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Article

Building One's Own Ladder: The Case of China's Path of State-Assisted Development[*]

Creando su propia escalera: El caso del camino al desarrollo con asistencia del Estado de China

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ABSTRACT

Recent US administrations have criticized China for taking a path of development marked by allegedly unfair methods of state assistance to the industrial sector. This article sets out to understand if such support is unusual in the light of the very historical experience of development of countries like the United States. The article carries out its analysis through the lens of Ha-joon Chang's argument on kicking away the ladder, which posits that all developed countries have become so thanks to the ladder of state-assisted development; it argues further that, once they have reached such heights, they have kicked down the ladder for others, falsely peddling the alleged virtues of free markets. An initial review of recent US actions and Chinese history finds that both have followed the path of state-assisted development, making this a less than unusual strategy for development for other countries.

Key words: State-assisted development, kicking away the ladder, China, infant industry.

JEL Classifications: F50, O21, P21, P51.

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RESUMEN

Administraciones estadounidenses recientes han criticado a China por seguir un camino de desarrollo marcado por métodos supuestamente injustos de ayuda estatal al sector industrial. Este artículo busca comprender si tal apoyo es inusual a la luz de la propia experiencia histórica de desarrollo de países como Estados Unidos. El artículo lleva a cabo su análisis a través del lente del argumento de Ha-joon Chang de "patear la escalera", que postula que todos los países desarrollados lo son gracias a que siguieron la escalera de desarrollo asistido por el Estado; argumenta además que, una vez que han alcanzado las alturas del desarrollo, estos han derribado la escalera para otros, vendiendo falsamente las supuestas virtudes del libre mercado. Una revisión inicial de acciones estadounidenses recientes y de la historia de China revela que ambos han seguido el camino del desarrollo asistido por el Estado, lo que hace que esta sea una estrategia de desarrollo menos que inusual para otros países.

Palabras clave: Desarrollo asistido por el Estado, patear la escalera, China, industria naciente.

Clasificaciones JEL: F50, O21, P21, P51.

I. INTRODUCTION

On the face of it, the trade war initiated by the Trump administration in 2018 against China was aimed at reducing the large and ever-growing trade deficit between the United States and China. After all, ever since he was a mere presidential candidate, President Donald Trump had been complaining about China taking advantage of the US commercially. As he said in his 2019 State of the Union address, referring to the phase one trade agreement being negotiated at the time, "it must include structural changes to end unfair trade practices, reduce our chronic trade deficit, and protect American jobs" (White House, 2019).

Nonetheless, a more profound look into the objectives behind the trade war shows that it has been about much more than trade flows. At its core, the trade war, continued under now President Joe Biden, has been about preventing China from following in the same successful path of state-assisted industrialization once trodden by today's developed economies, including the United States.[2] The trade war achieves this by targeting practices like those promoted in China's plan for industrial transformation, Made in China 2025, for example, subsidizing leading industries that are developing new technologies and facilitating the transfer of technology by foreign companies investing in China—practices that close advisers to the former US president characterize as a form of "cheating" (CNBC, 2019).

The allegations made by the Trump administration raises the question: is the support given by the Chinese government to leading industries all that unusual? And since the US decries these actions, does

[2] The implication here is not that today's developed economies no longer engage in the same kind of state-assisted industrialization that they used in the past. In fact, they do continue to protect key sectors and provide support for leading companies, as exemplified in the support given by the US to Boeing. This will be explored in the second section of this article.

that mean that the US became developed through an entirely free trade path with minimum government intervention?

The academic literature in economics and political science has already addressed key aspects of these questions. Thematically, there are helpful studies on the theoretical justifications for or against state participation in industrial and commercial development (O'Rourke, 2000; Greenwald and Stiglitz, 2006; Jacks, 2006; Harrison and Rodriguez-Clare, 2010), on the effects of policies in specific countries and by industry (Irwin, 2017; Kalouptsidi, 2018; Lane, 2021), and comparative analyses of industrial policy (Lawrence and Weinstein, 2001; Noland and Pack, 2003). Methodologically, there has recently been greater efforts placed on developing more sophisticated tools to advance knowledge on this subject, including through econometric methods (Aghion, *et al.*, 2015; Cerqua and Pellegrini, 2017; Criscuolo, *et al.*, 2019; Liu, 2019).

This article seeks to get into the debate by using Ha-joon Chang's (2003) argument on kicking the ladder. Using this framework is innovative in that, although already close to two decades since its publication, it hasn't been used to comparatively assess the US and Chinese experience of industrial development side by side. It appears especially relevant to use it at a time of growing trade- and industry-centered friction between the two countries, providing helpful insights on some of the arguments that stand behind the US decision to initiate the trade war. Finally, the choice of unearthing once more Chang's (2003) framework is useful in that it might re-open a much-needed normative debate on the role of government assistance in economic shifts in countries of the Global South. As an initial and tentative foray into the subject, this article then advances methodologically through a bibliographic analysis, leaving useful quantitative methods for later works.

The article will proceed in five sections, including this introduction. The second section explains the concept of kicking the ladder and the third one explains how the United States government continues to support and protect certain industries, even as it preached a gospel of free trade until the Obama administration.[3] The fourth section proceeds to describe China's path to development, one that, it will be argued, differs little from that followed by other developed countries today. Last section ends with some conclusions.

II. KICKING THE LADDER EXPLAINED[4]

Chang (2003) makes a profound argument in two parts. The first part of his argument is that the history that has been told about how today's developed countries became developed is false. This false history is simplistic, grounded on the theoretical propositions of the classical school of economics. Following David Ricardo's theory of comparative advantage, it alleges that the market is the best tool to allocate resources, and so, in international trade, markets must be allowed to function unhindered. By so doing:

[3] The arrival of Donald Trump to the White House marks somewhat of a turn in US rhetoric and action, which is why the data studied here will focus mostly on US actions up to the Obama years.

[4] This section draws heavily from Chang (2003). Quotes will be used when appropriate, but otherwise, for matters of style, the article will refrain from constantly referencing the document.

> [E]ach country will naturally invest its capital and labor in the jobs that are most beneficial for both of them. This pursuit of individual benefit is admirably related to the universal welfare. It [a system of absolute free trade] distributes labor in the most effective and cheapest way possible by stimulating industry, enhancing incomes, and most efficiently using the peculiar qualities with which nature has endowed them (Ricardo, 1959, p. 102).

Under this interpretation of history, then, today's developed countries are those that have allowed markets to freely run their course, while developing countries are those that have sinned time and again by distorting markets, whether through the imposition of barriers to trade, government overreach, or other such unnatural schemes.

Chang shows this interpretation of history to be false by tracing the factual historical development of today's developed economies. History shows us that "when they were developing countries themselves, virtually all of today's developed countries did not practice free trade… [they] were, in fact, often the pioneers and frequently the most ardent users of interventionist trade and industrial policy measures" (Chang, 2003, pp. 1-2), what will be referred to here as a form of state-assisted development.

This knack for state-assisted development is true for the United States, which Chang shows to have been one of the countries with the highest level of tariffs for the entirety of the period 1816 – 1945 (Chang, 2003, p. 10). An exemplar of this impulse for intervention is the one given by the speaker of the US House of Representatives, Henry Clay, who during the mid-19th century promoted "an 'American System' that aimed at national self-sufficiency by developing domestic manufactures and expanding the home market through such Federalist devices as protective tariffs, a national bank, and federally financed internal improvements" (Herring, 2008, p. 142).

The second part of Chang's argument is that, even while today's developed countries ascended the ladder of development thanks to state assistance, once they reached the top, they kicked down the ladder so that no one else could follow in their path. They do so, even today, by adopting the arguments of the classical school of economics as universal truths, repackaging them in the form of a neoliberal ideology, and enshrining them in the practices of international institutions that they influence. These countries and institutions, in turn, discipline developing countries that attempt to ascend the ladder. For proof of this, one needs to look no further than the International Monetary Fund's obsession with "macroeconomic adjustment" (Hernández, 2004) when imposing conditions on countries asking for credits, as was the case for Argentina during the 1990s and early 2000s.

By denying developing countries a chance to ascend the same ladder that they once used, and by offering them instead an artificial concoction that leads nowhere, today's developed countries thus secure the spoils of their dominant position.

Having described Chang's arguments about kicking the ladder, the next section will proceed to explain how even today the US continues to intervene in its own economy and that of the world.

III. THE UNITED STATES: FREE TRADE IN RHETORIC, STATE-ASSISTED DEVELOPMENT IN PRACTICE

Developed countries like the US are said to use a double strategy of rhetorically espousing free trade while still engaging in practices of state assistance to infant industries. As Pietz (1988) shows, it was only with the beginning of the Cold War that the US rhetorically positioned freedom, and by association free trade, at the core of a newly formed American and Western identity. This newfound identity was created to contrast the US with its own construction of an essentialized Oriental Soviet bloc that was thought to be despotic and closed. The end of the Cold War was interpreted as a signal of the inherent superiority of that alleged open model of free trade.

The facts, however, show that the US has and continues to intervene in favor of its own industry, disproving the idea that the US became developed through an entirely free trade path with unfettered competition, even as it forces developing countries to go down that road. In this section, I will present three illustrative examples of instances of US government intervention, in its economy or that of the world, for the benefit of its own industry.

The first example refers to US pressure on Japan during the 1980s to undercut its own economic capacity. Starting in the 1960s, Japan experienced tremendous growth owing to smart government assistance and protection for infant industries. Due to the necessity of a viable ally in East Asia that could counter the possible spread of Communism in the region, Washington allowed Japan's ascendance up the ladder of development.[5] But Japan's model of state-assisted development was so successful that by 1968 it had already become the world's second largest economy; and, in the decades thereafter, it began to threaten US economic dominance.

To stem the tide of Japanese ascendance, the US government intervened both domestically and internationally. At the domestic level, Conti (1995) finds that President Ronald Reagan, an ardent free trader in rhetoric,[6] began as early as 1981 to assist domestic industry by limiting imports of steel, funding the promotion of exports, and successively devaluing the dollar, among other actions. Internationally, the Reagan administration used threats and the imposition of tariffs to force the Japanese to the negotiating table. In the Plaza Accord, signed principally by the US and Japan, —but also with the participation of France, West Germany, and the United Kingdom in these negotiations— the Asian country was forced to revalue its currency by 46 % in relation to the dollar in less than a year (Yokokawa, 2013, p. 58). Japan was also forced to restrain its exports of vehicles and semiconductors to the US. In a few years, these decisions would lead to the development of asset bubbles in Japan that finally burst in 1991, sinking the economy into a cycle of stagflation that continues today. In this way, US dominance was preserved: not through competition and free trade, but rather with the heavy hand of state intervention.

[5] During the Cold War, the US demonized government intervention worldwide, even as it gave free rein to close strategic allies like Germany, Japan, Korea, and Taiwan to ascend the ladder themselves.

[6] In a 1986 speech, Reagan said: "Our trade policy rests firmly on the foundation of free and open markets. I recognize […] the inescapable conclusion that all of history has taught: the freer the flow of world trade, the stronger the tides of human progress and peace among nations" (Reagan, 1986, quoted in Richman, 1988)

The actions taken by the Committee on Foreign Investment in the United States (CFIUS) are the second example. The Committee is tasked with reviewing the implications to national security of foreign investment transactions in critical infrastructure and critical technologies. Whenever it assesses national security to be under threat, CFIUS has the authority to investigate and ultimately to recommend the blocking of particular investment transactions.

Jackson (2020) shows that, for the 2009 – 2017 period, CFIUS received 1,179 notices of foreign investment transactions. 47.6 % of them were investigated, 25.6 % of which withdrew during the process of investigation. In the same period, CFIUS recommended the White House to block three investment projects, all of them by Chinese companies. One of the projects was in the field of green energy and the other two in the production of semiconductors. CFIUS has then acted as a tool to deter investment in the US and protect companies in priority fields.

A final and most recent example of continued US intervention in its economy can be seen in the industrial subsidies given to companies in the automobile and manufacturing sectors following the 2008 – 2009 financial crisis. Between 2009 and 2018, the US federal and state governments implemented 595 industrial subsidy policies (Lou, *et al*., 2020). Of those, 148 went into effect in 2009 – 2010, the years immediately following the financial crisis. The four most used kinds of subsidies during the period were public procurement localization funding, tax or social security deductions, financial grants, and state loans.

Lou, *et al*. (2020) show that the industrial subsidies were not distributed equally among all sectors of the economy; instead, they were assigned in a preferential manner to companies in high-tech, capital-, and knowledge-intensive industries. Through the application of a mathematical model, the authors conclude that these subsidies reduced the price of mid- and high-tech products for export made in the US, allowing American companies to capture greater market shares in foreign countries, create economies of scale, and ultimately outprice Chinese competitors.

The three previous examples illustrate Chang's argument about countries like the US rhetorically supporting free trade while continuing to use state assistance to nurture infant industries in key sectors. The US used this strategy to undercut Japanese growth during the 1980s, and recent actions show that it is attempting the same against China today. The next section will describe China's experience of building its own ladder of state-assisted development, even as countries like the US chastise it for doing so.

IV. THE CHINESE EXPERIENCE OF DEVELOPMENT[7]

China have been the most productive economy in the world for the greater part of human history, contributing 26.4 % of global GDP on average for the period from the year 0 to 1820 (Maddison, 1989). The Asiatic giant's economic dominance began to decline in relative terms with the European conquest and pillage of the Americas. As Frank (1998) details, in the Americas, European powers found the factors of production with which to boost their own development that they had lacked in their own continent: vast

[7] This section is not meant as a comprehensive review of Chinese development throughout its history, which is why it skips events important in China's overall history but not so relevant for the purpose of answering this article's questions.

fertile land, ample labor, and abundant capital with which to insert themselves in the Asian-led dynamic of world trade. More importantly, European colonies in the Americas acted as captive markets that could be forced to sell much-needed commodities and buy the manufactured goods produced in the respective colonial power under the logic of mercantilism. European industrialization, which initially produced low-quality goods relative to those produced elsewhere, were in a sense subsidized by the American colonies. Over the course of three centuries, and thanks precisely to the state assistance described by Chang (2003), European goods improved to the point that they were finally able to compete with their Asian-made counterparts.

This is not sufficient to explain Chinese decline. Frank (1998) further notes that the influx of American silver to Asian markets through the purchase of Asian goods by European traders created economic imbalances that, over the long-term, weakened Asian states from within. Specifically, he refers to large jumps in inflation that especially affected the price of basic consumer goods. As Asian elites enriched themselves thanks to massive purchases by Europeans of tea, porcelain, spices, and other goods, the poorest suffered hunger and destitution. Across all of Asia, the disaffected would eventually rise or conspire with European imperialists, bringing once-powerful civilizations to their knees.

A final ingredient in the recipe for Chinese decline came in the form of an outdated mode of innovating. Lin (2012) explains that one of the reasons behind China's dynamism for most of human history was its capacity to innovate. Chinese innovation, however, did not come about through a scientific method, and it was not carried out by people specializing in innovation. Instead, innovation in China came about randomly, in the everyday behavior of common people. For example, a person inadvertently planting seeds in a new way might discover a planting technique unknown until then. Innovation acted, then, as a lottery: the more people, the higher the chances of innovating (Lin, 2012). China, as the most populous unified state, had the greatest advantage in innovating in this way. This changed with the scientific revolution in Europe.

In China, these transitions came to a head with the First Opium War (1839 – 1842). The war was initiated by the British after the Chinese seizure of an illegal shipment of trafficked opium. With their victory in the war, the British were able to extract enormous concessions from China. Land, access to markets, and indemnities were some of the rewards gained by British aggression. Other Western powers, seeing the many benefits gained from fighting or threatening China, followed the British example. This event then marks the beginning of what the Chinese call their century of humiliation.

For close to 107 years, China stood at the receiving end of great humiliation and aggression by the European powers, the US, and the Japanese. The century of humiliation transformed China in innumerable ways: it ended more than 500 years of tributary relations between China and its neighbors, it resulted in tremendous loss of territory, it brought about the end of the dynastic system, and it introduced new economic patterns in coastal cities (light industry) and in the Manchurian region (heavy industry), only to name a few.

During the entirety of the period, Chinese intellectuals returned again and again to the question of what had made China so weak and what was needed to save the country from extinction. Lin (2012, p. 57) explains that the answers came in three waves. In the first wave, which began soon after the First Opium

War, Chinese intellectuals believed that the problem was one of artifacts, that is, guns, ships, cannons, and the like. Their formula of survival was then to adopt these artifacts while preserving the Chinese essence. Once China lost against its former junior partner, Japan, in the First Sino-Japanese War (1894 – 1895), a new answer came about: it was not only that the artifacts were inadequate; Chinese institutions were equally insufficient to face up to imperial aggression. During this second wave, China reformed its school system, modernized its army, created large companies aided by the state, and even set up a constitutional monarchy with a parliament. But Chinese humiliation in the negotiations at Versailles after the end of World War I showed these steps to be insufficient.[8] The third wave, initiated by the May Fourth Movement of 1919 in response to the events at Versailles, was the most sweeping and thorough: more than outward changes to artifacts and institutions, what China needed was a comprehensive modernization of its own values, of the very meaning of being Chinese. As Chen Duxiu, who later co-founded the Chinese Communist Party (CCP), said:

> They are progressing hundreds of miles each day, while we are left far behind. Most of our people are lethargic and do not know that not only our morality, politics, and technology, but even common commodities for daily use are all unfit for struggle and are going to be eliminated in the process of natural selection (cited in Spence, 1982, p. 144).

The CCP was founded at the crux of these events. The century-long experience of humiliation deeply marked the psyche of Chinese Communist leaders. Committed to avoiding a repeat, these leaders believed that, to survive in the cruel modern world, Chinese society needed sweeping changes, including a modernization of its economic structure following the model of state assistance used by developed countries at the time.

This is the reason why, when Mao Zedong won the revolution and founded the People's Republic of China in 1949, he was determined to turn China into a strong and prosperous country.[9] In the economic field, strength and wealth meant leaving China's outdated rural economy in the past and focusing instead on investment in heavy industry. But the question remained: how would China go from being a predominantly rural economy to one with heavy industry? This question was especially poignant as close to 90 % of China's population lived in the countryside at the time. As an added obstacle, China had been devastated by a century of imperialism, decades of civil conflict, and a long war against the Japanese.

Rather than rely on the then-ascendant US rhetoric of free trade and little government intervention, the Chinese state adopted a command economy with sweeping powers, in effect building its own version of the ladder once used by the US and other Western powers—one that could be described as one of state-*commanded* development.[10]

[8] The Versailles Peace Treaty negotiations decided that German concessions in the Chinese province of Shandong should be given to Japan, even when China had sent hundreds of thousands of young Chinese to fight on the side of the Allied powers in World War I.

[9] For more on China's longstanding pursuit of strength and prosperity, read Schell (2014). His book thoroughly covers the period since the beginning of the century of humiliation all the way to the present.

[10] CCP leaders were influenced both by the Western experience of development, but also, of course, by the experience of development of the Soviet Union. Lin (2012) describes in greater detail how these leaders viewed the successes of the Soviet Union.

Naughton (2007) describes China's strategy during the Mao years as a form of big push industrialization, by which the state directed all excess capital to the building of China's heavy industry. In practice, the strategy clearly differentiated and assigned roles for industry in the cities and peasants in the countryside. In the cities, land and industry were nationalized and subsequent five-year plans for industrial sourcing, production, and distribution were instituted. In its plans, the state prioritized the development of strategic industries with significant downstream and upstream linkages in other industries, for example, steel production, which could spur demand for inputs like coal, iron ore, and specialized machinery and then be used to build industrial goods like vehicles, ships, and tanks. Meanwhile, in the countryside, the land was collectivized, grain quotas were instituted, markets were forbidden, and a system of birth registration, the *hukou*, was put in place, to avoid the mass exodus of peasants to the cities.

Under this strategy, the state set the prices of industrial goods—including the fertilizer bought by China's peasants—at a high level, thus guaranteeing a return for industrial production, which could be reinvested in heavy industry. The price of agricultural goods, on the other hand, was low. Since the government acquired all excess agricultural goods and paid an artificially low price for them, China's peasants financed the greater part of China's industrialization.

The results of this strategy on China's economic structure are remarkable: while in 1952 agriculture and industry represented 57.7 % and 19.5 % of GDP respectively, by 1978, the tables had turned, with agriculture representing 32.8 % and industry accounting for a whopping 49.4 % of GDP (Lin, 2012, p. 98). It is also noteworthy that China's industry was relatively well-distributed, owing to Mao's call for regional self-sufficiency. Xu (2011, p. 1085) asserts that by the time of Mao's death in 1976, "[t]he majority of the two thousand counties had SOEs [state-owned enterprises] producing agricultural machinery, while 300 counties had steel plants. Small regional SOEs produced 69 percent of China's total fertilizer output and 59 percent of its total cement. More than twenty provinces had SOEs producing automobiles or tractors". During the Maoist period, there were also substantial improvements in education, health, and infrastructure (Naughton, 2007, p. 82).[11]

As said before, China built its own ladder of state-commanded development during these years with significant government intervention, not by listening to the rhetoric of free trade espoused by Western developed countries.

Since the death of Mao Zedong in 1976 and the ascendance of Deng Xiaoping to power in 1978, China has embarked on a more moderate path. The state's role has not been eliminated, but rather it has been progressively complemented with the market mechanism. In this way, China has shifted from a ladder of state-commanded development to one of state-*assisted* development, notably like that used by Western states. This can be best exemplified in the shifts in the roles played by the five-year plans.

[11] While successful in its stated economic goals of industrializing the country, one cannot understate the costs and inefficiencies inherent in the big push industrialization strategy. The period of the second five-year plan (1958-1962), commonly associated with the campaign of the Great Leap Forward, is the most notable example of this, though not the only one. During this period, poor weather conditions, a deterioration of incentives to work the fields due to the collectivization of work under the figure of communes, centrally-mandated diversion of work in the countryside away from agriculture and into ineffective rural industrial endeavors, and higher production targets set both by local and central decision-makers all came together to create the conditions for between 16.5 and 30 million Chinese people to die, many of them from hunger (Kung and Lin, 2003)

Kennedy and Johnson (2016) talk about three distinct phases of economic planning in China. The first phase corresponds to the Maoist years, those of state-commanded development. In this period, the five-year plans established mandatory targets and directed the nationalized industry to take specific actions. In the second phase, which encompasses the period of the sixth through tenth five-year plans (1980 – 2005), the plans continued to set mandatory targets, but they did not direct officials to take specific actions to achieve them. Because of the opening-up of the economy, officials often used a combination of the state and market mechanisms themselves to achieve those objectives, for example, offering land and cheap labor to foreign companies interested in investing.

Finally, in the third phase, which runs up to the 13th five-year plan (2006 – 2020), the plans are said to act more as vision documents, with most targets not being mandatory but rather predictive. For instance, the 13th five-year plan set several predictive targets on innovation, like R&D spending as a percentage of GDP, the extent of Internet penetration in the countryside, and the number of invention patents per 10,000 people. State officials, seeking to be promoted, are encouraged to contribute to achieving these targets through innovative pilots in a decentralized manner of execution, most often acting hand in hand with market entities.

While outside of the temporal scope of this study, the 14th five-year plan, which was only approved by the National People's Congress in March 2021, corresponds with the shift towards a model of state-assisted development seen under the third phase of economic planning. Given what the plan calls an "intricate and complicated international situation" (Xinhua, 2021), government is "to guide and standardize the behavior of market entities," to achieve a more resilient economy. That is, one better able to sustain external shocks like those of the trade war with the US.

Finding a proper balance between state and market, the plan stands on three principal development pillars, all of which rely on the steady hand and assistance of the state. First, the so-called achievement of dual circulation. This term refers to the development both of an external circle, of China's economic relations with the world (trade, investment, finance), and an internal circle that relies principally on an increase in domestic consumption. Second, achieving technological self-sufficiency, for instance, reducing reliance on imports of high-tech inputs like semiconductors by producing them indigenously. Third, promoting ecological sustainability, which goes hand in hand with the rise of the growth of new industries, like that of electric vehicles. All these pillars require both of a market full of vitality and a government that sustains and guides it toward rightful action. Recent moves to regulate financial entities, technology companies, and data transfers (*The Economist*, 2021) are a representative expression of the shift toward state-assisted development under this plan.

The role of the market has then expanded in China. In 2013, the Third Plenum of the Central Committee of the CCP went as far as to acknowledge that the market plays a decisive role in allocating resources (Xinhua, 2013). But that is not to say that the state is in retreat. In a study on the extent of state intervention in the Chinese economy, Naughton (2017) found that the Chinese state continues to control a greater part of economic resources. By revenue, the state is said to control directly or indirectly about 38 % of GDP. By ownership of the means of production, China continues to control all land, and state-owned enterprises effectively maintain monopoly control over key sectors of the economy.

Naughton also found that state intervention is also growing in terms of redistribution, with a particular focus since the second term of former President Hu Jintao on transitioning China's economic model away from a focus on growth to a focus on quality. President Xi Jinping has continued that path: set and then achieved the goal of constructing a moderately prosperous society by 2021. As part of that goal, the Chinese government managed to eliminate extreme poverty in the country in 2020.

Several sectorial plans, like *Made in China 2025*, are final examples of the assistance given by the government to promote Chinese development. The plan was crafted as a master plan for industrial transformation for the period 2015 – 2025. Its objective is to transform China from the factory of the world to a world manufacturing power by the year 2025. The plan prioritizes the development of 10 key industries in leading sectors of innovation, all of which are tied with the latest five-year plans: new information technology, numerical control tools, aerospace equipment, high-tech ships, railway equipment, energy saving, new materials, medical devices, agricultural machinery, and power equipment.

As with the five-year plans today, *Made in China 2025* establishes certain predictive targets that the country expects to achieve by 2025. Key among those targets is to raise to 70 % the domestic content of products in the ten key industries, reduce the length of the production cycle by 50 %, reduce emissions by more than 20 %, and better position international brands in the identified industries. In order to achieve those goals, the central government has given massive financial support, supported outward foreign direct investment by approved companies, relaxed regulations in strategic areas to facilitate testing (for example, allowing companies to test autonomous vehicles in crowded cities), created incentives for the attraction of the world's best talent, and created dozens of innovation centers that connect the state, private companies, and academia, among many other policies.

It is the success of *Made in China 2025* in propelling Chinese companies in sectors like aviation, space, electric vehicles, fintech, artificial intelligence, robotics, and biotechnology, to name only a few, that pushed the Trump administration to initiate its trade war against the country. This then shows that the intention behind the trade war is not to reduce the trade deficit, but rather to kick down China's ladder, inhibiting it from placing America's economic dominance at risk.

V. CONCLUSIONS

This article set out to answer two related questions: is the Chinese government's support to leading industries all that unusual? And, given US criticism of China's support for its industries, does that mean that the US became developed through an entirely free trade path with minimum government intervention?

Following Ha-joon Chang's (2003) argument on kicking the ladder, we find that the US in fact became a developed country—as did most other developed countries today—thanks to significant government assistance. Even if it often clamors in favor of the arguments made by the classical school of economics, the US up to this day continues to intervene in its economy and that of the world in favor of its own industry.

We then proceeded to recount China's path towards development. Chinese Communist Party leaders were deeply marked by the experience of the century of humiliation, which informed them of the need to reform China's artifacts, institutions, and values. Along with its foundation, People's Republic of China set on a path of state-commanded development, in effect building its own ladder, regardless of criticism by the Western bloc. The Maoist years successfully transformed China's economic structure, from a rural economy to one focused on heavy industry.

Since Mao's death, the Chinese economy has taken a more moderate path that balances the state and market mechanisms. This new path corresponds more closely to the model of state-assisted development followed by today's developed economies, including the US. That state assistance in China continues through the five-year plans, sectorial plans like *Made in China 2025*, and state policies of redistribution, among others.

China's experience, then, reinforces the point made in Chang's (2003) work. The path of state assistance continues to prove itself as a successful one. China should stay on that path—and we should expect it to continue doing so—to become the world's largest economy in nominal terms and secure its position as the world's most innovative market. But it remains to be seen: once China achieves that position, will it also kick down the ladder for other developing countries? It will be interesting to answer this question in light of China's Belt and Road Initiative, which claims to offer shared benefits to all countries.

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