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Disasters and Risk Perception: Evidence from Thailand Floods[1]

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Abstract

This paper examines if and how past experience affects people's perception towards disasters. In particular, we study if past experience enables people to form a probabilistic belief as opposed to ambiguity or unawareness, i.e., Knightian uncertainty. To answer the question, we use a unique micro data set of firms operating in Thailand, which includes firms that incurred losses during the 2011 Thailand floods as well as those that did not. The empirical evidence indicates that firms with direct loss experience are more likely to form a probabilistic belief compared to those without one. In contrast, subjective probabilities across firms are very diverse regardless of loss experience. This suggests that the level or scale of the prevention measures firms or people would deploy on a voluntary basis would be diverse and that arranging a widely subscribed formal catastrophe insurance scheme targeting a specific catastrophe peril would be very difficult.

Keywords: Ambiguity, Knightian uncertainty, Probabilistic belief, Risk, subjective probability, Unawareness.
JEL classification: D80, D81, D83.

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1 Introduction

Disasters cause severe damage to the livelihood of people or firms. It is therefore important to be well equipped with various prevention measures ex ante so as to limit the level of damage. In the aftermath of a disaster, however, it is fairly common to claim that the disaster was hardly predictable or unforeseeable ex ante, revealing a high level of unpreparedness for the disaster prior to the event. Such a claim is closely connected with the difficulty associated with the very concept of uncertainty.

Knight (1921) made a distinction between situations in which one can calculate probabilities and those in which one cannot. The former is referred to as *risk* and the latter is referred to as the so-called *Knightian uncertainty*.[1] The modern interpretation of this distinction is that risk refers to situations in which one can form a probabilistic belief, which may well be subjective, and (Knightian) uncertainty refers to situations in which one is unable to form a probabilistic belief. The latter situation may be further divided into two distinct classes of situations: (a) *Ambiguity*, which refers to situations in which one precisely knows what may happen, i.e. she knows all the possible future outcomes, and (b) *unawareness* or *unforeseen contingencies*, where one does not know precisely what may happen, i.e. she is unable to specify all possible future outcomes. In other words, the distinction between ambiguity and unawareness is made in accord with the (self-perceived) knowledge of the state space and/or the lack of it.

The Ellsberg paradox by Ellsberg (1961), which violates the predictions of subjective expected utility, exhibited the importance of the distinction between risk and Knightian uncertainty. As a result, a large literature of decision theory on ambiguity has emerged, in particular, the Choquet expected utility theory initiated by Schmeidler (1989), and Gilboa and Schmeidler (1989), so did the cumulative prospect theory by Kahneman and Tversky (1979, 1992).[2] Meanwhile, the existing literature on unawareness or unforeseen contingencies includes Kreps (1979, 1992), Nehring (1999), Dekel et al. (2001, 2007), and Ghirardato (2001).

A critical issue in the literature of ambiguity and unawareness/unforeseen contingencies is how people update their preferences. Recent developments on this front include Gilboa and Schmeidler (1993), Pires (2002), Eichberger et al. (2007), and Hanany and Klibanoff (2007). However, not much effort has been made on the empirical side of the literature so far. In particular, we are left with very little understanding about the way how people would react to disasters when they are taken by complete surprise.

It appears to be fairly common that one's perception towards disasters would be substantially altered in the aftermath of a major disaster, which indicates that her preferences

[1] Knight (1921) defined risk as a situation in which an individual is able to calculate probabilities on the basis of an objective classification of instances, whilst he defined (Knightian) uncertainty as a situation where no objective classification is possible.

[2] See Gilboa and Marinacci (2013) for a survey on the development of the literature on ambiguity.

would have changed as a result of the disaster. The following two cases are the ones to which the current paper pays particular attention:

- One was unable to form a probabilistic belief prior to the disaster, but has become capable of forming one ex post;
- One was able to form a probabilistic belief prior to the disaster, but has become incapable of forming one ex post.

The former case may arise when a disaster triggers one to have a concrete idea about disasters and helps her form a probabilistic belief, although there is no guarantee that her probabilistic belief agrees with other people's beliefs, let alone with the correct probability. The second case may arise when a disaster comes as a complete surprise and is fundamentally incompatible with the belief she held prior to the disaster. In either case, it is not trivial a priori how one's preferences may be affected by a disaster.

To shed light on this issue, this paper examines empirically if and how past experience of disasters affects people's perception towards disasters. To this end, we use a unique micro data set covering over 300 firms operating in Thailand, including firms located in areas inundated during the 2011 Thailand floods as well as those located in other areas. The data were collected through the 'RIETI Survey of Industrial Estates/Parks and Firms in Thailand on Geographic and Flood Related Information' (the RIETI survey hereafter) conducted by the Research Institute of Economy, Industry and Trade (RIETI) of Japan from October 2013 until January 2014.[3] Using the data set, we explicitly examine if loss experience has impacts on belief formation and/or subjective probability.

Moreover, identifying the factors that affect belief formation as well as subjective probability is critical, because one's belief or risk perception would significantly influence her behaviour regarding risk mitigation/prevention activities ex ante. To this end, we use the basic attributes of each respondent firm/plant collected as part of the RIETI survey.

2 Data and Background

We use the data set collected through the RIETI survey conducted from October 2013 until January 2014. The RIETI survey comprises two parts: the firm questionnaire and the industrial estate/park operator questionnaire. We use the firm questionnaire, which includes questions on the basic attributes of the respondent firm/plant (such as location, plant size and operation history), flood related questions (such as direct/indirect loss and/or inundation experience caused by flooding and current and past flooding risk perception), business related questions (such as current and past main trading partners and

[3]The actual survey was commissioned to Teikoku Databank, Ltd. (TDB).

current and past business sentiments), and questions on human resources/labour (such as workforce size, wage rates, bonus payments, recruitment conditions and labour disputes).

The total number of samples collected from the firm questionnaire is 314: 129 samples were collected using a postal questionnaire sent to the headquarters of Japanese parent companies in Japan and 185 were collected directly in Thailand, of which 102 samples were collected through face-to-face interviews, 38 samples using a postal questionnaire, and 45 samples through telephone interviews.[4]

Table 1: Survey methods

Method	Samples
Japan (subtotal)	(129)
Postal survey	129
Thailand (subtotal)	(185)
Postal survey	38
Telephone interview	45
Face-to-face interview	102
Total	314

Note: The RIETI survey collected data from 129 samples in Japan and from 185 samples in Thailand.

Table A.1 in the Appendix summarises the locations of firms/plants. The region hit most severely by the 2011 floods is that located immediately north of Bangkok, i.e. Ayutthaya and Pathum Thani provinces.[5] Table A.1 shows that 106 samples are located in the worst hit region, which amounts to roughly one third of all 314 samples. Moreover, apart from the 2011 floods, major floods took place in the recent past along the Chao Phraya river in 1995 and in 2006, although the damage was fairly limited on these occasions compared to the 2011 floods. Table A.2 in the Appendix shows information on past floods.

Regarding belief formation and subjective probability, the RIETI survey includes the following questions:

- *What is the probability of an occurrence of flooding as severe as the 2011 floods during your tenure in the current office?* **[SP 1]**
- *What is the probability of an occurrence of flooding as severe as the 2011 floods in the next 50 years?* **[SP 2]**

The respondents were allowed to answer 'I do not know' to these questions; thus, such an answer let us identify who does not (or is unable to) form a probabilistic belief. Based on the answers to these questions, we construct the following variables:

[4]Please refer to the Appendix for details of the sampling procedures. TDB conducted the postal survey in Japan, but they delegated the survey in Thailand to Business Innovation Partners Co., Ltd., who conducted the survey in cooperation with the Industrial Estate Authority of Thailand (IEAT).

[5]Although the northern part of Bangkok was inundated, none of the industrial estates in Bangkok were.

- *Belief formation (during tenure in office)*:
  This variable identifies whether the respondent forms a subjective probability of flood occurrence during her tenure in the current office: It takes a value of 1 if the respondent answers a subjective probability to the first question above, i.e. [**SP 1**], and 0 if she answers 'I do not know'. Note that some respondents answered neither the subjective probability nor 'I do not know'. These are treated as missing values and are not used in the analyses.

- *Subjective probability (during tenure in office)*:
  This variable is the respondent's subjective probability of flood occurrence during her tenure in the current office (in percentage). This is the answer to the first question above, i.e. [**SP 1**].

- *Belief formation (over the next 50 years)*:
  This variable identifies whether the respondent forms a subjective probability of flood occurrence in the next 50 years: It takes the value of 1 if the respondent answers a subjective probability to the latter question, i.e. [**SP 2**], and 0 if she answers 'I do not know'. Some respondents answered neither the subjective probability nor 'I do not know'. These are treated as missing values and are not used in the analyses.

- *Subjective probability (over the next 50 years)*:
  This variable is the respondent's subjective probability of flood occurrence in the next 50 years (in percentage). This is the answer to the latter question above, i.e. [**SP 2**].

Regarding loss experience during the 2011 floods, the RIETI survey asks the following questions:

- *Was your plant inundated during the 1995/2006/2011 floods?*
  The respondent was to answer 'Yes' or 'No' for each floods in 1995, 2006 and 2011.

- *Please choose all applicable entries concerning losses your plant/firm incurred during the 2011 floods.*

  (a) Direct losses (inside the industrial estate/park);

  (b) Direct losses (outside the industrial estate/park);

  (c) Indirect losses (lack of supply);

  (d) Indirect losses (caused by disruptions at clients);

  (e) Indirect losses (disruption of part of the supply chain);

  (f) No losses incurred; (g) Enjoyed gains.

From these questions, we construct the following variables:

- Inundated during 2011 floods:
  This is a dummy variable that takes a value of 1 if the respondent answered 'Yes' to the first question for the 2011 floods.

- Direct losses during 2011 floods:
  This is also a dummy variable: It takes a value of 1 if the respondent's plant was directly damaged by the 2011 floods. This variable is constructed from the latter question. We consider the plant to have incurred direct losses if either (a) or (b) was chosen. As shown in the following table, some respondents answered that they were inundated but did not incur direct losses (or vice versa).

Table 2: Distribution of direct losses/inundation experience

	No direct losses	Direct losses	Total
Not inundated	165	15	180
Inundated	3	110	113
Total	168	125	293

Note: Numbers of plants applicable to each entry.

- Indirect losses during 2011 floods:
  This is a dummy variable: It takes a value of 1 if the respondent's plant was indirectly damaged by the 2011 floods. This variable is also constructed from the latter question. We consider the plant to have incurred losses indirectly if either (c), (d), or (e) was chosen. As shown in the following table, some respondents incurred losses both directly and indirectly.

Table 3: Distribution of direct/indirect losses

	No indirect losses	Indirect losses	Total
No direct losses	65	107	172
Direct losses	59	66	125
Total	124	173	297

Note: Numbers of plants applicable to each entry.

The definitions of other variables are listed in the Appendix. Also, descriptive statistics of the key variables are listed in Table B.1 in the Appendix.

3 Econometric Models and Results

In what follows, we first explain the econometric models. Then, we explain the estimation results.

3.1 Econometric Models

We first estimate the following class of regression models with which we may examine the impacts of the experience of the 2011 floods on belief formation:

$$BF_i = \alpha_1 Flood_i + \alpha_2 X_i + \varepsilon_i, \tag{1}$$

where BF_i is a *belief formation* dummy variable, $Flood_i$ is a set of loss experience dummy variables, X_i is a vector of other control variables, and ε_i is the random error term. We use two sets of variables that represent $Flood_i$ in the data set: (a) *Direct losses during 2011 floods* and *Indirect losses during 2011 floods*, and (b) *Inundated during 2011 floods*. Moreover, we use *Number of storeys (main factory building)*, *Introduced BCP before 2011 floods*, *Inventory value as of June 2011* and *Inventory value answered* as control variables X_i, while changing the combinations amongst them in addition to the choice of the $Flood_i$ variable.

Next, we estimate regression models of subjective probability on $Flood_i$ and other variables:

$$\Pi_i = \beta_1 Flood_i + \beta_2 X_i + v_i, \tag{2}$$

where Π_i is a *subjective probability* variable, and v_i is the random error term.

Considering that the subjective probability is observed only if a respondent forms a probabilistic belief, there may be a sample selection problem. Thus, we estimate the following Heckman selection model by a two-step procedure:

$$\begin{aligned} BF_i &= 1[\alpha_1 Flood_i + \alpha_2 X_i + \alpha_3 Z_i + u_i > 0], \\ \Pi_i &= \beta_1 Flood_i + \beta_2 X_i + v_i \quad \text{if } BF_i = 1, \end{aligned}$$

where $1[\alpha_1 Flood_i + \alpha_2 X_i + \alpha_3 Z_i + u_i > 0]$ is an indicator function equal to 1 if $\alpha_1 Flood_i + \alpha_2 X_i + \alpha_3 Z_i + u_i > 0$ and 0 otherwise, and Z_i is a variable satisfying the exclusion restriction. We assume that the two error terms u_i and v_i follow a joint normal distribution: $u_i \sim N(0,1)$, $v_i \sim N(0,\sigma^2)$ and $\text{cov}(u_i, v_i) = \lambda$.

For the exclusion variable Z_i, we use a dummy variable *Thailand survey* equal to 1 if the survey response was collected in Thailand and 0 if it was collected in Japan. The underlying assumption is that the respondent would more likely be able to form a subjective probability if she is located in Thailand since she may have directly experienced the floods in 2011, while the level of the subjective probability itself is irrelevant to it and

determined by other attributes of the plant. Note that this variable does not completely identify the actual location of the respondent, because some respondents for the postal survey in Japan were actually located in Thailand. We also estimate Heckman selection models without any exclusion variables.

The $Flood_i$ variables are most likely to be affected by the location choice of the firm, which in turn would have been dictated by the preferences of the firm at the time of the location choice. Thus, an endogeneity issue concerning the $Flood_i$ variables may exist. To alleviate the impacts arising from this endogeneity issue, we split the samples into two groups in accordance with flooding risk awareness before the 2011 floods based on the variable *Flooding risk awareness (before 2011 floods)*: Subsamples who were aware of the flooding risk before the 2011 floods and those who were not.

3.2 Results

All estimation results are reported in Section C of the Appendix. More specifically, the OLS estimates of the econometric models (1) and (2) are reported in Tables C.1.1—C.1.12 in Subsection C.1 of the Appendix. The estimation results of the Heckman selection model with an exclusion variable are reported in Tables C.2.1—C.2.12 in Subsection C.2 of the Appendix, and those of the Heckman selection model without an exclusion variable are reported in Tables C.3.1—C.3.12 in Subsection C.3 of the Appendix.

Note that columns labelled 'Probability' are for regression models of Π_i, which is represented by one of the two *subjective probability* variables, and those labelled 'Belief' are for regression models of BF_i, which is represented by one of the two *belief formation* variables. The relevant *subjective probability* Π_i and *belief formation* BF_i variables are indicated in the title of each table. Furthermore, for each specification, estimation results for three different sets of samples are reported, i.e. all samples, subsamples that include only respondents who were unaware of the flooding risk before the 2011 floods, and subsamples that include only respondents who were aware of the flooding risk before the 2011 floods.

The OLS estimates of the regression model (1) indicate that *direct losses during 2011 floods* has a statistically significant positive impact on the belief formation BF_i variables, both *during tenure in office* and *over the next 50 years*; this is the case for almost all specifications for regressions using all samples or subsamples that only include respondents who were unaware of the flooding risk before the 2011 floods. Thus, the impact of direct loss experience on belief formation is fairly robust amongst respondents who were unaware of the flooding risk before the 2011 floods or when we do not control for the flooding risk awareness before the 2011 floods.

Unlike direct loss experience, indirect loss experience or inundation experience in the 2011 floods (represented by the *inundated during 2011 floods* variable) has an impact

on belief formation only for a small number of specifications even for respondents who were unaware of the flooding risk, i.e. the impact is not robust. Thus, only direct loss experience has a robust impact on the belief formation of respondents who were unaware of the flooding risk before the 2011 flooding. Moreover, regardless of the model specification, no flood experience variable has a statistically significant impact on the belief formation of respondents who were aware of the flooding risk before the 2011 floods.

Amongst other control variables, the number of storeys of the main factory building has a consistently positive impact on the belief formation variable BF_i for all specifications when we use all samples or subsamples that include only respondents who were unaware of the flooding risk. Similar to the loss experience variable, it has no impact on the belief formation variable BF_i for respondents who were aware of the flooding risk before the 2011 floods.

Similarly, the introduction of a business continuity plan (BCP) before the 2011 floods tends to have a positive impact on BF_i, when we use all samples or subsamples that include only respondents who were unaware of the flooding risk, although this result is less robust. This positive impact is quite natural since firms are required to identify as many potential risk factors as possible in order to create a BCP. In addition, the introduction of BCP before the 2011 floods has no impact on BF_i for respondents who were aware of the flooding risk. The inventory value as of June 2011, just before the 2011 floods, has a negative impact on BF_i in general, although the impact is not robust for respondents who were unaware of the flooding risk before the 2011 floods.

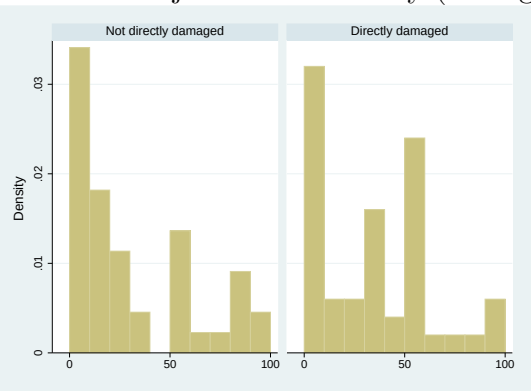
Next, we turn our attention to the OLS estimates of the regression model (2). The results show that loss experience during the 2011 floods generally does not affect the respondent's subjective probability Π_i. Although there are some exceptions when Π_i is represented by the *tenure in office* subjective probability variable, no loss experience variable has a statistically significant impact, when Π_i is represented by the *over the next 50 years* subjective probability variable.[6]

The number of storeys of the main factory building has a positive impact on Π_i, when we use all samples or subsamples that include only respondents who were unaware of the flooding risk, especially when Π_i is represented by the *during tenure in office* subjective probability variable. In contrast, it has a negative impact on Π_i for respondents who were aware of the flooding risk.

Introduction of BCP before the 2011 floods has no significant impact on Π_i, except for respondents who were aware of the flooding risk. Its impact on the respondents who were aware of the flooding risk is positive for most specifications, although it is negative for some specifications when Π_i is represented by the *during tenure in office* subjective probability

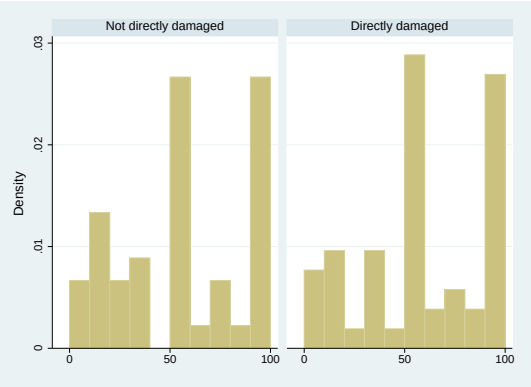
[6]Inundation experience or direct loss experience has a statistically negative impact for some specifications of the *tenure in office* subjective probability regression model for the respondents who were aware of the flooding risk before the 2011 floods. Furthermore, indirect loss experience has a negative impact for some specifications of the *tenure in office* subjective probability regression model.

Figure 1: Distributions of Subjective Probability (during tenure in office)



The horizontal axis: Subjective probability (%).
The vertical axis: Relative frequency.

Figure 2: Distributions of Subjective Probability (over the next 50 years)



The horizontal axis: Subjective probability (%).
The vertical axis: Relative frequency.

variable. The inventory value has a negative impact on Π_i, when it is represented by the *during tenure in office* subjective probability variable for most specifications, regardless of the samples. However, it tends to have no impact on Π_i, when it is represented by the *next 50 years* subjective probability variable.

The fact that most control variables have only limited impacts on Π_i is reflected in the diversity of subjective probabilities across respondents, as illustrated by Figures 1 and 2: The two distributions depicted in Figure 1 are very similar, and the two distributions in Figure 2 are similar as well.[7]

Regarding the estimation results for the Heckman selection model with an exclusion variable, the covariance between the two error terms u and v (represented by *lambda* in

[7]As can be confirmed by Figure B.1 in Section B of the Appendix, the vast majority of respondents exhibit internal consistency: Subjective probability of flood occurrence in the next 50 years is greater or equal to that during her tenure in office.

the tables) is not significant for most specifications, which suggests that sample selection is not very serious and that the sample selection model may well not be the correct model. Although it is significant for specifications with BF_i and Π_i defined by *during tenure in office* variables and $Flood_i$ defined by *direct losses* and *indirect losses* when we use subsamples that only include respondents who were unaware of the flooding risk, the estimation results are not too different from the corresponding OLS estimates—in particular, loss experience has generally no impact on subjective probability. Thus, we focus on the OLS estimates.

4 Conclusion

We have examined empirically the effects of loss experience on risk perception using a micro data set collected from firms operating in Thailand, including firms that incurred losses during the 2011 floods as well as those that did not. In doing so, we paid particular attention to the distinction between risk and Knightian uncertainty. Risk refers to situations in which a probabilistic belief can be formed, whereas Knightian uncertainty refers to situations in which a probabilistic belief cannot be formed. The latter comprises ambiguity and unawareness/unforeseen contingencies.

We have found that amongst respondents who were unaware of the flooding risk before the floods, direct loss experience makes one more likely to form a probabilistic belief. In contrast, direct loss experience has no impact on the belief formation of respondents who were aware of the flooding risk before the 2011 floods. Moreover, the impacts of indirect loss experience or those of inundation experience are not robust for respondents who were unaware of the flooding risk, and they are negligible for those who were aware of the flooding risk.

The effects of loss experience on subjective probability are mostly insignificant regardless of the prior awareness of flooding risk. This result suggests that one will not revise her probabilistic belief substantially upon occurrence of a disaster. Moreover, the probabilistic beliefs are very diverse amongst respondents regardless of loss experience.

Amongst other factors we have examined, we have found that respondents from firms who introduced a BCP before the flooding are more likely to form a probabilistic belief. Thus, it seems that introduction of a BCP suggests that the firm tends to be aware of the potential risk, although we are unable to claim any causality. However, the impact on subjective probability is not significant.

The results suggest that it is impossible to eliminate the risk of catastrophic losses firms may incur by letting them take prevention measures on a voluntary basis, including subscription to catastrophe insurance that targets a specific catastrophe peril. This is because many firms are not aware of the risk ex ante, and such firms will not take any measures. Even if they are aware of the risk, it is difficult to reach an agreement on

the probability of the disaster. Thus, it is very difficult to arrange a widely subscribed formal catastrophe insurance scheme that targets a specific catastrophe peril. Instead, we could look into ways to provide incentives to introduce a BCP, since introduction of a BCP would help firms expand the scope of their awareness. Nevertheless, a substantial difference would remain in the level or scale of prevention measures each firm would deploy, reflecting the diverse probabilistic beliefs. Thus, further direct public intervention is required.

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A The RIETI Survey of Industrial Estates/Parks and Firms in Thailand on Geographic and Flood Related Information (The RIETI Survey)

A.1 Sampling Procedures of the RIETI Survey

The postal questionnaire in Japan was sent to 842 firms selected from TDB's database. The selection criteria were firm size in terms of annual turnover (at least two billion yen) and number of employees (at least 50), and presence in Thailand. The survey in Thailand was focused on tenant firms of 34 major industrial estates/parks in central Thailand (Ayutthaya, Bangkok, Chachoengsao, Chonburi, Pathum Thani, Prachinburi, Rayong, Samut Prakan and Saraburi provinces), and the operators of these industrial estates/parks. The 34 industrial estates/parks are: Saha Rattana Nakorn, Hi-Tech, Bangpa-in, Rojana-Ayutthaya, Factory Land (Wangnoi), Nava Nakorn-Pathum Thani, Bangkadi, Bangchan, Lad Krabang, Bangpoo, Bangplee, Gateway City, Wellgrow, 304 IP II, Amata Nakorn, Pinthong, Hemaraj Chonburi, 304 Industrial Park (IP) I, Kabinburi, Rojana-Prachinburi, Laem Chabang, Eastern Seaboard (Rayong), Hemaraj Eastern Seaboard, Siam Eastern, Amata City, Rojana-Rayong, Hemaraj Rayong Industrial Land, Rayong Industrial Park, Asia Industrial Estate Mapta Phut, Hemaraj Eastern, Padaeng, Hemaraj Saraburi Industrial Land, Kaeng Khoi, and Nong Khae.

A.2 Basic Information

The detailed distribution of samples (plant locations) at the province level is summarised in Table A.1. The main focus of the RIETI survey was the industrial estates/parks located immediately north of Bangkok (Ayutthaya and Pathum Thani) along the Chao Phraya river, where all major industrial estates/parks were inundated during the 2011 floods. We also focused on the major industrial estates/parks located in the 'Eastern seaboard' of Thailand (Chachaoengsao, Chonburi and Rayong).

Table A.1: Sample locations

Province	Plants	Province	Plants	Province	Plants
Ayutthaya	67	Pathum Thani	39	Bangkok	16
Samut Prakan	23	Chachoengsao	24	Rayong	53
Chonburi	62	Prachinburi	2	Saraburi	5
Sing Buri	1	Samut Sakhon	2	Nakhon Pathom	1
Ratchaburi	2	Prachuap Khiri Khan	1	Lamphun	3
Nakhon Ratchasima	1	Chumphon	1	Unknown	11
Total	314				

Industrialisation in Ayutthaya and Pathum Thani began in the 1970s, while the development in the Eastern seabroad took off in the 1990s. The main industry in Ayutthaya and Pathum Thani is electronics, including computer devices such as hard disk drives (HDDs). In the Eastern seaboard, there is a high level of agglomeration of the car industry. See for instance METI (2012) for details of the industrial agglomeration in central Thailand.

Amongst the 314 firms/plants responded to the RIETI survey, most had no experience of inundation prior to the 2011 floods, as shown in Table A.2. Thus, it is most likely that flooding of the scale of the 2011 floods was completely new to most firms.

Table A.2: Past inundation experience

Floods	Inundated	Not inundated
1995 floods	2	262
2006 floods	1	273
2011 floods	113	191

Note 1: The numbers in the table are applicable plants.
Note 2: In the recent past, major floods occurred in the Chao Phraya river basin in 1995 and 2006, prior to 2011.

B List of Variables

In the following, we list the definitions of variables.

Distance from Bangkok (km): Distance is calculated using the 'geodist' command in Stata, from the latitude and longitude data we collected. Using Google Maps, we collected latitude and longitude data as follows: The latitude and longitude of the Industrial Estate (IE)/Park (IP) are used for plants that are tenants of an IE/IP, and the plant's own latitude and longitude are used for stand alone plants. Bangkok's latitude and longitude were obtained through Google Maps. Thus, it is not anchored to a specific building.

Distance from Suvarnabhumi Airport (km): This variable is constructed in the same way as *Distance from Bangkok*, although the reference point is Suvarnabhumi Airport.

Distance from Don Mueang International Airport (km): This variable is constructed in the same way as *Distance from Bangkok*, although the reference point is the Don Mueang International Airport.

Altitude (m): We use Google Maps to identify the altitude of each location, which is defined by the latitude and longitude data as per *Distance from Bangkok*. Thus, all plants within the same IE have the same altitude.

Land ownership: A dummy variable that takes a value of 1 if the firm owns the land site of the plant and 0 if it is leased.

Number of storeys (main factory building): The number of storeys of the main factory building.

Beginning of operation (year): Year when plant operations started.

Introduced BCP before 2011 floods: A dummy variable that takes a value of 1 if a business continuity plan was introduced before the 2011 floods.

Business sentiment in the first half of 2011: Business sentiment compared to the same period in the previous year. There are four categories: Do not know/N.A., Improved, Unchanged, or Worsened. In regressions, Do not know/N.A. is set as the base category.

Turnover in the first half of 2011: Turnover in the first half of 2011 compared to the same period in the previous year. There are four categories: Decreased, Increased by 20% or more, Increased, or Unchanged. In regressions, Unchanged is set as the base category.

R&D system as of June 2011: A dummy variable that takes a value of 1 if the firm's R&D system was in cooperation with trading partners as of June in 2011.

Inventory value as of June 2011 (million TBH): Missing values are set as 0.

Inventory value answered: A dummy variable that takes a value of 1 if the inventory value as of June 2011 was answered.

Flood insurance covering property damages in 2011: A dummy variable that takes a value of 1 if the plant was subscribing to insurance covering at least some property damages from floods in 2011.

Flood insurance covering BIs by floods in 2011: A dummy variable that takes a value of 1 if the plant was subscribing to insurance covering business interruptions (BIs) in 2011. Missing values are set as 0.

Flooding risk awareness (before 2011): A dummy variable that takes a value of 1 if the respondent was aware that the plant was located in an IE/IP prone to flooding before the 2011 floods.

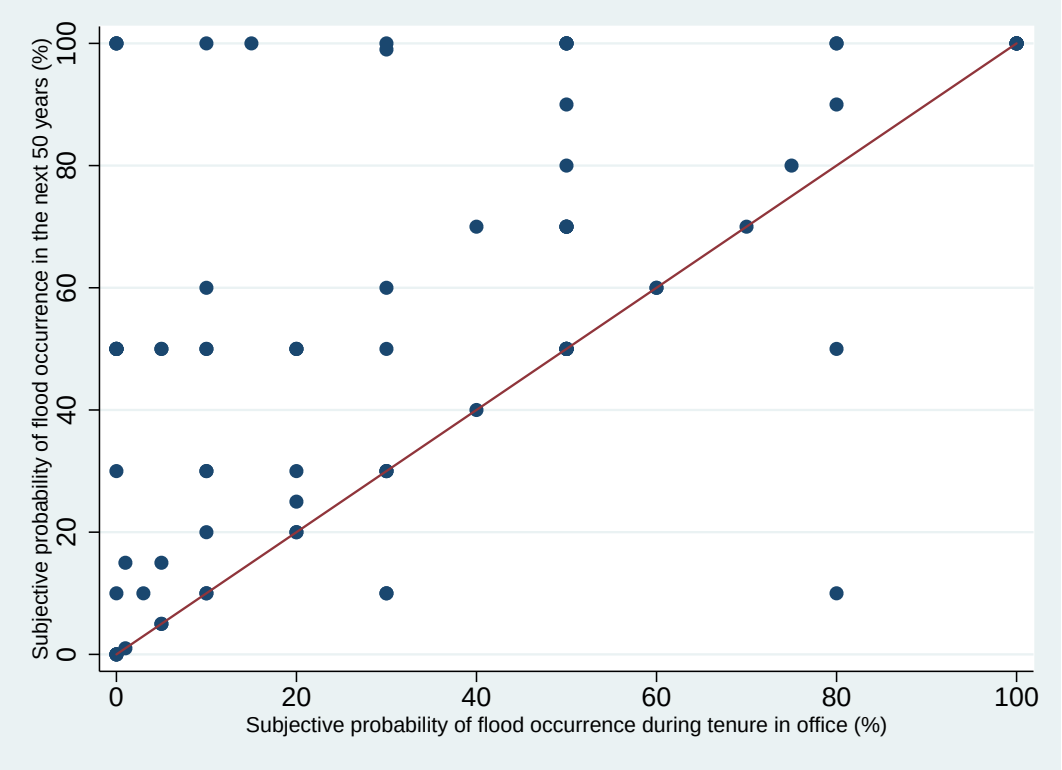
Thailand survey: A dummy variable that takes a value of 1 if the questionnaire was collected in Thailand and 0 if the postal survey in Japan. This does not necessarily correspond to the actual location of the respondent, because some postal surveys in Japan were answered by respondents in Thailand.

Table B.1: Descriptive Statistics

	count	mean	sd	min	max
Belief formation/Subjective probability					
Belief formation (during tenure in office)*	265	0.37	0.48	0.00	1.00
Subjective probability (%, during tenure in office)	98	29.90	30.00	0.00	100.00
Belief formation (over the next 50 years)*	263	0.38	0.49	0.00	1.00
Subjective probability (%, over the next 50 years)	100	55.15	33.07	0.00	100.00
2011 Floods					
Inundated during 2011 floods*	304	0.37	0.48	0.00	1.00
Direct losses during 2011 floods*	297	0.42	0.49	0.00	1.00
Indirect losses during 2011 floods*	297	0.58	0.49	0.00	1.00
Plant attributes					
Distance from Bangkok (km)	297	69.25	41.54	1.14	561.09
Distance from Suvarnabhumi Airport (km)	297	60.81	40.57	8.65	571.79
Distance from Don Mueang Airport (km)	297	66.80	46.63	9.46	543.56
Altitude (m)	297	23.48	34.80	2.30	297.64
Land ownership*	244	0.71	0.45	0.00	1.00
Number of storeys (main factory building)	282	1.54	1.85	1.00	30.00
Beginning of operation (year)	272	2002.48	8.68	1962.00	2014.00
Introduced BCP before 2011 floods*	275	0.04	0.19	0.00	1.00
Business sentiment in the first half of 2011					
Do not know/N.A.*	314	0.43	0.50	0.00	1.00
Improved*	314	0.25	0.43	0.00	1.00
Unchanged*	314	0.26	0.44	0.00	1.00
Worsened*	314	0.07	0.25	0.00	1.00
Turnover in the first half of 2011					
Decreased*	314	0.43	0.50	0.00	1.00
Increased by 20% or higher*	314	0.14	0.35	0.00	1.00
Increased*	314	0.24	0.43	0.00	1.00
Unchanged*	314	0.18	0.39	0.00	1.00
R&D system as of June 2011*	201	0.58	0.50	0.00	1.00
Inventory value as of June 2011 (million BHT)	107	83.44	190.00	0.00	1362.00
Flood insurance covering property damages in 2011*	115	0.79	0.41	0.00	1.00
Flood insurance covering BIs by floods in 2011*	145	0.21	0.41	0.00	1.00
Industry					
Rubber and plastic products*	314	0.14	0.35	0.00	1.00
Electronic devices*	314	0.18	0.38	0.00	1.00
Machinery*	314	0.07	0.26	0.00	1.00
Motor vehicles and transport*	314	0.20	0.40	0.00	1.00
Respondent attributes					
Flooding risk awareness (before 2011 floods)*	270	0.26	0.44	0.00	1.00
Thailand survey*	314	0.59	0.49	0.00	1.00
Observations	314				

Note: Variables with * are dummy variables.

Figure B.1: The relationship between subjective probabilities



Note 1: The diagonal line represents the 45-degree line.
Note 2: Each point in the figure corresponds to each respondent's two subjective probabilities.
Note 3: An internally consistent respondent is described by a point above or on the 45-degree line.

C Estimation Results

C.1 Estimation Results: OLS

Table C.1.1: OLS: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-5.566	0.140**	-5.761	0.129*	-5.587	0.100	-3.423	0.119*	-4.590	0.110
	(5.980)	(0.0624)	(6.536)	(0.0665)	(6.302)	(0.0655)	(6.328)	(0.0649)	(6.543)	(0.0669)
Number of storeys (main factory building)			1.823***	0.0275***	1.871***	0.0259***			1.795***	0.0258***
			(0.600)	(0.00683)	(0.554)	(0.00814)			(0.602)	(0.00779)
Introduced BCP before 2011 floods			-8.535	0.272*			-5.278	0.351**	-5.374	0.341**
			(15.44)	(0.150)			(16.15)	(0.140)	(16.24)	(0.142)
Inventory value as of June 2011					-0.129***	-0.000531***	-0.149***	-0.000618***	-0.132**	-0.000611***
					(0.0450)	(0.000134)	(0.0547)	(0.000148)	(0.0514)	(0.000145)
Inventory value answered					-1.950	0.137**	1.493	0.143**	-1.122	0.129*
					(7.114)	(0.0681)	(7.128)	(0.0680)	(7.126)	(0.0696)
Constant	32.79***	0.319***	30.03***	0.288***	32.75***	0.266***	34.53***	0.288***	32.66***	0.263***
	(4.703)	(0.0366)	(5.121)	(0.0436)	(5.703)	(0.0466)	(5.248)	(0.0425)	(5.767)	(0.0482)
Observations	97	261	89	227	92	240	94	246	89	227
Adjusted R-squared	-0.002	0.016	0.021	0.029	0.053	0.037	0.012	0.050	0.041	0.051

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.2: OLS: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	2.460	0.166**	3.198	0.156*	4.636	0.140	4.321	0.132	5.334	0.137
	(7.013)	(0.0784)	(7.944)	(0.0844)	(7.526)	(0.0861)	(7.822)	(0.0829)	(8.037)	(0.0873)
Number of storeys (main factory building)			2.551***	0.0222***	2.639***	0.0218***			2.545***	0.0210***
			(0.283)	(0.00524)	(0.324)	(0.00517)			(0.323)	(0.00516)
Introduced BCP before 2011 floods			-3.639	0.449***			-7.294	0.459***	-6.686	0.444***
			(20.01)	(0.152)			(20.26)	(0.147)	(20.65)	(0.150)
Inventory value as of June 2011					-0.106*	-0.000705*	-0.184**	-0.000612	-0.131**	-0.000568
					(0.0586)	(0.000424)	(0.0738)	(0.000425)	(0.0633)	(0.000429)
Inventory value answered					-3.673	0.104	5.139	0.106	-2.349	0.0815
					(8.687)	(0.0919)	(9.763)	(0.0888)	(8.864)	(0.0910)
Constant	23.43***	0.299***	19.33***	0.266***	21.29***	0.264***	25.62***	0.275***	22.59***	0.257***
	(5.150)	(0.0426)	(5.067)	(0.0494)	(5.986)	(0.0545)	(5.388)	(0.0498)	(5.842)	(0.0564)
Observations	62	175	56	151	58	158	60	167	56	151
Adjusted R-squared	-0.015	0.021	0.069	0.052	0.096	0.023	-0.008	0.046	0.085	0.046

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.3: OLS: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-32.59***	-0.0591	-28.46**	-0.0345	-28.59***	-0.121	-35.48***	-0.0462	-32.55***	-0.0694
	(10.22)	(0.128)	(10.48)	(0.133)	(9.619)	(0.121)	(10.50)	(0.127)	(10.45)	(0.125)
Number of storeys (main factory building)			-10.22***	0.131**	-10.45***	0.119*			-9.650***	0.125*
			(3.462)	(0.0635)	(2.951)	(0.0638)			(2.635)	(0.0636)
Introduced BCP before 2011 floods			-11.07*	0.0285			94.63***	0.357*	80.65**	0.387**
			(6.230)	(0.337)			(29.86)	(0.206)	(31.49)	(0.181)
Inventory value as of June 2011					-0.0901	-0.000583***	-0.431***	-0.000731***	-0.365**	-0.000744***
					(0.0797)	(0.000119)	(0.131)	(0.000226)	(0.136)	(0.000218)
Inventory value answered					-15.13	0.258**	-6.969	0.266*	-8.219	0.268**
					(9.995)	(0.128)	(11.24)	(0.134)	(11.45)	(0.132)
Constant	60***	0.519***	74.98***	0.292**	86.37***	0.268*	70.64***	0.429***	85.60***	0.231
	(8.224)	(0.0977)	(10.11)	(0.140)	(10.28)	(0.138)	(8.924)	(0.110)	(11.14)	(0.140)
Observations	31	64	29	60	30	63	30	61	29	60
Adjusted R-squared	0.242	-0.013	0.318	0.009	0.416	0.095	0.313	0.053	0.417	0.104

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.4: OLS: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	1.700	0.164***	4.520	0.165**	3.162	0.141**	3.606	0.145**	4.660	0.149**
	(6.146)	(0.0606)	(6.073)	(0.0647)	(6.788)	(0.0630)	(6.643)	(0.0624)	(6.585)	(0.0644)
Indirect losses during 2011 floods	-12.31*	0.0911	-16.59**	0.109*	-12.40	0.109*	-11.41	0.0759	-14.37*	0.104
	(6.444)	(0.0595)	(6.768)	(0.0646)	(7.875)	(0.0637)	(7.269)	(0.0621)	(7.821)	(0.0652)
Number of storeys (main factory building)			2.221***	0.0258***	2.178***	0.0244***			2.118***	0.0242***
			(0.612)	(0.00608)	(0.558)	(0.00717)			(0.612)	(0.00682)
Introduced BCP before 2011 floods			-7.059	0.238			-4.583	0.330**	-4.958	0.314**
			(15.94)	(0.147)			(16.30)	(0.136)	(16.60)	(0.137)
Inventory value as of June 2011					-0.0986**	-0.000567***	-0.124**	-0.000639***	-0.101**	-0.000637***
					(0.0427)	(0.000140)	(0.0554)	(0.000148)	(0.0501)	(0.000144)
Inventory value answered					-0.394	0.128*	3.965	0.146**	1.652	0.124*
					(7.717)	(0.0676)	(7.683)	(0.0666)	(7.640)	(0.0685)
Constant	36.34***	0.240***	34.05***	0.194***	33.85***	0.177***	35.72***	0.216***	33.88***	0.174***
	(6.664)	(0.0504)	(7.034)	(0.0565)	(7.043)	(0.0574)	(6.580)	(0.0551)	(7.041)	(0.0593)
Observations	94	258	86	225	89	237	91	244	86	225
Adjusted R-squared	0.022	0.027	0.085	0.046	0.073	0.056	0.035	0.063	0.082	0.071

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.5: OLS: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	5.113	0.175**	7.207	0.152*	7.339	0.156*	7.114	0.140*	8.669	0.141
	(6.977)	(0.0776)	(6.578)	(0.0849)	(7.706)	(0.0832)	(6.969)	(0.0810)	(6.855)	(0.0860)
Indirect losses during 2011 floods	-11.18	0.0801	-15.67**	0.120	-11.06	0.125	-10.59	0.0584	-12.63	0.120
	(7.224)	(0.0716)	(7.671)	(0.0772)	(9.156)	(0.0761)	(7.863)	(0.0735)	(8.840)	(0.0772)
Number of storeys (main factory building)			2.778***	0.0214***	2.769***	0.0213***			2.666***	0.0205***
			(0.263)	(0.00495)	(0.308)	(0.00511)			(0.301)	(0.00496)
Introduced BCP before 2011 floods			-4.182	0.403**			-7.405	0.424***	-7.236	0.394**
			(19.02)	(0.156)			(18.78)	(0.146)	(18.95)	(0.153)
Inventory value as of June 2011					-0.0877	-0.000795*	-0.171**	-0.000695	-0.119*	-0.000665
					(0.0650)	(0.000423)	(0.0766)	(0.000423)	(0.0650)	(0.000427)
Inventory value answered					-1.174	0.0838	8.183	0.105	1.616	0.0622
					(9.530)	(0.0898)	(10.06)	(0.0859)	(9.539)	(0.0880)
Constant	29.68***	0.241***	28.15***	0.190***	25.94***	0.186***	29.83***	0.235***	27.66***	0.189***
	(6.848)	(0.0555)	(7.278)	(0.0597)	(7.312)	(0.0627)	(6.825)	(0.0621)	(7.334)	(0.0645)
Observations	62	176	56	152	58	159	60	168	56	152
Adjusted R-squared	0.018	0.027	0.139	0.063	0.130	0.039	0.024	0.048	0.131	0.058

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.6: OLS: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-21.93*	0.0158	-9.870	0.0667	-14.45	-0.0500	-23.66*	0.0291	-15.50	0.0229
	(11.46)	(0.150)	(12.19)	(0.165)	(12.25)	(0.153)	(13.12)	(0.155)	(14.57)	(0.160)
Indirect losses during 2011 floods	-11.80	0.0811	-6.766	0.0522	-1.834	0.0260	-8.402	0.113	-2.926	0.0530
	(11.59)	(0.138)	(13.39)	(0.156)	(13.77)	(0.151)	(13.34)	(0.147)	(14.50)	(0.156)
Number of storeys (main factory building)			-12.48**	0.118	-12.30***	0.108			-11.90**	0.108
			(4.751)	(0.0747)	(4.304)	(0.0725)			(4.464)	(0.0722)
Introduced BCP before 2011 floods			-15.10*	0.0342			71.89**	0.355*	47.92	0.391**
			(8.371)	(0.316)			(32.91)	(0.184)	(43.76)	(0.166)
Inventory value as of June 2011					-0.0974	-0.000595***	-0.360**	-0.000769***	-0.259	-0.000759***
					(0.0612)	(0.000128)	(0.145)	(0.000220)	(0.183)	(0.000210)
Inventory value answered					-11.47	0.273*	-1.847	0.279*	-5.696	0.283*
					(12.62)	(0.137)	(15.05)	(0.141)	(14.57)	(0.141)
Constant	62.31***	0.410**	71.69***	0.203	81.65***	0.214	66.91***	0.295*	79.73***	0.150
	(11.84)	(0.166)	(11.91)	(0.185)	(13.21)	(0.168)	(12.34)	(0.169)	(13.72)	(0.176)
Observations	29	62	27	58	28	61	28	59	27	58
Adjusted R-squared	0.072	-0.028	0.135	-0.017	0.179	0.072	0.037	0.063	0.129	0.091

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.7: OLS: Over the Next 50 Years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-0.449	0.160**	-1.270	0.132**	-1.043	0.0994	-3.032	0.122*	-2.358	0.103
	(6.649)	(0.0626)	(7.124)	(0.0671)	(7.092)	(0.0660)	(6.942)	(0.0652)	(7.316)	(0.0677)
Number of storeys (main factory building)			0.886	0.0233***	0.711	0.0215***			0.686	0.0208***
			(0.714)	(0.00596)	(0.715)	(0.00674)			(0.723)	(0.00639)
Introduced BCP before 2011 floods			11.82	0.257*			13.72	0.309**	13.19	0.305**
			(20.14)	(0.149)			(21.26)	(0.142)	(21.38)	(0.144)
Inventory value as of June 2011					-0.0357	-0.000440***	-0.0523	-0.000525***	-0.0451	-0.000509***
					(0.0768)	(0.000118)	(0.0734)	(0.000134)	(0.0741)	(0.000135)
Inventory value answered					10.20	0.198***	11.14	0.207***	10.19	0.186***
					(7.912)	(0.0686)	(7.802)	(0.0682)	(8.213)	(0.0703)
Constant	55.37***	0.325***	54.24***	0.310***	50.26***	0.255***	51.93***	0.278***	50.90***	0.262***
	(4.646)	(0.0372)	(5.184)	(0.0445)	(6.080)	(0.0455)	(5.397)	(0.0422)	(5.998)	(0.0476)
Observations	100	259	92	225	94	238	98	244	92	225
Adjusted R-squared	-0.010	0.022	-0.019	0.024	-0.019	0.048	-0.012	0.063	-0.024	0.053

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.8: OLS: Over the Next 50 Years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	2.957	0.168**	5.051	0.128	3.009	0.111	0.743	0.110	3.356	0.0983
	(9.209)	(0.0785)	(10.25)	(0.0846)	(10.03)	(0.0844)	(9.768)	(0.0812)	(10.49)	(0.0857)
Number of storeys (main factory building)			1.300***	0.0210***	0.954*	0.0199***			0.924	0.0186***
			(0.479)	(0.00549)	(0.542)	(0.00530)			(0.563)	(0.00528)
Introduced BCP before 2011 floods			4.125	0.444***			3.952	0.463***	2.941	0.461***
			(23.26)	(0.154)			(24.25)	(0.145)	(24.53)	(0.149)
Inventory value as of June 2011					-0.105	-0.000230	-0.121	-0.000180	-0.109	-0.000106
					(0.0908)	(0.000614)	(0.0908)	(0.000607)	(0.0937)	(0.000626)
Inventory value answered					13.12	0.206**	16.12	0.211**	14.03	0.179*
					(11.26)	(0.0936)	(10.89)	(0.0905)	(11.73)	(0.0932)
Constant	53.69***	0.307***	50.70***	0.287***	48.84***	0.226***	49.87***	0.246***	48.43***	0.230***
	(5.845)	(0.0435)	(6.568)	(0.0512)	(7.659)	(0.0530)	(6.629)	(0.0491)	(7.536)	(0.0556)
Observations	63	173	57	149	58	156	62	165	57	149
Adjusted R-squared	-0.015	0.022	-0.032	0.042	-0.019	0.044	-0.020	0.071	-0.037	0.059

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.9: OLS: Over the Next 50 Years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-7.895	0.0320	-14.10	0.0648	-8.108	-0.00486	-15.39	0.0687	-14.61	0.0502
	(10.66)	(0.129)	(10.31)	(0.134)	(10.95)	(0.130)	(10.93)	(0.132)	(11.08)	(0.133)
Number of storeys (main factory building)			-5.173	0.0786	-6.167	0.0715			-4.977	0.0777
			(3.491)	(0.0628)	(4.011)	(0.0632)			(3.449)	(0.0622)
Introduced BCP before 2011 floods			52.09***	0.0126			70.05**	0.365**	64.91**	0.383**
			(6.207)	(0.321)			(30.59)	(0.173)	(30.62)	(0.158)
Inventory value as of June 2011					0.149*	-0.000503***	-0.0858	-0.000653***	-0.0578	-0.000661***
					(0.0868)	(0.000112)	(0.154)	(0.000181)	(0.156)	(0.000178)
Inventory value answered					-0.176	0.139	1.893	0.140	1.881	0.146
					(11.94)	(0.137)	(13.08)	(0.139)	(13.68)	(0.141)
Constant	60***	0.481***	72.36***	0.337**	67.35***	0.346**	64.90***	0.434***	72.24***	0.310**
	(8.775)	(0.0977)	(11.18)	(0.143)	(12.79)	(0.144)	(9.365)	(0.111)	(12.00)	(0.145)
Observations	32	64	30	60	31	63	31	61	30	60
Adjusted R-squared	-0.013	-0.015	0.103	-0.027	-0.003	0.008	0.029	0.011	0.032	0.015

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.10: OLS: Over the Next 50 Years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	3.135	0.162***	0.650	0.162**	1.310	0.134**	-0.119	0.124*	-0.476	0.135**
	(6.881)	(0.0613)	(7.544)	(0.0657)	(7.300)	(0.0642)	(7.280)	(0.0633)	(7.648)	(0.0658)
Indirect losses during 2011 floods	-5.425	0.0567	-6.005	0.0707	-9.163	0.0412	-9.887	0.0240	-9.960	0.0421
	(6.771)	(0.0607)	(7.151)	(0.0661)	(7.743)	(0.0648)	(7.097)	(0.0634)	(7.612)	(0.0667)
Number of storeys (main factory building)			1.032	0.0220***	0.894	0.0204***			0.852	0.0196***
			(0.728)	(0.00580)	(0.704)	(0.00602)			(0.721)	(0.00579)
Introduced BCP before 2011 floods			13.43	0.235			16.06	0.303**	15.82	0.294**
			(20.11)	(0.146)			(20.94)	(0.139)	(21.14)	(0.138)
Inventory value as of June 2011					-0.0157	-0.000451***	-0.0322	-0.000534***	-0.0254	-0.000518***
					(0.0775)	(0.000117)	(0.0728)	(0.000132)	(0.0736)	(0.000129)
Inventory value answered					13.41	0.203***	14.63*	0.223***	14.01*	0.195***
					(8.115)	(0.0690)	(7.899)	(0.0680)	(8.367)	(0.0702)
Constant	56.16***	0.275***	55.97***	0.240***	51.27***	0.201***	53.25***	0.240***	52.29***	0.205***
	(6.519)	(0.0522)	(7.191)	(0.0587)	(7.112)	(0.0582)	(6.532)	(0.0562)	(7.204)	(0.0604)
Observations	97	256	89	223	91	235	95	242	89	223
Adjusted R-squared	-0.011	0.022	-0.023	0.033	-0.008	0.059	0.001	0.068	-0.013	0.065

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.11: OLS: Over the Next 50 Years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	7.075	0.177**	7.108	0.155*	6.640	0.156*	6.824	0.120	7.022	0.133
	(9.072)	(0.0775)	(10.10)	(0.0847)	(9.950)	(0.0825)	(9.808)	(0.0798)	(10.52)	(0.0850)
Indirect losses during 2011 floods	-9.724	0.0564	-11.43	0.0926	-13.20	0.0488	-15.23*	0.00580	-15.73	0.0503
	(8.556)	(0.0730)	(9.268)	(0.0790)	(10.13)	(0.0779)	(8.947)	(0.0757)	(9.809)	(0.0802)
Number of storeys (main factory building)			1.487***	0.0207***	1.149**	0.0203***			1.111**	0.0188***
			(0.495)	(0.00527)	(0.514)	(0.00524)			(0.535)	(0.00519)
Introduced BCP before 2011 floods			4.051	0.397**			4.839	0.443***	4.126	0.424***
			(22.35)	(0.154)			(23.67)	(0.142)	(24.02)	(0.145)
Inventory value as of June 2011					-0.0940	-0.000260	-0.110	-0.000232	-0.100	-0.000144
					(0.0900)	(0.000572)	(0.0916)	(0.000575)	(0.0931)	(0.000589)
Inventory value answered					16.87	0.194**	20.87*	0.218**	19.35	0.167*
					(11.31)	(0.0936)	(10.61)	(0.0895)	(11.65)	(0.0928)
Constant	57.96***	0.264***	56.93***	0.218***	53.08***	0.180***	54.20***	0.234***	53.72***	0.189***
	(7.630)	(0.0583)	(8.599)	(0.0635)	(8.380)	(0.0645)	(7.545)	(0.0638)	(8.422)	(0.0668)
Observations	63	174	57	150	58	157	62	166	57	150
Adjusted R-squared	-0.003	0.024	-0.023	0.054	-0.001	0.054	0.013	0.070	-0.009	0.065

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.1.12: OLS: Over the Next 50 Years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-5.373	0.00687	-11.34	0.0753	-2.862	-0.0237	-15.26	0.0405	-12.36	0.0481
	(11.10)	(0.147)	(10.79)	(0.160)	(11.73)	(0.151)	(10.33)	(0.153)	(11.38)	(0.158)
Indirect losses during 2011 floods	-4.276	-0.0260	-0.829	-0.0390	-5.684	-0.0518	-5.008	0.0150	-0.975	-0.0272
	(11.06)	(0.138)	(12.04)	(0.155)	(13.23)	(0.151)	(11.63)	(0.149)	(13.55)	(0.157)
Number of storeys (main factory building)			-6.448	0.0692	-7.339	0.0636			-6.340	0.0631
			(4.972)	(0.0777)	(5.180)	(0.0754)			(4.862)	(0.0747)
Introduced BCP before 2011 floods			52.53***	0.0570			69.94**	0.360*	63.95**	0.384**
			(7.240)	(0.330)			(25.88)	(0.186)	(26.40)	(0.170)
Inventory value as of June 2011					0.164**	-0.000486***	-0.0857	-0.000654***	-0.0616	-0.000645***
					(0.0778)	(0.000121)	(0.139)	(0.000192)	(0.143)	(0.000184)
Inventory value answered					5.452	0.180	7.722	0.179	7.346	0.188
					(12.29)	(0.142)	(13.27)	(0.145)	(13.81)	(0.147)
Constant	59.52***	0.494***	72.54***	0.340*	63.77***	0.365**	64.03***	0.401**	70.13***	0.303*
	(12.20)	(0.160)	(11.31)	(0.184)	(13.55)	(0.175)	(10.54)	(0.167)	(12.16)	(0.181)
Observations	30	62	28	58	29	61	29	59	28	58
Adjusted R-squared	-0.061	-0.033	0.067	-0.052	0.001	-0.009	-0.007	-0.004	-0.005	-0.003

Robust standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

C.2 Estimation Results: Heckman with an Exclusion Variable

Table C.2.1: Heckman: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-2.758	0.256	-4.441	0.196	-3.409	0.0591	-2.319	0.171	-3.003	0.0931
	(7.143)	(0.168)	(6.765)	(0.181)	(6.676)	(0.184)	(6.472)	(0.180)	(6.568)	(0.189)
Number of storeys (main factory building)			2.142*	0.204*	2.521**	0.286**			2.251**	0.269**
			(1.177)	(0.119)	(1.202)	(0.125)			(1.137)	(0.127)
Introduced BCP before 2011 floods			-4.821	0.592			-0.236	0.870*	2.297	0.726
			(14.33)	(0.472)			(15.72)	(0.512)	(14.85)	(0.515)
Inventory value as of June 2011					-0.180**	-0.00350**	-0.170*	-0.00303*	-0.167*	-0.00336*
					(0.0854)	(0.00169)	(0.0877)	(0.00169)	(0.0859)	(0.00172)
Inventory value answered					5.174	0.610***	4.458	0.564***	3.521	0.580***
					(8.696)	(0.208)	(8.854)	(0.201)	(8.479)	(0.212)
Thailand survey*		0.581***		0.694***		0.756***		0.639***		0.751***
		(0.171)		(0.187)		(0.188)		(0.182)		(0.194)
lambda	13.94		7.875		19.69		8.417		13.71	
	(17.10)		(14.60)		(13.22)		(15.72)		(13.34)	
Constant	18.04	-0.790***	21.52	-1.110***	10.69	-1.370***	25.13	-0.941***	17.23	-1.351***
	(18.63)	(0.143)	(16.51)	(0.244)	(15.87)	(0.267)	(18.22)	(0.169)	(15.98)	(0.273)
Observations	261	261	227	227	240	240	246	246	227	227

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.2: Heckman: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	10.25	0.332	6.637	0.283	8.068	0.170	9.490	0.238	8.604	0.205
	(9.819)	(0.210)	(8.314)	(0.231)	(8.398)	(0.233)	(9.442)	(0.226)	(8.422)	(0.240)
Number of storeys (main factory building)			3.289***	0.107	3.497***	0.181			3.354***	0.123
			(1.219)	(0.0929)	(1.301)	(0.164)			(1.265)	(0.137)
Introduced BCP before 2011 floods			10.15	0.967			17.62	1.099*	10.11	0.965
			(17.64)	(0.638)			(22.16)	(0.644)	(18.03)	(0.646)
Inventory value as of June 2011					-0.173*	-0.00194	-0.241**	-0.00168	-0.176*	-0.00153
					(0.103)	(0.00203)	(0.111)	(0.00202)	(0.103)	(0.00201)
Inventory value answered					4.172	0.423	13.74	0.399	2.884	0.334
					(10.14)	(0.264)	(11.08)	(0.253)	(9.976)	(0.269)
Thailand survey*		0.674***		0.789***		0.879***		0.679***		0.814***
		(0.211)		(0.233)		(0.234)		(0.222)		(0.238)
lambda	37.01*		21.36		29.78**		36.71*		26.73*	
	(19.42)		(15.88)		(14.49)		(19.45)		(15.63)	
Constant	-16.09	-0.910***	-3.925	-1.098***	-10.94	-1.320***	-15.48	-1.005***	-6.920	-1.203***
	(22.10)	(0.178)	(18.49)	(0.242)	(17.36)	(0.336)	(23.26)	(0.203)	(18.80)	(0.308)
Observations	175	175	151	151	158	158	167	167	151	151

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.3: Heckman: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-17.65	-0.175	-23.93	-0.120	-19.66	-0.367	-19.21	-0.258	-25.04	-0.368
	(66.38)	(0.323)	(29.09)	(0.337)	(21.50)	(0.356)	(48.87)	(0.359)	(16.50)	(0.382)
Number of storeys (main factory building)			-28.12	0.383*	-20.99	0.430*			-18.47	0.495**
			(38.77)	(0.202)	(17.75)	(0.221)			(13.20)	(0.239)
Introduced BCP before 2011 floods			-23.50	0.136			-132.2	6.043	-17.37	8.143
			(78.99)	(0.954)			(496.6)	(71.84)	(138.0)	(0)
Inventory value as of June 2011					0.0928	-0.00567*	0.295	-0.00931	-0.0202	-0.0126*
					(0.306)	(0.00338)	(1.593)	(0.00579)	(0.483)	(0.00653)
Inventory value answered					-43.78	0.935**	-75.52	1.026**	-35.91	1.208***
					(45.35)	(0.399)	(145.0)	(0.420)	(37.97)	(0.453)
Thailand survey*		0.173		0.288		0.373		0.274		0.440
		(0.355)		(0.385)		(0.388)		(0.400)		(0.423)
lambda	-162.1		-87.99		-52.45		-109.3		-39.85	
	(489.3)		(179.6)		(76.91)		(230.4)		(51.23)	
Constant	184.4	-0.0625	174.2	-0.795	150.2	-1.046*	168.1	-0.329	135.3**	-1.219**
	(377.8)	(0.329)	(204.7)	(0.507)	(96.04)	(0.554)	(207.4)	(0.412)	(66.61)	(0.603)
Observations	64	64	60	60	63	63	61	61	60	60

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.4: Heckman: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	7.745	0.315*	9.024	0.280	9.150	0.152	6.340	0.231	9.241	0.185
	(8.390)	(0.170)	(7.732)	(0.184)	(7.617)	(0.188)	(7.260)	(0.182)	(7.395)	(0.193)
Indirect losses during 2011 floods	-9.258	0.183	-13.62*	0.228	-7.053	0.203	-9.935	0.103	-10.58	0.187
	(7.292)	(0.170)	(7.254)	(0.184)	(7.946)	(0.189)	(7.027)	(0.187)	(7.643)	(0.196)
Number of storeys (main factory building)			2.905**	0.184	3.076**	0.278**			2.798**	0.252*
			(1.243)	(0.124)	(1.324)	(0.130)			(1.209)	(0.132)
Introduced BCP before 2011 floods			0.143	0.550			2.884	0.856*	5.935	0.699
			(14.50)	(0.476)			(16.02)	(0.516)	(15.46)	(0.519)
Inventory value as of June 2011					-0.176**	-0.00367**	-0.158*	-0.00313*	-0.158*	-0.00348**
					(0.0893)	(0.00172)	(0.0893)	(0.00171)	(0.0878)	(0.00174)
Inventory value answered					9.367	0.583***	8.684	0.575***	8.675	0.561***
					(9.234)	(0.210)	(9.344)	(0.205)	(8.916)	(0.216)
Thailand survey*		0.522***		0.613***		0.683***		0.577***		0.669***
		(0.175)		(0.193)		(0.196)		(0.188)		(0.201)
lambda	22.50		17.38		28.32*		13.24		21.29	
	(19.46)		(16.60)		(15.46)		(17.33)		(15.39)	
Constant	9.263	-0.920***	12.05	-1.239***	-3.146	-1.483***	19.13	-1.026***	5.964	-1.446***
	(24.58)	(0.176)	(22.24)	(0.271)	(21.78)	(0.287)	(22.71)	(0.189)	(21.53)	(0.293)
Observations	258	258	225	225	237	237	244	244	225	225

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.5: Heckman: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	14.89	0.359*	11.88	0.282	12.57	0.226	13.78	0.263	13.11	0.231
	(10.43)	(0.208)	(8.618)	(0.229)	(8.724)	(0.229)	(9.915)	(0.221)	(8.798)	(0.236)
Indirect losses during 2011 floods	-8.179	0.158	-11.74	0.285	-6.245	0.241	-9.305	0.0553	-8.212	0.244
	(9.537)	(0.211)	(8.887)	(0.232)	(9.511)	(0.236)	(10.04)	(0.229)	(9.800)	(0.245)
Number of storeys (main factory building)			3.742***	0.109	3.712***	0.187			3.593***	0.128
			(1.291)	(0.104)	(1.347)	(0.166)			(1.323)	(0.150)
Introduced BCP before 2011 floods			12.88	0.878			18.27	1.050	10.87	0.871
			(18.18)	(0.639)			(22.53)	(0.650)	(18.51)	(0.648)
Inventory value as of June 2011					-0.163	-0.00211	-0.236**	-0.00179	-0.175*	-0.00170
					(0.103)	(0.00203)	(0.111)	(0.00201)	(0.102)	(0.00201)
Inventory value answered					6.481	0.371	17.70	0.401	7.074	0.278
					(10.27)	(0.268)	(11.55)	(0.257)	(10.36)	(0.276)
Thailand survey*		0.655***		0.770***		0.838***		0.672***		0.785***
		(0.213)		(0.235)		(0.237)		(0.225)		(0.241)
lambda	41.19**		28.61*		32.85**		39.78**		31.29*	
	(20.49)		(16.35)		(15.33)		(19.88)		(16.33)	
Constant	-17.02	-1.022***	-5.658	-1.284***	-13.17	-1.463***	-16.16	-1.051***	-9.801	-1.340***
	(26.00)	(0.218)	(21.85)	(0.293)	(21.03)	(0.362)	(25.61)	(0.228)	(22.15)	(0.345)
Observations	176	176	152	152	159	159	168	168	152	152

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.6: Heckman: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-40.82	0.0247	-24.43	0.125	-12.85	-0.200	-18.70	-0.0474	-15.14	-0.184
	(265.2)	(0.369)	(64.88)	(0.400)	(19.85)	(0.414)	(125.7)	(0.422)	(17.61)	(0.456)
Indirect losses during 2011 floods	-93.04	0.195	-15.86	0.0971	-7.336	0.117	-85.53	0.392	-9.137	0.192
	(828.8)	(0.341)	(50.46)	(0.375)	(21.17)	(0.394)	(356.7)	(0.404)	(18.24)	(0.425)
Number of storeys (main factory building)			-31.69	0.344	-21.41	0.411*			-19.58	0.476*
			(74.69)	(0.221)	(20.92)	(0.244)			(15.55)	(0.269)
Introduced BCP before 2011 floods			-25.88	0.128			-520.9	6.731	-38.84	8.116
			(100.6)	(0.981)			(2,606)	(269.5)	(163.2)	(0)
Inventory value as of June 2011					0.0884	-0.00592*	1.657	-0.0105*	0.0526	-0.0129*
					(0.399)	(0.00348)	(8.893)	(0.00602)	(0.590)	(0.00671)
Inventory value answered					-40.92	0.955**	-203.6	1.059**	-34.14	1.209***
					(60.84)	(0.399)	(869.4)	(0.426)	(50.12)	(0.454)
Thailand survey*		0.0554		0.163		0.268		0.0728		0.296
		(0.364)		(0.409)		(0.412)		(0.426)		(0.464)
lambda	-605.5		-107.4		-52.19		-318.2		-41.61	
	(6,017)		(401.6)		(102.3)		(1,369)		(69.31)	
Constant	637.9	-0.251	209.9	-0.886	151.9	-1.120*	429.4	-0.558	138.2	-1.303**
	(5,713)	(0.422)	(517.9)	(0.539)	(140.4)	(0.591)	(1,563)	(0.476)	(100.4)	(0.635)
Observations	62	62	58	58	61	61	59	59	58	58

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.7: Heckman: Over the Next 50 years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	8.652	0.340**	9.719	0.234	5.483	0.112	2.873	0.213	4.807	0.123
	(11.79)	(0.167)	(11.12)	(0.180)	(9.076)	(0.182)	(9.065)	(0.179)	(9.600)	(0.187)
Number of storeys (main factory building)			2.859	0.110	2.030	0.171			2.167	0.149
			(2.102)	(0.0960)	(1.767)	(0.119)			(1.878)	(0.120)
Introduced BCP before 2011 floods			34.66	0.599			31.21	0.784	37.95	0.709
			(23.67)	(0.464)			(21.87)	(0.497)	(23.22)	(0.500)
Inventory value as of June 2011					-0.0979	-0.00166	-0.101	-0.00167*	-0.120	-0.00166*
					(0.0794)	(0.00108)	(0.0809)	(0.000995)	(0.0822)	(0.00101)
Inventory value answered					26.63**	0.644***	24.19*	0.644***	27.74**	0.611***
					(12.87)	(0.193)	(13.44)	(0.188)	(13.09)	(0.196)
Thailand survey*		0.349**		0.471**		0.538***		0.454**		0.548***
		(0.169)		(0.183)		(0.184)		(0.180)		(0.190)
lambda	33.84		52.26*		42.15*		33.41		48.49*	
	(33.23)		(29.36)		(23.69)		(26.98)		(25.06)	
Constant	18.60	-0.636***	-2.957	-0.799***	0.185	-1.114***	13.16	-0.851***	-5.749	-1.070***
	(36.64)	(0.137)	(33.35)	(0.210)	(29.39)	(0.254)	(32.11)	(0.165)	(30.72)	(0.258)
Observations	259	259	225	225	238	238	244	244	225	225

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.8: Heckman: Over the Next 50 years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	28.83	0.383*	21.10	0.250	12.75	0.151	11.55	0.223	11.95	0.144
	(33.91)	(0.208)	(24.20)	(0.229)	(18.43)	(0.233)	(18.89)	(0.225)	(19.29)	(0.239)
Number of storeys (main factory building)			4.433	0.0820	3.182	0.141			3.195	0.0899
			(3.903)	(0.0724)	(3.066)	(0.158)			(3.171)	(0.0983)
Introduced BCP before 2011 floods			65.73	1.087*			57.50	1.252*	59.04	1.152*
			(61.04)	(0.636)			(55.69)	(0.653)	(51.36)	(0.651)
Inventory value as of June 2011					-0.175	-0.000423	-0.151	-0.000293	-0.148	-0.000106
					(0.148)	(0.00172)	(0.140)	(0.00170)	(0.152)	(0.00170)
Inventory value answered					45.61*	0.639**	45.05	0.626**	41.85	0.553**
					(25.93)	(0.256)	(29.61)	(0.247)	(26.61)	(0.258)
Thailand survey*		0.287		0.426*		0.557**		0.372*		0.508**
		(0.206)		(0.227)		(0.229)		(0.220)		(0.234)
lambda	96.32		91.36		77.80*		73.96		80.05	
	(97.46)		(67.38)		(45.18)		(61.45)		(51.75)	
Constant	-54.06	-0.656***	-52.29	-0.798***	-46.88	-1.168***	-41.02	-0.896***	-49.63	-1.050***
	(111.0)	(0.166)	(78.92)	(0.212)	(58.65)	(0.321)	(77.64)	(0.197)	(66.61)	(0.260)
Observations	173	173	149	149	156	156	165	165	149	149

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.9: Heckman: Over the Next 50 years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-15.24	0.0197	-19.17	0.103	-11.40	-0.0614	-20.22	0.0628	-16.97	0.0237
	(27.68)	(0.324)	(13.39)	(0.335)	(20.57)	(0.342)	(16.75)	(0.347)	(11.47)	(0.354)
Number of storeys (main factory building)			-9.928	0.247	-14.39	0.257			-8.888	0.277
			(8.272)	(0.196)	(14.06)	(0.204)			(7.492)	(0.210)
Introduced BCP before 2011 floods			47.23	0.144			-3.040	3.121	21.98	3.603
			(34.07)	(0.985)			(116.0)	(4.196)	(77.86)	(6.632)
Inventory value as of June 2011					0.283	-0.00324	0.119	-0.00478	0.0670	-0.00542
					(0.246)	(0.00284)	(0.340)	(0.00334)	(0.246)	(0.00379)
Inventory value answered					-18.38	0.493	-14.88	0.578	-8.216	0.613
					(30.82)	(0.373)	(26.76)	(0.380)	(18.31)	(0.390)
Thailand survey*		0.388		0.485		0.489		0.479		0.546
		(0.358)		(0.384)		(0.379)		(0.398)		(0.406)
lambda	-88.16		-37.64		-65.75		-49.83		-28.86	
	(122.8)		(46.76)		(78.88)		(63.94)		(39.65)	
Constant	133.6	-0.291	112.6**	-0.808	138.5	-0.848	109.3*	-0.502	104.4**	-0.990*
	(104.4)	(0.331)	(51.50)	(0.499)	(88.17)	(0.526)	(58.62)	(0.413)	(45.94)	(0.557)
Observations	64	64	60	60	63	63	61	61	60	60

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.10: Heckman: Over the Next 50 years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	18.09	0.346**	20.45	0.311*	13.48	0.196	8.120	0.209	12.67	0.203
	(15.63)	(0.169)	(18.60)	(0.183)	(11.61)	(0.185)	(10.36)	(0.180)	(13.33)	(0.190)
Indirect losses during 2011 floods	-1.855	0.116	0.257	0.145	-6.821	0.0271	-9.707	-0.0219	-7.335	0.0236
	(9.846)	(0.167)	(13.92)	(0.180)	(10.18)	(0.185)	(8.890)	(0.184)	(11.82)	(0.192)
Number of storeys (main factory building)			3.737	0.0948	2.581	0.152			2.691	0.124
			(3.044)	(0.0826)	(2.107)	(0.123)			(2.359)	(0.121)
Introduced BCP before 2011 floods			42.91	0.580			37.52	0.806	46.24	0.735
			(33.75)	(0.468)			(24.21)	(0.501)	(29.48)	(0.505)
Inventory value as of June 2011					-0.0993	-0.00166	-0.0941	-0.00170*	-0.122	-0.00166
					(0.0882)	(0.00109)	(0.0860)	(0.00101)	(0.102)	(0.00101)
Inventory value answered					35.87**	0.657***	32.45**	0.697***	37.92**	0.634***
					(15.85)	(0.198)	(15.91)	(0.193)	(17.84)	(0.202)
Thailand survey*		0.306*		0.397**		0.483**		0.425**		0.486**
		(0.173)		(0.188)		(0.192)		(0.186)		(0.197)
lambda	52.25		73.16		54.41*		41.38		61.13*	
	(44.37)		(48.81)		(30.36)		(30.79)		(35.24)	
Constant	-4.753	-0.716***	-32.49	-0.890***	-18.85	-1.141***	2.685	-0.877***	-25.61	-1.093***
	(53.23)	(0.169)	(61.68)	(0.222)	(41.06)	(0.269)	(39.02)	(0.184)	(47.15)	(0.269)
Observations	256	256	223	223	235	235	242	242	223	223

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.11: Heckman: Over the Next 50 years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	39.47	0.412**	30.73	0.334	24.90	0.286	20.60	0.247	22.71	0.247
	(43.01)	(0.207)	(31.45)	(0.227)	(22.29)	(0.227)	(20.46)	(0.220)	(23.25)	(0.234)
Indirect losses during 2011 floods	-1.652	0.132	2.498	0.230	-9.566	0.0600	-17.32	-0.0577	-10.96	0.0680
	(25.10)	(0.205)	(26.87)	(0.224)	(19.90)	(0.230)	(17.81)	(0.225)	(21.85)	(0.239)
Number of storeys (main factory building)			5.071	0.0827	3.669	0.140			3.661	0.0904
			(4.634)	(0.0758)	(3.398)	(0.158)			(3.543)	(0.0982)
Introduced BCP before 2011 floods			68.29	1.004			58.30	1.234*	61.52	1.099*
			(69.63)	(0.642)			(56.05)	(0.663)	(56.37)	(0.659)
Inventory value as of June 2011					-0.170	-0.000452	-0.148	-0.000381	-0.147	-0.000150
					(0.163)	(0.00173)	(0.147)	(0.00170)	(0.169)	(0.00171)
Inventory value answered					50.48*	0.613**	52.08*	0.659***	48.49	0.528**
					(28.68)	(0.259)	(31.55)	(0.250)	(29.89)	(0.264)
Thailand survey*		0.270		0.397*		0.519**		0.381*		0.482**
		(0.207)		(0.228)		(0.233)		(0.222)		(0.236)
lambda	110.0		105.1		83.83		76.44		87.35	
	(119.9)		(84.56)		(52.66)		(62.42)		(60.36)	
Constant	-72.43	-0.752***	-73.02	-0.968***	-55.91	-1.232***	-40.25	-0.894***	-58.87	-1.113***
	(146.4)	(0.203)	(110.2)	(0.252)	(72.91)	(0.340)	(80.14)	(0.218)	(82.29)	(0.279)
Observations	174	174	150	150	157	157	166	166	150	150

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.2.12: Heckman: Over the Next 50 years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-12.00	-0.0718	-19.95	0.0537	-6.108	-0.205	-19.01	-0.0872	-15.68	-0.117
	(34.12)	(0.370)	(18.79)	(0.399)	(23.49)	(0.407)	(25.14)	(0.410)	(14.30)	(0.427)
Indirect losses during 2011 floods	2.282	-0.123	3.997	-0.227	0.739	-0.227	-5.932	-0.0600	1.228	-0.219
	(32.08)	(0.343)	(15.74)	(0.376)	(23.70)	(0.387)	(23.11)	(0.389)	(13.05)	(0.408)
Number of storeys (main factory building)			-11.52	0.245	-14.61	0.257			-10.31	0.268
			(10.03)	(0.214)	(14.76)	(0.224)			(8.026)	(0.230)
Introduced BCP before 2011 floods			43.67	0.291			-28.73	3.151	13.33	3.474
			(40.08)	(0.998)			(167.2)	(4.066)	(82.53)	(5.447)
Inventory value as of June 2011					0.280	-0.00293	0.185	-0.00484	0.0774	-0.00515
					(0.244)	(0.00282)	(0.493)	(0.00344)	(0.252)	(0.00379)
Inventory value answered					-17.13	0.602	-19.58	0.691*	-7.568	0.737*
					(36.51)	(0.381)	(43.65)	(0.394)	(22.17)	(0.403)
Thailand survey*		0.368		0.489		0.508		0.475		0.580
		(0.368)		(0.410)		(0.406)		(0.421)		(0.442)
lambda	-99.20		-43.84		-64.97		-67.79		-35.28	
	(155.1)		(58.40)		(85.17)		(94.10)		(43.91)	
Constant	141.1	-0.181	120.1*	-0.704	134.0	-0.723	128.1	-0.469	110.2**	-0.894
	(131.6)	(0.425)	(65.13)	(0.530)	(94.88)	(0.555)	(92.70)	(0.470)	(51.99)	(0.579)
Observations	62	62	58	58	61	61	59	59	58	58

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

C.3 Estimation Results: Heckman's Selection Model without Exclusion Variables

Table C.3.1: Heckman: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	1.910	0.368**	21.30	0.336*	5.838	0.233	-82.10	0.302*	6.361	0.260
	(6.239)	(0.163)	(57.40)	(0.175)	(16.44)	(0.176)	(369.4)	(0.174)	(16.52)	(0.181)
Number of storeys (main factory building)			6.599	0.139	4.153	0.199*			3.835	0.183
			(10.74)	(0.112)	(3.486)	(0.117)			(3.307)	(0.119)
Introduced BCP before 2011 floods			40.34	0.704			-227.0	1.012**	25.16	0.928*
			(108.1)	(0.453)			(1,039)	(0.499)	(44.32)	(0.499)
Inventory value as of June 2011					-0.267	-0.00355**	0.642	-0.00326*	-0.245	-0.00343**
					(0.195)	(0.00167)	(3.797)	(0.00169)	(0.180)	(0.00171)
Inventory value answered					17.70	0.490**	-114.0	0.458**	14.63	0.451**
					(24.88)	(0.199)	(542.1)	(0.194)	(22.32)	(0.203)
lambda	29.29***		113.4		63.45		-384.1		56.21	
	(4.112)		(229.7)		(70.75)		(1,769)		(69.75)	
Constant	0	-0.470***	-101.8	-0.646***	-43.15	-0.796***	485.7	-0.554***	-34.95	-0.783***
	(0)	(0.102)	(268.1)	(0.197)	(85.45)	(0.213)	(2,081)	(0.122)	(84.59)	(0.218)
Observations	261	261	227	227	240	240	246	246	227	227

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.2: Heckman: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	8.657	0.440**	-87.40	0.426*	33.72	0.365*	-97.20	0.361*	-68.35	0.373
	(6.866)	(0.205)	(410.6)	(0.224)	(120.7)	(0.221)	(514.2)	(0.219)	(311.6)	(0.230)
Number of storeys (main factory building)			-9.040	0.0730	6.526	0.0928			-7.322	0.0754
			(52.42)	(0.0679)	(16.43)	(0.108)			(41.58)	(0.0786)
Introduced BCP before 2011 floods			-226.6	1.307**			-305.5	1.349**	-210.2	1.296**
			(996.0)	(0.636)			(1,487)	(0.641)	(841.4)	(0.641)
Inventory value as of June 2011					-0.283	-0.00231	0.371	-0.00201	0.231	-0.00188
					(0.777)	(0.00199)	(2.993)	(0.00199)	(1.693)	(0.00197)
Inventory value answered					19.46	0.299	-79.02	0.302	-49.34	0.240
					(97.46)	(0.248)	(434.5)	(0.245)	(209.1)	(0.255)
lambda	20.18***		-317.5		114.2		-414.9		-294.0	
	(4.284)		(1,400)		(462.7)		(2,050)		(1,199)	
Constant	0	-0.527***	405.0	-0.640***	-117.7	-0.670***	526.3	-0.599***	384.6	-0.673***
	(0)	(0.122)	(1,705)	(0.169)	(563.8)	(0.216)	(2,478)	(0.144)	(1,480)	(0.194)
Observations	175	175	151	151	158	158	167	167	151	151

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.3: Heckman: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-32.59***	-0.148	-41.96	-0.0802	-36.29	-0.319	2.495	-0.222	-33.18**	-0.305
	(9.691)	(0.318)	(126.3)	(0.332)	(29.27)	(0.351)	(400.4)	(0.354)	(14.64)	(0.372)
Number of storeys (main factory building)			45.04	0.357*	-2.278	0.383*			-8.840	0.432**
			(375.5)	(0.195)	(28.90)	(0.206)			(15.36)	(0.218)
Introduced BCP before 2011 floods			6.326	0.0686			-435.2	6.183	88.50	8.017
			(262.9)	(0.924)			(5,390)	(70.65)	(152.2)	(2,291)
Inventory value as of June 2011					-0.224	-0.00526	1.169	-0.00954	-0.391	-0.0121*
					(0.473)	(0.00329)	(16.36)	(0.00581)	(0.509)	(0.00633)
Inventory value answered					6.153	0.879**	-173.3	0.971**	-5.841	1.105**
					(74.02)	(0.389)	(1,677)	(0.408)	(44.61)	(0.430)
lambda	0		277.0		42.03		-289.7		3.895	
	(0)		(1,853)		(140.8)		(2,908)		(71.30)	
Constant	60***	0.0464	-236.6	-0.564	36.36	-0.722*	328.8	-0.126	80.83	-0.811*
	(7.177)	(0.241)	(2,092)	(0.394)	(170.3)	(0.428)	(2,589)	(0.285)	(88.01)	(0.441)
Observations	64	64	60	60	63	63	61	61	60	60

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.4: Heckman: During Tenure in Office (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	58.72	0.441***	73.56	0.442**	24.87	0.357**	-102.6	0.383**	30.67	0.379**
	(676.5)	(0.163)	(181.4)	(0.175)	(31.02)	(0.176)	(573.6)	(0.173)	(42.24)	(0.181)
Indirect losses during 2011 floods	20.46	0.254	30.54	0.303*	6.995	0.328*	-73.62	0.220	6.175	0.307
	(390.9)	(0.166)	(126.7)	(0.180)	(28.47)	(0.182)	(341.0)	(0.179)	(34.93)	(0.189)
Number of storeys (main factory building)			11.14	0.120	4.963	0.187			5.339	0.167
			(24.84)	(0.111)	(4.763)	(0.123)			(6.065)	(0.125)
Introduced BCP before 2011 floods			74.89	0.625			-217.9	0.943*	40.67	0.841*
			(228.8)	(0.460)			(1,155)	(0.505)	(78.95)	(0.507)
Inventory value as of June 2011					-0.296	-0.00384**	0.761	-0.00346**	-0.307	-0.00364**
					(0.298)	(0.00171)	(4.880)	(0.00172)	(0.364)	(0.00174)
Inventory value answered					23.90	0.466**	-120.6	0.468**	27.50	0.434**
					(34.99)	(0.202)	(675.0)	(0.198)	(43.02)	(0.207)
lambda	185.5		221.6		82.30		-401.1		93.80	
	(2,195)		(571.8)		(105.9)		(2,143)		(141.3)	
Constant	-201.1	-0.697***	-266.7	-0.894***	-80.92	-1.051***	567.8	-0.762***	-97.24	-1.026***
	(2,811)	(0.154)	(777.4)	(0.231)	(148.4)	(0.248)	(2,846)	(0.163)	(198.2)	(0.253)
Observations	258	258	225	225	237	237	244	244	225	225

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.5: Heckman: During Tenure in Office (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-109.7	0.471**	49.53	0.424*	35.85	0.423*	-45.22	0.390*	44.09	0.398*
	(1,737)	(0.202)	(192.8)	(0.221)	(102.1)	(0.217)	(529.5)	(0.214)	(165.5)	(0.226)
Indirect losses during 2011 floods	-68.43	0.234	19.77	0.350	13.98	0.367	-34.25	0.168	18.95	0.353
	(872.5)	(0.205)	(163.3)	(0.224)	(90.14)	(0.225)	(240.9)	(0.220)	(149.8)	(0.235)
Number of storeys (main factory building)			7.932	0.0741	5.997	0.102			6.927	0.0786
			(23.52)	(0.0734)	(11.96)	(0.128)			(20.01)	(0.0867)
Introduced BCP before 2011 floods			86.70	1.177*			-133.1	1.249*	71.29	1.143*
			(409.8)	(0.639)			(1,265)	(0.647)	(359.9)	(0.643)
Inventory value as of June 2011					-0.259	-0.00261	0.131	-0.00224	-0.315	-0.00215
					(0.650)	(0.00200)	(3.082)	(0.00198)	(0.950)	(0.00197)
Inventory value answered					14.50	0.238	-30.72	0.291	18.15	0.169
					(59.36)	(0.253)	(395.3)	(0.247)	(79.98)	(0.262)
lambda	-349.5		147.0		97.67		-193.2		131.0	
	(5,276)		(653.9)		(340.1)		(1,940)		(593.8)	
Constant	478.8	-0.703***	-174.4	-0.877***	-109.2	-0.922***	280.5	-0.717***	-153.1	-0.886***
	(6,784)	(0.181)	(904.1)	(0.227)	(471.6)	(0.276)	(2,519)	(0.189)	(821.9)	(0.240)
Observations	176	176	152	152	159	159	168	168	152	152

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.6: Heckman: During Tenure in Office (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	451.9	0.0381	25.73	0.171	-15.68	-0.124	-18.93	-0.0294	-15.48	-0.0908
	(144,457)	(0.359)	(251.2)	(0.384)	(13.62)	(0.399)	(151.6)	(0.409)	(12.78)	(0.430)
Indirect losses during 2011 floods	2,542	0.204	20.43	0.141	0.253	0.186	-100.9	0.414	-3.424	0.289
	(776,998)	(0.337)	(199.3)	(0.359)	(15.74)	(0.379)	(528.2)	(0.384)	(15.17)	(0.396)
Number of storeys (main factory building)			41.43	0.321	-8.957	0.362			-12.49	0.417*
			(350.2)	(0.211)	(18.92)	(0.226)			(13.88)	(0.244)
Introduced BCP before 2011 floods			3.961	0.0796			-617.0	6.811	41.93	8.150
			(288.1)	(0.959)			(3,857)	(294.2)	(144.6)	(0)
Inventory value as of June 2011					-0.163	-0.00574*	1.955	-0.0107*	-0.238	-0.0127*
					(0.365)	(0.00343)	(13.08)	(0.00598)	(0.511)	(0.00653)
Inventory value answered					-1.183	0.916**	-238.3	1.045**	-7.746	1.141***
					(56.20)	(0.392)	(1,298)	(0.418)	(46.38)	(0.434)
lambda	19,071		302.0		19.15		-382.2		-3.267	
	(5.803e+06)		(1,912)		(101.8)		(2,066)		(71.55)	
Constant	-17,986	-0.226	-313.8	-0.787*	56.45	-0.937*	501.3	-0.522	84.27	-1.095**
	(5.492e+06)	(0.390)	(2,452)	(0.475)	(135.3)	(0.514)	(2,356)	(0.428)	(100.3)	(0.537)
Observations	62	62	58	58	61	61	59	59	58	58

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.7: Heckman: Over the Next 50 Years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-0.449	0.416**	109.2	0.343**	32.31	0.252	-2.659	0.320*	33.50	0.262
	(6.586)	(0.163)	(452.5)	(0.174)	(75.03)	(0.174)	(42.38)	(0.173)	(92.73)	(0.179)
Number of storeys (main factory building)			18.36	0.0854	6.683	0.122			6.886	0.103
			(73.01)	(0.0778)	(14.39)	(0.113)			(16.89)	(0.107)
Introduced BCP before 2011 floods			202.2	0.676			14.60	0.879*	109.9	0.842*
			(791.2)	(0.452)			(99.72)	(0.488)	(248.1)	(0.488)
Inventory value as of June 2011					-0.236	-0.00172	-0.0543	-0.00180*	-0.267	-0.00178*
					(0.491)	(0.00113)	(0.237)	(0.00103)	(0.616)	(0.00104)
Inventory value answered					78.34	0.560***	11.80	0.567***	76.90	0.522***
					(145.2)	(0.189)	(73.78)	(0.184)	(166.8)	(0.191)
lambda	0		470.9		186.3		1.756		197.4	
	(0)		(1,902)		(385.6)		(197.1)		(479.1)	
Constant	55.37***	-0.454***	-475.5	-0.527***	-178.4	-0.739***	49.83	-0.587***	-188.4	-0.695***
	(4.563)	(0.103)	(2,142)	(0.161)	(475.1)	(0.210)	(235.7)	(0.124)	(582.5)	(0.206)
Observations	259	259	225	225	238	238	244	244	225	225

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.8: Heckman: Over the Next 50 Years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	17.28*	0.441**	59.36	0.348	56.79	0.298	-21.85	0.304	0.994	0.270
	(10.04)	(0.204)	(297.0)	(0.223)	(211.1)	(0.222)	(81.89)	(0.220)	(31.39)	(0.230)
Number of storeys (main factory building)			9.334	0.0678	9.130	0.0956			0.538	0.0692
			(43.61)	(0.0650)	(32.68)	(0.121)			(5.042)	(0.0782)
Introduced BCP before 2011 floods			165.6	1.281**			-77.61	1.394**	-6.529	1.363**
			(867.3)	(0.632)			(287.5)	(0.649)	(120.7)	(0.646)
Inventory value as of June 2011					-0.218	-0.000666	-0.0962	-0.000475	-0.107	-0.000333
					(0.635)	(0.00170)	(0.228)	(0.00170)	(0.0954)	(0.00170)
Inventory value answered					113.4	0.561**	-25.58	0.573**	9.811	0.496**
					(380.6)	(0.247)	(148.7)	(0.242)	(54.48)	(0.252)
lambda	46.92***		233.8		263.3		-110.9		-12.99	
	(6.264)		(1,245)		(991.6)		(383.0)		(163.9)	
Constant	0	-0.504***	-223.3	-0.576***	-292.4	-0.793***	190.3	-0.688***	65.14	-0.754***
	(0)	(0.123)	(1,461)	(0.167)	(1,287)	(0.236)	(486.7)	(0.150)	(211.0)	(0.199)
Observations	173	173	149	149	156	156	165	165	149	149

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.9: Heckman: Over the Next 50 Years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Inundated during 2011 floods	-7.895	0.0803	39.15	0.168	-8.282	0.00270	95.23	0.127	-1.555	0.0894
	(9.973)	(0.317)	(769.9)	(0.329)	(123.8)	(0.336)	(3,142)	(0.341)	(119.2)	(0.347)
Number of storeys (main factory building)			55.76	0.209	41.41	0.209			25.14	0.229
			(865.6)	(0.187)	(429.7)	(0.192)			(213.8)	(0.196)
Introduced BCP before 2011 floods			64.92	0.0297			1,848	3.217	366.9	3.564
			(463.3)	(0.933)			(49,890)	(3.922)	(2,131)	(5.185)
Inventory value as of June 2011					-0.569	-0.00295	-4.371	-0.00500	-0.810	-0.00546
					(6.526)	(0.00272)	(120.5)	(0.00341)	(5.411)	(0.00380)
Inventory value answered					105.4	0.432	414.8	0.484	75.49	0.518
					(953.1)	(0.364)	(11,588)	(0.368)	(521.8)	(0.378)
lambda	0		500.1		402.5		1,419		240.0	
	(0)		(7,053)		(3,568)		(39,720)		(1,659)	
Constant	60***	-0.0464	-456.5	-0.428	-357.7	-0.438	-1,194	-0.142	-190.6	-0.511
	(7.685)	(0.241)	(7,467)	(0.387)	(3,781)	(0.407)	(35,271)	(0.281)	(1,826)	(0.414)
Observations	64	64	60	60	63	63	61	61	60	60

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.10: Heckman: Over the Next 50 Years (All samples)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-68.36	0.429***	199.0	0.427**	55.34	0.354**	-31.17	0.332*	59.93	0.356**
	(1,361)	(0.162)	(1,004)	(0.174)	(152.2)	(0.173)	(156.5)	(0.171)	(200.6)	(0.178)
Indirect losses during 2011 floods	-31.16	0.155	83.37	0.191	10.05	0.113	-16.55	0.0603	11.19	0.109
	(493.2)	(0.165)	(463.9)	(0.178)	(64.27)	(0.180)	(40.27)	(0.178)	(80.45)	(0.187)
Number of storeys (main factory building)			24.95	0.0753	7.774	0.102			8.292	0.0848
			(122.8)	(0.0693)	(20.83)	(0.109)			(25.94)	(0.0928)
Introduced BCP before 2011 floods			259.7	0.627			-51.39	0.865*	131.5	0.821*
			(1,266)	(0.459)			(341.3)	(0.494)	(388.8)	(0.496)
Inventory value as of June 2011					-0.266	-0.00176	0.132	-0.00186*	-0.313	-0.00181*
					(0.750)	(0.00115)	(0.845)	(0.00106)	(1.004)	(0.00105)
Inventory value answered					96.94	0.574***	-41.12	0.614***	101.9	0.546***
					(232.2)	(0.193)	(280.6)	(0.188)	(290.7)	(0.196)
lambda	-241.0		675.0		220.8		-137.6		246.2	
	(4,583)		(3,389)		(603.3)		(684.6)		(798.3)	
Constant	346.6	-0.593***	-795.5	-0.709***	-245.2	-0.868***	228.6	-0.690***	-275.5	-0.829***
	(5,524)	(0.151)	(4,280)	(0.192)	(811.2)	(0.229)	(872.6)	(0.161)	(1,064)	(0.217)
Observations	256	256	223	223	235	235	242	242	223	223

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.11: Heckman: Over the Next 50 Years (Subsamples: Unaware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-523.4	0.469**	86.26	0.424*	47.95	0.425**	-16.28	0.332	15.19	0.367
	(11,212)	(0.202)	(413.7)	(0.221)	(147.4)	(0.217)	(94.78)	(0.214)	(64.72)	(0.225)
Indirect losses during 2011 floods	-192.5	0.161	38.24	0.261	0.867	0.136	-17.10	0.000456	-12.35	0.131
	(3,892)	(0.203)	(265.0)	(0.222)	(58.30)	(0.224)	(23.06)	(0.220)	(28.48)	(0.234)
Number of storeys (main factory building)			10.84	0.0690	5.705	0.0999			2.090	0.0711
			(49.02)	(0.0681)	(16.89)	(0.127)			(7.807)	(0.0803)
Introduced BCP before 2011 floods			171.7	1.165*			-64.62	1.348**	25.65	1.262*
			(870.5)	(0.640)			(284.8)	(0.660)	(169.6)	(0.656)
Inventory value as of June 2011					-0.168	-0.000772	-0.0728	-0.000625	-0.109	-0.000438
					(0.368)	(0.00172)	(0.244)	(0.00170)	(0.120)	(0.00171)
Inventory value answered					68.47	0.534**	-18.07	0.597**	29.31	0.464*
					(181.5)	(0.251)	(161.8)	(0.245)	(79.39)	(0.258)
lambda	-1,630		275.7		143.4		-99.85		32.50	
	(34,411)		(1,416)		(497.4)		(401.5)		(254.0)	
Constant	2,068	-0.631***	-305.4	-0.780***	-146.4	-0.933***	183.8	-0.715***	9.031	-0.867***
	(42,456)	(0.177)	(1,865)	(0.218)	(692.9)	(0.274)	(521.0)	(0.187)	(349.3)	(0.232)
Observations	174	174	150	150	157	157	166	166	150	150

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.

Table C.3.12: Heckman: Over the Next 50 Years (Subsamples: Aware of flood risk)

	(1)		(2)		(3)		(4)		(5)	
	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief	Probability	Belief
Direct losses during 2011 floods	-2,621	0.0174	117.9	0.193	-25.57	-0.0550	-46.22	0.0328	-0.399	0.0531
	(5.361e+06)	(0.360)	(2,869)	(0.384)	(331.0)	(0.391)	(1,266)	(0.397)	(163.6)	(0.408)
Indirect losses during 2011 floods	9,751	-0.0651	-64.64	-0.0964	-43.46	-0.0971	-69.65	0.0706	-7.465	-0.0336
	(1.999e+07)	(0.336)	(1,449)	(0.357)	(459.9)	(0.369)	(2,467)	(0.370)	(129.9)	(0.379)
Number of storeys (main factory building)			104.1	0.179	59.20	0.180			27.13	0.185
			(2,445)	(0.201)	(718.0)	(0.206)			(309.2)	(0.210)
Introduced BCP before 2011 floods			148.1	0.143			-1,828	3.300	473.0	3.457
			(2,275)	(0.948)			(70,524)	(4.070)	(3,714)	(4.659)
Inventory value as of June 2011					-0.910	-0.00274	4.533	-0.00517	-1.055	-0.00529
					(11.55)	(0.00266)	(172.0)	(0.00356)	(9.144)	(0.00376)
Inventory value answered					213.7	0.527	-522.6	0.584	128.3	0.616
					(2,216)	(0.369)	(19,690)	(0.378)	(1,096)	(0.383)
lambda	-232,510		1,023		637.5		-1,484		323.1	
	(4.765e+08)		(22,488)		(6,722)		(55,023)		(2,893)	
Constant	187,786	-0.0147	-1,009	-0.411	-596.9	-0.390	1,461	-0.222	-288.1	-0.508
	(3.847e+08)	(0.391)	(23,789)	(0.463)	(6,985)	(0.479)	(51,812)	(0.417)	(3,218)	(0.488)
Observations	62	62	58	58	61	61	59	59	58	58

Standard errors are reported in parentheses.
*** Significantly different from zero at the 1 percent level.
** Significantly different from zero at the 5 percent level.
* Significantly different from zero at the 10 percent level.