Understanding China's New "Dual Circulation" Development Strategy in the Face of Reverse Globalization: A Marxian Input-Output Analysis

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Abstract

The Chinese government has proposed a new development model called the "Dual Circulation." We argue that this economic strategic shift, on the one hand, is a response to the upsurge of trade protectionism in recent years, on the other hand, is an acceleration of China's long-planned upgrade of its economy. To gauge the external economic risk that China is faced with, we carry out an input-output analysis that measures the consequences of a potential US-China trade decoupling based on the world input-output relations of 2014. It is found that if the Unite States and China were to completely halt and transfer their bilateral merchandise trade to elsewhere, the Chinese economy would lose 2.5 percentage points in its growth rate and over ten million jobs while the United States would gain 1.3 percentage points in growth and some 700 thousand jobs. This huge risk facing China stems from the asymmetric trade relationship between the US and China, which, we argue, is an important reason why China switches to a "Dual Circulation" development strategy.

JEL Classification: B51, O24, D57

Keywords: globalization, reverse globalization, US-China trade conflict, Dual Circulation

1. Introduction

The history of world economic development teaches us that trade protectionism never disappears even as the world economy becomes increasingly globalized and integrated. In some historical periods, trade protectionism can be as strong as able to cause a wave of reverse globalization. For example, between the onset of the first world war and the close of the second, the widespread nationalism and trade protectionism led to a fall in the world export/output ratio from 8 percent to 5 percent; in particular, the protectionist 1930 *Smoot-Hawley Tariff Act* of the United States and the ensuing retaliations from its trade partners led to a 30 percent fall in US imports and 40 percent fall in US exports during the Great Depression (Collier and Dollar 2002: 25–7).

One century later, under the clouds of the Covid-19 pandemic that is still haunting every corner of the globe, the prospect of the world economy today seems pessimistic and the economic globalization process is again in the middle of a crossroad. The global division of labor

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and the production network are already undergoing a drastic changing process before the current pandemic, due to the resurgence of right-wing nationalism and trade protectionism in recent years (Kotz 2017). The now halted US-China trade war started by the Trump administration is our most recent memory. China, as the largest or second largest exporting country in the world since 2010,[3] has taken a tik-for-tat, non-escalating, and defensive strategy against the hostile Trump administration since the beginning of the trade war in 2018. The "Phase I" trade deal (United States Trade Representative 2020) signed in January 2020 represents the most recent ceasefire between the two countries. According to the deal, China will buy $200 billion additional US products on top of the 2017 level over the course of two years and commits to provide stronger protection of US intellectual property, eliminate pressure of foreign firms to transfer technology, refrain from directly supporting acquisitions of foreign technology, and refrain from currency manipulation. All these commitments are made only in exchange for US cutting half of the tariffs imposed on the $120 billion Chinese exports while the 25% tariff of another $250 exports remaining intact. This imbalance of the bargaining position is even evident in the imbalanced text of the trade deal: Most details in the text are about how China should live up to these commitments. The significant leverage the US has over China in such a trade war scenario profoundly reveals China's vulnerability being the workshop of the world.

While the world at large is still combating the coronavirus and the world economic prosect remains uncertain, China has come up with a new foreign economic strategy at this special historical conjuncture that is dubbed as the "Double Circulation" strategy. It was announced by President Xi Jinping in a politburo meeting in May 2020, which literally "means an economic development pattern that takes domestic development as the mainstay, with domestic and international development reinforcing each other" (CGTN 2020). The new strategy has then been emphasized several times by Xi in other scenarios and heavily covered by all state-run media. In a Central Committee meeting of the Chinese Communist Party, the new strategy is officially approved as part of its *Advice on Making the 14th Five-Year Economic and Social Plan (2021–2025)* (henceforth, *advice*) of the country whose details are set to be voted and approved by the National People's Congress next year. Liu He (2020), Vice Premier of China and top trade negotiator with the US, provides the first official detailed account of the new strategy after the *advice* is passed. The new Double Circulation strategy seems to counterpose and mark the end of the so-called "Great International Economic Circulation" strategy that underpins China's economic rise in the past four decades.

The proclaimed switch of China's foreign trade policy, if successful, would have profound implications for the world production network because of China's current deep penetration into world trade. Though the enforcement of the new strategy is likely subject to all kinds of internal and external contradictions, it is important to understand in the first place why China is making such a strategic turn. This paper argues that the Dual Circulation strategy is one that surfaces from China's long-standing attempt to upgrade its manufacturing sector, and it represents an acceleration of this process in the face of the intensifying reverse globalization. Most importantly, the Chinese government is determined about this accelerated shift to a new development model and is highly possible that they will put it into practice. To facilitate the understanding of this economic strategic shift, we first provide a brief account of China's development in recent decades in the context of economic globalization, and then carry out an input-output analysis that gauges the risk of reverse globalization that is facing China. Specifically, we employ the hypothetic extraction method (Dietzenbacher, Burken, and Kondo

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[3] Source: World Bank, World Development Indicators Database (series ID: NE.EXP.GNFS.CD).

2019) to measure the impact of a counterfactual US-China trade decoupling on growth and employment using the 2014 world input-output relations.

2. China's development in the context of economic globalization

China's economic success in the recent chapter of world history has drawn considerable academic attention. Within the Marxian tradition, although it remains a contentious topic whether China's economic system falls under the label of market socialism, neo-liberal capitalism, or state capitalism, we can understand its development from the perspective of capital accumulation within the context of globalization (He 2017).

Economic globalization is a result of market expansion due to capital accumulation, as is observed by Marx and Engels in *The Communist Manifesto*:

> The need o f a constantly expanding market for its products chases the bourgeoisie over the whole surface of the globe. It must nestle everywhere, settle everywhere, establish connexions everywhere.
>
> The bourgeoisie has through its exploitation of the world market given a cosmopolitan character to production and consumption in every country. To the great chagrin of Reactionists, it has drawn from under the feet of industry the national ground on which it stood. All old-established national industries have been destroyed or are daily being destroyed. They are dislodged by new industries, whose introduction becomes a life and death question for all civilized nations, by industries that no longer work up indigenous raw material, but raw material drawn from the remotest zones; industries whose products are consumed, not only at home, but in every quarter of the globe. In place of the old wants, satisfied by the productions of the country, we find new wants, requiring for their satisfaction the products of distant lands and climes. In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal inter-dependence of nations. (Marx and Engels 2002: 223)

This "universal inter-dependence of nations" in our own era where the second wave of globalization takes place, is much more profound than merely market expansion in Marx's time, the onset of the first wave of globalization. It features a deep global division of labor and the large-scale expansion and relocation of production around the globe, far beyond mere circulation. These elements altogether form a so-called global production network. The second wave of globalization has its root in the stagflation in late 70s and early 80s in the developed world. To restore the rate of profit, the capitalist class in the west relocate production to labor-rich and low-wage developing countries, which increases the rate of surplus value at home and abroad through the construction of a global reserve army of labor (Mandel 1978).

On the other hand, the participation in the global division of labor brings to some (certainly not all) developing countries the necessary external funds and demand to jump start new industries and hence industrialization, which is, as Marx and Engels put it above, "a life and death question for all civilized nations." Whether or not being able to capture the advanced technology through this process and increase labor productivity is a key factor determining whether a developing country can catch up with the developed world (Marquetti, Ourique, and Morrone 2020). Therefore, the globalization of production and specialization can potentially benefit the developing countries.

China seizes such an opportunity at a critical turning point of its economic development. After Deng Xiaoping took power in 1976, he steered the country into the direction of market

economy, with the opening-up policy aiming to integrate China with the world economy. [4] As a more specific development strategy, in 1987, a scholar named Wang Jian from the China Academy of Social Science, the top think tank of the Chinese government, proposed a "Great International Circulation" development strategy to increase China's foreign currency reserves and introduce advanced technology from the West by developing processing trade and introducing foreign direct investment. It was strongly endorsed by Deng and underpins China's foreign economic policy for the decades to come (Jia 2010). However, it is only after China's accession to the WTO in 2001 that the great international circulation is in full swing in China. Since then, China has developed into a typical export-led economy that heavily relies on processing trade, with both its imports, exports, current account trade surplus (exports – imports), and foreign reserves skyrocketing (see figure 1). Its GDP grows at about 10 percent annually (National Bureau of Statistics of China).
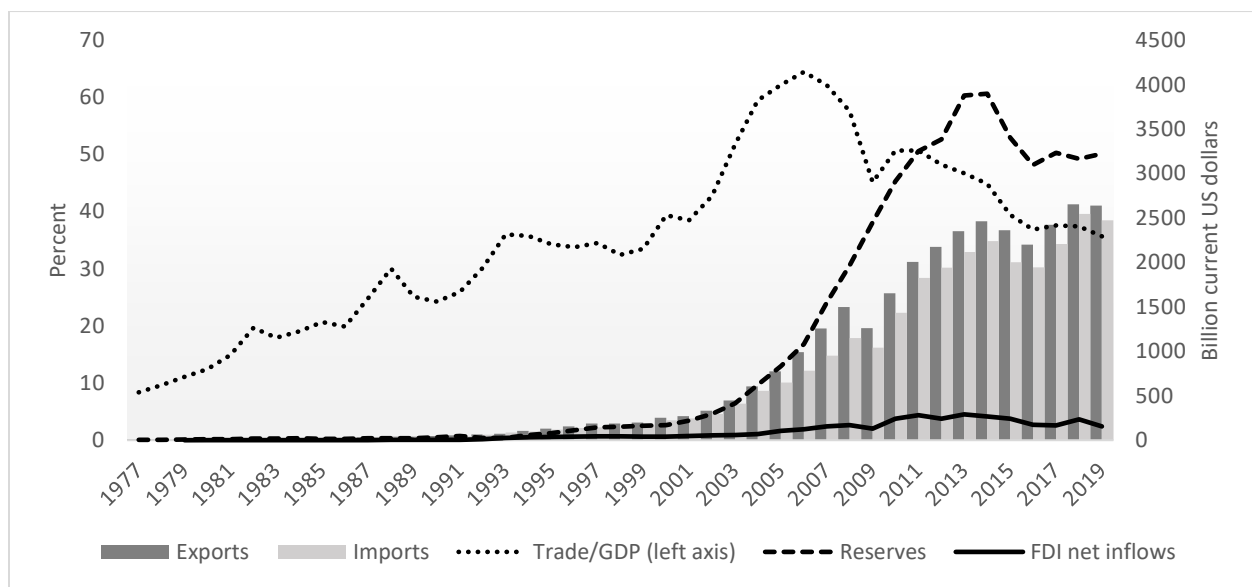

Figure 1: China's open economy
Source: World Bank, World Development Indicators

However, the economic globalization process itself is full of contradictions, subject to not only the power dynamics between the core and periphery countries but also their domestic political dynamics. On the one hand, the relocation of production across the globe, especially the outsourcing of production to low-wage regions, has a direct class consequence in the developed origin countries due to job loss, increasing poverty, and inequality. These shift the political spectrum of the voting population in electoral capitalist countries and change the political dynamics. The resurgence of right-wing nationalism trade protectionism that caters to domestic working-class voters in the electoral capitalist countries is exactly against this backdrop (Kotz 2017).[5] On the other hand, the developing countries like China that has an ambition to catch up

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[4] It should be noted, however, that the socialist development in the Maoist Era (1949–1976) had already established a relatively independent and comprehensive industrial system thanks to the rapid industrialization (Meissner 1999: 413–26), which serves as primitive accumulation of the Chinese economy that is crucial to its later economic takeoff.

[5] While in the developing countries, the issues of environmental degradation, uneven development, and the ensuing social problems also impede the process of industrialization, though the entire population at large benefit from industrialization.

with the West is never considered as a safe player in the global division of labor. When the rise of China has become so notable that it begins to compete with the West for the most advanced technologies, Western states like the US, be that the democratic or republican party in office, unanimously considers China as a threat to their national interest. When confronted with China's economic rivalry, it is a combination of the right-wing nationalist sentiments and the urge to contain China's global economic power that led the Trump administration to start a trade war with China (Kotz 2018).

Therefore, the economic globalization process has a dual nature: One the one hand, it globalizes and promotes the social forces of production, and brings growth and development to the developing world. On the other hand, the fundamental contradiction of capitalism—one between private ownership of the means of production and socialized production—expresses itself as the contradiction between the profit-driven globalized capital backed by the state, and what Alan Greenspan calls the "traumatized" working class (Woodward 2001: 168–9), and the contradiction between the global hegemon and its challenger. This dual nature implies that international economic conflict and trade protectionism are inherent concomitants of economic globalization.

The internal contradictions within a developing country are no less acute. After four decades into its opening-up, the issues of environmental degradation, urban-rural inequality, and uneven regional development in China have become so severe that many criticize the Chinese mode of development despite its seemingly success. Among the critiques, Jia (2010) coins the concept of the "Great Domestic Circulation" strategy, as opposed to the dominant Great International Circulation strategy, and urges China to sever its close tie with processing trade to deal with the many internal problems. In fact, the Chinese government announces as early as 2005 in its 11th Five-Year Plan (2006–2010) that it will gradually expand its domestic demand and upgrade the economy from an export- and investment-led one to a more balanced one, together with an aim to upgrade its industrial structure.

The external demand shock due to the 2008 global financial crisis also pushes China to focus more on its domestic demand, with the so-called "Four-Trillion" (yuan) stimulus package launched to boost domestic demand and weather the negative external demand shock. With this policy goal, China's (external) trade/GDP ratio has steadily declined from its peak 64.5 percent in 2006 to 35.7 percent in 2019 despite the continuing increase in trade volumes (Figure 1). Before Trump took office in 2017, China's external economic environment has been normal, though external demand becomes sluggish starting in 2015, with both its export and import volumes declining in two consecutive years for the first time since its opening-up except in the crisis year 2009. The theme of focusing more on domestic demand and upgrading the industrial structure have appeared in both the 12th and 13th Five-Year Plan. However, this upgrading process has been slow, and the trade/GDP ratio has remained above 35 percent.

It is the hostile Trump administration that propels China to seriously take note of a new external risk, decoupling, which was once proclaimed by Trump. It is against this background that the Dual Circulation strategy is announced. Though falling in China's long-term plan to achieve a more balanced economy, it does mark a sharp shift from focusing on the international circulation to the domestic circulation. If this new strategy is implemented successfully, external market will only be secondary and supplementary to China's new development. This is because the initial goal of China to accumulate foreign currency reserves and gain liquidity in world trade

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Nonetheless, class antagonism is under the surface and is largely limited to the spotted small-scale struggle for ensuring timely wage payment and fair working conditions (e.g., see Pun, Chan, and Chan 2010).

has been achieved (see figure 1) and balanced trade has become an explicit goal in the *advice*. Regarding introducing advanced technologies, China as the workshop of the world has harnessed most of the manufacturing technologies except some highly sophisticated "bottleneck" ones, which are more likely to be obtained by internal research and development, rather than through trade and foreign direct investment.

The reader may wonder how large the risk of decoupling is and whether the potential consequences are large enough to support such a qualitative interpretation of China's strategic shift as outline above. In what follows we provide a quantitative assessment of these questions.

3. **Model and data**

We base our quantitative analysis on the global extraction method (Dietzenbacher, Burken, and Kondo 2019) that hypothetically reshuffle the supply and demand relations in a global input-output framework to study the associated counterfactual effects.

Suppose there are N economies and each has n industries. Let D be the $Nn \times Nn$ constant capital input (flow) matrix, F the $Nn \times N$ final demand (re-investment plus social consumption) matrix, and x the $Nn \times 1$ gross output vector written as follows:

$$D = \begin{bmatrix} D^{11} & \cdots & D^{1R} & \cdots & D^{1N} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ D^{R1} & \cdots & D^{RR} & \cdots & D^{RN} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ D^{N1} & \cdots & D^{NR} & \cdots & D^{NN} \end{bmatrix}, F = \begin{bmatrix} f^{11} & \cdots & f^{1R} & \cdots & f^{1N} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ f^{R1} & \cdots & f^{RR} & \cdots & f^{RN} \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ f^{N1} & \cdots & f^{NR} & \cdots & f^{NN} \end{bmatrix}, x = \begin{bmatrix} x^1 \\ \vdots \\ x^R \\ \vdots \\ x^N \end{bmatrix}.$$

The $n \times n$ block matrix D^{RS} has the generic element D_{ij}^{RS} that means the sales from industry i of economy R to industry j of economy S. The $n \times 1$ vector f^{RS} has the generic element f_i^{RS} that means the sales from industry i of economy R to satisfy the final demand of economy S. The $n \times 1$ vector x^R has the generic element x_i^R that means the gross output of industry i in economy R. Then, the supply demand equilibrium relation for industry i of economy R is given by:

$$x_i^R = \sum_S \sum_j D_{ij}^{RS} + \sum_S f_i^{RS} = \sum_S \sum_j a_{ij}^{RS} x_j^S + \sum_S f_i^{RS},$$

in which $a_{ij}^{RS} = D_{ij}^{RS}/x_j^S$ is the necessary amount of constant capital input sold by industry i in economy R to produce 1 unit of output of industry j in economy S.

Let A be the production technology matrix with a_{ij}^{RS} as its generic element and the same dimension as D. Let f be the $n \times 1$ global final demand vector, i.e., the row sums of matrix F. Then the supply demand equilibrium relations of all industries in all economies represented in matrix form are: $x = Ax + f$, which could solve the gross output as $x = (I - A)^{-1}f$ when both A and f are given together with standard assumptions on A. Value added is defined as $v = x - d^T$ where d is column sums of matrix D. Let L be a row vector of abstract labor, $l = L \oslash x^T$ is the labor input coefficient where "$\oslash$" is the Hadamard element-wise division. Let the labor

value row vector be z, then $z = zA + l$，i.e., the unit value of a commodity is equal to the value transferred from constant capital plus living labor. It can be solved as $z = l(I - A)^{-1}$. The generic element of z, z_i^R means the labor value (hours) embodied in 1 monetary unit of product of industry i of country R. Let international value transfer (net inflow) be $t = (t^1, t^2, \ldots, t^R, \ldots, t^N)$，where scalar $t^R = z \sum_S f^{SR} - l^R x^R$ is the international abstract labor that is transferred into country R. We assume constant returns to scale, so employment changes with gross output proportionally, i.e., the labor power needed to produce each unit of good remains constant.

Suppose countries H and S completely halt their merchandise trade, both transferring away their demand for the other party's goods proportionally (based on initial supply) to other suppliers (including domestic suppliers). Suppose country H stops buying from industry s of country S, and transfer this previous demand to other countries including H itself, proportionally. Likewise, country S transfer its demand for products of industry h of country H to other countries and itself proportionally. Use an upper bar to denotes variables after the change. Then, for all i: $\bar{a}_{si}^{SH} = \bar{f}_s^{SH} = \bar{a}_{hi}^{HS} = \bar{f}_h^{HS} = 0$; $\bar{a}_{si}^{TH} = a_{si}^{TH} + a_{si}^{SH} \cdot a_{si}^{TH} / \sum_T a_{si}^{TH}$ and $\bar{f}_s^{TH} = f_s^{TH} + f_s^{SH} \cdot f_s^{TH} / \sum_T f_s^{TH}$, for all $T \neq S$; $\bar{a}_{hi}^{TS} = a_{hi}^{TS} + a_{hi}^{HS} \cdot a_{hi}^{TS} / \sum_T a_{hi}^{TS}$ and $\bar{f}_h^{TS} = f_h^{TS} + f_h^{HS} \cdot f_h^{TS} / \sum_T f_h^{TS}$, for all $T \neq H$. We can then use the resulting $\bar{A}$ and $\bar{f}$ to solve for the new gross output: $\bar{x} = (I - \bar{A})^{-1}\bar{f}$, as well as $\bar{D}$ and $\bar{v}$, which enable us to see the impact of trade stoppage on value added and employment.

The World Input-Output Database 2016 release (Timmer et al. 2015) covers 43 economies and 1 pseudo-economy, Rest of the World, each having 56 industries for the years 2000–2014. To bridge the gap between the original data and Marxian categories, we follow Shaikh and Tonak (1994) in treating the issues of depreciation and productive/unproductive activities. We take care of the issue of heterogeneous labor by using the human capital index from the Penn World Table 9.1 (Feenstra, Inklaar, and Timmer 2015) as an index of the complexity of labor of a country while labor within a country is assumed to be homogeneous due to unavailability of industry-level data.

4. Asymmetry of the US and China in the global production and value chains

With the setup and data as described in the last section, we first provide a description of the positions of China and the US in the global production network and global distribution. Table 1 presents the decomposition of gross output along two dimensions that can roughly capture a country's economic structure: the domestic/external dimension as well as the supply/demand

dimension. The top 5 exporting industries and the economy totals are selected for presentation. We can see that on the supply side, the Chinese economy heavily relies on imports that consists of 64.2 percent of gross output at the aggregate level, and the Chinese exports heavily rely on the US market. In contrast, the US imports heavily rely on Chinese supply while its exports are mainly sold to its neighbors, Canada and Mexico. This asymmetric reliance gives the US an upper hand when it comes to the trade war where exports are targeted.[6]

Table 1: Economic structures of China and the US (2014)

	Industry (% of total exports, top 5)	Supply side				Gross output	Demand side		
		Top 2 import origins (% of total imports)	Domestic	Imports	Value added		Domestic	Exports	Top 2 export destinations (% of total exports)
		% of gross output							
C h i n a	Manufacture of computer, electronic and optical products (38.1)	Taiwan (18.5) S. Korea (16.3)	13.2	63.0	23.8	6	64.6	35.5	US (18.7) Japan (15.9)
	Manufacture of machinery and equipment (10.2)	S. Korea (11.8) Japan (11.7)	5.3	68.3	26.4	4.5	84.1	12.6	US (12.9) Japan (4.5)
	Manufacture of electrical equipment (9.1)	Japan (12.6) S. Korea (12.5)	5.7	72.8	21.6	4.0	79.1	12.8	Japan (12.3) US (11.8)
	Manufacture of chemicals and chemical products (5.8)	S. Korea (13.6) Taiwan (9.3)	6.3	74.5	19.2	5.1	92.8	6.2	US (15.4) India (7.6)
	Manufacture of basic metals (5.4)	Australia (9.3) S. Korea (4.1)	8.7	73.4	17.9	6.8	95.2	4.4	S. Korea (13.7) Japan (6.5)
	Total (100)	S. Korea (9.6) Japan (7.4)	5.3	64.2	30.6	100	91.9	8.1	US (16) Japan (8)
U S	Manufacture of computer, electronic and optical products (10.4)	China (26) Mexico (12.5)	9.9	24.4	65.7	2.4	71.0	27.7	Mexico (17.5) Canada (14)
	Manufacture of chemicals and chemical products (10)	China (15.2) Canada (10.8)	11.4	41.5	47.1	3.7	80.1	17.3	Mexico (20.4) Canada (13.1)
	Manufacture of other transport equipment (9.9)	China (15.1) Canada (13.1)	14.0	39.1	46.9	2.2	63.4	29.5	UK (23.1) Canada (8.7)
	Manufacture of coke and refined petroleum products (8.5)	Canada (41) Mexico (10.5)	23.5	49.6	27.0	5.1	84.5	10.8	Mexico (17.8) Canada (13.1)
	Manufacture of machinery and equipment (8.2)	China (19.4) Mexico (16.1)	12.5	41.7	45.8	2.5	73.2	20.9	Mexico (18.9) Canada (14.8)

[6] The US certainly feels great pain when the shock happens on the supply side, e.g., the shortage of personal protective equipment at the beginning of the pandemic.

Total (100)	Canada (18.2) China (15.4)	8.1	37.1	54.7	100	90.9	9.1	Canada (18.8) Mexico (12.1)

Source: World Input-Output Database and authors' calculation.

However, Table 1 does not directly reveal the positions of the two countries in global distribution. We calculate the transfer of labor value based on the labor theory of value as a proxy for distributional positions. Table 2 reports the value transfers of the two countries. It reveals that the US is a heavy exploiter country while China is exploited. Although the labor value transferred out of China has been decreasing since 2010, the magnitude is still huge and comparable to the labor that is transferred into the US, with the former being 69.8 percent of the latter in 2014. One may argue that China's transferred (out) labor is reflected in the form of trade surplus in its current account and "saved" as its dollar reserves that gives China the necessary liquidity to participate in world trade. We argue that this is instead evidence of the US hegemonic power: If the dollar is to maintain its hegemonic position as the currency for world trade, the US does not need to pay for this debt and the fruits of world labor is consumed by them for free (Jia 2010). In addition, exploitation also goes beyond trade imbalance because our analysis shows that most developing countries, be it running a trade surplus or deficit, are exploited while most developed countries are exploiters.[7]

Table 2: International labor value transfers of China and the US (2010–2014)

	China				US			
Year	Labor expended	Labor received	Labor transferred	Transferred ratio	Labor expended	Labor received	Labor transferred	Transferred ratio
	(Million hours)			(%)	(Million hours)			(%)
2010	1124034	999369	124664	11.1	182102	325801	-143700	-78.9
2011	1202045	1087227	114818	9.6	184513	331744	-147230	-79.8
2012	1216165	1112781	103384	8.5	187327	331296	-143969	-76.9
2013	1197549	1109660	87889	7.3	190805	328467	-137662	-72.1
2014	1178079	1093195	84884	7.2	195254	331540	-136286	-69.8

Note: Labor transferred = labor expended – labor received, transferred ratio = labor transferred / labor expended.

Therefore, China and the US are in a trade relationship that is asymmetric in their positions of both production and distribution. The former is reflected in the imbalanced current account and the imbalanced trade reliance that gives the US an upper hand in trade conflict negotiations. The latter can be uncovered by the lens of Marxian labor theory of value: The US has been a longstanding exploiter despite its huge trade deficits and China has long been exploited despite its huge trade surplus and the accumulated foreign reserves. The inferior distributional position of the Chinese manufacturing industries has long been noticed by the Chinese government (e.g., see the most recent three Five-Year Plans) which motivates the upgrade of the Chinese manufacturing sector.

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[7] Results are available on request.

5. The impact of hypothetical decoupling on growth and employment

The gradual but slow changes as seen in figure 1 and table 2 seem too slow when the China-US trade conflict becomes a new normal during the Trump administration. As we have argued, the risk of decoupling is an important reason for China to expedite its reduction of trade reliance and propose the new Double Circulation development model. Table 3 presents the potential consequences of a complete decoupling of the US and China merchandise trade. If both parties were to transfer their trade with the other party to elsewhere proportionally, China would see a 2.47 percentage point slowdown in its growth rate which translates into 11.6 million job losses, a stunning magnitude that is enough to destabilize the Chinese society. This pain would be intensely felt in the labor-intensive sectors, e.g., the textiles industries. As for the US, it would gain 1.32 percentage point in its overall growth with 676 thousand more jobs created, though some sectors would suffer from slowdown and job losses.

Even if China internalizes (import substitution) its demand for the US goods as opposed to trade transfer, it will not help mitigate the negative impact. It is even a bit worse, China in this case will lose 0.01 percent more in growth and 29 thousand more in job loss, which reveals the deep penetration of China into the global production network. However, the case of import substitution gives US 0.15 percentage point more in growth rate, and 644 thousand more jobs than the case of trade transfer. We also carry out the same analyses treating all industries as productive without depreciation adjustment. In the case of trade transfer, China will lose 1.98 percentage points in growth and 14.3 million of jobs—the magnitudes are just like the main case. [8]

Table 3: Consequences of decoupling on value added and employment

Country	Industry	Value added (million dollars)			Employment (thousand)	
		Before decoupling	After	Change (%)	Before	Change
China	Manufacture of furniture; other manufacturing	50702	43773	-13.67	6304	-861
	Manufacture of computer, electronic and optical products	376676	335249	-11.00	12779	-1405
	Manufacture of textiles, wearing apparel and leather products	305611	281021	-8.05	32739	-2634
	Manufacture of electrical equipment	227587	215831	-5.17	12223	-631
	Manufacture of rubber and plastic products	120320	114217	-5.07	9475	-481
	Manufacture of fabricated metal products, except machinery and equipment	151207	144494	-4.44	9609	-427
	Manufacture of machinery and equipment	312688	300614	-3.86	15163	-585

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[8] Detailed results are available on request.

	Manufacture of chemicals and chemical products	261004	251010	-3.83	7597	-291
	Scientific research and development	41633	40228	-3.37	1343	-45
	Computer programming, consultancy and related activities; information service activities	87204	84343	-3.28	2272	-75
	Manufacture of other transport equipment	99542	100684	1.15	2459	28
	Total	8094239	7894035	-2.47	600656	-11586
US	Crop and animal production, hunting and related service activities	171561	166818	-2.76	1581	-44
	Manufacture of other transport equipment	162286	158197	-2.52	689	-17
	Forestry and logging	21732	21533	-0.92	423	-4
	Manufacture of textiles, wearing apparel and leather products	43885	51972	18.43	436	80
	Manufacture of computer, electronic and optical products	254205	298508	17.43	1060	185
	Manufacture of electrical equipment	61842	72114	16.61	370	61
	Manufacture of furniture; other manufacturing	129922	138468	6.58	1038	68
	Manufacture of basic metals	86097	91154	5.87	411	24
	Total	8805175	8921644	1.32	75344	676

Source: World Input-Output Database and authors' calculation.

The above exercise quantitatively reveals the external risk that China is faced with at this special historical conjuncture. Although the results are based on the 2014 world input-output structure, we believe the magnitudes are alike if we have the most updated data. This is because the world economic structure represented by the input coefficients changes very slowly year by year.[9]

6. Discussion

China's seemingly sharp turn in its development strategy—the new Double Circulation strategy—is essentially an accelerated step in its long-planned restructuring of the economy. We have seen that, since its opening-up in the 1980s, China has deeply integrated its economy into the global production and distribution network. It certainly benefits from the huge foreign currency reserves accumulated from its exports sectors and the technology introduced through FDI. But due to the uneven development and the increasing risk of reverse globalization, it is a logical step for China to focus on its domestic production network while maintaining its free access to the global economy, i.e., the double circulation strategy. The recent strategic acceleration of this transition is motivated by the trade war since the risk of reverse globalization is so huge that China does not want to subject itself to the hostage of imbalanced trade. The incoming Biden administration is not likely to ease China's worry in this respect given that

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[9] Evidence is available on request.

Biden (2020) also wants to get tough with China, and the Obama administration to which Biden serves as Vice President already took issue with China's huge trade surplus (Weber and Shaikh 2020).

The next question, then, is how is China going to implement this new development strategy and what is its implication for both China and the world? For one thing, if China is taking its domestic circulation as the mainstay, domestic consumption will have to the main means of realization of the produced value, which then implies a necessary adjustment of domestic income distribution. Supposedly the lower end of the distribution will have to be lifted and the size of the middle class need to expand—a goal explicitly written in the *advice*. However, it remains an open question as to how this could be achieved through the interplay of a developmental state that inherits some sort of socialist legacy, a capitalist class that is seeking political influence, and a working class that has long been silent in the political arena.

Regarding the impact of China's new development model on the world economy, China will presumably rely less and less on the market of advanced developed countries for its exports. Nonetheless, China's trade is set to increase with the developing countries through the Belt and Road Initiative. This new pattern of trade perhaps will change the geopolitics of the world.

7. **References**

Jia, Genliang. 2010. The dire consequences of the great international circulation economic development strategy. *Studies on Marxism* (12): 55–66.

Abiad, Abdul, et al. The impact of trade conflict on developing Asia. Asian Development Bank Economics, Working Paper Series 566, 2018.

Biden, Joseph R. 2020. Why America must lead again. *Foreign Affairs* 99 (2): 64–76.

Collier, Paul, and David Dollar, eds. 2002. *Globalization, growth, and poverty: Building an inclusive world economy.* Washington: World Bank.

Dietzenbacher, E., van Burken, B. and Kondo, Y.. 2019. Hypothetical extractions from a global perspective. *Economic Systems Research* 31(4): 505–19.

Ricci, Andrea. 2019. Unequal exchange in the age of globalization. *Review of Radical Political Economics* 51 (2): 225–45.

Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer. 2015. The Next Generation of the Penn World Table. *American Economic Review* 105 (10): 3150–82.

He, Zili. 2017. China's proposal opens a new chapter of economic globalization. *Hong Qi Wen Gao* (03): 22–4.

Kotz, David. 2017. The specter of right-wing nationalism. *Jacobin*. Assessed at: https://www.jacobinmag.com/2017/05/donald-trump-neoliberalism-right-wing-nationalism
———. 2018. What's behind the trade war. *Jacobin*. Assessed at: https://www.jacobinmag.com/2018/06/donald-trump-trade-war-china-tariffs

Liu, He. 2020. Accelerating the construction of a new development model wherein the domestic circulation is the mainstay and the domestic-international double circulation reenforcing each other. *People's Daily*. (11-25-2020)

Mandel, Ernest. 1978. *Late Capitalism*. London: Verso.

Marquetti, Adalmir, Luiz Eduardo Ourique, and Henrique Morrone. 2020. A Classical-Marxian Growth Model of Catching Up and the Cases of China, Japan, and India: 1980–2014. *Review of Radical Political Economics*. Published online. DOI: 0486613419878305.

Marx, Karl, and Friedrich Engels. 2002. *The Communist Manifesto*. London: Penguin.

Meisner, Maurice. 1999. *Mao's China and After: A History of the People's Republic*. New York: The Free Press.

Pun, Ngai, Chris King-Chi Chan, and Jenny Chan. 2010. The role of the state, labour policy and migrant workers' struggles in globalized China. Global Labour Journal 1(1): 132–51.

Shaikh, Anwar and E. Ahmet Tonak. 1994. *Measuring the Wealth of Nations: The Political Economy of National Accounts*. Cambridge, UK: Cambridge University Press.

Timmer, Marcel P., Erik Dietzenbacher, Bart Los, Robert Stehrer, and Gaaitzen J. De Vries. 2015. An illustrated user guide to the World Input-Output Database: The case of global automotive production. *Review of International Economics* 23 (3): 575–605.

Office of the United States Trade Representatives (USTR). 2020. Economic and trade agreement between the government of the United States of America and the government of the People's Republic of China.

Weber, Isabella and Anwar Shaikh. 2020. The US–China trade imbalance and the theory of free trade: debunking the currency manipulation argument. *International Review of Applied Economics*. Assessed at: https://doi.org/10.1080/02692171.2020.1814221