Preface¹

There have been many books on China's rise, and the country's innovation over 40 years from 1978 to 2019. Economists tend to explain the rise of China from the perspectives of joining the World Trade Organization (WTO) and benefiting from the demographic dividend of low labor costs. Political scholars interpret China's success as being due to its state capitalism regime. Academic researchers in science and technological innovations strive to explore a Chinese model of innovation that is distinct from the Western one.

In this book, we focus on state-owned enterprises (SOEs), the backbone of the Chinese economy, and investigate how the large SOEs make radical innovation in their respective industries possible. Some may argue that SOEs are simply relying on governmental subsidies. If that is true, then could SOEs' innovation be sustainable?

This book focuses on SOEs' innovation in four industries and shows how Chinese SOEs, as key players in radical innovation, have transformed the industrial infrastructure of China, from lagging far behind to becoming a global leader; and how Chinese SOEs have changed their role in the global competition landscape, from followers and imitators to world-leading innovators.

We propose that the catch-up and rise of Chinese SOEs' innovation reveal a new kind of approach: with the advantage of political support, they undertake innovation by utilizing or building a relevant ecosystem. In their respective industries, they quite often play the role of lead users to guide the complex innovation processes. They take advantage of the windows of opportunity to enter the innovation war in the industries. Therefore, this book highlights how – based on the user-centered innovation ecosystem – Chinese SOEs are achieving victory in the innovation war.

This book is the result of a long academic journey. We initially planned to tell the stories of both SOEs and private enterprises in one book. However, we encountered substantial challenges. Eventually, we decided to leave our exploration of innovation in private enterprises for a later book. We also planned to find a good framework for explaining and understanding Chinese

¹ This book is an outcome of the project supported by the National Natural Science Foundation of China: No.71932009; IFREM Alliance Program; and IBSS Development Fund.

SOEs' radical innovation. After research and discussion, we concluded that the user-centered innovation ecosystem fits our cases very well. We consider the SOEs' innovations included in this book to be radical innovations because they have an immense impact on various sectors in China.

We thank the China Enterprise Confederation for helping us to arrange the research visits to those large SOEs from 2015 to 2017. Also a sincere thank-you to China General Nuclear Power Corporation, State Grid, China Mobile, and China South Locomotive & Rolling Stock, regarding their great support to our field researchers.

The research on radical innovation in China is a result of our ongoing academic efforts. Many of our former and current students contributed greatly to this book. We thank: Jian Chen, Researcher at the Chinese Research Academy of S&T for Development; Peng Cheng, Associate Professor at Beijing Forest University; Xuemei Ma, Researcher at China Aerospace Engineering Science and Technology Development Strategy Research Institute, Beijing; Yuchen Gao, Postdoctoral Researcher at Tsinghua University; and Xi Wang, Peipei Yang, Xuechen Ding, and Caiting Dong, doctoral candidates at the School of Economics and Management, University of Chinese Academy of Sciences.

We also appreciate the following contributors from Xi'an Jiaotong-Liverpool University: Jianing Dong, Yuan Gao, Yujie Han, Yicong Mei, Yang Nan, Lujie Wang, Sirui Wang, Yiyang Wang, and Tianyu Xiang.

A sincere thank-you also goes to Xinzhi Chang from University of Chinese Academy of Sciences, who contributed to Chapter 2.

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December 5, 2020