

**A desaceleração do ritmo de crescimento econômico da  
China: uma abordagem novo-desenvolvimentista.**

**The decelerating pace of China's rate of economic growth:  
a new-developmental approach**

**José Luis Oreiro<sup>1</sup>  
João Pedro Heringer Machado<sup>2</sup>**

**Resumo:** O objetivo deste artigo é analisar as causas da desaceleração do crescimento econômico da China desde 2008. Duas hipóteses principais são apresentadas na literatura. A primeira é que a China teria caído em uma armadilha de renda média devido a uma suposta incapacidade de fazer a transição de uma economia liderada por investimentos para um crescimento baseado em inovação. Acreditamos que essa hipótese não é convincente, uma vez que muitas empresas de manufatura chinesas têm sido extremamente bem-sucedidas em alcançar empresas de manufatura do mundo ocidental nos últimos 15 anos. Uma segunda hipótese é que a China, devido a uma taxa de poupança extremamente alta sustentada por mais de 40 anos, está agora enfrentando uma estagnação secular, ou seja, um esgotamento de oportunidades de investimento lucrativas. Isso significa que uma alta taxa de acumulação de capital, como a sustentada pela China até agora, está resultando em uma produtividade decrescente do investimento, o que pode ser comprovado pelo comportamento da relação

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<sup>1</sup>Associate professor at Economics Department of University of Brasília (UnB/Brasília/Brazil), Professor of the Graduate Program in Economic Integration of the University of Basque Country (Bilbao/Spain), Level I Researcher of National Council for Scientific and Technological Development (CNPq/Brazil), Coordinator of the Research Area Developmental Macroeconomics at European Association of Evolutionary Political Economy (EAEPE), Senior Member of the Post-Keynesian Economics Society and coordinator of the Structuralist Development Macroeconomics Research Group. ORCID: <https://orcid.org/0000-0001-8955-8868>. E-mail: [joreiro@unb.br](mailto:joreiro@unb.br).

<sup>2</sup>MSc. at the Graduate Program in Economics of the University of Brasília and researcher of the Structuralist Development Macroeconomics Research Group. ORCID: <https://orcid.org/0009-0003-5773-8225>. E-mail: [joaopedroheringer@gmail.com](mailto:joaopedroheringer@gmail.com).

produto-capital desde 2008. Nossa conclusão é que o ritmo decrescente de crescimento econômico da China se deve à estagnação secular combinada com uma supervalorização da taxa de câmbio que prejudica a expansão das exportações manufatureiras.

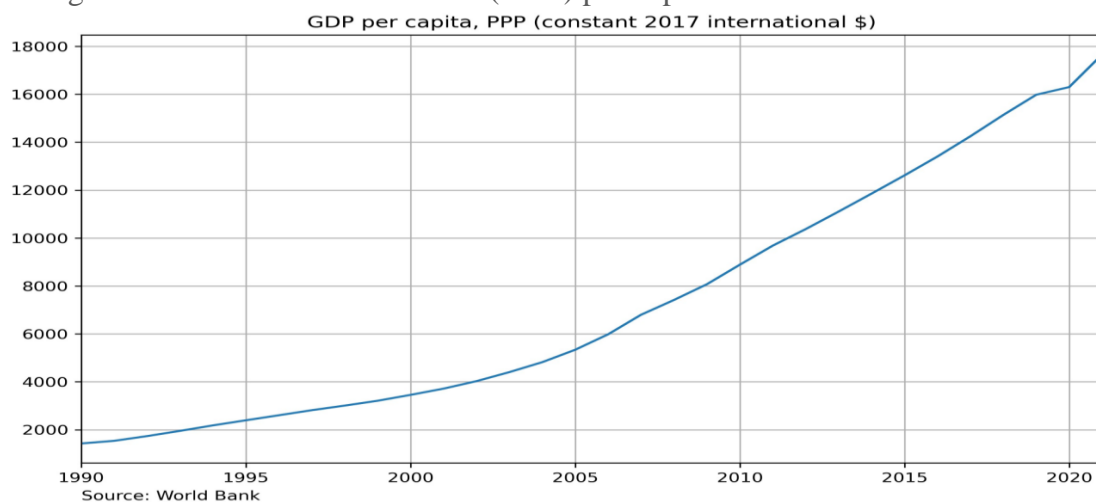
**Palavras-chave:** crescimento econômico, China, abordagem novo-desenvolvimentista.

**Abstract:** The aim of this article is to analyse the causes of growth deceleration of the Chinese economy since 2008. Two main hypothesis are advanced in the literature. The first one is that China had fallen in a middle-income trap due to a supposed incapacity to make a transition for a investment-led economy to an innovation based growth. We think that this hypothesis is not convincing, since many Chinese manufacturing companies are extremely successful to catch-up western-world manufacturing firms in the last 15 years. A second hypothesis is that China, due to an extremely high saving rate sustained for more than 40 years, is now facing a secular stagnation, that is, an exhausting of profitable investment opportunities. This means that a high rate of capital accumulation as the one sustained by China up to now is resulting in declining productivity of investment, what can be proved by the behaviour of output-capital ratio since 2008. Our conclusion is that China decelerating pace of economic growth is due to secular stagnation combined with an exchange rate over-valuation that harms the expansion of manufacturing exports.

**Key-words:** economic growth, China, new-developmental approach.

In the last thirty years China had emerged from a low-income country, with a per-capita income measured in Purchasing Power Parity (PPP) of less than US\$ 2000 (at 2017 constant prices), to a medium-income country with a per-capita income near US\$ 18000, a huge 9 times increase in per-capita income from 1990 to 2020 (see Figure 1). In the last decade the Gross Domestic Product (GDP) of China, measured in PPP, surpassed the GDP of the United States, making the Chinese economy the biggest in the entire world.

Figure 1- Gross Domestic Product (GDP) per-capita from 1990 to 2020



The reason of China's growth success is the combination of a huge rate of capital accumulation directed to the conquer of external markets. Instead of adopting the Latin-American inward orientation of economic development, based on the Import-Substitution Industrialization, China had adopted an export-led growth model in which the growth rate of autonomous demand is driven by the growth rate of exports, making investment rate to increase as device to adjust the rate of capacity expansion to the growth rate of aggregate demand (Oreiro and Costa Santos, 2023) This outward development model able Chinese firms to increase their non-price competitiveness and hence conquer growing shares of world's manufacturing exports so avoiding the stagnation of labour productivity due to the lack of incentives for domestic firms to escalate in the technological ladder, the typical problem that harms the manufacturing firms in Latin-American economies and it is one of the causes of premature deindustrialization of these economies in the last 30 years.

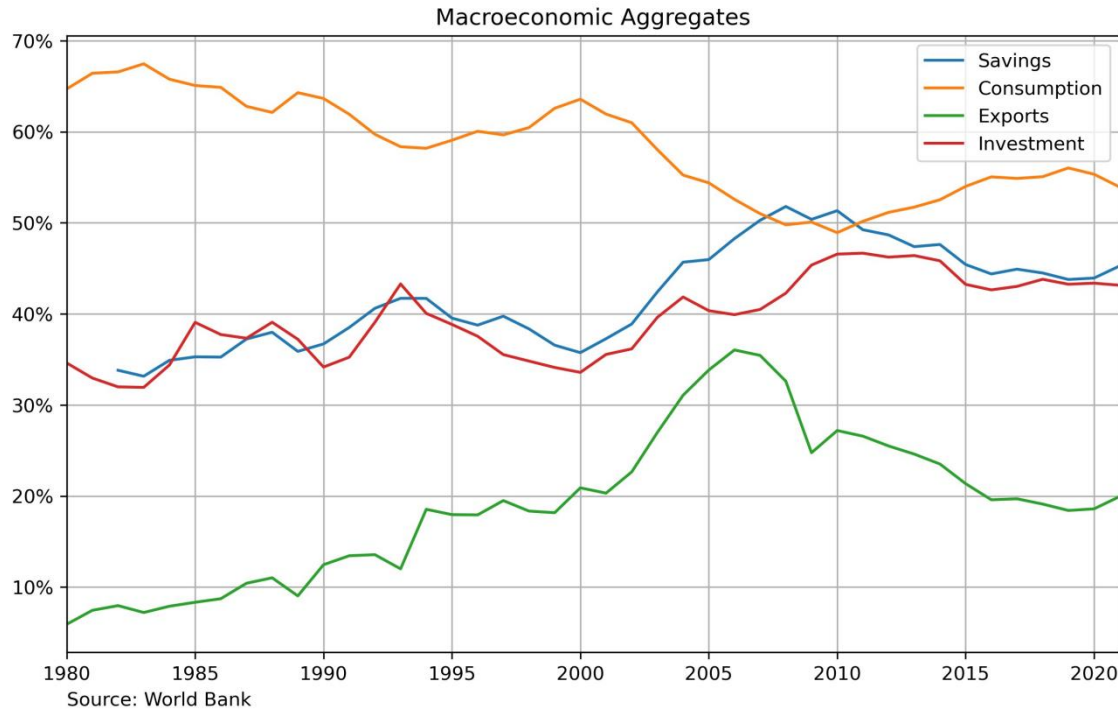
As we can see in figure 2 below, the exports to GDP ratio in China increased from less than 10% in 1980 to almost 35% in 2007, just before de 2008 International Financial Crisis. This outstanding performance of Chinese exports allowed a decrease in the share of consumption in GDP from 65% in 1980 to just 50% at the end of 2000's without producing an economic stagnation due to the lack of effective demand. In this context, China was able to increase domestic savings at a higher rate than investment expenditures, generating a current account surplus since 1995 that reached an incredible level of almost 10% of GDP in 2007.

The Chinese Development model is clearly in opposition to the recommendations of the so-called Washington Consensus that guided the change in development strategies of Latin American economies in the 1990's. One of the basic recommendations of the Washington consensus for the Latin-American economies is the adoption of the growth with external savings model, according to which foreign and domestic savings are complementary rather than substitutes (Bresser-Pereira, Oreiro and Marconi, 2015, pp. 78-82). So, a country can boost the rate of investment by opening its capital account and eliminate exchange controls to attract foreign savings that will add one-to-one with domestic savings. The increase in the investment rate will allow an increase in the rate of economic growth that is compatible with a balanced increase in both aggregate demand and productive capacity, the so-called warranted rate of growth (Harrod, 1939) which is given by equation (1) below:

$$g_w = \frac{h}{v} - \delta \quad (1)$$

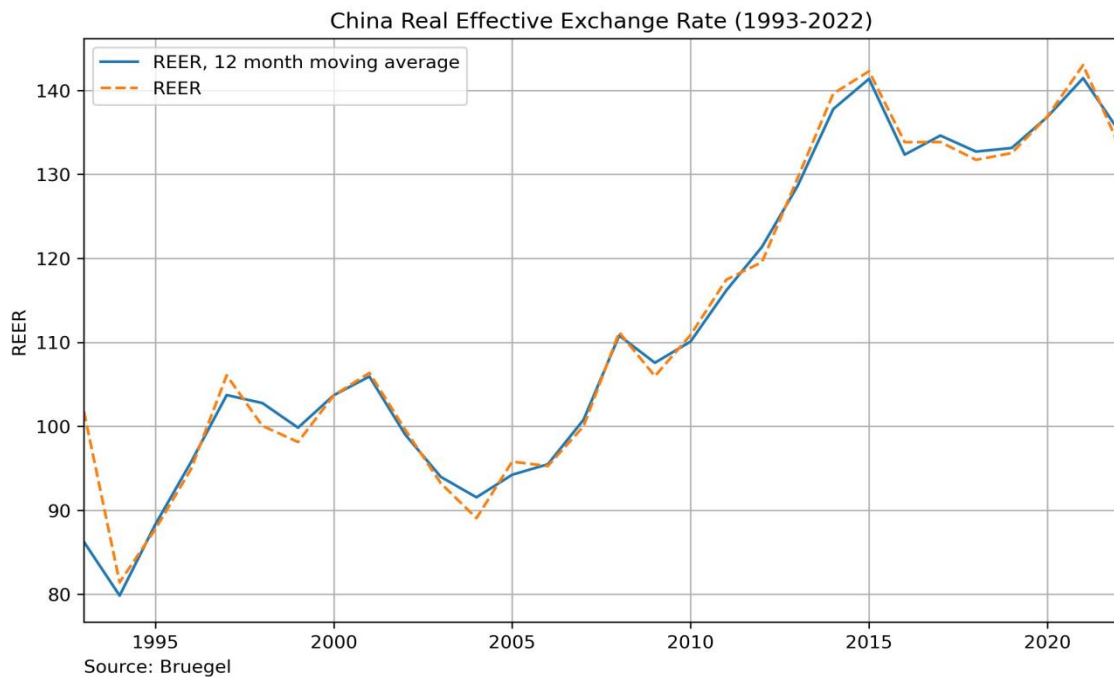
Where:  $g_w$  is the warranted rate of growth,  $h$  is the investment rate,  $v$  is the capital-output ratio and  $\delta$  is the rate of depreciation of the capital stock.

Figure 2 – Macroeconomic Aggregates



The huge increase in exports and the achievement of a huge surplus in current account will not be possible, however, without a deliberate policy on keeping the real exchange rate at competitive levels for a long period. As we can see in figure 3 below, from 1995 to 2005 the real effective real exchange rate in China are kept at low levels (in the figure 3 we are considering the exchange rate to be the price of domestic currency in term of foreign currency, which implies that a reduction in the exchange rate means a depreciation instead of an appreciation) the appreciation of real exchange rate at the end of 1990's was reversed in the beginning of XXI century, showing a deliberate policy of Chinese government to stimulate exports by increasing their price-competitiveness in international markets. This behaviour of real effective exchange rate is clearly compatible with the policy of Chinese government of funding its economic development by domestic savings, instead of being dependent of foreign savings as Latin American economies during this period.

Figure 3- China real effective exchange rate (1993-2022).



After experiencing an acceleration of GDP growth rate from less than 8% per year in 1998 to more than 14% in 2007, China stated a process of smooth decline in both the growth rate of GDP and GDP per-capita (see figure 4). In 2019 the year before the Covid-19 Pandemic, China GDP was growing at a rate of “just” 6% per-year, a decline off almost 57% in the rate of economic growth in a period of 12 years.

Figure 4- Growth rate of GDP and GDP per-capita



What are the underlying reasons for the decelerating pace of China economic growth in the last 12 years?

One hypothesis is that China, as other developing countries, may be falling in the so-called middle-income trap. According to the interpretation, emerging countries can grow at fast rates in the initial phase of economic development due to the spillover effects of the technological frontier located at high income economies (Aghion, Antonin and Bunel, 2021, p. 134). The problem with this source of catching-up is that as close is a country to the technological frontier, lower will be the productivity gain from firms in emerging countries in imitating the technological innovation of the firms in high-income countries. For an emerging economy to finish its transition to a high-income economy is necessary to change the investment-based growth for an innovation based-growth.

This explanation does not seem to be very compelling for the case of China. As a matter of fact, Chinese manufacturing firms were able in the last 15 years to increase its exports and market-share in high-tech manufacturing goods such as cars, solar panels, chips and 5G internet.

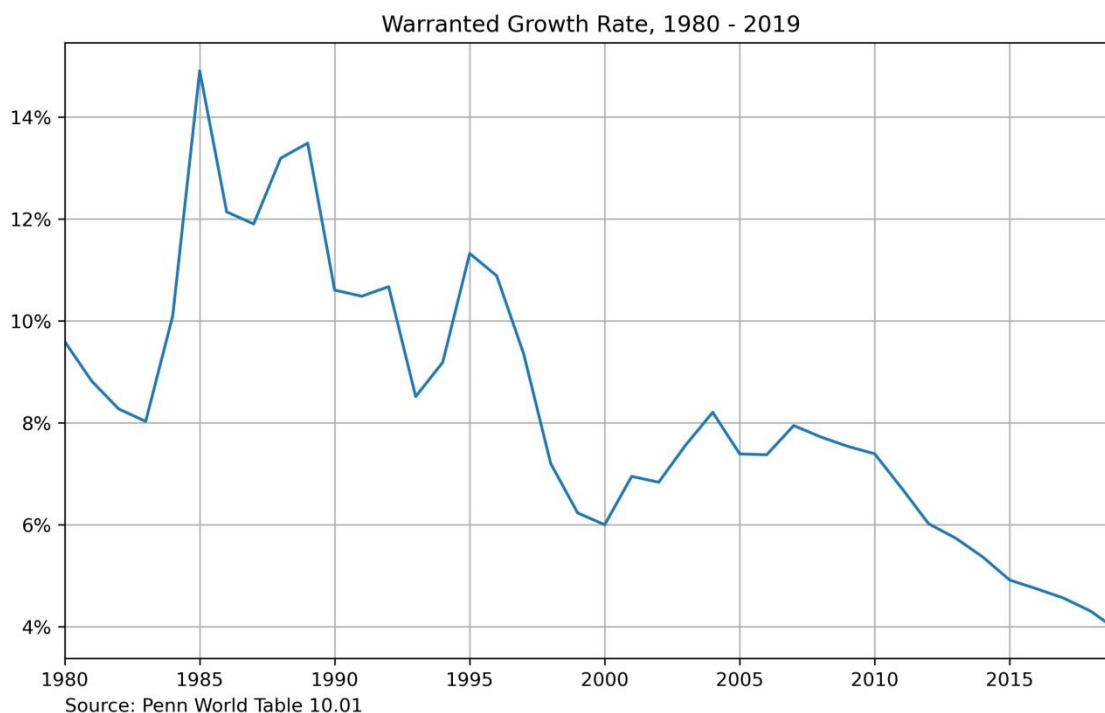
To understand the Chinese economic deceleration, we must analyse what happens to the warranted rate of growth as well as with the rate of growth of Chinese exports.

Figure 5 below shows our estimates for China's warranted growth rate from 1980 to 2019. As we can easily see on this figure, the warranted growth rate stated a process of sharp decline from 2007 on. This is a surprising result once we take in consideration that investment rate in China experienced a permanent increase from 40% in 2007 to 42 to 43% of GDP in 2019. All things remain constant, warranted growth rate had to be increased instead of being reduced. The only possible explanation for this strange result is the behaviour of capital-output ratio<sup>3</sup>. As a matter of fact, the capital-output ratio had increased in this period, which means a reduction in the productivity of capital. As we know the Chinese government answer to the 2008 financial crisis was to increase public investment in infrastructure (for example, railroads) and in housing. Maybe some of these investments are little productive and so incapable to increase the productive capacity of Chinese economy.

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<sup>3</sup> As a matter of fact, China's output-capital ratio increased from 2,88 in 2007 to 4,95 in 2019. See annex I.

Figure 5 – China's warranted growth rate from 1980 to 2019



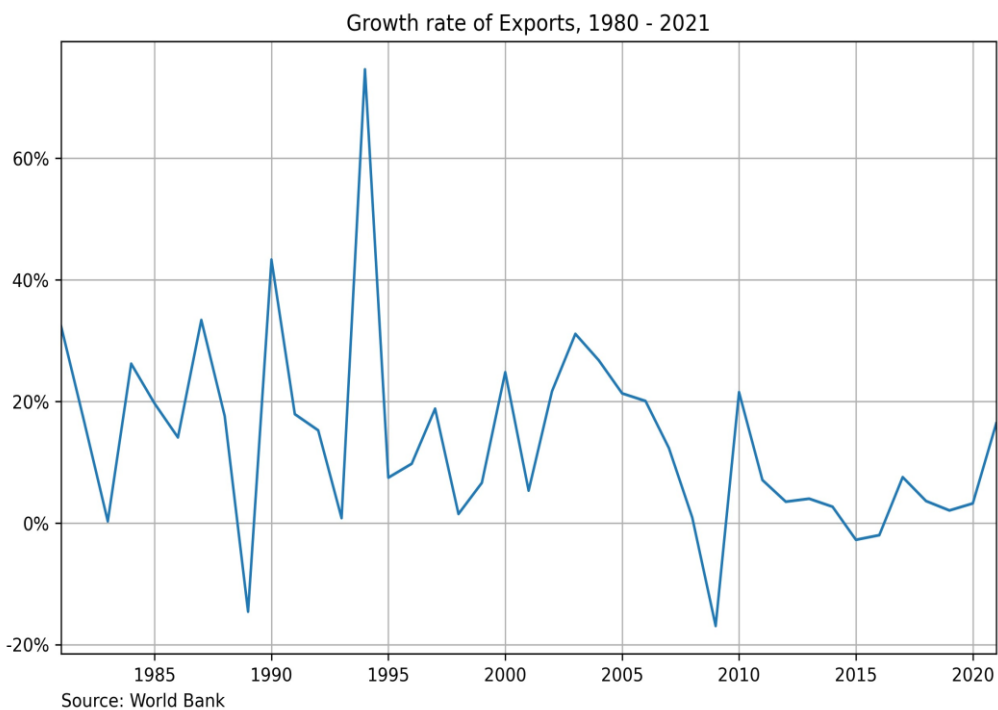
This reduction in the productivity of investment can be also the result of a lack of domestic demand for the services provided by the recently built infrastructure works. After reaching an astonishing peak of more than 50% of GDP in 2010, the saving rate in China declined to 43% of GDP in 2019. This value of the saving rate is too high for the last state of economic development which is the stage of high mass-consumption (Rostow, 1960, p.4). A high saving and investment rate is a necessary condition for an economy to take-off and to reach economic maturity defined as “the stage in which an economy demonstrates the capacity to move beyond the original industries which powered its take-off and to absorb and to apply efficiently over a wide range of its resources- if not the entire range – the most advanced fruits of (then) modern technology. It is the phase in which an economy demonstrates that it has the technological and entrepreneurial skills to produce not everything, but anything that it chooses to produce” (Rostow, 1960, p.10). At the state of high mass-consumption “the leading sectors shift towards durable consumers’ goods and services” (Ibid, p.10).

When an economy reaches this stage of economic development, a high consumption ratio is required to deliver the aggregate demand required for the expansion and diversification of consumers’ demand. China up to now appears incapable to make a successful transition from a nature to a high mass-consumption economy. As a result, the productivity of capital falls due to the lack of effective demand for the productivity capacity resulting from a high rate of capital accumulation.

Another explanation for China's decelerating rate of economic growth lies on the exhaustion of the export-led growth model. As soon as an economy is a small open economy in international markets, exports can be the leading component of autonomous demand growth (Oreiro and Costa Santos, 2023). The difficulties start to occur when the accumulated effects of a high rate of economic growth make the economy to be a major economy in international context. When such a situation occurs, it is no longer possible for an economy to led its economic growth by external demand but had to change the engine of autonomous demand growth for domestic demand such as consumption or military expenditures. As we can see in figure 6, after experiencing an average growth rate of exports of more or less 20% per year between 1985 to 2005, exports growth sharply declines to an average around 5% per year in the period between 2006 to 2019.

The fall in the rate of exports growth can be for sure attributed to the huge exchange rate appreciation of domestic currency after 2010 as we can see in Figure 3. But it is also the result of the huge size that Chinese economy reached in the last 15 years, which makes no longer possible for China to take a ride on the rest of the world economic growth, since China economy represents nowadays an important share of the world economy.

Figure 6 - Average growth rate of exports



To sum up, to avoid a middle-income trap China must change the engine of growth from the external demand cum capital accumulation for a domestic demand or high mass consumption pattern of economic development. Such a



stage of economic development, however, can hardly be reconciled with an autocratic political regime. If China aspires to be the economic leader of century XXI, then it will be necessary to make a peaceful transition for a western-based democratic society.

## References

AGHION, P; ANTONIN, C; BUNEL, S. *The Power of Creative Destruction*. Harvard University Press: Cambridge, 2021.

BRESSER-PEREIRA, L. C; OREIRO, J. L; MARCONI, N. *Developmental Macroeconomics: new developmentalism as a growth strategy*. Routledge: London, 2015.

HARROD, R. "An essay in Dynamic Theory". *Economic Journal*, (49) p. 14-33, 1939.

OREIRO, J. L; COSTA SANTOS, J. F. "The Impossible Quartet in a Demand Led Growth super multiplier Model for a Small Open Economy". *Brazilian Journal of Political Economy* 43 (3) p. 592-618, 2023. <https://doi.org/10.1590/0101-31572023-3448>

ROSTOW, W.W. *The Stages of Economic Development*. Cambridge University Press: Cambridge, 1960.

## Anex I - Evolution of Output-Capital Ratio in China

