

Article

Globalisation, De-Globalisation, the Combination, and the Future of Value Chains

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Abstract

This study examined globalisation, de-globalisation, the combination, and the future of value chains to ascertain which would be best for the future of value chains. The study used a cross-sectional survey of 277 randomly selected employees of multinational manufacturing firms in Nigeria. The data were analysed using structural equation model path diagram techniques. The results indicate that de-globalisation and the combination of globalisation and de-globalisation have direct and indirect significant relationships with the future of value chains, but globalisation does not have any direct significant relationship with the future of value chains but has an indirect significant relationship with the future of value chains. In addition, supply chain management significantly mediates the relationships among globalisation, de-globalisation, the combination, and the future of value chains. By establishing a significant association between the combination and the future of value chains, the study departs from future studies whose results are largely situated on the bipolar ends of a continuum. The study makes significant contributions to the traditional theory of trade protectionism, endogenous growth theory, and institutional theory, as well as to practice.

Keywords: globalisation; de-globalisation; combination; supply chain management; the future of value chains



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1. Introduction

As a result of their ability to form and utilise the networks between national economies and function within several countries, multinational companies are critical to the interconnectedness of global economies [1] because they form a single market. This results in the presence of several market operators, which is the major driver of market openness and increased competitiveness [2], especially in global supply and value chain subsystems. Optimising supply chain management (SCM) depends on efficiency and effectiveness. In the same vein, reliable sourcing is critical to efficient SCM and is, thus, crucial to a sustainable value chain. A fundamental requirement for the effectiveness of the global value chain (GVC) is openness. Specifically, unconstrained openness is required, which is the ability of goods and services to flow across regions and subregions without constraint.

A supply chain describes the network of companies responsible for the production and delivery of goods and services; the value chain is the full lifecycle of a product. With globalisation, the network of companies responsible for the production and delivery of goods and services transcends national boundaries to international boundaries. This can be

profitable for international companies, especially when international differences in relative costs exceed the cost of selling across borders [3]. To this end, multinational firms who buy or manufacture products in one nation to sell in another will continue to transact business across national borders, provided arbitrage is profitable [4]. This invariably means that globalisation will persist so long as arbitrage is profitable. De-globalisation seeks to reduce the level of global connectedness. Thus, it refers to the movement towards a less connected world characterised by strong nations, states and regions governed by national and regional institutions rather than global institutions. The proponents of de-globalisation argue that during a global crisis, as was experienced during the COVID-19 pandemic, the global supply and value chains will be in serious jeopardy. To this end, openness may not always be the case because it is not enough to envisage openness as there are interruptive factors beyond the control of economists and policymakers. The major factors related to the global market and health environments are not deterministic but stochastic. The stochastic nature of the underlying variables constitutes a major obstacle to the projections related to the GVC. Although the globalisation of supply chains has contributed significantly to increased output through the theory of highest comparative cost advantage and least comparative cost disadvantage, there was a significant reduction in sourcing options, which raised concerns about the globalisation of value chains, leading to the subsequent calls for de-globalisation as an alternative for the future of value chains. Both economic and societal globalisations have a negative influence on de-globalisation [5], and increased de-globalisation will also negatively influence globalisation.

While the GVC envisages an unconstrained flow of goods and services globally through an efficient global supply chain, unforeseen occurrences, such as those experienced during the COVID-19 pandemic, can restrict the flow of humans, materials, and factors of production. This invariably stimulates a disruption in the flow of goods and services across the globe and, thus, hinders the primary goal of the GVC, which is the efficiency and effectiveness of the global supply and value chain. Within a short while, a robust empirical literature base has emerged on the future of value chains, owing to the awareness that the GVC can be threatened by an international crisis, as was experienced during the COVID-19 pandemic. The empirical studies include the future of GVCs and international trade from the perspective of the EU [4], how the integration of a sustainable business model and GVCs can contribute to the revival of the sustainable growth of the value chain [6], and how de-globalisation, being a new way to trade, can take a firm from crisis to opportunity [7], among others. Empirical findings in support of globalisation include the following: Accessing resources and markets globally is increasingly a necessary condition but not sufficient per se [7]. Supply chain disruptions during recent crises are not due to market failure [8,9]. De-globalisation (border closure) has a positive effect on the manufacturing sector in the short run but a negative effect in the long run [10]. Globalisation is distinctly slowing down, although there is no trend reversal yet [11]. The findings in support of de-globalisation include the following: International trade protectionism has altered the landscape of GVCs by causing widespread disruption [12]. In addition, the reconfiguration of the GVC will stimulate meta-level changes, which will shape supply-chain management practices both in the near and long term [13]. There is strong support for domestic-based measures that are aligned with emerging global supply-chain sustainability regulations [14], and the global economy can look forward to fragmented and locally oriented supply chains [15]. The foregoing indicates that the studies on the future value chain are inconclusive, thus creating a conspicuous gap in the literature. To this end, this study seeks to investigate the future of value chains to ascertain whether a consolidation of globalisation or a shift to de-globalisation of the current global value chains or a combination of globalisation and de-globalisation will be beneficial for the world.

2. Literature Review

2.1. Conceptual Review

This section provides conceptual clarifications for the key variables of the study.

2.1.1. The Concept of Supply Chain Management (SCM)

The production and delivery of goods and services are critical for sustainability; thus, the global supply chain is critical to the GVC since it encompasses the network of the major participants in the production and delivery of goods and services. To this end, the management of the supply chain is crucial to its effectiveness and efficiency. SCM manages the movement of distribution channels from the supplier to the final customer [16,17], as well as the processes that ensure the provision of horizontal value to customers [18,19]. Furthermore, SCM is the deliberate coordination of business functions and tactics aimed at enhancing the performance of the supply chain and the individual firms [20]. The purpose of SCM is to govern the flow of the distribution channel from the supplier to the final customer to provide horizontal value to customers [21,22]. Nevertheless, Jodlbauer et al. [21] support the conceptualisation of SCM by The American Production and Inventory Control Society Foundations as the ideal definition that SCM is “the design, planning, implementation, monitoring and control of supply chain activities to create value and build competitive infrastructure”. It also includes the leveraging of local logistics, aligning supply with demand and measuring performance globally. This definition provides an adequate integration of previous definitions.

2.1.2. Value Chains and GVCs

A value chain describes the series of consecutive steps that go into the creation of a finished product; it is a GVC if such steps and activities are performed across international borders. Value chains are a vital part of global operations [23] and worldwide economic integration. Commonly tagged globalisation, they make GVC even more critical to SCM. Ironically, considerations about the sustainability of the GVC are recent, as the world is just beginning to understand how to make the GVC sustainable. By incorporating all of the steps required for the creation of a finished product—from the initial design to its delivery to the customer’s door—the GVC is important, and its management is critical to the efficiency of the global supply chain. The GVC identifies value-added steps in the process, which include the sourcing, manufacturing, and marketing stages of its production across national borders.

2.1.3. International Value Chains and the Dilemmas Associated with Their Use in Organisations

There is no denying that GVCs are relevant in organisations because of their growing importance in international trade, as the gap in development between the industrially advanced and developing countries restricts the competitive capacity of the less developed countries [24]. GVC theory provides a broad perspective of network-to-firm on the role of multinational companies (MNCs), as well as how their global activities are structured [25]. However, the international business developed through theories of internationalisation offers a firm-to-network perspective on MNC in contrast to the GVC theory. Irrespective of the theoretical standpoint, the establishment of the GVC facilitates the capacity of firms to reduce the cost of production across the entire production system.

The GVC framework (GVCF) describes the global economy as a “complex and dynamic economic network consisting of inter-firm and intra-firm relationship(s)” [26,27]. It focuses on the process and technique for generating and appropriating value along functionally integrated but internationally dispersed activities and the process of providing

explanations for the structures and influences of power (power dynamics) among various economic actors [26,28]. The GVC framework provides analytical tools for understanding and assessing patterns of value creation [26].

Fearne et al. [29] identified the boundary of analysis, the scope of value considered, and the shared value and governance (associations that are not channel power or alliance) as the three major dimensions of sustainable value chains. They are of the view that in the current context, the existing analysis approaches need to adopt more sustainable perspectives for value chain analysis to be relevant. Organisations can be sustainable by tackling external factors, such as environmental degradation, health, and poverty, which can stimulate a chain's capacity to create shared value [30].

2.1.4. De-Globalisation

Despite the prominence of the globalisation of value and supply chains, there are those who argue in favour of de-globalisation. The invasion of Ukraine by Russia and the COVID-19 pandemic brought the old-world order into question through the generation of a narrative of supply chain resilience as a consequence of the disruptions [13] and other constraints to the movement of factors of production in the wake of the series of lockdowns that accompanied the pandemic. The new narrative that has emerged argues that it is inevitable [31] because international supply chains are inadequately resilient, owing to the possibility of unpredictable disruptions and trade partners' hostility [32,33]. Some of the studies include supply chain myths in the resilience and de-globalisation narrative [9], de-globalisation, international trade protectionism, and the reconfigurations of GVCs [12].

The sharp reduction in international trade and investment in recent years signals the dawn of a new phase of de-globalisation owing to supply chain disruptions; hence, the rising cost of the global supply chain may just be the undoing of the international supply and GVC [33]. A recurring entrenchment of the narrative is that supply chains focus mainly on cost efficiency through the reduction of short-term costs. However, empirical evidence on the capacity of supply chains to stimulate cost reduction perpetually in contemporary times is scanty [9], as the studies on supply chains confirm that single cost factors constitute a smaller portion of total landed cost. The authors of [12] suggest the need to integrate sustainable business models into the GVC to mitigate the environmental and societal consequences of the GVC system. Kim et al. [7] found that economic and societal globalisation have a negative influence on de-globalisation. In addition, they found that de-globalisation is more frequent in countries that are industrially advanced than in less developed countries and that the trend of de-globalisation will continue in diverse formats.

Given the perceived constraints to the global value and supply chain and the subsequent threats to its sustainability, the attention of most global value chain researchers has shifted to de-globalisation in search of sustainability. Some of the studies include the global value-chain configuration [8], the future of manufacturing GVCs [8], the future of global supply chains in a post-COVID-19 world [13], and the impact of globalisation processes on SCM [34]. The others are equitable GVC and the production network [35], the relevance of GVC to green innovation [36], and stringent sustainability regulations for global supply chains [15]. Lastly, Choudhary et al. [37] sought to ascertain whether reshoring affects the resilience and sustainability of supply chain networks at Apple and Jaguar Land Rover. Some of the findings indicate that significant imbalances exist in the flows of value-added activities [36]. Firms have to combine locations and modes of governance in order to define their value chains [8].

2.2. Theoretical Background

This section presents some of the theories that explain the relationships between the underlying variables of this study.

2.2.1. Endogenous Growth Theory

As a theory of trade openness, the endogenous growth theory supports globalisation. The theory posits that trade openness correlates directly with economic growth owing to the widespread global dissemination of advanced technologies [38,39]. The theory further postulates that globalisation through trade openness facilitates innovation and knowledge transfer, thus making globalisation critical to the global supply and value chains. The major thrust of the theory is that globalisation through increased international collaboration can enhance the technological capabilities of any economy since the degree of openness of a country directly impacts its capability to utilise technologies, which leads to more rapid growth [38,40].

2.2.2. Traditional Theory of Trade Protectionism

Despite the popularity of the trade openness viewpoint and the attendant globalisation reasoning, there are pundits who support de-globalisation through their belief that there is a need for trade protection. One of the major arguments in support of the protectionists' viewpoint is the infant industry argument, which acknowledges that irrespective of the potential comparative advantage of the developing countries in manufacturing, they lack the capacity to compete with the organised and relatively more stable and developed manufacturing sector of the industrially advanced countries [41]. The major assumptions are those of full employment, fixed production technology, balanced trade, perfect mobility of factors within and among nations, and free market enterprise of international markets, indicating that prices are controlled by forces of demand and supply [41].

2.2.3. Institutional Theory

According to the Institutional Theory, the external environment often pressures an organisation or institution to change its policies, procedures, or structures in response to changes in the environment by employing countering or collaborative actions. The major premise of the theory is that external pressures force an institution to change so that it can continue to attract the support and/or goodwill of the external environment and win specific resources or acquire some measure of social and economic legitimacy [42]. In this context, an institution is a social, political, or economic body that operates according to laid down laws [24,43,44].

2.2.4. Relevance of the Theories to the Research Problem

The endogenous theory supports globalisation based on the argument that trade openness enhances economic growth due to the access to technology from industrially advanced countries to less developed countries and the facilitation of innovation and knowledge transfer. The traditional theory of trade protectionism and institutional theory are pro-de-globalisation theories. The traditional theory of trade protectionism argues that trade protection is necessary for infant industries to enable their growth, while the institutional theory argues that the external environment can force an institution to change its policies. This suggests that it is possible for environmental factors to force multinational companies to gravitate towards de-globalisation. The trade protection argument and the pressures from the external environment are sufficient to cause gravitation towards de-globalisation, especially as it can lead to high tariff policies that might make arbitrage unprofitable. Thus, while the endogenous theory supports globalisation and argues against

de-globalisation, the trade protectionist and institutional theories argue in favour of de-globalisation and against globalisation.

2.3. Importance of Sustainability to an Organisation and the Associated Dilemmas

Sustainability is critical to the going concern of a business because a non-sustainable business will cease to exist. Various organisational practices contribute to business sustainability, which translates to the building of a sustainable supply chain or organisation through effective, sustainable management [45]. The purpose of sustainable management is to address the firm's economic responsibility by creating business value through the optimisation of costs and revenues to maximise profits, as well as address the firm's social and environmental concerns. [46–50]. The implication is that the systematic verification of the resources consumed, the processes employed, the current structures (in terms of how they affect the economic, social, and environmental concerns), and the speed of adjustment to configuration for value creation for all stakeholders will facilitate the optimisation of the goals of the system (customers, suppliers, employees, society [50,51]. Strategic managers seek to achieve economic, environmental, and social objectives and seek equilibrium between them on a continuous basis. Sustainable GVC practices through decarbonisation and other green practices are critical to a firm's going concern. In the final analysis, the incorporation of sustainable practices enhances an organisation's going concern. Table 1 presents a summary of empirical studies.

Table 1. Summary of related empirical studies.

S/N	Title	Objectives	Methodology	Findings
1	Kim et al. [7]	To identify the impacts of de-globalisation and globalisation on global business	Longitudinal design using panel data	Economic and societal globalisations have a negative influence on de-globalisation. De-globalisation is more apparent in developed countries than in developing countries.
2	Monyela and Saba [39]	To ascertain the influence of trade openness on economic growth and economic development nexus in South Africa	Longitudinal design and vector error correction model	Trade openness substantially influences GDP growth in the post-BRICS period.
3	Ajoje and Adegboyoye [11]	To ascertain the impact of trade protection vis-à-vis border closure policy on manufacturing sector in Nigeria	Longitudinal design and regression technique	Border closure has a positive effect on manufacturing sector in the short run but a negative effect in the long run.
4	Cao et al. [51]	To examine the effect of the US–China trade tensions on the corporate social responsibility (CSR) performance of the Chinese suppliers	Longitudinal (difference in difference)	Chinese suppliers with direct US corporate customers experience a significant decline in CSR performance compared with their peers without direct US corporate customers.
5	Seifermann and Anzenender [10]	To find out the underlying reasons, motives, and key drivers for companies to operate in global MVCs	Literature review	There is a distinct slowdown of globalisation growth rates, but no trend reversal yet.

Table 1. Cont.

S/N	Title	Objectives	Methodology	Findings
6	Zahoor et al. [12]	To investigate the impact of international trade protection in the reconfigurations of the global value chains (GVCs)	Content analysis	International trade protectionism has altered the landscape of GVCs by causing widespread disruption to their functioning, thus making them prone to future external policy risks.
7	Baldwin et al. [3]	To determine the impact of globalisation on trade intensity	Longitudinal survey	The future of trade lies in services trade—especially trade in intermediate services.
8	Hernandez and Pedersen [8]	To determine the global value chain configuration	Literature review	Accessing resources and markets globally is increasingly necessary but not sufficient per se.
9	Panwar et al. [13]	To investigate the future of supply chains in a post-COVID-19 world	Literature review	There will be meta-level changes through GVC reconfigurations, which will shape supply-chain management practices both in the near and long term.
10	Nitsche et al. [52]	To ascertain the logistic challenges associated with the AfCFTA and potential solutions and development paths for future value chains	Mixed-methods	High logistic costs, as well as infrastructure deficits, are currently among the most pressing logistic challenges.
11	Sun et al. [53]	To estimate the mid-century socioeconomic impacts of heat stress	Longitudinal	Small- and medium-sized developing countries suffer disproportionately from higher health loss in South-Central Africa.
12	Hofstetter et al. [54]	To ascertain the structure of relationships across continental boundaries through global value chains and the role of political and corporate sustainability conversations and initiatives	Meta-analysis	Providing answers to pertinent questions will help advance individuals, firms, and societies in Africa to better connect to global value chains and achieve social, environmental, and economic objectives, locally and globally.
13	Acquaye et al. [35]	To find out whether the existing GVC set-up pertaining to global North and South countries is equitable and whether it would yield the needed socioeconomic and wider sustainable benefits	Input–output model	There are disproportionate contributions of embodied capital and labour value-added flows, particularly in the agricultural-based primary industries, from the global South to the global North and vice versa.
14	Orlanyuk-Malitskaya et al. [35]	To identify the drivers of value-added growth (VAG) as a key indicator of effective global supply chain management	Multi-stage methodological design	The effectiveness of countries' participation in VAG is determined by several drivers.

Table 1. Cont.

S/N	Title	Objectives	Methodology	Findings
15	Smith et al. [15]	To investigate the sustainability regulations for global supply chains	Multiple original survey-embedded experiments	There is strong support for domestic-based measures that are aligned with emerging global supply chain sustainability regulations. The support is driven by positive impact expectations.
16	Peter and Van Bergeijk [55]	To investigate shifts from globalisation to de-globalisation	Longitudinal design with econometric analysis	The results emphasise the complexities of de-globalisation involving international relations, history, and economics.
17	Yecesan [56]	To identify the forces that drive de-globalisation and understand how they shape the evolution of global supply chains		Their findings led them to conclude that there was a slow transition from global to regional supply chains.
18	Thakur-Weigold and Miroudot [9]	To investigate the root causes of perceived market failures	Literature review	They conclude that supply chain disruptions during recent crises are not due to market failure.
19	Herold and Marzantowicz [57]	To ascertain how supply chain scholars view decision-making for supply chain resilience from an institutional perspective	Systematic literature review	We argue that the complexity in supply chains represents a different playing field and results in different responses, in particular, when confronted with disruptions.
20	Gopalakrishnan et al. [14]	To analyse China-driven GVCs and explore the impact of tariff changes on China and its major trading partners on economic variables like consumption and investment	Longitudinal design with econometric analysis	The global economy can look forward to fragmented and locally oriented supply chains.
21	Giovannetti et al. [4]	To review the evolution of international trade and discuss the recent changes in the EU's trade patterns, looking at intermediate consumption and capital goods	Literature review	They find that domestic supply prevails over foreign supply in the presence of repercussions on investments, while the input characteristics have no role.
22	Smith [58]	To narrate reviews of six approaches that have emerged in the context of Hyper-localism, Open Localism, Cosmo-localism, Foundational Economy, Developmental Nationalism and Strategic Autonomy	Literature review	The paper finds that the world is now faced with complex and differing processes of (de)globalisation—sometimes overlapping and sometimes competing, which are grounded in a post-growth perspective.

Table 1. Cont.

S/N	Title	Objectives	Methodology	Findings
23	Zahoor et al. [12]	To challenge the perceived assumption of ongoing globalisation and the free flow of goods and services	Content analysis	International trade protectionism has altered the landscape of GVCs by causing widespread disruption to their functioning, thus making them prone to future external policy risks.
24	Baldwin et al. [3]	Contests the idea that the world has entered a post-globalisation era	Literature review	Makes a statistical and logical case that the future of trade lies in services trade—especially trade in intermediate services.

Note: African Continental Free Trade Area (ACFTA).

The results of extant studies indicate that the future of value chains cannot depend on globalisation alone, owing to the observed distinct slowdown of globalisation growth rates, although there is no trend reversal yet [10]. While it is evident that accessing resources and markets globally is increasingly necessary, it is not sufficient per se [8]. Most importantly, international trade protectionism has altered the landscape of GVCs by causing widespread disruption to their functioning, thus making them prone to future external policy risks [12], and there is strong support for domestic-based measures that are aligned with emerging global supply chain sustainability regulations [15]. Yacesan [56] also concluded that there was a slow transition from global to regional supply chains. Thus, the future of value chains will be shaped by a combination of globalisation and de-globalisation to attain equilibrium.

In view of the foregoing, the study tested the following null hypotheses:

- H1.** *There is no significant relationship between globalisation and supply chain management.*
- H2.** *There is no significant relationship between de-globalisation and supply chain management.*
- H3.** *There is no significant relationship between combination and supply chain management.*
- H4.** *There is no significant relationship between globalisation and the future of value chains.*
- H5.** *There is no significant relationship between de-globalisation and the future of value chains.*
- H6.** *There is no significant relationship between the combination and the future of value chains.*
- H7.** *There is no significant relationship between supply chain management and the future of value chains.*
- H8.** *Supply chain management does not have any significant mediating influence on the relationship among globalisation, de-globalisation, the combination, and the future of value chains.*

3. Research Method

The study employs a quantitative research method.

3.1. Research Design

The study's design is a cross-sectional survey of 277 employees from manufacturing companies in Nigeria. The study focuses on manufacturing companies because they are

critical stakeholders in the supply and value chain at local and international levels since they produce and utilise raw materials, produce goods, and market and distribute the goods.

3.2. Sampling Technique

The study used Cochran's formula to determine the sample size using a margin of error of 5% and an estimated sample proportion of 0.3; this resulted in a sample size of 323. The study randomly selected 15 multinational manufacturing companies in Lagos, Port-Harcourt, Abuja, and Warri in Nigeria. The study focused on multinational companies to provide a global perspective of the opinions of the employees and, thus, enhance the generalisability of the results. The choice of the locations and companies was judgmental and largely informed by convenience, but the focus on multinational companies was to give the sample a global dimension. Stratified systematic sampling was used to select 14 respondents from each of the conveniently sampled companies.

The sectors covered are mining, pharmaceuticals and health, breweries, food and beverages, mining and exploration, metal and aluminium, as well as chemicals and paints (See Table 2).

Table 2. Multinational manufacturing companies per sector.

S/N	Industry	Number of Companies
1	Pharmaceuticals and health	2
2	Breweries	4
3	Food and beverages	4
4	Mining and exploration	2
5	Metal and aluminium	2
6	Chemical and paints	1
	Total	15

3.3. Data Collection/Research Instrument

3.3.1. Questionnaire

The study utilised primary data, and the data were collected directly from the respondents in their respective organisations with the help of research assistants. A structured questionnaire was used to collect the data from the respondents. Before the main study, the author pretested the instrument on a sample of 44 respondents and used the results to test for the validity and reliability of the instrument.

3.3.2. Test for Validity and Reliability

The testing procedure included the conduct of exploratory and confirmatory factor analysis to determine the sampling adequacy and test for sphericity and factor loadings. The results showed that the measure of sampling was very good (See Table 3), and Bartlett's test for sphericity was equally very good (See Table 3). The factor loadings were used to compute the average variances extracted (AVE), which served as the measure of convergent validity. The results show that all the AVEs are greater than 0.5, the threshold proposed by [59,60] (See Table 4).

Table 3. Tests for sampling adequacy and sphericity.

Kaiser–Meyer–Olkin Measure of Sampling Adequacy		0.636
Bartlett’s Test for Sphericity	Approximate Chi-Square	1.62×10^2
	Degree of freedom	300
	Significance	0.000

Table 4. Validity.

	Convergent Validity (AVE)
1. .gbl	$\frac{4.321}{6} = 0.720$
2. .dgbl	$\frac{4.6973}{6} = 0.783$
3. .cmb	$\frac{3.032}{4} = 0.758$
4. .fvc	$\frac{3.427}{5} = 0.686$
5. .scm	$\frac{3.251}{4} = 0.813$

Next, the study tested for discriminant validity using the results of the correlation coefficients of the study’s variables and the square roots of the AVEs. The results indicate that the instrument satisfies the requirements for discriminant validity, as all the correlation coefficients in each column of the correlation matrix are less than the diagonal element (square root of the corresponding AVE) (See Table 5), which is consistent with Wei (2020) [61]. The study conducted a test for reliability using the composite technique. The results of the composite reliability for all the explanatory variables show that all the coefficients of composite reliability are greater than 0.7, thus indicating that the instrument is reliable (See Table 6).

Table 5. Composite reliability.

		Mean	Std. Dev
1. .gbl	$\frac{5.031^2}{5.031^2 + 1.68} = 0.938$	3.39	0.467
2. .dgbl	$\frac{5.288^2}{5.288^2 + 1.303} = 0.955$	3.36	0.690
3. .spc	$\frac{3.481^2}{3.481^2 + 0.968} = 0.926$	3.396	0.731
4. .fvc	$\frac{4.128^2}{4.128^2 + 0.916} = 0.916$	3.333	0.757
5. .Scm	$\frac{3.593^2}{3.593^2 + 0.749} = 0.945$	3.408	0.626

Table 6. Divergent validity.

	Gbl	dgbl	cmb	fvc	pcm
.gbl	0.849				
.dgbl	0.821	0.823			
Cmb	0.729	0.866	0.955		
.fvc	0.781	0.911	0.948	0.923	
.scm	0.802	0.833	0.835	0.911	0.902

3.4. Measurement of Variables

The study used Likert scale items to measure respondents’ opinions. Five Likert Scale items (strongly disagree, disagree, neutral, agree, and strongly agree) were used to measure the dependent variable (the future of value chains), while four Likert Scale items measured the mediating variable (supply chain). Six Likert Scale items measured two of the independent variables (globalisation and de-globalisation), while four items measured the third independent variable, the combination.

3.5. Data Analysis Technique

Descriptive statistics (mean and standard deviation) were used to analyse the data to present a subjective view of the opinions of the respondents. Subsequently, the study used inferential statistics to analyse the data. Specifically, the study used the analysis of the path diagrams of the structural equation model to analyse the relationships that the study hypothesised. The study's model specifications are presented below.

Model Specification

$$.scm = f(gbl, dgl, cmb) \quad (1)$$

Mathematically, Equation (1) is specified as:

$$.scm = \lambda_0 + \lambda_1 gbl + \lambda_2 dgl + \lambda_3 cmb + e \quad (2)$$

$$.fvc = f(scm, gbl, dgl, cmb) \quad (3)$$

Mathematically, Equation (2) is specified as:

$$fvc = \theta_0 + \theta_1 scm + \theta_2 gbl + \theta_3 dgl + \theta_4 cmb + e \quad (4)$$

where:

.scm = supply chain management;

.fvc = future of value chain;

.gbl = globalisation;

.dgl = de-globalisation;

.cmb = combination of globalisation and de-globalisation;

λ_0 = fraction of the changes in scm that the independent variables (gbl, dgl, and cmb) do not account for;

λ_i (i = 1–3) = slope/coefficients of the regression line;

θ_0 = fraction of the changes in fvc that the supply chain and the independent variables (gbl, dgl, and cmb) do not account for;

θ_1 = coefficient of scm;

θ_i (i = 2–4) = coefficients of the independent variables (gbl, dgl, and cmb).

4. Results

4.1. Results of the Descriptive Statistics

The results of the descriptive statistics present the mean and standard deviations of respondents' perceptions. The results indicate that all means are at least 3, the cut-off mark. The highest mean is the respondents' perception of the supply chain, while the lowest mean is the respondents' perception of the future value chain. The highest standard deviation is for the future of the value chain, while the least is for globalisation. This makes the respondents' perception of globalisation the most reliable (See Table 6).

4.2. Goodness of Fit Tests

The study used equation level, Root Mean Square Error (RMSE), Wald, and Likelihood ratio tests as its tests for goodness of fit. The overall value of the equation-level goodness of fit test was 0.9448, suggesting that 94.48% of the variation in the future of value chains is explained by the changes in globalisation and de-globalisation—a reasonably high value. In addition, the RMSE value is sufficiently small, indicating that the average values predicted by the model are not significantly different from the actual values (See Table 7).

Table 7. Equation-level goodness of fit.

Variance						
Depvars	Fitted	Predicted	Residual	R-Squared	mc	mc2
-----+-----						
Observed						
Scm	0.390123	0.3054955	0.0846276	0.7830746	0.884915	0.7830746
Fvc	5712312	0.5466331	0.0245981	0.9569384	0.9782323	0.9569384
-----+-----						
Overall	0.9448269			RMSE	0.158	

The results of Wald's test indicate that the asymptotic significant probabilities for the Chi-square statistics of fvc and scm are less than five percent, thus indicating that the coefficients of the model equations are significantly different from zero (See Table 8). Lastly, the calculated Chi-square and the associated significant probabilities of the likelihood ratio test indicate that the model is the same as the saturated model, while the baseline is significantly different from the saturated model (See Table 9). The study tested for homoscedasticity using the Breusch–Pagan test for heteroscedasticity. Since the *p*-value is not less than 0.05, we do not reject the null hypothesis of constant homoscedasticity (See Table 10). All of the tests suggest that the structural equation model is a good fit for the data.

Table 8. Wald test.

	chi2	Df	<i>p</i>
-----+-----			
Observed			
Smc	999.94	3	0.0000
Fvc	6155.65	4	0.0000

Table 9. Likelihood ratio test.

Fit Statistic	Value	Description
-----+-----		
Likelihood ratio		
chi2_ms (0)	0.000	model vs. saturated
<i>p</i> > chi2		
chi2_bs (7)	1294.511	baseline vs. saturated
<i>p</i> > chi2	0.000	

Table 10. Breusch–Pagan test for Ho: homoskedasticity.

chi2(14) = 6.72
Prob > chi2 = 0.073

4.3. Results of the Inferential Statistics

The results of the structural equation model of globalisation, de-globalisation, and supply chains (direct effects) indicate that all of the explanatory variables (gbl., Dgbl, and cmb) have positive relationships with supply chains (scm), and all of the relationships are statistically significant at the one percent level. Consequently, all of the null hypotheses are rejected, and we conclude that gbl, dgbl, and cmb have statistically significant relationships with scm (See Table 11). An examination of the relationships between the supply chain, globalisation, de-globalisation, and the future of value chains shows that scm, dgbl, and

cmb have positive relationships with fvc, while gbl has a negative relationship with fvc. Nevertheless, the negative relationship between gbl and fvc is not significant, but the relationships between scm and fvc, dgbl and fvc, as well as cmb and fvc are all statistically significant. To this end, all of the null hypotheses are rejected. The implication is that scm, dgbl, and cmb have statistically significant relationships with fvc (See Figure 1 and Table 11).

Table 11. Structural equation model (direct effects): future of value chains.

	OIM Coef.	Std. Err.	Z	P > z	[95% Conf. Interval]	
-----+-----						
Structural						
scm < -						
gbl	4513492	0.0657476	6.86	0.000	0.3224863	0.5802121
dgbl	0.1659309	0.0608813	2.73	0.006	0.0466058	0.285256
cmb	0.3693099	0.0479172	7.71	0.000	0.275394	0.4632258
-----+-----						
fvc < -						
scm	0.4039166	0.0323933	12.47	0.000	0.3404269	0.4674063
gbl	−0.0729958	0.0383435	−1.90	0.057	−0.1481477	0.0021562
dgbl	0.2721841	0.0332602	8.18	0.000	0.2069953	0.337373
cmb	0.5045466	0.0284692	17.72	0.000	0.448748	0.5603452

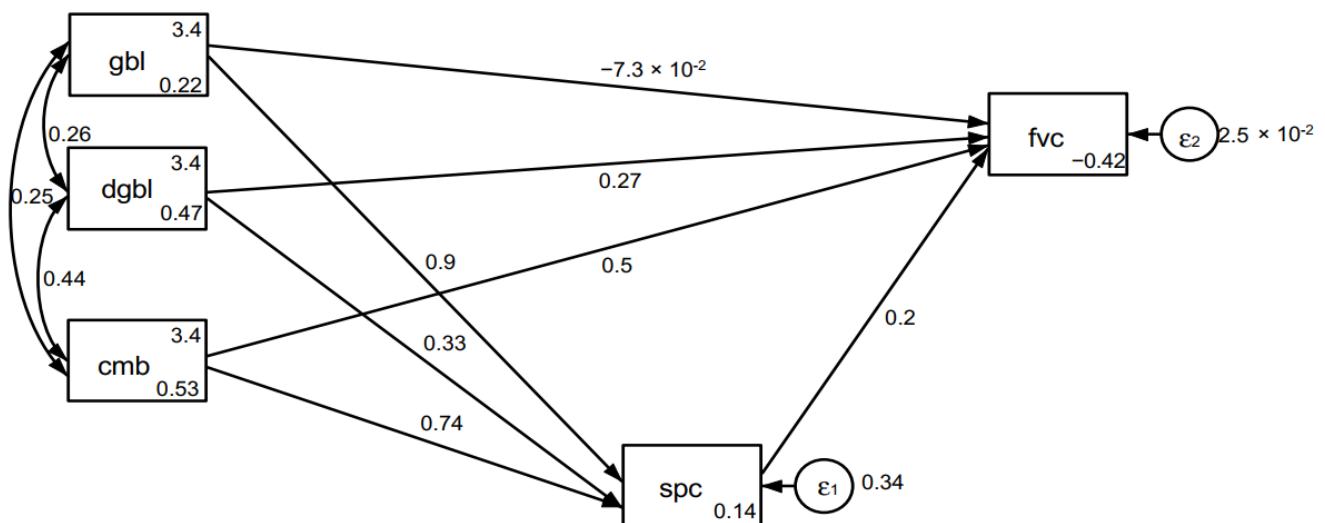


Figure 1. Path diagram analysis of globalisation, de-globalisation, their combination, and the future of value chains.

The indirect relationships between gbl, dgbl, cmb, and fvc reveal that all the predictors (gbl, dgbl, and cmb) have positive relationships with fvc, and all of the positive relationships are statistically significant at the one percent level since all of the *p*-values are less than one percent. To this end, all of the null hypotheses are rejected. Thus, gbl, dgbl, and cmb will have positive influences on the future of value chains (See Figure 1 and Table 12).

Table 12. Structural equation model (indirect effects): future of value chains.

	OIM Coef.	Std. Err.	z	P > z	[95% Conf. Interval]	
-----+-----						
Structural						
scm < -						
gbl	0 (no path)					
dgbl	0 (no path)					
cmb	0 (no path)					
-----+-----						
fvc < -						
scm	0 (no path)					
gbl	0.1823074	0.0303153	6.01	0.000	0.1228906	0.2417242
dgbl	0.0670223	0.0251715	2.66	0.008	0.0176869	0.1163576
cmb	0.1491704	0.0227534	6.56	0.000	0.1045746	0.1937662

4.4. Discussion

This study examined eight hypotheses. The first three hypotheses tested whether gbl, dgbl, and cmb have any significant associations with scm. The results indicate that gbl, dgbl, and cmb have statistically significant relationships with scm, meaning that all of the indicators are relevant to the efficient and effective functioning of scm. The significance of the influence of gbl on scm is consistent with [35], while the significance of the influence of dgbl on scm is consistent with [32,33] and Thakur-Weigold and Miroudot [9].

The fourth, fifth, sixth, and seventh hypotheses were tested to find out whether gbl, dgbl, cmb, and scm have any significant direct associations with fvc. The results indicate that gbl, dgbl, cmb and scm have positive relationships with fvc, but while the direct relationship between gbl and fvc is insignificant, that between dgbl and fvc, that between cmb and fvc, as well as that between scm and fvc are statistically significant. The implication is that the mediating variable and two of the indicators are relevant to the future of the value chain (fvc). The results of the test for indirect relationships with the mediation of scm show that all of the indicators have positive and significant relationships with fvc, thus indicating that all of the indicators have a predictive influence on fvc with the mediation of scm. The significance of the influence of gbl on fvc is consistent with the endogenous growth theory of Monyela and Saba [39] and Pettinger [41]. The significance of the influence of dgbl on fvc is consistent with the traditional theory of trade protection, as well as with Evenett [31], Coveri and Zanfei [32], Witt et al. [33], Thakur-Weigold and Miroudot [9], Zahoor et al. [12], and Ugwuja and Chukwukere [42].

The eight hypotheses were tested to examine whether scm has any mediating influence on the relationship between gb and fvc, dgb and fvc, as well as cmb and fvc. The direct relationship between gbl and fvc was not significant, but the mediated relationship is significant. This implies that scm has a full mediation effect on the relationship between gbl and fvc, but it has partial mediation effects on the relationship between dgbl and fvc and on the relationship between cmb and fvc since the direct effects of dgbl and cmb on fvc were significant. In addition, the non-significance of the direct relationship between gbl and fvc indicates that globalisation alone cannot sustain the future of value chains. In other words, the sustainability of value chains requires more than globalisation. This explains the significance of the relationship between cmb and fvc, where cmb represents a combination of gbl and dgbl. Thus, a mixture of globalisation and de-globalisation is required to sustain the future value chain system.

4.5. Proposed Model of Globalisation, De-Globalisation, the Combination, and the Future of Value Chains

Flowing from the findings, the study proposed a model of globalisation, de-globalisation, their combination, and the future of value chains. The model indicates that de-globalisation and combination have significant direct and indirect relationships with the future of value chains, while globalisation has an indirect relationship with the future of value chains. The indirect relationships are mediated by supply chain management. Thus, in the future, de-globalisation and a combination of globalisation and de-globalisation will be critical to the sustainability of value chains (See Figure 2).

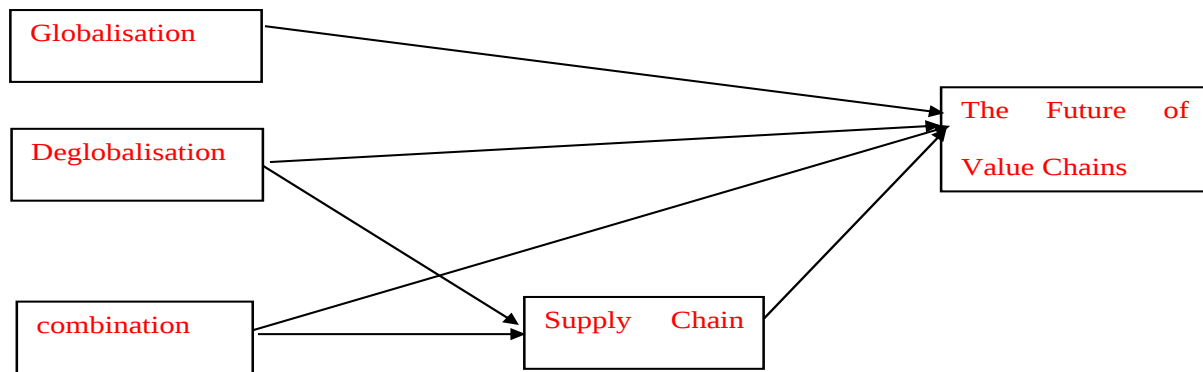


Figure 2. Proposed model of globalisation, de-globalisation, their combination, and the future of value chains.

This study makes significant theoretical contributions. First, since the direct relationship between gbl and fvc is not significant, it shows that globalisation does not have any significant relationship with the future of value chains and cannot, thus, depend solely on globalisation, thus providing support for the traditional theory of trade protection, which is pro-de-globalisation, and the institutional theory, which posits the possibility of institutional pressure, causing a shift from the status quo. The results are also consistent with the institutional theory due to changes in the external environment, as observed by the recent slowdown of globalisation growth rates (Seifermann and Anzenender, [10] and the altering of the landscape of GVCs by the international trade protectionism, causing widespread disruption [12], as well as the growing strong support for domestic-based measures [15], (Sm), which are strong indications of a changing environment of global business coupled with the supply and value chains. These results provide support for the institutional theory. The significance of gbl also has theoretical implications from the point of view of the endogenous theory, which is the traditional theory of trade openness and the institutional theory. Lastly, the significant relationship between cmb and fvc is insightful, as it indicates that a combination of globalisation and de-globalisation is required for a sustainable future value chain.

4.6. Empirical Contribution

The empirical literature on globalisation and de-globalisation is characterised by inconclusive outcomes, with some studies suggesting that globalisation will remain dominant in the future, while others suggest that de-globalisation is the way forward, thus making the outcomes seem situated on bipolar opposites of a continuum of opinions. This study thus departs from previous studies by bridging these opinions through the association of the combination with the future of value chains.

4.7. Practical Implications

The first practical implication is the need for regional blocks to start collaborating on the development of regional value and supply chains ahead of the anticipated domination of the global scene by de-globalisation. Thus, there is a need to move towards a less connected world characterised by strong institutions at the national, state, and regional levels rather than global institutions. Secondly, since a combination of gbl and dgbl are required to successfully drive the future of value chains, relying solely on globalisation will not sustain the fvc, and neither will the sole reliance on de-globalisation sustain the future of value chains. To this end, stakeholders should strategise on how to blend globalisation with de-globalisation to enhance the sustainability of the value chains through the enhancement of the ongoing concern of the fvc. The need for operational efficiency and profit maximisation are strong reasons to partially deviate from the globalisation of value chains and gravitate towards de-globalisation since Nitsche et al. [53] observe that globalisation is currently facing the challenges of high logistic costs and infrastructure deficits, among others. The importance of the combinatorial effect is that globalisation can coexist with de-globalisation for an optimum value chain so that when there are global interruptions, like the lockdowns in the wake of the COVID-19 pandemic, the de-globalisation of value chains along regional blocks will ensure that the value chain does not suffer any setbacks.

5. Conclusions

The efficiency and effectiveness of the global value and supply chains are critical to the flow of goods and services. Consequently, to ensure that production and distribution are sustained, the future of value chains must be supported. In view of the problem definition, this study concludes as follows: de-globalisation will have a significant direct relationship with the future of value chains, a combination of globalisation and de-globalisation will have a significant direct relationship with the future of value chains, but globalisation will not have any significant direct relationship with the future of value chains. In addition, globalisation, de-globalisation, and a combination of globalisation and de-globalisation will have significant positive relationships with the future of value chains through the mediation of supply chain management. The implication is that the degree of connectedness of the world should be drastically reduced to permit a movement towards a system characterised by strong institutions at the national, state, and regional levels instead of global institutions.

While some studies see de-globalisation as the future of value chains, other studies see such a claim as subjective, as it does not emanate from any scientific evidence. There is further empirical evidence that industrially advanced countries may benefit from de-globalisation because of their technical and technological capacity, while less developed countries may be constrained by de-globalisation because they are technologically deficient. The point of departure of this study from previous studies is the finding that globalisation will not have any direct significant relationship with the future of value chains but will have an indirect relationship through the mediation of scm. The absence of a significant direct relationship supports the traditional trade protection theory and the institutional theory. Another novel finding of this study is that a combination of globalisation and de-globalisation will significantly influence the future of value chains, thus suggesting the need for the integration of pro-globalisation and pro-de-globalisation studies.

The study is not without constraints, which indicate the need for further studies. Empirical studies do not have any consensus on the future of value chains. Empirical studies on the future of value chains in reputable journals are scanty, and the few available studies used different frameworks from this study. This posed some degree of limitation. In line with quantitative studies, the study identified three explanatory variables, one mediating and one dependent variable. The likelihood that some of the variables excluded

may have provided useful insight is a limitation of the study. This study concentrated on the employees of manufacturing companies in Nigeria. It is suggested that future studies focus on other geographical locations beyond Nigeria to enable a comparison of the results to ascertain consistency or otherwise with the results of this study. Future studies should employ and extend the framework and also attempt the inclusion of a moderating variable and/or control variable(s) to determine how such inclusions will affect the results.

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References

1. Kyove, J.; Streltsova, K.; Odibo, U.; Cirella, G.T. Globalization Impact on Multinational Enterprises. *World* **2021**, *2*, 216–230. [\[CrossRef\]](#)
2. Amighini, A.; Maurer, A.; Garnizova, E.; Hagemeyer, J.; Stoll, P.; Dietrich, M.; Roy, R.; Skowronek, A.; Tentori, D. *Global Value Chains: Potential Synergies Between External Trade Policy and Internal Economic Initiatives to Address the Strategic Dependencies of the EU*; European Parliament Study; European Commission: Brussels, Belgium, 2023.
3. Baldwin, R.; Freeman, R.; Theodorakopoulos, A. Deconstructing deglobalization: The future of trade is in intermediate services. *Asian Econ. Policy Rev.* **2023**, *19*, 18–37. [\[CrossRef\]](#)
4. Giovannetti, G.; Marvasi, E.; Ricchiuti, G. The Future of Global Value Chains and International Trade: An EU Perspective. *Ital. Econ. J.* **2023**, *9*, 851–867. [\[CrossRef\]](#)
5. Kornprobst, M.; Paul, T.V. Globalization, deglobalization and the liberal international order. *Int. Aff.* **2021**, *97*, 1305–1316.
6. Kim, H.-M.; Li, P.; Lee, Y.R. Observations of de-globalisation against globalisation and impacts on global business. *Int. Trade Politics Dev.* **2020**, *4*, 83–103. [\[CrossRef\]](#)
7. Yuan, L.; Mähönen, J. Can Integrate a Sustainable Business Model and Global Value Chains Revive the Value Chain’s Sustainable Growth? *Circ. Econ. Sust.* **2024**, *4*, 2957–2980. [\[CrossRef\]](#)
8. Hernández, V.; Pedersen, T. Global value chain configuration: A review and research agenda. *BRQ Bus. Res. Q.* **2017**, *20*, 137–150. [\[CrossRef\]](#)
9. Thakur-Weigold, B.; Miroudot, S. Supply chain myths in the resilience and deglobalization narrative: Consequences for policy. *J. Int. Bus. Policy* **2024**, *7*, 99–111. [\[CrossRef\]](#)
10. Seifermann, S.; Anzeneder, J. Deglobalization of Manufacturing Value Chains? A data-based approach. *Procedia CIRP* **2022**, *115*, 54–59.
11. Ajoje, O.I.; Adegboyoye, O.S. Trade protectionism and the manufacturing sector: A review of border closure policy in Nigeria. *Future Bus. J.* **2022**, *8*, 60. [\[CrossRef\]](#)
12. Zahoor, N.; Wu, J.; Khan, H.; Khan, Z. De-globalization, international trade protectionism, and the reconfigurations of GVCs. *Manag. Int. Rev.* **2023**, *63*, 823–859. [\[CrossRef\]](#)
13. Panwar, R.; Pinkse, J.; De Marchi, V. The Future of Global Supply Chains in a Post-COVID-19 World. *Calif. Manag. Review.* **2022**, *64*, 5–23. [\[CrossRef\]](#)
14. Gopalakrishnan, B.N.; Chakravarthy, S.L.; Tewary, T.; Jain, V. Isolating China: Deglobalisation and its Impact on Global Value Chains. *Foreign Trade Rev.* **2021**, *57*, 390–407. [\[CrossRef\]](#)
15. Smith, E.K.; Kolcava, D.; Bernauer, T. Stringent sustainability regulations for global supply chains are supported across middle-income democracies. *Nat. Commun.* **2024**, *15*, 1–12. [\[CrossRef\]](#)

16. Hosseinzadeh, L.F.; Allahviranloo, T.; Shafiee, M.; Saleh, H. Supply Chain Management. In *Supply Chain Performance Evaluation; Studies in Big Data*; Springer: Cham, Switzerland, 2023; Volume 122. [CrossRef]
17. Ellram, L.M.; Cooper, M.C. Characteristics of Supply Chain Management and the Implication for Purchasing and Logistics Strategy. *Int. J. Logist. Manag.* **1993**, *4*, 13–24. [CrossRef]
18. Monczka, R.M.; Morgan, J. What's wrong with supply chain management. *Purchasing* **1997**, *122*, 69–73.
19. Durugbo, C.M.; Al-Balushi, Z. Supply chain management in times of crisis: A systematic review. *Manag. Rev. Q.* **2023**, *73*, 1179–1235. [CrossRef]
20. Mentzer, J.T.; Dewitt, W.; Keebler, J.S.; Min, S.; Nix, S.W.; Smith, C.D.; Zacharia, Z.C. Defining supply chain management. *J. Bus. Logist.* **2001**, *22*, 1–25.
21. Jodlbauer, H.; Brunner, M.; Bachmann, N.; Tripathi, S.; Thürer, M. Supply chain management: A structured narrative review of current challenges and recommendations for action. *Logistics* **2023**, *7*, 70. [CrossRef]
22. Zhang, B.; Bai, S.; Ning, Y. Embodied Energy in Export Flows along Global Value Chain: A Case Study of China's Export Trade. *Front. Energy Res.* **2021**, *9*, 118220. [CrossRef]
23. Schmidt, M.; Giovannucci, D.; Palekhov, D.; Hansmann, B. *Sustainable GVCs*; Springer International Publishing: New York, NY, USA, 2019.
24. Białowas, T.; Budzyńska, A. The Importance of Global Value Chains in Developing Countries' Agricultural Trade Development. *Sustainability* **2022**, *14*, 1389. [CrossRef]
25. McWilliam, S.E.; Kim, J.K.; Mudambi, R.; Nielsen, B.B. GVC governance: Intersections with international business. *J. World Bus.* **2020**, *55*, 101067. [CrossRef]
26. De Marchi, V.; Di Maria, B.; Ponte, S. Multinational firms and the management of global networks: Insights from GVC studies. *Orch. Glob. Netw. Organ.* **2014**, *27*, 463–486.
27. Gereffi, G. GVCs in a post-Washington consensus world. *Rev. Int. Political Econ.* **2014**, *21*, 9–37.
28. Fernandez-Stark, K.; Gereffi, G. Global Value Chain Analysis: A Primer, 2nd ed. In *Handbook on Global Value Chains*; Ponte, S., Gereffi, G., Raj-Reichert, G., Eds.; Edward Elgar Publishing: Cheltenham, UK, 2019; Chapter 2; pp. 54–76.
29. Fearne, A.; Martinez, M.G.; Dent, B. Dimensions of sustainable value chains: Implications for value chain analysis. *SCM* **2012**, *17*, 575–581. [CrossRef]
30. Porter, M.E.; Kramer, M.R. Creating share value. *Harv. Bus. Rev.* **2011**, *89*, 62–77.
31. Evenett, S. What endgame for the deglobalisation narrative? *Intereconomics* **2022**, *57*, 345–351. [CrossRef]
32. Coveri, A.; Zanfei, A. The virtues and limits of specialization in global value chains: Analysis and policy implications. *J. Ind. Bus. Econ.* **2023**, *50*, 73–90. [CrossRef]
33. Witt, M.A.; Lewin, A.Y.; Li, P.P.; Gaur, A. Decoupling in international business: Evidence, drivers, impact, and implications for IB research. *J. World Bus.* **2023**, *58*, 101399. [CrossRef]
34. Agarwal, R.; Chowdhury, M.M.H.; Paul, S.K. The Future of Manufacturing GVCs, Smart Specialization and Flexibility! *Glob. J. Flex. Syst. Manag.* **2018**, *19* (Suppl. S1), 1–2. [CrossRef]
35. Orlanyuk-Malitskaya, L.; Plakhova, T.; Sakulyeva, T.; Glazkova, I. The impact of globalisation processes on SCM. *Innov. Infrastruct. Solut.* **2024**, *9*, 35. [CrossRef]
36. Acquaye, A.A.; Yamoah, F.A.; Quaye, E.; Yawson, D.E. Equitable GVC and production network as a driver for enhanced sustainability in developing economies. *Sustainability* **2022**, *15*, 14550. [CrossRef]
37. Hu, D.; Jiao, J.; Chen, C.; Xiao, R.; Tang, Y. Does GVC Embeddedness Matter for the Green Innovation Value Chain? *Front. Environ. Sci.* **2022**, *10*, 779617. [CrossRef]
38. Choudhary, N.A.; Ramkumar, M.; Schoenherr, T.; Rana, N.P.; Dwivedi, Y.K. Does Reshoring Affect the Resilience and Sustainability of Supply Chain Networks? The Cases of Apple and Jaguar Land Rover. *Br. J. Manag.* **2023**, *34*, 1138–1156. [CrossRef]
39. Monyela, M.N.; Saba, C.S. Trade openness, economic growth and economic development nexus in South Africa: A pre- and post-BRICS analysis. *Humanit. Soc. Sci. Commun.* **2024**, *11*, 1108. [CrossRef]
40. Frankel, J.A.; Romer, D. Does trade cause growth? *Am. Econ. Rev.* **1999**, *89*, 379–399.
41. Pettinger, T. Impact of Increasing Government Spending. 2019. Available online: <https://www.economicshelp.org/blog/2731/economics/impact-of-increasing%20governmentspending/> (accessed on 3 December 2024).
42. Ugwuja, A.A.; Chukwukere, C. Trade protectionism and border closure in Nigeria: The rice economy in perspective. *UJAH Unizik J. Arts Humanit.* **2021**, *22*, 78–106. [CrossRef]
43. Osadume, R.; Okene, A.O. Financial sector sustainability and performance—Policy Imperative for the monetary authorities. *J. Money Bus.* **2021**, *1*, 24–41. [CrossRef]
44. Hoejmoose, S.U.; Grosvold, J.; Millington, A. The effect of institutional pressure on cooperative and coercive 'green' supply chain practices. *J. Purch. Supply Manag.* **2014**, *20*, 215–224.
45. Lin, R.; Sheu, C. Why do firms adopt/implement green practices?—An institutional theory perspective. *Procedia Soc. Behav. Sci.* **2012**, *57*, 533–540. [CrossRef]

46. Walińska, E.; Dobroszek, J. The Functional Controller for Sustainable and Value Chain Management: Fashion or Need? A Sample of Job Advertisements in the COVID-19 Period. *Sustainability* **2021**, *13*, 7139. [\[CrossRef\]](#)
47. Adebajo, D.; Teh, P.-L.; Ahmed, P.K. The impact of external pressure and sustainable management practices on manufacturing performance and environmental outcomes. *Int. J. Oper. Prod. Manag.* **2016**, *36*, 995–1013. [\[CrossRef\]](#)
48. Akhavan, R.M.; Beckmann, M. A configuration of sustainable sourcing and supply management strategies. *J. Purch. Supply Manag.* **2017**, *23*, 137–151. [\[CrossRef\]](#)
49. Daub, C.; Ergenzinger, R. Enabling sustainable management through a new multi-disciplinary concept of customer satisfaction. *Eur. J. Mark.* **2022**, *39*, 998–1012.
50. Bokolo, A.J. Sustainable value chain practice adoption to improve strategic environmentalism in ICT-based industries. *J. Glob. Oper. Strateg. Sourc.* **2019**, *12*, 380–409.
51. Wang, O.; Somogyi, S.; Charlebois, S. Mapping the value chain of imported shellfish in China. *Mar. Policy* **2018**, *99*, 69–75. [\[CrossRef\]](#)
52. Cao, Y.; Chen, J.; Chen, X.C.; Lu, W. Compromise in hard times? The impact of deglobalization on corporate social responsibility in the US–China supply chain. *J. Bus. Financ. Account.* **2024**, *52*, 127–157. [\[CrossRef\]](#)
53. Nitsche, B.; Mensah, H.K.; Straube, F.; Barigye, V. Leveraging the Potential of the African Continental Free Trade Area: Logistics Challenges and Development Paths for Future Value Chains in Africa. *Logistics* **2024**, *8*, 25. [\[CrossRef\]](#)
54. Sun, Y.; Zhu, S.; Wang, D.; Duan, J.; Lu, H.; Yin, H.; Tan, C.; Zhang, L.; Zhao, M.; Cai, W.; et al. Global supply chains amplify economic costs of future extreme heat risk. *Nature* **2024**, *627*, 797–804. [\[CrossRef\]](#)
55. Hofstetter, J.S.; McGahan, A.M.; Silverman, B.S.; Zoogah, B.D. Sustainability and global value chains in Africa: Introduction to the Special Issue. *Afr. J. Manag.* **2022**, *8*, 1–14. [\[CrossRef\]](#)
56. Peter, A.G.; Bergeik, V. Deglobalization and resilience: A historical perspective. *Crit. Sociol.* **2024**. [\[CrossRef\]](#)
57. Yücesan, E. Does deglobalization imply the end of global supply chains? *Int. Bus. Rev.* **2025**, *in press*. [\[CrossRef\]](#)
58. Herold, D.M.; Marzantowicz, Ł. Supply chain responses to global disruptions and its ripple effects: An institutional complexity perspective. *Oper. Manag. Res.* **2023**, *16*, 2213–2224. [\[CrossRef\]](#)
59. Smith, T.S. Mapping complexity in deglobalisation: A typology of economic localisms from ‘hyper-localism’ to ‘strategic autonomy’. *Local Econ.* **2023**, *38*, 242–263. [\[CrossRef\]](#)
60. Inegbedion, H.E.; Eze, S.C.; Asaleye, A.; Lawal, A.; Ayeni, A. Managing Diversity for Organisational Efficiency. *Sage Open* **2019**, *10*, 2158244019900173.
61. Wei, J.Z.; Cheung, B.K.C.; Chu, S.L.H.; Tsang, P.Y.L.; To, M.K.T.; Lau, J.Y.N.; Cheung, K.M.C. Assessment of reliability and validity of a handheld surface spine scanner for measuring trunk rotation in adolescent idiopathic scoliosis. *Spine Deform.* **2023**, *11*, 1347–1354. [\[CrossRef\]](#)

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