

Currency Wars

WHY RUSSIA AND CHINA ARE RAPIDLY ACCUMULATING FOREIGN EXCHANGE RESERVES

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The specter of currency wars is again haunting policymakers.¹ An outburst of competitive devaluations of national currencies happened on a major scale during the Great Depression. In recent decades, there has been a rapid accumulation of reserves by developing countries, especially China. This is reviving the threat of a surge of exchange rate protectionism.

The ratio of foreign exchange reserves (FOREX) to GDP in China and Russia has dramatically increased (**Figures 1a, 1b**), and there are countries (like Botswana, Hong Kong, Malaysia, and Singapore) with even higher ratios of reserves to GDP. In fact, most developing countries have been accumulating reserves rapidly over the last 10 to 20 years, so the global ratio of FOREX-to-GDP and FOREX-to-import has more than doubled (**Figure 2**). But in Russia and China this ratio has increased five or more times in recent decades. Why have so many developing countries, including China and Russia, suddenly begun to build up their reserves?

This memo argues that reserve accumulation is an industrial policy that favors profits, savings, investment, exports, the tradable goods sector, and growth at the expense of wages, non-tradables, consumption, and imports. Sometimes called exchange rate protectionism, it became especially popular after rounds of trade liberalization negotiations within the GATT-WTO system de facto “outlawed” conventional tariff and non-tariff protectionism.

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¹ Currency Wars: Economic Realities, Institutional Responses, and the G-20 Agenda. Conference at Peterson Institute for International Economics, Washington, DC, April 2, 2013 (http://www.piie.com/events/event_detail.cfm?EventID=272)

Figure 1a.

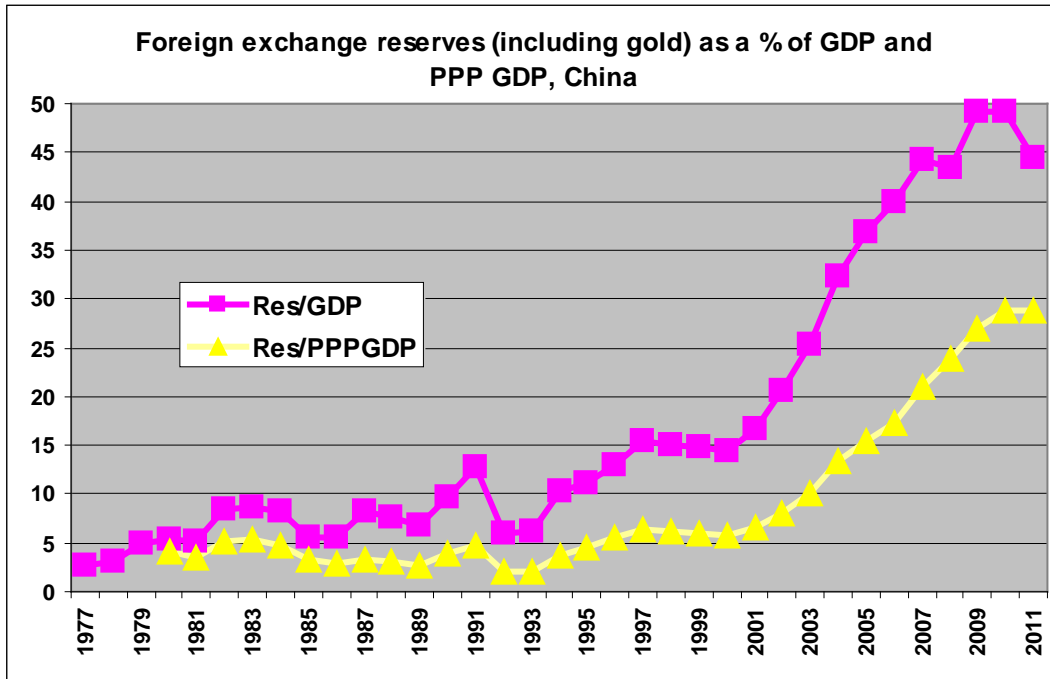
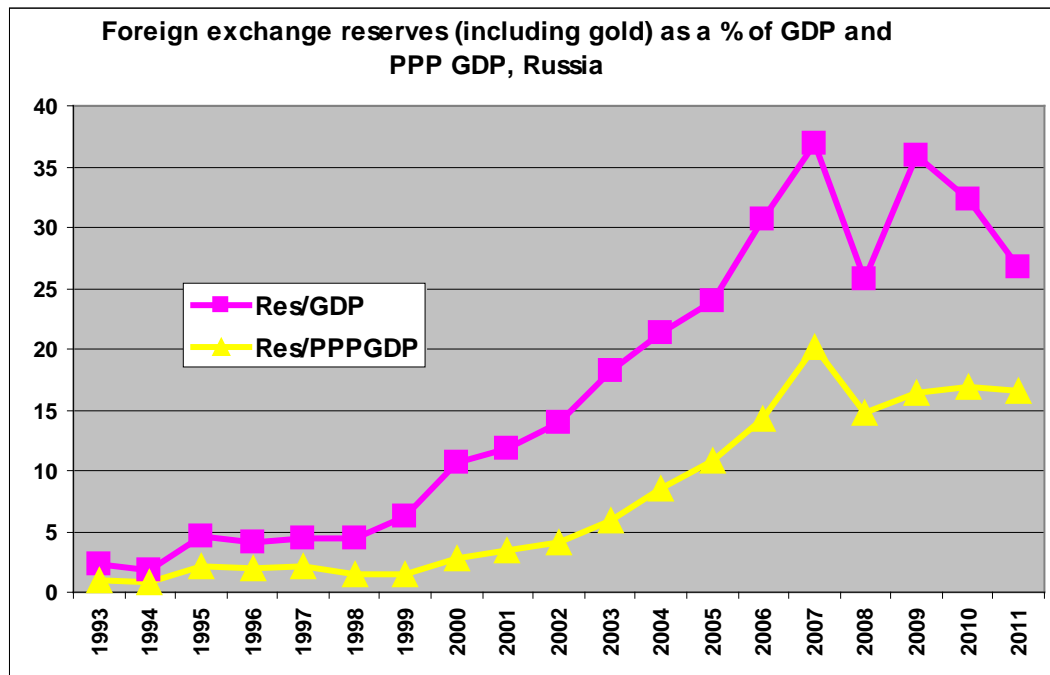
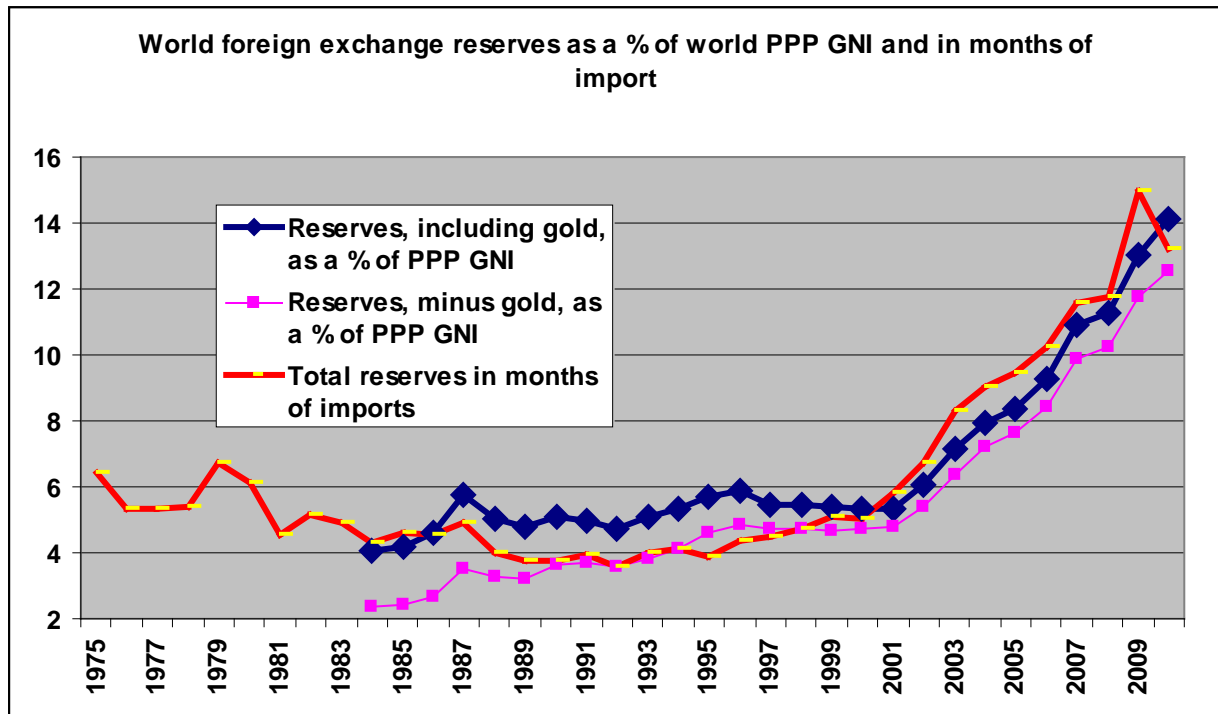


Figure 1b.



Source: World Development Indicators.

Figure 2.



Source: World Development Indicators.

For resource rich countries, this policy is especially important as it helps to avoid “Dutch disease” – an over-appreciation of the exchange rate of the national currency that kills manufacturing and high tech export, and encourages external financing and debt accumulation. That is why Russia—more abundant in resources than China—should have pursued reserve accumulation more vigorously than China, but in reality it has been the other way around.

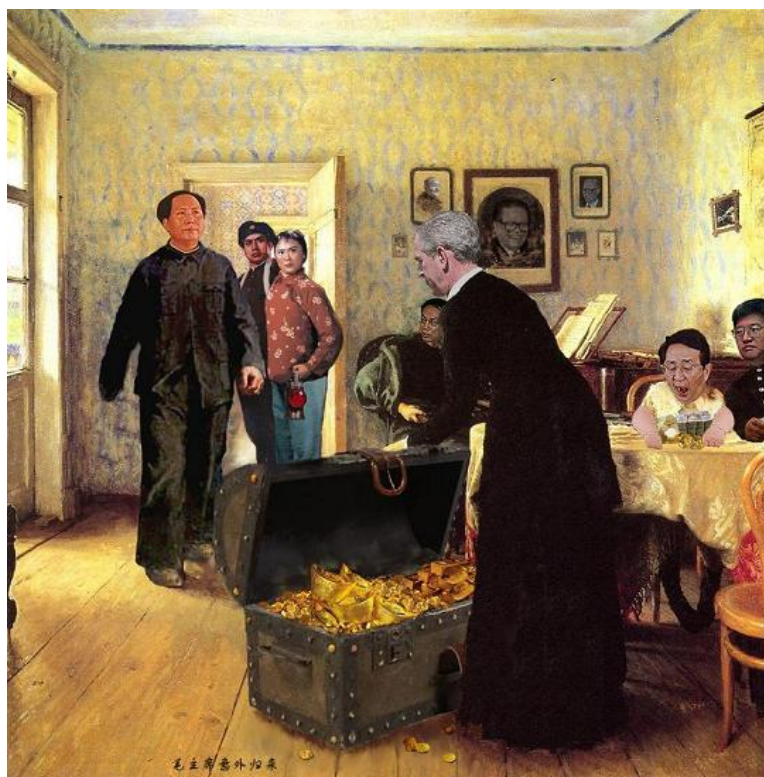
Critical Views

Many have considered the policy of reserve accumulation to be wrongheaded. An increase in FOREX represents a portion of national savings that is not invested in the national economy (for example, on infrastructure, education, or health care). It is exported out of the country to finance consumption and investment elsewhere. On top of this, FOREX yields low returns because it is invested in reliable instruments, such as U.S. treasury bills and short-term obligations of other Western governments. Investing these savings inside the country would yield higher returns.

In Russia and China, such arguments are common and made mostly by left-leaning critics of the government. The notion is well-captured in the remake of an Ilya Repin painting (**Figure 3**), which shows how the Chinese “left”² views the situation.

² The “left” signify orthodox communists who criticize the mainstream Communist Party line.

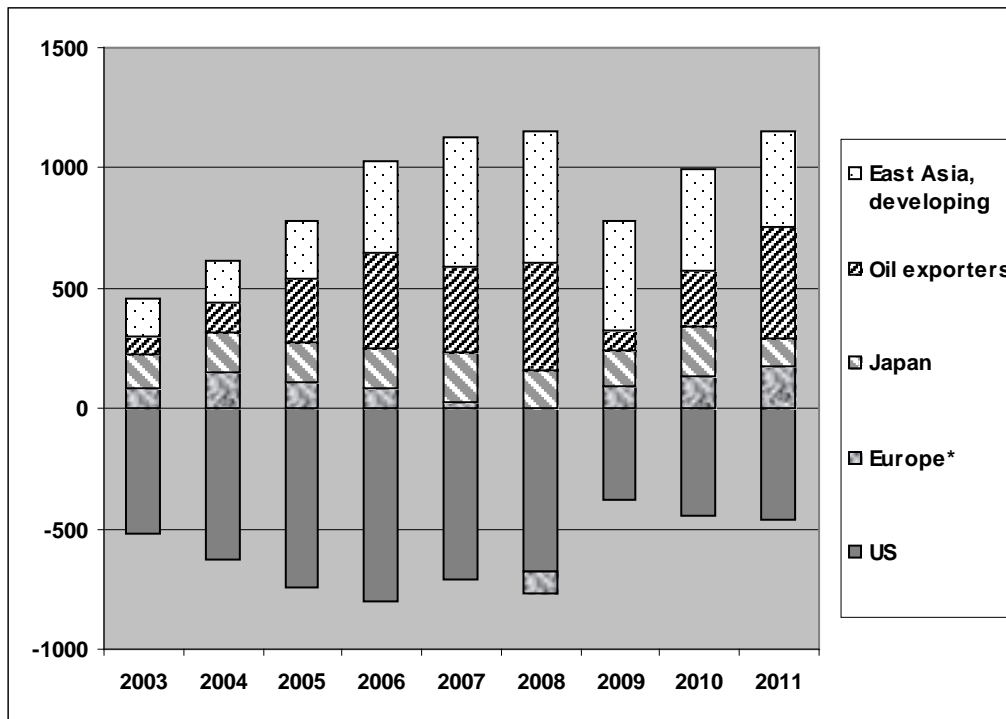
Figure 3. How the Chinese “left” view the accumulation of reserves in a remake (top) of Ilya Repin’s “They Did Not Expect Him” (1884-8).



It shows Mao with two fictional heroes of the anti-Japanese war coming to get Chinese gold from former U.S. president George W. Bush. The gold was given to Bush by Jiang Zemin whose portrait is on the wall. (Foreign exchange reserves are actually not mainly in gold but in dollar investments in U.S. treasury bills). The two characters sitting at the table are corrupt former party secretary of Shanghai Chen Liangyu (sentenced to 18 years in prison in 2008) and liberal economist Zhang Weiying.

The United States believes that China and Russia (and other states) accumulate reserves in excess of normal needs (ordinarily to service international trade and capital flows) in order to create artificial demand for foreign currency and to underprice their national currencies. They call it exchange rate protectionism, or a disequilibrium exchange rate, an attempt to gain unfair competitive advantage via the manipulation of exchange rates. This issue is also known in the United States as a problem of “global imbalances” – a U.S. trade and current account deficit financed by the accumulation of reserves by China, as well as Russia, other oil-exporting states, and Japan. These reserves are invested into U.S. treasury bills, in this way financing the U.S. current account deficit (an excess of consumption over production, and investment over national savings). Even though the U.S. current account as a percentage of GDP decreased somewhat over 2007-2009, it remains large (Figure 4), with U.S. net international indebtedness approaching 30 percent of GDP (Figure 5).

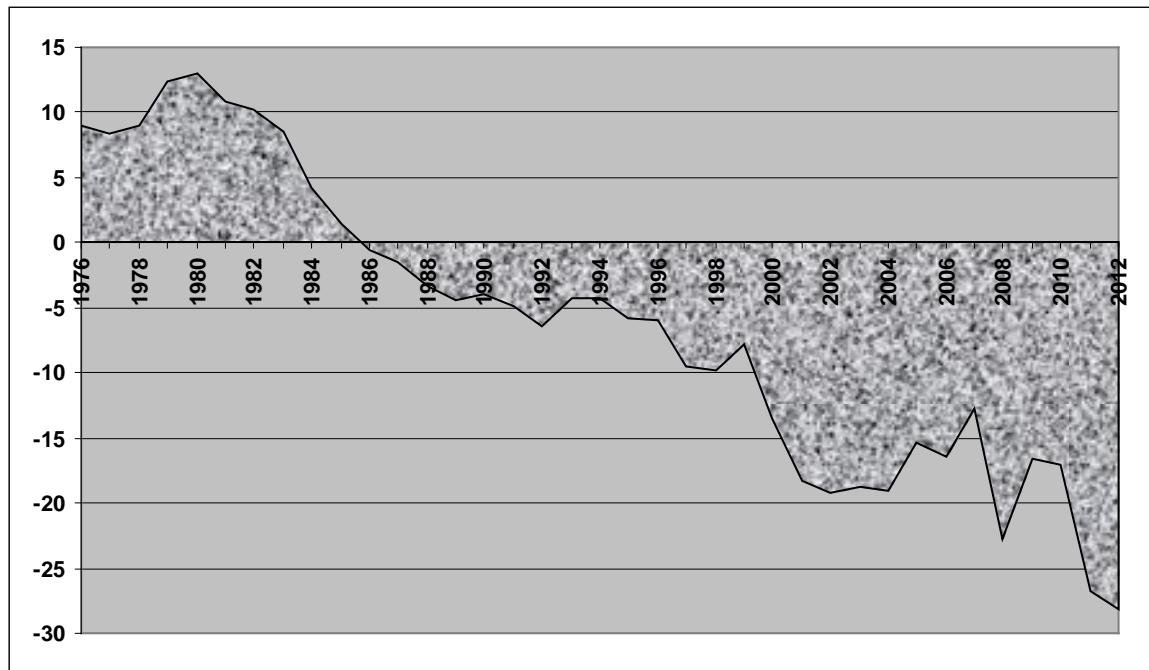
Figure 4. Balance of payments on current accounts for some countries and country groups, 2003–2011 (in billion dollars).



*Europe consists of the EU-15, the new EU member states, and Iceland, Norway and Switzerland.

Source: World Economic Situation and Prospects. United Nations, NY, 2013.

Figure 5. Net international investment position of the United States, % of GDP.



Source: Bureau of Economic Analysis (<http://www.bea.gov/>)

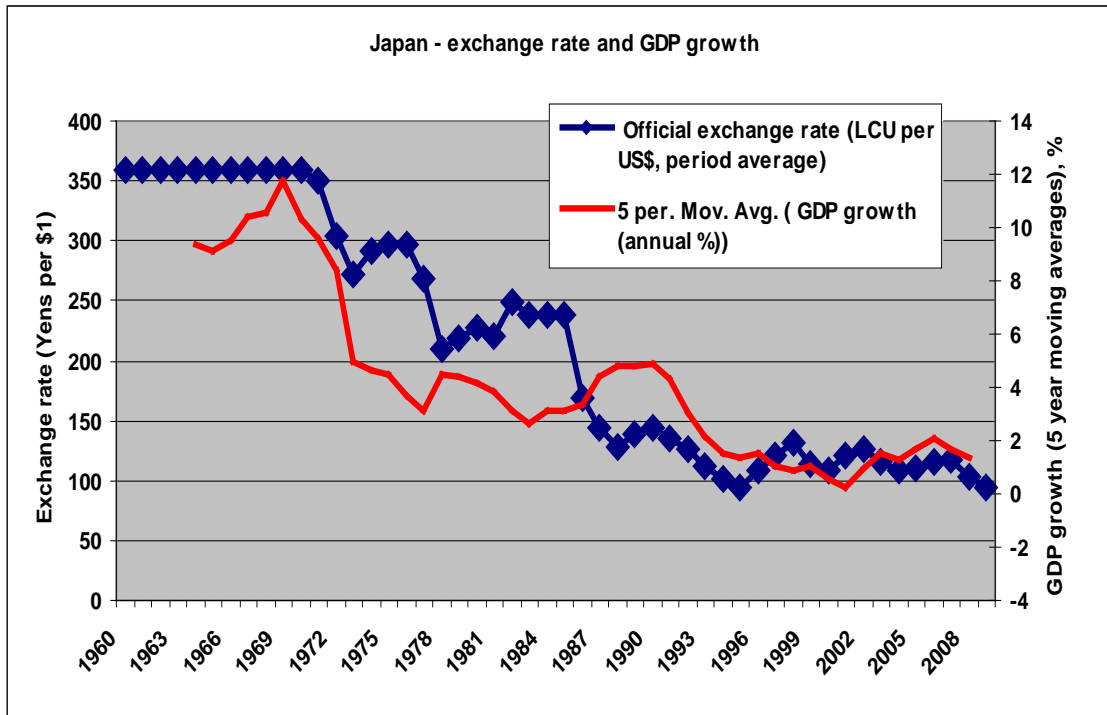
Why do Chinese and Russian central banks continue to accumulate reserves despite criticism at home and in the face of U.S. pressure? In China and Russia, there appears to be a gut feeling that an appreciation of the national currency can stop rapid growth in the same way as the 1985 Plaza Accord led to a revaluation of the yen, which brought an end to rapid Japanese growth. Many believe that the appreciation of the yen was one reason for Japan's stagnation in the 1990s and its weak growth afterwards (Figure 6).

A Non-Conventional Explanation

A non-conventional view of reserve accumulation—as an industrial policy to promote export oriented growth—has been gaining support. This is not a short-term Keynesian effect, but a long term effect operating through export externality (and strengthened by the subsequent inflow of FDI). In developed countries, trade/GDP ratios are already at optimal levels. In developing countries this ratio is below optimal, so a special policy is needed to reap the benefits of externality from export.

Theoretically, all externalities can be properly managed via taxes and subsidies, but these are selective tools of industrial policy; a clean bureaucracy is needed to successfully use these growth-promoting tools. Undervaluation of a currency is equivalent to import duties for all tradables with simultaneous subsidization of exports, but it is a non-selective industrial policy instrument that can be successfully used even in highly corrupt environments.

Figure 6.



Source: World Development Indicators.

A formal model demonstrating how the accumulation of reserves can spur growth, as well as the empirical evidence, is presented in Polterovich and Popov (2004) and in Popov (2005, 2010, 2011). These papers show that an accumulation of reserves leads to a disequilibrium in exchange rates. This, in turn, causes an increase in export/GDP and trade/GDP ratios, which stimulates growth.

There is strong evidence that an accumulation of reserves can spur long-term growth in developing states, if not in wealthy ones. If all states used such policies, all would lose. On top of this, for developed states, this policy would not work. But for developing states it does. With good reason, these states should have sufficient policy space to use this tool to promote catch-up development.

Accumulation of reserves means that a country saves more than it invests, and produces more than it consumes, thereby making savings to finance investment and consumption in other states. 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 returns on capital are higher. However, this may lead to the crowding out of domestic savings by foreign savings, so national debt grows while economic development does not accelerate.

Besides, this is only one effect. Another is dynamic and works in the completely opposite direction: if a country manages to become competitive in world markets (whether via higher productivity, lower wages, or a low exchange rate), it begins 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 others usually have a trade surplus, like the United States in the 1870s-1970s, Japan and Germany after World War II, the East Asian Tigers and Dragons, and of course China more recently. An accumulation of reserves (invested in reliable short-term government securities that yield very low interest rates) implies losses to the national economy, but every policy has costs – there is a price to pay for promoting growth.

Capital Flowing Uphill - External Financing and Growth

In fact, countries that have managed to achieve high growth rates mostly have been net creditors, not net borrowers; their current accounts have been positive, i.e., they have saved more than they have invested (**Figure 7**). Even controlling for level of development-PPP GDP per capita in the middle of the period (1975), the relationship between current account surplus and growth remains positive and significant.

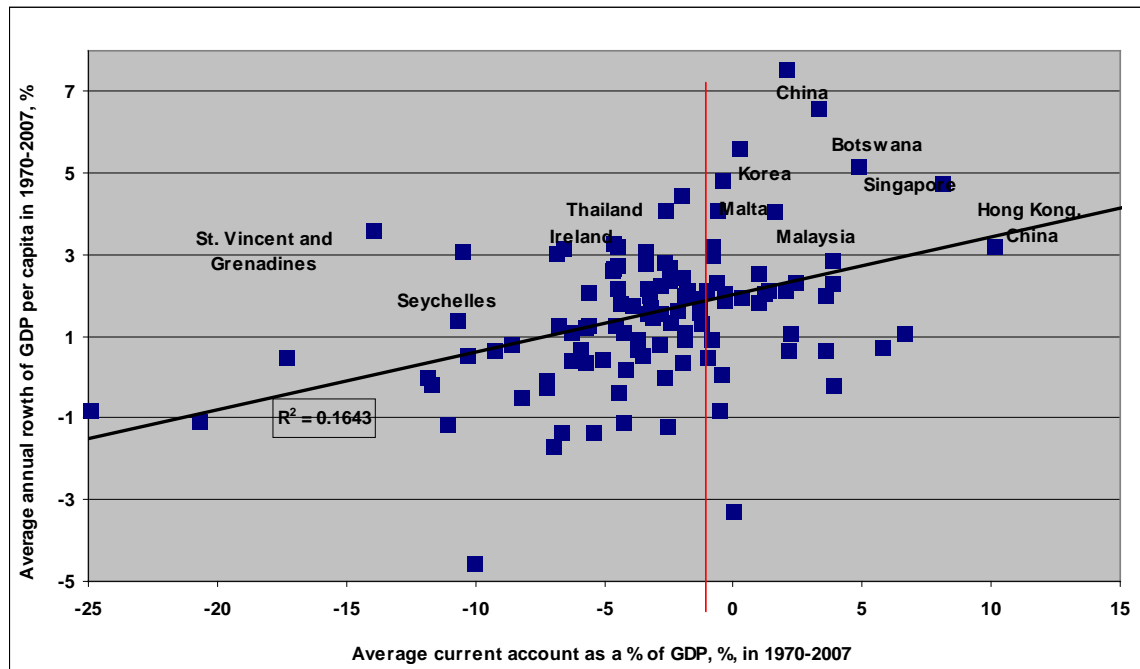
This is known as the Feldstein-Horioka puzzle—a high correlation between domestic savings and investment, even among states with relatively open capital accounts, contrary to the theory that capital should flow to countries with better investment climates and rates of return on investment. With high domestic savings rates comes high investment rates, which usually (if not always) leads to faster growth. In the words of Paul Krugman (2009), there have been three large waves of capital flows to developing countries since the early 1980s, but none of them resulted in growth miracles:

“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. 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 am not aware of any 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 light of this, a developing country’s policy choice to rely on external financing is ironic. It is also ironic that while development economists are preoccupied by problems of “capital flowing uphill” (from developing to developed countries), the best growth record is exhibited precisely by those states that are generating this uphill movement of capital, with positive current accounts and large reserve accumulations.

³ Paul Krugman, “Finance mythbusting, third world edition,” November 10, 2009, <http://krugman.blogs.nytimes.com/2009/11/09/finance-mythbusting-third-world-edition/>

Figure 7. Average Current Account as a percent of GDP and Growth of GDP per Capita, percent, 1970-2007.



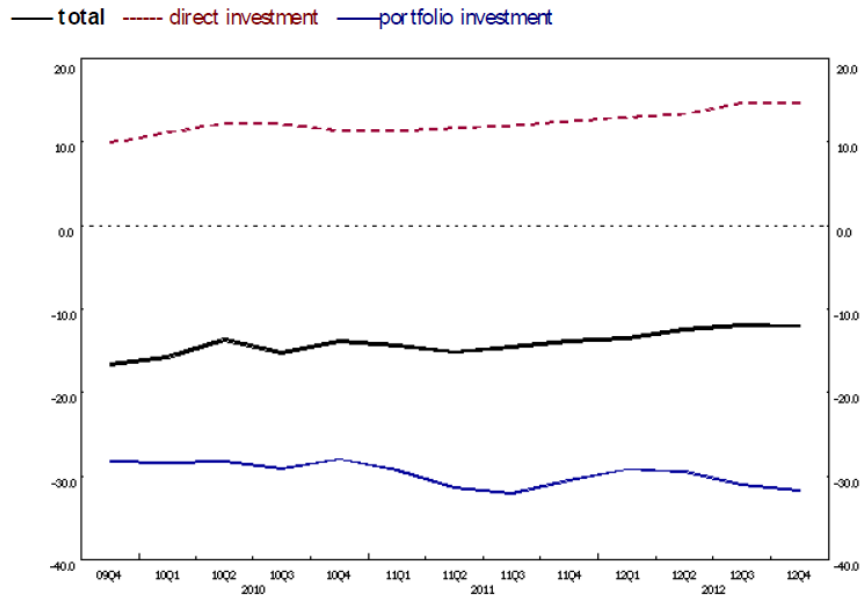
Source: World Development Indicators.

The Marshall Plan for Western Europe right after World War II may have been the first and last success story of foreign financing contributing substantially to economic revival. However, even in this case, it could be argued that without appropriate domestic (European) institutions and mobilization of domestic savings, (relatively) rapid growth would not have occurred. Foreign financing of Japan after World War II was insignificant, whereas Japanese postwar growth was more impressive than European growth. 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.

The argument against the policy of reserve accumulation and undervaluation of the exchange rate for developing countries is the following: if all poor countries were to pursue this policy, developed countries would ultimately accumulate unsustainable levels of debt and the inevitable subsequent adjustment would be painful.

But today, the debt of wealthy states is not that high. The United States has net international indebtedness of about 30 percent of GDP (**Figure 5**), the Euro area has net international liabilities of just over 10 percent of GDP (**Figure 8**), and Japan is a net creditor with net international assets of nearly 50 percent of GDP (**Figure 9**). It is exactly developing countries that are the major international debtors, whereas developed countries (with some well known exceptions, like Spain, Greece and Portugal) are mostly net creditors (Germany, Japan) or modest debtors (United States and UK), so there is still room for the West to go into debt (**Table 1**).

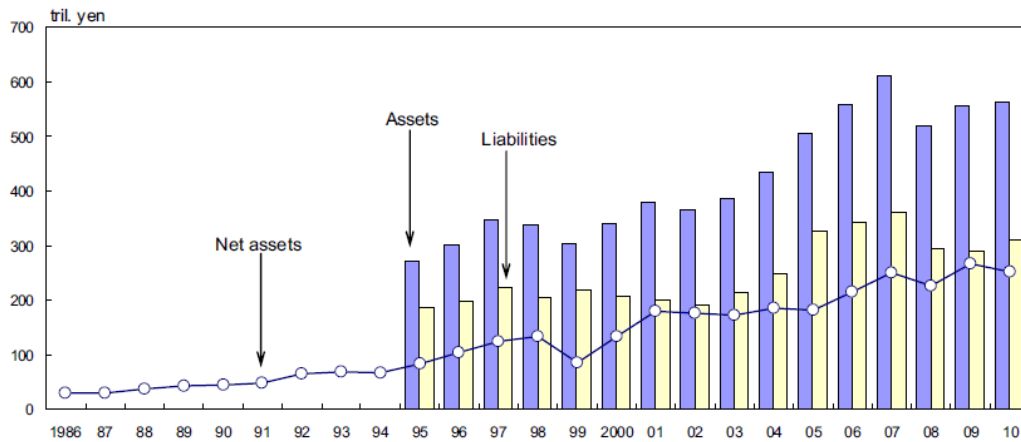
Figure 8. Net Euro Area International Investment Position, as a percent of GDP, Outstanding Amounts at the End of the Period.



Source: European Central Bank

(http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Eurosysteme_et_international/PR-ECB-euro-area-balance-of-payments-february-2013.pdf)

Figure 9. Japan's International Assets and Liabilities, Trillion Yen.



Note: Figures for 1995 and after are calculated in accordance with the fifth edition of the *Balance of Payments Manual* issued by the International Monetary Fund (IMF), while those for years through 1994 are based on the fourth edition.

Source: Japan's International Investment Position at Year-End 2010 International Department, Bank of Japan. BOJ Reports and Research papers, August 2011

(http://www.boj.or.jp/en/research/brp/ron_2011/data/ron110826a.pdf).

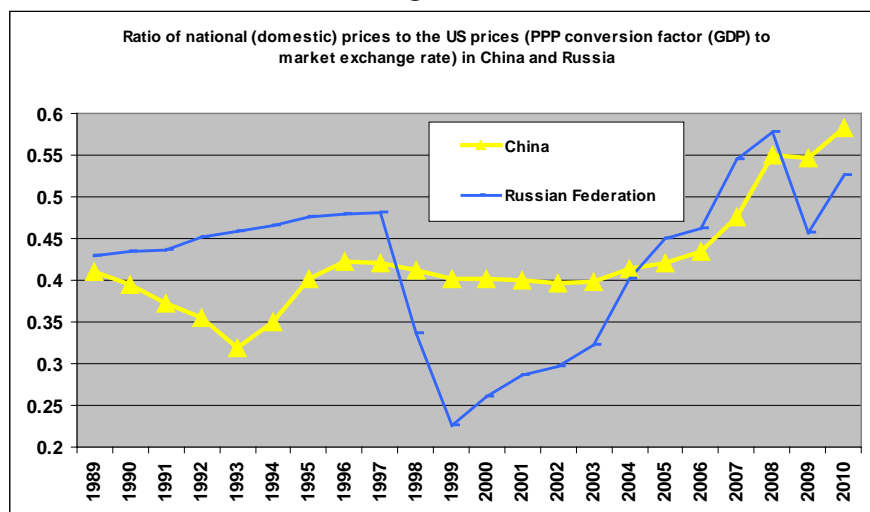
So reserve accumulation works as a development tool. That said, although China and Russia have been accumulating FOREX rapidly over the last 10-20 years, Russia has been less successful in underpricing its exchange rate than China (**Figure 10**). Russia

experienced a substantial improvement in its terms of trade due to the increase in global oil and gas prices but suffered from Dutch disease (exchange rate overvaluation). China's increase in productivity was higher than Russia's, so there were more objective reasons to appreciate the yuan than the ruble (the so-called Balassa-Samuelson effect). To keep the exchange rate competitive, Russia should be accumulating FOREX faster than China, but this has not been the case.⁴

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 the World Trade Organization, exchange rate protectionism is the only available tool for promoting catch-up development—in a way it is an instrument of last resort. Reserve accumulation in poor states will not continue forever; it will come to an end once they catch up with the West. Meanwhile, developed states get a chance to consume more than they produce.

This begs the question, why not go into debt to help the global South catch up with the West sooner? Maintaining today's global imbalances would help to overcome the major disproportion of our times: the income gap between developed and developing countries. This gap has been widening for 500 years and only now, in the last 50 years, have there been some signs that this gap is starting to close. The chance to eliminate this gap sooner rather than later would be increased if the West would go into debt, thus allowing developing states to have trade surpluses that would help them develop. Previously, over the sixteenth to the twentieth centuries, 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.

Figure 10.



Source: World Development Indicators.

⁴ In addition to over \$3 trillion in FOREX China keeps about \$1 trillion in sovereign wealth funds (SWF). Russia also has SWF (about \$160 billion at the beginning of 2013), but in Russian statistics, it is included in the total FOREX (\$500 billion).

Table 1. Net Assets of Major Countries: An International Comparison.

Country/year	Net assets as a percent (%) of nominal GDP
Hong Kong	
2010	308.6
2007	233.6
Japan	
2010	53.5
2009	56.5
2008	44.4
2007	48.5
Switzerland	
2010	136.1
2008	123.2
China	
2009	36.5
2008	34.5
Germany	
2010	42.1
2008	26.2
Russia	
2009	9.1
2007	-9.4
India	
2007	-6.5
France	
2010	-11.5
2007	13.4
United Kingdom	
2010	-13.2
2008	-4.6
Canada	
2010	-16.2
2008	0.8
Italy	
2010	-17.1
2008	-12.9
United States	
2009	-19.4
2007	-17.7
Brazil	
2007	-38.8
Australia	
2010	-58.2
Spain	
2010	-87.1

Note: "International Investment Position" as released by the central banks of Germany, Switzerland, and Italy, as well as the statistical authorities of China, Canada and the United Kingdom. Figures for all other countries are from the International Financial Statistics of the IMF.

Sources: Japan's International Investment Position at Year-End 2008 International Department, Bank of Japan. BOJ Reports and Research papers, August 2009 (https://www.boj.or.jp/en/research/brp/ron_2009/data/ron0908c.pdf); Japan's International Investment Position at Year-End 2010. International Department, Bank of Japan. BOJ Reports and Research papers, August 2011 (http://www.boj.or.jp/en/research/brp/ron_2011/data/ron110826a.pdf).

This memo is based on:

Vladimir Popov, “Global Imbalances: An Unconventional View,” *IDEAs*, Oct. 19, 2010. Also published at *Iniciativa para la Transparencia Financiera*, lectura 57, and as a *CEFIR and NES working paper* No. 160 (May 2010).

В.В. Попов (V.V. Popov), “Глобальные дисбалансы—нетрадиционная трактовка (Global imbalances: an unconventional view),” *Вопросы экономики* (Problems of the Economy), No. 1 (2013).

For additional details, please see:

V. Polterovich and V. Popov, “Accumulation of Foreign Exchange Reserves and Long Term Economic Growth,” *Slavic Eurasia’s Integration into the World Economy*, eds. S. Tabata and A. Iwashita, Slavic Research Center, Hokkaido University, Sapporo, 2004.

Vladimir Popov, “The Exchange Rate in a Resource-Based Economy: The Case of Russia.” *PONARS Policy Memo* No. 386 (December 2005).

Vladimir Popov, “Exchange Rate in the Resource Based Economy in the Short Term: The Case of Russia,” *IUP Journal of Monetary Economics*, Vol. IX, No. 3, August 2011.
