

Shifting economic powers: China vs. the United States

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Preliminary draft

Abstract

After the second World War, the United States was the economic and financial world leader. Yet, since the 1980s the situation has been gradually, but inexorably changing. The main factor of change consisted in the rapid economic ascent of China. While the US entered a phase of rapid de-industrialization, China massively industrialized. Since 2016 the total GDP in PPP and total exports of China has surpassed the level of the US, though up to 2019 the United States has maintained a higher technological level, a per capita GDP more than three times superior to China and its world financial supremacy.

A substantial part of China's net export revenues has been used to buy financial and real assets in the United States and in other countries, sustaining the dollar and the persistence of a delicate and fragile world equilibrium. However, if Trump's neo-protectionist policy will not completely disrupt the present trends, in the long-run the growing economic and commercial strength of China will also lead to a strong challenge to the world financial supremacy of the United States. The shifting in financial power, which in the last Century went on between the UK and the United States, will probably take place in the future between the US and China.

1. Introduction.

After the Second World War and the Reconstruction, the United States was by far the largest economy in the world. In 1952 the United States had a total GDP in PPPs (Purchasing Power Parities),² almost three times higher than the Soviet Union, and about four times than the ones of Germany and the United Kingdom (see Table 1). In the years 1952-73 there was a great reduction of the gap with the US for Japan, a lesser one for Brazil, the Soviet Union, Germany, France, Italy. China had badly suffered from the Japanese invasion of a large part of its territory and then from the civil war between the communists and the nationalists up to the victory of the former in 1949. Therefore, In the 1950s it had started from a very low level of GDP, and had some relative improvement in the years 1952-1973, while the United Kingdom and India did worse than the United States. The great energy crisis in 1973 marked an important turning point. The major Western European countries almost halved their GDP rate of growth, while the US, which was less dependent on the import of oil, slowed down a little less. Also Japan halved its rate of growth, though maintaining a higher level of the rate than the other major industrialized countries until

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² For the years 1950- 1990 the EKS method of PPP calculations gives much lower results for China than alternative methods, such as the Geary Khanis (GK) method. On the differences between the two methods, see for example UN (2007). In any case, all PPP methods, China's official data and several other sources confirm the extraordinarily rapid growth of the Chinese economy since 1978.

the end of the 1980s³. In the 1973-78, China could slightly reduce the very large GDP gap with the United States.

The second important turning point in the world economy occurred in 1978, with the great economic reforms started by Deng Hsiao-ping.⁴ China radically reformed agriculture, introducing the “responsibility principle”, which assigned to the peasants’ families the use (not the ownership) of the land and allowed them to freely sell a part of the production on open markets. This strongly contributed to a faster growth of agriculture productivity and production, and a large part of the

Table 1. Long-run GDP trends in major economies: 1952-2018

Total GDP in PPPs EKS of each country in % of the USA in selected years

Countries	1952	1973	1978	1990	2008	2018
China	5.1	8.4	9.5	18.8	68.6	123.8
USA	100.0	100.0	100.0	100.0	100.0	100.0
India	12.4	11.9	13.0	16.0	29.4	49.5
Japan	12.3	34.4	34.6	41.1	30.3	27.3
Germany	24.8	33.7	32.5	27.4	22.6	21.2
USSR-Russia	33.6	35.4	41.9	34.3	22.3	20.6
Indonesia	5.2	5.9	6.7	8.7	12.0	17.1
Brazil	8.3	15.2	18.0	17.1	17.4	16.4
United Kingdom	21.8	18.6	17.5	16.6	15.4	14.6
France	15.4	19.9	19.7	18.6	15.5	14.3
Mexico	6.5	11.0	12.4	12.3	12.1	12.5
Italy	14.0	19.4	19.6	18.8	14.2	11.6

Notes: present borders for all countries, with the exception of USSR (1952-1990) and Russia (2008-2017). For China the estimates are based on the official data; alternative estimates give lower results. For USSR/USA the estimates are based on PPP GK. Sources: Maddison (2001) for USSR as % of USA pp. 274-275; Conference Board, *Total Economy Database* (2019), April for all the other data (PPP EKS). Our elaborations.

surplus of the agricultural sector was channeled to finance an extraordinarily rapid industrialization process. This process was reinforced and stimulated by deep reforms in the industrial and service

sectors and by the creation of SEZ (Special Economic Zones) to attract foreign direct investment, which brought new capitals, modern technologies and easier access to several foreign markets.

In the 1980s and in the following decades the Chinese government favored the rapid expansion of TVE (township and village enterprises), controlled by local authorities in rural areas and also allowed the de facto rapid growth of private enterprises, although private ownership was fully legitimized only in the 2004 Constitution and in the 2007 Chinese Property Code⁵.

Another important shock in economic trends took place in 2008, with the Great Recession, started in 2007-8 with a deep US financial crisis, which led to a severe real crisis in the United States and in many other countries. The Great Recession led also to a sharp reduction in the high rate of growth of exports and output in China and in some other emerging economies. Nevertheless, around 2015, China was able to surpass and then distance the United States by about one fourth in terms of total GDP in PPPs. China also raised its per capita GDP in PPPs from about 16% of the

³ See Valli (2017), chapter 3, for the analysis of the long phases of growth and crisis of the Japanese economy.

⁴ On China’s period of rapid growth, see Musu (2011), (2018); Naughton (2007), (2018); Deaglio (2015); Valli (2015 a).

⁵ See Chavance (2017), p.18.

US level in 2008 to about 30% in 2018. With the exception of the United States and India, in 2018 no other country did reach one third of the economic size of China, roughly measured by total GDP in PPPs.

Indonesia and Mexico had an uneven path of growth, but in recent years were able to exceed, thanks also to their large population, the total GDP in PPPs of several European countries.

At present, the dominant global economic players are the US and China, with the possible future intrusion of India, while the EU remains impotently enveloped in its deep divisions and frequent nationalist skirmishes.

2. Economic, technological, military, financial and political powers

In the last two Centuries, history has shown that the growth of economic and technological powers

strongly facilitates the rise in military and political powers and that the combination of economic, technological, military and political powers leads, with delay of a few decades, to a vast increase in financial power (see Figure 1).⁶

The progressive shift in power from the United Kingdom to the United States was paradigmatic.

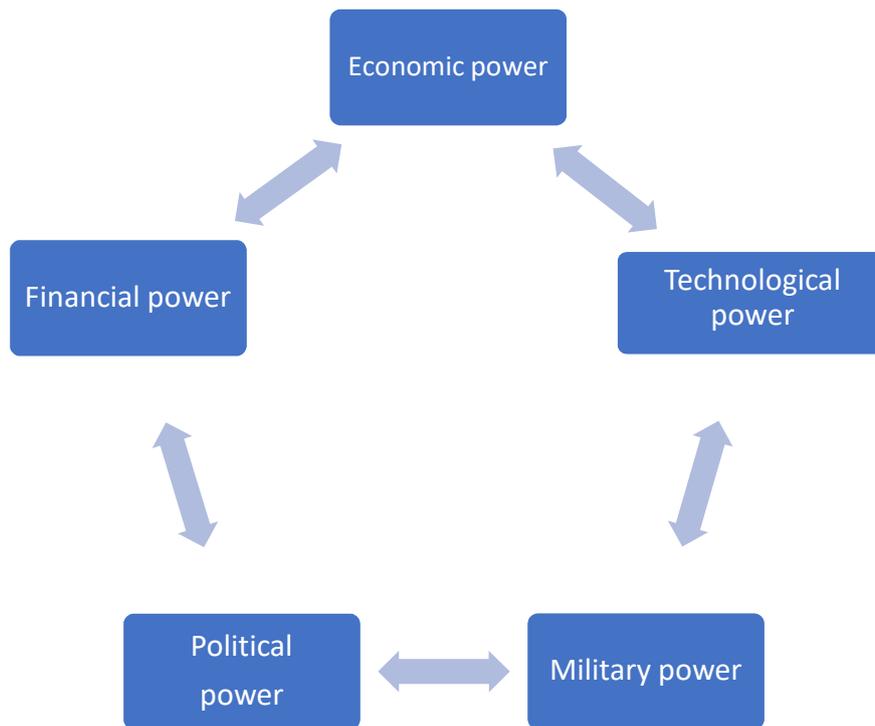
In the last decades of the XIX Century, the United Kingdom was the center of the mighty British Empire and the world leader in the economic, technological, military (as regards the navy) and financial spheres. The United States exceeded the United Kingdom in economic size during the 1870s, in labor productivity and technological dynamism between the end of the 1890s and the beginning of the XX° century, in the army during the First World War, in political and financial power, air and sea military power during and immediately after the Second World War.

The progressive dissolution of the British Empire in the post WWII years, sanctioned the sharp decline of the United Kingdom vis-à-vis the great superpowers of the period: the United States and the Soviet Union, which, however, could never reach half of the US total GDP.

After the dissolution of the Soviet Union in 1991, the real economic competitor of the United States

Figure 1. The interplay of powers

⁶ See Valli (2018), chapter 6, for a more detailed analysis of the interplay of powers in the United States.



became China, which had a rate of economic growth over three times higher than the one of the US. In the 1990s the distance from the United States in output, productivity and technological level was still enormous, but China had a huge population (over four times the one of the United States) and much higher saving and investment rates. Moreover, as we will see in detail in paragraph 4, China had the possibility of exploiting the advantages of Gerschenkron's *economic backwardness* and those associated to the *Fordist model of development* in a growing number of modern sectors of industry and the services.⁷

3. The dominance and the structural weaknesses of the United States in the 1990s.

At the beginning of the 1990s the US was undoubtedly *the top economic, technological, military, political and financial power* in the world. The Soviet Union had been severely struck by the consequences of the fall of the Berlin wall and was near disaggregation; Japan was falling into a long structural crisis; even after reunification, Germany, the main Western European economy, had about one fourth only of the US total GDP; the three great emerging Asian economies, China, India, Indonesia and the major Latin American economies, Brazil and Mexico, had between one fifth and one sixth of the US total GDP in PPP. In the military, technological and financial spheres the US was far ahead of all the other major powers. However, the US had some great, creeping, *structural weaknesses*:⁸

1. Before the recent vast exploitation of shale gas and shale oil, the US had become a large net importer of energy sources and also of other strategic raw materials, such as the rare earths.

⁷ See Gerschenkron (1962). See Valli (2015), Chapter 2 for the concept of "Fordist model of development".

⁸ See Valli (2018), chapter 7.

2. Since the 1970s it has entered a rapid process of *de-industrialization* in percent of total employment and since 1979 as regards the absolute level of employment in manufacturing.
3. In almost all years since 1970, it has registered a *structural deficit in the balance of current accounts*, and since 1987 it has gradually become a huge net international debtor.
4. Since the late 1970s the US has shown a *rapid rise in income and wealth inequalities* and had a level of economic inequalities substantially higher than most Western European countries and Japan.⁹
5. Among the major economies the US had recorded a *much lower rate of growth of per capita GDP* than Japan and several European countries in the 1950-73 years; than China since 1978 and India since 1992.

4. China vs. the United States

As we already know, since 1978 China's economy has grown much more rapidly than the US, vastly reducing its gap for per capita GDP and even surpassing the US by over 23% in terms of total GDP at PPPs in 2018. (see Tables 1 and 2). China's rapid growth has been favored by two of Gerschenkron's *advantages of economic backwardness*. These advantages had been important for the United States between the XIX^o century and the first decades of the XX^o Century, while China could vastly exploit them since 1978. First, China had the possibility of transferring great masses of workers from sectors with low productivity, such as agriculture and some traditional industries, to sectors with much higher productivity such as modern industrial and services activities. Second, China could buy, or imitate, or acquire by means of joint ventures with foreign multinationals, modern technologies from technologically more advanced countries, such as the United States, Japan, Germany, Singapore, South Korea, etc. Since the 1980s, China could also increasingly profit from *the advantages of the Fordist model of development*, which had strongly favored the US growth in the years 1908-1929 and 1946-1973. In the 1980s China profited from these macro-economic advantages firstly in sectors such as electric domestic appliances and the associated industries (steel, electricity, etc.); then, in the 1990s also in ICT hardware and telecommunication services, shipyards, etc.; finally, in the 2000s, in the automobiles, batteries, fast trains, airplanes, telecommunication, internet services, solar panels, etc. The enormous and rapidly increasing size of the Chinese market and the fast rise of exports have allowed Chinese corporations to obtain very large economies of scale, of scope and of network. This has strongly contributed to increase productivity, wages, investment, employment, consumption, net exports, aggregate demand and GDP, and so on. This process has been supported by a State developmental policy and an unprecedented long period of very high rates of saving and of investment. The pace of very rapid growth of the Chinese economy has been progressively attenuated by the consequences of the *Great Recession* of the years 2008-10, which have strongly reduced the rate of growth both of

Table 2: Selected economic indicators for the United States and China: 1990 and 2017

Indicators	USA		CHINA	
	1990	2017	1990	2017
GDP in PPP in % of USA	100.0	100.0	18.8	120.4
Per capita GDP in PPP in % of USA	100.0	100.0	4.1	28.5

⁹ See, for example, WID. World (2019)

Population in % of USA	100.0	100.0	453.9	421.9
Gross investment/ GDP (%)	21.5	20.6	34.7	44.3
Mean years of schooling (25+ years of age)	12.3	13.4	4.8	7.8
R.&D. spending in % of GDP (a)	2.4	2.8	0.6	2.1
Stock exchange capitalization in % of GDP (b)	124.5	148.5	30.9	46.5

Notes: (a) 1996, 2016; (b) 2003, 2018. Sources: Conference Board (2018), November, for lines 1-3; World Bank (2019 a) for line 4; UNDP (2019) for line 5; World Bank (2019 b) for line 6; World Bank (2019 c) for the last line.

Chinese exports and of real GDP, and the inflows of foreign capitals. Lately China has tried to raise domestic consumption and welfare spending in order to be less dependent from foreign markets and to increase its direct investment outflows in Asia, Africa, Latin America, and in several industrialized countries. However, the 2018-19 trade war with the Trump's administration has contributed to reduce its penetration in the huge US market and to weaken its industrialization drive, while in 2018 the stricter monetary policy has frozen the financial and housing bubbles, but has reduced investment in several small and middle size firms.

4. Industrialization versus de-industrialization

One of the most important determinants of China's impressive long period of rapid economic growth was its fierce industrialization drive. Industrialization was robust in the 1980s, but did accelerate in the 1990s and in the 2000s, at least until the effects of the 2008-10 Great Recession and Trump's trade war. *While China industrialized, the United States de-industrialized*¹⁰. From 1978 to 2018 in China the percentage of employed people in industry on total employment went up from 17.3% to 28.6%, though diminishing a little after 2014. In the same period, in the United States the percentage went down from about 31% to 19.4%. In 2017 the total number of workers employed in the industrial sector in China was 218.2 million persons, while in the US was about 27 million. In the US manufacturing sector, the total number of employed people went up to 19.5 million in July 1979, then went down to 11.5 million in April 2010, recovered a little up to 12.9 million in April 2019, but still could not return to the pre-crisis level (13.8 million persons) attained in November 2007.¹¹

Since 2011, China has also surpassed the United States in terms of total manufacturing value added. Although manufacturing productivity is still much lower in China than in the United States, the gap is rapidly decreasing. Huge investments, extensive learning by doing processes, robotization and the shift from low to higher productivity sub-sectors have powerfully contributed to increase China's manufacturing productivity, though the rate of growth of productivity has slowed down during and after the Great Recession.

China has so become an industrial powerhouse, although in 1998 the services sector has surpassed industry as regards employment, and in 2013 as regards value added, and afterwards has increasingly distanced industry. In some modern ICT and internet activities China is the only great global competitor of the United States.

5. The structural deficit in the balance of trade

¹⁰ See, for example, Baily and Bosworth (2014) for the US industrial trends and Valli (2015), pp.43-63 for China's rapid industrialization phase.

¹¹ US BLS (2019) and FRED (2019 a).

A large part of trade regards manufacturing goods. So, when a country, such as the US, de-industrializes too rapidly while its currency is sustained by large capital inflows, it becomes a huge net importer of manufacturing goods, and it is likely to have large structural trade and current accounts deficits and a rapidly growing net international debt (see Table 3). On the contrary, a

Table 3: USA and China: selected indicators on international economic relations

Indicators	USA		China	
	2000	2017	2000	2017
Exports of goods and services, \$ billion	1312	2285	331	2442
Balance of current accounts, % of GDP	-3.9	-2.3	1.7	1.4
Net international investment position (\$ billion, end of year) (a)	-2363	-9555	236	2130
Stock FDI inward, \$ billion	2783	7807	193	1491
Stock FDI outward, \$ billion	2694	7799	28	1482

Note (a) 2004 and 2018. Sources: OECD (2018), World Bank (2018) for exports and current accounts; BEA (2019), SAFE (2019), IMF (2019) for net international investment positions; UNCTAD for FDI.

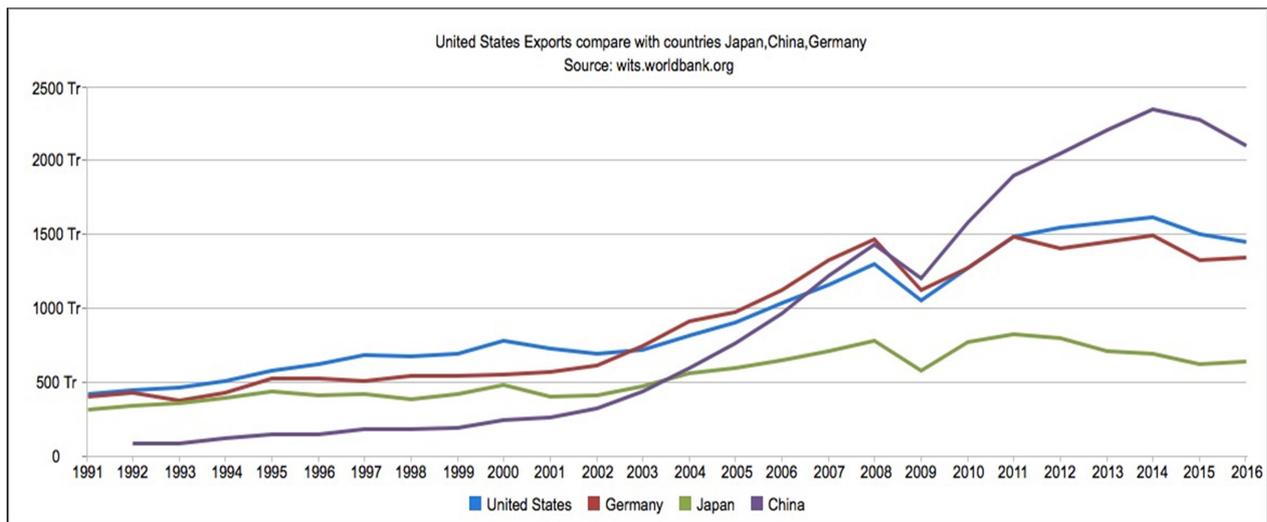
country, such as China, industrializing very rapidly and keeping a somewhat undervalued currency, can maintain a structural surplus in its balance of current accounts and gradually become a great trade and financial power. Since the 1970s the United States has registered a persistent structural deficit in the trade of goods balance with the rest of the world. Moreover, in 2008 China has exceeded the US and Germany as the top world exporter of goods (Figure 2). Since the 1980s the contrasting trends of the United States and China, the US de-industrializing and China industrializing, have powerfully contributed to determine a great imbalance in the trade transactions between the two countries. In 1985 the US had a very small deficit for trade in goods with China (\$ - 6.0 million), but the deficit rapidly increased in the 1990s and the 2000s, up to \$ 419.5 billion in 2018.¹² Although the US has attained a growing surplus for services with China, the overall balance for goods and services has been heavily negative since the 1990s (\$ 378.6 billion in 2018). Yet, it must be noticed that a relevant part of China's exports comes from joint-ventures with multinationals, partly American ones. A large part of the profits of the US multinationals operating in China goes back to the US, but the profits mainly accrue to US top managers and share-holders, only partially and indirectly to US workers, who are often damaged by the negative impact on domestic employment of vast off-shoring processes. Naturally, also the level and the variations of the rate of exchange between the US Dollar and the RMB¹³, and the tariff policies have an important impact on the US-China trade relations. In the January 1980-January 1994 period, the RMB was strongly undervalued and was further depreciated vis-à-vis the dollar and this facilitated the expansion of Chinese exports towards the US market. Yet, the rapid expansion of Chinese net exports to the US continued also in the January 1994-January 2014 period, notwithstanding a revaluation of about 30% of the Chinese currency to the Dollar. In the January 2014- August 2019 period there was a more fluctuating behavior of the rate of exchange, but with a trend -devaluation of the RMB to the Dollar of about 13%, partly because of the Chinese response to the decline in exports due to the Great Recession and, more recently, to the tariff rises applied, or threatened, by Trump. As regards tariffs, an important change occurred before

¹² US Bureau of Census (2019).

¹³ See FRED (2019 b), for the trends of China/US foreign exchange rates.

and after China's entry into the WTO in 2001. The tariff rate was 32.1% in 1992, but rapidly fell to 14.1% in 2001 and to 3.8% in 2017. In the same period the US tariff rate was going down from 4.0% to about 1.7%.¹⁴ After the rise to presidency of Donald Trump, the US policy towards China and other countries with a large trade surplus with the United States radically changed. China is the country with the largest trade surplus with the United States, and Trump has begun trade conflicts with China in 2018, and a real trade war in 2019.¹⁵

Figure 2. Exports of goods of the top world exporters: China, US, Germany and Japan (\$ billion)



6. From industrial to technological leadership

At present, the United States is undoubtedly the world technological leader in civilian and military production. However, in the military field the US-China gap remains very large, though China is gradually catching up, but in civilian production the gap is less sizable and in some niches or subsectors China has even surpassed the US and the major European competitors.

In the long run technological advances depend mainly on four elements. First, the progress in quantity and quality of education, in particular in the scientific and technological fields. Secondly, the learning by doing process in medium and high-technology productive sectors. Third, the quantity and quality of the stock of physical capital, since plants, machines, and infrastructures incorporate or influence technologies and organizational innovations. Finally, the expenditure in R.& D, the number of persons employed in R.&D. activities and the main results of R.&D. activities.

Even though, as we can see in Table 2, in terms of average years of schooling, the US is much ahead of China, the gap is gradually diminishing. Moreover, the quality of education, as measured by the OECD Pisa tests is much better in some big Chinese cities than in the US, though in the rural areas it is probably lower. Finally, thanks to the much greater population and the rapid rise in educational standards, the total number of holders of higher degrees and of engineers is higher in China than in the United States and the gap between the two countries is increasing over time.

Up to now, the number of workers exposed to learning by doing processes is much higher in China than in the United States, but the average quality is lower, because of the richer technological level

¹⁴ See World Bank (2019). The tariff rates were: most favored nation, weighted mean, all products.

¹⁵ See Valli (2018), pp.171-2 for the year 2018 and the detailed timeline of China Briefing (2019) for the first half of 2019.

prevailing in the US. Yet, China's rapid technological upgrading is reducing the quality gap. In terms of physical capital formation in current US dollars, in 2010 China has surpassed the United States and the gap is widening year after year, since in the present decade the gross investment rate has been over the double than in the United States.

The United States has maintained a percentage of R. & D. spending on GDP superior to that of China (in 2017, 2.8% vs. 2.1%), but China has been able to increase this percentage from 0.6% in 1990 to 2.1% in 2017 and will soon surpass the US in terms of total spending. The total number of full-time equivalent researchers in R. & D. in China was already higher in China than in the United States in 2016¹⁶ and the gap has been widening, although the average quality of researchers remains probably higher in the US, which can count on a network of excellent top universities and research centers, which have attracted a large number of foreign scientists and experts. Moreover, the United States can count on the large technological spill-over from its huge military sector to the civilian one. Yet, in terms of patent applications, in 2015 China had largely surpassed the United States, Japan, South Korea and Germany.¹⁷

In the crucial ICT- internet – artificial intelligence fields, the US has Apple, Intel, Microsoft, Google, Facebook, Amazon, etc., but China has Lenovo, Huawei, Tencent with its We-chat, Ali Baba, Mobile China, Baidu, etc. The European corporations are smaller and weaker and their markets are largely colonized by the two global superpowers. Almost only some Japanese, South Korean, Indian, German and Swedish firms have been able to survive, in some ICT sub-sectors, to the supremacy of the big corporations of the two giant economies, which can count on much larger economies of scale and of network in their huge domestic markets.

The United States maintains a technological leadership vis-à-vis China in airplanes and some sections of space technology, drones, chips, software, artificial intelligence, robotics, several capital goods, nuclear submarines, etc., but China has surpassed the US in electric vehicles, batteries, fast trains, 5G telecommunication, etc. and is implementing ambitious plans to reach the world technological leadership in the next two or three decades, including the vital area of the digital economy.¹⁸

In 2015 the Chinese government launched the "Made in China 2025" (MIC 2025) initiative, a bold plan to rapidly increase China's technological level in ten key sectors (new information technology; numerical control tools and robotics; aerospace equipment; high-tech ships; railway equipment; energy- saving; new materials; medical devices; agricultural machinery; power equipment).¹⁹ A complex set of tools is used to reduce the dependence on foreign technology; introduce new standards and 40 national and 48 provincial innovation centers; create national champions and new internationally competitive brands; finance new projects and expand digitalization, artificial intelligence, 3D printing, self-driving vehicles, sensors, clouds and big-data, energy and water saving techniques, etc.

Moreover, China, by means of its long-ranging programs of the "Belt and Road"(B.& R.), or "New Silk Road" initiative, is building a railway, roads, sea ,air transport and connectivity network with several Asian, European and African countries. This initiative has five main objectives: to better develop internal Chinese zones; to increase exports and improve trade relations with a number of countries; to extend China's economic, financial and political influence; to secure raw material supplies and strategic facilities and portions of land abroad; to increase the know-how and competitiveness of Chinese infrastructures and fast-trains corporations by means of the massive economies of scale associated to the B.& R. giant projects.

¹⁶ See UNESCO (2019)

¹⁷ See WIPO (2019). In 2015 China had 968,252 patent applications vs. 288,335 ones from the United States.

¹⁸ See Musu (2018), Valli (2015 a), Institute for Security and Development Policy (2018)

¹⁹ See Institute for Security and Development Policy (2018).

7. China towards financial leadership?

At present the United States is the financial global leader. The US has the stock exchanges (New York and Nasdaq) with the largest capitalization (see Table 4); the main mercantile exchange center; several of the most important banks and insurance companies in the world; the largest capital market for public and private bonds; and, finally, it can count on the US dollar, the dominant currency in international commercial and financial transactions.

At the beginning of the 1980s, China was financially very weak. It was a net debtor country. It had an often passive balance of current accounts. It had no stock exchanges. The banking system was very centralized and rigidly state-controlled and it did finance almost only state enterprises and cooperatives. International trade and the Yuan-RMB were rigidly controlled by the state authorities and the securities and bonds markets were practically non-existent. Although the shadow finance was already existent, its size was limited and the public controls were numerous.

Yet, in general, when the economic and trade power of a country grows, after two or three decades of delay, financial power grows as well. The delay is mainly due to the fact that in the long run financial power depends on a stock variable, wealth, which requires several years to be accumulated. Moreover, the financial institutions of the country have to acquire solidity and an adequate sound reputation. In the case of China it also has required deep institutional changes such as the de facto acceptance, and later the legitimization, of private enterprises and private ownership; the institution in 1990 of two stock exchanges in Shanghai and Shenzhen, and the acquisition in 1997 of the partial control of Hong Kong stock exchange; the extensive trade liberalization furthered by the entry in the WTO in 2001; the partial liberalization in banking and insurance markets; the large expansion of the shadow finance, etc. Yet, China's authorities have maintained a strong control on the RMB, which is still not fully convertible, and on international movements of capitals. They also make selective controls and frequent anti-bubbles interventions on the stock exchanges of Shanghai and Shenzhen, on the housing market and on shadow banking.

The extraordinarily rapid growth of the Chinese economy and the sweeping institutional transformations have radically changed the financial situation of the country.

First of all, in the 1990s, China began to have a structural surplus in the balance of current accounts and in a few years became also a net creditor country. At the end of 2018 it was the country with the highest surplus in the international investment position in the world (\$ 2130.1 billion)²⁰. Moreover, China enormously increased its foreign exchange reserves (\$ 3,103.7 billion, in July 2019, the largest in the world) and created in 2007 a powerful sovereign fund, China Investment Corporation (CIC), with over \$ 941 billion in total assets in 2019, of which about \$ 120 billion invested abroad.

At the end of 2018 China also had the four largest banks in the world in terms of total assets; five out of the top ten vs. only two for the United States; 21 out of the top 100 vs. 11 for the United States.²¹

Instead, in the field of insurance companies, the United States was ahead of China, with the world largest corporation in terms of net premiums written, and 7 out of the 25 top corporations in the world vs. 4 Chinese corporations.²² However, in the last two decades China's insurance firms had performed at a much higher rate of growth than the American ones.

²⁰ See IMF (2019). In end-year 2018 the United States had the world largest negative value (- \$ 9,554.7 billion).

²¹ See ADV (2019).

²² See Insurance business (2019).

In November 2018, as we can see in Table 4, China's stock exchanges capitalization, summing up Shanghai, Shenzhen, and Hong Kong, was second in the world, well after the United States, but ahead of Japan, India, United Kingdom, etc. At present, China's private wealth is more concentrated in housing than in shares and in other financial assets, but since 1990 the growth of the capitalization of the Shanghai and Shenzhen stock exchanges has been enormous, though subject to wild fluctuations, hurriedly tamed by the Chinese authorities.

A problem frequently debated on China's present financial system is its inner structural weakness associated to the excessive indebtedness of the Chinese firms and the hazardous role played by the huge, poorly regulated, shadow banking and by several local and regional public authorities.²³

In China total debt in percentage of GDP is rather high (about 303% in the first quarter of 2019) if compared to other emerging countries, though inferior to the level of several developed countries.

Yet, six elements have contributed to the growing worries of the Chinese government and of the international financial markets. First, the rapid rise of total debt, from about 180 % in 2009 up to almost 300% in 2017, debt that the government had contributed to push upwards with the great \$ 589 billion fiscal stimulus in 2008-10²⁴ and has tried to restrain in 2018 and the first months of 2019. Second, the comparatively very high level of corporate debt, in particular of some state corporations, real zombie firms, which have very low levels of efficiency and productivity, but often operate in strategic sectors, employ a large number of workers and furnish important welfare services to their employees. Third, the rapidly growing indebtedness of local governments and of small and middle-size firms, which often recur to the largely un-regulated shadow banking. Four, the growing tendency of several Chinese large multinationals to obtain loans from foreign financial markets. Five, banks and insurance companies are still less sophisticated and profitable than US banks and insurance companies, though the domestic payments system, partly run through we-chat pay and other internet-based devices, is probably more advanced than in the United States. Six, the huge, highly speculative, housing market. Its ample fluctuations can have heavy consequences on the financial situation of many banks, corporations, local governments and a large part of the population.

These problems are indeed very important, but the Chinese government has powerful direct and indirect tools to control the financial system, which the US and other industrialized countries often lack, partly because of incomplete or badly designed regulations. As we know, the Chinese monetary authorities have a huge amount of foreign financial assets. Moreover, the government can exercise

Table 4. Stock exchange market capitalization. Trillion US dollars. November 2018

Stock exchange markets	Capitalization	Country	Ranking by country	Capitalization
New York	30.9	USA	USA (a)	41.8

²³ See, for example, Jetin Duceaux (2018) and the notes by Ippolito (2015), Sau (2015), Valli (2015 b) in the OEET newsletter "Emerging Economies", n. 2, edited by Donatella Saccone.

²⁴ Because of the slowing down of the rate of growth, two smaller fiscal stimulus measures were introduced also in 2012 and 2015, while in March 2019, China's government started another fiscal stimulus, mainly based on tax and fee cuts.

Nasdaq	10.9	USA	China (b)	10.4
Tokyo	5.7	Japan	EU (c)	8.4
Shanghai	4.0	China	Japan	5.7
Hong Kong	3.9	China	India (d)	4.1
Euronext	3.9	EU	UK	3.8
London	3.8	UK	Canada	2.1
Shenzhen	2.5	China	Switzerland	1.5
Toronto	2.1	Canada	South Korea	1.5
Bombay	2.1	India	Australia	1.3

Notes: (a) New York + Nasdaq; (b) Shanghai + Hong Kong + Shenzhen; (c) Euronext (includes Amsterdam, Brussels, Dublin, Lisbon, Paris) + Nordic Stock exchanges + Madrid + Milan; (d) the two Bombay stock exchanges.

a direct control on China's currency, the international movements of capitals, the top managers and the board of most banks, state enterprises, stock exchanges. It has also an indirect control, by way of the Chinese communist party, on local governments and TVEs, and many means to influence private Chinese corporations, if widespread corruption does not prevail.

However, in the middle and long run, three basic problems will occur, probably worsening over time.

First of all, the deceleration of the rate of economic growth will continue, as long as some structural advantages, the Gerschenkron 's and Fordist-Toyotist ones, will gradually wane; the industrialization drive will subside; de-industrialization and the neo-protectionist tendencies, begun with Trump's trade policies, will reduce the growth of exports; the environmental costs will increase.²⁵ The slowing down of growth will delay, but probably not impede, the gradual shift of the world leadership in financial power from the United States to China, since in the next two decades the rate of growth of the United States will most likely continue to be lower than China's one.

Secondly, inequalities in incomes are already very high for a socialist country. They are close to the level of the United States and higher than in several European countries²⁶. Moreover, wealth inequalities are growing very rapidly. According to the 2018 *World Inequality Report*, in 2015 in China the top 1% of the population owned about 30% of total wealth, while in the mid-1990s the percentage was about 18%.²⁷ The mounting number of huge private firms and of China's super-

²⁵ China's annual average rate of growth of real GDP has decreased from over 12% in the 2000- 2007 years to 6-7% in the 2012-2018 years. Lardy (2019) explains the slowing down period mainly on the basis of the resurgence of state dominance that has reduced the driving force of private firms and the market. In different ways, other authors, such as Naughton (2018), Musu (2018), Valli (2015 a), consider instead a complex set of domestic and international structural and policy factors which have contributed to the slowing-down process.

²⁶ See WID.WORLD (2019).

²⁷ See WIR (2018), p.16. In the same period the US 1% share went up from 28% to 38%, and the French share from 20% to 22%.

rich might capture a growing influence on the economic strategies of the Chinese communist party.

Thirdly, China's ambition to promote the RMB as a key currency in the international monetary system and the growing pressure of many Chinese corporations, financial institutions and wealthy investors, will push towards a full convertibility of the RMB and the relaxation of the controls on capital movements, thus increasing the sources of instability of the Chinese financial system.

Yet, one important point is to be stressed. In the 2000s, both the net *debtor* international position of the United States and the net *creditor* position of China have been vastly increasing. At the same time many US multinationals have massively invested in China, which has become a vital crossroad in their global value chain, while, with a delay of some years, also Chinese multinationals have begun to hugely invest in the United States. Moreover, great amounts of China's manufacturing goods have invaded the US market and China has used an important portion of its USD receipts to buy US Treasury bonds and other financial or real US assets. All this has contributed to rapidly create a vast and intricate set of economic and financial relations between the two countries.

The deep consequences of the Great Recession and later the trade-war started by Trump's administration have cracked the delicate trade and financial equilibrium between the two countries and have contributed to freeze the globalization drive.

8. Conclusions

If the present trends continue - but the future rarely mirrors the past - in three-four decades China will not only be the major economy in the world, but will also become the top technologically and financial world power.

However, as Fernand Braudel and Giovanni Arrighi had anticipated,²⁸ the last phase of financial power can prelude to a decline in economic and global power, as it is happening in the US and might happen also to China in a more distant future. Big investors will often prefer the world most lucrative financial investments to domestic productive investments, damaging internal employment, real wages, and aggregate demand, and further amplifying domestic economic inequalities and environmental disasters. Moreover, they will also push against deleveraging and financial regulations, opening the way to great and recurring financial crises, social discontent and widespread populism. Populism will nurture nationalisms, and nationalisms might foster trade wars, conflicts and real wars.

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²⁸ See Braudel (1984) and Arrighi (2010).

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