

Book Review: Network Origins of the Global Economy: East vs. West in a Complex Systems Perspective by Hilton L. Root

*In **Network Origins of the Global Economy: East vs. West in a Complex Systems Perspective**, Hilton L. Root argues for the need to consider economies and social orders as open, complex networks, focusing particularly on the transitions that have shaped Europe and China historically with implications for the present day. This original volume will not only serve as a useful textbook for university courses, but will hopefully inspire related studies exploring the social worlds behind our constantly changing economic structures, writes **Gábor Bíró**.*

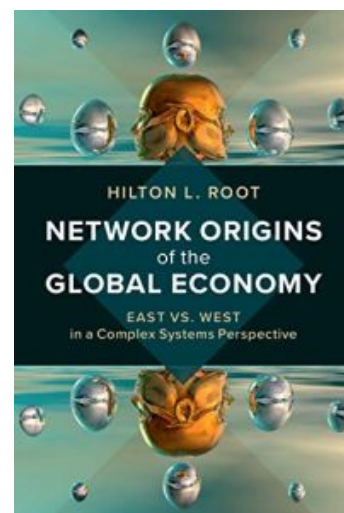
This review originally appeared on [LSE Review of Books](#). If you would like to contribute to the series, please contact the managing editor of LSE Review of Books, Dr Rosemary Deller, at lsereviewofbooks@lse.ac.uk

Network Origins of the Global Economy: East vs. West in a Complex Systems Perspective. Hilton L. Root. Cambridge University Press. 2020.

Mainstream economics tells us a lot about what happens in the economy and little about how the economy itself evolves. From the mainstream perspective, inspired by mechanical physics, the economy looks like a machine that works along mechanical laws. People are treated as cogs in this gigantic machine and as 'fitters' to the abstract model that describes its working. They are not expected to have any unquantifiable traits (hopes, fears, morals, histories) as these are deemed irrelevant for discourses of economic science. [Network Origins of the Global Economy](#) embraces another perspective, that of complexity economics, and mixes quantitative network science with qualitative historical and institutional inquiries. The idea behind this is that by analysing the formation of economies by using qualitative methods, we might be able to better understand the principles underlying quantitative changes.

Hilton L. Root and his co-authors argue that Europe and China have different hypernetwork structures and show how these structures have emerged historically. Root describes Europe as having small-world connectivity: that is, several power hubs (or nodes) connected by a few larger hubs and a couple of even larger ones. Disturbances are common. If one hub is destroyed, the neighbouring hubs can easily reach out to heal the wounds of the social fabric. The system is defined by high *resilience*: that is, the capacity to absorb disturbances and to restore the social order.

China is referred to as a highly centralised star-shaped network with a hierarchical, hub-and-spoke structure. Disturbances are rare, but when they do occur, they bring down the entire system, which will eventually be followed by a very similar one. The system is defined by high *stability*: that is, the capacity to minimise disturbances. There is, as Root points out, a trade-off between resilience and stability. Europe has high resilience but low stability. China has low resilience but high stability. And these basic traits can not only be used to explain the great economic transitions of their past, but perhaps also to predict their future.





China is rising with the aim of becoming the ultimate rule-setter for the global economy. While the figures for Chinese outward expansion are telling, the most compelling chapters (written with Dr Liu Baocheng, director of the Center for International Business Ethics at UIBE, China) explore the China behind the numbers. By moving from the *allocation*-based perspective of mainstream economics (focused on how agents allocate resources) towards the *formation*-based perspective of complexity economics (focused on how agents form larger structures), the reader gets introduced not only to the economic performance of China, but also to what these numbers really mean to Chinese individuals and institutions on various levels.

From this perspective, China not only produces and distributes commodities, but is engaged in a historically embedded network with a path-dependence and culturally specific ways of organising economic affairs. Root and Baocheng identify legalism and Confucianism as the two most important sources of this path-dependence. While both of these philosophical traditions embrace the idea of absolute power radiating from the top through a hierarchy of committed subjects, their sources of legitimacy are different.

In Confucianism, legitimacy is seen as coming from the moral virtues of the leader, who rules based on a Mandate of Heaven with a mission to foster the wellbeing of the people. In legalism, legitimacy is seen as coming from the capacity to ensure that everything follows legal provisions. Thus, for both traditions, the capacity to secure order is the key to legitimacy. Confucianism aims to provide order through giving moral examples that should be followed. Legalism aims to provide order through ensuring correspondence with law. Not surprisingly, regimes established based on these philosophies are highly sensitive to any kind of disorder. And a very small amount of disorder can go a very long way, threatening the legitimacy of the entire system because it challenges its capacity to secure perfect order. As the authors show, these philosophies are still present in 2020, affecting what is happening in the People's Republic of China.

A great merit of this book is that it does not shy away from addressing the entanglements of the Chinese economy. Most companies, even banks, are state-owned, with managers recruited from the Chinese Communist Party's cadre system. Loyalty to the party is constantly monitored and secured to fit the party's overall objectives and aims. To realise the 'Going Global' strategy, China's scheme to foster the overseas expansion of Chinese enterprises, three institutions were established in 2003. The National Development and Reform Commission (NDRC) sets the prices of water, electricity, gas and oil and oversees the formation and implementation of China's Five-Year Plans. The State-owned Assets Supervision and Administration Commission (SASAC) oversees all of China's state-owned enterprises (hereafter SOEs), including those operating abroad. SASAC ensures that executives of these SOEs run their enterprise along party lines. Of course, this is also true of Chinese SOEs operating abroad, which means that China not only spreads its economic activity globally, but also its way of organising economic affairs.

The third new institution, the Central Huijin Investment Ltd. (later replaced by the Chinese Investment Corporation (CIC)) is a state-owned investment fund holding government stakes in state-owned banks and other financial institutions. So the outward expansion of Chinese SOEs is indirectly financed by the state-owned CIC, which also puts party loyalty before profit-seeking. But can Chinese SOEs survive much longer in the global economy because, like the institutions financing them, profitability is not their primary concern? Can their expansion, fuelled by the money of the state, reach the tipping point of being too big to fail? Will China's rivals be unable to keep up with the pace of growth without a similar safety net or will the Chinese state run out of money before pumping their SOEs into defining positions on the global market? How will the global COVID-19 pandemic and the trade wars with the United States affect the globalisation of China and China's influence in the global economy?

Network Origins of the Global Economy is a thought-provoking book that will affect scholarly discourse in multiple fields. However, the book is not without certain flaws. Some of these are structural. It only begins to analyse actual historical regimes on page 77 (of 334 pages in total, plus the Preface), after stating several times what will be discussed in each chapter and how. While this structure might be useful for students who use the volume as a textbook for a university course, it might scare off other readers who seek to jump right into the action and want to be swept away by a compelling scholarly narrative. This book, after all, touches on one of the most pressing economic issues today: the dependence of the global capitalist economic system on the local Chinese socialist economic system. That this is not explicitly addressed in the beginning of the book seems to be a missed opportunity to appeal to a wider audience of people who may be less interested in complexity economics and more interested in the impact of the global rise of China.

There are also a few other issues that should be addressed. The narrative is not consistent about whether China has a market economy. There are pages suggesting that it does have a market economy (xxvii, 181, 183, 195, 210) with a Chinese twist: a 'socialist market economy'. Other pages seem to suggest that the Chinese economy is not a market economy (216-17). I would argue that the Chinese economy is not strictly a market economy, but retains characteristics of a planned economy. The price of certain key products is set by a central power hub rather than the market, and economic performance is made along Five-Year Plans

Another issue concerns historical narratives. Expressions like 'the Western legal tradition' are a bit too broad for most constitutional and legal historians. Today one cannot simply draw a direct line from Roman law, Germanic customs and canon law to the contemporary Western legal tradition (whatever that is) without making libraries of disclaimers. The authors do not explain the striking difference between the continental and common legal systems, both prevalent in the West. If 'the Western legal tradition' induced a coherent transformation of the whole European system, as the authors argue, why does the latter still consist of (at least) two distinctly different legal cultures? This is not the only example of painting with a broad brush. If dynastic relations are of primal importance in the historical development of the Western system, as the authors suggest, how they can explain events such as the American War of Independence (1775-83) that went against hereditary privileges but significantly furthered the Western system?

This book provides unprecedented inspiration for scholars of Friedrich Hayek and Michael Polanyi because it takes formation-thinking to a whole new level. Complexity economics, as Root calls it, seems to offer a fascinating new approach to advance our thinking about spontaneous and corporate orders by taking the middle road between economic history (and economic anthropology) and network science. Hopefully, this original volume will not only serve as a useful textbook for university courses, but will also launch a torrent of related studies exploring the social worlds behind our constantly changing economic structures.

Note: This review gives the views of the author, and not the position of the LSE Review of Books blog, or of the London School of Economics.

Photo by [Alina Grubnyak](#) on [Unsplash](#).
