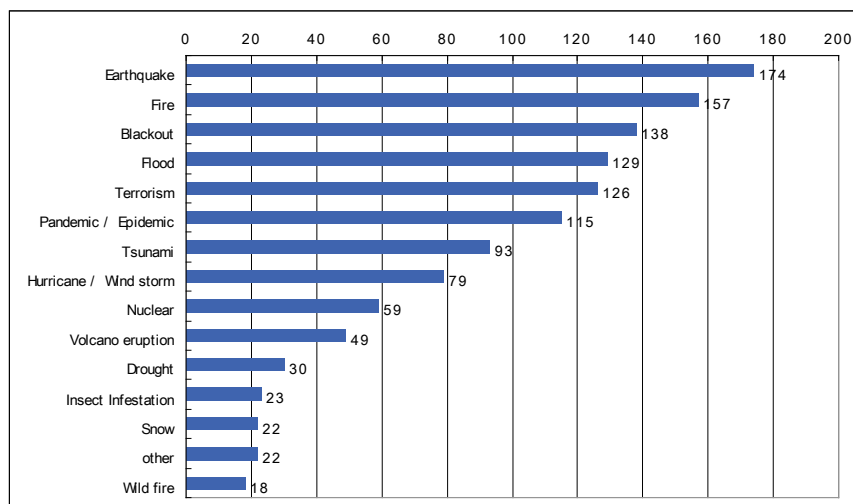
	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Education	Human health and social work activities	Other service activities	Activities of extraterritorial organizations and bodies	Other	total
Australia						1			1
Brunei Darussalam		1							2
People's Republic of China	1								1
Hong Kong, China		1							2
Indonesia	1	1				4		6	16
Japan								4	40
Republic of Korea						1			16
Malaysia									7
Mexico									2
New Zealand		1						1	5
Peru		2		2		3		1	27
The Philippines	1	2	1	1	2			3	40
Russia	1	2	1	1		2			12
Singapore	1	5				3		8	33
Chinese Taipei			1			1			15
Thailand	1		1					5	35
The United States					1		1	2	10
Viet Nam						1		1	8
total	6	15	4	4	3	16	1	31	272

3. Survey Results and Findings

3.1 Potential Threats and Disaster Experiences

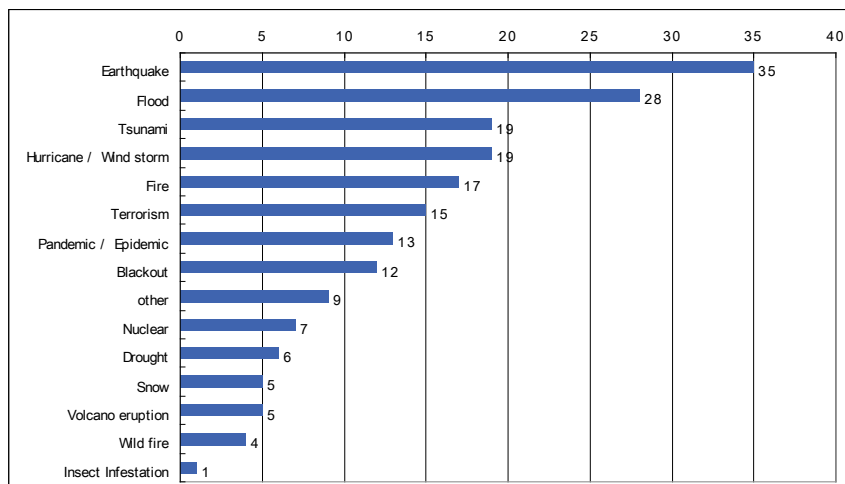
- In terms of both potential threats and disaster experiences, “Earthquakes” represent the greatest hazard.
- When looking at responses by economy, the perceived threats vary. For example, “pandemics/epidemics” are the top concern in Singapore, while “floods” are the top concern in Brunei Darussalam, Malaysia, Mexico, Thailand, and the US.

Potential threats (total)



(multiple answer, n=272: all respondents)

Disaster experiences (total)



(multiple answer, n=78: Companies which have been seriously disrupted by a disaster)

Potential threats by economy

	Whole	Potential Threats														
		1 k E a r t h q u a	2 T s u n a m i	3 s e H t o r r m W i c i a n	4 F l o o d	5 S n o w	6 F i r e	7 f i r e	8 e V o l u l p c t a i o n	9 D r o u g h t	10 i n f e s c t t a	11 E / P a n d e m i c	12 B l a c k o u t	13 m T e r r o r i s	14 N u c l e a r	15 o t h e r
Whole	272 100.0	174 64.0	93 34.2	79 29.0	129 47.4	22 8.1	157 57.7	18 6.6	49 18.0	30 11.0	23 8.5	115 42.3	138 50.7	126 46.3	59 21.7	22 8.1
Australia	1 100.0	-	-	-	1 100.0	-	1 100.0	-	-	1 100.0	-	1 100.0	1 100.0	1 100.0	-	-
Brunei Darussalam	2 100.0	1 50.0	-	-	2 100.0	-	1 50.0	-	-	1 50.0	1 50.0	1 50.0	1 50.0	-	-	-
People's Republic of China	1 100.0	-	-	-	-	-	-	-	-	-	-	1 100.0	-	-	-	-
Hong Kong, China	2 100.0	2 100.0	2 100.0	2 100.0	1 50.0	1 50.0	1 50.0	-	-	-	-	1 50.0	1 50.0	-	-	1 50.0
Indonesia	16 100.0	13 81.3	10 62.5	2 12.5	12 75.0	-	8 50.0	2 12.5	11 68.8	2 12.5	2 12.5	8 50.0	6 37.5	11 68.8	1 6.3	2 12.5
Japan	40 100.0	37 92.5	29 72.5	19 47.5	17 42.5	5 12.5	25 62.5	3 7.5	10 25.0	3 7.5	1 2.5	30 75.0	35 87.5	23 57.5	20 50.0	4 10.0
Republic of Korea	16 100.0	7 43.8	2 12.5	5 31.3	4 25.0	2 12.5	12 75.0	-	1 6.3	-	-	2 12.5	6 37.5	2 12.5	4 25.0	-
Malaysia	7 100.0	2 28.6	1 14.3	-	4 57.1	-	3 42.9	-	-	-	-	1 14.3	3 42.9	1 14.3	-	1 14.3
Mexico	2 100.0	1 50.0	-	-	2 100.0	-	2 100.0	-	-	-	-	1 50.0	1 100.0	1 50.0	-	-
New Zealand	5 100.0	5 100.0	3 60.0	4 80.0	1 20.0	-	5 100.0	-	2 40.0	-	-	4 80.0	4 80.0	2 40.0	-	2 40.0
Peru	27 100.0	24 88.9	15 55.6	-	7 25.9	-	13 48.1	-	-	3 11.1	4 14.8	3 11.1	3 11.1	15 55.6	2 7.4	-
The Philippines	40 100.0	32 80.0	7 17.5	21 52.5	30 75.0	-	25 62.5	3 7.5	14 35.0	9 22.5	7 17.5	17 42.5	28 70.0	19 47.5	3 7.5	4 10.0
Russia	12 100.0	3 25.0	-	2 16.7	4 16.7	4 33.3	9 75.0	2 16.7	2 16.7	1 8.3	1 8.3	1 8.3	6 50.0	5 41.7	2 16.7	-
Singapore	33 100.0	10 30.3	5 15.2	4 12.1	11 33.3	1 3.0	24 72.7	1 3.0	3 9.1	1 3.0	2 6.1	2 78.8	21 63.6	19 57.6	6 18.2	5 15.2
Chinese Taipei	15 100.0	13 86.7	2 13.3	4 26.7	5 33.3	1 6.7	9 60.0	1 6.7	-	1 6.7	-	5 33.3	7 46.7	4 26.7	4 40.0	-
Thailand	35 100.0	13 37.1	10 28.6	7 20.0	18 51.4	2 5.7	9 25.7	3 8.6	4 11.4	6 17.1	3 8.6	5 14.3	10 28.6	14 40.0	8 22.9	5 14.3
The United States	10 100.0	6 60.0	4 40.0	7 70.0	8 80.0	6 60.0	6 60.0	1 10.0	2 20.0	1 10.0	1 10.0	7 70.0	4 40.0	7 70.0	4 40.0	-
Viet Nam	8 100.0	5 62.5	3 37.5	2 25.0	4 50.0	-	4 50.0	2 25.0	2 25.0	-	-	1 12.5	3 37.5	3 37.5	2 25.0	-

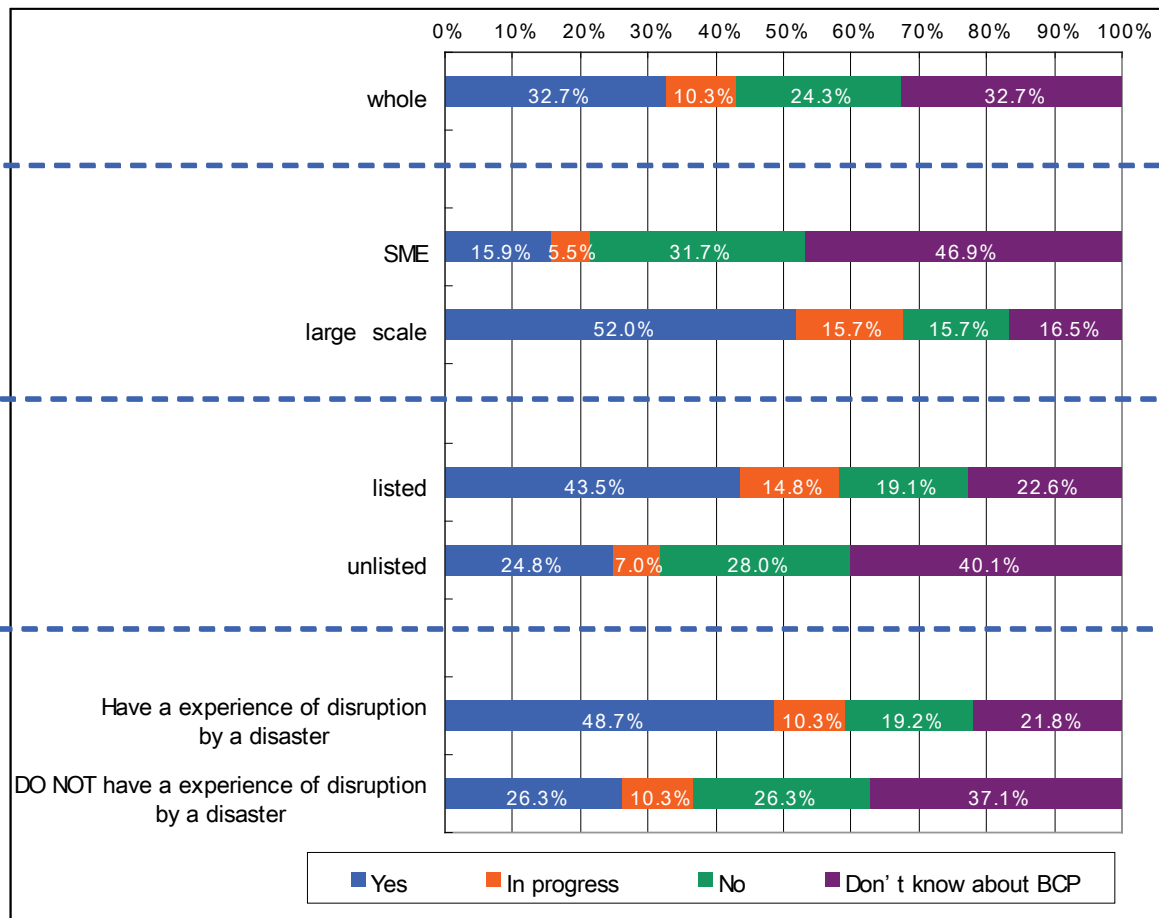
Blue cells: the top responses in each economy
(multiple answer, n=272: all respondents)

3.2 Adoption and Awareness

- **Among all respondents, 32.7% claim their companies have a written BCP. On the other hand, 32.7% of respondents are not aware of BCPs.**
- **Responses demonstrated substantial differences in terms of the level of BCP development between SME and large-scale companies, listed and unlisted respondents, and between respondents that have actually experienced disruption and respondents that have not.**
- **The level of BCP development varies greatly by the size of firm: only 15.9% of SME respondents have a written BCP, while 52.0% of large-scale company respondents have a written BCP.**
- **Also, there are considerable differences between APEC economies. In some economies, such as Japan, Singapore, and the US, the majority of respondents have a written BCP, whereas in economies such as Malaysia and Viet Nam, more than 50% of respondents DO NOT even know about BCP.**
- **The industry with the highest percentage (85.7%) of respondents with a written BCP is “financial and insurance activities.”**

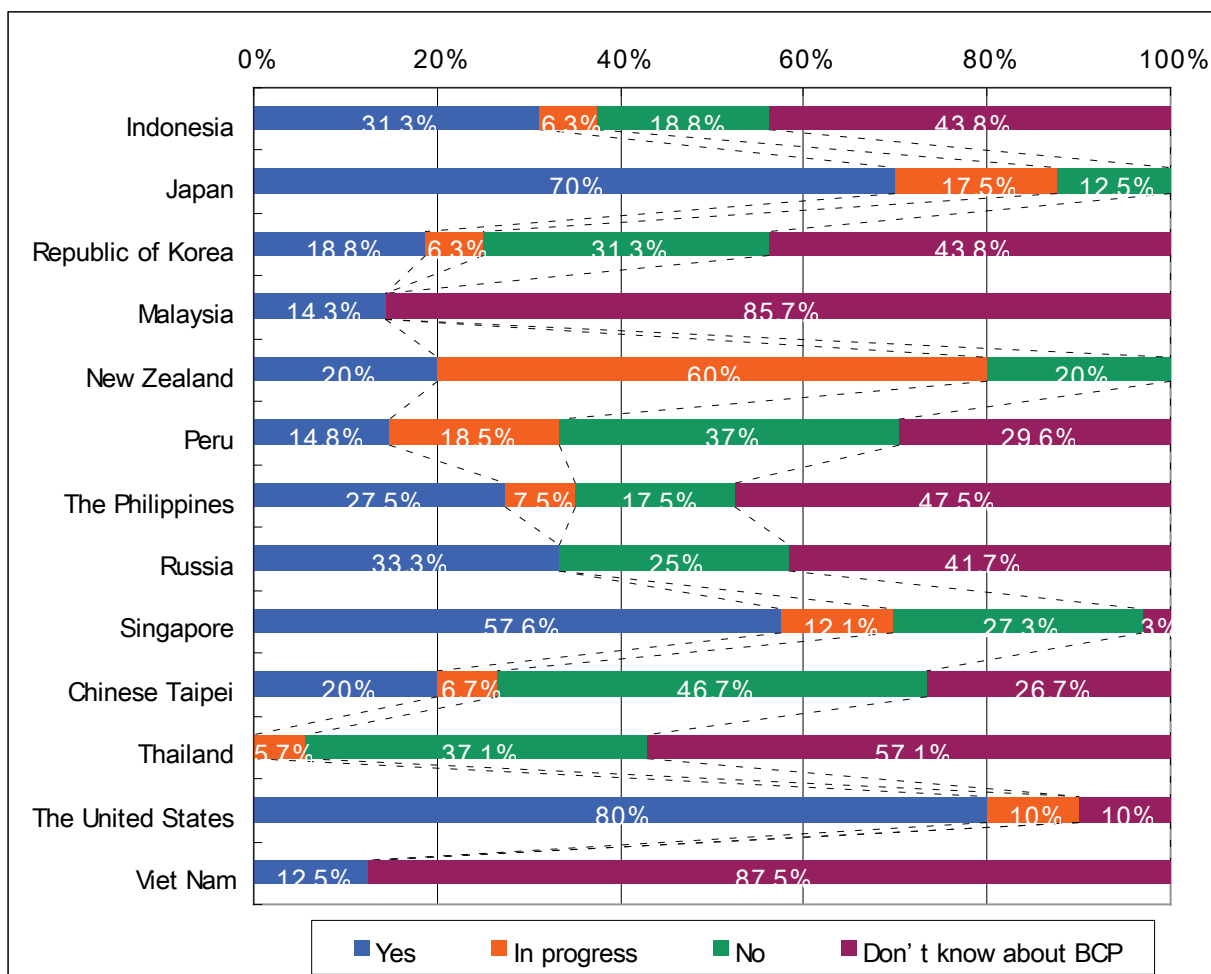
* A written BCP : Documented plans or manuals that detail how the organization will manage a disruptive event and how it will recover or maintain its activities to a predetermined level.

BCP development status (Do you have a written BCP?)



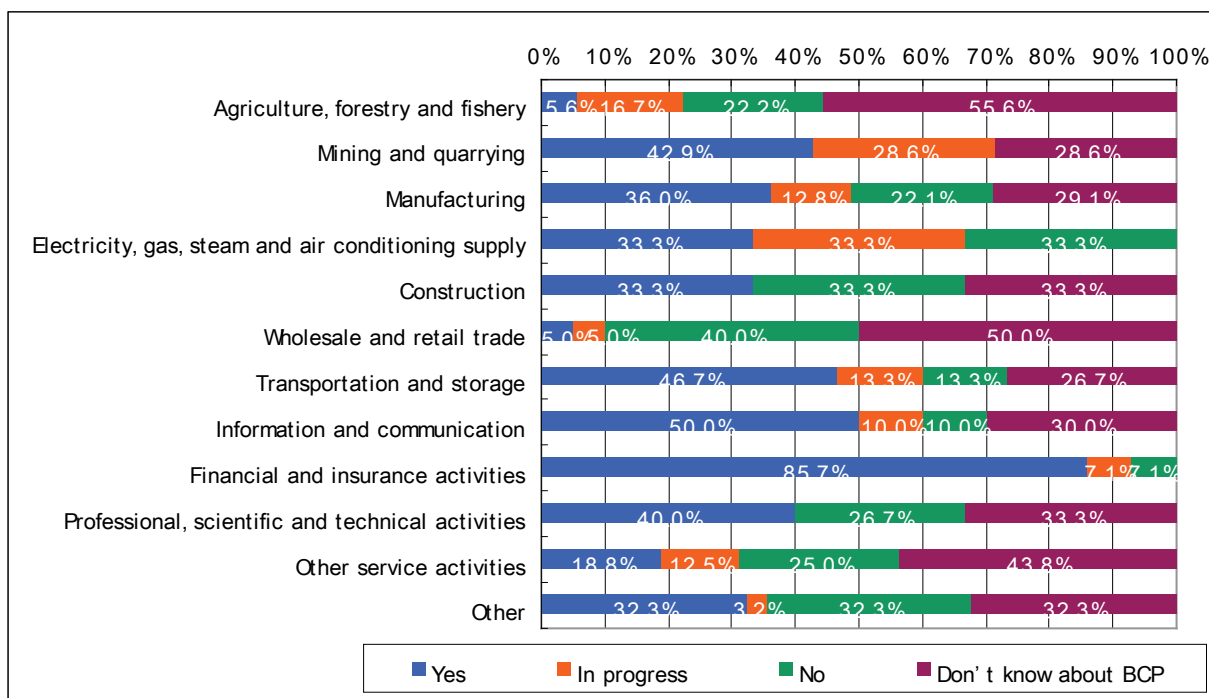
(single answer, n=272 (total), 145 (SME), 127 (large-scale), 115 (listed), 157 (unlisted),
 78(have experienced disruption due to a disaster)
 194(have NOT experienced disruption due to a disaster))

BCP development status by economy (Do you have a written BCP?)



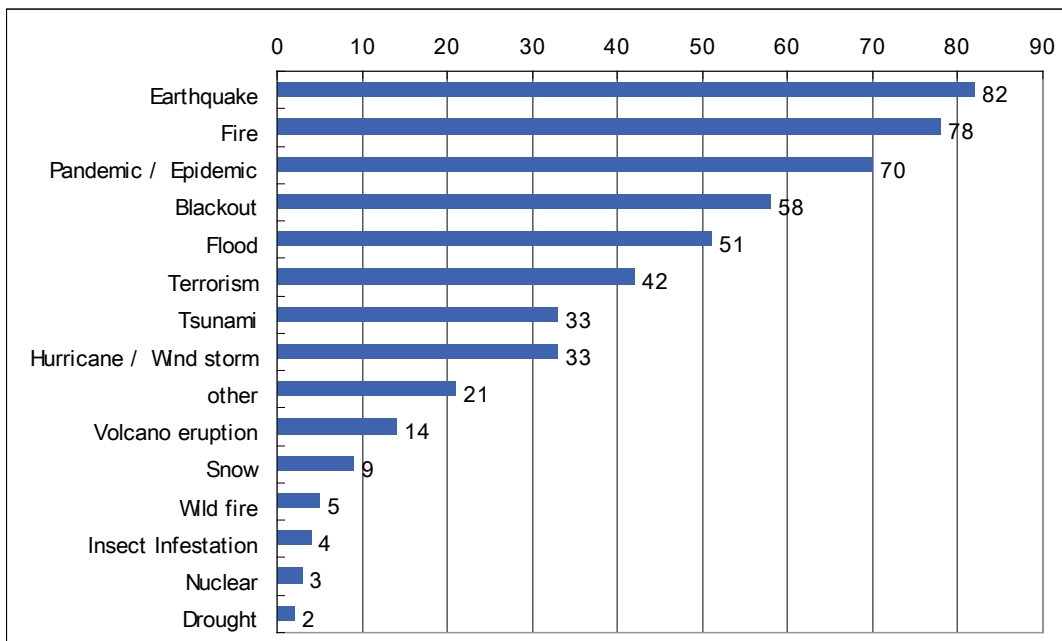
(single answer, economies in which the number of respondents >4
n=16 (Indonesia), 40 (Japan), 16 (Republic of Korea), 7 (Malaysia), 5
(New Zealand), 27 (Peru), 40 (Philippines), 12 (Russia), 33 (Singapore),
15 (Chinese Taipei), 35 (Thailand), 10 (United States), 8 (Viet Nam))

BCP development status by industry (Do you have a written BCP?)



(single answer, industries in which the number of respondents >4
n= 18 (Agriculture, forestry and fishery), 7 (Mining and quarrying), 86
(Manufacturing), 6 (Electricity, gas, steam and air conditioning supply), 2
(Construction), 20 (Wholesale and retail trade), 15 (Transportation and
storage), 10 (Information and communication), 14 (Financial and insurance
activities), 15 (Professional, scientific and technical activities),
16 (Other service activities), 31 (Other))

Threats addressed in BCP

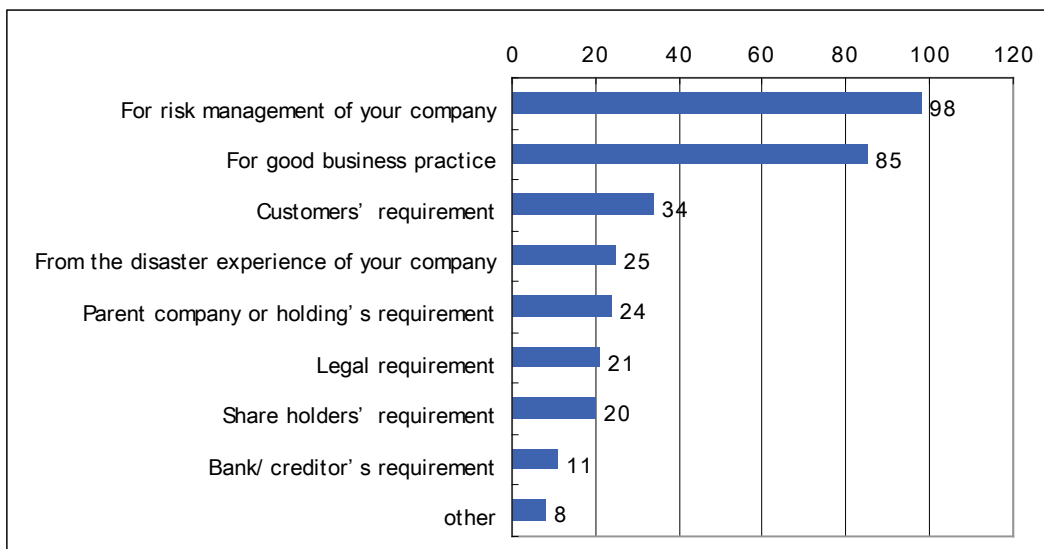


(multiple answer, n=117 : companies that have or are in the process of creating a written BCP)

3.3 Process of BCP Development

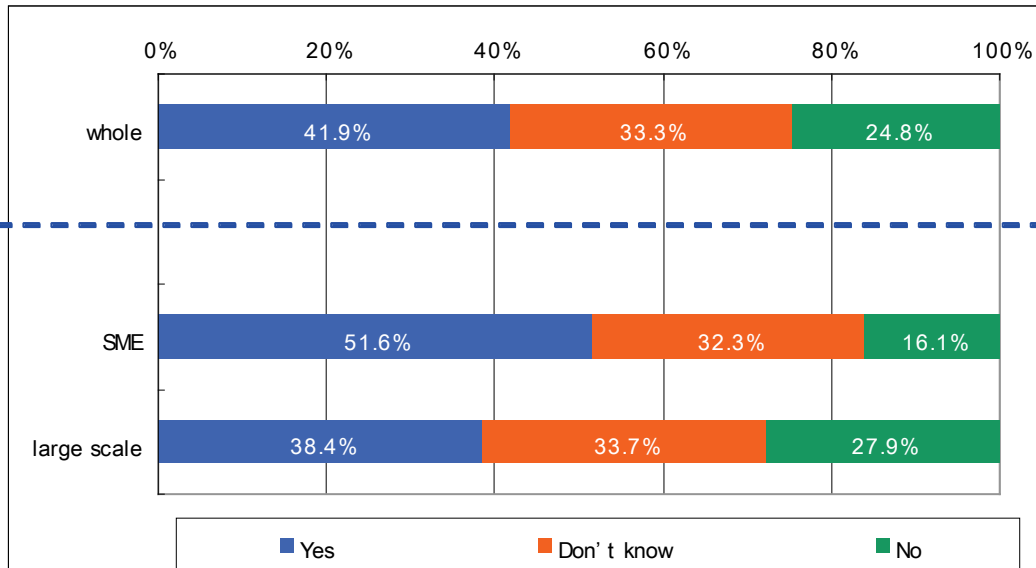
- Many respondents developed BCPs spontaneously, identifying the reasons as “for risk management of your company” or “for good business practice.” The number of respondents that developed BCPs because of their stakeholders' requirements is relatively small.
- Among all respondents, 41.9% indicated that public organizations have support systems for BCP development. More SME respondents than large-scale respondents indicated this to be the case. This indicates that public support systems are more helpful for SMEs than for large-scale companies.
- The top three types of support perceived as useful by respondents are “providing disaster information,” “training support,” and “providing a toolkit,” in descending order. When focusing only on SME respondents, “training support” is ranked at the top.
- The top three obstacles for respondents that don't have written BCPs are “lack of company BCP knowledge and expertise,” “lack of human resources,” and “of information needed for BCP development,” in descending order. On the other hand, when focusing on large-scale companies, “None in particular” is the top response.

Reasons or trigger events that motivated your company to develop a BCP



(multiple answer, n=117: companies that have or are in the process of creating a written BCP)

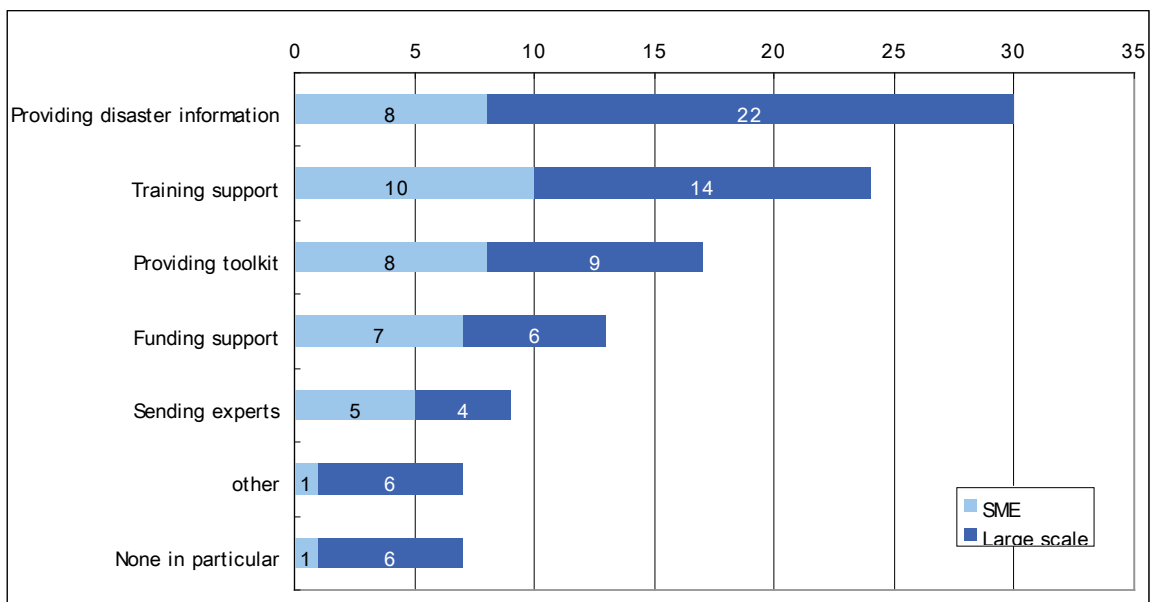
Public support (Does central / local government or emergency management/public safety organizations have public support systems for creating a BCP?)



(single answer, n = 117 (total), 31(SME), 86(large-scale)

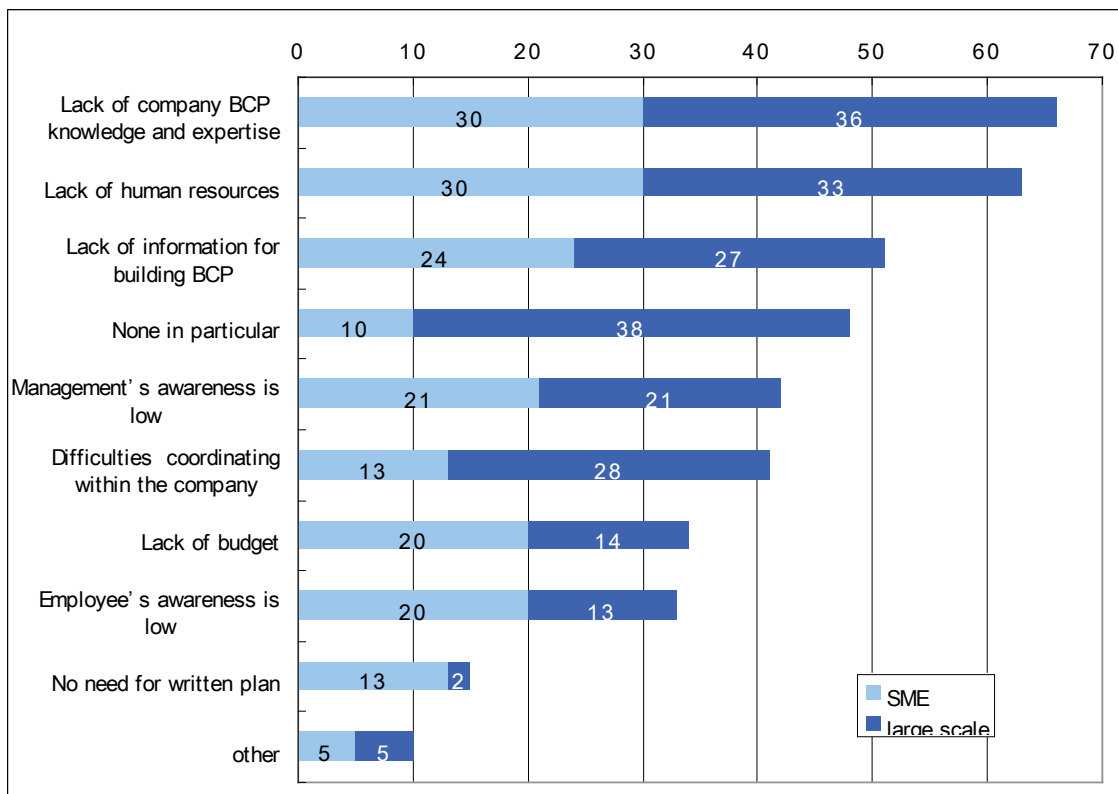
: companies that have or are in the process of creating a written BCP)

Useful public support systems



(multiple answer, n = 16(SME), 33(large-scale): companies that have or are in the process of creating a written BCP)

Obstacles for building a BCP



(multiple answer, n = 46(SME), 20(large-scale):
companies that have or are in the process of creating a written BCP)

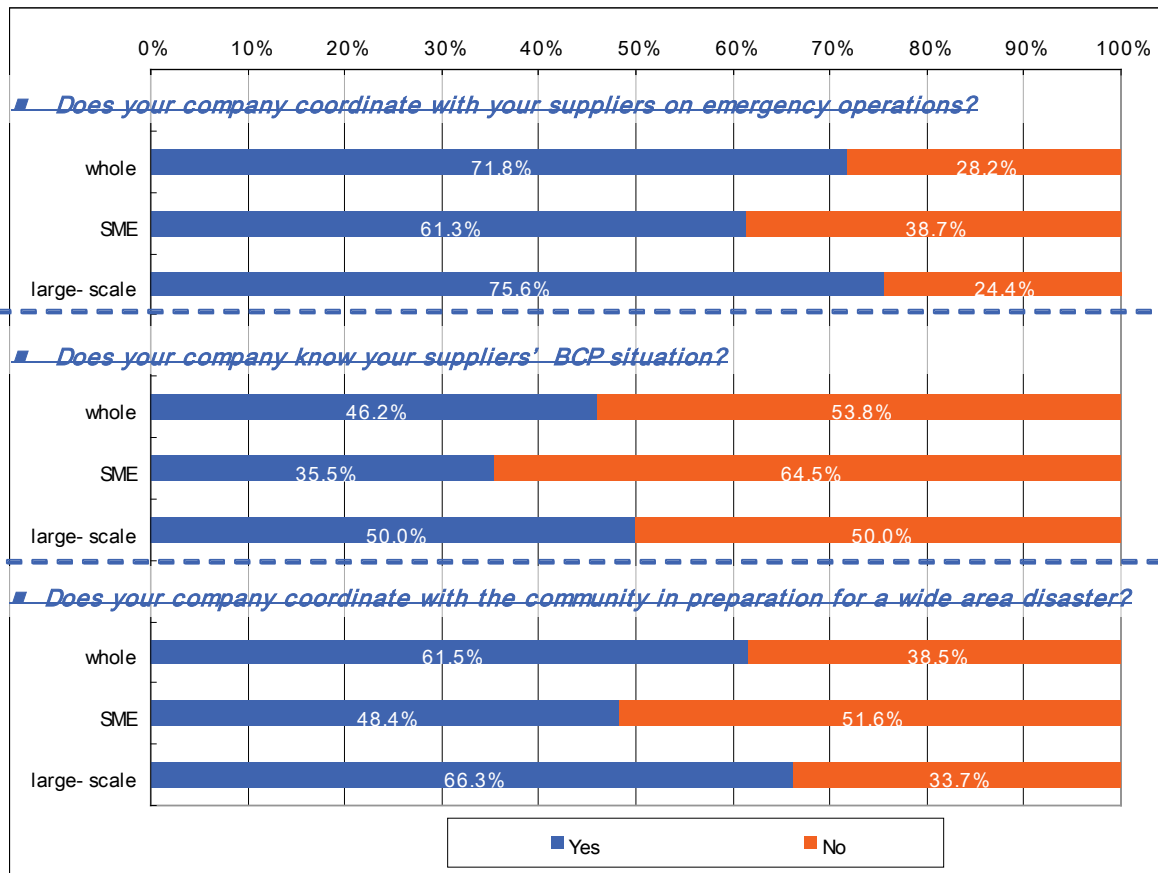
3.4 BCP Implementation

- **Among respondents that have or are in the process of creating a written BCP 71.8% coordinate with their suppliers on emergency operations. On the other hand, only 46.2% of those know their suppliers' BCP status.**
- **Among respondents that have a written BCP, 61.5% coordinate with their communities in preparation for widespread disasters.**
- **Many respondents that have a written BCP have insurance for their property or employees. However, few respondents utilize “commitment lines *” or “derivatives **”.**
- **Popular educational activities and drills among respondents that have a written BCP are “evacuation drills” and “awareness lectures.”**
- **Many respondents that have a written BCP monitor and update their BCP “annually” or “when the business environment changes.”**
- **Overall, the top two obstacles in monitoring and updating BCPs are “lack of human resources” and “lack of company BCP knowledge and expertise.” On the other hand, when focusing on large-scale companies, “None in particular” is the second-most frequent response.**

* Commitment lines : A formal offer by a lender making explicit the terms under which it agrees to lend money to a borrower over a certain period of time. Also called “loan commitments”..

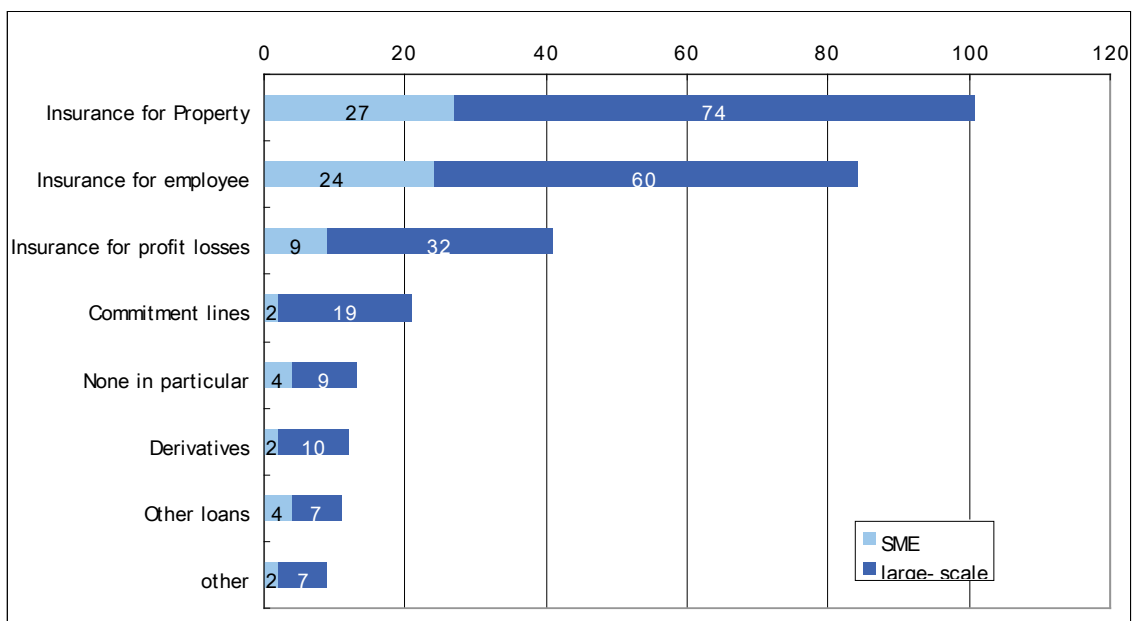
** Derivatives: A financial instrument whose characteristics and value depend upon the characteristics and value of an underlier, typically a commodity, bond, equity or currency. Some derivatives provide for payment in the event of disasters.

Coordination with suppliers and community



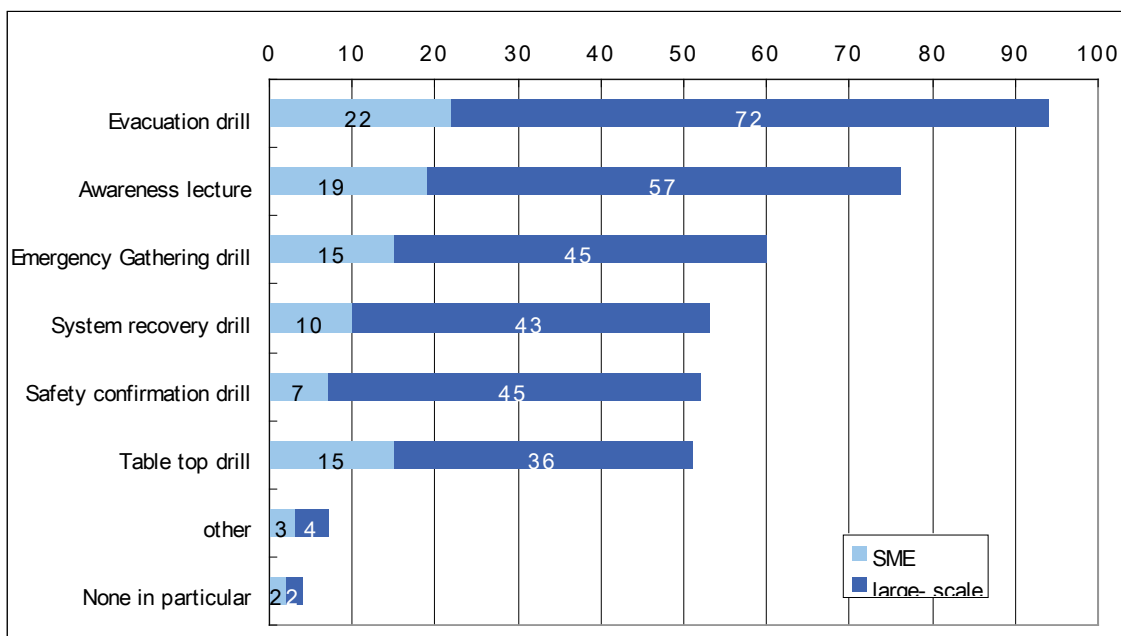
(single answer, n = 117(whole), 31(SME), 86(large-scale):
companies that have or are in the process of creating a written BCP)

Utilized risk finance mechanisms



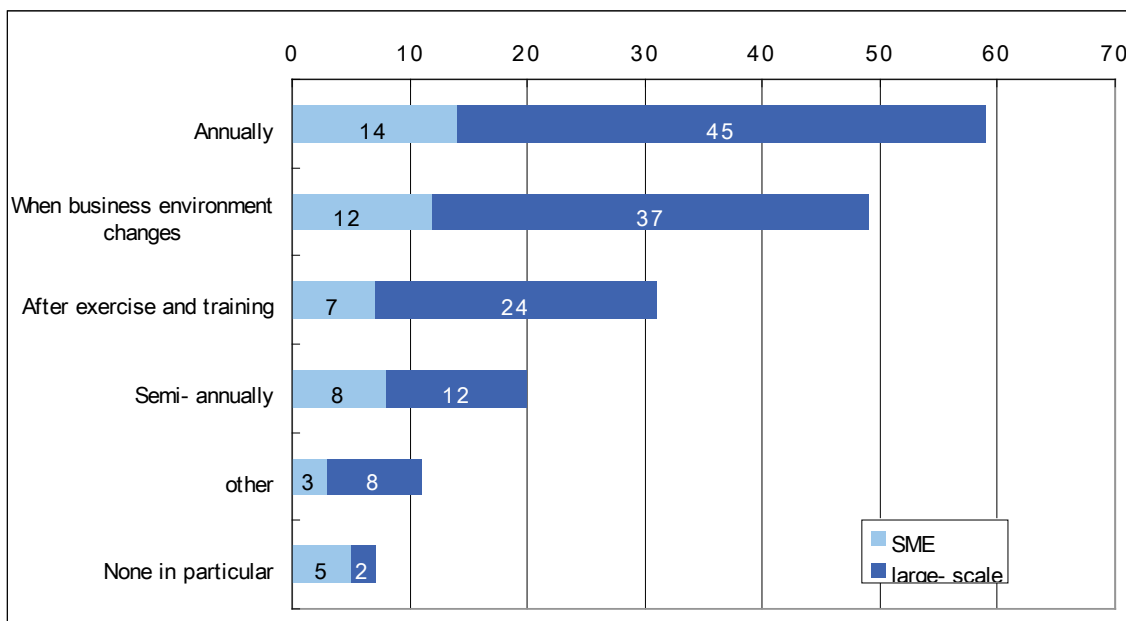
(multiple answer, n = 23(SME), 66(large-scale): companies that have a written BCP)

Utilized BCP educational activities / drills for employees



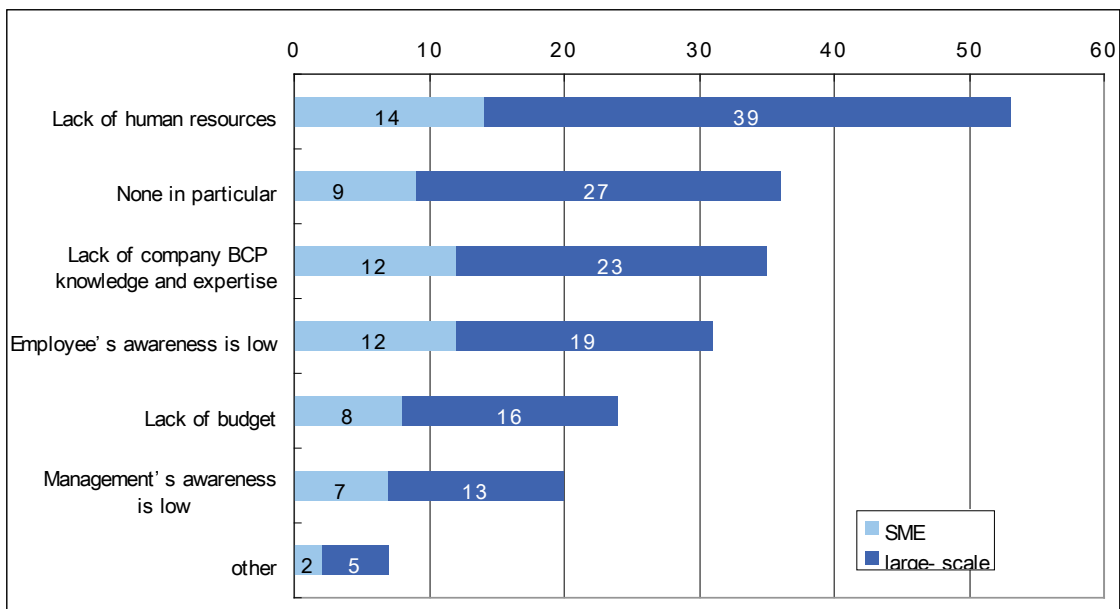
(multiple answer, n = 23(SME), 66(large-scale): companies that have a written BCP)

Frequency of monitoring / updates



(multiple answer, n = 23(SME), 66(large-scale): companies that have a written BCP)

Obstacles for monitoring / updating BCP



(multiple answer, n = 23(SME),66(large-scale): companies that have a written BCP)

4. Discussion

From the lessons learned from past catastrophic events, the private sector plays an important role in reducing economic damage and regional impacts when they are well prepared for disasters. APEC therefore needs to strengthen the private sector's capacity for disaster preparedness and recovery by promoting BCP among APEC member economies.

The following are key suggestions for encouraging adoption of BCP among APEC economies drawn from the survey's findings.

- **Fill in the gaps between economies and improve each level**

We found that there are gaps in their level of BCP development between economies. To fill those gaps throughout the APEC region, we should first share good practices to raise their awareness of the significance by utilizing BCP guidelines and toolkits commonly used in advanced economies.

Second, we should pay more attention to supply chain management and close relationships with relevant communities, public infrastructures and agencies as one of the perspectives of public private partnership (PPP). We have observed situations in which supply chain disruptions in one economy had impacts on many other economies (e.g., the automobile industry in Great East Japan Earthquake, 2011). Therefore, supply chain management is imperative when developing a business continuity strategy. Also, teamwork on BCP development with suppliers, including those in different economies, will improve the BCP status of emerging economies.

- **Bottlenecks identified for BCP development**

Our survey shows the following bottlenecks for BCP development:

- Lack of BCP leadership among top management
- Lack of skills and knowledge
- Difficulty in securing human resources
- Low awareness among employees
- Lack of budget for BCP tasks

These all are critical factors for BCP development. Therefore, each economy should make an effort to remove these obstacles.

- Expand effective public support systems and resources available to SMEs

We found that BCPs are least well known among SMEs. SMEs are the predominant firms within APEC member economies, and they employ a large percentage of the region's work force. However their limited resources and skills make them more vulnerable.

Our survey indicates that public supports are effective for SMEs. Therefore, we should expand the public support systems and resources available to SMEs. First, public support should enhance the BCP awareness of SMEs by providing disaster information. Second, skills and knowledge should be provided using supply guidelines, standards, and toolkits.



*Questionnaires
and Raw Results*

I Basic Information

1. *In which country/economy is your company registered? [single answer]*

		N	%
Whole		272	100.0
1	Australia	1	0.4
2	Brunei Darussalam	2	0.7
3	Canada	0	0.0
4	Chile	0	0.0
5	People's Republic of China	1	0.4
6	Hong Kong, China	2	0.7
7	Indonesia	16	5.9
8	Japan	40	14.7
9	Republic of Korea	16	5.9
10	Malaysia	7	2.6
11	Mexico	2	0.7
12	New Zealand	5	1.8
13	Papua New Guinea	0	0.0
14	Peru	27	9.9
15	The Philippines	40	14.7
16	Russia	12	4.4
17	Singapore	33	12.1
18	Chinese Taipei	15	5.5
19	Thailand	35	12.9
20	The United States	10	3.7
21	Viet Nam	8	2.9

2. Which is your company's major industry segment? [single answer]

* If you wonder which is the best for your company, please refer the detail of UNSD classification;

	N	%
Whole	272	100.0
1 Agriculture, forestry and fishery	18	6.6
2 Mining and quarrying	7	2.6
3 Manufacturing	86	31.6
4 Electricity, gas, steam and air conditioning supply	6	2.2
5 Water supply; sewerage, waste management and remediation activities	0	0.0
6 Construction	12	4.4
7 Wholesale and retail trade	20	7.4
8 Transportation and storage	15	5.5
9 Accommodation and food service activities	4	1.5
10 Information and communication	10	3.7
11 Financial and insurance activities	14	5.1
12 Real estate activities	6	2.2
13 Professional, scientific and technical activities	15	5.5
14 Administrative and support service activities	4	1.5
15 Public administration and defence; compulsory social security	0	0.0
16 Education	4	1.5
17 Human health and social work activities	3	1.1
18 Arts, entertainment and recreation	0	0.0
19 Other service activities	16	5.9
20 Activities of households as employers; undifferentiated goods - and services-producing activities of households for own use	0	0.0
21 Activities of extraterritorial organizations and bodies	1	0.4
22 Other	31	11.4

Other (free answer)

Investment solution provider, media and entertainment, philanthropy, community development, etc.

3. How much are your company's total assets? [single answer]

* Please answer not as consolidated whole group but as a single company.

	N	%
Whole	272	100.0
1 Up to US\$15 million	129	47.4
2 More than US\$15 million	143	52.6

4. How much is your company's annual revenue? [single answer]

* Please answer not as consolidated whole group but as a single company.

	N	%
Whole	272	100.0
1 Up to US\$15 million	116	42.6
2 More than US\$15 million	156	57.4

5. *How many people does your company employ? [single answer]*

* Please answer not as consolidated whole group but as a single company.

		N	%
Whole		272	100.0
1	Up to 300	145	53.3
2	More than 300	127	46.7

6. *Is your company listed or unlisted? [single answer]*

		N	%
Whole		272	100.0
1	Listed	115	42.3
2	Unlisted	157	57.7

7. *What threats have the potential to cause serious disruption to your company? [multiple answer]*

		N	%
Whole		272	100.0
1	Earthquake	174	64.0
2	Tsunami	93	34.2
3	Hurricane / Wind storm	79	29.0
4	Flood	129	47.4
5	Snow	22	8.1
6	Fire	157	57.7
7	Wild fire	18	6.6
8	Volcano eruption	49	18.0
9	Drought	30	11.0
10	Insect Infestation	23	8.5
11	Pandemic / Epidemic	115	42.3
12	Blackout	138	50.7
13	Terrorism	126	46.3
14	Nuclear	59	21.7
15	other	22	8.1

Other (free answer)

Chemical leakage, aircraft accident, hijacking, supply chain interruption, Internet service disruption (cable cut due to the Chinese Taipei quake), etc.

8. *Has your company ever been seriously disrupted by a disaster? [single answer]*

(1) Yes >> Question 8S

(2) No >> Question 9

		N	%
Whole		272	100.0
1	Yes	78	28.7
2	No	194	71.3

8S. *Which disasters? [multiple answer]*

		N	%
Whole		78	100.0
1	Earthquake	35	44.9
2	Tsunami	19	24.4
3	Hurricane / Wnd storm	19	24.4
4	Flood	28	35.9
5	Snow	5	6.4
6	Fire	17	21.8
7	Wild fire	4	5.1
8	Volcano eruption	5	6.4
9	Drought	6	7.7
10	Insect Infestation	1	1.3
11	Pandemic / Epidemic	13	16.7
12	Blackout	12	15.4
13	Terrorism	15	19.2
14	Nuclear	7	9.0
15	other	9	11.5

Other (free answer)

Aircraft accident, hijacking, Internet service disruption, SARS, viral infection in plants, etc.

II BCP Development

9. *Does your company have a written BCP? [single answer]*

- (1) Yes
- (2) In progress
- (3) No >> GO TO QUESTION 17 AND 18, THE END
- (4) Don't know about BCP >> THE END

		N	%
Whole		272	100.0
1	Yes	89	32.7
2	In progress	28	10.3
3	No	66	24.3
4	Don't know about BCP	89	32.7

10. *Which threats does your BCP address? [multiple answer]*

		N	%
Whole		117	100.0
1	Earthquake	82	70.1
2	Tsunami	33	28.2
3	Hurricane / Wnd storm	33	28.2
4	Flood	51	43.6
5	Snow	9	7.7
6	Fire	78	66.7
7	Wild fire	5	4.3
8	Volcano eruption	14	12.0
9	Drought	2	1.7
10	Insect Infestation	4	3.4
11	Blackout	58	49.6
12	Pandemic / Epidemic	70	59.8
13	Terrorism	42	35.9
14	Nuclear	3	2.6
15	other	21	17.9

Other (free answer)

Chemical leaks, civil unrest or insurrection, system disruptions, computer server down, etc.

11. Did your company have a BCP in place during any of the disasters you listed in question 8?

[single answer]

- (1) Yes >> Question 11S
- (2) No >> Question 12

		N	%
Whole		46	100.0
1	Yes	38	82.6
2	No	8	17.4

11S. How was it useful? [multiple answer]

		N	%
Whole		38	100.0
1	Getting back to supply service and products quickly	33	86.8
2	Stabilizing your company's workforce	18	47.4
3	Continue stakeholders' confidence	19	50.0
4	Avoiding enormous loss and saving revenue	17	44.7
5	other	7	18.4

Other (free answer)

Ensure safety of employees, commitment to social responsibility, manage the risk, etc.

12. What are the reasons or trigger events that motivated your company to develop a BCP?

[multiple answer]

		N	%
Whole		117	100.0
1	For good business practice	85	72.6
2	For risk management of your company	98	83.8
3	From the disaster experience of your company	25	21.4
4	Legal requirement	21	17.9
5	Customers' requirement	34	29.1
6	Share holders' requirement	20	17.1
7	Bank/ creditor's requirement	11	9.4
8	Parent company or holding's requirement	24	20.5
9	other	8	6.8

Other (free answer)

Protect reputation of the company, assure business continuity to customers, political demonstration, governance requirements and staff well-being, etc.

13. Does central / local government or emergency management/public safety organization have a public support systems for building a BCP? [single answer]

- (1) Yes >> Question 13S
- (2) Don't know >> Question 14
- (3) No >> Question 14

		N	%
Whole		117	100.0
1	Yes	49	41.9
2	Don't know	39	33.3
3	No	29	24.8

13S. If yes, which system has your company ever used? [multiple answer]

		N	%
Whole		49	100.0
1	Funding support	13	26.5
2	Providing disaster information	30	61.2
3	Training support	24	49.0
4	Providing toolkit	17	34.7
5	Sending experts	9	18.4
6	other	7	14.3
7	None in particular	7	14.3

Other (free answer)

Drills, tabletop exercises, Singapore Standard for BCM, audits, seminars, etc.

14. How did your company build a BCP? [multiple answer]

		N	%
Whole		117	100.0
1	Refer to general guidelines published by central / local government	59	50.4
2	Refer to Sector specific guidelines published by each industrial association	36	30.8
3	Refer to guidelines of BCP standards, e.g. BS25999, NFPA1600, etc.	42	35.9
4	Refer to text books	27	23.1
5	Advised from consultants	55	47.0
6	other	23	19.7

Other (free answer)

Recruit BCP practitioners, examples from other organizations, used experience from existing staff and other business peers, group guidelines, etc.

15. Does your company coordinate with your suppliers on emergency operations? [single answer]

		N	%
Whole		117	100.0
1	Yes	84	71.8
2	No	33	28.2

16. Does your company know your suppliers' BCP situation? [single answer]

		N	%
Whole		117	100.0
1	Yes	54	46.2
2	No	63	53.8

16S. If yes, how are your suppliers' BCP situation? [single answer]

		N	%
Whole		54	100.0
1	All have done	9	16.7
2	Some have done	39	72.2
3	All in progress	4	7.4
4	All no plan	0	0.0
5	other	2	3.7

Other (free answer)

Some have built BCP, some are in progress, etc.

17. What are the obstacles for building BCP or what was the reason for not building BCP?
[multiple answer]

		N	%
Whole		183	100.0
1	Management' s awareness is low	42	23.0
2	Employee' s awareness is low	33	18.0
3	Difficulties coordinating within the company	41	22.4
4	Lack of information for building BCP	51	27.9
5	Lack of human resources	63	34.4
6	Lack of company BCP knowledge and expertise	66	36.1
7	Lack of budget	34	18.6
8	No need for written plan	15	8.2
9	other	10	5.5
10	None in particular	48	26.2

Other (free answer)

Low motivation of usefulness, not a high priority due to other priorities in the business, prioritizing time, etc.

18. Do you have any related written plans? [single answer]

		N	%
Whole		183	100.0
1	Yes	140	76.5
2	No	43	23.5

18S. If yes, what contents of the plans? [multiple answer]

		N	%
Whole		140	100.0
1	Emergency response plan	124	88.6
2	Evacuation plan / manual	109	77.9
3	Emergency communications plan / manual	93	66.4
4	Pandemic protection plan / manual	72	51.4
5	System down manual	78	55.7
6	System recovery manual	86	61.4
7	other	7	5.0

Other (free answer)

Crisis management plan, fire plan, crisis mgmt/communications plans, etc.

III Implementation situation of BCP

19. Does your company coordinate with the community in preparation for a wide area disaster?
[single answer]

		N	%
Whole		117	100.0
1	Yes	72	61.5
2	No	45	38.5

20. Does your company have or have a plan to be certified by BCP guidelines and standards e.g. BS25999, NFPA 1600, etc? [multiple answer]

		N	%
Whole		117	100.0
1	Yes, BS25999	15	12.8
2	Yes, NFPA1600	7	6.0
3	Yes, other guidelines and standard	17	14.5
4	None in particular	84	71.8

Other (free answer)

SS540 (Singapore BCM Standard), group requirement, OHSAS 18001, ISO 14001, local health, safety and environmental requirements, etc.

21. What risk finance mechanisms does your company utilize? [multiple answer]

	N	%
Whole	117	100.0
1 Insurance for Property	101	86.3
2 Insurance for employee	84	71.8
3 Insurance for profit losses	41	35.0
4 Derivatives	12	10.3
5 Commitment lines	21	17.9
6 Other loans	11	9.4
7 other	9	7.7
8 None in particular	13	11.1

Other (free answer)

Captive, internal cash reserves, credit risk insurance, etc.

22. How does your company educate and drill itself? [multiple answer]

	N	%
Whole	117	100.0
1 Awareness lecture	76	65.0
2 Evacuation drill	94	80.3
3 Emergency Gathering drill	60	51.3
4 System recovery drill	53	45.3
5 Safety confirmation drill	52	44.4
6 Table top drill	51	43.6
7 other	7	6.0
8 None in particular	4	3.4

Other (free answer)

Individual training on the Crisis Management Plan, attend government sponsored, public, community or business association events/seminars and forums, simulations, etc.

23. How often does your company monitor and update BCP? [multiple answer]

	N	%
Whole	117	100.0
1 Annually	59	50.4
2 Semi- annually	20	17.1
3 After exercise and training	31	26.5
4 When business environment changes	49	41.9
5 other	11	9.4
6 None in particular	7	6.0

Other (free answer)

Quarterly, after disasters, etc.

24. What are obstacles and problems monitoring and updating BCP? [multiple answer]

		N	%
Whole		117	100.0
1	Management' s awareness is low	20	17.1
2	Employee' s awareness is low	31	26.5
3	Lack of human resources	53	45.3
4	Lack of budget	24	20.5
5	Lack of company BCP knowledge and expertise	35	29.9
6	other	7	6.0
7	None in particular	36	30.8

Other (free answer)

Time and resources, making exercises realistic to ensure BCP will work, staff have other more pressing day-to-day priorities, etc.

25. Please fill out the following form if you may cooperate with the additional research;

- (1) Company Name _____
- (2) Person in Charge _____
- (3) Contact E-mail _____ TEL _____