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Globalization and Growth in a Bipolar World

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Abstract

Globalization is not over, but it is being reconfigured by events. Internationally, there are economic and political tensions between the United States and China. Both countries have responded with import tariffs, export controls, and foreign investment restrictions that have led to a decline in the relative importance of bilateral trade and the collapse of bilateral foreign direct investment. The paper concludes that globalization remains deeply entrenched despite the Global Financial Crisis, COVID, Russia's invasion of Ukraine, and U.S.-China tensions. At the same time, the landscape of globalization has been changing in response to these events and specifically in response to U.S.-China rivalry.

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1. Introduction

Globalization may not be over, but it is being reconfigured in light of events. Internationally, there are economic and political tensions between the United States and China. These stem from U.S. complaints about China's lack of enforcement of foreign intellectual property rights and alleged unfair competitive practices of its state-owned enterprises. U.S. policymakers worry about their country's dependence on China for critical commodities and manufactures, everything from personal protective equipment (PPE) and solar panels to rare earths, access to which may be interrupted by supply chain disruptions like those of the COVID era but also by Chinese export restrictions prompted by geopolitical conflict. Chinese policymakers for their part worry about their country's dependence on the U.S. and its partners for semiconductors and other high-tech inputs critical to the development of, inter alia, artificial intelligence and hypersonic weapons. Both countries have responded with import tariffs, export controls, and foreign investment restrictions that have led to a decline in the relative importance of bilateral trade and a veritable collapse of bilateral foreign direct investment.[1]

Domestically, there is the political backlash against unfettered trade that is increasingly seen as imposing costs on sectorally- and geographically-concentrated interests. The literature on the China Shock has documented both the economic impact (Autor, Dorn and Hanson 2016, De Lyon and Pessoa 2021) and the political reaction (Autor, Dorn, Hanson and Majlesi 2020, Colatone and Staig 2018). In response, policymakers across the political spectrum have resorted to protectionist measures, which have proliferated in recent years (IMF 2023a). The restrictive effect of protection at the border has been reinforced by the "new industrial policy," under which governments, including that of the United States, have extended subsidies and tax preferences to domestic firms with the goal of increasing industrial self-sufficiency and reshoring "good manufacturing jobs."

Some authors have mooted the possibility, or more precisely the specter, of the global economy bifurcating into distinct Western and Eastern blocs (Gopinath 2023), where "Western" in this context refers roughly to the NATO countries and "Eastern" refers to economies politically aligned with China. But there are also other scenarios, for example where global flows remain multilateral but simply grow more slowly than global GDP, or where the impact of domestic and international tensions on global flows turns out to be *de minimus*.

A starting point for thinking about the likelihood of these alternatives is to examine what has happened so far.

2. Implications for Trade and Growth

Much has been made of the slowdown in the growth of global trade due to the "trade war" between the U.S. and China (meaning U.S. tariffs under Presidents Trump and Biden and Chinese retaliation) and COVID-era disruptions. In fact, global trade has not declined noticeably relative to global GDP. All that has happened is that the rate of

[1] In addition there is the impact of Western sanctions and price ceilings affecting Russia's exports, which cause its shipments of oil and gas, at a minimum, to be redirected toward countries that are not party to those measures.

growth of trade no longer exceeds the rate of growth of global output of goods and services. Hyperglobalization has given way to globalization pure and simple. Moreover, the breakpoint when trade stopped growing at a faster rate than output and when global imports plus exports as a share of global GDP stabilized around 50 percent was not following the outbreak of COVID or even following imposition of the Trump-Biden tariffs, but earlier following the Global Financial Crisis (Eichengreen 2023a). Data from Global Trade Alert (2023) show that the number of harmful new trade policy interventions began rising already in 2012-13, which plausibly explains, at least in part, the end of the period when the global trade/GDP ratio was on an upward trajectory.[2] Evidently, the dislocations of the GFC and the subsequent slowdown in advanced-country productivity growth (Erber, Fritsche and Harms 2017) had already given rise to significant protectionist pressures even before politicians such as Trump sought to capitalize on them.

A couple of caveats are important in this connection. First, the post-GFC stagnation of the global trade/GDP ratio is less impressive when one considers not the value of trade but ton-kilometers of goods crossing borders (Ganapati and Wong 2023), where the difference reflects the evolution of global supply chains (that more countries are exporting parts and components as opposed to more expensive final products) and the growing importance of trade in bulk goods such as agricultural produce and refined petroleum. Second, trade in services, especially digitally-enabled services, has continued to grow relative to GDP even while the merchandise and commodity export/GDP ratio has stagnated (Baldwin 2022).[3]

The implications for global growth are contested, because the literature and evidence on the impact of trade on growth is contested (Eichengreen 2019). Simple correlations between trade and growth do not speak clearly owing to reverse causality and sensitivity to country sample. Efforts to tease out the causal effect of trade on growth by instrumenting trade using geographical distance (between country pairs, as in Frankel and Romer 1999) suffer from omitted-variables bias owing to the correlation of the length of trade routes with latitude and its separate implications for growth, i.e. heavier disease environment close to the equator (Rodriguez and Rodrik 2001). The most recent generation of studies uses variation in transport costs not just between countries but also over time, due to improvements in aircraft technology and containerization (Feyrer 2019), and quasi-natural experiments such as the 1967-75 closure of the Suez Canal (Feyrer 2021).[4] These studies support the presumption that trade has a positive causal impact on growth, with an elasticity of approximately 0.2 in the short run (Feyrer 2021) and 0.5 in the long run (Feyrer 2019). These elasticities can then be combined with assumptions about the likely decline in the rate of growth of trade owing to U.S.-China tensions to back out the negative implications for global growth.

There is already some evidence of decoupling of U.S. and Chinese trade. Bown and Wang (2023) show that China has been shifting purchases of foreign goods away

[2] Other factors contributing to the slowdown in the growth of global trade plausibly include slower Chinese GDP growth, a rapidly growing Chinese economy having been a motor for export growth in the earlier period, and the growth of China's production of intermediate goods, which moderated its need to source intermediate inputs abroad.
[3] Replace this with a reference to Baldwin's 2019 book if the same graph appears there.
[4] Data for late 2023, when traffic through the Suez Canal declined precipitously due to attacks on ships passing through the Red Sea provide another potential data point.

from the United States since Trump's imposition of tariffs in 2018 and China's retaliation. They compare U.S. exports to those of those of international peers also exporting to China, in the equivalent of a synthetic-control analysis, finding that U.S. exports to China were 23 percent lower in 2022 than suggested by the comparison, and that this gap has been widening over time.

The picture on the U.S. import side is seemingly similar but in reality more complex. U.S. imports from China fell in 2019-20 but then recovered in 2021-22 following the worst pandemic- and supply-chain disruptions. But there was no recovery of the roughly two-thirds of U.S. goods imports from China covered by those tariff actions. U.S. goods imports from China then fell 25 percent during the first six months of 2023. China's share of total U.S. import dropped from more than 20 percent in 2018 to less than 15 percent in the first half of 2023, the lowest in 20 years. Alfaro and Chor (2023) suggest that there is some evidence of reshoring – of more finishing stages of production in global value chains involving countries such as China now being performed in the United States.

But there is also evidence of exports from China to the United States being rerouted through third countries such as Mexico and Vietnam, where final assembly takes place. In recent years these countries are all running larger trade deficits with China and larger surpluses with the United States (Gatley 2023). The rise in Chinese foreign direct investment in Mexico and Vietnam is further consistent with the idea that China is shifting a portion of assembly of goods destined for Western markets to these third countries.[5] Qiu, Shin and Zhang (2023) similarly find that firms from other jurisdictions mainly in Asia, not just Vietnam but also Thailand, Indonesia and others, have been interposing themselves in China-U.S. supply chains. Thus, whether China and the West are on a path to significant decoupling remains an open question.

Attempts to quantify the impact of fragmentation of global trade into two nonoverlapping blocs are generally based on the outputs of large simulation models and are therefore sensitive to specification and assumption. World Trade Organization (2023), not an entirely disinterested observer, estimates that the impact on global GDP could be as large as -6.5 percent in the long run.[6] Estimates by Bolhuis et al. (2023) are of the same order of magnitude, at some -7 percent of global GDP; those of the IMF are smaller, on the order of -2 percent of GDP (cited in Aiyar et al. 2023).

3. Implications for Capital Flows and Growth

There has similarly been a leveling off in world external financial liabilities as a percentage of world GDP since the GFC, according to the Milesi-Ferretti-Lane database (Milesi-Ferretti 2022). Subramanian, Kessler and Properzi (2023) show that this reflects lower values of both FDI and, especially, gross portfolio capital flows in recent years. Emerging Asia was the one exception to the general pattern, in that it saw a sustained increase in capital flows between 2000-07 and 2009-2019. With the

[5] For more on FDI patterns see below.

[6] The WTO assumes a 13 percent drop in trade; thus, its conclusions are consistent with (and conceivably make use of) the long-run elasticity of growth with respect to trade as estimated by Feyrer (2019). Other models that look not only at trade multipliers but incorporate also knowledge spillovers from trade conclude in favor of even larger growth effects (see e.g. Góes and Bekkers 2022).

economic slowdown in China, it now seems unlikely that this exception will persist (more on this below).

Much of the drop in global flows has been in the form of lower bank-intermediated loans, particularly those originated by euro-area banks, as the authorities tightened regulation and financial institutions tightened internal controls following the banking crises of the GFC years. The decline in cross-border bank lending has been offset, but only in part, by the growing importance of asset managers, investment funds and other non-bank financial intermediaries (Committee on the Global Financial System 2021). On the borrower side, the public sector – central governments, subnational governments, the central bank, and state-owned banks and enterprises – has accounted for a growing share of new debt securities issued, especially by emerging markets. Then there is the rise of China as the world's single largest official bilateral creditor. The country has made substantial amounts of external funding and development finance available to low- and middle-income countries but also been targeted by accusations of "debt trap diplomacy" (Brautigam 2020) while complicating debt-restructuring efforts (China not being a member of the Paris Club of bilateral lenders).

There is robust evidence of a positive impact of FDI on growth (see e.g. Alfaro, Kalemli-Ozcan and Volosovych 2014), making the FDI slowdown since the GFC worrisome. The evidence for portfolio capital flows is disputed. This is unsurprising, insofar as portfolio inflows are a mixed blessing: on the one hand they relax financing constraints, augment domestic savings and fund additional productive investments; on the other, they can be put to unproductive uses and are subject to abrupt reversals ("sudden stops"). The balance between these two factors will vary case by case. This points to the inference that costly sudden stops will be less likely and hence the net benefits of portfolio capital inflows will be greater in countries with strong institutions (Honig 2008), where diversion of funding to unproductive uses and negative shocks to investor confidence are less prevalent.

A specific institution on which recent policy initiatives and analysis have focused is the market in domestic-currency-denominated bonds for sale to international investors. Earlier literature (e.g. Eichengreen and Hausmann 1999) had shown that foreign-currency-denominated debt creates risks for emerging markets and developing countries placing their liabilities with foreign investors. Subsequent work (e.g. Hofmann, Patel and Wu 2022) suggests that placing local-currency bonds with foreign investors is no panacea, since those investors will be vulnerable to the double whammy of declining bond prices and a falling exchange rate when things go wrong, encouraging them to cut and run. Eichengreen (2023c) concludes that the only guarantee of safety and stability for emerging markets is to fund more of their investment out of domestic savings. Those concerned about the costs of the green transition in low-income countries will object that domestic savings will not be enough; they point to the desirability of hedging instruments (Eichengreen and Brouwer 2023) and basket-based bonds (Mountain Pacific Group 2023) as ways of attenuating the risks and volatility of external borrowing.

Capital flows between the U.S. and China are a different story. These have plummeted: foreign direct investment plus venture capital flows from the U.S. to China are down, circa 2022, by roughly two-thirds from their pre-pandemic peak, while flows from China to the U.S. have fallen by an astounding 90 percent from their peak in 2016. This decline is a function, in part, of preexisting controls on inbound U.S. FDI, long since overseen by the interagency Committee on Foreign Investment in the United States (CFIUS), but enforced recently with increasing rigor, and of new U.S. controls on outward FDI in firms and sectors linked to China's military-industrial complex. In August 2023, the Biden Administration released an executive order directing the Treasury Department to issue new regulations prohibiting or requiring prior notification of outbound U.S. investment to China involving 'sensitive technologies and products in the semiconductors and microelectronics, quantum information technologies, and artificial intelligence (AI) sectors that are critical for the military, intelligence, surveillance, or cyber-enabled capabilities." FDI was discouraged not just by actual prohibitions but also by uncertainty surrounding scope of application and ultimate Treasury decisions.

More generally, political noise and the deterioration of bilateral relations between China and the U.S. has had a dampening effect on bilateral capital flows. U.S. companies are increasingly concerned about the implications for their public image of investing in China. Declining trust between the two countries likely has a negative impact on bilateral investment. Eichengreen and Saka (2022) examine bank-intermediated flows, specifically banks' investments in the government bonds of other countries; they find that such investments are less, and less likely, when trust of residents of the initiating country in the destination country is less.[7]

The decline of foreign investment into China is not limited to the United States. China saw its first-ever negative value for inward FDI 2023 Q3. This suggests that not only U.S.-China tensions but also the growth slowdown in China itself and the country's real-estate-related financial troubles may have played a role. In contrast, neither inward nor outward U.S. FDI has declined overall. That U.S. outward FDI remains stable raises the question of the direction of investment diversion. China has been replaced as a leading destination of U.S. FDI by Mexico and Vietnam. Yet it is not clear that this tendency is widespread. Kearney's (2023) ranking of emerging markets as potential destinations for foreign investment based on a survey of business executives still shows China (including Hong Kong), along with India, at the top of the list, followed by Latin America (starting with Brazil and Mexico) and Southeast Asia (starting with Thailand, Malaysia and Indonesia) as the most attractive destinations.

The economic impact of this diversion of FDI toward destinations that offer security as opposed to the highest purely economic return is difficult to predict. Estimates by the IMF (2023b) put those costs at around 2 percent of global GDP.

4. Implications for the International Monetary System

International tensions have heightened preexisting questions about the U.S. dollar's dominance of the international monetary and financial system. The tensions in question center first and foremost not on China but on the clash between Russia and the West, precipitated by Vladimir Putin's attack on Ukraine. In response, the United States and its allies froze the foreign reserves of the Bank of Russia. The U.S. prohibited American banks from doing business with the Russian government and excluded Russian entities from sending messages and clearing international transactions through the Society for Worldwide Interbank Financial Communications (SWIFT). More

[7] Their evidence is specifically for intra-European flows, where survey data on trust and bank-specific information on bond portfolios are available, but the point plausibly generalizes.

recently, discussions in the U.S. and Europe have turned to the possibility of garnishing Russian reserves and repurposing them for financing the economic reconstruction of Ukraine. These actions occur against the backdrop of increasingly frequent resort by the U.S. to financial sanctions (Cipriani, Goldberg and La Spada 2023).

They also occur against the backdrop of renminbi internationalization, creating speculation about the possible bifurcation of the international monetary and financial system into competing dollar- and renminbi-based blocs. Russia has moved toward making payments and clearing transactions using the renminbi, Beijing having remained studiously neutral in the conflict between Moscow and the West. The Bank of Russia now holds fully a third of all identified renminbi-denominated foreign reserves. There is at least the possibility that still other countries, concerned that at some point they may find themselves in U.S. financial crosshairs, will move in the same direction as a prudential measure.

China has taken a number of steps to encourage them. Thus, the People's Bank of China (PBoC) has signed memoranda of understanding for the establishment of overseas renminbi clearing banks, currency swaps, and local current payments with a series of countries not obviously aligned with either Russia or the West. China concluded new clearing arrangements with Pakistan and Argentina in November 2022. On the heels of these agreements, President Xi visited Saudi Arabia to discuss the possibility of shifting payments of the country's oil export to China to renminbi; in 2023 the PBoC and Saudi Central Bank then signed a RMB50 billion (approximately $7 billion) swap arrangement, presumably with local currency settlement in mind. Also in late 2022, China held a summit with the Gulf Cooperation Council (GCC), in which it committed to increase imports of oil and liquefied natural gas from GCC countries, and carry out renminbi settlement of this oil and gas trade (Yee 2022). In February of 2023, the PBoC and Central Bank of Brazil announced an agreement on opening an offshore renminbi clearing bank to facilitate renminbi clearing in Brazil. Iraq's central bank announced a plan to allow, for the first time, direct renminbi settlement of trade with China, where previously imports from China had been financed entirely in U.S. dollars (Jing 2023). In mid-2023 the Central Bank of Bolivia revealed that it had accepted payments in renminbi for exports of bananas, zinc and wood products and imports of motor vehicles and capital equipment (presumably to and from China).

At this stage, these agreements are largely symbolic: the renminbi remains leagues behind the dollar as a vehicle for cross-border payments and a reserve currency. The IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) data shows that just 2.4 percent of allocated foreign exchange reserves were held in renminbi in 2023Q3, compared to 59 percent for the dollar. In October the renminbi accounted for just 3.6 percent of global payments through SWIFT, compared to 47 percent for the dollar; it accounted for 5.1 percent of global trade finance, compared to fully 84 percent for the dollar (SWIFT 2023). The renminbi accounts for roughly 5 percent of turnover in foreign exchange markets, where currencies used in trade are accessed and currency exposures are hedged, whereas the dollar is on one side of fully 88 percent of all global currency trades. All this is to say that the possibility of an international financial system bifurcated between the dollar and the renminbi at this point remains hypothetical.

It is not hard to see why the renminbi lags behind. China's capital controls create red tape for entities seeking to use it in cross-border transactions. China's financial infrastructure is underdeveloped: the Cross-Border Interbank Payments System (CIPS), under construction since 2015, has barely 10 percent as many participating banks and clears only 2 percent as many transactions by value as the New York Clearing House. Although CIPS is developing its own native Mandarin-language messaging system, it relies on SWIFT for its cross-border messaging. China's financial markets lack liquidity compared to markets in U.S. treasury securities; revealingly, that most of China's Belt & Road loans to developing countries have been denominated in dollars, not renminbi.

Above all, China's political system is an obstacle to wider global utilization of the renminbi. There are no political checks and balances to prevent Chinese leadership from arbitrarily changing the rules of the financial game. It is no coincidence that every leading international and reserve currency in history has been the currency of a political democracy or republic, where such checks and balances on executive action are prevalent. More of China's own cross-border transactions may be settled in renminbi than in dollars, but the same is not true for other countries.

Thus, neither Russian sanctions nor U.S.-China tensions have done much to dent dollar dominance or create significant movement toward a bifurcated international monetary and financial system, despite China's concerted efforts to promote international use of its currency. But might a further ratcheting up of bilateral tensions accelerate movement in this direction? A belief that it was at possible risk of U.S. sanctions would cause China to redouble its efforts to free itself from the thrall of the dollar. Beijing might insist unconditionally that other countries accept payment in renminbi in return for their bilateral exports. Unquestionably, this would work to expand the currency's remit. Still, given the existing imbalance between dollar and renminbi utilization, the transition to parity would be lengthy.

The actual imposition of sanctions that bar U.S. banks from doing business with Chinese entities, freeze China out of SWIFT and garnish the PBOC's dollar reserves would be a game changer, of course. China would shift away from the dollar; it would make and accept payments solely in other currencies, first and foremost its own. It might compel other countries to choose between trading with it or with the United States, leading at least some other countries into the anti-dollar, pro-renminbi camp. This would full-fledged bifurcation. It would be a catastrophic disruption for the global monetary and financial system.

5. Conclusion

Globalization remains deeply entrenched despite the Global Financial Crisis, COVID, Russia's invasion of Ukraine, and U.S.-China tensions. At the same time, the landscape of globalization has been changing in response to these events and specifically in response to U.S.-China rivalry. Bilateral trade between the world's two largest economies has been slowing relative to global trade. Protectionist measures have led to some reshoring of the final stages of production but also to rerouting of trade through third countries. Capital and foreign direct investment flows between the U.S. and China have declined precipitously due to a combination of government controls and political uncertainties. But the fact that total U.S. inward and outward FDI has remained buoyant points to the existence foreign investment diversion to other countries. Likewise, China, even while investing less in the United States, has been ramping up investment in and running growing trade surpluses with countries like

Vietnam and Mexico that export significant volumes to the United States, including conceivably goods produced using Chinese parts, components and technology. The renminbi has come to play a modestly greater role in the international monetary and financial system, as China seeks to promote its cross-border use, Russia looks to it as an alternative to the dollar, and third countries seek financial diversification. But in the competition for international and reserve currency status, the renminbi remains far behind.

In sum, U.S.-China tensions have led to some loosening of economic links between the two countries but not to the end of globalization. They have led to some diversion of bilateral trade and investment to third countries with negative implications, other things equal, for the efficiency of production and ease of transactions. But other things are not equal. The governments in question have accepted this deterioration in efficiency in return for what they hope will be an improvement in national security. For our part, we must hope that they feel sufficiently secure that bilateral tensions don't ratchet up still further.

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