Deglobalization

WHITEPAPER
JULY 2023

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COVID and the war in Ukraine have led to headlines about corporations wanting to secure their supply chains and countries wanting to secure their national interests, both by limiting and changing with whom they trade. Thus, there is reason to believe that we may be entering a period of deglobalization, that is, a halt or even an outright reversal of the globalization that drove global investment, boosted growth, and lowered the cost of manufactured goods for much of the last fifty years. This would have lasting consequences for the global economy and for investors.

In this paper, we examine the current evidence for deglobalization by analyzing the current environment and the historical effects of globalization, primarily during the post WWII era. We also examine the costs and benefits of globalization to identify potential impacts of its unraveling. Beyond the obvious diminishment of the peace dividend, we find that deglobalization may have ramifications for price stability, interest rates, economic growth, and lower returns on investment in the US and beyond.[1]

[1] In economics, the peace dividend represents a concept where a nation that is at peace will spend less money on military defense, allowing for more spending on social and other programs. See: IMF, "Transcript of April 2023 MD Kristalina Georgieva Press Briefing on Global Policy Agenda," April 14, 2023 where IMF head Kristalina Georgieva stated "the peace dividend is over". See also New York Times, P. Cohen et al. "The 'Peace Dividend' is Over in Europe. Now Come the Hard Tradeoffs," May 3, 2023.

Deglobalization: recent evidence

While the pace of globalization slowed considerably after the Global Financial Crisis (see Figure 2), it has been a combination of the COVID pandemic and geopolitics that have given rise to the notion that globalization might be on the retreat.

COVID and supply chain vulnerabilities

The COVID pandemic led many governments to close their borders and limit "non-essential" economic activity. This interrupted the production of goods and services, and thereby disrupted global supply chains (see Figure 1). The initial lockdowns caused a reduction in both supply (as manufacturers temporarily shuttered operations) and demand. Yet, there was a sharp rebound in demand, especially in the US, particularly for goods more so than services. The rebound in demand in the US pushed shipping capacity to its maximum so that the volume of imports in December 2020 was 30% higher than December of 2019.[2]

[2] Source: United States International Trade Commission, "The Impact of the COVID-19 Pandemic on Freight Transportation Services and US Merchandise Imports" as of June 23, 2023.

Supply was not able to rebound nearly as quickly in 2020 due to several factors related to the pandemic. The pandemic caused disruptions in global supply chains, as factories and transportation networks were shut down or slowed down in many parts of the world. This led to shortages of raw materials and finished goods, and reduced production capacity. Additionally, there were changes in consumer demand patterns. Many people started working from home, which led to increased demand

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for electronics and home office equipment, while demand for other products, such as clothing and travel-related goods, decreased. This shift in demand created imbalances in supply chains, further exacerbating supply shortages. Furthermore, social distancing measures and lockdowns imposed in many countries also caused labor shortages and reduced productivity, particularly in industries such as manufacturing, construction, and logistics. This made it difficult for businesses to maintain pre-pandemic levels of production, resulting in continued supply chain disruptions.

[3] Source: Ibid.

[4] Source: Pacific Basin Economic Council & KPMG as of March 2023. And McKinsey & Company, "Taking the Pulse of Shifting Supply Chains," August 26, 2022. A range of surveys reveal a range of reasons for diversification of supply chains. Companies cite political risks and rising tariffs as the main reasons for diversifying their productive capacity since 2019.

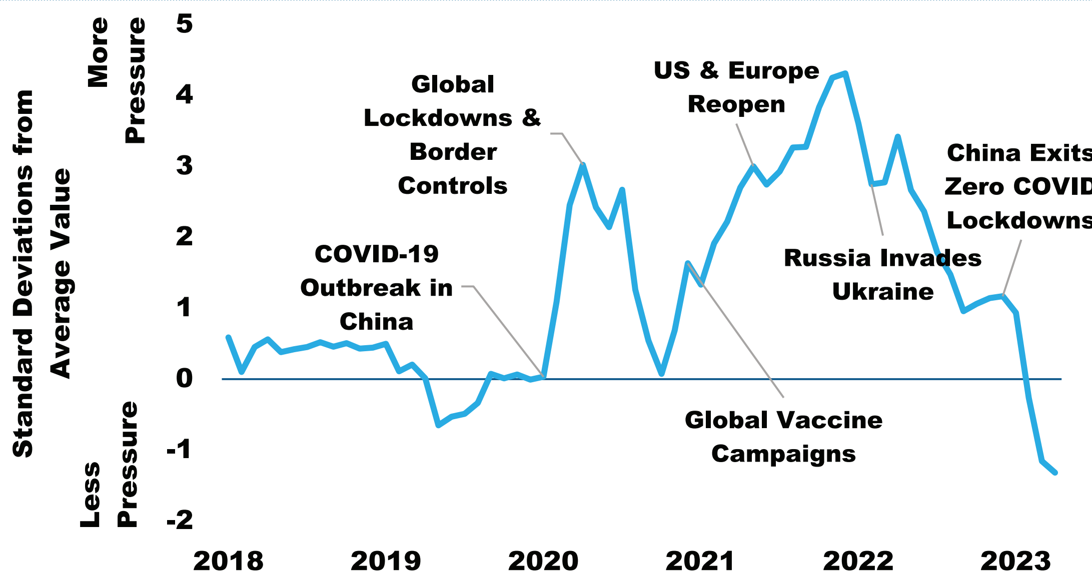

FIGURE 1
Global Supply Chain Pressure Index

Source: New York Federal Reserve as of March 2023. The Global Supply Chain Pressure Index ("GSCPI") also uses several supply chain-related components from Purchasing Managers' Index ("PMI") surveys, focusing on manufacturing firms across seven interconnected economies: China, the euro area, Japan, South Korea, Taiwan, the United Kingdom, and the United States.

The US Commerce Department and other governmental agencies have coordinated with allies and partners to develop supply chain principles and plans. Even the members of the World Trade Organization ("WTO") are on the record advocating for diversifying supply chains to ensure resiliency and reduce potential country specific or government disruptions.[3]

For private corporations,[4] the reorganization of supply chains is a bit more complicated. While there are numerous anecdotal headlines of major multinational companies diversifying their supply chains, the nuances regarding these changes is more challenging. For example, to take advantage of the US CHIPS Act's attractive tax breaks and loans, global chip makers have announced new investments in the US. But a majority of the world's existing chip foundry capacity remains in places like Taiwan.[5] In a recent survey of corporations doing business in the Asia Pacific Region, most of the companies plan to remain in the Asian Pacific Basin, even as tensions between the US and China are on the rise. "Much of the relocated distribution has remained in Asia (71%), with 55% centered in Southeast Asia. Vietnam receives the highest number of company inflows, but India shows the greatest potential for future sourcing patterns to emerge."[6] Such "Friend-shoring" and China +1, and China +2 strategies may diversify supply chains, but they may also incur additional costs.[7] Still, there is clear evidence that foreign direct investment ("FDI") has pivoted away from Asia since the outbreak of COVID, and this shift is even more pronounced for China (see Figure 2).

[5] Source: New York Times: J. Liu *et al.*, "Inside Taiwanese Chip Giant, A US Expansion Stokes Tensions," February 22, 2023. Taiwan Semiconductor Manufacturing Company ("TSMC") has announced plans to build new foundry capacity in Arizona in 2022. TSMC's announcement of $40 billion investment in the US raised tensions with China.

[6] Source: Pacific Basin Economic Council & KPMG as of March 2023. In this report, a sample of 132 companies were analyzed that are considering or have already altered their supply chain sourcing, covering 232 market relocations between 2018 and 2023. Vietnam tops the list with 70 companies that relocated or diverted production there, followed by Taiwan (24), Thailand (20), and India (18) Outside of Asia, Mexico is the biggest beneficiary outside of the US (19), given its proximity to the US market. The US also features as a sourcing relocation destination (19), but less than half of these are reshoring moves.

[7] There are many terms to describe the process of re-organizing supply chains such as friend-shoring, re-shoring, and de-risking China +1 and China +2 are sometimes used to describe a new supply chain strategy that incorporates new sources for goods in addition to an existing China based supply chain. For example, a China +1 supply chain strategy could mean a US company adds Vietnam based suppliers to their current supply chain that depends solely on Chinese suppliers.

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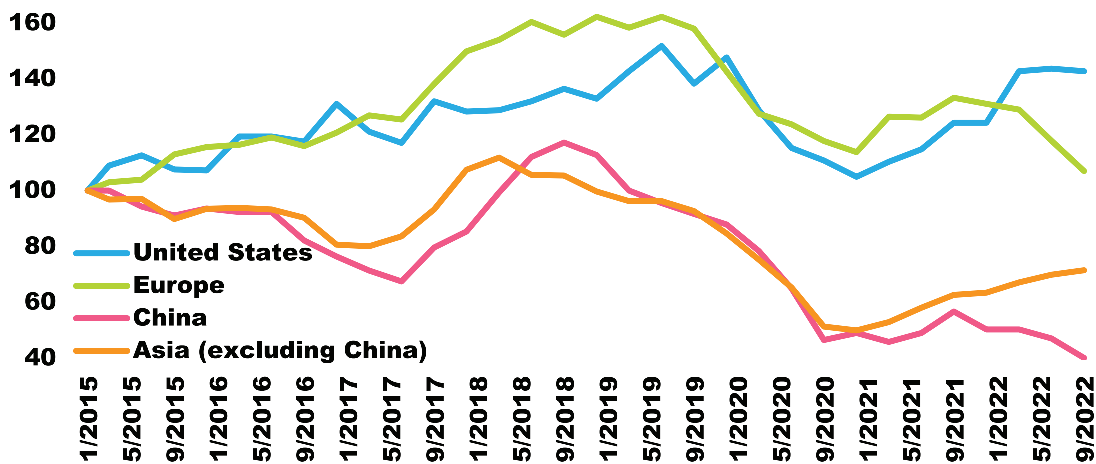

FIGURE 2
Number of Global Foreign Direct Investments By Region (2015 – 2022)

Source: IMF World Economic Outlook April 2023. Chapter 4. Geoeconomic Fragmentation and Foreign Direct Investment. Number of investments with four-quarter moving average.

Resource security

Even as the pandemic receded, Russia's invasion of Ukraine and the West's trade and financial sanctions of Russia made self-sufficiency and national security even more important. Global food and energy prices soared in response to the war in the Ukraine. Supply chain disruptions and lockdowns created food insecurity around the world, and poorer countries suffered the most.[8]

As a result, national governments became more focused on policies to support self-sufficiency. Europe and NATO allies have engaged in price controls on Russian natural gas and pursued infrastructure investments to diversify away from Russia. They built up reserves of natural gas prior to the winter and replaced imports of Russian gas and oil with those from other countries. The decoupling of Europe from Russian natural gas pipelines will force restructuring and investment around the world. Natural gas is a key transition fuel for advanced and developing economies as they move away from coal-fired power generation. The EU, Germany, and the UK have announced fiscal plans for energy infrastructure investments and energy subsidies.[9] In addition, multinational corporations (and their management consultants) now include security and resiliency when assessing the structure of their supply chains.

[8] Source: National Institute for Health (NIH) as of July 2022. H. Kakaei et al., "Effect of COVID-19 on Food Security, Hunger, and Food Crisis."

[9] Source: Daniel Yergin, "The New Map", 2020.

National security

The invasion of Ukraine reinvigorated interest and support for NATO as countries along Russia's border, such as Finland who reassessed their national security policy and joined NATO in 2023. Not only did NATO allies re-commit to their mutual defense in the face of Russia's invasion, but many of the same countries are also re-drawing trade relationships to prioritize shared security concerns. Multinational corporations – like national governments – are looking to diversify and secure their supply-chains to stay clear of future international tensions and possible sanctions.

Diplomatic and trade tensions primarily between the US and China have added to the waning enthusiasm for globalization. Over the past fifteen years, the US attitude to China's rise has shifted from engagement and cooperation to strategic decoupling. Antecedents for our present-day trade related tensions between the US and China reach back to the early 2000s when China was accused of currency manipulation and

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violations of its WTO commitment to avoid unfair trade policies.[10] Prior to 2008, most trade disputes simmered at the level of trade policy and sector specific challenges in the WTO and did not rise to the level of national security for the US. China was first named as a currency manipulator in 1994 where the Peoples Bank of China ("PBOC") actively suppressed the value of their currency to enhance the competitiveness of its exports. By the end of 2011, the process of artificially weakening the value of its currency against the US dollar had allowed China to attract massive investment from global companies anxious to take advantage of the competitive exchange rate and very cheap labor.[11]

After nearly two decades of waiting for China to open its economy and allow its currency to float like other G20 members, the US government began to take action. Following the Global Financial Crisis, US policy on trade with China began to shift and gain priority as an issue of national security.[12] China's use of economic and industrial espionage, systematic use of state support for exports, and currency manipulation reduced US appetite for diplomatic and economic engagement. In January 2018 the Trump administration began to actively defend US interests in key sectors that they perceived were being harmed by China's unfair trade practices. In particular, these sectors included steel, aluminum, and intellectual property rights for technology like semiconductors.[13] President Biden's administration has increasingly embraced new industrial policies (e.g., CHIPS Act and Inflation Reduction Act) along with targeted sanctions of Chinese companies with connections to the Chinese People's Liberation Army ("PLA").[14]

Declining political support domestically

Since 2012, more Americans have seen foreign trade as "an opportunity for economic growth" as opposed to a "threat to the economy." In 2020 the number of Americans with a negative view on foreign trade declined to a multi-decade low of 18%.[15] That trend reversed in 2021 and 2022, with support for foreign trade falling from 79% to 61%.[16] Still, this indicates that there is popular support for trade broadly. Despite voters having a positive view on foreign trade, the Biden administration has looked to national industrial policy and increased use of foreign sanctions.[17] This might be due to a harsher view on trade, specifically with China. A 2021 survey indicated that a "majority supports a more assertive stance on bilateral relations with China across a range of issues."[18]

In the Spring of 2022, US Treasury Secretary Janet Yellen gave a speech at the Atlantic Council recommending "friend-shoring," whereby multinational corporations seek supply chain security from friendly, like-minded allies.[19] In the US, the Inflation Reduction Act and the CHIPS Act of 2022 included passages designed to boost domestic production of green energy and semiconductors, respectively. Moreover, corporations have sufficient financial and political incentives to bring production closer to home markets. For example, the CHIPS Act established the Advanced Manufacturing Investment Credit ("CHIPS ITC"), which offers a 25% credit against a qualified company's investment in a facility with the primary purpose of manufacturing semiconductors or related equipment.[20] Moreover, recipients of these governmental incentives cannot transact or build facilities in "countries of concern" – a list which includes China - for a ten-year period. [21]

[10] Source: US Treasury and US Government Accountability Office ("GAO"). China was the first country to be named as a currency manipulator in 1994 by the US Treasury Department. While China is not the only country to have been named a currency manipulator, its outsized ability to accumulate foreign reserves in US dollars has been a long-standing subject of debate among economists. By the end of 2011, China had accumulated over $3 trillion US dollars through a process of sterilization where the central bank of China actively managed the inflow of foreign currency which kept the value of the local Chinese currency (RmB) very low. The process requires a closed capital account and pegging the value of its currency (RmB or CNY) to the value of the US dollar.

[11] Source: Peterson Institute for International Economics C. Fred Bergensen et al, "Currency Manipulation, the US Economy and the Global Economic Order," 2012. Analysis varies, but some estimate that currency manipulation has cost the US domestic economy hundreds of billions of dollars a year and millions of jobs. The US Commerce Department has estimated that $1 billion in US exports would add around 5,000 jobs. In 2012, the US Federal Reserve estimated that currency manipulators have cost the US between 3 and 5 million jobs.

[12] Source: Center for Strategic & International Studies ("CSIS"), M. Blesser, "The Drive to Decouple," January 24, 2023. See also, The Peterson Institute for International Economics "Trump Trade War Timeline" for detailed chronology of the US -China trade war and effected sectors and goods.

[13] Source: Ibid.

[14] Source: US Treasury 's Office of Foreign Asset Control ("OFAC") and US Commerce Department blacklist.

[15] Source: Gallup, "US Views of Foreign Trade Nearly Back to Pre-Trump Levels," March 10, 2022.

[16] Source: Ibid.

[17] Source: Whitehouse, US Department of Commerce, "Build Back Better", CHIPs Act, Inflation Reduction Act.

[18] Source: Pew Research Center, "Most Americans Support Tough Stance Toward China on Human Rights, Economic Issues", March 4, 2021.

[19] Source: Atlantic Council April 13, 2022. Treasury Secretary Janet Yellen's Speech "Next steps for Russia sanctions and 'friend-shoring' supply chains."

[20] Source: US Treasury Department Press Release, "Treasury Department Mobilized Semiconductor Supply Chain Investment Incentives with Key CHIPS Investment Tax Credit Guidance," March 21, 2023. The CHIPS ITC provision includes a 10-year claw back of the original credit which follows the sizing of facility investment.

[21] Source: National Institute of Standards and Technology ("NIST"), "Commerce Department Outlines Proposed National Security Guardrails for CHIPS for America Incentives Program," March 21, 2023.

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The historical impact of globalization

For much of the past three decades, globalization was considered an unmitigated positive. From an economic perspective, it increased growth and reduced inflation, leaving much of the world's population better off than it had been previously. From a corporate perspective, globalization increased specialization, decreased labor costs, and increased profitability.[22] However, a more nuanced picture emerges when this period is examined more closely.

[22] Source: Center for Economic Policy Research ("CEPR"), Y. Xu et al., "Globalisation, Specialisation, and the Division of Labour," August 7, 2021.

Trade and growth

Global trade grew from around twenty percent of global GDP in 1970 to over fifty percent of global GDP in 2008 (see Figure 3). This was happening as the world's gross domestic product grew from $2.9 trillion dollars in 1970 to $85.1 trillion dollars in 2020.[23]

[23] Source: World Bank and FRED. Annual data as of September 2022.

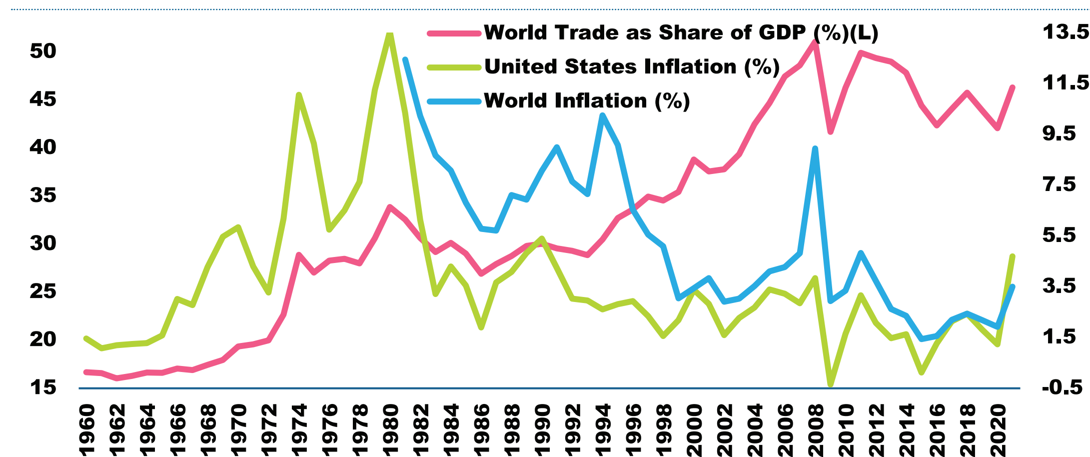

FIGURE 3

Global Trade and Global Inflation (1970 – 2021)

Sources: World Bank and United Nations Conference on Trade & Development Trade Analysis Information System ("UNCATD TRAINS") and FRED. US corporate profits after tax as a percentage of GDP. Inflation, consumer prices for the World. Annual data as of September 2022.

A major driver of these increases in trade and growth was that globalization expanded developing countries' access to global capital markets and investment. Classical economic theory argues that relative differences in productivity can lead to greater aggregate efficiency and growth.[24] When individuals and entities are free to pursue economic activities that they are best at, the result is the efficient allocation of capital. Trade of specialist goods and services is the most efficient use of labor and resources.[25] As countries adopted trade liberalization policies, access to new markets and trading partners offered new avenues for economic growth and investment. Multinational firms were quick to leverage and integrate competitive advantages across borders for sourcing of inputs and accessing markets. For developing nations, the expansion of trade allowed for countries to compete on the basis of comparative advantage.

[24] Source: Brookings, D. Bahar, "Diversification or specialization: What is the path to growth and development," November 16, 2016. David Ricardo.

[25] Source: Adam Smith, "The Wealth of Nations", 1776.

Specialization and efficiency have dominated corporate investment decisions since the 1990s. For example, just-in-time manufacturing and inventory systems connected specialist manufacturers from far-flung regions in the production of other goods. However, such levels of specialization also introduced fragility to the system, leaving these entities vulnerable to geopolitical risks, raw material or labor shortages, etc.

Inflation and global capital markets

In the 20th century, there were multiple periods of low and stable inflation in the US.[26] The period from 1982 to 2021 was by far the longest such period. And this trend

[26] Source: Brookings, J. Ha et al.,"Is High Inflation Here to Stay?" April 5, 2022.

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was not limited to the US. Global inflation averaged just 3.4% per annum from 2000 through 2020.[27]

Several factors contributed to the most recent period of low and stable inflation, including trade and financial openness, central bank independence, and inflation-targeting monetary policy.[28] Globalization increased global competition across borders, and openness to trade helped drive the price of goods and labor lower even as demand grew.[29] In the 1990s, many governments in emerging economies gradually adopted policies advocated by the IMF and the World Bank that included trade openness, flexible exchange rates, fiscal responsibility, and privatization of state assets. As developing countries adopted these policies, often as part of a multilateral aid package from the IMF and World Bank, trade expanded and economic instability and inflation started to fall.

Economic stability attracted foreign investment. Global capital markets permitted investors access to new markets and investment opportunities based in other regions. Between 2000 and 2021, the MSCI All Country World Index – representing approximately 95% of global listed stocks - grew from 2,187 securities to 2,966 securities, despite the number of listed US companies shrinking.[30] The expansion of trade and access to capital helped to rein-in global inflation (see Figure 2). Inflation, which had averaged 7-10% in the 1980s, fell to around two percent for most of the 2010s.[31]

Economic growth

As developing countries benefited from foreign investment and higher wages, local financial markets also matured, allowing public investment and expansion of public services. The period of globalization from the early 1990s through 2020 saw living standards rise across the developing world. Since the 1980s, the percentage of the world's population living on less than two dollars a day fell from over forty-two percent to less than ten percent.[32] In particular, China experienced the most rapid decline in poverty on historical record, lifting between 400 and 500 million people out of extreme poverty between 1980 and 2013.[33]

Trade of goods and services reflects a surplus that is available to trade outside of a nation's domestic economy. When countries are able to produce more than enough goods and services to meet their own needs, the ability to sell the surplus boosts the gross domestic product of a country.[34] In 2021, the World Bank estimates that 57% of global GDP came from international trade, which was down slightly from the 2008 peak of 61%.[35]

Profitability

Since the 2000s, multinational corporations have enjoyed generous profit margins as they pursued low-cost production strategies in relatively unregulated developing economies. These corporations built complex, multi-country supply chains connecting low-cost producers delivering cheaper goods to global consumers. US corporate profits as a share of US GDP rose from around five percent of GDP to around 10% of GDP (see figure 4).

[27] Source: FRED, Inflation, consumer prices for the World. Annual data as of September 2022.

[28] Source: World Bank, editors J. Ja et al., "Inflation in Emerging and Developing Economies."

[29] Source: Brookings, J. Ha et al.,"Is High Inflation Here to Stay?" April 5, 2022.

[30] Source: MSCI as of March 2023.

[31] Source: FRED. Inflation, consumer prices for the World. Annual data as of September 2022.

[32] Source: World Bank UNCATD TRAINS as of March 2023. Annual data through 2019.

[33] Source: IMF, S. Jain-Chandra et al., "Inequality in China - Trends, Drivers, and Policy Remedies," June 2018. Between 1980 and 2015 the number of Chinese people in the lowest decile of income declined by 86%. However, income inequality remains high.

[34] Source: Gross Domestic Product ("GDP") = Private Consumption Spending + Investment + Government Spending + **Exports minus Imports.**

[35] Source: World Bank UNCATD TRAINS data as of April 23, 2023. The 2008 peak of global trade to GDP may have reflected slower domestic demand or decline in investments where trade remained at quite high levels. Since 2008, the ratio has not returned to its former highs. However in 2011 the ratio did reach 60%.

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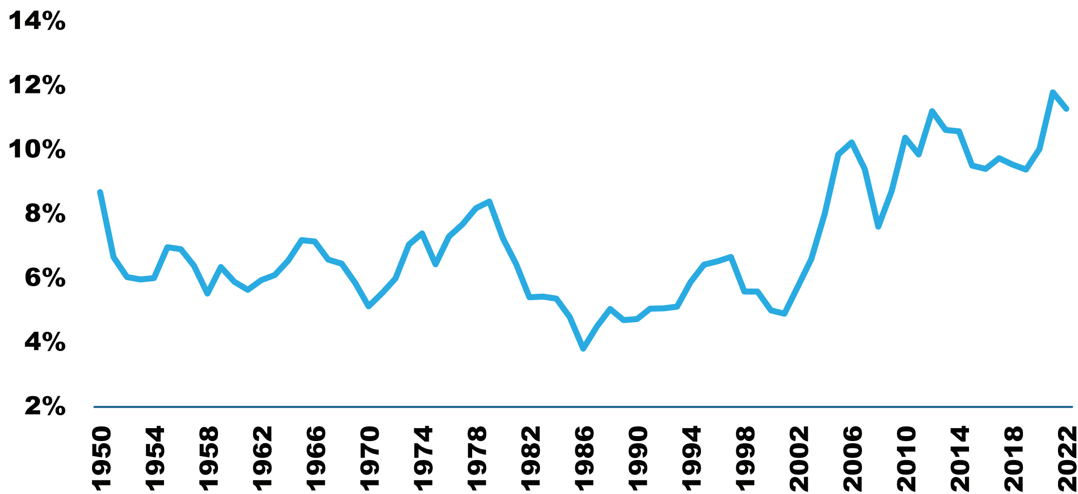

FIGURE 4

US Corporate Profits as a % of GDP

Source: Meketa analysis of data from FRED. Corporate Profits After Tax (without IVA and CCAdj), Seasonally Adjusted Annual Rate, and Gross Domestic Product, Seasonally Adjusted Annual Rate.

Employment and income

The net impact on employment of globalization has been positive, as a significant number of people in developing countries have entered the global labor force. According to the Organization for Economic Co-operation and Development ("OECD"), the poorest of the world's population saw their income increase by 20% between 1993 and 2008.[36] For decades, the shift from subsistence farming to manufacturing and urbanization provided global corporations a massive influx of inexpensive labor.[37] But globalization's substantive benefits obscured numerous pitfalls, such as stagnant wages in advanced economies, the loss of manufacturing jobs in Europe and the US, and expanding income inequality both within and across countries.

At the end of the 1970s, there were nearly twenty million manufacturing jobs in the US, which fell to less than twelve million jobs by 2010. There is some debate among economists regarding the extent of the impact of globalization on the loss of manufacturing jobs in the US. Some point to the role of automation and technology as having a larger impact in reducing the number of manufacturing jobs.[38] Manufacturing in the US has nearly doubled in value to $2.3 trillion dollars since China joined the WTO in 2001, but the number of workers in manufacturing fell from around 17 million workers to around 13 million in 2021 (see Figure 5).[39] Over that same period, the US share of GDP from manufacturing fell from 13% to around 10% as the value of the service sector expanded.[40] The apparent decline in manufacturing as share of GDP can be associated with efficiency and productivity in the manufacturing sector, along with greater accumulation of wealth that has been used to purchase consumer goods and services.[41]

When we look at labor compensation, we note that US workers' wages as a share of GDP declined over the same period. Wages started to fall as a share of GDP in the 1970s. There was a short-lived rebound that peaked in 2001, when China joined the WTO. It then fell for much of the next twenty years to around 60% of GDP (see Figure 5). It is unclear how much of this decline was due to the side effects of global trade versus other factors, such as disruptive technological advancements.[42]

[36] Source: OECD, "Why Open Markets Matter" as of April 2023.

[37] Source: Ibid.

[38] Source: Atlanta Federal Reserve, S. Alder *et al.*, "The Decline of the US Rust Belt: A Macro Economic Analysis," CQER Working Paper 14-05 August 2014.

[39] Source: FRED as of April 23, 2023.

[40] Source: FRED as of April 23, 2023. Deindustrialization in the US was evident in the 1960s and 1970s when consumption grew more important as a driver of GDP. In 1965 manufacturing accounted for approximately 28% of the US economy. See also, IMF R. Rowthorn et al., "De-industrialization – Its Causes and Conditions," 1997. Deindustrialization is considered to be a part of economic maturing.

[41] Source: IMF, R. Rowthorn *et al.*, De-industrialization – Its Causes and Conditions," 1997. Deindustrialization is considered to be a part of economic maturation.

[42] Over the past century, higher wages have prompted companies to invest in technologies to boost productivity without hiring more workers. On balance, when wages rise to a point where the alternative technology investment makes sense, new technology advances emerge. Disruptive technologies and novel shared-economy solutions have revolutionized transportation (Uber), accommodation (AirB&B), and retail investing (RobinHood). But rather than suppress incomes, investment in technology ultimately has shown to boost overall worker income over time. Over the past 200 years, technology advancements have increased wages ten-fold while productivity increased.

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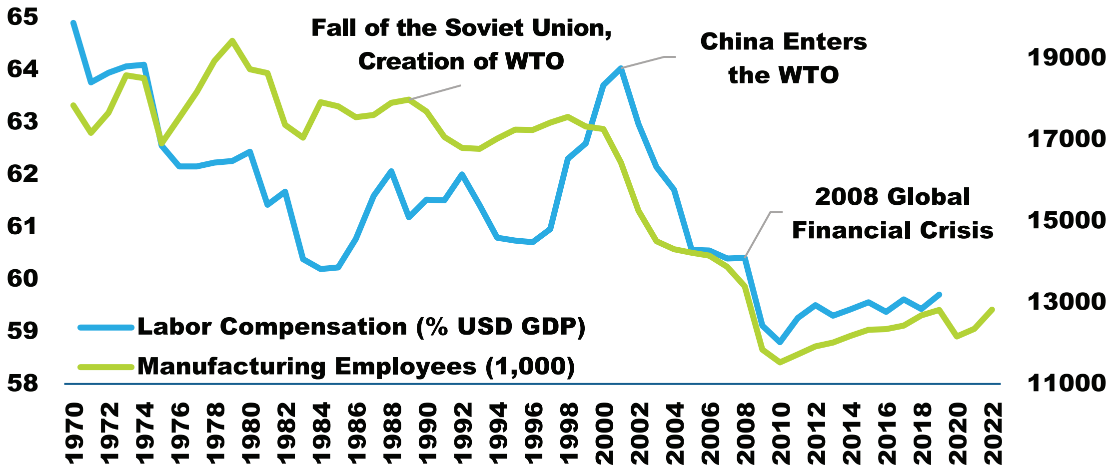

FIGURE 5

US Manufacturing Jobs (Millions of Employees) & US Labor Compensation (% GDP) 1970 -2022

Source: FRED as of May 2023.

Although global trade has helped lift living standards of the very poor, income inequality has risen inside countries and across countries since the founding of the WTO in 1990.[43] Rising inequality in major emerging market countries and in some developed markets has fueled criticism of globalization. When China joined the WTO, its income inequality was modest with a ratio of 29, but this measure has risen quickly to around 47 by 2020 (see Figure 6). An often-cited result of income inequality is an increase in political divisions.

[43] Source: IMF, F. Jaumotte *et al*, "Rising Income Inequality: Technology, or Trade and Financial Globalization?" 2008. Trade is associated with reducing inequality while global capital market expansion is indicated as increasing income inequality.

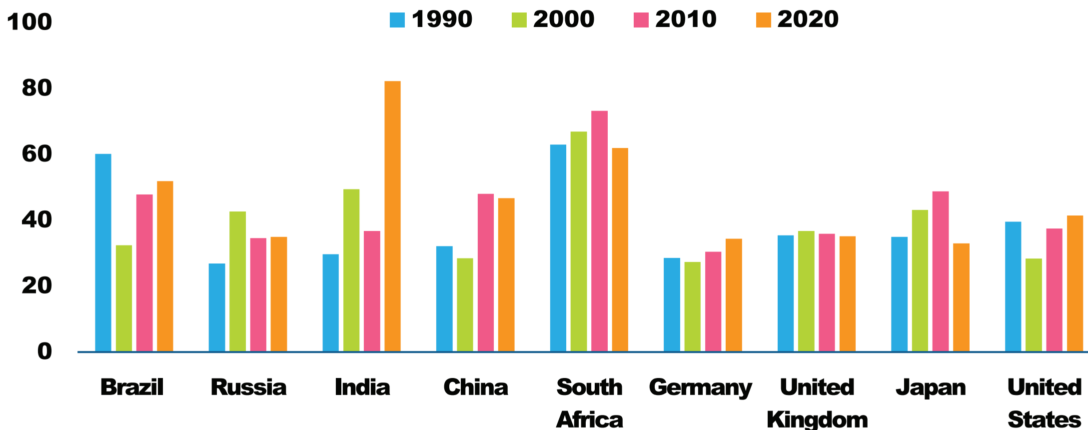

FIGURE 6

Income Inequality by Decade (1990 – 2020)

Source: WIID Income Inequality annual income inequality as of May 2023. The World Income Inequality Index (WIID) annual income inequality data reflects independent and consistent income inequality measurement. Official multilateral and national estimates may vary and reflect different official calculation methods and statistics.

Peace dividend

The fall of the Soviet Union and the end of the Cold War left the West's post-WWII multilateral organization without a diplomatic and economic foe. The IMF, NATO, the World Bank and other Western institutions expanded their membership and reach. Former economic and political rivals became trade partners. Communist China joined the WTO in 2001. The Eurozone monetary union was signed into existence in early 1992, establishing common structures and rules for the creation of a single currency.[44] Within a decade, the European Union agreed to terms to put former Soviet nations of eastern Europe on the path to membership.[45] For nearly three decades, the expansion of trade and financial relationships appeared to reduce military and diplomatic tensions, the so-called 'peace dividend' of globalization and multilateralism.

[44] Source: European Central Bank, "Economic and Monitory Union" as of April 2023.

[45] Source: Ibid.

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Political backlash

Since the Global Financial Crisis ("GFC") in 2008, the rate of trade growth and globalization slowed as political appetite for liberalizing reforms waned. Global trade quickly rebounded to its pre-GFC levels, but the annual growth rate of trade slowed notably. Although global trade continued, its general growth trend slowed (see Figure 7). Falling energy and commodity prices cannot entirely explain the slowing of trade growth as the same pattern is evident in manufactured goods over the same period.[46] The slowing growth rate of global trade in the years after the pandemic were accompanied by a pullback in global foreign direct investment and cross-border bank lending.[47]

[46] Source: World Trade Organization ("WTO") annual trade data as of March 2023.

[47] Source: Bank for International Settlements, S. Avdjier *et al.*, "The Shifting Drivers of International Capital Flows," 2016.

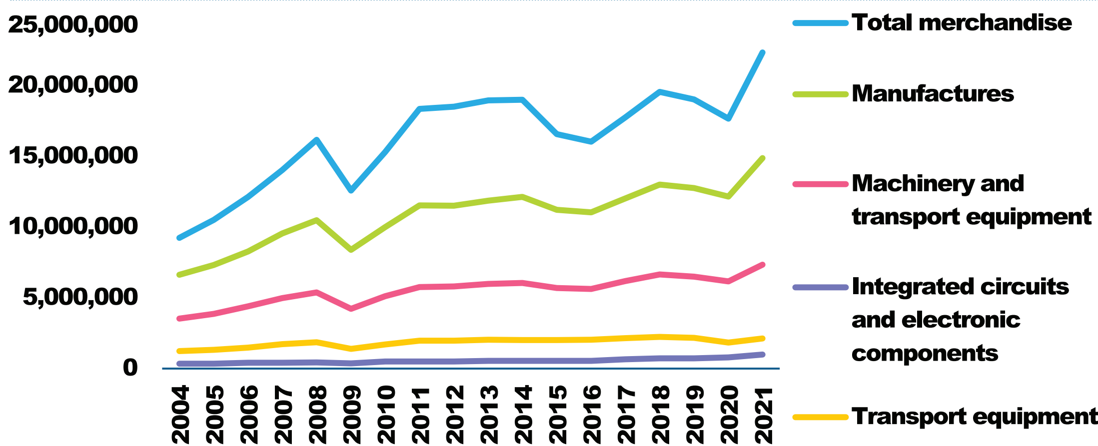

FIGURE 7
Annual World Trade Data 2004 – 2021 ($M)

Source: World Trade Organization (WTO) annual trade data as of March 2023.

Likewise, since 2010, foreign investment has increasingly been directed to "friendly" countries, as defined by those nations that are geopolitically close to each other (see Figure 8). This is a reversal of the trend toward more geographically and geopolitically diverse FDI levels prior to the GFC.

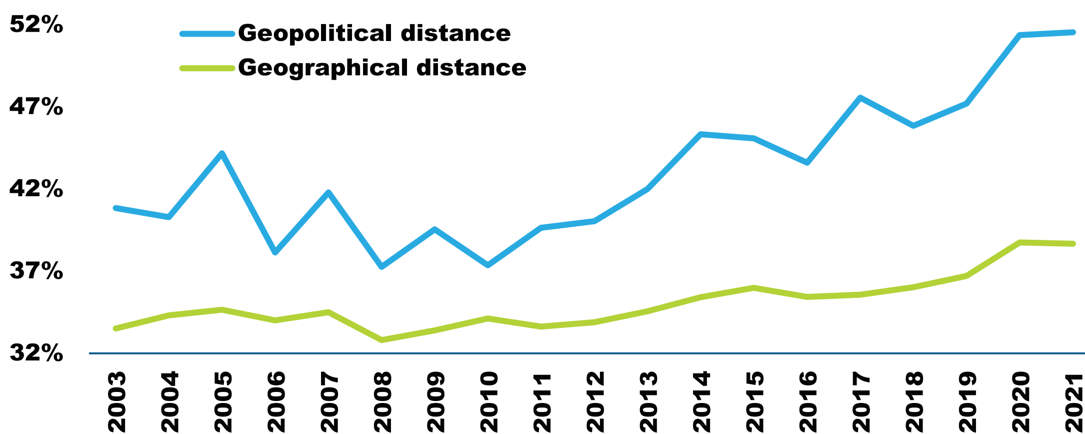

FIGURE 8
Foreign Direct Investment Between Geographically and Geopolitically Close Countries

Source: IMF World Economic Outlook April 2023. Chapter 4. "Importance of geopolitical distance for FDI has increased. Figure shows the annual share of total foreign direct investments between country pairs that are similarly distant (that is in the same quintile of distance distribution), geopolitically and geographically, from the United States.

The backlash against unbridled globalism and multilateralism has been connected to the rise of populist and nationalist domestic policies in the advanced and developing world. Some people feel that their cultural identities and economic interests are being threatened by global forces, such as international trade and immigration. This has led to a backlash against globalization in many parts of the world and has fueled

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the growth of nationalist and anti-globalization movements. In some cases, this has led to increased polarization and divisiveness in politics.

In addition, the benefits and costs of globalization have not been distributed evenly across countries and within societies. Some people have benefited greatly from globalization, while others have been left behind or even harmed by it. This has contributed to political polarization, as different groups have competing visions of how to address the challenges and opportunities of globalization.

Deglobalization's economic ramifications

Slower global growth

Some analysis suggests that reshoring of supply chains may be detrimental to growth as costs will rise.[48] Countries and corporations that pursue self-sufficiency policies may experience lower rates of growth and higher prices for goods, services and labor.[49] For some sectors of global trade, the costs for reshoring may outweigh perceived policy benefits. But for strategic industries like high tech goods and materials (e.g., semiconductors and pharmaceuticals), reshoring some of the supply chain could be beneficial.[50]

After decades pursuing lowest-cost production, the building out of diversified supply chains may result in lower return on investment for corporations. Companies seeking to diversify their supply-chains may be forced to deploy capital on duplicative capacity rather than to optimize and streamline current productive capacity. Building new production facilities (i.e., green field investment) may have a lower rate of return than upgrading current machinery or facilities. Likewise, many developing countries will require infrastructure investment designed to facilitate trade, such as roads, ports, and airports. From the perspective of the global economy, multiple smaller infrastructure projects may have less economic return than a few very large projects, such as ports that can accommodate super-tankers and large intermodal facilities. Taken together, invested public and private capital may experience lower rates of returns and increase the costs of goods for consumers.[51]

[48] Source: CSIS, C. Savoy et al., "Diversifying Supply Chains: The Role of Development Assistance and Other Official Finance," June 2022.

[49] Source: CSIS, D. Runde et al., "Recovery with Resilience: Diversifying Supply Chains to Reduce Risk in the Global Economy," September 2020.

[50] Source: CSIS C. Savoy et al., "Diversifying Supply Chains: The Role of Development Assistance and Other Official Finance," June 2022.

[51] Source: Project Syndicate, K. Rogoff, "Deglobalization Will Hurt Growth Everywhere, June 3, 2020.

High inflation

As globalization and interdependency helped to reduce global inflation pressures, if the process goes into reverse, inflation pressures could rise. The disinflationary drivers of globalization and expansion of supply chains may be waning. The demographic dividends of a rapidly growing young global workforce are now dissipating. Higher labor costs could force companies to reconsider their supply chain. For example, the average monthly wage in Mexico is $480 a month compared to the average wage in China of $840.[52] Multinational companies are investing in Mexico with its younger, cheaper work force and access to the NAFTA free trade zone. But there are limits to new areas of cheap labor and reshoring, as reconfiguring supply chains can be costly.

[52] Source: Baker Institute, D. Gantz, "Will New Chinese Investment in Mexico Benefit North America?" March 2023. See also New York Times, P. Goodman, "Why Chinese Companies Are Investing Billions in Mexico" February 3, 2023.

Lower profitability and investment returns

The higher cost of capital and higher wages could negatively impact corporate earnings, especially if corporations are not able to completely pass these costs on to their customers. The inflation of 2021 was expected to have a major hit on profitability,

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but instead, most businesses were able to pass through their new, higher costs. However, this may have been an anomaly, as demand was fueled by pandemic fiscal stimulus. More broadly, US corporate profits have been a larger share of GDP over the past two decades than they were historically (see Figure 8). If this trend was partly fueled by globalization, it is reasonable to expect that a reversal of globalization will hurt corporate profitability.

Higher wages can also mean higher levels of unemployment where less skilled workers or new entrants into the labor force find it increasingly difficult to find work. During the 1970s, when inflation surged with the oil crises, wages were high but so was unemployment.[53] The net impact was slower economic growth and market volatility. Higher interest rates and inflation combined with lower growth may impact corporate profitability. High labor and manufacturing costs are more easily passed along to consumers when the economy is growing than when it is stagnant.

[53] Source: https://meketa.com/leadership/stagflation/

The combination of the lower growth and higher inflation poses challenges both for central banks and the private sector. Deglobalization may result in a toxic mix of inflation and low growth otherwise known as stagflation. The traditional central bank toolkit is ill-equipped to deal with such an environment.

Where could we be wrong?

The combination of a pandemic and geopolitical turmoil has wreaked havoc on the global economy and brought about many changes. However, it is as yet unclear which of these changes may be temporary versus permanent. For example, the work-from-home response to pandemic lockdowns could be temporary, as people have gradually been returning to work in physical offices.[54] Or it could be a permanent feature of economic activity going forward, with implications for urban real estate and businesses everywhere. The pandemic and the War in Ukraine have refocused governmental policy and focus on domestic security. But it remains to be seen if these impulses will be long-lived.

[54] Source: Wall Street Journal, G. Guilford, "Work from Home Era Ends for Millions of Americans," March 25, 2023.

Many of the potentially inflationary forces we noted could be cyclical instead of secular headwinds. The global pandemic unleashed a series of sudden stops, shutdowns, and stimulus-fueled reopening demand booms around the world. The effects on labor markets and supply chains drove inflation to multidecade highs. The momentum of inflation pressures, labor shortages, and demand for housing and goods has forced central banks to aggressively raise interest rates. The Russian invasion of Ukraine added fuel to the fire where energy and food prices rose rapidly in 2022. But many of these trends have reversed. Food and fuel prices have fallen from their peaks, though they remain elevated relative to the previous decade.

The reshoring of critical sectors and technology could help reduce diplomatic and security concerns. Some diversification away from China was to be expected as wages rose far above their neighbors in Southeast Asia.[55] Outside of Singapore, China has the

[55] Source: The Economist, "The Future of Factory Asia: A Tightening Grip – Rising Wages Will Only Strengthen Asia's Hold on Manufacturing," March 2015.

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highest wages in the Asian region, and as the Association of Southeast Asian Nations Economic Community trade bloc matures, manufacturing is expected to move out of China.[56] The bottom line is that, despite many headlines about deglobalization, it is not (yet) evident in global trade metrics. The value of global trade reached a historic high in 2022, topping $32 trillion dollars.[57]

[56] Source: Ministry of Trade for New Zealand Government, "The China-ASEAN Dynamic, February 2016. The ASEAN Economic Community is a trade block founded in December 2015.

[57] Source: World Bank UNCTAD data as of December 2022.

How will deglobalization risks impact investment returns?

The pace and degree of deglobalization is unknowable as the evidence for outright deglobalization remains mixed. As with most investment decisions, there are trade-offs where risks and potential returns help guide asset allocation and portfolio discussions. With this in mind, we designed a scenario analysis with a focus on a range of potential outcomes.

In our analysis we considered four potential deglobalization scenarios. The premise of our most optimistic scenario is that governments will rediscover their pro-trade multilateralism, which could reboot globalization. Our next scenario resembles the current situation, extending the current drift of regionalism and rerouting of global trade and capital flows within trade blocs. Our third scenario considers what might happen if outright deglobalization becomes prevalent. Our final scenario is the most bearish, as it ponders the consequences of a military blockade and embargoes related to a military conflict over Taiwan.

Should globalization resume its long-term trend, our model estimates that investor returns will benefit. However, slower globalization or regionalism will likely weigh on portfolio returns due to the negative impact on economic growth. A well-diversified institutional portfolio might experience a decline in expected returns of between -0.5% and -1.5% per annum in all but the worst-case scenarios.[58]

[58] We describe our scenario analysis and the outcomes in greater deal in the appendix.

Conclusion

Deglobalization could have significant impacts on global growth, inflation, and politics. One potential impact of deglobalization is a reduction in global growth. Economic integration has helped to increase productivity and efficiency, and it has allowed countries to specialize in the production of goods and services in which they have a comparative advantage. Reduced economic integration could lead to a decline in trade, investment, and innovation, which could ultimately lead to slower economic growth.

Deglobalization could also have an impact on inflation. Globalization has contributed to lower prices for goods and services, as countries have been able to take advantage of lower labor and production costs in other countries. Reduced economic integration could lead to higher prices, as companies face higher production costs and trade barriers.

In terms of politics, deglobalization could lead to a rise in nationalism and protectionism, as countries seek to protect their domestic industries and reduce their dependence

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on foreign trade and investment. This could lead to increased tensions between countries and a breakdown in international cooperation. However, it is important to note that the impact of deglobalization on global growth, inflation, and politics is complex and uncertain, and will depend on the specific policies and circumstances involved.

Institutional investors can take a variety of steps to respond to deglobalization. First is to construct portfolios that are geographically diversified. Specifically, equity portfolios should provide exposure to a range of regions and economies. This could mean that portfolios include companies that have diversified operations across multiple countries or regions.

Investors should also monitor political developments. The trend of deglobalization is closely tied to political developments, and investors should monitor political risks and changes in policy. This could include paying attention to election outcomes, trade negotiations, and other policy changes that could affect global markets.

Finally, investors should consider the long-term perspective. While the trend of deglobalization could lead to short-term volatility and uncertainty, it is important to consider the long-term prospects of the global economy. Over the long term, economic growth and innovation are likely to continue, even as the global economic landscape evolves. Investors should focus on building well-diversified portfolios that can weather short-term volatility and continue to benefit from long-term growth opportunities.

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Appendix: scenario analysis description and output

We modeled four Monte Carlo deglobalization simulation scenarios: Rising Globalization, Stalled Globalization, Moderate Globalization, and Chinese Assets Embargoed. Rising Globalization is defined as a return to long-run globalization trends after 2 years, combined with an increase in US onshore production and increases Chinese demand for goods. Stalled Globalization is defined as a broad slowdown of in growth of the global economy and Chinese trade growth slowing to 2%-5% per year. Moderate Globalization is defined as an increase in established trade blocks reducing global trade and GDP growth by 25%, and Chinese trade growth declines by 50%. The Chinese Assets Embargoed scenario is defined by an immediate 50% decline in global trade and GDP, while Chinese assets receive the same treatment as Russian assets did during the early half of 2022.

Our model uses Monte Carlo scenario analysis incorporates machine learning to identify the probabilities and paths of returns for each scenario. Each scenario includes 10,000 trials and forty-seven economic variables to determine probabilistic paths of portfolio returns. We used our Large Public Plan universe[59] as our sample portfolio which included US and non-US equities, global fixed income, hedge funds, real estate and private equity.

Meketa's asset allocation modeling tools allow us to conduct scenario analyses on a wide variety of long-term capital market risks. Meketa uses a top-down, statistical approach to give asset allocators a "big picture" estimate of potential impacts to returns and risks that they might face in fundamentally uncertain situations where the magnitude, direction, and timing of economic shocks and investment risks can vary substantially from historic experience during typical economic cycles.

Each of our simulation models iteratively generate monthly return data for 47 different economic, financial, and climate factors by using available historical data to estimate relationships among these variables. The process assumes a randomized movement of each factor consistent with its historical behavior. The impact of all other relevant factors is added to derive a forecasted monthly return for each asset class. We repeat this process for each month in the forecast period to generate a simulated return stream stretching across the entire period (a "simulation"). We then repeat this process to create multiple simulations. The relationships of 104 asset classes to these factors are estimated based on historical data and then applied to the simulated pathways, generating asset class returns for each simulation.

[59] Meketa annually compiles a peer universe average for large public plans that is based on the asset allocation of the ~50 largest US public pension plans as published in their most recent (e.g., 2022) Annual Comprehensive Financial Report and/or quarterly reports.

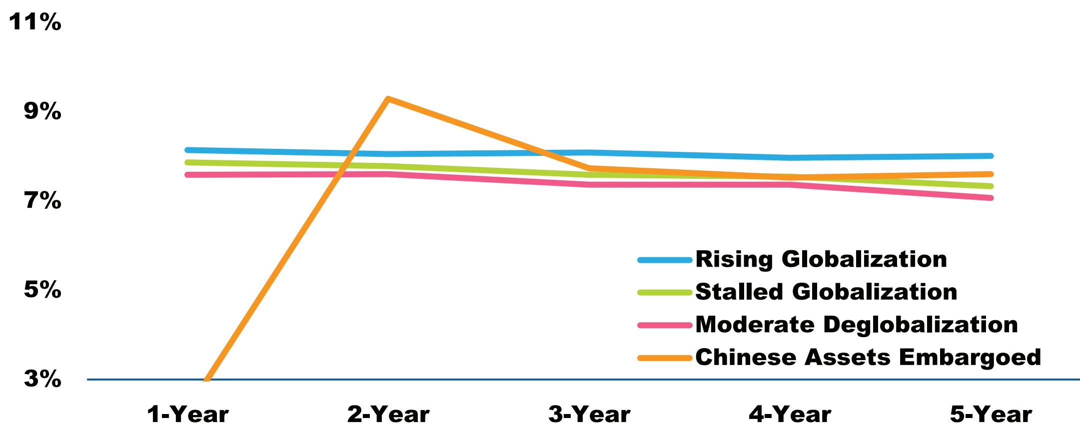

FIGURE 9
Four Globalization Scenarios Average Annual Return (50th Percentile Estimates)

Source: Meketa's Deglobalization Scenario Analysis as of May 2023.

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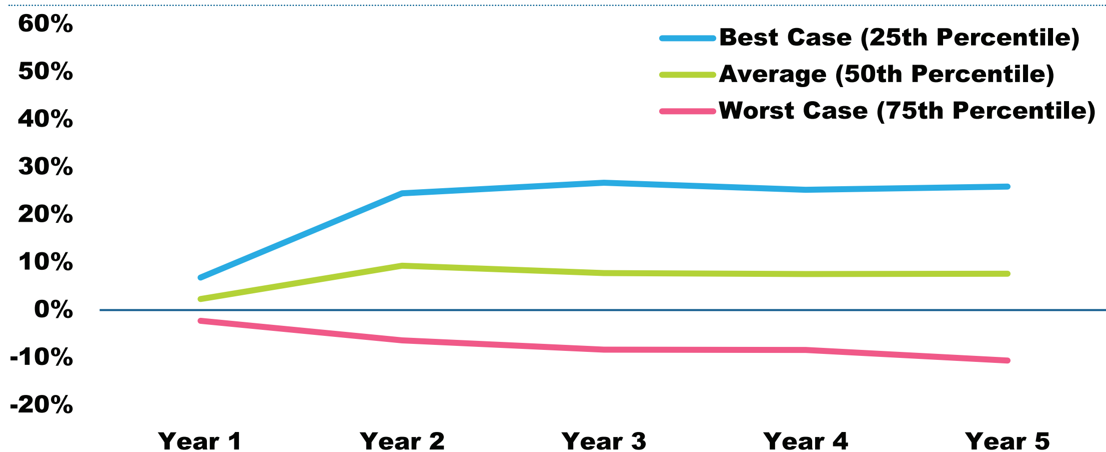

FIGURE 10

Portfolio Annualized Return Probabilities for the Chinese Assets Embargoed Scenario

Source: Meketa's Deglobalization Scenario Analysis as of May 2023.

	Large Plan Asset Weight (%)	Meketa 10-Year Expected Returns (%)	10-Year China Assets Embargoed Scenario Expected Returns (%)	Year 1 (%)	Year 2 (%)	Year 3 (%)	Year 4 (%)	Year 5 (%)
Cash Equivalents	2.0	3.10	3.86	5	4	3	3	3
Investment Grade Bonds	9.1	4.80	7.41	12	7	6	5	6
Long term Government Bonds	3.2	4.30	6.05	10	7	3	4	6
TIPS	0.7	4.30	7.69	13	7	6	5	7
High Yield Bonds	1.9	8.00	9.34	8	9	9	10	11
Bank Loans	1.3	7.60	9.39	8	8	9	10	12
Private Debt	4.6	9.40	7.62	2	11	9	8	8
Foreign Bonds	0.6	3.80	2.79	1	4	3	3	3
Emerging Market Bonds	0.8	6.40	5.09	2	6	6	6	6
US Equity	25.0	7.80	6.94	2	10	8	8	7
Developed non-US Equity	11.8	10.10	8.40	-3	13	11	11	10
Emerging Market Equity	4.4	10.30	5.85	-8	11	9	9	9
Private Equity	14.7	9.70	8.01	2	9	10	10	9
Real Estate	10.3	5.90	4.41	1	7	5	5	5
Natural Resources	1.0	8.60	7.26	-2	11	9	9	9
Commodities	1.0	6.30	9.00	13	8	7	9	8
Infrastructure	2.0	6.90	5.44	1	8	6	6	6
Hedge Funds	3.4	5.40	4.46	1	7	5	5	5
RMS Aggregate	0.8	4.00	2.91	1	4	3	3	3
Risk Parity (10% vol)	0.5	7.80	7.23	2	11	8	8	8
Tactical Asset Allocation	0.9	5.60	5.14	1	8	6	6	6

FIGURE 11

Model Asset Allocation Expected Returns (%)

Source: Meketa's Deglobalization Scenario Analysis as of May 2023.

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