

# **The Connectivity Project**

# Introduction

Over the last few years, it has become increasingly clear that the world is taking steps toward fragmentation. In place of the rush toward globalization, "geopolitical risk" has entered the lexicon of Western businesses and political leaders. In Europe, the watchwords of economy policy have become "decoupling" and "de-risking." The question is where these new movements are going to lead the world – and how countries large and small should react to them.

By now, many actors on the global stage acknowledge that previous expectations for a fully interconnected world went too far. Elements of culture, nationhood and religion that some expected to fade have returned, now intertwined with the aspirations of many rising states.

New powers have emerged, and the interconnected world is no longer simply the American-dominated one of the 1990s. This strange new world is prompting reevaluation and even risk-taking.

Yet stepping back from an interlinked global order also seems more and more costly – economically, militarily and politically. Efforts to mitigate "geopolitical risk" through energy sanctions have shifted prices higher in the developed world. The trust that underlay the Western-led global economic order has also been challenged by alternative formats and means for development.

Can there be an interconnected world that also respects national sovereignty, as well as different political traditions and cultures? In a world driven by "de-risking," does the notion of connectivity still have a role to play? Does Europe need global connectivity – and can it afford not to have it?

Over the course of the next ten months, the Hungarian Institute of International Affairs will be publishing a series of papers and reactions, led by the macroeconomist Philip Pilkington, illuminating the main challenges around connectivity. The first paper, "The Origins of Economic Multipolarity," is attached below.

It's my hope that you will join us in this discussion.

Welcome to the Connectivity Project.

Gladden Pappin

# The Origins of Economic Multipolarity

# by Philip Pilkington

To understand the global power structure, it is necessary today to understand how economic power is distributed across the world. Until recently many observers had not given this much thought because the distribution of economic power was largely unipolar, centered around the United States. Even during the Cold War, the United States dominated the global economy because, although the Soviet Union's military power was impressive, the Soviet economy was both insular and dysfunctional. After the collapse of the Soviet Union, we have taken it for granted that the world economy is effectively unipolar and that the United States is the core of the global system, supported by its close allies in the G7 countries.

Yet recent events are leading people to question whether this is any longer the case. The most important of these is the rise of China, which has gone from a dysfunctional developing economy, plagued by poverty and inflation, to one of the world's leading economic players. With China's rise it was all but inevitable that the world would pull away from American-led unipolarity, but many economists thought that this process would not play out for another few decades. With the war in Ukraine and the solidification and growth of the BRICS+ economic alliance, it appears that this process has been sped up greatly.

Does the new situation represent a novel stage of bloc formation, or something different? And how should states respond to it?

We believe that the concept of economic multipolarity is a far more useful way of understanding the emerging world economy than the competing idea of bloc formation.

Bloc formation seems to imply some sort of autarky on the part of various actors. It views each economic bloc as being closed in upon itself and only interacting with other members within that bloc. After decades of globalization and the integration of national economies, this seems prima facie a misleading way of looking at the changes taking place in the world economy.

In what follows, we will chart the rise of economic multipolarity from the standpoint of the United States, China and the rising BRICS and BRICS+ alliances. In the Connectivity Project papers to come, we'll explore the consequences of this situation—and explain why we think that economic connectivity will remain essential.

# The Rise of Economic Power and the Failure of Sanctions

But first, let us take a step back. Prior to the emergence of industrial warfare in the First World War, economic power was not thought of as definitive at all. In the early modern period, economies were based on mercantilism, and monarchs would run

trade surpluses to fund stronger navies. But this was a means to an end. These trade policies were not aimed at economic development per se but rather toward military power. Even in the nineteenth century, geopolitical power was still mainly a function of military power.

All of this changed with the onset of the First World War. It quickly became apparent that entire economies were needed for the war effort. Similar levels of expenditure were needed to supply the armies of the Second World War. In the era of total war, it was readily apparent how important it was to consider the relative size of an economy to understand its capacity for waging war.

After the Second World War, however, and especially with the development of nuclear weapons, the prospect of total war largely faded from view. In a nuclear war, there would be no winners. But in this new world, generating enormous wealth would lead other countries to want to replicate your success; and because your enormous wealth held the key to the wealth of others, through trade and commerce, dependencies could be developed between countries.

By all accounts, the post-Cold War era of American unipolarity is over. But what is emerging?

Economic multipolarity, the view articulated in this project, conceives of the new emerging global economy as being one with multiple poles that interact with one another in flexible ways. Because actors in this world can interact with one another flexibly, balancing one power off another, this gives them far more freedom of movement relative to what was available in the unipolar world.

In a system of economic multipolarity, no single nation or economic bloc has total power. This is not to say that economic power is evenly distributed—it is not—but even midsize or small countries can play the larger economic powers off one another to secure advantage. Economic multipolarity creates a system of geoeconomic competition that is detrimental to incumbent "monopoly" players and advantageous to "competitive" upstarts.

The task for economic and geopolitical analysts today is to better understand this emerging system. Those thinking in terms of economic bloc formation will simply fail to understand the new system. This has already given rise to policymaking—especially around sanctions, but also around protectionist tariffs—that fails completely to achieve its goals.

Consider the attempts to sanction the economies of Russia and China are a case in point in this regard. The failure of these sanctions—whether it is the energy sanctions placed on Russia, or the semiconductor sanctions placed on China—show clearly that the world economy is simply too integrated to be thought of in terms of blocs.

But the new situation is also giving rise to wrongheaded thinking about the emerging global system. Commentators, many of whom have been until recently card-carrying neoliberals who emphasized free trade and positive-sum outcomes,

have started to retreat into zero-sum thinking. The tone in many Western financial publications has moved away from being positive, forward-looking, and self-confident and become belligerent, envious, and occasionally warlike.

Yet the reality is that the integrated global economy will march on – and those who try to dig their heels in will get left behind.

The new system will not work like the old, and it will be more difficult to understand. In the new world of economic multipolarity analysts themselves, together with policymakers, will be subject to harsh competition. Those tied to the unipolar modes of thinking associated with the old geoeconomic monopoly power will not survive these competitive forces.

In the following paper we will lay out how the world arrived at a position of economic multipolarity and what the relative balance of economic power currently looks like.

# Measuring the World Economy Properly

We will begin our study by looking at the basic structure of the world economy. As China has risen to be a leading economic power, and especially since the Russian invasion of Ukraine in February 2022, there has been a lot of misleading information put out on how large certain countries' economies are and their share of the world economy.

The most notable example of this was President Biden's tweet of March 26, 2022, when he laid out how the U.S. administration anticipated the impact of the Russian sanctions on the Russian economy. In this tweet the president wrote:

As a result of our unprecedented sanctions, the ruble was almost immediately reduced to rubble. The Russian economy is on track to be cut in half. It was ranked the 11<sup>th</sup> biggest economy in the world before this invasion — and soon, it will not even rank among the top 20.<sup>1</sup>

Since the failure of the sanctions has been made clear,<sup>2</sup> most commentators have focused on the president's failed predictions. Biden's advisers really believed that the sanctions package would cut the Russian economy in half and demolish the ruble. Less attention is paid to the claim that the Russian economy is the eleventh largest in the world. Where did the president's advisers get these numbers?

If we type "world's largest economies" into Google the top three hits are the "Worldometer" website, Investopedia, and the Wikipedia page for "List of countries by GDP (nominal)." All these websites measure the Russian economy based on

<sup>1</sup> https://twitter.com/POTUS/status/1507842574865866763.

<sup>2</sup> https://www.project-syndicate.org/commentary/why-western-sanctions-failed-to-devastate-the-rus-sian-economy-by-kenneth-rogoff-2023-03.

nominal GDP—that is, GDP denominated in dollars unadjusted for domestic inflation or relative international inflation levels. Worldometer and Investopedia, however, list Russia as the eighth largest economy in the world. Only the Wikipedia page on nominal GDP lists Russia as the eleventh largest. We assume that this is the source that Biden's advisers used when they were writing the tweet.

The fact that a Wikipedia page is being used by the Biden team to estimate, not only the size of the Russian economy, but also the potential efficacy of sanctions policies is concerning. It suggests that the foreign affairs and national security teams in D.C. need better advice when addressing matters of such vital importance. But even beyond this, the numbers that Biden cited are not the correct numbers. As we have suggested, nominal U.S. dollar GDP cannot possibly measure the relative size of an economy. Doing so ignores the relative price level in the economy.

To give a concrete example of this, consider the price of a Big Mac burger in China and the United States. As of July 2023, a Big Mac could be bought in the United States for \$5.58 while the same burger would cost \$3.50 in China. When we measure GDP, we are trying to establish the total output in the economy—in this example, how many burgers are produced and consumed. Using a nominal U.S. dollar measure, the Chinese burger would only register as around 63 percent the output as the American burger despite the burgers being identical. If both economies were completely dominated by Big Mac production, using the nominal U.S. dollar GDP measure, if the number of burgers produced and consumed in both economies was identical, the Chinese economy would be mismeasured as being 63 percent the size of the American economy even though in reality the two economies would be the same size.

It is for this reason that economists try to cancel out these mismeasurements. They do this by taking the relative price levels of the entire economies in question—not unlike what we have done with the Big Mac, but with the methodology expanded to include everything produced and consumed in the economy—and they use these to adjust the nominal spending figures. Economists call this "Purchasing Power Parity Adjusted GDP" or "PPP-adjusted GDP." Using PPP-adjusted GDP is not controversial. It is standard practice, and our Big Mac example shows why. When the media or politicians say things like "on certain measures the Russian economy is the 11th largest in the world," they are either receiving improper advice or they are actively manipulating the data. This is equivalent to saying "on certain measures an elephant is the smallest mammal in the world." As in the case of the elephant, we can simply say that these "certain measures" are the wrong measure—bjectively so.

Using the correct measure has enormous implications for how we analyze various economies and their size relative to one another. For example, when we look at the PPP-adjusted GDP figures we see that Russia is either the fifth or sixth largest economy in the world. It is roughly of similar size to the German economy. The nominal U.S. dollar figure that showed Russia being the eleventh largest economy in the world would lead us to believe that the Russian economy was comparable in size to Mexico which, using our PPP-adjusted figures we know is only around half the size of the Russian economy. The reason for this is obvious to anyone who has travelled at all: German prices are higher than Russian prices.

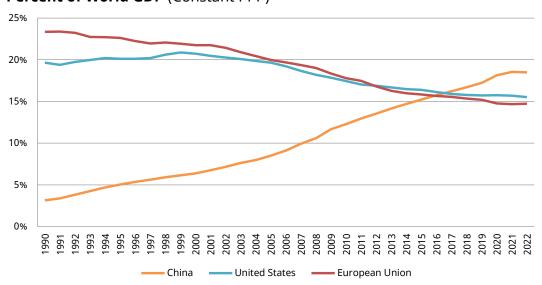
Turning back to our Big Mac example, we encounter a problem because after the Russian invasion of Ukraine, McDonald's decided to leave the Russian market and was quickly replaced with a Russian alternative. But as of 2020, we still have pricing data that shows a Russian Big Mac cost \$2.13 while the American equivalent was around \$5. Even these simple Big Mac pricing metrics suggest that on a nominal U.S. dollar basis, the Russian economy was being mismeasured by a factor of two, and that is precisely what we see when we use the correct PPP-adjusted measure.

While this introduction to the metrics we are going to use is a rather long one, given how widespread the misinformation on this topic is today, it is worth explaining in some detail how economists measure the relative economic size of countries. Let us now turn to this same metric to see how the world economy has developed since 1990.

# 2017: The Rise of China

It should now be clear why we use PPP-adjusted GDP. We want to understand where most of the economic activity is taking place in the world. We are not interested in overall levels of dollar spending, but how many goods and services are being exchanged for money. We will start by focusing on the most important economic development of the past few decades: the rise of China. The following chart compares China's share of the world economy measured against the share taken up by the United States and the European Union.

## **Percent of World GDP** (Constant PPP)



Data source: World Bank

The first point that stands out is that China has, when properly measured, been the world's largest economy since 2017. What is so striking about this development is how little widespread attention it received in the popular media.

In 2017, the economist Noah Smith wrote a Bloomberg column entitled "Who Has the World's No. 1 Economy? Not the US." Smith noted, correctly, that measuring GDP in terms of simple dollar GDP is misleading and that the correct way to measure the two economies is on a PPP-adjusted basis. Smith concluded in no uncertain terms that China had overtaken America as the world's largest economy. "American commentators may be slow to recognize China's economic supremacy," he wrote, "but the rest of the world is starting to wake up to the fact."<sup>3</sup>

This was again highlighted in a World Bank report in 2020. The response to this by the Chinese was revealing. Even though the Chinese National Bureau of Statistics (NBS) provided the data needed by the World Bank to produce their calculation, they nevertheless pushed back on how to interpret the data. The Chinese insisted that even though the Chinese economy was the largest in the world, it remained a developing country. Just prior to the report, President Donald Trump had complained that China had used its status of being a developing country to make smaller contributions to the United Nations and other multilateral organizations. The Chinese were already sensitive to the use of statistics in international disputes, especially after Donald Trump became president. "When Tsinghua University professor Hu Angang concluded in 2017 that China's economy had already surpassed the US to become the world's largest, he received widespread criticism at home and abroad, and was partly blamed for inducing the subsequent US-China trade war," wrote Frank Tang in the South China Morning Post.<sup>4</sup>

This back-and-forth over complex economic statistics has given rise to complete confusion about relative economic power. Even though in 2017 Bloomberg columnists were recognizing that China had overtaken the United States and that the American president himself was using these statistics in international disputes, the media soon reverted to improper reporting of statistics. For example, in August 2023 Rick Newman at Yahoo News published an article with the headline "China's Economy May Never Eclipse America's." The article, which includes citations of popular economic commentators like Paul Krugman, cites the misleading dollar GDP metrics.<sup>5</sup>

It appears that misunderstandings about the changes that have taken place in the world economy have a strong political bias.

Nor does this bias lead in any singular direction of misinterpretation. Instead, we have a strange situation where pro-American commentators are joining Chinese statisticians in denying or at least playing down the changes that have taken place in the world economy. Yet while all these debates have been completely overcome by political "spin," the facts remain clear as day.

https://www.bloomberg.com/view/articles/2017-10-18/who-has-the-world-s-no-1-economy-not-the-u-s?leadSource=uverify%20wall.

<sup>4</sup> https://www.scmp.com/economy/china-economy/article/3085501/china-overtakes-us-no-1-buying-power-still-clings-developing.

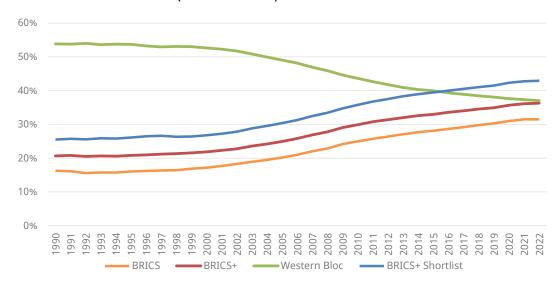
<sup>5</sup> https://finance.yahoo.com/news/chinas-economy-may-never-eclipse-americas-202222283.html.

# 2022: The Rise of BRICS+

In 2017 or even in 2020 it was reasonable to look at China in isolation. But in the wake of the Russia-Ukraine war and the solidifying of economic and diplomatic ties between Russia and China, it makes far more sense to now look at alternative trade groupings like the BRICS. Here we will look at four separate groupings, three of which are closely related. The first is what we will call the "Western grouping." In the Western group we include all the major Western economies: Canada, Japan, South Korea, the United States and the European Union<sup>6</sup>.

Next, we have three different baskets to measure both the current BRICS economies and their future potential development. The first of these is simply the original BRICS: Brazil, Russia, India, China and South Africa. The second is the BRICS+, which adds in the countries added to the group in August 2023:<sup>7</sup> Saudi Arabia, Iran, Ethiopia, Egypt, Argentina and the United Arab Emirates. Finally, the third is the countries rumored to be on the short list to join the group.<sup>8</sup> This includes, on top of the BRICS+: Indonesia, Turkey, Thailand, Kazakhstan, Afghanistan, Nicaragua, Nigeria and Senegal. We believe that this short list represents the likely expansion of the BRICS+ in the coming years and is worth examining.

#### Percent of World GDP (Constant PPP)



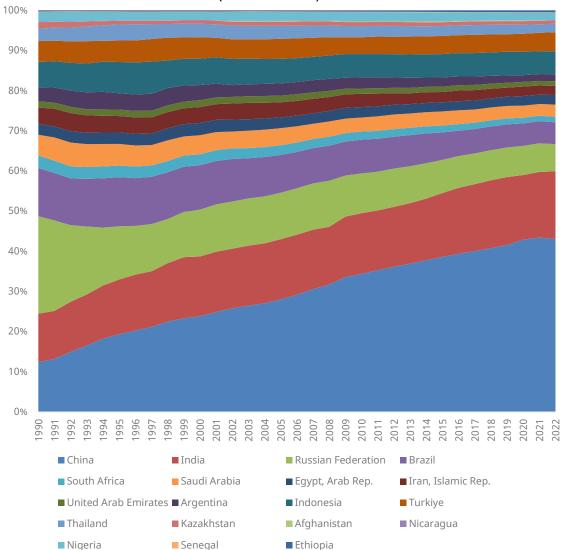
Data source: World Bank

Here it appears that the pivotal year was 2022, the same year that the China-Russia alliance appears on the world stage.

- Note that we do not include the antipodes, Australia and New Zealand. The reason for this is that, although both countries are firmly stitched into the Western cultural and diplomatic world, their economies are not. New Zealand mainly exports food and dairy products to China, which absorbs around 29 percent of the country's exports. Australia famously exports raw commodities to China for processing, with China absorbing 34 percent of its exports. It is not clear that either country could easily move away from this model of economic development, and so we believe that the future of the antipodes is at best uncertain. That said, neither economy is particularly large and leaving them out of the Western grouping makes little difference to our analysis.
- 7 https://www.reuters.com/world/brics-poised-invite-new-members-join-bloc-sources-2023-08-24/.
- 8 https://www.reuters.com/world/what-is-brics-who-are-its-members-2023-08-21/.

As of 2022, the BRICS+ have a larger share of PPP-adjusted world GDP than the entire Western group. Interestingly, the BRICS+ short list overtook the Western group in its share of world GDP in 2017, the same year that China overtook the United States as the world's largest economy.

The chart below shows a breakdown of the BRICS+ short list by country. This gives us a sense how the group has developed in recent years. China has certainly become more dominant, at the expense mainly of Brazil and Russia.



**BRICS+ Shortlist as % of Total** (Constant PPP)

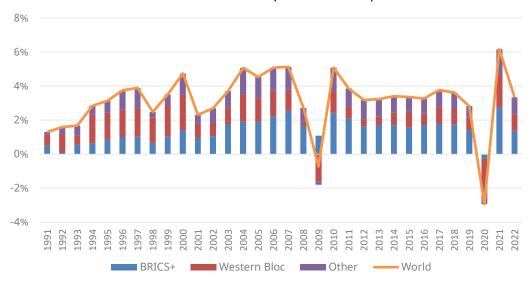
Data source: World Bank

It seems unlikely that China will continue to overtake Russia because Chinese per capita GDP overtook Russian in 2020 and, as we would expect, its rate of economic growth has since slowed. Brazil has a substantially lower per capita GDP than both. Its per capita GDP is only around 60 percent of Russia and China's. Brazil's per capita GDP has fallen substantially since 2011. It will be interesting to watch Brazil in the future and whether the new BRICS+ group can help it with its economic problems.

India has notably increased its share and will certainly be worth watching in the future, as India is substantially poorer than the other BRICS and so has a lot more catching up to do. Indian per capita GDP is currently only around 18 percent of China's.

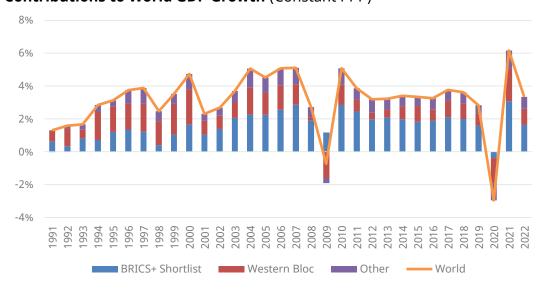
Next, we will look at how each group has been contributing to world growth in the past few years. Economic size ultimately matters more than growth, but growth tends to attract investment and capital development. Rational investors will be interested in rapidly growing economies and will shun those that grow more slowly. This can build a dynamic process where the faster-growing regions become more exciting for would-be investors and for countries considering increasing their business and diplomatic ties. The following two charts show world GDP growth together with the contributions of the Western group, the BRICS+ and the BRICS+ short list.

# **Contributions to World GDP Growth** (Constant PPP)



Data source: World Bank

## **Contributions to World GDP Growth** (Constant PPP)



Data source: World Bank

When it comes to the BRICS, three periods stand out. In the 1990s, world growth was still disproportionately driven by the Western group. But by the 2000s, the BRICS+ group was starting to dominate.

Since the 2008 financial crisis, however, the BRICS+ have completely dominated world economic growth. Since 1991, world GDP growth has averaged around 3.2 percent per year, and the BRICS+ have contributed around 1.4 percent of this while the Western group has contributed around 0.95 percent.

But since 2010, when the world economy started to recover from the 2008 financial crisis, world GDP has grown at an average of around 3 percent per year, of which the BRICS+ have contributed around 1.6 percent and the Western group has contributed only around 0.55 percent.

The situation is even more dramatic if we take the BRICS+ and the short-listed countries. Here we see that by even the mid-1990s, this potential formation was already competing with the Western group in terms of contribution to world growth. By the 2000s, this potential group was already leading the Western group and, since the financial crisis, it has been dominating completely. Since 1991, the BRICS+ plus the short-listed countries have contributed around 1.6 percent of world GDP growth and since 2010 they have contributed 1.9 percent. Compared to the Western group's contributions—0.95 percent and 0.55 percent respectively—the BRICS+ together with the short-listed countries is a far more significant formation from a global growth perspective.

Since the early 1990s, the global economy has changed completely. The Western countries are no longer the most important economies, from either a size or a growth perspective.

Some of the BRICS+ countries will grow more slowly in the future as their per capita GDPs reach higher levels, as we are already seeing this in the case of China. But provided that other countries in the group are pulled up by the larger players, we should assume that there is plenty of potential rapid growth left in the group. Even though the wealthier countries in the group will grow more slowly in the future, they will almost certainly grow much faster than the Western set, which the statistics show being mired in relative stagnation since the 2008 financial crisis.

# The Rise of BRICS+ in Global Trade

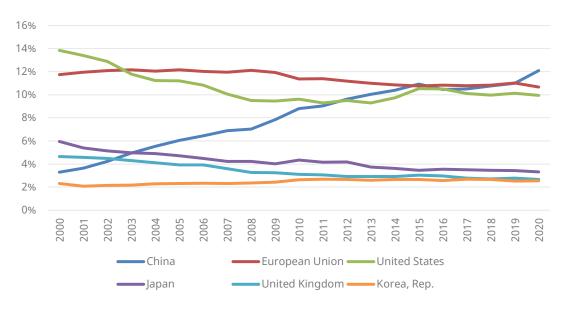
Ultimately, the size of a country's GDP determines its relative importance in the global economy. Trade flows are secondary. We can see this clearly if we look at the statistics as a percentage of GDP. The country with the largest amount of trade relative to the size of its economy is Hong Kong, whose exports and imports make up around 402 percent of GDP. Compare this to the United States which, with a trade-to-GDP

ratio of around 25 percent, is far down the list in the 176th position. This leads to Hong Kong having around 29 percent the total trade of the United States while only having around 2 percent of the PPP-adjusted GDP. Few would argue that we should rate Hong Kong's economic importance in terms of its trade share.

Yet trade is far from unimportant. Countries that do large amounts of trade tend to have outsize global influence. Hong Kong, for example, is well known to be of outsize importance in global finance. The major bank HSBC—which stands for the Hongkong and Shanghai Banking Corporation—is headquartered in Britain but has a subsidiary in Hong Kong. Hong Kong itself has a small population of 7.4 million people but is regularly visited by businessmen and financiers. So, while trade does not matter in terms of economic power as much as GDP, it remains important.

The following chart shows the breakdown of global trade by major country or region.

# % Global Trade



Data source: World Bank

Once again, the major story that we see emerge is the rise of China, which has gone from around 3.2 percent of global trade in 2000 to around 12 percent of global trade in 2020. Remarkably China now makes up a larger share of global trade than the United States or the European Union.

Yet even this figure might understate Chinese importance because in the previous chart we have only counted China itself. Yet we have already discussed how Hong Kong is a very small economy with an outsize share of world trade. This raises the question of whether Hong Kong should be counted today as being part of China. This question mattered very little when it came to measuring China's relative

<sup>9</sup> It is standard practice in the national accounts to separate the two countries. This is true in both the Chinese national accounts and those published by international agencies like the World Bank.

economic size because Hong Kong is so small. But as the following chart shows, if we factor in Hong Kong's trade with the world (excluding China) we see China's share of global trade rise from 12 to 14 percent—a very meaningful increase.

#### % Global Trade

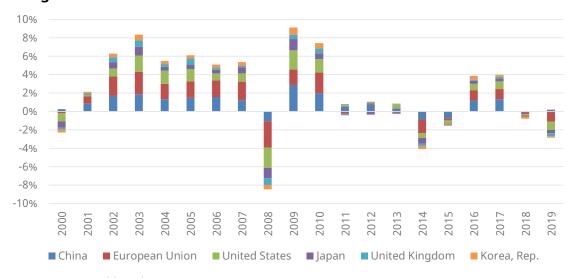


Data source: World Bank

In the rest of our analysis, we will not count Hong Kong as being part of China. We do this to provide an inherently conservative view of shifting trade relations. But the reader should keep in mind that we have used this conservative methodology and that, if we included Hong Kong as being part of China, then the enormous shifts in global trade that we have seen over the past two decades would be even more dramatic than what our analysis shows.

Next, we will look at how the major economies have contributed to the growth in global trade over the past two decades. When we look at this at a country/regional level, we see that China is one player among many in global trade. Even though the share of global trade occupied by the United States has fallen slightly and the share by the European Union has remained stable in the face of huge Chinese growth, these regions still contribute to global trade.

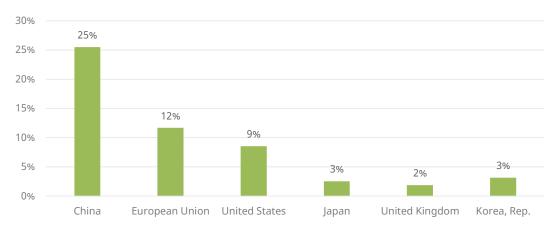
#### Weighted Contribution to Global Trade Growth



Data source: World Bank

Yet despite this, overall China has contributed substantially more to trade growth than the other economies. We see this most clearly if we take the share of global trade growth contribution by economy across the whole period. We then see that China has contributed roughly double what the European Union has contributed and two and a half times what the United States has contributed.

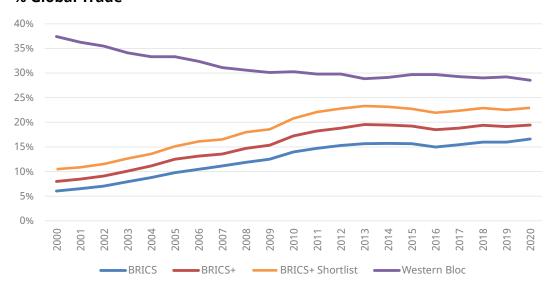
#### **Share of World Trade Growth 2000-2020**



Data source: World Bank

But as with our analysis of the global economy, while China's rise is extremely important, in a sense it is yesterday's news. With the geopolitical changes that have taken place since the Russian invasion of Ukraine in 2022, the real question is how the emerging BRICS+ compares with the incumbent Western grouping. To analyze this we will once again use our three baskets: BRICS, BRICS+ and BRICS+ with short-listed countries that will possibly join the BRICS+ in the future.

#### % Global Trade

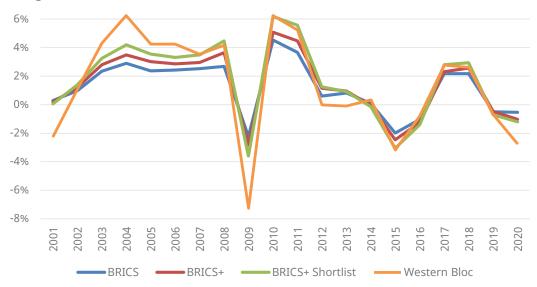


Data source: World Bank

Here we see a somewhat different picture emerge in comparison to what we saw when we studied PPP-adjusted GDP share. The BRICS+ have risen from being about 8 percent of global trade to being around 19.5 percent of global trade, but the Western group remains dominant with around 28.5 percent of global trade. Even if we include the short-listed countries, the BRICS+ group only gets up to around 23 percent of global trade. Of course, there is every chance that this will change in the future. The Western group's global share of trade is falling and the BRICS+ share is rising. But as of 2020, while the BRICS+ compete with the Western group in terms of economic size, it remains substantially smaller in terms of its share of global trade.

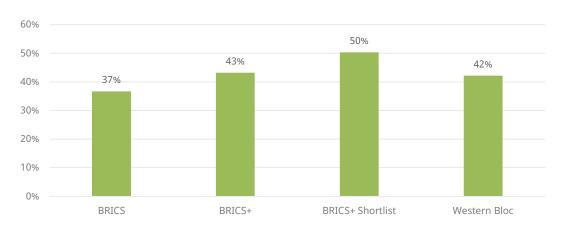
Next, we will look at share of world trade growth this period.

# Weighted Contribution to Global Trade Growth



Data source: World Bank

#### Share of World Trade Growth 2000-2020



Data source: World Bank

Here we see that the BRICS+ have accounted for around the same share of global trade growth as the Western group. If we include the short-listed countries, the group has counted for substantially more growth in global trade. This is an

important statistic to consider because it effectively reflects emerging opportunities for businesses and countries. Most of global trade is, in a sense, already set. New opportunities appear at the margins.

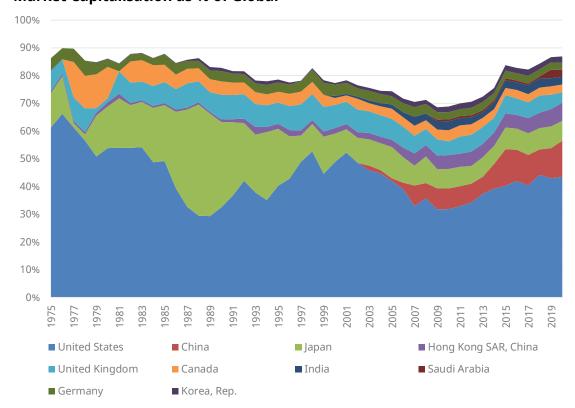
Currently the BRICS+ are creating as many new opportunities as the Western group. This further suggests that, in time, they will increase their share of trade to match the Western group.

Overall, the picture that emerges of global trade is somewhat different from the picture that we see of global economic share. The BRICS+ have yet to catch up with the Western group, although it probably will in time. Meanwhile, new trading opportunities coming out of the two groups are roughly equal.

# The Illusion of Financial Power

We have already seen that the BRICS+ countries have overtaken the Western countries in terms of relative economic size. We have also seen that, while the Western group maintains an advantage in share of global trade, the BRICS+ are catching up. But what about ownership? It is often said that a core component of Western—and especially American—global economic dominance is through their enormous financial markets. Before considering the validity of this argument, let us first establish the facts as they have developed over the past fifty years.

# **Market Capitalisation as % of Global**

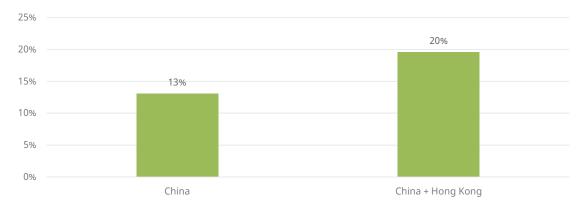


Data source: World Bank & author's estimates

To measure the size of equity markets we take the standard measure of market capitalization. Market capitalization measures the total dollar value of a given stock market. This measures the total value of each listed company's outstanding shares and then adds these all together for all listed companies. While the market capitalization can shift as the stock market goes through cycles—as we shall see, this can be extremely important when measuring the size of equity markets—this remains the standard measure of a country's equity market. We will consider issues with this momentarily, but let us first look at how equity markets have evolved in the past fifty years.

Here we see that the United States remains the largest equity market in the world. But its share has fallen since 1975 from around 61 percent to around 43 percent in 2020. The development of the Japanese market is interesting and worth commenting on. At its peak in 1988, the Japanese market made up nearly 40 percent of total equity markets, yet in 2020 it made up only 7 percent. This is because in the late 1980s, Japan experienced an enormous stock market bubble which subsequently crashed. This highlights a key weakness in using market capitalization to measure the relative importance of equity markets: if there is a bubble in any given equity market, the measure may be misleading.

## Market Capitalisation as % of Global



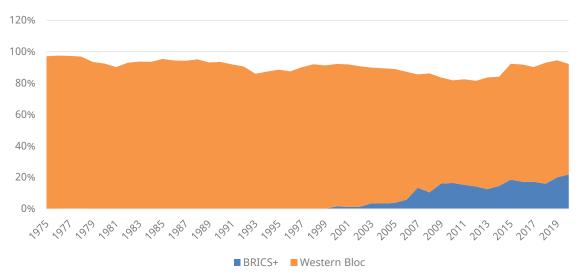
Data source: World Bank & author's estimates

Most of the other Western countries have maintained their share of the equity market relatively intact.

When it comes to the emerging BRICS+ group, the main story is the emergence of China and India. India has gone from making up less than 1 percent of the global equity market in 2000 to nearly 3 percent in 2020. China's rise has been even more impressive: it has gone from making up around 1.6 percent of the global equity market in 2003 to around 13 percent in 2020.

We also see that, as in the case of global trade, the question of whether we should count Hong Kong as part of China inevitably comes up. If we count Hong Kong as part of China, the Chinese share of global equity markets rises from 13 percent to nearly 20 percent in 2020. Next let us compare the BRICS+ and Western groupings.

# **Market Capitalisation as % of Global**



Data source: World Bank & author's estimates

Unlike in the case of relative economic size or even the share of global trade, the BRICS+ group has not yet fully emerged as a major player in global equity markets. It currently makes up around 22 percent of total global equity markets. While this is significant share and is meaningful for global investors, it falls far short of the 70 percent share that is occupied by Western markets. This raises the inevitable question of whether this financial power is real or substantial. If the BRICS+ have an economy comparable to that of the Western group, is the fact that the latter still possesses the lion's share of the global equity market simply a legacy of past glories that will soon fade away? Before discussing this, let us briefly consider the question of valuations.

As we saw with the case of Japan, if an equity market is experiencing a major bubble, it can mislead us as to the relative share of global markets that equity market occupies. This means that it is useful for our analysis to get a sense of whether any of the equity markets studied above might be experiencing overvaluation or a bubble. How do we detect a bubble? One popular way is to use a Shiller Cyclically Adjusted Price-to-Earnings Ratio (CAPE). The CAPE is a simple enough construction. It takes the actual earnings of companies listed on the stock market and compares them to outstanding price of their stock. In theory the CAPE should be stable because the price of the stock should move roughly with the earnings of the company. After all, the "value" of the stock is ultimately derived from the capacity of the underlying company's ability to earn revenue in the real economy. CAPE measures are quite successful at detecting stock market bubbles. Below are the CAPEs for some of the equity markets that we have examined.

Most of these countries have relatively stable CAPEs. As we have seen, this likely means that they are not experiencing major stock market bubbles. But two countries stand out: the United States and India. Both countries have seen dramatic rises in their CAPE since 2010. This means that stock prices have been rising in these countries much faster than the earnings capacities of the underlying companies. It is possible, therefore, that the stock prices in these countries will eventually have to readjust. If this happens the share of the global equity market in both countries will fall, possibly dramatically.

#### Shiller CAPE



Data source: Barclays

Once again, this raises the question of the utility of studying financial markets as a component of relative economic power of a country. It is possible that countries that are objectively in decline in terms of their relative economic power might possess overvalued equity markets as their underlying economies become less and less stable. Key here would be the quantitative easing (QE) policies that Western countries have been pursuing for well over a decade. Many investment professionals believe that these QE "easy money" policies have given rise to giant bubbles in financial markets. The turmoil that we have seen in these markets recently as the QE policies are unwound lend credence to this view. Overall, we believe that while it is worth monitoring the relative size of various countries' equity and financial markets, it should not be taken as a core indicator of global economic dominance.

The failure of the sanctions against Russia have led some to raise problems with GDP as a measure of economies. 10 We have not addressed these issues in this study, except insofar as we have insisted on using PPP-adjusted metrics instead of the nominal dollar metrics that are sometimes used in a misleading fashion. It is uncommon, by contrast, for economists or even popular commentators to point to the relative size of financial markets as indicative of economic power. It is very common, however, for economists and commentators to allude to relative size of financial markets as being indicative of a country's financial power. This is most notable when the role of the U.S. dollar as the global reserve currency is discussed. 11 Those who think U.S. dollar dominance will continue into the foreseeable future typically point

<sup>10</sup> https://americanaffairsjournal.org/2022/11/assessing-the-russian-and-chinese-economies-geostrategically/

https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-us-dollar-post-covid-edition-20230623.html

toward America's outsize financial markets which they refer to as "deep and liquid." Finally, many in Western policymaking circles think that this financial dominance will give them leverage in the emerging multipolar world economy.

It seems more likely, however, that having an outsize financial system can give rise to economic distortions. Having a larger financial sector relative to GDP logically means that more resources are allocated to engaging in purely financial transactions at the expense of transactions that result in the production of useful goods and services. If we compare the metrics that we have produced on relative sizes of financial markets, it is immediately striking that China and other BRICS+countries are achieving far higher rates of economic growth with much smaller financial systems. Correlation is certainly not causation here, but it is notable that these economies are able to grow—both in terms of economic size and of international trade—with much leaner financial systems. There is every reason to think that having an oversize financial system is itself indicative of past economic legacy and so might actually give policymakers and even businesspeople an illusion of global reach where very little exists.

# Conclusion

In this study we have attempted to form an understanding of how economic multipolarity emerged and to what extent it is already a reality. One of the most surprising findings with respect to China is that it has been the world's largest economy for several years. More recently it has become the largest country in terms of global trade. But as we have shown, simply focusing on China will prove misleading.

The big story of our time is the emergence of economies that we typically think of as "developing" into an increasingly coherent group, centered around the ever-growing BRICS+ alliance. Until now, economists have not given much consideration to the actual size and power of this group—much less of its potential for future growth.

We have shown that even on the most basic of metrics, it is already an extremely important part of the world economy and will only grow more important over time.

As we stated in the introduction to this study, however, it would be wrong to think of the BRICS+ as purely a rival group to the Western G7 economies. We do not think that the world either can or will separate into autarkic economic blocs.

In reality, these financial markets are increasingly volatile, and investors can be subject to enormous drawdowns when they collapse. This was most obviously the case in the wake of the 2008 financial crisis when the S&P500 suffered a drawdown of 49 percent. It has also become apparent recently with the unwinding of the Federal Reserve's QE market which has led to a drawdown in the value of US Treasury Bonds of nearly 20 percent (note that bonds are supposed to be "safe" assets and drawdowns should be less than 5 percent). This increased volatility in these financial markets is directly linked to the increased financialization of the American economy that is visible in the fact that these markets are so large relative to the real economy.

# What the rise of the BRICS+ represents is the emergence of economic multipolarity.

In the past many individual members of the BRICS+ may have had little in the way of choices when it came to how they structured their global economic ties. This is clearly no longer the case. We have already seen, for example, that the BRICS+ is as large as the entire Western group of economies. This is very different from the situation in 1990 just after the collapse of the Soviet Union, when the countries that now make up the BRICS+ were less than 40 percent the size of the Western bloc economies. Given that the BRICS+ are actively discussing trade and economic relations among themselves and is roughly the same size as the Western economies, it seems highly unlikely that global economic diplomacy will be able to operate in the same manner as it did in the early 1990s.

This is the most productive takeaway from this survey: the world has changed drastically, and there is no way to reverse this change, so the best strategy moving forward is to simply embrace the change.

The reality is that the developing economies were always going to become developed economies at some point and catch up with the Western economies. The fact that the BRICS+ alliance has emerged so quickly and has already caught up with the Western economies before they have fully developed is certainly surprising—and implies that when these economies do become more developed, they will be substantially larger than the Western group.

But once again, given simple population levels this was always inevitable.

The speed of these changes may have caught many of us off guard, but there is no turning back. Recognizing this leads us to the conclusion that embracing connectivity should be a top priority of every nation in the world—developing or developed—BRICS or Western.

