

consume. The result being that the propensity to consume is very low among the high-income population, who in Sun's words simply want to convert RMB into US dollars and run abroad. This will not come as a surprise to those observing China's monetary reforms and one imagines it is a strongly held view at the People's Bank.

Sun also offers his thoughts on two important theoretical issues: China reaching the Lewis Turning Point and the Theory of the Impossible Trinity. Both are issues that have garnered considerable attention over the last decade. Sun argues that in the case of the Lewis turning point, China has probably reached the first turning point where the labour force ceases to have unlimited flexibility and salaries in the capitalist sector begin to rise. This, Sun argues, is potentially enough to trigger the Balassa-Samuelson effect, where an increase in wages in the tradable sector leads to higher wages in the non-traded services sector and ultimately higher levels of price inflation. This increases the need to monitor productivity developments in the agricultural and manufacturing sectors. Rising agricultural productivity could absorb some of these pressures and would allow the nominal exchange rate to appreciate.

Sun concludes by arguing that what China faces is not necessarily an impossible trinity – where countries cannot simultaneously have free flows of capital, a fixed exchange rate and an independent monetary policy – but rather an “impossible duality.” Citing the case of the United States, Sun argues that in dynamic conditions, a floating exchange rate does not necessarily guarantee monetary independence. Independent monetary policy can therefore only be achieved through capital controls. This is no longer such a controversial view. The IMF has recently revised its position on capital controls as a legitimate policy under certain circumstances. Here readers would naturally like to know more about the extent to which these views prevail in the People's Bank of China.

This book will be of interest to those wishing to gain a greater understanding of the technical aspects of China's monetary policy. The bibliography also provides a very useful list of references for researchers in this area. However it might disappoint those wanting an insight into the politics and inner tensions in Chinese monetary policy formation. The analysis appears to stop short of answering some crucial questions; in particular if China has met the first condition of a Lewis turning point, does this mean that China will increasingly revert to more conventional monetary policy instruments? On these issues readers would undoubtedly appreciate more insight.

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The Globalization of Clean Energy Technology: Lessons from China

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In late 2015, 188 nations signed the landmark Paris Climate Change Agreement pledging to limit greenhouse gases and keep global warming two degrees Celsius above pre-industrial averages. To achieve this goal, which requires an estimated 60–80 per cent cut in greenhouse gas emissions, developed and developing nations alike will need to make major investments in clean technology. The developments in Paris give added significance to this already important book, in which Gallagher

offers a rich, rigorous analysis of the factors influencing the international transfer of clean energy technology both into and out of China. In examining the globalization of green technology, Gallagher also provides sharp insight into the astonishing expansion of China's clean energy industry. Aside from the second chapter, which provides a succinct overview of China's energy landscape and development, the book may be above the level of most undergraduates. However, it will appeal to graduate students and scholars broadly interested in China's economic development as well as comparativists interested in national innovation. For academics interested in China's environmental challenges, or climate change, it is a must-read.

Gallagher frames her argument with the assertion that the barriers to clean technology diffusion are not "insurmountable" or "nearly as daunting as many people assume" (p. 4). While the reader may occasionally wonder who actually asserts the barriers are insurmountable, she nonetheless offers a sophisticated analysis that paints a cautiously optimistic picture about the prospect of a globalization-driven development of the clean energy industry. Her work is based on an impressive array of sources including an extensive review of secondary literature, original quantitative data, and almost 100 interviews with government and industry leaders in the US, Germany and China. The heart of the book is chapter three, which offers four case studies on different clean energy sectors – gas turbines, solar photovoltaic (PV), coal gasification and advanced vehicle batteries. Gallagher selected these sectors because they represent a range of success in terms of technology diffusion.

The key to effective technology transfer, Gallagher lucidly argues, is government policies that reduce the cost of clean energy vis-à-vis fossil fuels and provide incentives for private sector investment in clean technology. Markets for clean energy products do not arise spontaneously; they must be built by governments, both national and local. Thus, the relative slow growth of electric vehicles in China, at least compared to the explosive expansion of solar PV, is a function of the absence of government policies such as a fuel tax (p. 60). Another crucial factor is access to finance. Both companies and consumers need capital in order to invest in green technology. One of the components of China's success in building the solar industry has been the ready availability of financing, even if the easy access to capital has led to some overinvestment. Finally, counter to conventional wisdom, the weakness of intellectual property rights (IPR) protection does not serve as a major inhibitor of technology transfer. Although IPR theft is a concern of many foreign investors, the lure of China's market combined with the strengthening IPR protection regime has provided the necessary inducements to transfer advanced technology to China. This novel, interesting finding is supplemented in chapter five by a cogent analysis of patent cases, which is based on a database Gallagher constructed. As she shows, the number of patents for clean energy technology filed by foreign companies has increased dramatically over the last decade, evidence of investors' confidence in patent protection.

One of the more interesting aspects of Gallagher's work, and a testament to the intricacy of her analysis, is her demonstration that there is no clear formula for effective government policy. Finding the right mix of industrial, innovation, export-promotion and market-formation policies is difficult and much depends on the national and local context. Every initiative carries potential drawbacks. Government-provided capital may facilitate acquisition of clean technology, but also can lead to hyper-investment, over-saturation of an industry, and misallocation of capital. The same holds for intellectual property protection. If it is too weak, foreign companies will not transfer technology for fear of infringement. If it is too strong, then there is no spillover to the host country. Moreover, smart policy may

be sector-specific; what works for gas turbines may not work for coal gasification. In this sense, what Gallagher adeptly illustrates is that it is not just the activity-level of Chinese policy makers that has contributed to success in building a clean energy industry, but also the flexibility, adaptiveness, and willingness to experiment on the part of Chinese government and industry leaders.

Although this is a remarkably well-researched, thoughtful book, one could offer a couple of quibbles. For instance, in the opening chapter Gallagher refutes the idea that China engages in “green mercantilism,” i.e., that it seeks to dominate clean energy industry primarily to shore up its economic power. Given only three pages and not addressed again in the empirical chapters, this section seems out of place in this book. Likewise the discussion of the internationalization of university education as a main driver of the globalization of clean technology, which appears briefly in the first and final chapters but is little mentioned elsewhere. But these are minor issues and overall Gallagher’s book is an outstanding piece of scholarship that enriches our understanding of a topic of undeniable importance.

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Strategic Reassurance and Resolve: US–China Relations in the Twenty-First Century

JAMES STEINBERG and MICHAEL E. O’HANLON

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There is no shortage of books analysing and predicting the course of US–China relations. It seems as though another one is released every week. And with China’s power and influence consistently rising within a global order dominated by the United States since the end of the Cold War, it is evident why so many intellectuals have turned their attention in this direction, and will continue to do so.

With *Strategic Reassurance and Resolve: US–China Relations in the Twenty-First Century*, James Steinberg and Michael E. O’Hanlon have added another work to this body of scholarship. The subtitle of their book, however, is somewhat misleading. It doesn’t actually comprehensively address US–China relations – something the authors note (p. 4). Rather, it analyses their strategic/military dimensions.

Steinberg and O’Hanlon’s central aim is to provide concrete strategic/military policy steps that both the United States and China can take to mitigate the risk of conflict resulting from the latter’s rise. They feel that “the pessimistic outcome [of conflict] is not inevitable. But there are powerful forces that make it quite possible, and perhaps even likely, in the absence of a comprehensive strategy by both countries to resist them” (p. 4). These forces include: (1) the United States’ alliance system that China may see as a containment mechanism; (2) the two countries’ strategic cultures that are unwilling to accept vulnerability and through which the United States feels responsible for global security while China seeks the restoration of stature and perceived historical territory; (3) differences in regime type that can result in misunderstandings and sharp ideological frictions; and (4) domestic politics where nationalism can push leaders towards combative postures.

But these specific tensions aside, the book essentially offers views on how to fight the forces of Realism. This theory posits that states are the sole guarantors of their