successive" (p. 236). In this view, migration and oceans as spaces become fluid and constantly moving matrixes that embody political possibilities by disrupting the locked and solid legal structures operating on land and extending onto free seas.

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Climate Management in China

Qihao He, Climate Change and Catastrophe Management in a Changing China (Cheltenham: Edward Elgar Publishing, 2019) pp 288. Hardcover: \$94.00. doi:10.1017/als.2019.18

As the world's largest greenhouse gas (GHG) emitter, China is especially vulnerable to climate-change disasters; therefore, how China manages climate-related risk is a crucial concern for the sustainability of China and the world. Despite the fact that numerous studies have noted the potential contribution of private governance, few have provided practical proposals to mitigate disaster risks based on theory and a comparison of experiences and social contexts. Climate Change and Catastrophe Management in a Changing China, written by Qihao He of China University of Political Science and Law, is therefore a timely and pertinent contribution to the field of climate-change law and catastrophe management.

The book consists of seven chapters, with each presenting a contemplative study of an important theme. Together, they provide theoretical, comparative, and contextualized bases for proposing a climate-change catastrophe-insurance system in China. Chapter 1 analyzes the problem of the current "Whole-Nation System"—a disaster-reduction and relief mechanism—and argues that an insurance system will be more efficient for long-term catastrophe risk management. Chapters 2-6 attempt to answer questions to work toward constructing a catastrophe-insurance system in China. By analyzing issues including the choice between government regulation or market mechanism, the merit of catastrophe insurance over liability insurance, and the role of the government, this book argues for a compulsory multiyear catastrophe-insurance system. He suggests that the system should allow private insurers to apply technical tools to reduce disaster risk effectively, and the government should take measures to enhance the incentives and capacity of private insurers, as well as to integrate political desiderata into the insurance scheme.

He diligently makes worthy contributions to the under-studied issues of adaptation and catastrophes in this book in at least three aspects. First, by analyzing possible

^{1.} He (2019), pp. 46, 62-3. He further argues for an insurance system and proposes three principles to facilitate government intervention in the catastrophe-insurance market: (1) solving market-failure problems, (2) implementing a mandatory system with affordable premiums, and (3) reforming the Whole-Nation System to avoid crowding out the private insurance market.

obstacles, choices, and solutions, this book suggests a promising future of insurance for risk management; it also concretizes the theory of such systems into one conceivable system.² Second, this book also supplements the study of public-private governance. Through a comparative study of catastrophe-insurance systems, he argues the contribution of private insurance on the one hand and carefully elaborates on a limited role of the government in providing disaster coverage to those with low income and filling in where primary insurers are incapable.³ Third, this book practically proposes a catastropheinsurance scheme on the context of China. Instead of praising the effectiveness of authoritarian control, this book provides a well-considered proposal to reduce the barriers related to climate insurance and establish a more reasonable and equitable insurance system. In this system, the government functions as a safeguard for the market.

With its focus on post-disaster resilience, this book provides a compelling argument that a government-sponsored catastrophe-insurance system would enable Chinese society to be more resilient against climate change. This proposal also elucidates policy frameworks for insurance and public-private governance worldwide. Nevertheless, two understated contexts in this book —the human-induced nature of climate-change disasters, and the political and legal context in China—may mean that the proposal is unjust and cannot be implemented.

First, he downplays the difference between natural catastrophes and climate-change disasters. Unlike earthquakes and other natural catastrophes, climate change has been proven to be a human-induced phenomenon. It is right to say that anyone can be a victim of climate-change catastrophes and should put in efforts, but it is wrong to ignore that some contribute to GHG emission much more and to require victims to pay as much as polluters. Although the book argues that insurance companies can mitigate climate-change risk through a risk-based pricing approach that may influence policy-holders' behaviours, this approach focuses mainly on the potential victims of climate hazards and therefore provides little incentive for emitters to reduce GHG emissions or for stricter government regulations for such emissions.⁴ Without an efficient mechanism to control GHG emissions, the frequency and degree of climate-change disasters will increase to a point beyond the capacity of any insurance system.

The risk-based pricing approach suggested by this book may even exaggerate social inequality and climate injustice. According to a report by the Office of the United Nations Commission for Human Rights,⁵ people who live in the most vulnerable areas to climate-change disasters mostly are the most disadvantaged people without sufficient ability to move. As a result, people who are in urgent need of insurance against climate disasters suffer more losses and must pay higher premiums, whereas polluters, who usually have greater global mobility, pay less or nothing at all. The author may consider liability insurance in addition to catastrophe insurance with the rapid development of climate-related tort litigations, so that the insurance market can better control GHG emission.

^{2.} *Ibid.*, p. 130.

^{3.} *Ibid.*, p. 252.

^{4.} *Ibid.*, p. 122.

^{5.} Office of the United Nations High Commissioner for Human Rights (OHCHR), Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, UN Doc. A/HRC/10/61 (15 January 2009) (hereafter OHCHR Report).

This book also circumvents the possible threat of a government without the rule of law on the insurance market. 6 The institutionalization of a market requires rules that promote predictability, limit government authority, and protect the economic rights of citizens. Without a transparent market or a rule-of-law government, it is doubtable whether a governmentsponsored insurance market will operate well. First, the Chinese government has been reluctant to disclose information fully in order to maintain its legitimacy.⁸ It is possible that the Chinese government controls insurers' licences and excludes insurers that do not comply with its censorship policy. Accordingly, insurance becomes a private form of government regulation and the market may not deliver the services expected by the author.

After examining the flaws of the Whole-Nation System, he quickly bypasses the issue of reform and argues for the urgent requirement of insurance. However, the contribution of catastrophe insurance does not legitimize government failure, especially when it concerns human rights around the world. China's rapid economic growth without sufficient awareness of environmental protection makes China the biggest polluter and GHG emitter.⁹ Worryingly, the dominant ideology of economic growth of the Chinese government may continue to inhibit its efforts to reduce GHG emissions and increase environmental protection. The under-implemented GHG emission regulation is one tacit piece of evidence.¹⁰

The passive actions of the Chinese government will encounter much more political and legal pressure in near future. The 2015 Paris Agreement enables the international society to closely examine the performance of the most prolific GHG emitter. In addition, courts around the world are more willing to refer to international human rights law and climate agreements to hold a government liable for passive climate actions. 11 In the near future, governments may find that they are liable for passive effort on GHG emission control and adaptation under the Paris Agreement, the UN Framework Convention on Climate Change (UNFCCC), and other human rights treaties. Even if China successfully enforces the catastrophe insurance, it will not shield the Chinese government from its legal obligations to reduce GHG and to implement adaptation policy.

This book will surely inspire policy-makers and researchers interested in climate change around the world. This review is more of a reminder than a commentary, hoping the book's

^{6.} The rule of law has been recognized as "an indispensable foundation for a market economy, which provides an essential environment for the creation and preservation of wealth, economic security, and well-being, and the improvement of the quality of life." See e.g. Schmid (1989), p. 67; Medema et al. (2000), p. 423.

^{7.} See Clarke (1992), pp. 283-4; Klein (2004), pp. 89-91.

^{8.} For example, the Chinese government censored information on the 2003 severe acute respiratory syndrome crisis, 2008 Sichuan earthquake, and sinking of a cruise ship on the Yangtze River in 2015. The relevant local authority also controlled information about the casualties resulting from a serious explosion in Tianjin in 2015. See Washingtonpost.com (2015); see also Hanrahan (2015).

^{9.} See e.g. Zhu (2011), pp. 419-44; BBC News (2015).

^{10.} He, *supra* note 1, p. 4.

^{11.} In 2015, the Dutch court ordered the Dutch government to limit the joint volume of annual GHG emissions by at least 25% by the end of 2020 compared with the 1990 level on the basis of the Dutch Civil Code, UN Framework Convention on Climate Change (UNFCCC), Kyoto Protocol, and international human rights treaties. In the same year, the High Court of Justice in Pakistan ruled that the government's under-implementation of climate-adaptation policy violates its Constitution. See Urgenda Foundation v. The State of the Netherlands (Ministry of Infrastructure and the Environment, 2015) Case C/09/456689/HA ZA 13-1396 (English translation); Ashgar Leghari v. Federation of Pakistan (W.P. No. 25501/2015), Lahore High Court Green Bench, Order of 4 Sept., 2015, https://elaw.org/ pk_Leghari (accessed 1 July 2019).

contribution may go beyond its limited scope of post-disaster risk management to contribute more to the global challenge of climate change.

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REFERENCES

- BBC News (2015) "Climate Change: China Official Warns of 'Huge Impact'," 22 March 2015, https:// www.bbc.com/news/world-asia-china-32006972 (accessed 1 July 2019).
- Clarke, Donald (1992) "Regulation and Its Discontents: Understanding Economic Law in China." 28 Stanford Journal of International Law 283-4.
- Hanrahan, Mark (2015) "Tianjin Explosions: Disasters in China Prompt Wave of Media Censorship," International Business Times, 13 August.
- He, Qihao (2019) Climate Change and Catastrophe Management in a Changing China, Cheltenham: Edward Elgar Publishing.
- Klein, Bradley (2004) "Democracy Optional: China and the Developing World's Challenge to the Washington Consensus." 22 UCLA Pacific Basin Law Journal 89-149.
- Medema, Steven et al. (2000) "Institutional Law and Economics." 1 Encyclopedia Law and Economics 418 - 23.
- Schmid, Allan A. (1989) Law and Economics: An Institutional Perspective, in N. Mercuro, ed., Law and Economics, Boston: Kluwer, 57.
- Washingtonpost.com (2015) "The Post's View: China Tries to Censor a Disaster," 3 June 2015, https:// www.washingtonpost.com/opinions/china-tries-to-handle-a-cruise-ship-disaster-by-increasingcensorship/2015/06/03 (accessed 1 July 2019).
- Zhu, Weihong QianYafen (2001) "Climate Change in China from 1880 to 1998 and Its Impact on the Environmental Condition." 50 Climatic Change 419-44.