

REVITALIZING THE SPIRIT OF BRETTON WOODS

50 PERSPECTIVES ON THE FUTURE OF
THE GLOBAL ECONOMIC SYSTEM



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MULTILATERAL COOPERATION AND SYSTEMS CHANGE

TRANS-SOVEREIGN NETWORKS

China's Role in the New Global Order



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The world is increasingly characterized by networks: technologies, firms, banks, global supply chains, even the English language. It is impossible to understand the workings of the modern-day economy without grappling with the intricacies of how shocks propagate through networks, how firms conduct business via networks, how infrastructure connects countries into networks, and how productivity gains are accrued from networks. The world as a whole also works as a network. Whether it is the Red Cross, an agreement to tackle global climate change, or international financial systems and global supply chains, these efforts are of a transnational nature. Even looming challenges such as technology displacing jobs or AI outsmarting humans are issues not between states but across them.

Competition and substitution, emphasized in traditional economic thinking, are gradually giving way to notions of complementarity, connectivity, and cooperation. With greater interdependence comes the need for a rethinking of the international politico-economic architecture that takes into account networks of a transnational nature. There is also a series of questions to ponder: Will networks supersede sovereign relations? Will they render the concept of hegemony obsolete, or at least less relevant? Will networks of the transnational sort need fostering, or will they just emerge without design? If they do need shepherding, who will play that leadership role?

This century and the subsequent ones are likely to be centuries of expanding networks, but the current

era is also one in which China will rise and assert itself as a global leader. What will be the defining characteristics of its leadership? This will likely be a key question of our time. Seventy-five years ago, China was one of the 44 allied nations to have participated in the founding of the Bretton Woods system. Ever since, it has transformed itself from an economic backwater to one of the most connected components in the global economy. China has experienced seismic changes, in the same way that the global economy has radically transformed itself by weaving a web of interconnected, interrelated components. But what hasn't changed at a similar pace is the design and thinking on international economic and financial architecture.

The main argument of this essay is that in a world of global economic networks, new economic relationships and linkages warrant a new type of economic leadership, one that supplants traditional notions of power and hegemony. China, by living through its own experience of building networks that succeeded in *jump-starting* development, is poised to become a global network leader. In that role, the most central and connected nation enables and propels the networks; it does not seek to dominate the system but instead strives to ensure the smooth functioning of the networks, as well as their safety and sustainability.

China, the second-largest economy today, doesn't easily fit into a category of historical and nascent superpowers.

China has defied conventional wisdom on its path to prosperity; it has achieved economic growth not by sheer forces of the market but instead with significant state intervention. It is on its way to becoming the largest economy in the world, yet it is still a developing country, marked by backward financial development and ailed by a myriad of deep-seated economic distortions. It has cutting-edge technological capacity despite its low income levels. It's seen an income growth of more than 15 times since 1990, and this was all achieved without being a Western-style democracy and arguably even without a proper set of incentives-enabling institutions.

But there seems to be a "silver bullet" absent from the conventional set of explanations for China's success. Yes—factor accumulation has been important, and reforms that have removed distortions have so far led to efficiency gains. But China's ability to transform itself rapidly from an economic backwater to one of the world's most vibrant economies in a matter of three decades seems to hinge on something else. Forty years ago, China was a centrally planned economy, absent a properly functioning marketplace. The state set production targets and prices, with virtually all daily necessities and many other consumer goods rationed. But over a short period of time, the government was able to coordinate the various elements in the nation and set development in motion. The country leveraged its ability to accumulate resources and mobilize

them—rapidly building infrastructure that connected its various regions, people, and complementary inputs. It worked as a network, with firms and industries enabling other firms and other industries, and productivity gains were maximized as the networks were built and expanded.

The idea of building linkages to foster economic development goes back to Hirschman.²⁹ By building forward and backward linkages, development can be self-reinforcing, propelling a virtuous cycle. A straightforward example illustrates that this mechanism extends beyond simple scale economies: if, for example, the transportation sector is inadequate, then output in many other activities, including truck manufacturing and highway construction, will be hampered, in turn further reducing output in the transportation sector and in the rest of the economy. This vicious cycle engenders a *multiplicative* effect. The same goes for a virtuous cycle, in the opposite direction.

If intermediate goods are complementary in nature, then forging and strengthening these linkages is ever more important. For instance, textile producers require raw materials,

machines, a trained workforce, technical expertise, security, business licenses, transportation networks, electricity, and so on. Problems with any input can substantially reduce the overall output. What China has managed to achieve is to build up the business and transportation networks that have connected these inputs fairly rapidly—further increasing the value of the inputs and, in turn, the incentive to produce them. Whereas it took the West a hundred years to create and link markets, China did it in a matter of two decades.

NETWORK EFFECTS ON A GLOBAL SCALE

The same idea of network effects and self-reinforcing linkages carries over to the global economy. There is substantial evidence, first, that inputs across countries have become complementary. For example, Japanese earthquakes in 2011 are shown to have caused substantial disruptions for parts of the US economy.³⁰ Moreover, switching costs in global supply chains tend to be high.³¹ In the world of financial networks, interdependencies among governments, central banks, investment banks, and firms, through

29 Albert Hirschman, *The Strategy of Economic Development* (New Haven, CT: Yale University Press, 1958).

30 Christoph Boehm, Aaron Flaaen, and Nitya Pandalai Nayar, “Input Linkages and the Transmission of Shocks: Firm-Level Evidence from the 2011 Tōhoku Earthquake” (Unpublished working paper, University of Michigan, Department of Economics, Ann Arbor, MI, 2014); Vasco M. Carvalho, Makoto Nirei, and Yukiko Saito, “Supply Chain Disruptions: Evidence from the Great East Japan Earthquake” (RIETI Discussion Paper Series No. 14035, Research Institute of Economy, Trade and Industry, Tokyo, 2014).

31 Jean-Noël Barrot and Julien Sauvagnat, “Input Specificity and the Propagation of Idiosyncratic Shocks in Production Networks,” *Quarterly Journal of Economics* 131, no. 3 (2014): 1543–92.

cross-border exposures in bonds, equities, housing, and capital flows, can lead to cascading defaults and failures.

Technology has precipitated more intense specializations around the world. Examples abound in which specific countries' resources and inputs can realize their full value only in a world with linkages: cheap labor in developing countries became an important asset when technology advanced and trade costs fell; oil from Middle Eastern countries was useless 150 years ago but is a critical input to the world's output today; rhodium and lithium are now valuable only because the world needs batteries to produce electric cars. The networks and linkages make country-specific inputs and products more valuable, which in turn makes the networks and linkages more valuable, and so on and so forth.

This cycle makes the importance of connectivity, both physical and digital, ever more crucial in this modern day and age. Ideas feature economies of scale. Physical infrastructure makes markets larger; digital infrastructure and technology makes ideas display greater economies of scale. And because ideas are now of more value than ever before, infrastructure serves an even greater purpose in connectivity. The connectivity makes the inputs more important, in turn heightening the benefits of connectivity. As crucial as these notions may seem, they are not described nor fully captured by simple measures of cross-border goods and financial flows, bilateral or multilateral

arrangements—but that is where the current international economic policies and thinking lie.

Brexit is a major disruption in networks. The calculable cost is still unknown. And the UK's rupture with the EU is mainly regulatory rather than physical. The chaos we have already witnessed at the border points between the UK and France indicates that in the present-day world, the networking in terms of policy, regulation, and other nonphysical issues is no less crucial than the tangible and visible connectivity. Whether it is a hard Brexit, a soft Brexit, or a blind Brexit, Britain's tendon, deep under the skin, is snapped, and all of the unprepared-for consequences are all of a sudden apparent to the naked eye. Already, the English Channel looks like an artery clogged up by cholesterol. It is reported that trucks now back up for miles outside the tunnel's entrance and passengers have to wait for boarding Eurostar trains. Slow and longer processes in clearing trucks, cars, and passengers at ports, train stations, and the tunnel linking Britain with France and the rest of Europe is expected to be routine. Even though both the UK and France have substantially increased customs officers, security staff, and other employees, things will get worse yet after Brexit. Breaking connectivity and networking, physical or nonphysical, is no joke.

If linkages are crucial, will every nation do its part to build these linkages and internalize its own externalities on the network? Take again

the example of infrastructure, which connects countries via roads, railways, power transmission lines, and gas pipelines. It may well be that China would like to build connections of its hitherto isolated hinterlands to Europe. But if neighboring countries such as Kyrgyzstan or Tajikistan cannot build railways and highways that link them with their surrounding nations, then the transport linkages that China builds with this purpose in mind are of no substantive value. Similarly, Kenyan ports are modern and efficient, but in the absence of a railway link that connects Angola to the coastal areas, these ports fall short of achieving their potential, and Angola's precious resources remain beneath the earth.

The more connected the entire network is, the more valuable is each link. Only when the global network of infrastructure is constructed with relative completeness is its externality the greatest, are its productivity gains the largest, and does each segment of the infrastructure linkage reach its greatest value. In this sense, the actions of each sovereign nation have considerable externalities at a global level.

CHINA: AN ENABLER?

If governments do not fully internalize these externalities, efforts to build and maintain networks will be suboptimal. Moreover, when it comes to small

countries, there is not only an issue of willingness but also one of capacity. After all, building links across nations is more difficult than building them within nations. Cross-border frictions and distortions abound—be they political, regulatory, informational, or due to unaligned incentives. In this instance, should there be a supranational actor, or a lead sovereign actor, that plays the role of coordinating nations and mitigating these frictions? If the traditional hegemon was a great power strong enough to force the other countries to follow the rules it had created, the new power of a network leader should be that of a connected and central participant that initiates, creates, and expands networks. The concept behind such a leader should be different from that of a hegemon, and so should its behavior.

But who will play this new role, and how much should each nation contribute? The question of burden sharing among states in the global provision of public goods is a time-dated controversy. It goes back to the classic problem of how much rich countries such as the United States should contribute to NATO spending. Olsen and Zeckhauser provided a theory as to why it makes sense for large, rich countries to shoulder a disproportionate amount of defense spending while allowing smaller and poorer allies to enjoy a free ride.³² In 1980, the United States' contribution to NATO was

32 Mancur Olson Jr. and Richard Zeckhauser, "An Economic Theory of Alliances," *Review of Economics and Statistics* 48, no. 3 (1966): 266–79.

around a 75 percent share (68 percent in 2016), larger than what is required for its relative GDP size and larger than the estimated relative benefits it derives (around 35 percent).³³ The flip side of this argument is that by getting other countries to contribute to some of the defense spending, the United States can avoid paying for 100 percent of it.

Global networks and public goods share some similarities but are still distinct concepts and require different thinking on international cooperation. Building linkages to form a network is different from contributing to public goods. Efforts in the latter are often more substitutable, while those in the former are more complementary. If countries spend less on building military alliances or supporting international organizations, other countries can compensate by spending more. But in the case of many networks, reduced efforts in one country can substantially affect the entire network. In the extreme case, in which each country's inputs are "critical," then the failure of one nation's contributions to the network will lead to the collapse of the entire system. In this scenario, the network is only as strong as its weakest link.³⁴ When the space shuttle

Challenger broke apart 73 seconds into its flight in 1986, it was the failure of a single inexpensive rubber seal (O-ring) that killed the entire crew.

China's Belt and Road Initiative, the grand plan to connect Asia, Africa, and Europe, aims to connect and build networks. In infrastructure networks, there are some "critical nodes"—occupied by countries in important geographic and strategic locations. But some of these countries may be too small and too poor to build cross-border infrastructure. Moreover, they may not be able to handle the range of risks that infrastructure entails—uncertainty associated with the long gestation period, regulatory changes, disruptions in financing, operational glitches, and the like. In this case, the active participation of a larger nation with capacity and scale, capable of mitigating or absorbing such risks, may be critical. But why is China the large nation incentivized to bear the brunt of the burden on this project? Arguably it can derive more private benefits from this particular network than can, say, other large economies. It occupies a more central position geographically, and it also relies more on trade with other countries and is more dependent on resources in Africa.

33 Todd Sandler and Keith Hartley, "Economic of Alliances: The Lessons for Collective Action," *Journal of Economic Literature* 39, no. 3 (2001): 869–96.

34 Michael Kremer, "The O-Ring Theory of Economic Development," *Quarterly Journal of Economics* 108, no. 4 (1993): 551–76; Charles I. Jones, "Intermediate Goods and Weak Links in the Theory of Economic Development," *American Economic Journal: Macroeconomics*, 3, no. 2 (2011): 1–28.

CHINA: A GLOBAL NETWORKER

In today's world, being at the center of a network and becoming its most connected component has some substantial privileges. The power derived from such positions in networks is nowhere better illustrated than in the historical example of the rise of the Medici family in 15th-century Florence. At the outset, the Medicis were not the wealthiest family, nor did they have the most political clout. The Strozzi family was more financially powerful and had more seats in the legislature. But by marriage, the Medici family was the most connected component of a network of intermarried families, economic relationships, and political patronages. Cosimo de' Medici consolidated political and economic power by leveraging the family's central position, allowing the Medicis to become the "godfathers of the Renaissance."

China is currently fashioning itself into a successful global networker. By participating in various areas of global effort—whether it is building truly international institutions with sound corporate governance, coordinating global infrastructure projects, or building relationships with developing and emerging economies—it is turning itself into the central and most connected component in them.³⁵

Perhaps no country understands the power of networks better than China. *Guanxi*, or "connections," has been a linchpin of socioeconomic and political life for centuries, and all the way up to the present day. The rise through the ranks of the political hierarchy relies on *guanxi*; conducting business and undertaking projects requires connections to the local party cadres; even finding the right doctor requires *guanxi*.

Even from a historical point of view, China has been a purveyor of networks. The ancient Silk Road, begun in the second century BC, aimed to connect Asia and Europe. It stretched about 7,000 kilometers from Chang'an, the ancient capital in China, to Athens and Constantinople. The lasting legacy of the Silk Road is as much about bridging cultures and people as about trade. Merchants learned the languages and customs of countries to which they traveled, and the knowledge helped with negotiation and commerce. The process of making paper was propagated worldwide via the Silk Road network, and the same is true of the printing press technology.

A LEADER IN THE AGE OF NETWORKS

The growing connectedness of the world is a key fact of our economic and

35 According to the American Institute, some US\$340 billion will be spent on infrastructure as part of the Belt and Road Initiative. In 2018, during the Beijing Summit of the Forum on China-Africa Cooperation, Chinese leaders pledged about US\$60 billion in financial assistance to African nations, and the country's aid reached US\$3 billion in 2018.

political life, but if the field of vision is confined to the traditional economic lens, the world will still be viewed as a collection of discrete and separate entities. Developing intellectual frameworks that capture a global web in which elements are connected, overlapping, and enmeshed has become imperative. So have policy prescriptions that reflect such global realities. More work needs to be done on measuring the interconnectedness of nations, the structure of various networks, and the propagation of shocks across these networks.

The three major pillars for a global economy in the post–World War II era, namely, the International Monetary Fund, the World Bank, and the World Trade Organization, manifest the importance of networking. China has consistently been a vocal advocate for a multilateral approach to addressing formidable challenges facing the world. A change of representation at the Bretton Woods institutions in 1980 rendered it possible for China to participate in deliberation on global macroeconomic situations, macroeconomic surveillance of individual members, broad policy coordination, and development interventions, among other issues discussed in the multilateral institutions. Being a beneficiary of the international financial order established in 1945, China has reiterated that it has no intention whatsoever of upsetting the international order that has served the post–World War II world well, albeit with room for improvement. Bretton Woods institutions and all institutions that follow

suit work well as network builders, in terms of policy coordination and cooperation in addressing debt problems and financial crises, as well as cofinancing for physical infrastructure projects.

Forums such as Asia-Pacific Economic Cooperation (APEC) and the G20 have been playing a big role in international cooperation. China sets great store by getting involved in these multilateral networks in a proactive way. Some China watchers in the West seem to be concerned, even with a bit of trepidation, over China’s potentially dominant role in multilateral institutions and forums. It seems that China knows its limitation and has no superpower pretensions in the American way. Nevertheless, the country will try to play a bigger role in global affairs. Whether China is an existential threat to other nations or a constructive player in the international networking scheme will be determined by its actions. Perhaps the country should have the ambition to shoulder greater responsibility and learn to be a global leader. Cicero said, “You do not have to convince me. Your authority convinces.” China’s potential ability to claim such authority depends on what it does and will do, step by step, over years, and maybe decades, by right intention and right execution.

A resilient network can’t be hegemonic in the conventional sense. It needs governance to reflect multipolarity. It also needs to permit others to mobilize. China needs not only to play a greater role but also to encourage other

members of the international community to do the same, if the established leading nations decide to pull out and abdicate their crucial responsibilities on the global stage. In this sense, China's great destiny is not only to become the largest economy—and a rich one to

boot—but also to recognize the duties and rewards inherent in designing such an architecture that enables others to flourish as it has flourished, that permits greater integration as it has integrated, and where one country's success begets another's.