In May 2016 the Council on Foreign Relations’ Civil Society, Markets, and Democracy (CSMD) program held a workshop to explore how global supply chains are evolving, the risks they face, and U.S. policy options to mitigate some of those risks. The workshop, hosted by CFR Senior Fellow Shannon O’Neil and Visiting Fellow Ella-May Seth, was sponsored by CSMD and the Maurice R. Greenberg Center for Geoeconomic Studies. The views described here are those of workshop participants only and are not CFR positions. The Council on Foreign Relations takes no institutional positions on policy issues and has no affiliation with the U.S. government. In addition, the suggested policy prescriptions are the views of individual participants and do not necessarily represent a consensus of the attending members.
**INTRODUCTION**

Global trade and the supply chains that support it are undergoing a period of profound change, including structural transformations in the cross-border flow of goods and services thanks to liberalization and improved communication, as well as sweeping changes in big exporting economies, especially in Asia (see figure 1). At the same time, the United States and countries in Asia, Latin America, and Europe are seeking to update the global trade architecture with ambitious trade pacts such as the Trans-Pacific Partnership (TPP), the Transatlantic Trade and Investment Pact (TTIP), and other regional accords.

Global supply chains face several challenges. Trade itself is becoming less of a driver of global growth, and is confronted by a resurgence of protectionism across nearly all major markets. Other threats include climate change, decaying infrastructure, cyberattacks, and human rights abuses, all requiring responses from both corporations and governments.

The Civil Society, Markets, and Democracy program at the Council on Foreign Relations hosted a workshop with current and former government officials, supply chain experts, corporate representatives, finance specialists, and others to explore how globalized production patterns are evolving, the risks they face, and how companies and countries can improve compliance and resilience across supply chains through new trade standards, legal regimes, and policies.

**Figure 1. Integration Into Global Supply Chains**

![Graph showing participation index over time for different countries. Source: OECD, WTO. Participation Index is expressed as the share of foreign inputs and domestically produced inputs used in third countries' exports in a country’s gross exports. Sharp decline in 2009, the most recent year for which data is available, reflects the decrease in trade during the global financial crisis.]
A BRAVE NEW WORLD FOR TRADE

In just a single generation, supply chains have grown to dominate global trade, undergirding the creation of everything from textiles to electronics to high-end machine tools, as products are increasingly made across countries rather than within them. Workshop participants noted that many of the most striking changes come from China’s rise as a major manufacturing center within these chains, now producing about one-quarter of global output.

Many elements helped supercharge China’s emergence as a production hub, participants noted, including low-cost and abundant labor, relatively cheap and accessible land, improved infrastructure, and a light regulatory touch. Matching developing-world labor costs with world-class trains and ports, for example, offered unique advantages.

But today, many of those advantages are fading as manufacturing costs increase and the Chinese government seeks to rebalance its economy away from manufacturing and exports in order to boost domestic demand and create a more robust service sector. Several participants stressed the degree to which China’s labor cost advantage has eroded, making regions like Southeast Asia and eastern Europe more appealing by comparison. As those demographic and policy changes continue to play out, they could threaten China’s place at the center of global supply chains, participants said. Likewise, as environmental consciousness has increased in China, the government is gradually strengthening its limited regulations, potentially eroding some regulatory advantages. “Pollution is democratic,” one participant said, noting that fouled rivers and unbreathable air affect workers and bosses alike.

Shifting consumer preferences, in both the developed world and China, are also driving changes in the composition, sustainability, and transparency of Asian supply chains. Consumer preferences in the rich world, and increasingly in China, have led many companies, especially in textiles, to improve their supply chain visibility and sustainability, at least among first-tier suppliers.

In addition, recent legal changes can help address labor concerns in supply chains. This spring, for example, U.S. customs officials seized a Chinese shipment of soda ash, the first such seizure under a recent amendment of Section 307 of the U.S. Tariff Act of 1930. The law prohibits the import of any goods made using forced or child labor, but until earlier this year a loophole still allowed these goods if they met U.S. demand. With the change, workshop participants said they expect many more Section 307 cases, potentially changing supply chain labor practices for the better.

Policy is driving other changes inside China. Participants noted that Chinese officials are now much more willing to mirror more stringent, Western-style rules on sustainable sourcing than they were a few years ago. For example, the Chinese government has started to develop strategies for tracking the provenance of so-called conflict minerals. A growing number of voluntary corporate guidelines for supply chain transparency in China, one participant said, reflects a “sea change” in corporate and governmental attitudes.
Predicting Chinese Growth

Workshop participants grappled with questions about the future of Chinese economic growth—China last year posted the most anemic gross domestic product (GDP) increase in a quarter century—and the degree to which China’s push to expand services both domestically and for export will affect China’s future and shape trade competition with the United States.

Some participants argued that China has essentially exhausted much of what propelled decades of double-digit growth, for example, cheap labor and the dividends provided by a massive infrastructure buildout. China also faces financial challenges due to high levels of municipal and corporate debt, a shadow banking sector, and the integration of the renminbi into the global financial system. The country is dealing with a hangover from years of breakneck expansion in manufacturing capacity, which will also complicate the quest to employ Chinese workers. For example, China’s large excess steel production capacity has stoked tensions with Europe and the United States. Half of all capital formation in China, one participant noted, goes to capital-intensive industries with few jobs.

Others pointed to China’s steady improvement in technological innovation, especially in cutting-edge areas such as robotics, to argue that Beijing can successfully escape the middle-income trap, even though the government must follow through with policy changes to ensure continued growth. “This is not Tokyo in 1990; this is Tokyo in 1960,” said one participant, pointing to advanced manufacturing in China to contradict the idea that China’s economic rebalance will focus excessively on domestic services.

China’s ability to rebalance toward services will also be important in determining the country’s progress toward GDP growth objectives. In recent years, Chinese leadership has made service exports a priority. Despite U.S. objections, Beijing is pushing to join the Trade in Services Agreement, a step toward accelerating China’s move up the value chain. China’s rapid evolution means it is catching up to India, currently the developing world’s largest exporter of services, and in several years China could directly challenge the United States, the world’s biggest services exporter, one participant said.

Risks to Supply Chains and Trends in Compliance

Participants stressed several risks to global supply chains that threaten their resilience and viability. Natural disasters can upend the smooth functioning of global supply chains. Climate change and deeper global connections can exacerbate public health risks, from traditional pests to newer concerns, such as the Ebola or Zika viruses, one participant noted. Rising sea levels accelerated by climate change present a challenge for the bulk of the world’s population that lives in coastal areas and for the manufacturing facilities located near shipping routes.

For the United States in particular, one participant said, decrepit infrastructure—including ports, railroads, bridges, and airports—presents a growing risk to competitiveness and ability to integrate with global supply chains. One participant noted that the United States ranks fifteenth in the World Economic Forum’s Trade Enabling Index, which includes measures of infrastructure, coming in below Singapore, Hong Kong, and Japan. Another participant said his company sees much of the United States as “a second-world country.”
Additionally, several participants noted that cyberattacks, especially those aimed at stealing intellectual property, present a huge risk to supply chains. Some 80 percent of cyber breaches originate in supply chains, one participant said, and 98 percent of manufacturing firms will experience a cyber-related disruption to production in the next two years. Particularly vulnerable are the small and medium businesses that make up the lower tiers of global supply chains, because those companies usually lack information technology resources to track and combat cyber threats.

The division of production in global supply chains—including the growing use of smaller subcontractors to provide some components or services—also presents a risk to labor and human rights. Although regulation, or the specter of regulation, has prompted many companies to better monitor their contractual partners, one participant said, visibility beyond first-tier suppliers is still lacking. Companies have little knowledge of or control over the network of smaller subcontractors who do much of the actual production.

Some participants observed a change in the way that companies and governments are overseeing supply chain compliance with labor and environmental standards. In the traditional compliance model, there are misaligned incentives between lead companies and their providers down the chain—time-to-market and cost-cutting imperatives, for example, can undermine a supplier’s incentives for complying with all standards. Some participants suggested shifting to more of a partnership model, where buyers and suppliers embrace a relational, rather than a transactional, contract. That gives lower-tier suppliers the incentive and security to invest in environmental and labor improvements, some participants said.

U.S. POLICIES TO BOOST SUPPLY CHAIN COMPETITIVENESS

The United States has both significant advantage and serious constraints as it considers using policy to improve U.S. competitiveness in a world of global supply chains. Government action is still relevant, some participants noted, despite the rise of more collaborative supply chain governance, because corporate self-policing has seldom ensured chain-wide compliance. As one participant noted, government mandates are better suited to “bringing up the bottom of the supply chain” to higher levels of labor conditions and sustainability.

Many participants said that the TPP could potentially be a useful tool to ensure that “high-standard” trade pacts improve supply chain behavior around the world. That is true for member countries that have sought to hedge against excessive reliance on Chinese-built supply chains in Asia by joining a U.S.-led accord with high standards on the environment and labor rights.

And, participants noted, the incentives to reform trade practices are not limited to the eleven other TPP signatories. The mere desire to qualify for the TPP is helping spur reform across Asia, despite Chinese officials and corporations’ initial skepticism. With the initial benefits of Chinese accession to the World Trade Organization (WTO) essentially having run their course, the TPP now may provide a necessary stimulus for change to China’s trade policies.
However, others pointed to the TPP’s limits. One called its labor protection standards “too little, too late,” and said they do not do enough to bolster developed-world labor protections. Another noted that the TPP does not liberalize services, thus sharply limiting the pact’s ability to drive changes across the fastest-expanding sectors.

Some participants argued that the United States is burdened with an outdated approach to a rapidly changing world of global trade. Responsibility for regulatory oversight spreads across nearly fifty agencies, and standards and regulations tend to proliferate with little appreciation of the real impact on companies sourcing, manufacturing, and moving goods around the world. “The United States is trying to use legacy frameworks . . . to govern what it is now essentially a different, modern trade environment,” asserted one participant. Another participant warned of the risks of “exporting” burdensome U.S. regulations to other countries, saying, “the regulation that comes out of the United States is uncoordinated [and] ill-advised” from the point of view of companies with global supply chains.

National security concerns can also complicate policy formulation. Low-probability, high-impact events—such as a major terrorist attack—can suddenly threaten global supply chains around the world. Yet there is a fundamental tension, some participants noted, between the impetus to create nimble, “just-in-time” supply chains to satisfy consumer demand, and the policies required to build more resilient supply chains that can better adjust to unforeseen disruptions. National security issues can also muddy seemingly simple supply chain issues such as quotas on local content. Similarly, some participants expressed concern that investment policies are becoming ever more interwoven with national security issues. Because investment is needed to generate trade, the lack of a global foreign direct investment regime and the potential for governments to increasingly restrict foreign investment for security reasons could impede global supply chain growth.

Finally, in seeking to craft policy responses to today’s trade landscape, some participants stressed a fundamental change: trade is no longer the engine of the global economy. The declining importance of trade as an economic motor is due both to cyclical factors, such as weaker demand and the end of the commodities super cycle, and structural changes. In the case of China, better domestic communication links and more in-country sourcing of components and raw materials have dampened cross-border trade. Additionally, in the wake of the financial crisis of 2008–2009, a credit crunch depressed activity and a resurgence of protectionist measures limited trade. In the fifty years before, global trade expanded at about 6 percent per year and led GDP growth. Since the crisis, trade growth has been at 3 percent or less. Even if accords such as the TPP and TTIP materialize, they may not be enough to overturn these trends.

The rise of protectionism, both in terms of formal trade-restrictive measures and public sentiment, presents a challenge for both global trade and global supply chain resilience, participants noted. Rhetoric opposed to free trade has been a fixture in the U.S. presidential campaign and in many European countries. This not only adds headwinds to the completion of trade deals but could also reverse gains that have been made in recent decades under global trade liberalization.