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BRICS: World Heavyweight in Agricultural Trade

BRICS, the 15-year-old alliance of Brazil, Russia, India, China and South Africa, has emerged as an important actor on the global political and economic stage, not least by expanding its membership to include middle-power states Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates in early 2024. Much like the countries of the G7 and the EU, BRICS members are among the major players in international agri-food markets. BRICS and the G7 have accounted for around one-seventh of each other's agricultural exports in the past decade. However, excessive protectionism and mounting sanctions as well as ideology-driven de-risking strategies are a high-risk venture that could ultimately lead to isolationism and the formation of blocs. Food insecurity is growing, primarily at the expense of poorer people in the Global South. Against this background, it seems advisable to balance geopolitical and geoeconomic interests by turning away from confrontational Stone Age politics and towards more cooperative approaches, such as more diplomacy.

BRICS has long been overlooked.[1] However, at least since its most recent annual summit in August 2023, the almost 15-year-old alliance made up of Brazil, Russia, India, China and South Africa has begun to attract growing media attention. This has largely been focused on the development of the group, and its political and economic significance in the global arena. From January 2024, the BRICS alliance expanded its membership to include middle-power states Argentina,[2] Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates to create BRICS+ (see Figure 1).[3] Given the significance of some of its new members as major resource powers and energy exporters, BRICS could once again consolidate its status as the voice of the Global South and expand its geopolitical role and international economic influence (e.g. Maihold and Müller, 2023). Much like the countries of the G7, BRICS members are among the major players in international agri-food markets, especially when it comes to exports of staple foods such as wheat and rice to food insecure countries in the Global South.

The five countries that make up the original BRICS partnership account for around 40% of the world's population (3.3 billion people). Together, they generated close to 32% of global economic output in 2022, measured in gross domestic product (GDP) based on purchasing power parity. China generated by far the largest share, accounting for 70% of BRICS GDP (IMF, 2023). The newly expanded BRICS+ is home to almost half of the world's population (46%) and generates 36% of global GDP.

In comparison, the G7 group of industrialised nations made up of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States is home to around 10% of the world's population and accounts for close to 30% of global GDP. Around half of this is generated by the United States. If the European Union, which holds observer status in the G7, were added to the mix, the alliance would account for close to 13% of the world's population and around 38% of global economic output.

Further, the United Nations Human Development Index (UNDP, 2023) takes into account per capita income as well as education standards and life expectancy. According to this measurement, in 2021, all G7 countries were ranked very high, the highest of four categories. In contrast, of the five original BRICS members, only Russia was rated very high, while China, Brazil and South Africa

1 As of 8 March 2024. This article was written as part of the BMBF project O1DO21009 and the DFG project 51485816. We thank Hayley Moore for her excellent editing of the text.

2 Argentina's newly elected president, Javier Milei, withdrew his country from its planned entry into BRICS and is instead planning to pursue bilateral ties with member states. Argentina is therefore included (hypothetically) in the following quantitative analyses, which are predominantly based on the period 2001–2021.

3 A further 16 countries applied to join: Algeria, Bahrain, Bangladesh, Belarus, Bolivia, Cuba, Honduras, Indonesia, Kazakhstan, Kuwait, Nigeria, Palestine, Senegal, Thailand, Venezuela and Vietnam.

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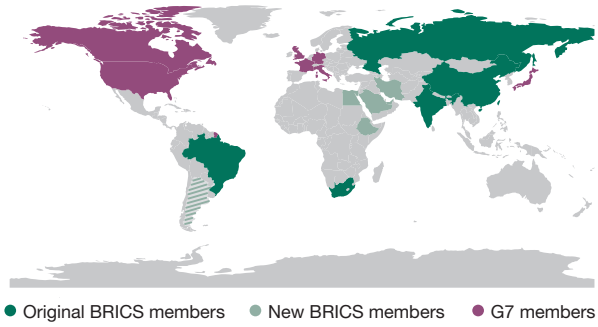
Figure 1
BRICS+ members and G7 members



Note: Argentina's president, Javier Milei, withdrew the country from its planned entry into BRICS and is instead planning to pursue bilateral ties with member states.

Source: Authors' illustration.

were rated high and India was rated medium. Finally, at the beginning of the current decade, both BRICS and the G7 each accounted for around a quarter of global goods exports, with China accounting for around 15% and the USA around 10% of global export volumes. Close to 30% of BRICS exports went to G7 countries and, conversely, around 15% of G7 exports went to BRICS countries.

BRICS: Neither paper tiger nor jack of all trades

Due to the growing importance of the (expanded) BRICS alliance as well as rivalries between major powers, a shift towards protectionism and a surge in armed conflicts around the world, transnational groupings like BRICS are expected to gain greater geopolitical and geoeconomic influence (Maihold et al., 2024).

Media reporting often characterises BRICS as an endeavour to create a new world order – of whatever kind – and to push back against Western alliances such as the G7. However, given there is no clear reason for this or means of achieving it, as is often pointed out, such a motive seems more superficial and far-fetched than probable.

Experts are less likely to view BRICS as a single-minded group working to revolutionise the world. Rather, they see in BRICS members a desire to achieve better representation of their individual interests and a greater status on the international stage (Katz, 2024; Nam, 2024; Maihold, 2024). The middle powers of the alliance, such as Brazil, Egypt, Saudi Arabia and South Africa, want strategic sovereignty, greater economic independence and political neutrality with regard to major power blocs.

Similar assessments can be made for many other emerging economies (see Lippert and Mair, 2024), which generally believe that a multipolar order and multilateral (economic) relations will offer them greater opportunities for strategic independence. Forming single alliances could stand in the way of their own economic development and threaten international order and their own national security interests.

This is evident in the desires of emerging economies to advance their economic partnerships in market-oriented and flexible ways, to contain security threats and to manage dependencies. Values-based partnerships or shared ideologies are in no way a prerequisite for cooperation. The fact that BRICS+ members also belong to or have applied to join other global alliances, such as the OECD, G20, G77, SCO and the Quad,[4] further highlights their commitment to international cooperation.

Nevertheless, BRICS+ members share common concerns and institutions. In addition to agreeing on foreign policy and security issues, these include reducing the dominance of the US dollar in international trade and reforming the global financial system, including the Bretton Woods Institutions. This is also linked to the establishment of the New Development Bank (NDB) to promote development projects and the Contingent Reserve Arrangement (CRA) to provide payment support.

The BRICS members' strong economic and trade interests and their desire for inclusive multilateralism are also reflected in the annual BRICS summit declarations (BRICS, 2023). The summits in India in 2021 and China (virtually) in 2022, for example, emphasised the importance of (unhindered) international agricultural trade and trade dialogues for global food security. The most recent summit in South Africa also highlighted the expansion of partnerships for sustainable development between BRICS and Africa.

Competitive agricultural trade has made a significant contribution to reducing hunger and food insecurity in recent decades. It has also shown itself to be robust and adaptable in the face of geopolitical and market-related challenges (Glauben and Svanidze, 2023). For example, the past decade has seen remarkable growth in global agricultural trade. Global exports rose by around a third (in nominal terms) in 2021, from around US $1.5 trillion to almost US $2 trillion (UN Comtrade, 2023). The countries of BRICS, the G7 and the EU contribute significantly to international food trade and thus to overcoming global food security challenges.

4 OECD: Organisation for Economic Co-operation and Development; G20: Group of 20 (19 industrialised and developing nations plus the EU); G77: Group of 77 (coalition of 77 countries from the Global South); SCO: Shanghai Cooperation Organisation (coalition of nine Asian countries including Russia); the Quad: Quadrilateral Security Dialogue (organisation for security dialogue in the Indo-Pacific region).

BRICS and G7 together account for almost half of global agricultural exports

Figure 2a shows that almost half of global agricultural exports in 2021 came from the G7 and BRICS. France, Germany and Italy accounted for 13% of global agricultural exports, and the USA accounted for 9%. Together the four countries made up around 80% of G7 agricultural exports (Figure 2b), but the EU remained the most significant exporter of agricultural goods.

Since the beginning of the last decade, the original BRICS members' share in global agricultural exports has increased slightly, by around 1%. If the new 2024 members were included, the BRICS+ countries would have (hypothetically) accounted for 20% of global agricultural exports in 2021 (original members 16% and new members 4%). In contrast, the share of agricultural exports from the G7 fell slightly, from 30% in 2011 to 28% in 2021. Since 2011 both the EU and the USA have lost around 4% and 0.5% of their export shares respectively.

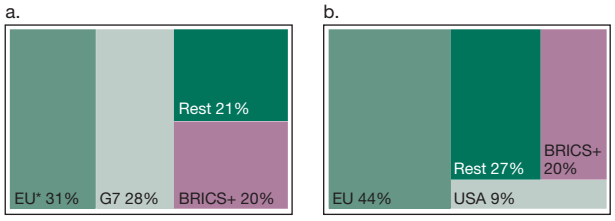
These slight changes – without seeking to overinterpret or overexplain them – could also be due to improvements in the conditions for trade, including agricultural trade. The OECD's Services Trade Restrictiveness Index (STRI) (OECD, 2023), for example, shows that, over the past 10 years, the BRICS countries have made marked improvements in the areas of air transport, road freight transport and maritime transport and are now roughly on par with the G7, the EU and the USA. This is most evident for China and Brazil. Nevertheless, BRICS members are still behind when it comes to, in particular, logistics customs brokerage and rail freight transport. A similar situation can be observed using the Digital STRI (OECD Stat, 2023), which identifies regulatory bottlenecks in digital trade processes. This applies in particular to the quality of digital infrastructure, which, despite noticeable improvements in recent years, is significantly lower on average in BRICS countries than in the USA, the G7 or the EU. However, BRICS performs very well in terms of the quality and use of electronic transactions and digital payment systems.

BRICS and G7 account for around a seventh of each other's agricultural exports

While some may see BRICS and the G7 as two (politically and economically) distinct and adversarial blocs, their relationship on global agri-food markets paints a different picture.

BRICS and the G7 maintain lively agricultural trade relations with one another. In 2021, around 12% (US $66 billion) of total G7 agricultural exports went to BRICS countries. The largest export shares were held by the USA at 57%, Canada at 13% and France 10%. The main products were oilseeds, grain and meat.

Figure 2
Share of global agricultural trade by country group (2021, value share of world trade)



Note: BRICS+ (original members 16% and new members 4%). EU* (excluding G7 members France, Germany and Italy).

Source: UN Comtrade (2023).

Conversely, in 2021 close to 17% (US $52 billion) of total agricultural exports from BRICS went to the G7. China and Brazil dominated, together accounting for around three-quarters (48% and 25% respectively) of BRICS agricultural exports to the G7. China mainly exported meat and fish, and Japan (42%) and the USA (31%) were the most important destinations in the G7 group. In Brazil, coffee, tea and spices were the main exports to the G7. The most important trading partners were the USA, which accounted for 36% of Brazil's total exports to the G7, followed by Japan at 18% and Germany at 15%. It is worth noting that 81% of Brazil's grain exports to the G7 in 2021 went to Japan and 99% of Brazil's exported live animals went to the USA.

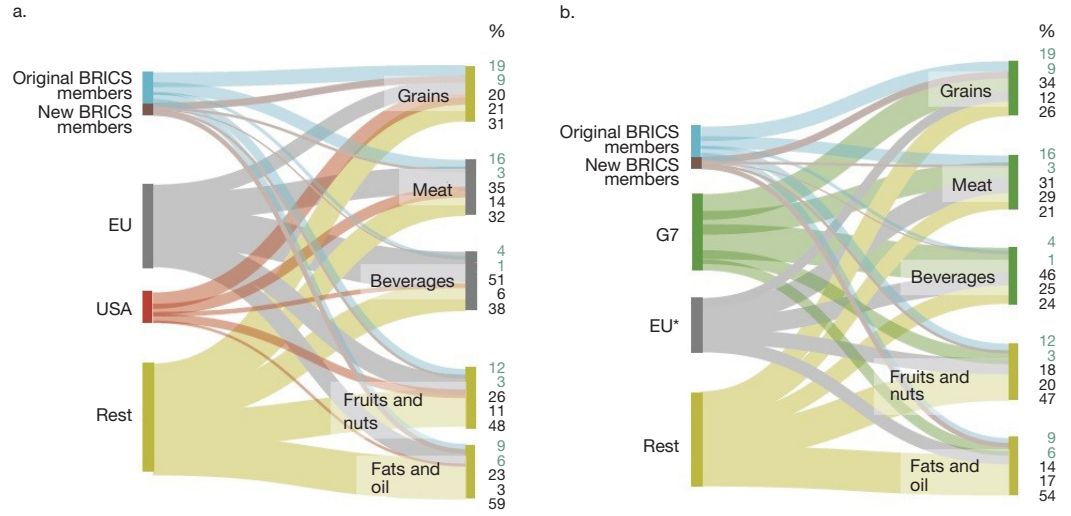
A similar picture emerges for agricultural trade between BRICS and the EU. In 2022, the EU exported 12% of its agricultural products to BRICS countries and sourced around 22% of its agricultural imports from BRICS (European Commission, 2023).

BRICS: Key player in multibillion-dollar agricultural markets

The important role that BRICS plays in agricultural trade extends beyond its relations with the G7. Indeed, BRICS accounts for a significant share of exports of the top five agricultural and food commodities based on trade value. With a total export value of around US $730 billion in 2021 (based on UN Comtrade 2-digit nomenclature), the top five commodities are grain (US $151 billion), meat (US $153 billion), beverages (US $139 billion), fruits and nuts (US $139 billion) and fats and oils (US $145 billion), which account for around 40% of global agricultural export values. This does not include soybeans, which also has a significant trade value of around US $80 billion (see below).

In particular, BRICS is a key player in grain markets, accounting for around one-fifth (19%) of global exports in 2021. This position is comparable to that of the USA

Figure 3
Top five world agricultural export markets (2021, value share of world trade)



Note: EU* (excluding G7 members France, Germany and Italy).

Source: Authors' own illustration, UN Comtrade 2023.

(20%) and the EU (21%, Figure 3b). If the new BRICS members were also taken into account, the share would be 28% and would be roughly on par with the G7 (34%, Figure 3a). BRICS also holds a considerable share in terms of export value in the markets for meat, fruits and nuts, and fats and oils at 16%, 12% and 9% respectively; with the exception of fats and oils, this is roughly on par with the USA (14%, 11% and 3%) but noticeably lower than the EU (35%, 26% and 23%). If the export shares of the new BRICS members were added, the relative export values for fruits and nuts, and fats and oils (15% and 15%) would be very similar to those of the G7 (18% and 14%). For meat, however, the G7 (31%) ranks around ten percentage points higher than BRICS+ (19%). This is largely due to the high export market share of the G7 members in the EU (Germany, France and Italy).

The top five agricultural export markets for BRICS/BRICS+ are oilseeds, cotton and fish as well as grain and meat mentioned above. For these products, BRICS export shares range between around one-fifth and two-fifths (Figure 4). In terms of oilseeds and cotton, in particular, BRICS held a dominant position in 2021, accounting for around 40% and 45% of exports. The export shares for oilseeds roughly correspond to those of the G7 (37%). For cotton, they are noticeably higher (46%), and for fish, at around 20%, they are roughly at the level of the G7 (15%) and the EU (18%). Brazil was by far the largest BRICS exporter of oilseeds in 2021, with a share of 85% (US $39 billion). Almost two-thirds (63%) of this was traded within BRICS. At the same time, Brazil accounted for a large proportion (68%) of imports to other regions of the world.

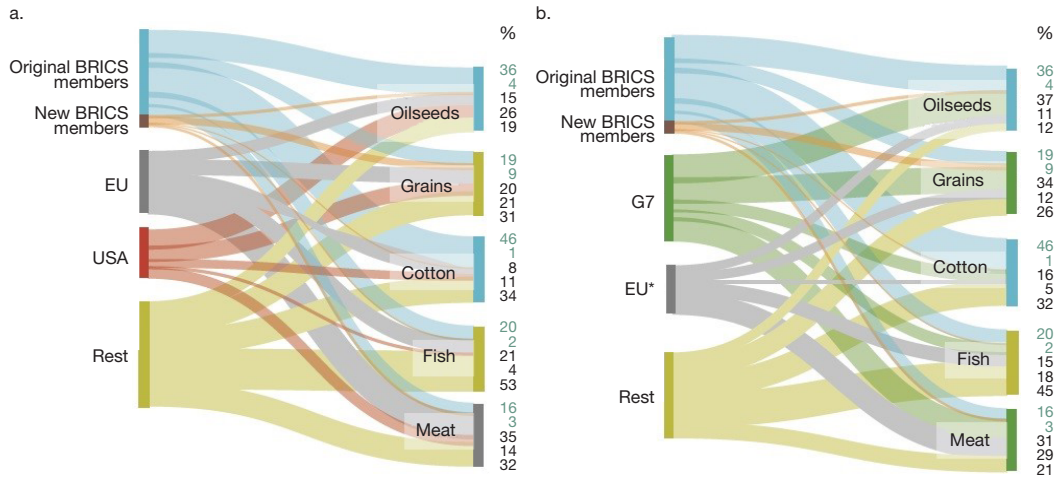
Despite the importance of BRICS in the multibillion-dollar agricultural markets, the individual member countries have quite diverse agricultural export portfolios. According to the Herfindahl-Hirschmann Index (HHI),[5] both the export product portfolios and the export market portfolios for 2021 were rather unconcentrated and largely diversified. Only very slight changes in the indices can be seen compared to 2011. In terms of product concentration, the indices fluctuate around the threshold value of 15, between low and moderately concentrated. In terms of export market concentration, all five countries are well below the threshold value and have very low concentration. The latter is also reflected in the number of BRICS trading partners across all exported products, which is around 200 for each of the BRICS members.

Soybeans, rice, wheat and corn are the top agricultural exports from BRICS

Almost nine-tenths (86%) of total BRICS oilseed exports are soybeans (Figure 5a), which primarily come from Brazil. In 2021, global soybean trade amounted to almost US $80 billion. Soybeans are primarily used as animal feed in livestock production, and only a small amount is used directly for human consumption, for example as soybean oil. China is by far the largest importer of soybeans (accounting for around 60%) and Brazil's main competitor is by far the USA. Brazil and the USA alone satisfied 85% of global import demand in 2021, with Brazil (50%) replacing the USA (35%) as the main supplier over the past decade.

5 The authors can provide the HHI calculations upon request.

Figure 4
Top five BRICS agricultural export markets (2021, value share of world trade)



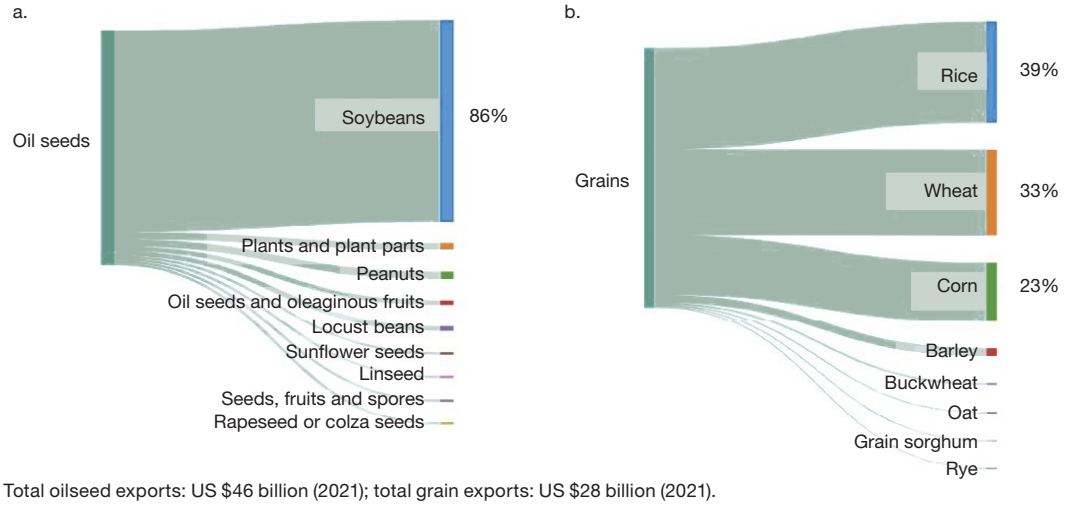
Note: EU* (excluding G7 members France, Germany and Italy). Total global exports in 2021 of the top five BRICS/BRICS+ agricultural exports amount to USD 620 billion (oilseeds: USD 128 billion; grain: USD 151 billion; cotton: USD 61 billion; fish: USD 128 billion; meat: USD 153 billion).

Source: Authors' own illustration, UN Comtrade (2023).

Towards the end of the last decade in particular (July 2018 to January 2020), the global soybean market experienced turbulence as a result of significant retaliatory and punitive tariffs between the US and China due to the escalating trade conflict. This came to an end at the beginning of 2020 with the Phase One agreement, under which China committed to importing US $200 billion worth of US goods (Grant et al., 2021). In addition to short-term price distortions on the soybean market (Gale et al., 2019), the trade dispute also caused temporary policy-related changes in trade flows.

In 2017, Brazil's soybean exports to China amounted to US $20 billion, just under twice the value of the USA's exports (US $12 billion). After the conflict began in 2018, the trade situation changed significantly, and Brazil's soybean exports to China increased to almost nine times the value of the USA's exports (US $26 billion compared to US $3 billion). At the same time, the US increased its soybean exports to other regions of the world by around 50%, from US $10 billion to US $15 billion, and reduced its crop area by around six million hectares. After trade tensions began to

Figure 5
Top BRICS oilseed and grain export products (2021, value share of world trade)



Note: Total oilseed exports: US $46 billion (2021); total grain exports: US $28 billion (2021).

Source: Authors' own illustration; UN Comtrade (2023).

ease, imports from the USA to China increased significantly in 2021 to around US $14 billion and a share of close to 30%. Nevertheless, in 2021 Brazil was able to secure 60% of the Chinese market (US $28 billion), gaining a higher share than before the conflict. The market – which has the structure of a bilateral oligopoly with two major suppliers, Brazil and the USA, and a dominant buyer, China – has evidently adapted well, and there have been no noticeable gaps in supply.

There is likewise an observable "specialisation" when it comes to grain exports from BRICS, with rice accounting for 39%, wheat 33% and corn 23% of the total grain export value (Figure 5b). Rice and wheat are the main staple foods, especially in countries of the Global South. The unhindered trade of these commodities is therefore key to reducing the risk of food insecurity. India supplied by far the most rice to international markets in 2021, with a global market share of 35%, ahead of Thailand (12%) and Vietnam (10%). Major destinations were China, the Philippines and Bangladesh in Asia as well as various West African countries and South Africa. Russia recorded the most wheat exports at around 15%, followed by the USA (13%), Australia (12%), Canada (11%) and Ukraine (10%). According to a recent econometric study (Jaghdani et al., 2023), these exporting countries showed fairly stable supply relationships on global markets between 2011 and 2021. The main importing countries were Egypt, Nigeria and Algeria in Africa, Indonesia, China and Turkey in Asia and Brazil in Latin America. In addition to being used in human food and animal feed, corn also serves as a raw material for biogas and biofuels. In 2021, Brazil accounted for close to one-tenth of corn exports and was the fourth largest exporter of corn after the USA (36%), Argentina (17%) and Ukraine (11%). China, Mexico, Japan and South Korea are among the main destinations (OEC Trade, 2024).

Mission creep: Are we stumbling in a geopolitics-driven "world planned economy"?

The era of geopolitical calm seems to have well and truly given way to the storm, affecting the global economy and international economic relations, including agricultural trade. The members of BRICS, the G7 and the EU are not immune to this, and any impact on trade relations between and among these countries poses a considerable (additional) risk to food security in the Global South, where hundreds of millions of people already suffer from hunger and malnutrition. The situation is particularly dire in countries affected by armed conflict and frequent extreme weather events (Glauben and Svanidze, 2023).

Geopolitical posturing, hot and cold conflicts, and wars threaten to divide the world into blocs and artificially fragment global trade. Rampant protectionism, escalating sanctions regimes and state dirigisme, driven by competition between major powers, an overemphasis on shared political values and, increasingly, market interventions supposedly motivated by national security, threaten the international trading system. This is exacerbated by the ongoing crisis in the World Trade Organization (WTO) caused by the US blockade of the WTO's Appellate Body (dispute settlement body).

According to Global Trade Alert (2023), the number of direct state interventions in foreign trade activities, such as import or export restrictions, has risen to around 20,000 in recent years. In 2020 and 2021, the number of new protectionist interventions in foreign trade peaked at several thousands. Key agricultural commodities were also affected.

The growing number of sanctions restricting market access for foreign importers or goods is leading to rising inflation and concern. The Global Sanctions Database (GSDB) has recorded around 400 active sanctions regimes since the beginning of the 2020s. This is almost three times as many as in the 1990s and 2000s and around twice as many as in the 2010s. Since the early/mid-1990s, almost 40% of sanctions have been implemented by the USA, 20% by the EU and 10% by the UN. This directly or indirectly affects agriculture worldwide. According to a recent study (Yalçin, 2023), around 80% of the sectors observed experienced negative effects on trade due to sanctions, with agriculture being one of the most affected sectors.

These sanctions are motivated not by trade policy but by geopolitics. For example, they aim to achieve political change, to destabilise regimes, to promote democracy or to prevent or resolve territorial conflicts or wars. This is sometimes justified by the need to reduce the externalities of trade activities related to power relations and national security, as trading companies do not (sufficiently) internalise these (Felbermayer, 2023).

The growing tendency towards state intervention has recently been supplemented by politically driven demands for companies conducting business abroad to orient their trade activities towards something like de-risking. They are increasingly encouraged to engage in friendshoring and nearshoring or to trade with partners that share similar political and ideological values. At the same time, they are asked to achieve greater regional diversification while also increasing national self-sufficiency in goods and services. All of this is expected to reduce dependencies and national supply risks.

What can we expect going forward? With the increasing spread of protectionist measures and sanctions regimes as well as ideology-driven de-risking strategies, the market as a proven decentralised system will be severely undermined in its functions such as supply, pricing and innovation. The foreseeable consequence for the agri-food sector is that

goods will become harder to source and more expensive and the safety net of global agricultural trade will be weakened. A large number of studies (e.g. Verma et al., 2014) emphasise the importance of unhindered trade for the short- and long-term supply of food for the world's population, especially given the increased climate and environmental challenges.

It is also doubtful that geopolitically and dirigistically driven world trade is a suitable recipe for promoting ambitious goals such as political change or destabilising regimes or for resolving military conflicts. Studies show that sanctions often fail to achieve their politically motivated objectives (e.g. Pape, 1997) or have, at best, moderate success (e.g. Hufbauer et al., 2007). This may also be the result of market adjustments, for example in the form of trade diversions as a result of sanctions. On the other hand, it could be due to the high bureaucratic cost of implementing and monitoring these sanctions. In addition, sanctions are generally part of broader foreign policy and security measures, and as such it is hard to gauge their true success (Yalçin, 2023).

In summary, excessive protectionism, mounting sanctions and an overemphasis on shared political values is a high-risk venture that could ultimately lead to isolationism and the formation of blocs. Key players on international agricultural markets, such as BRICS+, the G7 and the EU, could be affected by this. Food insecurity is growing, primarily at the expense of poorer people in the Global South. Although makeshift solutions such as green corridors for essential goods or plurilateral arrangements can provide some relief, they cannot replace an open multilateral trade system.

In light of this, it seems advisable to take a more targeted and modern approach to balancing geopolitical and geo-economic interests (Gopinath, 2024), one that steps away from confrontational Stone Age policies and towards more cooperative approaches, such as more diplomacy in the true sense of the word. The investment required to improve the art of diplomacy, whether in terms of personnel or institutions, is likely to be considerable, but it would undoubtedly pay off, not least when it comes to tackling major global challenges such as climate change, poverty and war.

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