

NBER WORKING PAPER SERIES

US SANCTIONS REINFORCE THE DOLLAR'S DOMINANCE

Michael P. Dooley
David Folkerts-Landau
Peter M. Garber

Working Paper 29943
<http://www.nber.org/papers/w29943>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
April 2022

We thank Robert Flood for helpful comments. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2022 by Michael P. Dooley, David Folkerts-Landau, and Peter M. Garber. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

US Sanctions Reinforce the Dollar's Dominance
Michael P. Dooley, David Folkerts-Landau, and Peter M. Garber
NBER Working Paper No. 29943
April 2022
JEL No. F3,F33,F51

ABSTRACT

Recent sanctions on the use of Russia's international reserve assets seem likely to reduce the appeal of US dollar reserves as a "shock absorber" for international payments. But international reserves are also a means to reassure foreign investors that problematic countries will not confiscate their investments. The "collateral" motive for holding dollar reserves has been enhanced by the demonstration that the United States is willing and able to sanction misbehavior. Geopolitically risky countries now more than ever need to reassure foreign investors that their investments are safe from expropriation. We conclude that recent events will strengthen the role of the dollar as the key international reserve currency.

Michael P. Dooley
Department of Economics
Engineering II
University of California, Santa Cruz
Santa Cruz, CA 95064
and NBER
MPD@UCSC.EDU

Peter M. Garber
16 Silvermine Woods
Wilton, CT 06897
vic2eroy@gmail.com

David Folkerts-Landau
Deutsche Bank
Deutsche Bank AG London
1 Great Winchester Street
London EC2 2EQ
United Kingdom
david.folkerts-landau@db.com

US Sanctions Reinforce the Dollar's Dominance

The freezing of Russia's dollar foreign exchange reserves has driven warnings that the dollar may lose its dominant status¹. But providing a relatively safe asset is not the only function of a reserve currency. In a series of papers starting in 2004, we have argued that the willingness and ability to engage in comprehensive financial asset seizures is part of the job description for a reserve currency.² Such potential seizures were the foundation of the massive expansion of net and gross capital flows between rich and poor countries over the past thirty years. Moreover, for good reasons, the US was and is the country most trusted to fulfill this responsibility. It has had a long track record of seizing foreign assets while suffering no diminution of its role as the key reserve currency.³

The most important historical example of demand for reserves to reassure foreign investors is China after 2002. China had to convince foreign industrial capital that the Chinese government, hitherto a fervent enemy of private capital, would not ultimately expropriate their investments. China was fortunate because the policy employed to manage the exchange rate, i.e. sterilized foreign exchange intervention, also provided the commitment necessary to support the inflow of private foreign capital.

For direct investors in China reserves provided a safe way to access disciplined labor at a fraction of the cost of industrial country labor. Safety came from the "collateral value" of large Chinese foreign reserves. China would sustain a large loss in any asset seizures driven by domestic politics or a geopolitical break and so be less likely to engage in such action.

Prior to this accidental innovation, industrial country labor had been "protected" by the threat of expropriation by governments in risky, low-wage countries. This threat discouraged capital exports to cheap labor countries not directly under the center country's control. When collateral protection was provided in the form of

huge net and gross capital exports from e.g. China, center country capital responded.

Why are gross international capital flows important?

The key insight is that an accumulated capital account balanced in dollar terms between a rich and a poor country is unbalanced in terms of risk. To support a gross private capital inflow, the problematic government must offer an even greater stock of assets at risk of expropriation by the center country government. For China, the important gross capital flows were foreign direct investment into China which provided the most efficient way to acquire the technology, management technique, product quality, and foreign market access necessary to industrialize. What could the Chinese government offer to convince foreign capital that their investments were safe? The Chinese government's holdings of dollar reserves and later Chinese private sector investments were the obvious answer.

So large and permanent was this net export of Chinese capital for collateral that long-term real interest rates in industrial center countries have been reduced for the last 20 years. An influential academic theory for persistently depressed real interest rates in the center is that the US supplies "safe assets" to the rest of the world.⁴ **This is only part of the story. The US also produces assets that are unsafe to those who misbehave.** The center country must provide safety for good behavior and punishment for bad behavior.

There is empirical evidence to support the collateral argument. The collateral that was in fact provided by reserve accumulation was comparable in China to what would have been required between private investors with comparably different credit risks. We calculated the collateral requirement for a hypothetical total return swap of reserves against direct investment. To our surprise, direct investors in China were getting about what a commercial swap would require. Over the years, updates in our calculations reconfirmed our findings.⁵

Private and public collateral

The analogy with private collateral arrangements is useful but should not be taken literally. Private collateral is a powerful incentive for private lending to risky

agents because it is both a deterrent to default and an almost risk-free guarantee of payment to the creditor. Moreover, the circumstances under which the collateral is forfeited are well defined and enforced by the legal system where the credit contract is negotiated. For this reason, most international debt contracts are covered by US or UK law.

Our definition of public collateral, that is assets subject to seizure by center country governments, shares an important attribute with private collateral. Public collateral is a powerful deterrent to defaults or to military actions that will force default. But public collateral provides a less powerful incentive for individual center country investors because they may not be compensated even if center-country governments actually seize assets. This ex-post decision by center governments may add only marginally to the incentives already offered by public collateral. Moreover, the trigger for forfeiting public collateral is not known ex ante. Actions ranging from straightforward expropriation of foreign investors' assets to military adventures might generate forfeiture of public collateral. We argue below that, looking ahead, recent events will condition expectations about the range of assets that comprise public collateral, expectations for the compensation center country governments will provide to their capital exporters, and the actions that trigger forfeiture.

The demand for reserves

The conventional analysis is that reserve accumulation makes a country stronger in smoothing shocks to trade and capital flows and therefore stronger in negotiating with its trading partners. For example, in the preliminary moves toward the Ukrainian war, it was argued that Russia had accumulated a "war chest" of foreign reserve assets so that it could weather sanctions that might be imposed in response to Russia's actions.

More generally, most observers⁶ viewed the accumulation of dollar reserves as a threat to the US because governments could dump their dollar reserves for other assets, causing a painful collapse in US asset prices. Indeed, the prevailing view in the mid-2000s was that the dollar-based system would end with a major dollar devaluation as governments realized that continued reserve accumulation was no longer in their interests.⁷ It was not recognized that this would itself backfire spectacularly by provoking an immediate freeze on such reserves. Russian officials

seemed genuinely surprised and distressed that Russia's foreign exchange reserves were frozen.⁸

Our conclusion was exactly the reverse. Reserves do constitute a threat, but the threat is owned by the US, not the reserve holder. For us, the accumulation of stocks of official reserve assets was the collateral that made sustainable the large-scale gross and net capital exports to the poor countries. This view was reinforced by the fact that official claims against the US seemed excessive relative to the value of shock absorbers.

The almost universal response to this idea in the academic community was that the US would never sequester (steal) the reserves of another country because that would end the use of the dollar as a reserve currency. This was in direct conflict with the US's long track record of doing just that. Our response was and is that the dollar is the dominant reserve currency **because** the US is the only country with sufficient power to impose exactly such sanctions when a country like Russia misbehaves. The US earns the "exorbitant privilege" of having the global reserve currency by daring to impose penalties when justified by the behavior of the owners of reserves.

New centers?

It is clear that Russia will for the foreseeable future drop out of the dollar-based periphery and attempt to persuade the formation of a new bloc. But Russia is small in economic terms, and a bloc of its own satellites will also be small. The important question is: what will China choose to do? China has an enormous stake in the dollar-based system. Exports account for 18.5% of its GDP, and it holds \$3.2 trillion in reserves. Moreover, the huge expansion in the last decade of its vulnerable foreign investments makes China's existing collateral even more valuable than in earlier years. But the Russian experience also highlights the constraint on geopolitical actions posed by participation in the dollar-based system. Are the economic incentives for continued participation sufficient to offset limitations on territorial and other political objectives?

If China chooses geopolitical independence, capital flows within its new proprietary bloc likewise will depend on its own financial and military threats to its periphery members. China is unlikely to open its domestic financial market to

massive net or even gross capital inflows. But what is China's financial clout over a member of its bloc that is a pure debtor to China? As in the history of the Western empires, it would need to have bases or quasi-colonial dominance to be confident enough for such uncollateralized lending to occur. All those foreign ports that it owns and manages can turn into naval and marine bases overnight. However, what if China allows large net capital inflows from bloc members to serve as hostage? Then, as did the US, it will have to tolerate an overvalued CNY exchange rate and watch as its labor market suffers from imported unemployment. As its labor force shrinks, perhaps this is a reasonable program for the future.

What has changed?

In the past few weeks, an amazing array of Russian private sector assets—from banks to boats—have proven to be vulnerable to center country governments. These include financial and even real assets held by the Russian government, government officials, and powerful and super-wealthy private sector allies of the government. Moreover, blocking access to Western payments systems and insurance contracts makes vulnerable many private assets of the periphery country, even many of those in-country.

What is the reaction to this enormous *de facto* expansion of the stock of assets that comprise the public collateral pool of periphery countries? For risky country private persons with foreign assets, it will generate a shift to foreign assets that are less vulnerable and certainly less visible. But for governments of high-risk countries still participating in the dollar system the implications are less clear. Their existing stocks of foreign assets, suddenly so much more evidently vulnerable hostages given the revealed teeth of the US and its partners, will now support more gross capital inflows from much more confidently fortified FDI investors. If the periphery government wants to encourage private foreign investment, building a stock of foreign reserves is now an even more powerful incentive for center country capital.

Offsetting this positive boost to a given amount of collateral's effectiveness, Russia's war demonstrates that at least one country was willing to sacrifice economic for political objectives. If center country capital concludes that the

world's risky countries have become more dangerous than it had thought, then it may require yet more collateral to support given levels of gross capital flows. We can take some lessons from private markets. When credit spreads widen because the world has become a more dangerous place, risky agents must initially post more collateral to reassure their counterparties. But if the margin calls get too large, higher risk agents are forced to reduce their participation.

In our view, the most powerful lesson from recent developments is that the US and other center governments have more concretely revealed when they are willing to aggressively enforce the previously implicit collateral arrangements. The risk-on effect from Russia's decision to forfeit its collateral will be temporary and the remaining dollar bloc participants will increase their capital market integration and their associated demand for dollar and other center country assets. The willingness of the EU to back the US may generate some diversification toward the euro.

Conclusions

Seizure of reserves in a serious enough geopolitical confrontation is a natural process that **must** occur if the dollar is to preserve its role as the economic foundation and defender of global capital flows. It is not the enemy of such flows. Sequestering foreign exchange reserves is not an exogenous initiative by the US; it underpins the global social contract behind gross and net international capital flows.

Going forward, a key challenge for economic analysis is how the structure of a country's gross foreign assets and liabilities will adjust to the new information about what is vulnerable to a counterparty's official sanctions. The explosion of gross international capital flows in recent decades has been identified as an important source of world growth. The scale of collateralization in recent years would not have been possible without the liberalization of domestic financial systems and the associated expansion of gross international capital flows. The scale and composition of gross flows are important for development in themselves beyond the conventional academic analysis of net savings flows across countries. High risk countries that exit the dollar bloc will have very restricted ability to reassure foreign investors. The result will be exclusion from the growth strategy that involves participation of center country capital.

A small part of this financial intermediation will be curtailed as Russia drops out of the system. If China also exits, or more likely starts to prepare for an exit, this will be a far more important change in the international system. Our main conclusion, however, is that the dollar will remain the central reserve currency of the remaining dollar-based system and that the role of the dollar and the demand for dollars will increase.

¹ For a small sample of opinion about how badly the dollar's role will be hurt see:

Barry Eichengreen, "Ukraine war accelerates the stealth erosion of dollar dominance," *Financial Times* March 28, 2022.

Zoltan Pozar, "Bretton Woods III" *Credit Suisse* 7 March 7, 2022. <https://plus2.credit-suisse.com/shorturlpdf.html?v=4ZR9-WTBd-V>.

Karen Bettel, "As sanctions 'weaponize' U.S. dollar, some Treasury buyers could fall back" *Reuters* March 29, 2022

Elsabe Loots, "Russia sanctions: new impetus for Chinese yuan to move up the reserve currency ladder? **The Conversation** March 22, 2022 12.54pm EDT <https://theconversation.com/russia-sanctions-new-impetus-for-chinese-yuan-to-move-up-the-reserve-currency-ladder-179602>

Andy Kessler, "Is the Dollar in Danger? China and Russia may be working to take away America's 'exorbitant privilege'" *Wall Street Journal*, March 13, 2022. <https://www.wsj.com/articles/is-the-dollar-in-danger-china-russia-ruble-yuan-reserve-currency-foreign-sanctions-11647195545>

"Financial Warfare: will there be a backlash against the dollar?", *Financial Times*, April 7, 2022, <https://on.ft.com/3ufm0fC>

² A 2008 compilation of this series can be downloaded from

<https://www.researchgate.net/publication/242366353> *Asia Interest Rates and the Dollar*

In particular, we draw here from Chapters 1, 2, 3, 4, and 6, "An Essay on the Revived Bretton Woods System", "The US Current Account Deficit and Economic Development: Collateral for a Total Return Swap", "The Two Crises of International Macroeconomics", "That Old Time Religion: It's Good Enough for Me", and "Direct investment, Rising Real Wages and the Absorption of Excess Labor in the Periphery", respectively.

³ See "That Old Time Religion: It's Good Enough for Me", pp. 68-69 for a history through 2005. The tempo of such seizures has become more intense since then.

⁴ Caballero, Ricardo J., Emmanuel Farhi, and Pierre-Olivier Gourinchas. 2017. "The Safe Assets Shortage Conundrum." *Journal of Economic Perspectives*, 31 (3): 29-46.

⁵ Dooley, Michael, David Folkerts-Landau, and Peter Garber, August 26, 2014, "The Revived Bretton Woods System's First Decade". Deutsche Bank Research, pp 18-19.

https://www.nber.org/system/files/working_papers/w20454/w20454.pdf

⁶ “Global current account imbalances and exchange rate adjustments”. Brookings Papers on Economic Activity, 2005, Issue no. 1:67–146. Washington, DC: Brookings Institution.

Eichengreen, Barry, “Global Imbalances and the Lessons from Bretton Woods,” NBER Working Paper 10497, 2004.

⁷ Roubini , Nouriel and Brad Setser., “Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005-2006”, February, 2005. <https://pages.stern.nyu.edu/~nroubini/papers/BW2-Unraveling-Roubini-Setser.pdf>

⁸ <https://on.ft.com/3JtJd2S>