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# The 'Dual Circulation' development model of China: Background and insights

Saad Ahmed Javed and Yu Bo School of Business, Nanjing University of Information Science and Technology, Nanjing, China, and

Liangyan Tao and Wenjie Dong College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China

# Abstract

**Purpose** – Global supply chains experienced unprecedented changes in 2020 and the relationship between domestic and global markets needed adjustments considering the long-term impacts of the changes that are unfolding around these markets. China has become the first country to announce a formal strategy – "Dual Circulation" Strategy (DCS) – to guide its self-reliant economic development in the post-COVID era. However, what exactly is the DCS and what drove China to publicize this strategy is not yet clear. This study aims to answer these questions.

**Design/methodology/approach** – Based on an extensive review of literature and media reports, a background has been constructed that justifies the DCS as a long-overdue historic necessity.

**Findings** – A novel definition of "Dual Circulation" is introduced. A novel construct to visualize the domestic circulation in light of international and domestic markets and international circulation has been presented. The study argues that maintaining optimum levels of consumption and saving rates is crucial to the DCS's success.

**Originality/value** – The study pioneers the first scientific definition of the "Dual Circulation" that will pave way for future debate on the topic. Also, it is the first time an academic study on the DCS has been executed.

Keywords Dual circulation, Economics, Consumption, Sustainable development, China

Paper type Research paper

# 1. Introduction

Balancing economic growth with the needs of society and the environment is at the heart of sustainable economic development (Ravago *et al.*, 2015). However, how an ideal sustainable economic development looks like in the real world is hard to imagine because of the variation in social and environmental needs that vary from one region of the world to



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another and the priorities of the policy-makers in these regions. Among all nations in the world. China presents a very unique and interesting case when it comes to balancing the social and environmental needs with the economic needs of society. Despite the COVID-19 pandemic-induced economic disruptions that affected the production and consumption patterns in almost every country and the world economic growth was reported to be staying negative till the fourth quarter of 2020. China not only emerged triumphant in containing the pandemic but also emerged as the only major economy to report positive economic growth in 2020 (Yeung, 2020; CGTN, 2020b). Not only this, but the ambitious goal of the Chinese government to alleviate poverty from the country by the end of 2020 also remained unshattered (The Economist, 2020; UNDP, 2020), at a time when half a billion more people are on the verge of getting pushed into poverty globally and attainment of the United Nations Sustainable Development Goal of ending poverty by 2030 seems impossible (Sumner et al., 2020). Although it is already well-known that China is the leading force turning Earth greener (Chen et al., 2019), recently, while addressing the United Nations General Assembly, the Chinese President Xi linping announced achieving carbon peak by 2030 and carbon neutrality by 2060 (Gupta, 2020). Thus, with every new day, China's journey towards sustainable development through its commitments and actions is becoming more and more evident to the international community. Then, even though challenges and threats are also mounting, the comparative resilience of the Chinese model of development is hardly dented.

One of the key factors responsible for the unceasing resilience of the Chinese economy can be attributed to its ability to adapt to changing environments where the socialist tradition of "Five-Year Plans" played a decisive role in enabling this adaptability. The first significant adjustment happened in the late 1970s. Afterwards, the period from 2006–2007 was critical in Chinese economic history. Trade-to-gross domestic product (GDP) ratio and export-to-GDP ratio peaked in 2006, at 64.5% and 36%, respectively, while GDP growth rate peaked in 2007 at 14.2%. In March 2007, then-Premier Wen Jiabao acknowledged the "unsteady, unbalanced, uncoordinated and unstable" development in China arising from "structural problems" (Woetzel *et al.*, 2009). In the country's 11th Five-Year Plan (2006~2010), released in early 2006, it was announced: "China's growth should be based on domestic demand, especially consumption demand. The drives for economic growth should be shifted from the growth of investment and exports to the balanced growth of consumption and investment, as well as balanced growth of domestic demand and external demand" (Yongding, 2020).

Meanwhile, to minimize the damage resulting from the Global Financial Crisis of 2007/ 2008, the Chinese economy found the driver of growth in debt-fuelled investments (Wolf, 2018a). However, the continuous decline in return on investment is long a matter of concern and the circumstances are forcing the Chinese economy towards another adjustment. It has been reported that in China's 14th Five-year Plan (2021–2025), due to be released in March 2021, the Chinese President is going to disclose the blueprint of an economic model called "Dual Circulation" (EIU, 2020). Currently, in the absence of any blueprint, speculation of various kinds is coming to light. The West is speculating it as China's effort to move "inward" (EIU, 2020; Buckley, 2020). Even though President Xi has echoed "manage our own business" (Desheng, 2020), the purpose of the new strategy seems to be the creation of "a largely self-sufficient system" in the long run, according to Zhou and Ma (2020), who argued it as an attempt of China "to bolster its domestic market, but it is unlikely to completely turn inward". In fact, in 2018, Martin Wolf, who observed the early signs of the rebalancing of the Chinese economies, noted that if the Chinese economy achieves balance by relying on the consumer demand of its vast population where consumption replaces Dual circulation

investment as a driver of growth, "that would, in turn, be good for China and for the rest of the world" (Wolf, 2018a, 2018b).

As the analysts are still struggling to understand what the Chinese leadership has exactly committed to (Pettis, 2020), the current study attempts to summarize the information available to us through data and makes a strong case for the Dual Circulation Strategy (DCS). The study argues that the strategy is likely to succeed despite all challenges and problems because the socio-economic conditions on the ground are conducive and point to the same direction in which the Chinese leadership has committed to leading the people. Considering the fact that China is about to overtake the US as the world's largest consumer market, probably before the end of 2020 (Deutsche, 2019; Jie, 2019), the current study is of significant importance for everyone who is concerned with the developments in China, a country that is the world's most dominant trading partner having crucial trading relations with most of the nations (Chong, 2020; Gosh, 2020) and where developments have consequences for almost every nation that is connected with it.

The study is organized as follows: After the introduction, the key problems associated with the Chinese economy that is probably leading it towards "Dual Circulation" (DC) or another round of strategic reforms, have been identified and their significance is discussed based on historical data. Afterwards, in the light of the insight from the results, a novel definition of DC is proposed. Finally, the study concludes with essential insights and policy implications.

#### 2. The background

What is the problem to which solution "Dual Circulation" (DC) is? In the current section, the background of the problem will be discussed with the aid of some socioeconomic indicators. A closer look at these indicators and the associated timelines (Table 1) provide valuable insight into the background that lead to the proposals for DC.

## 2.1 Private consumption and savings

In 2020, China emerged as the largest consumer market by surpassing the USA (Table 1). Chinese consumer spending represented 31% of global household consumption growth from 2010 to 2017 (Ho *et al.*, 2020). Joshua (2017: p. vi) noted China's experience of structural transformation of its economy and journey towards a consumer-oriented society without relinquishing its export markets. He further argued that such a structural transformation is likely to influence the international economy by prompting new trade relations and new changes in competitive advantages.

In November 2020, Stephen Roach, a US economist affiliated with Yale University, said, "With household consumption still less than 40% of China's GDP – the lowest such share of any major economy – a more aggressive push towards consumer-led rebalancing is long overdue" (Moody, 2020). The rate of household savings in China is among the highest in the world. It has experienced a substantial surge in savings rates in the past two decades, with household savings as a share of disposable income almost doubling, from 16% in 1992 to 30% in 2009 (Chen *et al.*, 2020). For comparison, based on OECD data [1], in 2016, total household savings (per cent of household disposable income) in China was 36.14% while that of the USA, UK, New Zealand and South Africa was 6.99%, 1.74%, 0.02% and -0.91%, respectively.

Therefore, understanding the consumption patterns and saving patterns in China can provide important insight into the need for Dual Circulation Economics. Table 2 presents the

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Timeline	Event	Reference	Dual circulation
1970	Exports of goods and services (% of GDP) started surging	World Economic Indicators	circulation
1978	The Chinese economy went through the first market-driven	Hu and Khan (1997) and Yao	
	reforms	(2011)	
1988	Wang Jian coined the term the "great international circulation"	Yongding (2020); Yao (2011)	
	to recount China's processing trade (export)-led strategy of	and Wang (1988)	_
	economic development		5
1997	The Asian Financial Crisis	Zhiming (2020)	
2001	China joined the World Trade Organization	Yao (2011)	
2006	In the 11th Five-Year Plan (2006–2010), the importance of	Yongding (2020)	
	domestic demand, in general, and consumer demand, in		
0007	particular, for economic growth recognized		
2007	Wen Jiabao acknowledged the "structural problems" in the	Woetzel <i>et al.</i> (2009) and Wolf	
0010	Chinese economy	(2018a)	
2013	China became the world's largest exporter	Zhiming (2020)	
2018	The US-China Trade War	General knowledge	
2019	China's GDP was 16.4% of the world GDP	World Economic Indicators	
2020	China became the world's largest retail market	Zhiming (2020) and Cramer- Flood (2020)	
2020	On May 14, in a high-level meeting chaired by Xi Jinping, the	Xinhua (2020) and Baijie	
	concept of "Dual Circulation" (双循环) was proposed	(2020)	
2020	China to alleviate absolute poverty by the end of the year	The Économist (2020) and	
		UNDP (2020)	Table 1.
2020	China is likely to overtake the USA as the world's largest	Deutsche (2019) and Jie (2019)	Timeline of
	consumer market by the end of the year		important events

Ratio	1998 (%)	2002 (%)	2006 (%)	2010 (%)	2014 (%)	2018 (%)
PCE/GDF	)					
China	36.0	37.1	34.3	34.3	37.5	40.3
India	62.9	61.2	56.6	54.7	55.8	56.2
USA	64.6	67.1	67.4	67.9	67.7	69.4
GGFCE/C	DP					
China	13.8	16.5	15.8	14.6	12.9	12.6
India	11.6	11.0	9.8	11.0	10.1	10.6
USA	16.8	16.8	15.7	16.7	14.4	13.8
FCE/GDP	)					
China	49.7	53.6	50.0	48.9	50.3	52.9
India	74.6	72.1	66.4	65.7	65.9	66.8
USA	81.4	83.9	83.1	84.7	82.1	83.2

**Notes:** \*PCE = households and NPISHs final consumption expenditure. \*FCE = final consumption expenditure. \*GGFCE = general government final consumption expenditure. \*GDP = gross domestic product

The consumption to GDP ratios of China, India and USA

Table 2.

consumption to GDP ratios of China and its two competitors, the USA and India. In the current study, General Government Final Consumption Expenditure (GGFCE) was calculated through the difference of final consumption expenditure (FCE) and Households and NPISHs Final Consumption Expenditure (PCE) as,

$$FCE = GGFCE + PCE$$

FCE and PCE are also called total consumption expenditures and private consumption expenditures, respectively.

Plotting of consumptions and their ratios is a very convenient way to visualize their relative positions. As shown in Figure 1, in 1995, private consumption in China was around 12 (12.14) times lower than that of the USA, whereas the gap is continuously reducing and in 2018, the consumption in China was almost three (2.83) times lower. A similar trend was observed by Wolf (2018b). This progress is commendable. However, if one looks at the timeline from 1995–2015, China's private consumption (as per cent of GDP) on average stayed around 36% in this two decade-period. Meanwhile, for the same period, the USA and India reported on average 66.3% and 59% of private consumption, respectively. Even in 2018, China hardly crossed 40% of the ratio, which is still lower than in other countries (Table 2). This fact can explain the high household savings rate in China (Table 3).

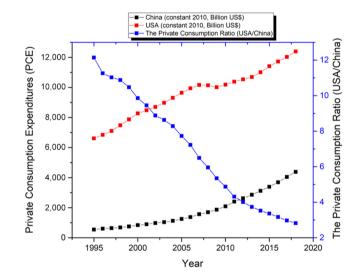


Figure 1. The private consumption expenditures – China versus USA

	Countries	Total consumption% of GDP (FCE/GDP)	Private consumption% of GDP (PCE/GDP)	Savings (% of GDP)
<b>Table 3.</b> Savings and consumption of China and selected	China South Korea India Russia Germany Japan South Africa Brazil USA UK	52.9 63.5 66.8 69.4 73.1 75.5 82.0 82.8 83.2 85.4	$\begin{array}{c} 40.3 \\ 47.9 \\ 56.2 \\ 52.5 \\ 53.3 \\ 55.5 \\ 61.6 \\ 63.7 \\ 69.4 \\ 65.3 \end{array}$	$\begin{array}{c} 47.1\\ 36.5\\ 33.2\\ 30.6\\ 26.9\\ 24.5\\ 18.0\\ 17.2\\ 16.8\\ 14.6\end{array}$
countries (2018)	Pakistan	95.6	84.0	4.4

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Therefore, it is very likely that the DCS would promote a reduction in the savings rate and a surge in the private consumption rate.

## 2.2 Declining poverty and increasing income

Economic growth can be sustained in the long-term only when poverty is largely alleviated (Joshua, 2017 p. 72; Breunig and Majeed, 2020). An increase in income directly influences buying power, and thus reduces poverty. In 2013, a study identified the early signs of the rebalancing of the Chinese economy resulting from the changes in market factors like increase in labour income, which, in turn, increases the household income as a share of GDP and improvement in household income distribution (Huang *et al.*, 2013). Data and reports suggest that the Chinese people's per capita income is increasing while the poverty rate is declining. Despite the disruptions induced by the COVID-19 pandemic, the Chinese government has reiterated its commitment to eliminate absolute poverty from the country by the end of 2020. These facts point out that generally, the Chinese people are becoming more affluent with time, as shown in Figure 2 (Data from TE, 2020). As the income is increasing, the demand for products and services is likely to increase. Thus, the Dual Circulation strategy is likely to strengthen the domestic consumption market for absorbing this demand. The development of the domestic service sector can significantly facilitate it.

#### 2.3 The declining share of exports (and trade) in gross domestic product

If one consults the World Bank database [2], one finds that since 1970, the curve of the Chinese "exports of goods and services (per cent of GDP)" was generally increasing until 2006. After the Global Financial Crisis, China saw a generally declining trend that is continuing to date. The decline in exports was followed by a decline in the GDP growth rate (Figure 3). As China's exports heavily relied on processing trade, which peaked at 60% (as a percentage of total trade) at the end of the 1990s (Yao, 2011), therefore, a decline in the share of exports of goods and services in GDP was inevitable. Thus, the country that once achieved comparative advantage through its exports is unlikely to sustain its comparative advantage in the long-term if it continues seeing exports as the sole source of its advantage; especially, when the role of the service sector, which already accounts for

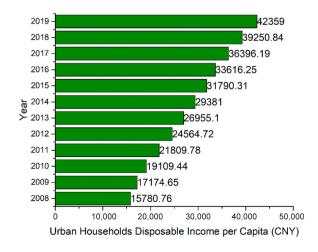
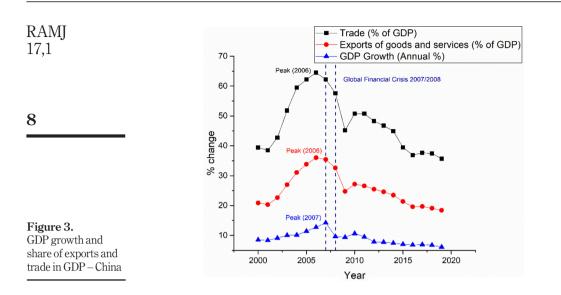


Figure 2. The increasing trend in per capita income of the Chinese population

Dual circulation

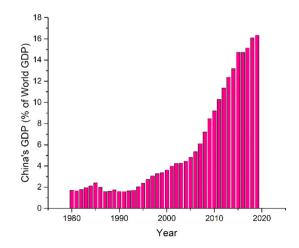
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more than half of the GDP, increases with time (Zhang and Lin, 2018). From Figure 3, it is evident that the Chinese economy needs a new driver of growth and it seems the Chinese economists finally identified it in domestic consumption. Further, the increase in Chinese share in the world GDP is another factor that signifies that the Chinese economy cannot rely on international trade and exports for sustainable economic growth (Figure 4).

# 2.4 Declining returns on investment

During the 2007/2008 global financial crisis, China expanded investment to minimize the impact of the crisis on the economy; however, this solution caused a declining return on investment and an increase in debt, which was needed to support investment expansion (Wolf, 2018a). Literature (Zhihua, 2020; Fukumoto and Muto, 2012) reported an investment-



**Figure 4.** The Chinese GDP as a percentage of the world GDP driven development pattern to be unsustainable and one of the limitations preventing the Chinese economy from rebalancing amid new realities. The declining return on investments has strengthened this narrative. To demonstrate the declining return on investment, a metric called Investment Capital Output Ratio (ICOR) is useful (Figure 5). In the current study, ICOR was estimated by taking the ratio of Total Investment (per cent of GDP) and GDP Growth Rate (Annual). It can be argued that the DCS is a recognition of the fact that investment-driven growth is no more a viable mechanism to produce sustainable economic growth in China and is inferior to consumption-driven growth in the current circumstances.

## 2.5 Increasing debt-to-gross domestic product ratio

Under neoliberal economic policies, both export-led growth and debt-led growth are ultimately unsustainable (Lavoie and Stockhammer, 2012). Studies have reported the negative influence of high public debt (as a fraction of GDP) on economic growth (e.g. Reinhart and Rogoff, 2010). The statistics reveal that China's gross debt rose from 171% to 295% of GDP between 2008 (Q4) and 2017 (Q3) (Wolf, 2018a). According to the data available at IMF [3], the general government gross debt (per cent of GDP) significantly rose from 22.81% in 2000 to 50.64% in 2018 (Figure 6). According to multiple recent World Economic Outlook reports (e.g. June 2020 update) by IMF, the figure rose to around 52% in 2019. Also, the potential bad debt in China is non-financial corporate, not household. The DCS is likely to optimize the level of public debt to a lower debt-to-GDP ratio.

#### 2.6 The declining economic growth

As shown earlier in Figure 1, China's GDP as a percentage of the world's GDP has increased over the past several decades. However, the GDP growth rate has declined over time (Figure 7; Data from the World Bank database). There is no wonder in it as it is a natural phenomenon; as a system develops, the dialectical transition of quantity into quality becomes apparent. There is less room for development, without breaking with the existing constraints, as a system develops. The manufacturing industry and exports gave impetus to the Chinese economy and were primarily responsible for its fast economic growth in its early days of the race. Today, as the export-to-GDP ratio is declining and investment is also

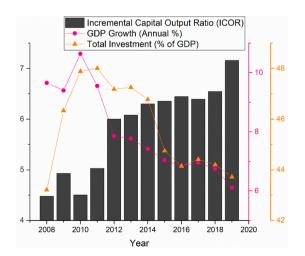
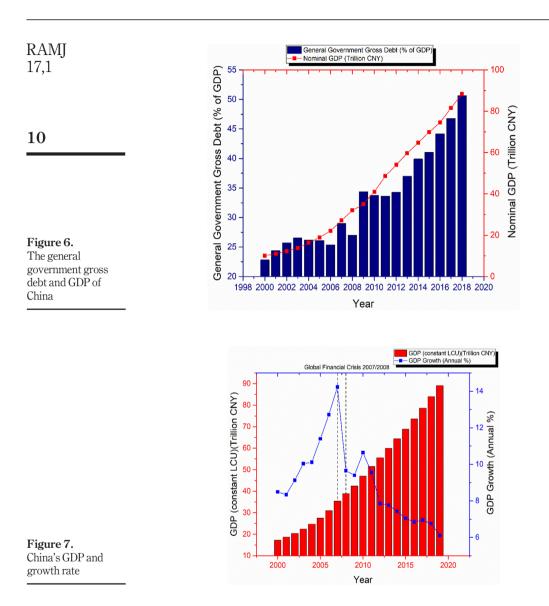


Figure 5. Inefficiency with which capital is being used



becoming inefficient over time, it is impossible to reverse the natural trend of decline in economic growth without finding a new growth driver.

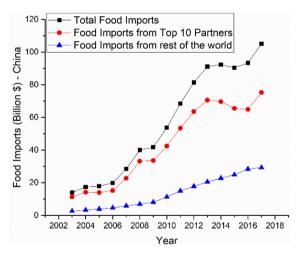
# 2.7 Issues concerning food security and sustainability

China's food production and consumption have substantial implications for the national food security of China and the world (Huang *et al.*, 2017). It is one of the links that connects domestic circulation with international circulation in the DCS. Today, food security is an important topic of discussion among Chinese scholars. Yu and Han (2020) and Liu, Shi *et al.* (2020) reported a decrease in cultivated/arable land area, while He *et al.* (2019) report the

potential of the food supply chain defects for food insecurity. Yao *et al.* (2020) argued that despite being the world's largest consumer of food, food insecurity is not an imminent threat for China; however, it has different food self-sufficiency rates that vary from one item to another. Thus, imported food plays a vital role in achieving food security in China (Figure 8). However, with time it is diversifying its supply of imported food as the proportion of food from the top 10 partners decreases while that from the rest of the world is surging (Table 4). This trend is likely to continue in the future as well.

Realizing sustainable agriculture is another key challenge for China in achieving food sustainability as it ranks much lower than its competitors in sustainable agriculture (Table 5). Also, as the arable land in China is relatively more stressed (Table 6), managing food sustainability and security issue is important for warranting a sustainable food system for future generations in China.

Therefore, it can be argued that in the future, for the success of the DCS achieving food security through the establishment of a sustainable food system while minimizing the dependence on imported food has an important role to play. Improving food safety at home would be another challenge for the food authorities. DCS could emerge as a double-edged sword if the overemphasis on consumption did not lead to an equal emphasis on production



Notes: Data from https://chinapower.csis.org/china-foodsecurity/

Figure 8. Food imports to China

Imports	2003	2010	2017	
Total food imports (Billion \$) Imports from top 10 partners Imports from rest of the world Source of data: https://chinapowe	\$14B \$11.3B (81%) \$2.66B (19%) r.csis.org/china-food-secur	\$53.7B \$42.4B (79%) \$11.3B (21%)	\$105B \$75.3B (72%) \$29.3B (28%)	Table 4Food imports inChina from 2013 to2017

Dual circulation

RAMJ (and distribution). Here, lessons should be learned from incidents like the 2008 melamine infant milk scandal. It was argued that the high demand for milk in an increasingly affluent country at a time when the government was trying to encourage milk consumption while milk self-sufficiency was not at hand contributed in part to the tragedy (Huang, 2018; Yasuda, 2018). A 2016 survey reported that about 40% of consumers in China considered food safety to be "a very big problem," up from 12% in 2008 (Huang, 2018). Therefore, managing the gap between production and domestic consumption effectively is an important milestone to be achieved by the DCS.

## 2.8 Energy security

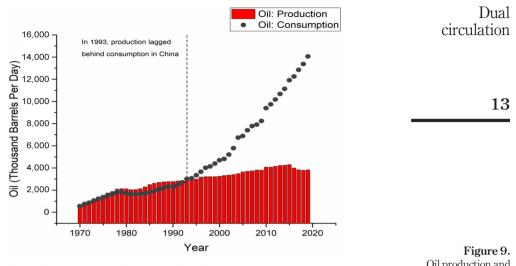
The importance of foreign energy in China's energy mix is significant. Today, China is the world's largest importer of oil and natural gas (Clemente, 2019). China's self-sufficiency in oil ended in 1993 when it became a net importer of oil (Figure 9). The self-sufficiency score (Javed *et al.*, 2020) of China's oil has continuously decreased since 1993, and thus the self-sufficiency rate has been negative since then. From 0.96 in 1993, the self-sufficiency score reduced to 0.27 in 2019. In other words, China fulfilled 72.7% of its demand for oil from imported oil in 2019, compared with 4.02% in 1993 (Table 7). Data (2000 to 2014) presented in Wang *et al.* (2018) shows that the gap between China's primary energy consumption and production is increasing with time. Prioritizing renewable and alternative energies (Wang *et al.*, 2018), raising the price of high-carbon fuel (Feng *et al.*, 2013, p. 66) and improving refining capacity (Sundria *et al.*, 2020) pose some opportunities for China to handle energy security issues in the future.

## 2.9 Changing demographics

In the past, low-cost labour provided a competitive advantage to China and boosted investment in its manufacturing and processing-trade industry. The result was the increasing share of exports (and trade) in the GDP. Today, not only exports' contribution to GDP is declining, but the labour market in China is also evolving. As China's population peaks in 2030 at 1.4 billion and projects to show a negative growth rate from 2035 onward (Figure 10;

	Countries	Food loss and waste	Sustainable agriculture	Nutritional challenges		
Table 5.The scores (ranks) ofChina and selected	China India USA	82.4 (4) 81.1 (7) 77.7 (16)	60.7 (57) 65.5 (47) 68.6 (33)	67.5 (21) 52.5 (61) 59.5 (45)		
countries in terms of food sustainability	Notes: The score range: 0–100. In the brackets are the ranks out of 67 regions in the world. Source of data:. https://foodsustainability.eiu.com/					

	Countries	Arable land (hectares per person)	Arable land (% of land area)
Table 6.   Arable land of China   and selected	China India USA	0.086 0.118 0.471	12.7 52.6 16.7
countries	Source of data:	World Economic Indicators (https://data.worldbank.org)	



Notes: Data from www.bp.com/en/global/corporate/energyeconomics/statistical-review-of-world-energy.html

Figure 9. Oil production and consumption of China

Data from WPR, 2020), labour-intensive industries are less likely to sustain in China in the long term. Therefore, in the future, the labour quality is more likely to seek attention, instead of labour cost, for the companies interested in doing business in China. Thus, by improving domestic labour quality, the "international circulation" can be strengthened through the DCS. Also, as the DCS boosts the service sector, which is nearly impossible without the participation of the female labour force, there is a need to reform work policies to realize the lowering of working time per worker in China (and also to curb the excessive-work cultures like "996"), improve the birth rate and welcome foreign skilled workforce.

# 3. The "dual circulation"

The questions regarding the sustainability of China's economic growth and the need for economic rebalancing were long raised by scholars (Huang *et al.*, 2013; Fukumoto and Muto, 2012). Even though some may view China's DCS as an attempt of "turning inward" (EIU, 2020), China's DCS, on the contrary, reportedly involves "domestic and international development reinforcing each other" (CGTN, 2020a). Just as in asset portfolio rebalancing, buying and selling of assets in a portfolio does not implies giving up one asset over the other but managing the risks likewise in the DCS, which is a kind of domestic consumption-driven economic rebalancing, the ultimate objective is to build economic resilience against external uncertainties and risks, which have been well-known to all both at home (Zhihua, 2020) CGTN, 2020a) and abroad (EIU, 2020). Moreover, these risks, uncertainties, and unfavorable external conditions are not new. Even though one may argue the COVID-19 pandemic and the USA's trade war against China might necessitate the need to announce the DCS: however, consumer-demand-driven economic rebalancing was a much-awaited event in the Chinese economic history. For instance, Wolf (2018a) studied several economic indicators and observed "early signs of the necessary change in the structure of the Chinese economy towards one that is less unbalanced and, above all, one that is more reliant on the consumer demand of China's vast population". His study pointed out that in consumer demand lies the

RAMJ 17,1	Year	(%) of oil import	Self-sufficiency rate	Self-sufficiency score
	1990		0.17	1.21
	1991		0.12	1.14
	1992		0.05	1.05
	1993	4.0	-0.04	0.96
1 4	1994	4.4	-0.05	0.96
14	1995	10.5	-0.12	0.90
	1996	13.3	-0.15	0.87
	1997	19.8	-0.25	0.80
	1998	22.3	-0.29	0.78
	1999	26.7	-0.36	0.73
	2000	30.7	-0.44	0.69
	2001	31.2	-0.45	0.69
	2002	35.6	-0.55	0.64
	2003	41.1	-0.70	0.59
	2004	48.3	-0.93	0.52
	2005	47.0	-0.89	0.53
	2006	49.9	-0.99	0.50
	2007	51.9	-1.08	0.48
	2008	51.7	-1.07	0.48
	2009	53.8	-1.17	0.46
	2010	56.6	-1.30	0.43
	2011	58.2	-1.39	0.42
	2012	59.1	-1.45	0.41
	2013	60.5	-1.53	0.40
	2014	61.9	-1.62	0.38
<b>T</b> 11 <b>T</b>	2015	63.8	-1.76	0.36
Table 7.	2016	67.3	-2.06	0.33
The timeline of	2017	70.1	-2.34	0.30
china's self-	2018	71.6	-2.52	0.28
sufficiency in oil	2019	72.7	-2.66	0.27

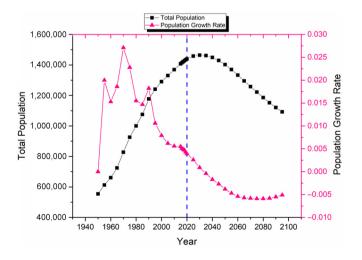


Figure 10. The Chinese population trajectory and growth

solution to the Chinese economy's woes. Huang *et al.* (2013) also emphasized boosting consumption as a policy strategy for rebalancing the Chinese economy.

Thus, what is the "Dual Circulation" Strategy (DCS)? On May 14, 2020, in a high-level meeting chaired by President Xi Jinping, the concept of "Dual Circulation" (双循环) was proposed as (Xinhua, 2020):

会议指出,要深化供给侧结构性改革,充分发挥我国起大规模市场优势和内需潜力,构建国 内国际双循环相互促进的新发展格局。

which can be translated as (Baijie, 2020; Yongding, 2020)

"The meeting highlighted the necessity to deepen supply-side structural reform, give full play to the advantages of the country's super-large market and the potential of domestic demand and construct a new development model (or pattern) featuring domestic and international dual circulations that complement each other".

According to EIU (2020), a report by The Economist Intelligence Unit, China's "dual circulation" strategy "aims to foster resilience by emphasizing the "internal" circulation of the domestic economy over the "external" circulation of the global economy". CGTN (2020a), an influential English language newspaper from China, states,

"The "dual circulation" strategy means an economic development pattern that takes domestic development as the mainstay, with domestic and international development reinforcing each other. It indicates an accelerated shift from China's export-oriented development strategy. Under such a pattern, China's economy posits to be dominated by domestic economic circulation and facilitated by circulation between China and the rest of the world".

Based on the discussion above and interpretation of the facts and socio-economic indicators known to us from the data and reports, it can be argued that:

*Dual circulation* is the domestic consumption-driven economic rebalancing to achieve sustainable economic development.

In other words, it is an economic rebalancing to achieve sustainable economic development through domestic consumption (domestic consumer demand). Guided by the theory of asset portfolio rebalancing, economic rebalancing can be explained. Thus, if one considers *economic rebalancing* as a process of realigning the weightings (priorities) of the economic resources, then the first definition can be rephrased as:

*Dual circulation* is the process of realigning the weightings of the economic resources to achieve sustainable economic development through domestic consumption (domestic consumer demand).

The optimum balance of these resources is the source of comparative advantage for a domestic economy in the global market. One may argue that in such a self-reliant economic development model, domestic circulation acts as a lever that balances the weights of international and domestic markets in the economic policy (Figure 11). Also, the key force that shifts the position of this lever (domestic circulation) are the uncertainties in the international market that influence the international circulation, and thus the relationship between two markets (Figure 12).

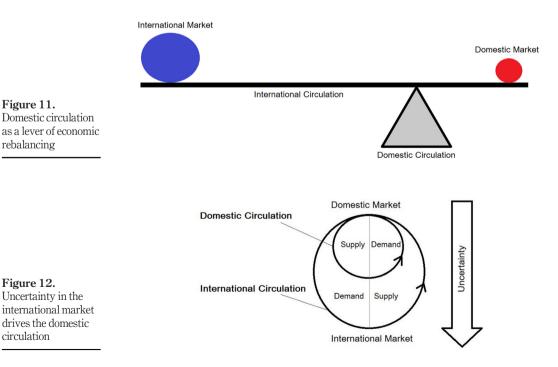
#### 4. Conclusion

The world, in general, and China, in particular, is going through an important period of history. In the middle of the Trade War, it became the first victim of the COVID-19 pandemic. The fight against the pandemic was still in progress when it was dragged into technological conflicts and some other issues concerning national security. Huawei, TikTok, Integrated

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Circuits and 5G remained hot issues. It had hardly finished its effective fight against the COVID-19 pandemic when it was hit by a series of the worst flooding in a decade. Meanwhile, the rise of sinophobia in the West added salt to the injury and the Chinese students and scholars abroad began a reassessment of their priorities. Thus, the nation found itself fighting at multiple fronts at once. It was the background in which the DCS was announced.

The DCS is an attempt to fix the drawbacks of China's neoliberal economic policies, which were in practice since the 1980s. It can also be considered as an economic rebalancing with Chinese characteristics in a "moderately prosperous society". The current study made a pioneering attempt in explaining the DCS in light of the available socio-economic indicators. The study found that the DCS is likely to improve the Chinese economic development model's resilience by providing it with a new comparative advantage untapped in its vast consumer base. As China becomes the world's largest consumer (retail) market while its private and total consumption expenditures lag behind those of the developed countries, the country has huge potential to turn its consumer demand into a new engine of economic growth while paying the way for self-reliant sustainable economic development. The study identified several indicators that pointed to the fact that this transition was long overdue. For example, the decline in GDP growth rate and the dwindling share of exports (and trade) in GDP since 2006/2007 and increase in the share of the service sector were pointing to the fact that the economic growth dependent on manufacturing and exports is no longer sustainable. Increasing the debt-to-GDP ratio and declining returns on investment further strengthened this narrative and exposed the limitations of neoliberal economics. Meanwhile, the change in population demographics such as improvement in household



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incomes, ageing population, women's increasing role in the service sector and a decrease in population growth rate also pointed out that labour-intensive industries are less likely to provide impetus to the future economic growth. In the period, where achieving technological independence in every aspect is a major national security issue, failure in improving food sustainability and energy security can create new challenges if not managed timely. Therefore, China needs a new engine of economic growth and a set of policies to boost domestic consumption at home that can together pave the way for China's journey to sustainable development and improve the resilience of its socio-economic system. It is very likely the DCS will facilitate this "great transition".

With the declining role of the primary sector, the tertiary (and quaternary) sector is likely to play an important role in the DCS's success. To encourage consumption expenditures in China, rural populations hold a huge untapped potential for future economic growth, especially if one considers that more than one-third of rural residents account for less than one-fourth of household consumption in China. Here, policies should be enforced that increase the share of the citizens' income to the primary distribution of income while providing them with high-quality avenues where they can spend their excessive savings. Here, improvement in the social security net and public services and the up-gradation of the service sector are of critical importance.

Here, it should also be noted that just as processing trade/export-led growth has given rise to severe structural imbalances highlighted by underused savings, sluggish growth of residential income and domestic consumption and a heavy reliance on investment (Yao, 2011) that are becoming inefficient, with time problems with heavy dependence on consumption-led growth may also come to notice. Economic growth based on overconsumption and lack of savings can cause economic bubbles, busting of which can cause economic recessions, as happened in the USA during the Financial Crisis of 2007/2008. Overconsumption can lead to a series of crises and usually turn out to be a solution that is worse than the problem itself. Thus, maintaining an optimum level of consumption rate and saving rate is crucial to the DCS's success. By benchmarking Japan and the USA, efforts should be made to bring private consumption expenditures between 55% and 70%, total consumption expenditures between 75% and 83% and saving rate between 16% and 25%. Trust building is also of significant importance; thus, the quality of domestic products and services should be improved so the country's rural and urban residents feel comfortable consuming them. The residents' food safety concerns should be addressed on a priority basis. Here, managing the gap between production and consumption effectively is an important task. Therefore, the success of the DCS is not just dependent on domestic consumption; it is equally dependent on domestic production and distribution and exchange mechanisms.

#### Notes

- 1. https://data.oecd.org/hha/household-savings.htm
- 2. https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS
- 3. www.imf.org/external/datamapper/datasets

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## **Corresponding author**

Saad Ahmed Javed can be contacted at: saad.ahmed.javed@live.com

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