

Rethinking globalisation: changing globalisation leaders as a signal of the reglobalisation process

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Abstract

This article presents an analysis of the global financial crisis's impact and subsequent economic disruptions on globalisation, particularly on international trade dynamics. The author investigates whether these events have led to deglobalisation, a slowdown, or a shift toward reglobalisation. Through statistical analysis of trade flows and their share of global GDP across four World Bank income groups over 34 years (1989–2022), the researcher demonstrates a trend toward slowbalisation and reglobalisation rather than deglobalisation. Slowbalisation does not signify a strict divide by income level; instead, globalisation remains dynamic, with emerging economies increasingly challenging high-income countries' dominance.

Keywords: global financial crisis, globalisation, deglobalisation, slowbalisation, reglobalisation, Europe, international trade dynamics

Globalizacja na nowo: zmieniający się liderzy jako oznaka procesu reglobalizacji

Streszczenie

W artykule przedstawiono analizę wpływu globalnego kryzysu finansowego i późniejszych turbulencji gospodarczych na procesy globalizacyjne, ze szczególnym uwzględnieniem dynamiki handlu międzynarodowego. Autor bada, czy te wydarzenia doprowadziły do deglobalizacji, spowolnienia czy przejścia w kierunku reglobalizacji. Przeprowadzając analizę statystyczną przepływów handlowych oraz ich udziału w światowym PKB w czterech grupach dochodowych Banku Światowego na przestrzeni 34 lat (1989–2022), badacz wskazuje na trend w kierunku spowolnienia globalizacji

i reglobalizacji, a nie deglobalizacji. Spowolnienie globalizacji nie oznacza ścisłego podziału według poziomu dochodów; globalizacja pozostaje dynamiczna, a kraje rozwijające się coraz bardziej konkurują z krajami o wysokich dochodach.

Słowa kluczowe: globalny kryzys finansowy, globalizacja, deglobalizacja, spowolnienie globalizacji, reglobalizacja, Europa, dynamika handlu międzynarodowego

After the fall of the Soviet Union, a notable pattern in the global economy was the intensification of globalisation. This phenomenon gave rise to the establishment of economic networks and interconnected systems around the world. Markets and production in different countries became increasingly interdependent. The expansion of economic globalisation acted as a catalyst for international endeavors undertaken by businesses, encompassing foreign investments, international trade activities, and collaborative efforts to advance production and supply chains. However, because of the global financial crisis (GFC), there was a notable reduction in globalisation, which was evident in the magnitude of global trade and financial flows compared to the 2007 peak. This decline was caused by financial instability that initially emerged in advanced nations and subsequently spread worldwide, triggered by chain reactions. International trade volumes fell dramatically during the 2008–2009 economic crisis.

During the second decade of the 21st century, many threats have disrupted the global economy. At the end of the decade, the COVID-19 pandemic began, which required the implementation of a new economic policy, including temporary economic activity lockdowns. The economic downturn caused by the pandemic was greater than the impact of the global financial crisis. As a result, 2020 saw a significant decline in international trade and foreign direct investments in all regions of the world. External shocks, such as the situation in Ukraine, disrupted global commodity markets, trade, and supply chains.

After the GFC, it became evident that globalisation had indeed spurred economic growth, but it had also heightened destabilising elements within the global economy, including encouraging financial sector speculation. Particularly, questions about the future of globalisation became more pronounced with the emergence of demand-supply shocks related to the COVID-19 pandemic. The dominant voices in the discussion about the future of globalisation concerned the potential process of deglobalisation (Garcia-Herrero 2019), its slowdown (slowbalisation) (Bakas 2015), or the process of re-globalisation (Madhok 2021).

The research question posed by the author is related to the impact of the global crisis and other turbulences, culminating in the COVID-19 pandemic, on the direction of globalisation processes as reflected in the dynamics of international trade. The author examines whether these changes result in deglobalisation – a limitation of globalisation, or whether we can speak of a slowdown in the pace of globalisation, or even reglobalisation, signifying a change in the pattern of globalisation. To address this question, a statistical analysis of trends in the development of trade flows, represented by the total of exports and imports, is carried out at both the global level and within particular income groups.

To assess whether a dataset demonstrates a statistically significant upward or downward trend over time in either direction, several statistical tools were employed. These tools include the Mann-Kendall test for trend (Kendall 1975; Mann 1945), Sen's estimator (Sen 1968), and Kendall's rank correlation coefficient (Kendall 1938). The author analyses statistical trends in the share of foreign trade in the global Gross Domestic Product (GDP) within the four income groups defined by the World Bank's classification from 2019. The analysis covers 34 years (from 1989 to 2022), with the main goal being to assess the potential impact of the global financial crisis on the process of globalisation.

Specifically, **the study's aim** is to determine whether the crisis has led to a reduction or deceleration in cross-border trade within the analysed groups of countries. To accomplish this, the dataset is divided into two distinct periods: one before the global financial crisis (1990–2007) and one since the onset of the crisis (2008–2022). This division allows for a comparative examination of trends in global economic activities in the pre-crisis and post-crisis eras.

The article consists of six parts. Following the introduction, a literature review is conducted regarding changes in globalisation in the global economy after the outbreak of the global financial crisis. Next, the research methodology and the data used in the study are presented, and the following parts present and discuss the results of the statistical analysis.

Literature review

The end of the Cold War and the fall of the Soviet Union marked the beginning of a new era of globalisation. Neoliberal economic policies spread rapidly. Institutions such as the World Bank and the International Monetary Fund (IMF) promoted free trade, privatisation, and deregulation, fundamentally shaping the economies of both developed and developing countries (Stiglitz 2002). During this time, international trade, capital flows and technological communication increased exponentially, a phenomenon that Subramanian and Kessler (2013), Rodrik (2015) and Antràs (2020b) described as hyper-globalisation. This has led to an unprecedented level of economic integration, with many countries becoming deeply intertwined in global supply chains.

The economic downturns of 1997–1998 and notably the 2008 financial crisis highlighted the vulnerabilities of an excessively interconnected financial world, prompting discussions on its long-term viability (Roubini, Mihm 2011). The subsequent drop in trade and capital movements was seen as evidence of a potential move away from globalisation, that is deglobalisation (Obstfeld 2021; Mihaylov, Sitek 2021). While globalisation can be viewed as growing interconnections within a system, deglobalisation represents a trend of diminishing interlinkages and declined trade and financial international flows. In particular, due to the COVID-19 pandemic that began in 2020, many countries put their citizens and economies first, leading to protectionist measures. The pandemic has also exposed the vulnerability of global supply chains, which, together with demand-side shocks, lead to significant slowdowns in both goods and capital flows (e.g. Shukla 2020; Escaith, Khorana 2021).

Another strand of literature argues that despite the decline in international trade and investment after the GFC, it's not accurate to declare the end of globalisation (Lund et al. 2019; UNCTAD 2021; Goldberg, Reed 2023). Two prominent themes appear in the literature: the notions of slowbalisation and reglobalisation. The concept of slowbalisation has been introduced to characterise the decelerated tempo of globalisation (Bakas 2015; Goldberg, Reed 2023). This doesn't mark its cessation but indicates a shift towards more regionally focused and less extensive global networks. Hence, slowbalisation can be seen as a maintained linkage in the global financial framework, albeit progressing more leisurely than the pace seen before the GFC.¹

The recent scientific discourse emphasises a profound transformation in the nature of globalisation. If the concept of slowbalisation focuses on slowing down the growth of global connections, reglobalisation can be identified by changing the types, quantities, and originators of international connections. Reglobalisation stands for a recalibration of global interconnectivity, which has changed and reflects the world's adaptive responses to new global economic, political, and social landscapes in the post-GFC era, stimulated also by events such as the BREXIT, and the COVID-19 pandemic (Paul 2021; Madhok 2021). It is not a reversal of globalisation but a refinement, characterised by a more conscious, deliberate, and, at times, more restrained approach to international exchange. Bishop and Payne (2021) advocate that this renewed strategy doesn't abandon the principles of interconnected global markets but reassesses and modifies them in line with contemporary global realities. Global interactions were not retracting, but they were becoming more qualitative than quantitative. This transformative approach acknowledges the complexities of modern global challenges, as outlined by Clift and Robles (2021).

As a result, even though some changes in the speed and structure of global trade and financial flows appear possible, reglobalisation recognises that its important feature is the change in the structure of the global economic network. Firstly, Amankwah-Amoah et al. (2021) and Scarlat et al. (2022) underscore the pandemic's role in speeding up digital transformation, as well as enhancing global connectivity, particularly in services, education, and remote work. The surge in digital usage during the pandemic could offset some deglobalisation patterns by fostering global digital ties. Secondly, Baldwin and Tomiura (2020), as well as Miroudot (2020) note that despite early trade reductions due to the pandemic, new forms of trade cooperation emerged, highlighting global trade's adaptability. The crisis forced many firms to prioritize resilience over efficiency, potentially leading to shorter and more regionalised supply chains reducing dependence on distant suppliers, and thereby diminishing one aspect of globalisation. As a result, cross-border investments are being shifted either home (reshoring), somewhere else in the region (nearshoring) or to ally countries (friend shoring). Antràs (2020b) asserts that the pandemic exposed the vulnerabilities of lean and just-in-time production methods, leading to reconsideration of such global production networks. Miroudot (2020) concurs, indicating a post-pandemic trend towards regionalised or localised supply chains and

¹ This sentiment is echoed by e.g. Linsi (2021), and Garcia-Herrero (2022).

a potential reduction in globalisation aspects. Third, as highlighted by Dąbrowski (2020) and Reyes-Heroles et al. (2020), the role of emerging markets in the new globalisation narrative is growing. Their increased participation in global trade and investment signals a reshaping rather than a rollback of globalisation. The growing role of developing and emerging economies in the world trade network and in the world GDP was analysed lately by Hoang et al. (2023) and Rubaj (2023).

Methodology

The Mann-Kendall statistical test for trend (Kendall 1975; Mann 1945) is used to determine if a dataset exhibits a statistically significant increase or decrease over time in either direction. To visualise the trend graphically, the conventional approach involved estimating the slope of a regression line that best fits a set of (x, y) data points through a least-squares method. Because the data points do not conform to a linear pattern and exhibit outliers, the subsequent step involved computing Sen's slope (see: Sen 1968) to analyse the trend.

The decision to use the Mann-Kendall (MK) test to investigate the presence of a trend was made, because it is a non-parametric test that does not rely on specific distribution assumptions. Especially, unlike regression analysis, it doesn't necessitate the assumption of normal distribution for the residuals. Another significant characteristic is that the Mann-Kendall test does not require the trend to conform to a linear pattern.

The MK test statistic, denoted as **S**, is calculated as follows (Gilbert 1987):

$$S = \sum_{i=1}^{n-1} \sum_{j=i+1}^n \text{sgn}(x_j - x_i)$$

where **n** stands for the length of the data series, x_i and x_j are sequential data in the series.

$$\text{sign}(x_j - x_i) = \begin{cases} -1 & \text{for } x_j - x_i < 0 \\ 0 & \text{for } x_j - x_i = 0, \text{ or if the sign cannot be determined due to non - detecs} \\ 1 & \text{for } x_j - x_i > 0 \end{cases}$$

The variance of **S** is calculated using a complex formula that considers the number of ties in the data:²

$$\text{Var}(S) = \frac{n(n-1)(2n+5) - \sum_{p=1}^g t_p(t_p-1)(2t_p+5)}{18}$$

where t_p is the number of ties for the p^{th} value, and **g** is the number of tied groups.

² This approach is applicable when **n** exceeds 10. If **n** is less than 10 or equal to 10, a distinct procedure is employed (Gilbert 1987).

Based on these calculations, a standardised test statistic, denoted as $\mathbf{Z}$, is computed as follows:

$$Z = \begin{cases} \frac{S + 1}{\sqrt{\text{Var}(S)}}, & \text{if } S < 0 \\ 0 & \text{if } S = 0 \\ \frac{S - 1}{\sqrt{\text{Var}(S)}}, & \text{if } S > 0 \end{cases}$$

To determine the existence of a monotonic trend at a specific level of significance, the MK test verifies the null hypothesis (H_0) against the alternative hypothesis (H_1):

H_0 : no monotonic trend,

H_1 : monotonic trend is present.

The null hypothesis is rejected when the absolute value of the standardised test statistic $\mathbf{Z}$ exceeds the critical value, which is either $\mathbf{Z}_{1-\alpha/2}$ (for a two-tailed test) or $\mathbf{Z}_{1-\alpha}$ (for a one-tailed test), where α represents the chosen level of statistical significance.

The primary purpose of the MK test is to detect the presence of a trend in a dataset. It helps find if there is a statistically significant upward or downward trend in a variable over time. To estimate the size of that trend, Sen's estimator (*Sen's slope*) was applied. *Sen's slope* offers a numerical measure of the extent or strength of the trend. It allows the evaluation of the extent, to which the variable is undergoing changes over time, including whether it is experiencing growth or decline, and the rate, at which these changes are occurring.

Sen's slope is formally defined as the median from a set of linear slopes (Sen 1968; Hipel, McLeod 1994):

$$\text{Sen's slope} = \text{Median} \left\{ \frac{x_j - x_i}{j - i}, \text{ where } 1 \leq i < j \leq n \right\}$$

where x_i and x_j denote the variables (the data).

To calculate $1-\alpha$ (confidence interval for *Sen's slope*), the following formula is used:

$$k = Z \left(1 - \frac{\alpha}{2} \right) se$$

where $Z(1-\alpha/2)$ is the critical value from the normal distribution corresponding to the desired confidence level, while se is the standard error for the Mann-Kendall test.

Thus, k is subtracted and added from *Sen's slope*, respectively. This confidence interval provides a range, in which we can reasonably expect the true *Sen's slope* to fall with a probability of $1-\alpha$.

Sen's slope offers several advantages over linear regression parameters, particularly when considering the characteristics of the data being studied. Firstly, *Sen's slope* is a non-parametric statistic, which means it doesn't rely on assumptions about the underlying data distribution. Secondly, it is a robust statistic, making it less sensitive to extreme values (outliers) in the data compared to some other methods. This robustness

makes it well-suited for datasets that show irregularities or contain outlier values. Thirdly, *Sen's slope* is more versatile in capturing non-linear trends. It does not assume a linear relationship between the independent variable (typically time) and the dependent variable, allowing it to accommodate various trend shapes and patterns. Lastly, *Sen's slope* treats all pairs of data points equally, which can be helpful, especially when working with a limited number of data points. In contrast, linear regression may give more weight to recent observations, potentially skewing the results.

Since the dataset occasionally has very small numbers, which can lead to a *Sen's slope* of zero, even when a meaningful trend exists, we have incorporated Kendall's tau (Kendall, 1938), also known as Kendall's rank correlation coefficient, as an additional analytical tool.

Kendall's Tau is a non-parametric statistical metric employed to gauge the intensity and direction of a relationship between two datasets. It produces values within the range of -1 to 1: a positive value signifies a positive association (as one variable rises, the other tends to increase), while a negative value shows a negative association. A value of 0 implies no discernible association between the two datasets. Like the Mann-Kendall statistical test and *Sen's slope*, Kendall's Tau is less influenced by outliers compared to Pearson's correlation coefficient. The formula for computing Kendall's tau is as follows:

$$\tau = \frac{C - D}{C + D}$$

where **C** is the number of concordant pairs (they move in the same direction), **D** is the number of discordant pairs.

Data

The article presents the analysis of statistical trends in the share of foreign trade in the global GDP in the four world's income groups, as defined by the 2019 World Bank's classification by income. For this purpose, the data were extracted from the World Bank database. These included (i) world GDP, (ii) exports of goods and services, and (iii) imports of goods and services. All the data presented here are denominated in current U.S. dollars. The information about points (i) to (iii) is related to the overall global economy, while the data associated with points (ii) to (iii) also correspond to income groups. The World Bank classifies the world's economies into four income groups based on their Gross National Income (GNI) per capita.³ The income groups are illustrated in *Table 1*.

³ The classification of countries into income groups is updated periodically, and it can change from year to year based on changes in GNI per capita. As a result, an economy can move between different classification groups in different years, reflecting shifts in its economic development and income levels. For example, the COVID-19 pandemic had a significant impact on the income classifications of certain countries like Panama and Romania. In 2020, the pandemic caused them to move from the high-income group to the upper-middle-income group. However, their economies rebounded strongly in 2021, allowing them to regain their high-income status by 2022. Some countries may not have income

Table 1: World Bank's country classification by income level.

	GNI per capita, as of 1 July 2022 for FY23
High income	> 13 205
Upper-middle income	4256 – 13 205
Lower-middle income	1086 – 4255
Low income	< 1085 USD

Source: World Bank, <https://datatopics.worldbank.org/>

The analysis covers 34 years – from 1989 to 2022. This time allows for a comprehensive examination of data and trends over more than three decades, offering valuable insights into various aspects of the subject under study. The dataset is split into two periods: before and since the beginning of the global financial crisis of 2008–2009 (i.e. 1989–2007 and 2008–2022).

The data on exports and imports of goods and services were related to the world GDP. By regressing data on GDP, it is normalised to the size of the world economy. This is a frequent practice in economic research. By referencing data to a common variable like the world GDP, it becomes easier to compare and understand these metrics across different time periods, especially as the world economy grows or shrinks. The trade capital openness metric is commonly used as a proxy for globalisation (IMF 2023). The goal of statistical analysis is to examine whether the financial crisis has altered the globalisation process by reducing or slowing cross-border trade. Also, by analysing trade flows in different income groups, we gauge how different income segments of the global economy are participating in and benefiting from global trade. This can reveal disparities or convergence in economic trends among countries at different stages of development. This allows for a comprehensive comparison and deeper insights into how globalisation is evolving. The descriptive statistics of this data are presented in *Table 2*.

Table 2: Summary statistics (all data relative to global GDP).

	Variable	Observations	Minimum	Maximum	Mean	Std. deviation
World	Exports of goods and services	34	0,182	0,312	0,253	0,044
	Imports of goods and services	34	0,183	0,306	0,248	0,041
	The sum of exports and imports	34	0,365	0,617	0,501	0,086

classifications due to data unavailability, as exemplified by Venezuela in 2022. (See more: The World Bank WWW).

High income	Exports of goods and services	34	0,155	0,228	0,193	0,020
	Imports of goods and services	34	0,116	0,187	0,150	0,018
	The sum of exports and imports	34	0,271	0,415	0,343	0,038
Upper-middle income	Exports of goods and services	34	0,018	0,076	0,046	0,020
	Imports of goods and services	34	0,013	0,060	0,037	0,016
	The sum of exports and imports	34	0,031	0,137	0,083	0,036
Lower-middle income	Exports of goods and services	34	0,006	0,023	0,013	0,005
	Imports of goods and services	34	0,007	0,022	0,014	0,006
	The sum of exports and imports	34	0,014	0,044	0,027	0,011
Low income	Exports of goods and services	17	0,001	0,001	0,001	0,000
	Imports of goods and services	17	0,001	0,002	0,001	0,000
	The sum of exports and imports	17	0,002	0,003	0,002	0,000

Source: the author's own calculation.

Research results

The objective of statistical analysis is to examine whether the financial crisis has altered the globalisation process by reducing or slowing cross-border trade. Table 3 displays the results of a statistical analysis examining the trends in globalisation during two distinct time intervals: from 1989 to 2007 and from 2008 to 2022.⁴

⁴ For low-income countries, due to the lack of sufficient data, statistics were not calculated for the period 1989–2007.

Table 3: Sen's slopes and intercepts, and the Mann-Kendall trend test results.

	Exports of goods and services	Imports of goods and services	The sum of exports and imports
World (1989–2007)			
Sen's slope	0,006	0,005	0,011
Intercept	0,165	0,184	0,331
Kendall's tau	0,883	0,856	0,895
MK trend test (p-value)	<0,0001***	<0,0001***	<0,0001***
World (2008 - 2022)			
Sen's slope	-0,001	-0,001	-0,003
Intercept	0,308	0,301	0,610
Kendall's tau	-0,124	-0,143	-0,124
MK trend test (p-value)	0,553	0,488	0,553
High income (1989 - 2007)			
Sen's slope	0,004	0,003	0,007
Intercept	0,149	0,108	0,258
Kendall's tau	0,825	0,801	0,825
MK trend test (p-value)	<0,0001***	<0,0001***	<0,0001***
High income (2008 - 2022)			
Sen's slope	-0,001	-0,002	-0,003
Intercept	0,218	0,176	0,395
Kendall's tau	-0,333	-0,410	-0,371
MK trend test (p-value)	0,092*	0,038**	0,06*
Upper-middle income (1989 - 2007)			
Sen's slope	0,002	0,001	0,003
Intercept	0,012	0,010	0,022
Kendall's tau	0,977	0,895	0,918
MK trend test (p-value)	<0,0001***	<0,0001***	<0,0001***
Upper-middle income (2008 - 2022)			
Sen's slope	0,001	0,000	0,001
Intercept	0,061	0,048	0,110
Kendall's tau	0,257	0,314	0,295
MK trend test (p-value)	0,198	0,113	0,138
Lower-middle income (1989 - 2007)			
Sen's slope	0,000	0,000	0,001
Intercept	0,005	0,006	0,011
Kendall's tau	0,895	0,789	0,813
MK trend test (p-value)	<0,0001***	<0,0001***	<0,0001***
Lower-middle income (2008 - 2022)			
Sen's slope	0,000	0,000	0,000
Intercept	0,018	0,019	0,036
Kendall's tau	0,448	0,4290	0,486
MK trend test (p-value)	0,023**	0,029**	0,013**
Low income (1989 - 2007)			
Sen's slope	-	-	-
Intercept	-	-	-
Kendall's tau	-	-	-
MK trend test (p-value)	-	-	-
Low income (2008 - 2021)			
Sen's slope	0,000	0,000	0,000
Intercept	0,001	0,002	0,003
Kendall's tau	-0,319	-0,143	-0,363
MK trend test (p-value)	0,125	0,511	0,080*

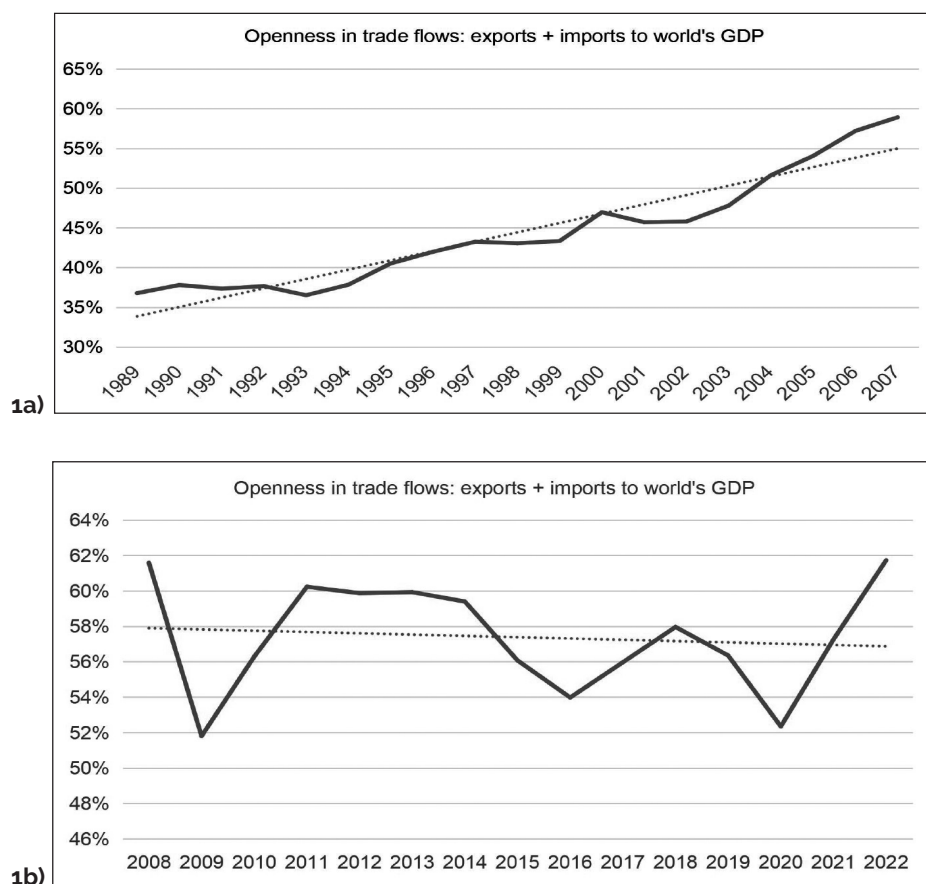
*** - significant at the 1 percent level; ** - significant at the 5 percent level; * - significant at the 10 percent level.

Source: the author's own calculation.

The findings suggest that during the period from 1989 to 2007, there was a noteworthy positive trend in the development of global exports and imports. Not only did the share of world exports in the global GDP rise from 18.3% in 1989 to a substantial 29.9%, but imports also increased from 18.5% to 19%. Moreover, this shift occurred in a relatively smooth and consistent manner.

The onset of the worldwide financial crisis in 2008 brought about notable alterations in the manner, in which globalisation unfolded. It led to several changes in the way countries conducted international trade and these shifts are apparent in the alteration of the direction in Sen's slope and Kendall's tau. The MK trend test indicates that there is no noteworthy trend in cross-border trade flows. The trends in trade are visually depicted in Figure 1(a,b).

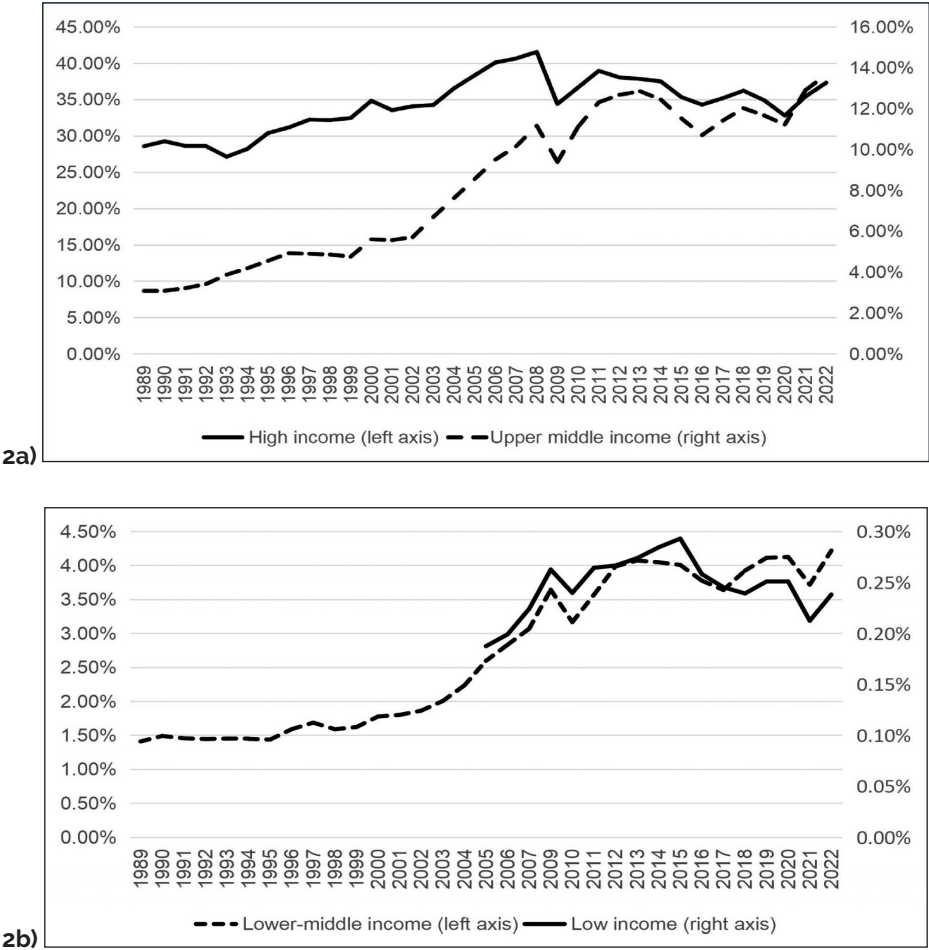
Figure 1(a,b): Cross-border trade from 1989 to 2007 (1a) and from 2008 to 2022 (1b).



Source: the author's own calculation.

Until 2008, the expansion of globalisation was evident across all four income groups. The positive trend in the development of international trade was statistically significant, indicating an increasing economic openness of the world. After 2007, disruptions occurred in the formerly positive global trends, although these disruptions varied in intensity across different income groups. Regarding the total exports and imports, in both middle-income groups, the favorable trend persisted, though it was notably weaker (with lower positive Sen's slopes and Kendall's taus). However, it was statistically significant only in the upper-middle-income group. In the high and low-income country groups, the formerly positive trends in cross-border trade flows, which were observed before 2008, shifted to negative trends, as indicated by the statistics in *Table 3* and demonstrated in *Figure 2(a,b)*.

Figure 2(a,b): Cross-border trade in the four income groups from 1989 to 2022.



Source: the author's own calculations.

Discussion and conclusions

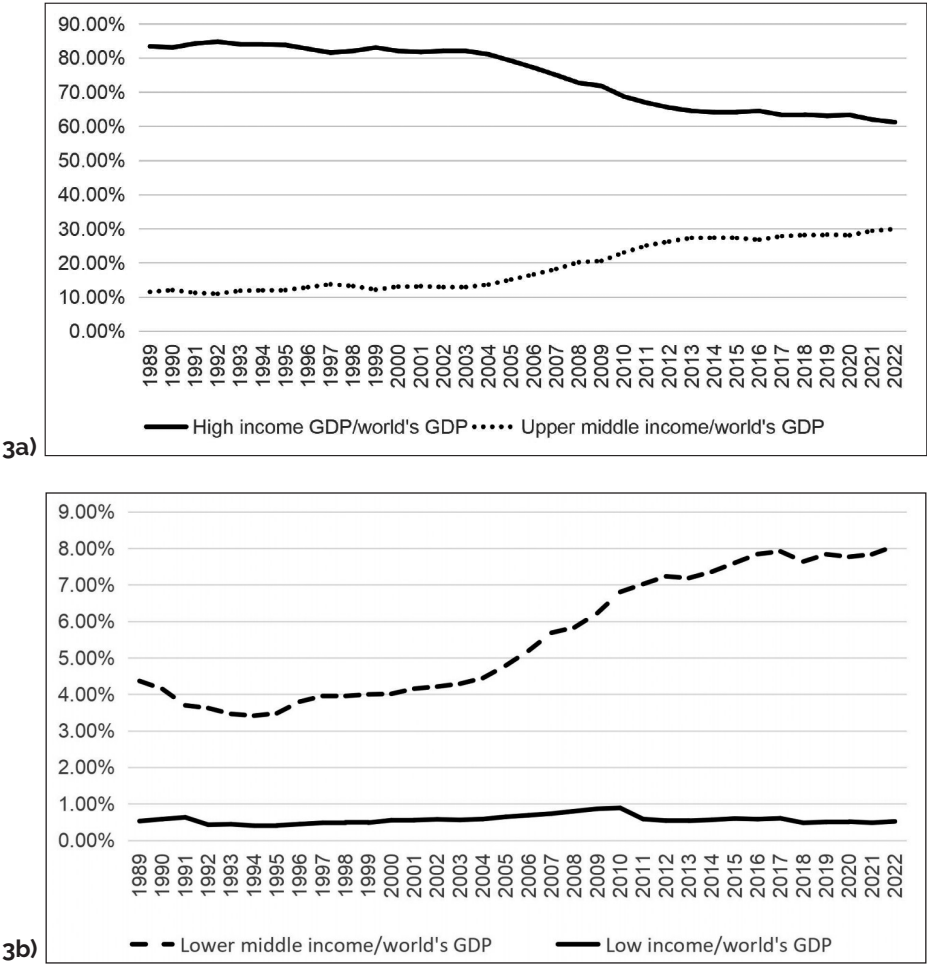
The statistical analysis revealed that the GFC was a turning point that halted the rapid globalisation process, sometimes referred to by experts as hyper-globalisation. In the period leading up to the GFC, global trade generally grew at a faster pace than the world's GDP as shown in *Figure 1(a,b)*. This was influenced by numerous factors. The unification of markets and goods traded within them was pivotal to economic globalisation. A key outcome of this is the easing of international trade barriers, facilitating businesses across nations to live effectively in foreign markets. Notable milestones included trade liberalisation and tariff reductions, especially prevalent in the 1990s. Several emerging economies opened up to global trade. Notably, China pivoted to an export-driven growth model, integrating itself further into the global economic fabric. Simultaneously, Central and Eastern European countries strengthened their economic ties with Western Europe. There was also a noticeable transition in the nature of trade, from primary commodities to manufactured goods, as highlighted by Irwin (2002), and a significant decline in transportation expenses played a crucial role in propelling trade growth in recent decades. Innovations like containerisation boosted transportation efficiency, promoting trade expansion, as pointed out by Hummels (2007). Global Value Chains (GVCs) greatly influenced the swift ascent of global trade *vis-à-vis* income during the 1990s and the early 2000s. Technological breakthroughs and economic progress enabled the segmentation of manufacturing processes across borders via intricate global supply chains (Bems et al. 2013). Finally, the relative global peace and lack of widespread conflict also amplified world trade manifold.

After the global financial crisis, the world experienced slowbalisation, characterised by decelerating trade and investment. The literature suggests several causes, both cyclical and structural. Freund (2009) observed that during recessions, the correlation between trade and GDP typically shifts, with trade plummeting more than output indicates. This is partly due to reductions in inventories and favour of domestic suppliers. Since 2008, trade growth has been sluggish, reflecting weak GDP growth. Predominant was the frail global demand. Different demand components possess varying trade intensities, as illustrated by Boz et al. (2015). For example, business investment is more trade-oriented than government spending, while private consumption falls in between. Also after the GFC, financial institutions became more risk-averse and tightened lending standards. Rebuilding balance sheets and reducing debt overhangs was also crucial for fostering export capabilities across various industries. Consequently, restricted trade finance availability emerged as a potential cause of slowbalisation (Gächter, Gkrintzalis 2017). The structural factors comprise the end of the integration processes of China and Central and Eastern Europe into the global economy and a rise in protectionism, which increased government support for domestic sectors, disincentivising international purchases. Also, over the last decade, the growth of global value chains has decelerated (Antràs, Chor 2022). This trend can be attributed to several factors: the intensity of trade in goods-producing value chains has decreased, and labour costs have surged in major emerging markets, which has led to a reduction in trade based on labor-cost differences in certain value chains. This, in turn, has caused value chains to shift towards a more regional focus, rather than a global one.

Additionally, businesses are becoming more aware of potential supply chain vulnerabilities, and the increased use of regulatory measures and other non-tariff barriers such as export subsidies further exacerbate the situation (Lund et al. 2019; Cigna et al. 2022).

The period following the GFC also witnessed a notable shift in the contributions of advanced and emerging economies to global growth and trade. Compared to advanced economies, emerging market economies have substantially boosted their contribution to global GDP growth, as illustrated in *Figure 3(a,b)*. This relative weakness in aggregate demand, as highlighted by Ollivaud and Schweltnuss (2015), plays a significant role in shaping the trend of foreign trade relative to global GDP in high-income countries. Since 2008, trade growth has been subdued in advanced economies, especially in the Euro-zone, where intra-EU trade makes up roughly one-third of global trade.

Figure 3(a,b): The portion of the world GDP attributed to various income groups from 1989 to 2022.



Source: the author's own calculation.

The diminishing role of advanced economies in the global trade landscape has ramifications for the course of globalisation. Notably, middle-income countries exhibit significant openness to international trade, as evidenced by their increasing share in global trade. Yet, when viewed historically, emerging economies have proven to be more resilient during recent crises compared to past downturns and have spearheaded the global rebound. Observing the trend, middle-income countries persist in amplifying their engagement in global exchanges of goods, services, and finance. As noted by Gruss et al. (2017), emerging markets and developing economies have risen in prominence within the global economy. The significant income gaps between these economies and advanced nations indicate ample opportunities for convergence, suggesting they have the potential to sustain relatively robust growth over the medium term. The ascent of emerging economies is poised to shape global trade dynamics in various dimensions, not only by their expanding contribution to global exports, but also by changing trade patterns, and growing significance as consumers of goods and services from other countries. Due to consistent robust growth over the years, emerging markets, particularly China, have contributed significantly to the surge in global demand.

Emerging markets are indisputably slated to continue their key role in the global economic landscape. However, the nature and model of their growth are evolving in response to current trends. Notably, we may witness a pivot in global trade flows, shifting from a predominant focus on manufactured goods to an emphasis on services. The prospect of service trade outpacing goods trade in the future is becoming increasingly likely. The digital revolution is playing a transformative role in this dynamic (Lund, Tyson 2018).

With digital technologies and data flows acting as the new lifelines of global commerce, the very fabric of international trade is undergoing a metamorphosis. However, technological advancements, especially in the realm of automation, present a double-edged sword for globalisation. As pointed out by Arslan et al. (2018), while technology has historically catalysed globalisation, the burgeoning rise of automation may pose challenges. If automation allows machines to take over jobs predominantly held in emerging market economies, it could lead to a potential rollback of globalisation. Such a scenario would mark a stark contrast to previous eras, where technological progress invariably spurred deeper global integration. Threats to the globalisation process are also evident in other areas. Goldberg and Read (2023) primarily identify these threats in the rising protectionist policies of various governments following the initiation of the trade conflict that erupted between the world's two dominant economies in 2018 and lately the conflict in Ukraine, with national security concerns serving as a central driving force. Moreover, the COVID-19 pandemic intensified the emphasis on economic security, prompting a reevaluation of supply chains. The crisis revealed the susceptibility of these supply networks in numerous countries, leading to heightened efforts to bolster their resilience.

Despite these threats, we are witnessing a shift towards slowbalisation rather than deglobalisation, indicating that the pace of international economic integration may not increase as swiftly as it did in past decades. Instead, it might stabilise at historically high levels reached before the pandemic began. However, slowbalisation doesn't imply

a rigid divide between countries based on income levels will persist. Even in this era of slowbalisation, the process of globalisation remains dynamic. Thus, slowbalisation goes hand in hand with reglobalisation. Power dynamics are shifting, with emerging economies challenging the high-income nations.

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