PART I

Chapter 5

National Security and Compensation Policy for Terrorism Losses

by
Lloyd Dixon and Robert Reville*
Rand Center for Terrorism Risk Management Policy

Much research and policy on terrorism insurance compares terrorism to natural catastrophes, but this obscures the national security dimension of terrorism insurance. In this chapter, it is argued that government support of terrorism insurance and compensation can impact national security in several ways. It can increase resilience after terrorist attacks, demonstrate solidarity with victims, and affect incentives for security precautions. Thus terrorism insurance policy may be an important element of the strategy against terrorism, particularly as terrorists increasingly focus on economic targets.

* Co-Director.

1. Introduction

Much of the literature on terrorism insurance public policy has described terrorism as a catastrophic risk analogous to hurricanes, earthquakes or floods. The lessons learned from earthquakes and hurricanes provide important strategies to understand this risk, as illustrated by the growth of the terrorism risk models out of the natural catastrophe risk modeling industry. There are also important differences in the risk characteristics between terrorism and natural disasters that present challenges for insuring against terrorism, such as the difficulties in predicting frequency and the concentration of risk. However, the analogy to natural catastrophes obscures a critical distinction between terrorism and natural disasters: the national security dimension.

To motivate the national security considerations, it is useful to distinguish between the immediate goals of terrorists and the ultimate goals of terrorists. The immediate goals of terrorists are the terrorist acts, such as hijacking an aircraft to use as a missile against a landmark building, or detonating backpack bombs on public transportation. In contrast, the ultimate aims of terrorists are strategic. Terrorism scholars have described various ultimate aims, but one prominent example is from Bruce Hoffman (1999, 2004) who describes the ultimate aim of terrorists as to change the policies of governments by dividing them from their citizens through the use of fear.

The immediate effects of terrorist events are analogous to those stemming from natural disasters. With some understanding of terrorist capabilities and trends in targeting, it may be possible to describe the risk characteristics associated with the immediate aims of terrorists and to ultimately price insurance policies that property owners and other businesses may be willing to purchase. To the extent that insurers and government support may facilitate this market, there are natural catastrophe institutions that provide a precedent for dealing with the immediate aims of terrorists, such as the California Earthquake Authority or the French Natural Catastrophe Law.

Thwarting the ultimate aims of terrorists is a matter of national security. To the extent that government support of terrorism insurance, or direct government compensation of terrorism victims, is part of a portfolio of policies intended to thwart the ultimate aims, a different set of policy considerations is needed. Take-up rates for insurance policies or consequences for businesses or insurance companies that may be acceptable for natural disasters may be unacceptable if they can be seen to promote the ultimate aims of the terrorists. However, the relationship between national security and government support of insurance or direct compensation of victims remains largely unexplored.

Accepting Hoffman's description of the strategy of terrorists as to divide citizens from government through fear, it is not difficult to imagine that showing solidarity with victims through compensation or insurance can be seen as a way to counter this. In addition, the existence of terrorism insurance or compensation programs in many countries where no program for other catastrophic risks exists, such as in the United Kingdom, suggests that governments may at least implicitly recognize this connection. In the United States, Kenneth Feinberg, the Special Master of the 9/11 Victim' Compensation Fund (VCF), has described the VCF, as "vengeful philanthropy"[1] – showing the terrorists that they cannot hurt us or divide us because our country will support the families of the dead and seriously injured. However, little scholarly research exists to understand this connection or to explore what policies serve the goal of frustrating the ultimate aims of terrorists, and which do not.

In this chapter, the links between national security and the compensation system are explored and it is argued that the national security should be considered in developing compensation polices for terrorism. In the next three sections, the discussion is generalized from insurance to the larger *compensation system*, of which insurance is one part; describe its performance during 9/11; and discuss the situation since 9/11 in the United States. In the following two sections the relationship between national security and compensation is discussed in the context of terrorism, and discuss recent trends in terrorism and their implications for terrorism compensation and national security. A final section concludes.

2. The compensation system

The institutions, programs, and policies that provide benefits to businesses and individuals affected by an accident, natural disaster, terrorist attack, or other type of loss can be thought of as a system composed of four primary compensation mechanisms: insurance, the tort system, government programs, and charity. Together these mechanisms determine the fraction of losses borne by injured parties, who pays for the losses, and the time to payment and the transaction costs associated with the transfers. Together they also create incentives for physical and financial risk management for both businesses and individuals (Dixon and Stern, 2004, p. 5, pp. 145-149). Ultimately, their combined operation contributes to the resilience of a country to a catastrophe.

The role that each compensation mechanism plays in the United States varies by the type of injury or loss. For example, the tort system and life insurance play the lead role in providing benefits to individuals who are killed or injured in commercial aviation accidents. In contrast tort does not play a major role in compensating losses caused by floods. Instead, flood insurance, FEMA disaster assistance programs, and charities provide benefits to flood victims. It may be stating the obvious, but in the absence of benefits from insurance, tort, the government or charity, the business or individual harmed bears the loss.

3. The response of the system in the United States after 9/11

The September 11th attacks caused tremendous loss of life, health, property, and income to individuals, businesses, and public assets. The attack also resulted in a massive multi-pronged compensation response. Insurance payouts to businesses, to homeowners, and to individuals injured or killed in the attacks (including loss adjustment expenses) are expected to total $32 billion, the largest amount for any single event in U.S. history[2]. Congress limited the role of the tort system in compensating losses after the attacks and set up the September 11th Victim Compensation Fund to provide compensation to those who were killed or suffered seriously physical injury after the attacks. Overall, the Fund distributed over $7 billion to survivors of 2,880 persons killed in the attacks and to 2,680 individuals who were injured in the attacks or in the rescue efforts conducted thereafter (Feinberg, et al. 2004). The federal government also provided billions to compensate businesses, and workers, and to rebuild New York City. The charitable response was unprecedented. Approximately two-thirds of U.S. households made contribution to charities for victims of the September 11 attacks, and charitable donations exceeded $2.9 billion (Renz, Cuccaro, and Marion, 2003)[3].

The economic effects of the 9/11 attacks were far-reaching, but the compensation response after the attacks arguably reduced economic impacts and sped economic recovery compared to what would have occurred in the absence of such programs. Insurance payments for property damage and business interruption allowed businesses to repair damage and pay their workers for at least part of the time that operations were interrupted. Government grant and incentive programs encouraged small businesses to return to Lower Manhattan when the prospects for Lower Manhattan were extremely uncertain after the attacks. The response of government, insurers, charity, and plaintiff lawyers who donated their time to help victims apply to the Victim Compensation Fund, was a demonstration of national solidarity against the aims of terrorism. Arguably, the response limited the effectiveness of the attacks in causing economic damage, and therefore to some extent, frustrated the ultimate aims of the terrorists.

The insurance system provided more than half of the total payout of the compensation system after 9/11. This is because terrorism was not yet recognized as a distinct peril by insurers (despite the previous attempt to destroy the World Trade Center in 1993), and therefore was neither excluded nor priced as a stand-alone policy. In addition, insurers decided not to invoke war damage exclusions. As a result, all insured businesses and individuals received payouts on their policies (Dixon and Stern, 2004). This, too, contributed to the national response and likely improved resilience from the attacks.

4. The United States terrorism compensation system since 9/11

There is no ongoing government-supported program to compensate victims of terrorism in the United States. The benefits to those who were killed or injured or who suffered financial losses due to the September 11th attacks was a unique combination of benefits from insurance, government programs, and charity. There is no guarantee that a similar mix of resources will be available for victims of future attacks.

While the Victim Compensation Fund and other government programs put in place after 9/11 may create a precedent for programs that might be adopted after a future attacks, there is no guarantee that similar programs will be adopted in the future. For example attempts to extend the VCF retroactively to past terrorist attacks (such as the 1998 bombings of the U.S. embassies in Africa or the Oklahoma City bombing in 1995) have been unsuccessful. In addition, many aspects of the Fund have been criticized, such as the amount paid to each victim and the use of tort-style damages which track economic losses instead of a fixed amount for each victim. (Dixon and Stern, 2004; Feinberg, et al 2004). Thus, if a new program is created, it is likely to be different in style, and the implications for the functioning of the compensation system are difficult to predict.

As noted, insurance played a leading role in provided compensation after 9/11, but the magnitude of insurance payments in the event of a future attack is highly uncertain. Even with the Terrorism Risk Insurance Act in place, purchase of terrorism insurance after 9/11 has been spotty[4]. The Terrorism Risk Insurance Act is set to sunset at the end of 2005, and if it is allowed to expire, the insurance may not play a significant role in compensating losses caused by future attacks (Dixon et al., 2004).

The charitable response to 9/11 was unprecedented and played a critical role filling many gaps in the compensation system, but charities provided a relatively small portion of the total payout. Whether the public would be so generous after a future attack, which may not seem as unexpected, is uncertain. In addition, the creation of the VCF after 9/11 may raise the expectation that a similar fund will be created, limiting the motivation to contribute to charity, whether or not a similar fund is created the next time.

There is no general agreement in the public policy community about the role each compensation mechanism should play in compensating victims of future terrorist attacks. Ongoing crime victim compensation and social insurance programs (such as Unemployment Insurance) in the United States would provide limited compensation for losses. Workers' compensation, intended to compensate workplace injuries, will pay limited compensation, though in the case of some particularly catastrophic attacks (such as nuclear or biological attacks), many insurers have raised the concern that the workers' compensation insurance industry will be destabilized by an attack (Dixon et al, 2004).

In the absence of a strategy for compensation losses, the tort system may be the primary recourse for injured parties in the United States for injuries caused by terrorist attacks. After 9/11, due to the limitations on lawsuits imposed by Congress and due to the high participation in the VCF (which excluded recipients from suing third parties), tort litigation was not a significant factor in the compensation system. As other alternative (or competing) options are unavailable, litigation may become a more a central compensation response to future terrorist attacks.

Fortunately, no terrorist attacks have occurred in the United States since the September 11th attacks. If an attack does occur, however, compensation may not be available to facilitate rapid recovery, absent new policy interventions. From a national security perspective, the question is whether the lack of a comprehensive compensation strategy will further the ultimate aims of terrorism.

5. What we do know about the link between compensation and national security

The links between compensation for terrorism and national security are just beginning to be explored. Initial examination of potential links suggests that compensation may be linked to national security in a number of ways.

- The compensation system can alter incentives to reduce physical vulnerability to terrorism.

This connection between terrorism and national security is the most direct and obvious, but the ways in which it works or can work are new and important areas for further research. One important issue is that extensive government assistance after an attack may reduce the incentive of a firm to avoid risky situations, leading firms to underprotect against terrorism. This observation is common for government programs that compensate natural

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disasters , and a prominent statement of this argument in the United States for terrorism insurance is provided by Congressional Budget Office (2005).

There are, however, specific issues with terrorism that make the comparison to natural disasters less salient. For instance, given that terrorists undoubtedly adapt their strategies in response to security measures, securing one target may just cause terrorists to switch focus onto another target. This leads to a security arms race that results in excessive amounts of protection. Government subsidy of terrorism insurance in this context reduces the incentive to overprotect and can lead to appropriate levels of security[5]. The complex relations between compensation, incentives to adopt security measures, and the net effect on national security illustrate the need for careful consideration of compensation policy for terrorism. This is an area where simple analogies to other types of risks may be particularly unfruitful.

The physical security incentives from terrorism may be seen as relating to the immediate aims of terrorists. Other ways in which the compensation system may affect national security are related to the ultimate aims of terrorists. These are more speculative, and are important areas for future research. The first can be referred to as *resilience*:

- By helping the economy rebound after an attack, the compensation system can reduce economic vulnerability to terrorism.

Improving resilience (reducing economic disruption) is likely to reduce fear of future attacks. This can be regarded as a counterterrorism measure in the broadest sense, insofar as it does not directly deter attacks, but does reduce the ability of attacks to cause fear, which reduces their effectiveness. It is not inconceivable that this could ultimately reduce the likelihood of attacks.

The second connection between the compensation system and national security may be referred to as *solidarity*.

- By restoring some of the losses experienced to the victims, the compensation system can reduce the amount of social fragmentation caused by attacks.

Kenneth Feinberg's "vengeful philanthropy" is an example of this. Terrorists aim in part to create divisiveness and fear in the hope of altering U.S. policy. Compensation policies that encourage cohesion may frustrate the terrorists' aims in this regard. For example, policies that spread the cost of providing compensation broadly across the nation may further the perception in the U.S. that terrorism is an attack on the nation as a whole.[6] Furthermore, compensation by government or government support of insurance can serve to signal to victims (and therefore to others who fear they could be victims) that the government (or the nation) stands with them.

As above, this does not immediately deter future attacks, but could in the long run.

Further investigation is needed to understand the complex role that resilience and solidarity play in security against terrorism. In addition, it is unclear which specific approaches to insurance or compensation are more or less effective in improving resilience or solidarity. For instance, Feinberg has noted that paying different amounts to victims, as was done in the VCF, may increase divisiveness. Further investigation is needed to (1) relate particular policies with solidarity and resilience and (2) relate improved solidarity and resilience to the inability of terrorists to achieve political goals, and ultimately to deterrence of future attacks.

6. Trends in terrorism and implications for terrorism compensation policy

Information about the trends in terrorism is important for terrorism insurance and compensation public policy at multiple levels. Returning to the distinction between the immediate ends and ultimate ends of terrorists, knowledge of trends in the immediate ends is needed for pricing, exposure assessment and other characteristics of private markets. For instance, there is a need to know the trends in the technical capabilities of terrorists, as well as the types of targets (e.g., commercial, or government) and the cities or locations most likely to be targeted. However, some recent trends may be relevant for regarding government support of terrorism insurance and compensation as part of a portfolio of counterterrorism strategies. In this section, this aspect of terrorism insurance and compensation public policy is examined. The terrorism trend information discussed briefly in this section is documented at greater length in Chalk, Hoffman, and Kasupski (2005).

Since 9/11, al Qaeda's ability to strike many of its traditional targets has been degraded. This is on the one hand due to the significant damage inflicted on al Qaeda's Afghanistan safe haven, their top leadership, and their ability to operate unnoticed or unimpeded. On the other hand, it is due to the dramatic increase in security at many of the traditional targets, such as embassies and other government properties. The security is referred to as "hardening," and many terrorism experts have noted that the hardening of one kind of target displaces risk toward other, "softer" targets. This displacement of risk phenomena has been used to explain al Qaeda's targeting of, for instance, nightclubs and hotels.

One prominent characteristic of the displacement of risk toward softer targets is that the softer targets are typically private, while the harder targets are more likely to be government. This implies that there has been a displacement of risk toward targets that are more likely to result in private sector losses, and if insured, insurance losses. Ultimately, the displacement of risk to the private sector is one part of a set of broader policy questions that are only now being explored by researchers and policymakers alike: the appropriate allocation of security resources across targets, and the vehicles for encouraging this allocation. Among the unexplored questions are if government policy tends to displace risk to the insured private sector, does government support of terrorism insurance encourage a more appropriate allocation of security resources?

A second recently observed trend in terrorism is the increased interest by al Qaeda in wreaking economic damage. As discussed in Chalk *et al* (2004), Osama bin Laden commented since 9/11 on the economic damage that the attack caused, and he argued that this exposed the United States as a "paper tiger," akin to the Soviet Union during its ill-fated occupation of Afghanistan. As a result, causing economic damage is believed to have become a goal for future planned attacks. The manifestation of this targeting shift has many examples, including the alleged plots against financial institutions in New York and New Jersey, as well as the interest in attacking targets that would lead to economic disruption that exceeds the losses to the particular target, such as airlines, oil shipping, and tourism.

As with the displacement of risk through hardening of government targets, the increased focus on causing economic damage has also shifted risk to the private sector. While this involves some increased risk to insured property and assets, it also increases risk in a way that is truly without a parallel in natural catastrophes, and for which no insurance exists. In particular, much of the follow-on economic losses, such as increased hotel vacancies as a result of decreased travel, are uninsured.

If terrorism is going to be increasingly targeted at private sector assets that will also have additional economic consequences from the ensuing disruption, policymakers must not confine themselves to physical security measures to counter the attacks. Financial security measures, including but not limited to government support of terrorism insurance, must be explored as part of the portfolio of potential responses. In other words, one as yet unexplored role for government support of terrorism insurance or government compensation is as a *strategic* response to terrorist targeting intended to lead to economic damages.

7. Conclusion

Much of the debates over government involvement in terrorism insurance in the United States have focused exclusively on economic efficiency grounds (see, e.g., Smetters, 2005). On these grounds, one must identify market failures in order to justify a government program. At the same time, few economists dispute the need for a role for government in national security. If terrorism insurance serves national security goals, it would not be surprising for government support to be justified. In this paper, some ways in which national security goals and strategies are relevant for policy regarding the broader compensation system are explored (including terrorism insurance).

A primary distinction lies between the immediate and ultimate goals of terrorism. The immediate goals of terrorists are the success of particular attacks. The ultimate goals of terrorists can be described as to change the policies of governments by instilling fear in the citizens. Thwarting the ultimate goals of terrorists is the realm of national security. It is argued that economic efficiency may be the only relevant consideration if terrorism insurance or other means of compensating losses are only intended to disrupt the immediate goals of terrorists. However, if the compensation system is relevant to policies to frustrate the ultimate goals of terrorists, then economic efficiency must be balanced against national security goals.

It is suggested in this chapter that terrorism insurance (as well as direct government compensation as in the 9/11 Victims' Compensation Fund) ought to be considered part of the portfolio of policy measures available to policymakers to counter the threat of terrorism. Particularly in light of evidence that recent trends in terrorism suggest increased risk of economically-motivated attacks against private sector targets, government support of the compensation system may be a means of protecting financial assets in a manner that is complementary to the physical protection of targets and the direct disruption of terrorist activities.

While this chapter has demonstrated that terrorism insurance and compensation are relevant for national security policy, and therefore that government involvement may be warranted for reasons other than market failure, the concepts are new and in need of further exploration. An example of the style of question that would be fruitful for further research is the extent to which universal terrorism insurance coverage increases the successful recovery from terrorist attacks (increased resilience). If this is established, it is still necessary to balance the national security considerations against economic considerations, e.g., to what extent does a rapid recovery reduce the ability of terrorists to instil fear in the citizenry, and how does society value this outcome against potential inappropriate allocation of resources from universal insurance coverage. Many of the economic arguments for and against various approaches to catastrophic insurance, such as universal coverage, have been well-developed by analogy to natural disasters. The national security arguments for and against various approaches have not been available for catastrophic terrorism, and need to be explored before the appropriate policy choices can be made.

Notes

1 Quote from Manhattan Institute Center For Legal Policy Conference, “9/11 Victim Compensation Fund: Successes, Failures, and Lessons for Tort Reform,” Thursday, January 13, 2005, transcript forthcoming.

2 The Insurance Information Institute currently projects that insured losses due to the 9/11 attacks will total $32.5 billion (Hartwig, 2004). The second-largest insured loss is the $20 billion for Hurricane Andrew in 1992 (Thillinghast-Towers Perrin, 2001).

3 For a detailed evaluation of the performance of the compensation system after 9/11, see Dixon and Stern, 2004.

4 In the second quarter of 2004, Insurance broker Marsh and McLennan found terrorism insurance take-up rates of 37 percent for firms with total insured value (TIV) of $5 to $100 million, 52 percent for firms with TIV between $100 million and $500 million, 68 percent for firms with TIV between $500 million and $1 billion, and 44 percent for firms with TIV greater than $1 billion (Marsh 2004).

5 See Lakdawalla and Zanjani for further discussion of this possibility (Lakdawalla and Zanjani, 2003).

6 It is also possible that spreading losses broadly could encourage resentment in areas where the terrorist threat is low.

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Annex 1

List of Speakers and Presentations at the Conference*

Session 1 - Insurability of catastrophic risks

- Economics of catastrophe risk insurance, *Christian Gollier (University of Toulouse).*
- Insurability of terrorism risk: challenges and perspectives, *Howard Kunreuther and Erwann Michel-Kerjan (Wharton School, University of Pennsylvania).*
- Industrial, technological and other catastrophes, *Christian Lahnstein (Munich Re).*
- Recent trends in the catastrophe risk insurance/reinsurance market, *Patrick Murphy O'Connor (Benfield).*
- Role of the reinsurance industry in the management of weather related risks, *Peter Zimmerli (Swiss Re).*
- Issues and options in the management of terrorism risk through insurance, *Robert Reville (Rand Corporation).*
- Current state of the coverage for war and terrorism risks - including NBC - in the aviation sector, *Eugene Hoeven (IATA)*
- Free market solutions for terrorism risks coverage, *Ben Garston (MAP Underwriting and Lloyd's Terrorism Panel).*

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* Power point presentations summarising papers included in this publication as well as other presentations made at the conference are available on the OECD Insurance homepage: http://www.oecd.org/daf/insurance.

- Improving insurability and affordability: the role of insurance in hazard identification, risk assessment, risk prevention and mitigation for industrial/chemical accidents, *Satyananda Mishra, IAS, Disaster Management Institute, Bhopal - Government of Madhya Pradesh, India).*

Session 2 - Financial market solutions to manage catastrophic risks

- International financing solutions to catastrophic risk exposures, *Torben Juul Andersen (Copenhagen Business School).*
- The use of risk linked securities to manage catastrophic risks, including terrorism, *Christian Mumenthaler (Swiss Re).*
- Current challenges in terrorism risk securitization, *Gordon Woo (RMS).*
- Financing catastrophic risks in non-OECD countries: challenges and perspectives*, Reinhard Mechler (IIASA).*
- Current market trends for catastrophe bonds and risk kinked securities, *Christopher McGhee (MMC Securities, Guy Carpenter).*
- The potential for new risk transfer instruments to cover terrorism risks, *Michele David (The Bond Market Association).*
- Rating agency's perspective on catastrophe bonds and risk linked securities, *Rodrigo Araya (Moody's).*

Session 3 - Role of governments and development of public-private partnerships for catastrophe risk management

- Role of governments in natural catastrophe risk management and financing in OECD countries, *Paul K. Freeman (University of Denver).*
- Catastrophe insurance programs in emerging countries: field experience, *Eugene Gurenko (World Bank, Financial Sector Operations and Policy Department).*
- Potential role for governments in terrorism coverage, *Dwight Jaffee (Haas School of Business, UC Berkeley).*
- Public-private partnerships to cover terrorism risks in OECD countries, *John Cooke (International Economic Relations Consultant, London).*

- Role of the US government in the prevention and mitigation of terrorism risks, *Robert Liscouski (Infrastructure Protection Office, Department of Homeland Security, USA).*
- Disaster risk management policy in Japan, *Kazuhiro Kawachimaru (NIPPONKOA Insurance Company Ltd).*
- The Spanish experience in the management of extraordinary risks, including terrorism, *Ignacio Machetti (Consorcio de Compensación de Seguros).*
- A stakeholder approach for developing a public-private partnership: the Hungarian case*, Reinhard Mechler (IIASA).*
- Disaster risk management policy in China, *Yuanchang Zheng and Jianguo Mu (Department of Disaster and Social Relief, Ministry of Civil Affairs).*
- The French experience in natural catastrophe risk management, *Suzanne Vallet (Caisse Centrale de Réassurance).*
- Earthquake risk management policy in Indonesia, *Werner Bugl (PT Asuransi, MAIPARK Indonesia)*.
- Disaster risk management policy in Mexico, *Carlos Bayo Martinez (FONDEN).*
- Disaster risk management policy in the Philippines, *Ronald I. Flores (Department of National Defense, Office of Civil Defense, National Disasters Coordinating Council).*
- Disaster management in India, *D. Madan (Under Secretary, National Disaster Management Division, Ministry of Home Affairs, Government of India).*
- Management of extraordinary risks, including terrorism, in India: achievements and perspectives, *C. S. Rao (Indian Insurance Regulatory and Development Authority).*

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Part II
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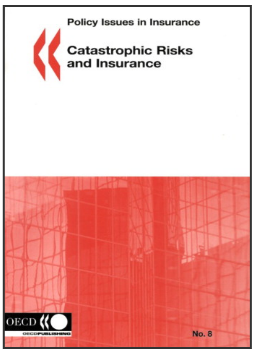
* Background Note of Mr Kawachimaru’s presentation (NIPPONKOA Insurance Company Ltd), based on *Governmental Earthquake Insurance System in Japan*, from *Earthquake Insurance in Japan*, written and published in March 2003 by Non-Life Insurance Rating Organization of Japan.



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