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ABSTRACT

In 2020, after decades of "great international circulation" – a strategy of pursuing economic growth and development through export-oriented production – China announced that it would adopt a "dual-circulation" strategy. As was argued, "this means that, while China will continue to engage with global markets and supply chains, it will rely on domestic markets rather than external demand to drive economic growth" (Yu, 2023).

What happens to the Chinese growth rates under the dual circulation strategy? Is it inevitable that the dramatic slowdown of growth that occurred since 2007 will become permanent? This paper argues that the slowdown of the Chinese growth is due not only to the objective factors (slowdown of population increase, approach to the technological frontier), but also to policy choices made well before the "dual-circulation" strategy emerged. It is due first and foremost the cessation of foreign reserve accumulation after the "Great Recession" of 2008-09 that led to the appreciation of the yuan, decline in the growth of export, investment and GDP.

It is also argued that there are not only temporary costs of decoupling associated with restructuring (reorientation from foreign to domestic markets), but also permanent costs caused by the decline in international specialization and division of labor. It means that high growth rates could be maintained only at a higher price, in particular only with an even higher share of investment in GDP. Such a strategy can be justified only by security consideration, not economic ones.

Keywords: dual -circulation strategy, Chinese growth, export/GDP ratio, exchange rate undervaluation, foreign exchange reserves accumulation

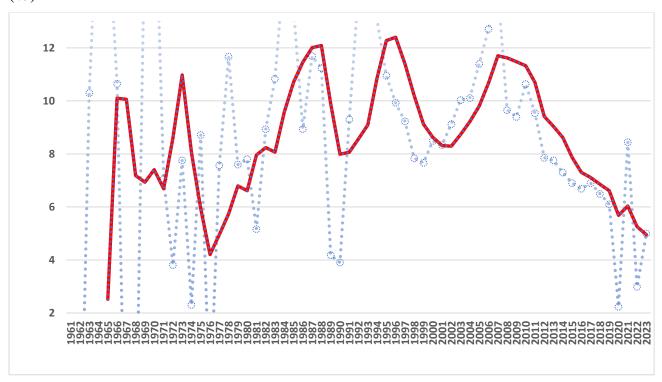
JEL classification: O11, O24, O47, O53.

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In 2007, Chinese GDP grew by 14%. Since then, growth rates have gradually declined to 5% in 2023. The five-year moving average growth rate in 2023 fell to the lowest level since reforms began in 1978, over four decades ago (fig. 1).

Figure 1. China's annual GDP growth rates, actual and 5-year moving average, 1962-2023 (%)



Source: <u>World Development Indicators.</u>

China survived COVID pandemic way better than other countries: growth rates remained positive in both 2020 and 2021, whereas in other G20 countries (with the exception of Turkey) there was a reduction of output. Life expectancy grew to 78 years in 2021, exceeding that of the

US, where it fell to 76 in 2021. However, the post-pandemic growth rates remained sluggish by Chinese standards (3% in 2022 and projected 5% in 2023).

Views about "dual-circulation" and the slowdown of growth

The debate about the possibility to maintain high growth rates of the 1980s-2000s is ongoing in China for over a decade. In May 2014 president Xi Jinping referred to the need to "adapt to the new normal" that was understood as the transition from double digit growth rates to a more moderate growth of 5 to 7%. Later, in 2020, after the break out of COVID pandemics and proliferation of sanctions and embargoes in the world economy, China announced the strategy of the "dual-circulation" envisaging the focus on the domestic markets. But it seems like decoupling from the international markets is understood as the inevitable consequence of the Western sanctions, not like a deliberate Chinese strategy (Lin and Wang, 2022).

It may well be that even Western sanctions would not lead to the decline in the international trade and other economic contacts between China and the world. Even more so that most non-Western countries are not ready to follow such a policy and those that try to follow are not very successful. Verma (2023) argued that "self-reliance India campaign" is infeasible.¹ So Chinese "dual-circulation" strategy may be regarded as a contingency plan in case there would be a collapse of international trade like in the 1930s.

Economists have offered various explanations for the slowdown of China's growth, including the decline in the population growth rate and the ageing of the Chinese population. These factors are real, but should not be exaggerated. The working age population and employment both grew at 2% annually from the 1980s, but such growth declined earlier this century before coming

¹ "Economic decoupling from China is infeasible in the near to medium term because the Chinese economy is deeply intertwined with the Indian economy. It will be expensive, and in some cases impossible, to replace China as a supplier in economic value chains. Moreover, reducing imports from China or restricting Chinese investment does not greatly hurt or punish China because its exports to and investments in India are a very small proportion of its global exports and investments. On the contrary, restricting investments from China into India will damage India much more than it will China. Chinese investments in India can play an important role in enhancing economic growth in the post-pandemic period by creating employment, strengthening the manufacturing sector, improving infrastructure, and increasing exports under Indian government's Atmanirbhar Bharat Abhiyan ("self-reliant India campaign") - (Verma, 2023).

to a complete halt in 2014 for working age population and in 2020 for the total population. This could explain the decline in GDP growth rate by two percentage points yearly.

Another factor is exhaustion of the advantages of economic backwardness: it is easier to catch up from a low base, especially because cutting-edge innovation is more difficult and costlier than copying existing technologies, whether for free or even by buying patents and copyrights. Developed economies have rarely grown for extended periods at the breakneck pace rate of the East Asian 'miracle' economies when they were 'catching up' or converging, and growth tends to slow in fast-growing economies as they approach the technological frontier.

After all, only five countries/territories have successfully gone from 'developing' (i.e., less than a fifth of US per capita income) to 'developed' (over half of US per capita income) status. These were Japan, South Korea, Taiwan, Hong Kong (HK) and Singapore. But their growth slowdowns have taken place after their per capita incomes reached over half the US level, whereas Chinese per capita GDP (at purchasing power parity, i.e., even in comparable prices) is currently under a quarter of the US level (fig. 2). In fact, marked slowdowns have only occurred in Japan and HK, whereas the other 'tigers' have continued to grow rapidly, avoiding the supposed 'middle-income trap'. If these experiences are any guide, China's growth slowdown is still a couple of decades away, if it happens at all (Lin, 2017).

Many Chinese economists speculate whether the slowdown of growth is temporary or permanent. Lin (2017) believes there is a need for industrial policy to avoid the "middle income trap", whereas Zhang (2017) argues that the market alone can fix the problem, if only obstacles for entrepreneurial innovations are removed. In 2016 Lin, Wang and Morgan (2016) argued that the main factors that led to the slowdown since 2010 are external and cyclical and were optimistic that a reacceleration to 8% in the medium run is possible under favorable conditions.

However, China's growth slowdown also appears to be due to policy choices, involving economic policy changes. The slowdown started over a decade ago – after the "Great Recession" of 2008-09, i.e. before COVID pandemic, before the new wave of sanctions, and before the initiation of "dual-circulation" strategy.

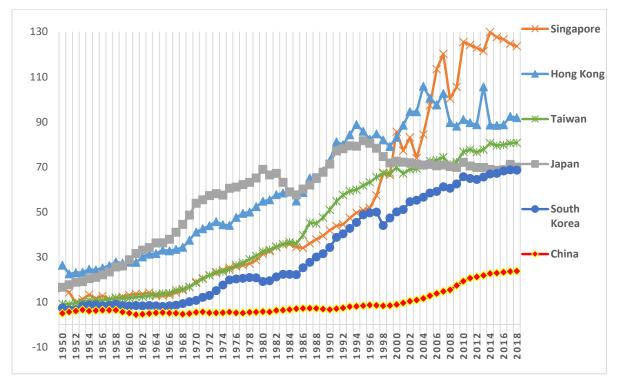


Figure 2. Per capita PPP GDP in some East Asian economies as shares of US (%)

Source: Maddison project database (2020).

Undervaluation of the exchange rate as an export-oriented growth-promoting industrial policy

There is an argument (Polterovich, Popov, 2004; Rodrik, 2008; Popov, 2010b, 2013,2019; 2020; Popov, Jomo, 2020) that breathtaking Chinese growth in the 1980s-2000s, quite like the rapid growth of Japan, Korea, Taiwan, and a number of ASEAN countries, has been driven by deliberate exchange rate undervaluation through rapid accumulation of foreign exchange reserves (FOREX), promoting exports and discouraging imports,

Management of the exchange rate is an important tool of non-selective industrial policy Popov, 2020) – the maintenance of the undervalued real exchange rate via accumulation of foreign exchange reserves (above the normal amount needed to ensure smooth trade and capital account transactions) is the important instrument of promoting economic growth based on export of tradable goods, although at the expense of non-tradables (Polterovich, Popov, 2004).

There are important differences between import duties and devaluation of the exchange rate. "Exchange rate protectionism" is more efficient policy to stimulate growth because decisions on import duties and government taxes/spending are affected by a poor quality of institutions (corruption and low efficiency of implementation), whereas low exchange rate policy is indiscriminate and nonselective by nature: it cannot be captured and "privatized" by particular interest groups – this makes it especially efficient growth promoting instrument in poor and middle income countries that generally suffer from corruption (Polterovich, Popov, 2004).

As it is stated in the UN flagship report (UN WESP, 2016), "reserve accumulation can have positive externalities on the production and export of tradables and industrial development and can thus be a feature of the country's development model. Undervaluation of the exchange rate can increase the competitiveness of exports, without the need for sector- or firm-specific subsidies or interventions".

As Griffith-Jones and Ocampo (2010) observe, the rationale for the accumulation of foreign exchange reserves "is usually found in either one of two explanations: the "competitiveness" (or, in more pejorative terms, "mercantilist") and the "self-insurance" motives. This mercantilist view that undervaluation of exchange rate via accumulation of foreign exchange reserves is in fact an industrial policy – aimed at promoting export oriented growth by benefiting the producers of tradables and exporters at the expense of the producers of non-tradables and importers – is gaining support in the literature (Dollar, 1992; Easterly, 2001; Rodrik, 2008; Bhalla, 2012; Greenwald, Stiglitz, 2013). If there are externalities from export and production of tradables (industrialization, development of high tech sectors), undervaluation of the exchange rate resulting from the accumulation of reserves is an efficient way to provide a subsidy to these activities and this subsidy is automatic, i.e. does not require a bureaucrat to select possible beneficiaries.

In short, this is a non-selective industrial policy promoting export and production of tradables that seems to be quite efficient especially in countries with high corruption and poor quality of institutions. The formal model demonstrating how the accumulation of reserves can spur growth, as well as the empirical evidence, is presented in Polterovich and Popov (2004). It is also shown that accumulation of reserves leads to disequilibrium exchange rate, which in turn causes the increase in export/GDP and trade/GDP ratios, which stimulates growth. There is strong evidence that accumulation of reserves can spur long-term growth in developing countries, although not in rich countries (Polterovich, Popov, 2004). If all countries use these policies, all will lose, and, on top of that, for developed countries this policy does not work. But for developing countries it works, and there are good reasons, why these countries should have sufficient policy space to use this tool to promote catch up development.

The policy of reserve accumulation is often considered to be self-defeating because in order to avoid inflation (that would eat up the impact of devaluation on real exchange rate) it is necessary for the monetary authorities to carry out sterilization policy, i.e. to sell government bonds in order to neutralize the impact of purchases of foreign currency on ballooning money supply. But sales of government bonds lead to higher interest rates that in turn attract capital from abroad that contribute to increase in foreign exchange reserves that again should be sterilized, which creates a vicious circle. That is why economists talk about "impossible trinity": a country cannot maintain at the same time an open capital account, managed exchange rate and independent monetary policy.

But many developing countries exercise control over capital flows (China and India would be the prime examples) and even without such a control, capital mobility – especially for large economies – cannot be considered perfect. In practice, as the statistics shows, the accumulation of foreign exchange is financed through government budget surplus and debt accumulation, but not through money printing (Polterovich, Popov, 2004). That is to say, most countries that accumulated reserves rapidly exhibited low inflation and low budget deficit (or budget surplus), but increasing holdings of government bonds by the public (see Polterovich, Popov, 2004).

When China stopped accumulating FOREX, growth slowed down

Since the beginning of market-oriented reforms in the late 1970s China was accumulating FOREX: they increased from 5% of GDP in 1980 to nearly 50% in 2010 (fig. 3). The result was the undervaluation of the exchange rate – real exchange rate, as measured by the ratio of Chinese to US prices, stayed within 25-40% in 1990-2007 (fig. 4) – this was way lower than for countries at a similar level of economic development (per capita income).

After the "Great Recession" of 2008-09, however, China stopped completely FOREX accumulation (fig. 3), so RMB appreciated – from 40% in 2007 to 65% in 2021 (fig. 4). As a result, exports growth slowed down – China's exports as a share of GDP peaked at 35% in 2005, but fell to below 20% by 2020 (fig. 5). Domestic consumption rose, savings, investments and growth inevitably declined (Popov, 2010 b; Popov, 2013). The investment share of GDP peaked in 2013 at 45% before declining (fig. 6).

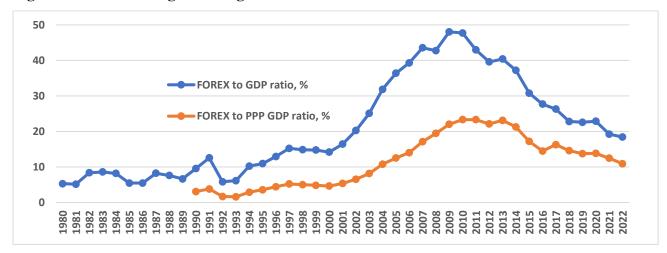


Figure 3. China's foreign exchange reserves as a % of GDP and PPP GDP

Source: World Development Indicators.

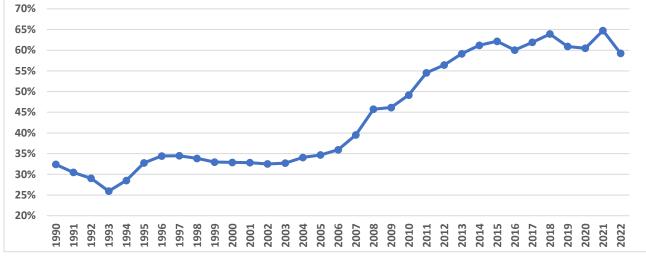


Figure 4: Real exchange rate of Chinese renminbi (%) (ratio of Chinese to international prices, as measured by the ratio of dollar GDP at the official exchange rate to PPP GDP)

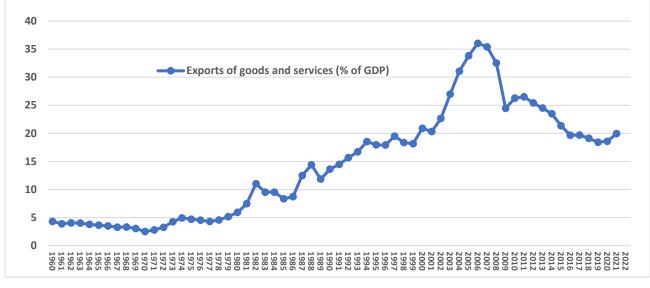


Figure 5: Exports of goods & services as a % of GDP, 1960-2022

Source: World Development Indicators.

Source: World Development Indicators.



Figure 6. China: Gross fixed capital formation as share of GDP (%)

Source: World Development Indicators.

The US, the International Monetary Fund, the World Bank and the G7 accused China of 'currency manipulation' to gain 'unfair' advantage in international trade, causing 'global imbalances', including the huge US current account deficit with China (Popov, 2010b, 2013). Whether the decision of China to stop the accumulation of FOREX and to allow yuan to appreciate was made under the pressure of the US (or whether there was a deal reached with the US on that issue) is not exactly known. However, the consequences of this policy change were obvious – China's positive current account, virtually a mirror image of the US current account deficit, declined from 10% of GDP in 2007 to zero in 2018, whereas US current account in the same period improved (fig. 7).

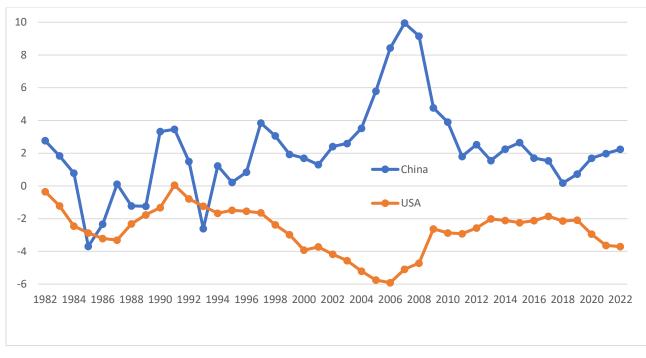


Figure 7. Current account balance of China and the US, % of GDP

Source: <u>World Development Indicators.</u>

Can China return to export-oriented growth model based on FOREX accumulation?

Accumulation of reserves means that the country saves more than it invests, produces more than it consumes, providing its savings to finance investment and consumption in other countries. This may sound like a drag on development; it is often argued that capital should flow from rich to poor countries because K/L ratios are lower in developing countries and hence the returns on capital are greater. However, there may be crowding out of domestic savings by the foreign savings, so the national debt grows, but economic development does not accelerate.

Besides, this is only one effect, the other effect is a dynamic one and it works in a completely opposite direction: if a country manages somehow to become competitive in the world markets (either via higher productivity or through lower wages or via low exchange rate), it starts to export more than it imports and develops a trade surplus. If this surplus is stored in the form of foreign exchange reserves, the exchange rate gets undervalued and the trade surplus persists. That

is why countries that develop faster than the others usually have a trade surplus (United States since the Civil War of 1861-65 and until the 1970s, Japan and Germany after the Second World War, East Asian Tigers and Dragons and China, of course, more recently). Accumulation of reserves (that are invested in reliable short-term government securities and yield very low interest rates) implies losses to the national economy, but every policy has costs – this is a price to pay for promoting growth.

In fact, countries that managed to achieve high growth rates were mostly net creditors, not net borrowers; their current accounts were positive, i.e. they were saving more than they were investing (fig. 8). Even controlling for the level of development, PPP GDP per capita in the middle of the period, 1975, the relationship between the current account surplus and growth rates in 1960-2000 is still positive and significant² (Popov, 2010 a).

This is known as the Feldstein-Horioka puzzle – high correlation between domestic savings and investment even among countries with relatively open capital accounts, contrary to the prediction of the theory that capital should flow to countries with better investment climate and rates of return on investment. With high domestic savings rate comes high investment rate, which usually, although not always, leads to faster growth.

In the words of Paul Krugman, since the early 1980s there have been three big waves of capital inflows to developing countries, but none of them resulted in a growth miracle. "The first wave was to Latin American countries that liberalized trade and opened their markets in the wake of the 80s debt crisis. This wave ended in grief, with the Mexican crisis of 1995 and the delayed Argentine crisis of 2002.

² GROWTH = 0.68* Ycap + 0.12***CA + 0.05,(1.80) (3.44)

N=91, R2 = 0.23, robust standard errors, T-statistics in brackets below, where *GROWTH* –annual average growth rates of per capita GDP in 1960-99, %, Ycap – logarithm of per capita PPP GDP in 1975,

CA – average current account to GDP ratio in 1960-99, %.

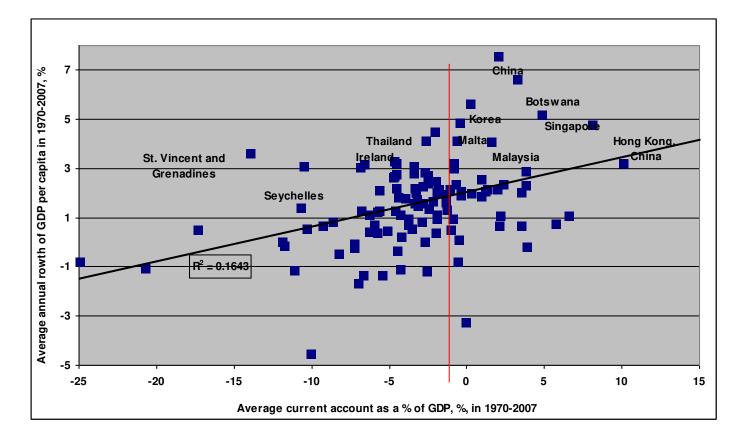


Figure 8. Average current account as a % of GDP and growth of GDP per capita, %, in 1970-2007

Source: World Development Indicators.

The second wave was to Southeast Asian economies in the mid-90s, when the Asian economic miracle was all the rage. This wave ended in grief, with the crisis of 1997-8.

The third wave was to eastern European economies in the middle years of this decade. This wave is ending in grief as we speak.

There have been some spectacular development success stories since 1980. But I'm not aware of any that were mainly driven by external finance. The point is not necessarily that

international capital movement is a bad thing, which is a hotly debated topic. Instead, the point is that there's no striking evidence that capital flows have been a major source of economic success"³.

In view of this evidence, the developing countries' determined policy choices to rely on external financing are ironic. It is also ironic that while development economists are preoccupied by "capital flowing uphill" problem (from developing to developed countries), the best growth record is exhibited exactly by countries with positive current accounts and large reserve accumulation that are generating this uphill movement of capital.

Marshal plan for Western Europe right after the Second World War may have been the first and the last success story of foreign financing contributing substantially to economic revival. But even in this case it could be argued that without appropriate domestic (European) institutions and mobilization of domestic savings, the (relatively) rapid growth would not happen. Foreign financing of Japan after the Second World War was insignificant, whereas Japanese postwar growth was more impressive than European. Economic miracles happened only in countries that relied on mobilization of domestic savings, not in countries that were seeking to bridge the financing gap through borrowing abroad, as development economists suggested.

One argument against the policy of reserve accumulation and undervaluation of the exchange rate for developing countries is the following: if all poor countries would pursue this policy, developed countries would finally accumulate unsustainable levels of debts and the inevitable subsequent adjustment may be painful. There are fears that "exchange rate protectionism" can result in "beggar-thy-neighbor policies": obviously all countries cannot exercise these policies at the same time to achieve undervaluation of their exchange rates. If all countries use these policies, all will lose, and, on top of that, for developed countries this policy does not work, so their losses would be the greatest. But for developing countries it works, and there are good reasons, why these countries should have sufficient policy space to use this tool to promote catch up development.

³ Krugman, Paul (2009). Finance mythbusting, third world edition. Nov 10, 2009. – Paul Krugman's blog: <u>http://krugman.blogs.nytimes.com/2009/11/09/finance-mythbusting-third-world-edition/</u>

True, trade surpluses resulting from undervaluation of the exchange rate due to reserve accumulation may lead to what is now called "global imbalances", driving the other countries into debt, but there is some room for such a scenario that in a sense will only reverse the opposite trend of the 19-20th centuries (US enjoyed a trade surplus for nearly 100 years after the Civil War of the 1860s driving many developing countries into debt – see Popov, 2010 a, b; 2011 for details).

Today the debt of the rich countries is not that high. France, Greece, Portugal, Spain the UK and the US are net international debtors (US – close to 100% of GDP), but Canada, Germany, Japan, the Netherlands, Norway, South Korea, Switzerland are net creditors.

So reserve accumulation can work as a powerful industrial policy development tool (theoretically, every externality could be taken care of through taxes, but in practice selective policies rarely work). Because protectionism is currently *de facto* outlawed by WTO, exchange rate protectionism is the only available tool for promoting catch up development, in a way – the instrument of last resort. Reserve accumulation in poor countries will not continue forever, it will come to an end, once they will catch up with the West. Meanwhile, developed countries get a chance to consume more than they produce. Why not go into debt to help the global South catch up with the West sooner?

Acceptance by the West of global imbalances (current account deficits leading to debt accumulation) would help to overcome the major disproportion of our times – income gap between developed and developing countries. This gap was widening for 500 years and only now, after the Second World War, there are some signs that this gap is starting to close (Popov, 2015). Chances to eliminate this gap sooner rather than later would be better, if the West would go into debt allowing developing countries to have trade surpluses that would help them develop faster. Previously, in 16-20th century, it was the West that was developing faster, accumulating surpluses in trade with "the rest" and using these surpluses to buy assets in developing countries, while "the

rest" were going into debt. Now it is time for "the rest" to accumulate assets and for the West to go into debt.

Concluding remarks

Growth of productivity, labor productivity, as well as total factor productivity, is associated with the expansion of the international trade, which over the years, as available data suggest, was growing faster than GDP (fig. 9). In fact, trade in general and international trade in particular has been one of the sources of productivity growth due to specialization and division of labor. Had it not been for the outstripping growth of the international trade, the productivity increases and economic growth would be slower.

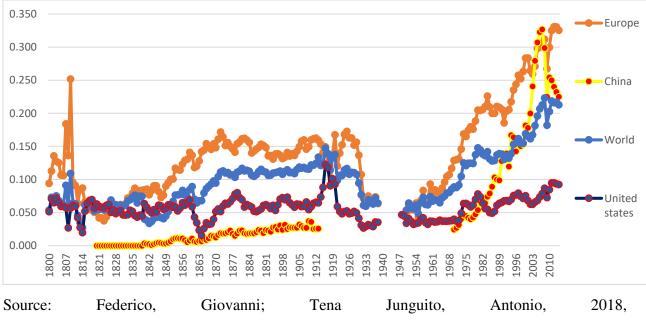


Figure 9. Export/GDP ratio for major regions and countries in 1800-2014

Source: Federico, Giovanni; Tena Junguito, Antonio, 2018, "Openness_1800_2014_Ftwthd_201710_V01.Xlsx", Federico-Tena World Trade Historical Database. Exporting to world markets, especially to developed countries, enables the upgrading of quality and technology standards and yields social returns in excess of returns to particular exporters. The greatest increases in productivity are registered at companies that export to advanced (Western) markets and that export hi-tech goods (Harris & Li, 2007; Shevtsova, 2012). It has been also shown that the gap between the actual level of development and the hypothetical level that corresponds to the degree of sophistication of a country's exports is strongly correlated with productivity growth rates (Hausmann et al., 2005). To put it differently, it pays off to promote exports of sophisticated and high tech goods. Not all the countries that try to promote such exports succeed, but those that do not try, virtually never engineer growth miracles.⁴

There is no doubt that the growth of all countries would suffer in case of decoupling; if international trade declines, it is even possible that the world would enter in a recession similar to the "Great Depression" of the 1930s (fig. 9). China as the largest economy in the world is better prepared for the isolation and decoupling, it will suffer less than others from the collapse of the international trade, but of course even for China there would be costs. It means that high growth rates in case of decoupling could be maintained only at a higher price, in particular only with an even higher share of investment in GDP.

As Yu (2003) argues, "even if the geopolitical situation deteriorates further, China cannot disengage fully from global supply chains – at least not without paying a heavy price. But the same is true of the West, which may be tempted by the idea of forcing China out. Just as Chinese industry would suffer massively from the economy's isolation, so would Western businesses".

Hence the best dual circulation strategy for China is the one that does not lead to the reduction of international trade and decoupling from the world markets. The only reasonable

⁴ One exception could be Botswana that had one of the highest rates of per-capita GDP growth in the last 50 years (5% during 1960-2010), which was primarily driven by exports of primary commodities (namely, diamonds) and not of high-tech goods. The other exception may be Oman: out of 20 economies with average growth rates of GDP per capita in 1950-2010 of 3% and more a year, Oman was the only oil rich state (nearly 5% growth a year) – (Popov, Jomo, 2017). True, many other oil and gas exporters in the Persian Gulf and elsewhere quickly became rich in recent decades, but this was due not to higher growth rates of output (these were moderate), but to the improvement in the terms of trade – their income from resource exports grew much faster than their output and exports.

raison d'etre for the isolation and self-sufficiency policy could be the national security considerations, not economic ones.

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