Decoupling the US Economy from China after COVID-19

BY DR. JOHN LEE
Senior Fellow, Hudson Institute
May 2020

The ongoing, devastating effects of COVID-19 are strengthening US resolve to increase “economic distancing” from China. There is growing discussion about economic “decoupling,” “disentangling” and “diversifying” away from China to ensure a more resilient United States that is less exposed to consequences of decisions made by the Chinese Communist Party.\(^1\)

What will an economic separation from China look like and what does the US need to do to protect and advance its interests?

This policy memo argues:

- Many traditional and current products for Asian consumers, even if produced by American firms, will continue to be made or assembled in China.
- There will likely be a trend towards producing products for American consumers in America or in geographically proximate economies such as Mexico.
- Regardless, there will be greater efforts by the US government and firms to capture more of the value in global production processes.
- The most disruptive battleground will be in the enabling technology sectors neatly captured in Beijing’s Made in China 2025 blueprint.
- The US should increasingly develop approaches to deny or restrict Chinese firms from access to capital, markets, and know-how in the MIC sectors.

Obstacles to Supply Chain Decoupling and Economic Distancing from China

COVID-19 has dramatically highlighted the importance of ensuring critical products and sectors are not overly dependent on external supply chains, especially those based in China, as this will leave the US vulnerable to coercion, blackmail and helplessness in various circumstances.

In recent times, the administration has identified initiatives such as dramatically lowering reliance on China for critical minerals that are required for electric vehicles, green technologies, sophisticated consumer products such as smartphones, and other military applications such as lasers.\(^2\) Currently, the focus is on ensuring domestic production of pharmaceutical and medical supplies.\(^3\) It is clear that the list of critical and/or strategic sectors and products will only grow which will be
accompanied by policies to ensure either domestic production or else production in friendly countries where the supply chain to source products back to the US is secure.

There is also reinvigorated discussion about the broader question of repatriating supply chains away from China and preferably back to the US or else restricting the capacity of Chinese firms to entrench themselves in global supply chains.

However, and outside of specifically identified critical and/or strategic sectors, we are unlikely to see a flood of US and international firms dramatically lowering reliance on China-based supply chains for many traditional products and sectors.

One reason for multinational firms continuing to invest in, and rely on, Chinese-based supply chains is that doing so is often mandatory if one seeks to gain access to its large and growing domestic market. Chinese regulatory burdens can also make it prohibitive not to invest in Chinese-based supply chains if one seeks to sell to the Chinese market. For example, Caterpillar has more than 30 plants in China as the latter is the source of up to 10 percent of its overall sales revenue. All Caterpillar equipment made in China is sold in the country.

Moreover, the cost of relocating supply chains out of China can be prohibitive, and in some instances, impractical. The example of Taiwanese firm Foxconn which makes iPhones is instructive. Foxconn is reliant on China’s excellent manufacturing and transport infrastructure and draws on a network of over 1,500 Chinese suppliers. In 2018, the company produced around 220 million smartphones in the country to sell to the world. Other prospective production centers such as Vietnam and India are not comparable substitutes in the foreseeable future. Indeed, it is estimated there are 51,000 international companies with one or more direct suppliers from Wuhan, where COVID-19 originated, while over 5 million companies have one or more tier-two suppliers in that region. Some 938 of the Fortune 1000 companies are included in this latter estimate.

One should also bear in mind that in the short-term, and possibly longer, the effects of COVID-19 in alternative manufacturing centers such as Vietnam, Thailand, Bangladesh and India are uncertain. If China can manage and contain infections in key manufacturing provinces, it might be far too risky for firms to shift operations out of China into economies still afflicted with COVID-19.

Finally, forcing Chinese firms to exit supply chains through “deny and disrupt” approaches can inflict considerable self-harm. The semiconductor issue is one example. If the US completely banned sales of semiconductors to China, this would pose an existential threat to Huawei and, in the short- to medium-term, severely degrade Huawei’s capacity to conduct its business in China and external markets, thereby weakening Huawei’s importance in the Information and Communications Technology sector. But a complete ban on semiconductor sales to China could mean American firms lose about 18 percent of their global share and an estimated 37 percent of existing revenues. The US semiconductor industry argues this will allow South Korea to eventually overtake the US as the global leader in semiconductors.
Meanwhile, US firms would have to cut R&D and other capital expenditures, which would imperil their global leadership of this sector. Bear in mind that over the past decade, the US semiconductor industry has spent over $312 billion on R&D and $39 billion in 2018 alone. This is double the total amount spent on R&D by international competitors and is largely possible because of the US’s 50 percent global market share – with 35 percent of this global share coming from the Chinese market.

Multiple Production Regions for Different Consumer Markets

When it comes to traditional and current generation merchandise goods, the current administration and future ones will find it difficult to persuade American firms to relocate supply chains back to the US when goods are being produced for markets in Asia and elsewhere outside North America.

The trend of supply and value chains for traditional and current generation merchandise goods becoming more regional will continue, especially in the East Asia region of China, Japan, South Korea and the Southeast Asian economies. This is helped by the rapid pace of technological progress in manufacturing-related technologies such as robotics, automation, artificial intelligence and 3D printing – along with these technologies interacting with each other in ever more sophisticated ways.

These technologies increase incentives to locate production and assembly of merchandise goods closer to the end consumer.

However, the flip side is that the declining importance of direct labor inputs and even land costs resulting from these technological developments mean that it is far more feasible to locate supply and value chains in the US when producing products for US consumers. The value and impact of investment in such technologies is already proven. For example, more than one-third of global installations of robots are in China – Japan and South Korea fill out the top three.

These are the countries which are eating the lunch of other regional manufacturing economies as it is where the most advanced regional manufacturing plants are based. The best and most advanced industrial robotic companies are headquartered in the US, Japan and Europe. Yet, the US is only the 4th largest robot installer in the world and 7th when it comes to robot density (per 10,000 workers).

While it does not make sense for the US to compete for low paid global manufacturing jobs (and will fail if it tries to do so), the emphasis will be increasingly on encouraging advanced manufacturing plants serving American consumers to be based in the US – by far the world’s largest domestic consumption market. This will create more highly paid and skilled jobs in manufacturing services, logistics, marketing etc., where much of the value will reside and be created.

These issues are already on the radar of the current administration and the previous one. But there will be an acceleration of specific US industrial policies to create more incentives for American firms and those from advanced like-minded entities such as Japan, South Korea, the EU and Australia to invest in these technologies and capabilities within the US when serving North American markets.

The result could be an emerging North American production and assembly zone for an increasing number of merchandise...
goods designed and dedicated to serve North American consumer markets.

The Emerging Battleground: Next Generation Technologies and Sectors
In May 2015, the Chinese State Council launched Made in China 2025 (MIC 2025) to guide the upgrading of Chinese industry, production, and innovation over the next ten years. The blueprint identified certain sectors as essential: electrical equipment, information technology, farming machines, aerospace equipment, new materials, railway equipment, energy saving and new energy vehicles, ocean engineering equipment, numerical control tools and robotics, and medical devices.

The blueprint seeks control over, and dominance of, entire manufacturing processes, supply chains, and associated services for the sectors identified in the MIC 2025 plan.

MIC 2025 will co-opt and use indigenous private firms to ensure that value creation is created in and retained within China. All state-controlled and private indigenous firms are potential partners and participants in MIC 2025, and those advancing the blueprint’s objectives will be offered financial, commercial, regulatory, legal, and political support and assistance.

MIC 2025 is also much more ambitious and muscular in its outward-focused end goals than previous blueprints. Its objective is not simply to ensure China becomes an advanced and competitive economy. The internal measures are explicitly designed to create the foundation for Chinese firms to dominate these sectors in global markets. China is also to become a global hub for firms in these sectors. This will allow its economy to host, absorb, and localize entire supply chains, intellectual property, and related services.

China’s Performance in High-Tech and Emerging Industries
With respect to the current state of play in key technologies, China’s progress is mixed and is not dominant across the board as much common reporting might suggest. This is true for several reasons.

First, China is not yet the standard setter for high-tech and emerging industries. For example, one comprehensive analysis of over eighty technologies in eleven categories found that more than 90 percent of technologies used in China adhered to global standards, which were largely shaped by advanced economy firms and governments.16

Second, and with respect to high-tech supply chains where much future value will reside, Beijing is far from self-reliant. In areas such as robotics, aeronautics, semiconductors, closed-circuit chips and cloud services, China has low domestic and/or global market share and is heavily dependent on external sources. Using China’s National Bureau of Statistics definition of “high-tech,” which correlates closely with MIC 2025 sectors, China has a trade deficit once computers and
telecommunications equipment (which are current generation technologies) are excluded. The other high-tech sectors include biotechnology and life-sciences, opto-electronics, electronics, computer-integrated machinery, and aerospace materials and applications.

One of the most acute cases for China is semiconductors which are integral to almost all aspects of the MIC 2025 plan, and more generally, for China’s capacity to move up the value chain and compete into the future. In 2018, China imported over $312 billion worth of semiconductors from US, Japanese, South Korean and Dutch firms. This is 30 percent more than the value of Chinese imports of oil in the same year. It is this Chinese vulnerability which led the Trump administration to place restrictions on the sale of chips to Huawei (which is on a banned entity list). At the time of writing this memo, the administration is considering further measures to require foreign companies using US chipmaking equipment to obtain a US license before supplying chips to Chinese firms such as Huawei. This is an attempt to stop firms in countries such as Taiwan from selling chips to China using American equipment and knowhow.

Undermining the Foundations for Chinese Technology Dominance

When it comes to economic distancing in the context of supply and value chains, the sectors outlined in MIC 2025 is where the US must, and is already, competing most earnestly, intensely, and with preparedness to create the most disruption even if there are collateral impacts on allies and friends. Given that prevention is better than finding a cure, the US will want to ensure that China is not in the position to dominate key technologies, set standards and assume the leading role in dominating supply and value chains for these emerging and enabling technologies.

Leadership and dominance in these technologies and sectors are generally predicated on four conditions:

1. Investment at scale.
2. Access to large and advanced markets.
3. An effective system to drive innovation and competition.
4. Channels to develop and/or acquire technology and know-how.

China’s state-led approach and economic size clearly fulfill the first condition. However, meeting the other three conditions is far more problematic for China. It becomes much more challenging if China’s access to markets in North America and Europe is becoming more restricted—as it is—or if its firms are denied access to essential inputs such as big data from those markets.

CHINA’S ADVANCES IN HIGH-SPEED RAIL, HIGH-SPEED COMPUTING, COMMUNICATIONS TECHNOLOGY AND AI HAVE BEEN ON THE BACK OF KNOWLEDGE ACQUIRED OR STOLEN FROM ADVANCED ECONOMIES. ADVANCES DRIVEN BY GRADUATE STUDENTS IN THESE FIELDS DEPEND ON THEIR CONTINUED ACCESS TO FOREIGN UNIVERSITIES AND ACADEMICS.
For most MIC 2025 categories, lack of access to these large foreign markets will impede the development of local Chinese clusters (a concentration of locally connected businesses, suppliers and associated institutions) in those sectors, and simply dominating the Chinese market will not suffice. Beijing needs the first-mover advantage in foreign markets if it is to develop a new export-oriented market, as MIC 2025 and other blueprints such as the Thirteenth Five Year Plan for Science and Technology, the Thirteenth Five Year Plan for National Informatization, and the National Cybersecurity Strategy envisage.

Moreover, while China has narrowed the R&D total (public and private) spend gap with the US ($254 billion by China compared to $564 billion by the US), around 80 percent of China’s R&D system is geared toward using acquired knowledge and innovation to produce or improve products and services.

The point is that China’s system to accelerate creativity and basic innovation is deficient vis-à-vis other advanced economies, such as those in North America, Europe, and Japan. Its impressive advances in high-speed rail, quantum and high-speed computing, information and communications technology (ICT), AI, electric vehicles, solar panels, and space, have been on the back of technologies and know-how acquired, adapted or stolen from advanced economies. Advances driven by graduate students in these fields depend on their continued access to foreign universities and academics. Reports indicate that Chinese regulatory hurdles favoring state-controlled companies and private “national champions,” the crowding out of the private sector, and insufficient IP protections continue to adversely affect creativity and basic innovation in the Chinese political economy.

(a) Restricting Chinese access to capital

China’s corporate and government sectors are over-burdened by the challenge and cost of managing the consequences of massive misallocation of capital and mounting debts despite the country’s high rates of household savings. This means that Chinese firms seeking to expand globally are increasingly dependent on international sources of finance, and the US’s deep and diverse capital markets most of all.

There are growing calls from within the administration and Members of Congress to tighten up the rules that allow Chinese firms such as Alibaba (market cap of approximately $500 billion) to list on US exchanges. There are currently about 160 Chinese firms listed with a combined market value of over $1 trillion. This is a significant presence. Shares on the Shanghai Stock Exchange which is China’s largest exchange have a total market capitalization of about $4 trillion.

Such calls will continue and must be heeded. There must be restrictions on individual firms or sectors linked to MIC 2025. Chinese firms gain access to US capital through listing but the Public Company Accounting Oversight Board, which oversees the audit of public companies, has no right to examine the books of Chinese firms or the sources of financial information presented by these firms. This gives Chinese firms the benefit of accessing the world’s deepest
financial and capital market without being accountable to the regulatory or legal oversight that is applied to all other companies listed on US exchanges.

Similarly, calls such as those by Florida Senator Marco Rubio, advocating for stronger scrutiny and restraints for Chinese companies to be included in stock indices (e.g., MSCI All Country World ex-U.S. Investable Market Index) and pension funds (e.g., Thrift Savings Plan’s International Stock Fund) must be acted on. Being included in such indices and funds provides Chinese firms with flow-on advantages such as access to cheaper capital and “captured” institutional investors given the need for benchmark or passive funds to own these stocks. Critically, the Chinese firms included are largely state-owned-enterprises and “national champions” which are central to Beijing’s MIC 2025 plan.

(b) Restricting Chinese access to markets

The measures against Huawei which restrict its access to the US market, components and software are the most notable move when it comes to narrowing access for a Chinese high-tech firm. It will not be the only example. The appetite to work with governments and firms in other like-minded countries (such as Japan and EU nations) to develop credible alternatives to specific Chinese offerings will grow. Common tax, regulatory and financial arrangements to that end should follow. The objective is to ensure international dependency on Chinese firms and technologies are minimized through the provision of credible, if not superior, alternatives.

This means that even though the US withdrew from the original Trans-Pacific Partnership (TPP), one of the key mindsets of the TPP might well be revived. The TPP strategy was to use the leverage resulting from the size of the US domestic market to persuade countries to abide by specific rules and standards. That general approach will ensure and be increasingly applied to bilateral and mini-lateral trade agreements concerning high-tech and advanced sectors. Indeed, in any revision or upgrade of a trade agreement between the US and another advanced democratic nation, it is almost certain that cooperation on enabling and critical technologies will be a high priority to reduce reliance on Chinese options.

(c) Restricting Chinese access to innovation and know how

It is likely that the US government will give itself broader powers to block corporate and sales transactions between American and Chinese firms, along with the export of whole classes of products or technologies such as semiconductors and aeronautical equipment (even if these powers are held in reserve most of the time). It is almost certain a growing number of Chinese firms in the MIC 2025 sectors will be included on the US government’s restricted entity list, with penalties to those violating the restrictions: enormous fines, revocation of US licenses, blocking of US dollar transactions and criminal penalties for executives.
number of Chinese firms in the MIC 2025 sectors will be included on the restricted entity list and ever harsher penalties will be threatened and applied to those violating the restrictions: enormous fines, revocation of US licenses, blocking of US dollar transactions and criminal penalties for executives.

Chinese innovation and know-how also depend heavily on joint ventures with foreign firms. One estimate is that about 80 percent of private sector R&D money spent in China in 2015, about $44 billion out of $55 billion, was by non-Chinese multinationals.\textsuperscript{30} This will be an increasingly unacceptable situation as it will help China emerge as the global leader in terms of enormous advances in innovation and know how. Therefore, US attempts to identify and capture a larger share of the supply and value chain across a growing number of emerging and enabling technologies and sectors and deny these to China will accelerate.

To the Trump administration’s credit, the game-plan is already in play. An analysis of tariffs levied against Chinese goods by the White House under section 301 of the Trade Act of 1974 revealed that 80 percent (by value) of the targeted trade with China was in industries identified as “patent-intensive” by the Department of Commerce.\textsuperscript{31} These include computer/electronic products and machinery/equipment, which constitute about 30 percent and 22 percent, respectively, of Chinese exports to the US.\textsuperscript{32} It is worth noting these are the industries that China heavily targets for forced transfers and IP theft.

Moreover, approximately one-third of all Chinese exports of these products to the US are directly related to the business operations of American-based firms.\textsuperscript{33} In other words, around one-third form part of the current supply chains for American-based firms.

Further analysis reveals that around two-thirds of these industries’ products imported from China to the US are produced by foreign-invested firms based in China – mainly US, European and Japanese firms. This is significant because, in theory, these firms do not have to base operations in China. In addition to concerns about IP transfers and theft, tariffs levied on China-based firms make it commercially less attractive for foreign-invested firms to base operations in China when the next or end destination for their product is the US. The idea is to minimize Chinese involvement – and therefore learning – in prized supply and value chains in certain sectors. It is encouraging that Tokyo is taking the US’s lead in this regard, having allocated about $2.25 billion from its COVID-19 stimulus package to help Japanese firms move important supply chains out of China.\textsuperscript{34}

Finally, one should also expect more movement when it comes to further restrictions on visas for Chinese researchers and tertiary students to US institutions in fields such as aviation, robotics and advanced manufacturing.\textsuperscript{35} It would be surprising if the US did not exert pressure on other allies, such as Japan, South Korea and the European Union, to do the same. Beijing

THE IDEA IS TO MINIMIZE CHINESE INVOLVEMENT – AND THEREFORE LEARNING – IN PRIZED SUPPLY AND VALUE CHAINS IN CERTAIN SECTORS.
has long carried out a systematic program to acquire expertise and know-how from US and global institutions to advance industrial plans such as MIC 2025 and enhance its military capabilities.37

There are currently around 370,000 Chinese students enrolled in US colleges and universities when there were only just above 98,000 a decade earlier.38 It is improbable that Chinese researchers and students will be granted the same level of access when it comes to sensitive and strategic areas of study in the years ahead. Failure to restrict such access should increasingly be perceived as irresponsible by those accepting the reality of comprehensive competition with China.39

Conclusion

COVID-19 has amplified important truths and exposed several myths. With respect to the former, the US-China competition and rivalry are becoming broader and deeper and a global pandemic (unleashed by the Chinese Communist Party) is only accelerating this trend.

With respect to myths exposed, the notion that what is good for the short-term bottom line of US firms is axiomatically in the national interest has been revealed as a dangerous delusion. US firms do not exist solely to serve the country’s national interest, but they certainly ought to take efforts to ensure they do not advance the interests of an authoritarian competitor and rival. It is of great consequence for US economic and security interests where American firms invest and which goods are produced where and by whom.

It is for this latter reason that the decoupling, disentangling and diversification of supply chains away from China is necessary, and should be pursued in a manner that advances strategic and economic objectives of the United States.

Endnotes


Computers and telecommunications equipment are excluded because China is merely the primary assembler of imported components and materials in the world. For this reason, China accounts for nearly half of global exports of electronic devices, and approximately 70 percent of electronic devices imported to the United States are assembled in China. The next three-largest suppliers—Mexico, South Korea, and Vietnam—account for about 19 percent combined. China is the primary “assembler” of devices, and thus much of the value of each device is not produced or captured there. For example, China adds from 4–20 percent of the value of each iPhone, even though most of the phone is assembled in China. Since assembly of today’s computers and electronics is not where value will be created in the future, if these categories were included, this would give a misleading impression that China’s high-tech deficit vis-à-vis advanced economies is smaller than it is. See Enrique Duarte Melo et al., “Unpacking the US-China Tech Trade War,” BCG, 5 June 2019, https://www.bcg.com/en-us/publications/2019/us-china-tech-trade-war.aspx


About the Author

John Lee
Senior Fellow, Hudson Institute

John Lee is a senior fellow at Hudson Institute. He is also a non-resident senior fellow at the United States Studies Centre in Sydney, Australia and adjunct professor at the University of Sydney.

From 2016 to 2018, he was senior national security adviser to Australian foreign minister Julie Bishop. In this role, he served as the principal adviser on Asia and on economic, strategic, and political affairs in the Indo-Pacific region.

Lee was also appointed the foreign minister's lead adviser on the 2017 Foreign Policy White Paper, the first comprehensive foreign affairs blueprint for Australia since 2003, written to guide Canberra's external engagement for the next ten years and beyond.

His articles have been published in leading policy and academic journals in the United States, Asia, and Australia. He is the author of Will China Fail?, published in 2007 and updated and reissued in 2009.

Lee's opinions have been published in over fifty major newspapers and current affairs magazines around the world, including leading broadsheets in the United States, Asia, Europe, the Middle East, and Oceania.

He received his master's degree and doctorate in international relations from the University of Oxford and his bachelor of laws and arts degrees (1st class, philosophy) from the University of New South Wales.

Lee is based in Sydney, Australia.

About Hudson Institute

Hudson Institute is a research organization promoting American leadership and global engagement for a secure, free, and prosperous future.

Founded in 1961 by strategist Herman Kahn, Hudson Institute challenges conventional thinking and helps manage strategic transitions to the future through interdisciplinary studies in defense, international relations, economics, health care, technology, culture, and law.

Hudson seeks to guide public policy makers and global leaders in government and business through a vigorous program of publications, conferences, policy briefings and recommendations.

Visit www.hudson.org for more information.

Hudson Institute
1201 Pennsylvania Avenue, N.W.
Fourth Floor
Washington, D.C. 20004

+1.202.974.2400
info@hudson.org
www.hudson.org

© 2020 Hudson Institute, Inc. All rights reserved.