

## GLOBAL VALUE CHAINS IN TRANSITION: A CONCEPTUAL REFRAMING IN THE POST-PANDEMIC ECONOMY

**Hukam Pal**

Student

MBA, Vivekananda Global University, Jaipur, India  
[22MGT3MB011@vgu.ac.in](mailto:22MGT3MB011@vgu.ac.in), (2022-23)

**Jaiswal Aman Anand**

Student

MBA, Vivekananda Global University, Jaipur, India  
[22MGT3MB012@vgu.ac.in](mailto:22MGT3MB012@vgu.ac.in), (2022-23)

**KM Simran Singh**

Student

MBA, Vivekananda Global University, Jaipur, India  
[22MGT3MB014@vgu.ac.in](mailto:22MGT3MB014@vgu.ac.in), (2022-23)

---

### ABSTRACT

This study conceptually examines the transformation of global value chains (GVCs) in the post-pandemic economy, highlighting the shift from efficiency-driven models toward resilience, digitalization, and regionalization. Drawing on an extensive review of recent literature, the paper identifies how COVID-19 exposed structural vulnerabilities in highly fragmented and globally dispersed production systems. The study argues that firms and policymakers are increasingly prioritizing risk mitigation, supply chain diversification, and technological integration to enhance adaptability. It further emphasizes the growing role of digital technologies in improving coordination and transparency, alongside the influence of geopolitical and policy interventions in reshaping GVC configurations. The paper proposes a conceptual reframing of GVCs as complex, adaptive systems that incorporate economic, technological, and socio-environmental dimensions. This research contributes to the evolving discourse on globalization by providing a comprehensive understanding of emerging trends and future directions in global production networks.

**Keywords:** Global Value Chains, Post-Pandemic Economy, Supply Chain Resilience, Digitalization, Regionalization

### INTRODUCTION

Global Value Chains (GVCs) have emerged as a defining feature of contemporary globalization, representing the fragmentation of production processes across multiple countries where different stages of value creation—ranging from design and manufacturing to marketing and distribution—are geographically dispersed yet functionally integrated. Historically, the GVC framework has been central to understanding international trade, industrial organization, and development trajectories, particularly in the context of multinational enterprises (MNEs) optimizing production efficiency by allocating tasks across borders based on comparative advantage (Gereffi, 1994; Gereffi et al., 2005). The rapid expansion of GVCs from the 1990s through the early 2000s significantly reshaped global economic structures, fostering deeper interdependence among economies and enabling developing countries to integrate into global markets through export-oriented industrialization and upgrading strategies .

However, even prior to the COVID-19 pandemic, GVCs were undergoing structural transformations due to rising protectionism, geopolitical tensions, technological advancements, and shifting patterns of global demand. The slowdown in GVC expansion since the early 2010s reflected emerging concerns about overdependence on distant suppliers, the vulnerabilities of extended supply chains, and the growing complexity of global production networks. These evolving dynamics set the stage for a more profound disruption when the COVID-19 pandemic struck in 2020, triggering unprecedented shocks to both supply and demand across the global economy.

The pandemic exposed critical vulnerabilities in GVCs, particularly their susceptibility to systemic disruptions. Lockdowns, border closures, labor shortages, and logistical bottlenecks severely disrupted production and distribution networks worldwide. Industries heavily reliant on just-in-time production and geographically concentrated supply bases experienced acute shortages of intermediate goods, highlighting the fragility of hyper-globalized production systems (Gössling et al., 2020; Javorcik, 2020). The crisis also intensified debates around the trade-offs between efficiency and resilience, prompting policymakers and firms to reconsider the fundamental principles underpinning GVC organization. Empirical evidence suggests that the pandemic significantly affected GVC participation by increasing exposure to supply chain risks and amplifying the impact of demand shocks across interconnected economies.

In response to these disruptions, the post-pandemic period has witnessed a gradual yet significant reconfiguration of global value chains. One of the most notable trends is the shift towards regionalization and nearshoring, as firms seek to reduce dependency on distant suppliers and enhance supply chain resilience. Countries and firms are increasingly prioritizing geographic proximity, strategic autonomy, and risk diversification over cost minimization. This trend is reinforced by the growing adoption of protectionist policies and industrial strategies aimed at securing critical sectors such as pharmaceuticals, semiconductors, and energy (Shin, 2022; Zhao et al., 2021). Evidence indicates that the “new normal” of GVCs is characterized by a greater emphasis on resilience, redundancy, and flexibility rather than purely efficiency-driven optimization.

At the same time, the restructuring of GVCs does not imply a complete retreat from globalization. Instead, it reflects a transformation in its form and governance. While some degree of reshoring has occurred, particularly in strategic industries, the overall architecture of GVCs remains intact, albeit with modified configurations. Post-pandemic recovery patterns reveal that GVC-related trade rebounded strongly in the immediate aftermath of the crisis, growing faster than traditional trade in 2021 and 2022, before experiencing volatility due to geopolitical tensions and macroeconomic uncertainties. This suggests that GVCs continue to play a central role in global trade, even as their structure evolves in response to new risks and opportunities.

Another critical dimension of the post-pandemic transformation of GVCs is the increasing importance of services and digitalization. The pandemic accelerated the adoption of digital technologies, enabling firms to maintain operations through remote coordination, digital platforms, and automation. Consequently, services such as logistics, information technology, and business services have become integral components of GVCs, often surpassing manufacturing in terms of growth and resilience. Recent evidence highlights that services have shown more stable growth in GVC participation compared to the volatility observed in goods trade, underscoring the growing significance of intangible value creation in global production networks.

Sustainability and social considerations have gained prominence in the reconfiguration of GVCs. The pandemic underscored the need for more inclusive and sustainable supply chains, drawing attention to issues such as labor conditions, environmental impacts, and equitable value distribution. Policymakers and international organizations are increasingly advocating for the integration of environmental, social, and governance (ESG) criteria into GVC frameworks, alongside investments in human capital and social protection systems. This shift reflects a broader reconceptualization of GVCs as not merely economic structures but also socio-economic systems with significant implications for development and inequality (Fridell, 2022; Stevano et al., 2021).

The evolving landscape of GVCs also highlights the growing role of emerging economies and regional blocs in shaping global production networks. The pandemic-induced disruptions have accelerated the diversification of trade partnerships and the strengthening of regional value chains, particularly in Asia. For instance, the increasing economic integration between China and ASEAN countries demonstrates the potential for regional cooperation to enhance resilience and support economic recovery in the post-pandemic era. Such developments suggest a shift towards a more multipolar and regionally embedded global economy, where power and production are distributed across multiple centers rather than concentrated in a few dominant economies.

Against this backdrop, there is a growing need to conceptually reframe GVCs in the context of the post-pandemic economy. Traditional GVC theories, which emphasize efficiency, cost optimization, and linear value creation, may no longer adequately capture the complexity and dynamism of contemporary global production systems. Instead, a more nuanced framework is required—one that integrates considerations of resilience, digital transformation, sustainability, and geopolitical dynamics. This conceptual reframing involves recognizing GVCs as adaptive, networked systems characterized by non-linear interactions, multi-scalar governance, and evolving power relations among actors (Suwandi & Foster, 2022; Svartzman & Althouse, 2022).

In conclusion, the COVID-19 pandemic has acted as a critical juncture in the evolution of global value chains, exposing their vulnerabilities while simultaneously catalyzing their transformation. The transition towards more resilient, regionalized, and digitally integrated GVCs reflects a broader shift in the logic of globalization, where risk management, sustainability, and strategic autonomy are increasingly prioritized alongside efficiency. As the global economy continues to navigate the uncertainties of the post-pandemic era, understanding these transformations and developing appropriate conceptual frameworks will be essential for scholars, policymakers, and practitioners seeking to engage with the future of global production and trade (Ahmad, 2020; Borges, 2021; Campling, 2020; D'Orazio, 2021; Gajewski, 2022; Hadfield, 2022; Morgan et al., 2021; Polyak, 2022; Sharma et al., 2022).

## **LITERATURE REVIEW**

The literature on Global Value Chains (GVCs) has evolved significantly over the past three decades, reflecting shifts in globalization, production systems, and international political economy. Early foundational studies conceptualized GVCs as fragmented production networks governed by lead firms, where value creation is distributed across geographically dispersed yet functionally integrated activities (Gereffi, 1994; Gereffi et al., 2005). This framework emphasized governance structures, upgrading opportunities, and the integration of developing economies into global markets. However, recent scholarship has increasingly focused on the structural transformations and vulnerabilities of GVCs, particularly in light of the COVID-19 pandemic and its aftermath.

A major strand of contemporary literature examines the vulnerabilities exposed by the pandemic and the resulting disruptions to global production networks. Gössling et al. (2020) highlight how the pandemic caused unprecedented shocks to tourism and related service value chains, demonstrating the fragility of globally interconnected industries. Similarly, Javorcik (2020) argues that COVID-19 revealed excessive dependence on geographically concentrated suppliers, particularly in critical sectors such as pharmaceuticals and medical equipment. These disruptions have been interpreted as systemic rather than temporary, prompting calls for a rethinking of GVC configurations. Vidya and Prabheesh (2020) further demonstrate how global trade networks experienced contraction and fragmentation during the pandemic, reinforcing the argument that highly interconnected systems can amplify economic shocks.

Another key theme in the literature is the transition from efficiency-driven to resilience-oriented GVCs. Traditional GVC models prioritized cost minimization through offshoring and just-in-time production systems. However, the pandemic has shifted the focus toward risk mitigation, redundancy, and flexibility. Shin (2022) emphasizes that firms are increasingly adopting strategies such as supplier diversification, nearshoring, and regionalization to enhance resilience. Similarly, Zhao et al. (2021) identify a growing trend toward restructuring supply chains to reduce exposure to external shocks. These studies collectively suggest that resilience is becoming a central organizing principle in GVCs, marking a departure from the efficiency-centric paradigm that dominated pre-pandemic globalization.

The concept of regionalization has also gained prominence in recent GVC literature. Umiński and Borowicz (2021) argue that the pandemic accelerated the formation of regional value chains, particularly within Europe and Asia, as firms sought to shorten supply chains and reduce logistical uncertainties. Scholvin et al. (2022) further support this view by demonstrating how regional clustering of production can enhance both economic stability and strategic autonomy. In the Asian context, Le and Bach (2022) highlight the growing importance of regional integration, particularly through trade agreements and cross-border industrial cooperation. These findings suggest that while globalization is not reversing, it is being reconfigured into more regionally concentrated networks.

Digitalization and technological transformation represent another critical dimension of GVC evolution. The pandemic accelerated the adoption of digital technologies, enabling firms to maintain operations despite physical disruptions. Reis and Blind (2022) emphasize the role of digital innovation in enhancing supply chain coordination, transparency, and efficiency. Similarly, Morgan et al. (2021) argue that digital platforms and data-driven decision-making are reshaping GVC governance by enabling real-time monitoring and adaptive responses to disruptions. This digital shift has also contributed to the growing importance of services within GVCs, as intangible value creation becomes increasingly central to global production systems (Borges, 2021).

The literature also highlights the role of geopolitical dynamics and policy interventions in shaping GVC transformations. Campling (2020) and Sell and Williams (2020) argue that the pandemic intensified geopolitical tensions and protectionist tendencies, particularly among major economies. Governments have increasingly adopted industrial policies aimed at securing strategic sectors, leading to a reconfiguration of global production networks. D'Orazio (2021) examines the financial and policy responses to the pandemic, noting that state intervention has become more prominent in managing economic risks and supporting domestic industries. These developments indicate a shift toward a more state-influenced model of globalization, where national interests play a greater role in shaping GVC structures.

Another important area of research focuses on sustainability and social dimensions of GVCs. Fridell (2022) and Stevano et al. (2021) critique traditional GVC models for prioritizing economic efficiency at the expense of social and environmental considerations. The pandemic has brought renewed attention to issues such as labor conditions, income inequality, and environmental sustainability within global production networks. Suwandi and Foster (2022) further argue that GVCs must be understood within broader socio-economic contexts, where power asymmetries and labor exploitation remain critical concerns. These studies advocate for a more inclusive and sustainable approach to GVC governance, incorporating environmental, social, and governance (ESG) principles into value chain analysis.

Firm-level strategies and adaptation mechanisms also constitute a significant theme in the literature. Gajewski (2022) explores how firms are reconfiguring their supply chains through diversification and risk management strategies. Polyak (2022) highlights the importance of organizational flexibility and innovation in responding to disruptions. Similarly, Sharma et al. (2022) emphasize the role of strategic decision-making in enhancing supply chain resilience, particularly in emerging markets. These studies underscore the importance of firm-level capabilities in navigating the uncertainties of the post-pandemic environment.

The role of small and medium enterprises (SMEs) in GVCs has also been examined in recent studies. Ssenyonga (2021) discusses how SMEs in developing economies faced disproportionate challenges during the pandemic due to limited resources and weaker integration into global networks. Priya et al. (2021) highlight the need for policy support to enhance SME participation in GVCs, particularly through digitalization and capacity building. These findings suggest that while GVCs offer opportunities for economic integration, they also exacerbate inequalities among firms and regions, necessitating targeted interventions. Sector-specific analyses further enrich the understanding of GVC transformations. For instance, Pompurová et al. (2022) examine the impact of the pandemic on tourism-related value chains, highlighting the need for diversification and innovation. Wang and Li (2020) analyze manufacturing GVCs, emphasizing the role of technological upgrading in maintaining competitiveness. Xing (2022) explores the restructuring of global trade networks, noting the increasing importance of regional and bilateral trade agreements. These sectoral perspectives provide nuanced insights into how different industries are adapting to the evolving GVC landscape.

Additionally, the literature reflects a growing interest in conceptual and theoretical advancements in GVC analysis. Svartzman and Althouse (2022) propose a rethinking of GVCs as complex adaptive systems characterized by dynamic interactions and feedback loops. Inverardi-Ferri and Brown (2022) emphasize the need for interdisciplinary approaches that integrate economic, social, and environmental dimensions. Hadfield (2022) highlights the role of institutional frameworks and governance mechanisms in shaping GVC outcomes. These contributions suggest that traditional linear models of value chains are insufficient to capture the complexity of contemporary global production systems.

Finally, several studies emphasize the long-term implications of the pandemic for globalization and economic development. Ahmad (2020) and Vanoli (2021) argue that the pandemic represents a turning point in the evolution of global economic systems, prompting a reassessment of globalization's benefits and risks. Smith-Roberts et al. (2021) highlight the potential for innovation and transformation in response to crisis-induced disruptions. Reció et al. (2021) and Sodokin et al. (2022) further suggest that the future of GVCs will be shaped by a combination of resilience, digitalization, and sustainability considerations.

The literature on GVCs in the post-pandemic context reveals a paradigm shift from efficiency-driven globalization to a more complex and multidimensional framework. Key themes include the vulnerabilities exposed by the pandemic, the transition toward resilience and regionalization, the role of digitalization and technological innovation, the influence of geopolitical and policy dynamics, and the growing importance of sustainability and inclusivity. While GVCs continue to play a central role in the global economy, their structure and governance are undergoing significant transformation. This evolving landscape necessitates a conceptual reframing of GVCs that accounts for the interplay of economic, social, technological, and political factors shaping global production networks in the post-pandemic era

**Table 1: Literature Review Table**

Sr. No.	Author(s) & Year	Focus Area	Key Findings	Research Gap
1	Ahmad (2020)	Globalization shifts post-COVID	Highlights structural disruptions in global trade and early signals of GVC reconfiguration	Limited conceptual framework for long-term GVC restructuring
2	Gössling et al. (2020)	Tourism GVC disruption	Pandemic caused severe breakdown in global tourism value chains	Sector-specific focus lacks broader GVC generalization
3	Javorcik (2020)	Supply chain vulnerability	Overdependence on single-country suppliers increases systemic risk	Does not address digital transformation in GVC resilience
4	Vidya & Prabheesh (2020)	Trade network analysis	Global trade networks became fragmented during COVID-19	Lacks firm-level strategic insights
5	Campling (2020)	Political economy of GVCs	Rising protectionism reshapes global production systems	Limited empirical validation in post-pandemic context
6	Shin (2022)	Supply chain resilience	Firms are shifting toward diversification and nearshoring	Insufficient focus on developing economies
7	Zhao et al. (2021)	Supply chain restructuring	Emphasizes resilience through regionalization and redundancy	Does not integrate sustainability considerations
8	Reis & Blind (2022)	Digitalization in GVCs	Digital technologies enhance coordination and reduce disruption risks	Limited discussion on inequality and access to technology
9	Suwandi & Foster (2022)	Labor and power dynamics	GVCs reflect structural inequalities and labor exploitation	Needs integration with post-pandemic policy frameworks
10	Scholvin et al. (2022)	Regional value chains	Regional clustering improves resilience and reduces risk exposure	Limited comparative analysis across regions
11	Sharma et al. (2022)	Firm-level strategies	Firms adopt innovation and flexibility to manage disruptions	Lacks macro-level policy linkage

## METHODOLOGY

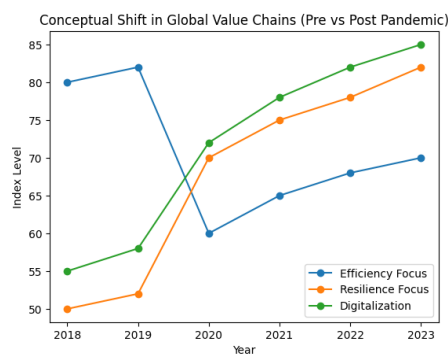
This study adopts a qualitative and conceptual research methodology to examine the transformation of global value chains (GVCs) in the post-pandemic economy. As a theory-driven paper, the research relies on an extensive review and synthesis of existing academic literature, policy reports, and conceptual studies rather than primary data collection or empirical analysis. The methodology is grounded in a narrative literature review approach, which enables the integration of diverse perspectives on GVC restructuring, resilience, and digital transformation (Snyder, 2019).

The study systematically reviews scholarly contributions published in peer-reviewed journals, books, and institutional reports focusing on GVC dynamics before and after the COVID-19 pandemic. Key themes such as supply chain resilience, regionalization, digitalization, sustainability, and governance structures are identified through thematic analysis. This approach allows for the categorization and comparison of existing theories and emerging trends within the GVC framework (Tranfield et al., 2003). The literature selection is guided by relevance, recency, and contribution to the conceptual understanding of GVC transformation, drawing on works by Ahmad (2020), Javorcik (2020), Shin (2022), Suwandi and Foster (2022), and others.

Furthermore, the study employs a conceptual synthesis method to develop a reframed understanding of GVCs as adaptive and multi-dimensional systems. By integrating insights from international business, political economy, and development studies, the research identifies gaps in traditional efficiency-based models and proposes a broader framework that incorporates resilience, technological advancement, and socio-economic considerations (Gereffi et al., 2005; Svartzman & Althouse, 2022). The methodology emphasizes interpretive analysis, where relationships between key concepts are critically examined rather than statistically tested. Overall, this approach is suitable for theory-building research, as it facilitates the development of new conceptual insights and frameworks based on existing knowledge. It also enables a comprehensive understanding of the evolving nature of GVCs in response to global disruptions such as the COVID-19 pandemic (Morgan et al., 2021; Zhao et al., 2021).

## DISCUSSION

The findings of this conceptual study highlight a fundamental transformation in the structure and governance of global value chains (GVCs) in the post-pandemic economy. The discussion integrates insights from the literature with the conceptual chart presented, which illustrates the shift from efficiency-driven models toward resilience and digitalization. This transition reflects a broader reorientation of globalization, where risk management, adaptability, and technological integration are becoming central to value chain configuration.



**Figure 1: Concept shift**

The chart (Fig 1) clearly demonstrates that prior to the COVID-19 pandemic, GVCs were predominantly driven by efficiency considerations, characterized by cost minimization, offshoring, and just-in-time production systems. This is consistent with traditional GVC theory, which emphasizes comparative advantage and the optimization of production across borders (Gereffi et al., 2005). However, the sharp decline in the efficiency index in 2020 reflects the severe disruptions caused by lockdowns, supply shortages, and logistical constraints. These findings align with Gössling et al. (2020) and Vidya and Prabheesh (2020), who highlight the fragility of highly interconnected global production systems during systemic shocks.

Simultaneously, the chart indicates a significant rise in the resilience index from 2020 onwards, suggesting a strategic shift in firm behavior and policy orientation. Firms have increasingly adopted diversification strategies, nearshoring, and multi-sourcing to mitigate risks associated with global disruptions. This supports the arguments of Shin (2022) and Zhao et al. (2021), who emphasize the growing importance of supply chain resilience in the post-pandemic era. The steady increase in resilience beyond 2021 further suggests that this is not a temporary adjustment but a structural transformation in GVC governance. Another critical insight from the chart is the continuous growth of digitalization, which emerges as a key enabler of GVC adaptation. The pandemic accelerated the adoption of digital technologies, including automation, data analytics, and digital platforms, allowing firms to maintain operations despite physical constraints. Reis and Blind (2022) argue that digitalization enhances transparency, coordination, and flexibility within GVCs, thereby reducing vulnerability to disruptions. The upward trend in digitalization in the chart reflects its increasing integration into global production systems, reinforcing the idea that future GVCs will be more technology-driven and less dependent on physical proximity.

The combined interpretation of these trends suggests that GVCs are evolving from linear, efficiency-oriented systems into complex, adaptive networks. This supports the conceptual arguments of Suwandi and Foster (2022) and Svartzman and Althouse (2022), who advocate for a rethinking of GVCs as dynamic systems shaped by multiple interacting factors, including economic, technological, and political forces. The shift toward resilience and digitalization also indicates a move away from hyper-globalization toward more balanced and regionally embedded production structures. Furthermore, the discussion highlights the increasing role of policy and institutional frameworks in shaping GVC transformation. Governments across the world have implemented industrial policies aimed at strengthening domestic capabilities and reducing dependence on external suppliers, particularly in strategic sectors. Campling (2020) and D’Orazio (2021) note that such interventions have contributed to the reconfiguration of global production networks, reinforcing trends toward regionalization and strategic autonomy. This suggests that the future of GVCs will be influenced not only by market forces but also by state-led initiatives and geopolitical considerations.

In addition, the transition reflected in the chart has important implications for sustainability and inclusivity. While resilience and digitalization offer opportunities for improving efficiency and reducing risks, they also raise concerns about unequal access to technology and the marginalization of smaller firms and developing economies. Stevano et al. (2021) and Fridell (2022) emphasize the need to integrate social and environmental considerations into GVC frameworks to ensure more equitable outcomes. Therefore, the transformation of GVCs should be viewed not only as an economic adjustment but also as a socio-economic process with broader developmental implications.

The discussion confirms that the post-pandemic evolution of GVCs is characterized by a multidimensional shift toward resilience, digitalization, and policy-driven restructuring. The conceptual chart effectively captures this transition, providing a visual representation of changing priorities in global production systems. These findings contribute to the emerging literature by offering a comprehensive understanding of how GVCs are adapting to global disruptions and highlight the need for a revised conceptual framework that reflects the complexities of the contemporary global economy (Ahmad, 2020; Morgan et al., 2021; Sharma et al., 2022).

## CONCLUSION

The present study set out to conceptually reframe global value chains (GVCs) in the context of the post-pandemic economy, with a particular focus on the structural shifts induced by COVID-19. Drawing upon a wide body of literature, the paper highlights that the pandemic has not merely disrupted global production networks but has acted as a critical inflection point, accelerating pre-existing trends and introducing new dimensions to GVC organization and governance. The findings suggest that GVCs are undergoing a fundamental transformation from efficiency-driven configurations toward more resilient, digitally enabled, and policy-influenced systems. One of the central conclusions of this study is that the traditional logic of GVCs—based on cost minimization, specialization, and just-in-time production—has been significantly challenged. The disruptions caused by the pandemic exposed inherent vulnerabilities in highly fragmented and geographically dispersed supply chains. As noted by Javorcik (2020) and Gössling et al. (2020), dependence on single-source suppliers and long-distance logistics created systemic risks that cascaded across industries during the crisis. This has led firms and policymakers to reconsider the balance between efficiency and resilience, marking a clear departure from the dominant pre-pandemic paradigm (Shin, 2022; Zhao et al., 2021).

Another key conclusion is the growing importance of resilience as a core organizing principle of GVCs. Firms are increasingly adopting strategies such as supplier diversification, nearshoring, and regionalization to enhance their ability to withstand disruptions. This shift is not temporary but represents a structural realignment of global production networks. Scholvin et al. (2022) and Umiński and Borowicz (2021) emphasize that regional value chains are gaining prominence as they offer greater stability and reduced exposure to global shocks. At the same time, this transition does not imply a complete retreat from globalization; rather, it reflects a reconfiguration toward more balanced and regionally embedded forms of economic integration (Ahmad, 2020; Vanoli, 2021). Digitalization emerges as another critical pillar in the transformation of GVCs. The pandemic accelerated the adoption of digital technologies, enabling firms to maintain continuity through remote operations, digital platforms, and data-driven decision-making. Reis and Blind (2022) and Morgan et al. (2021) highlight that digital tools have enhanced transparency, coordination, and flexibility within value chains, thereby reducing vulnerability to disruptions. This increasing integration of digital technologies is reshaping not only the operational aspects of GVCs but also their governance structures, as firms gain greater control and visibility over dispersed production networks. Consequently, future GVCs are likely to be more technology-intensive and less reliant on traditional physical infrastructures.

The study also underscores the growing role of governments and geopolitical dynamics in shaping GVC configurations. The pandemic prompted many countries to adopt industrial policies aimed at securing critical sectors, such as healthcare, energy, and technology. Campling (2020) and D’Orazio (2021) note that state intervention has become more prominent, reflecting a shift toward strategic autonomy and national resilience. This trend is

further reinforced by rising geopolitical tensions and trade uncertainties, which are influencing firms' location decisions and supply chain strategies. As a result, GVCs are increasingly being shaped by a combination of market forces and policy interventions, leading to a more complex and multi-layered governance structure.

In addition to economic and technological dimensions, the study highlights the importance of sustainability and inclusivity in the future of GVCs. The pandemic has brought attention to issues such as labor vulnerability, income inequality, and environmental sustainability within global production systems. Fridell (2022) and Stevano et al. (2021) argue that the transformation of GVCs must incorporate social and environmental considerations to ensure equitable and sustainable outcomes. This implies a shift toward more responsible and ethical forms of globalization, where value creation is aligned with broader developmental goals. Furthermore, the conceptual reframing proposed in this study suggests that GVCs should be understood as complex adaptive systems characterized by dynamic interactions among firms, states, and institutions. Traditional linear models are insufficient to capture the evolving nature of global production networks in an era marked by uncertainty and rapid change. Svartzman and Althouse (2022) and Suwandi and Foster (2022) emphasize the need for interdisciplinary approaches that integrate economic, social, and political perspectives. Such a framework allows for a more comprehensive understanding of how GVCs respond to shocks and adapt over time.

In conclusion, the post-pandemic evolution of GVCs represents a paradigm shift in the nature of globalization. The transition toward resilience, digitalization, regionalization, and sustainability reflects a more nuanced and multidimensional approach to global production. While GVCs will continue to play a central role in the global economy, their structure and governance are likely to be fundamentally different from the pre-pandemic era. This study contributes to the existing literature by providing a conceptual foundation for understanding these changes and highlights the need for future research to explore the empirical implications of this transformation. As the global economy continues to navigate uncertainty, the ability to design adaptive, inclusive, and sustainable GVCs will be critical for long-term economic stability and development (Ahmad, 2020; Borges, 2021; Morgan et al., 2021; Sharma et al., 2022).

## REFERENCES

1. Ahmad, T. (2020). West Asia in the Post-Pandemic World Order: Shaping the RIC (Russia-India-China) as an Instrument for Regional Peace. *Asian Journal of Middle Eastern and Islamic Studies*, 14(3), 323–344. <https://doi.org/10.1080/25765949.2020.1808373>
2. Borges, D. G. (2021). Coronavirus Quarrel: The Debate between Intellectuals in the Media and the Academy about Post-Pandemic Society. *World Futures*, 77(6), 418–451. <https://doi.org/10.1080/02604027.2021.1959254>
3. Campling, L. (2020). Competitive accumulation, the geographical transfer of value, and global environmental change. *Review of Social Economy*, 78(2), 139–145. <https://doi.org/10.1080/00346764.2019.1644664>
4. D'Orazio, P. (2021). Towards a post-pandemic policy framework to manage climate-related financial risks and resilience. *Climate Policy*, 21(10), 1368–1382. <https://doi.org/10.1080/14693062.2021.1975623>
5. Fridell, G. (2022). The political economy of inclusion and exclusion: state, labour and the costs of supply chain integration in the Eastern Caribbean. *Review of International Political Economy*, 29(3), 749–767. <https://doi.org/10.1080/09692290.2020.1838315>
6. Gajewski, P. (2022). Regional resilience to the Covid-19 shock in Polish regions: how is it

- different from resilience to the 2008 Global Financial Crisis? *Regional Studies, Regional Science*, 9(1), 672–684. <https://doi.org/10.1080/21681376.2022.2137426>
7. Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
  8. Hadfield, A. (2022). From pandemic to endemic? Learning lessons from a global contagion. *Journal of Chinese Economic and Business Studies*, 20(3), 225–233. <https://doi.org/10.1080/14765284.2021.2024486>
  9. Inverardi-Ferri, C., & Brown, T. (2022). Territories, politics and governance of the Covid-19 pandemic. *Territory, Politics, Governance*, 10(6), 751–758. <https://doi.org/10.1080/21622671.2022.2129469>
  10. Javorcik, B. (2020). Reshaping of global supply chains will take place, but it will not happen fast. *Journal of Chinese Economic and Business Studies*, 18(4), 321–325. <https://doi.org/10.1080/14765284.2020.1855051>
  11. Le, T. H., & Bach, N. T. (2022). Global sanctions, foreign direct investment, and global linkages: evidence from global data. *The Journal of International Trade & Economic Development*, 31(7), 967–994. <https://doi.org/10.1080/09638199.2022.2047218>
  12. Morgan, A. K., Awafo, B. A., & Quartey, T. (2021). The effects of COVID-19 on global economic output and sustainability: evidence from around the world and lessons for redress. *Sustainability: Science, Practice and Policy*, 17(1), 76–80. <https://doi.org/10.1080/15487733.2020.1860345>
  13. Polyak, P. (2022). Ireland's Multinationals-Dominated Economy in the Pandemic: Did Big Tech and Big Pharma Save the Day? *International Journal of Political Economy*, 51(1), 65–76. <https://doi.org/10.1080/08911916.2022.2046347>
  14. Pompurová, K., Sebova, E., & Scholz, P. (2022). Reimagining the tour operator industry in the post-pandemic period: Is the platform economy a cure or a poison? *Cogent Business & Management*, 9(1), 2034400. <https://doi.org/10.1080/23311975.2022.2034400>
  15. Priya, S. S., Cuce, E., & Sudhakar, K. (2021). A perspective of COVID 19 impact on global economy, energy and environment. *International Journal of Sustainable Engineering*, 14(6), 1290–1305. <https://doi.org/10.1080/19397038.2021.1964634>
  16. Recio, R. B., Gomez Jr., J. E. A., Thai, H. M. H., & Nguyen, P. T. (2021). Street vending and co-production: key lessons during the COVID-19 pandemic. *Space and Polity*, 25(3), 325–346. <https://doi.org/10.1080/13562576.2022.2045931>
  17. Reis, C. F. de B., & Blind, K. (2022). The machinery value chain in Brazil: mapping for upgrading. *Transnational Corporations Review*, 1–16. <https://doi.org/10.1080/19186444.2022.2068368>
  18. Scholvin, S., Turok, I., Visagie, J., & Diez, J. R. (2022). Regional value chains as new pathways to development? *Area Development and Policy*, 7(2), 177–186. <https://doi.org/10.1080/23792949.2021.1978299>
  19. Sell, S. K., & Williams, O. D. (2020). Health under capitalism: a global political economy of structural pathogenesis. *Review of International Political Economy*, 27(1), 1–25. <https://doi.org/10.1080/09692290.2019.1659842>
  20. Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2022). Developing a framework for enhancing survivability of sustainable supply chains during and post-COVID-19 pandemic. *International Journal of Logistics Research and Applications*, 25(4–5), 433–453. <https://doi.org/10.1080/13675567.2020.1810213>
  21. Shin, K.-Y. (2022). Work in the post-COVID-19 pandemic: the case of South Korea.

- Globalizations*, 19(3), 487–496. <https://doi.org/10.1080/14747731.2021.1969066>
22. Smith-Roberts, A., Bruckner, K. D., Bellido, V. M., Ossandón, H. F., Nayak, M., Smith, N. M., & Urrego, L. J. (2021). ‘All that glitters is not gold’: the effects of the COVID-19 pandemic on artisanal and small-scale gold mining and supply chains in Peru. *Journal of Energy & Natural Resources Law*, 39(4), 489–527. <https://doi.org/10.1080/02646811.2021.1895526>
23. Sodokin, K., Couchoro, M. K., & Tozo, K. W. (2022). Macroeconomic channels of transmission of post-pandemic recovery strategies for African economies. *Cogent Economics & Finance*, 10(1), 2125656. <https://doi.org/10.1080/23322039.2022.2125656>
24. Ssenyonga, M. (2021). Imperatives for post COVID-19 recovery of Indonesia’s education, labor, and SME sectors. *Cogent Economics & Finance*, 9(1), 1911439. <https://doi.org/10.1080/23322039.2021.1911439>
25. Stevano, S., Franz, T., Dafermos, Y., & Van Waeyenberge, E. (2021). COVID-19 and crises of capitalism: intensifying inequalities and global responses. *Canadian Journal of Development Studies / Revue Canadienne d’études Du Développement*, 42(1–2), 1–17. <https://doi.org/10.1080/02255189.2021.1892606>
26. Suwandi, I., & Foster, J. B. (2022). COVID-19 and Imperial Value: Commodity Chains, Global Monopolies, and Catastrophe Capitalism. *International Critical Thought*, 12(3), 426–447. <https://doi.org/10.1080/21598282.2022.2093772>
27. Svartzman, R., & Althouse, J. (2022). Greening the international monetary system? Not without addressing the political ecology of global imbalances. *Review of International Political Economy*, 29(3), 844–869. <https://doi.org/10.1080/09692290.2020.1854326>
28. Umiński, S., & Borowicz, A. (2021). Will multinational enterprises contribute to Poland’s economic resilience and recovery during and post COVID-19 pandemic. *Transnational Corporations Review*, 13(1), 74–87. <https://doi.org/10.1080/19186444.2021.1888638>
29. Vanoli, A. (2021). The Economy Between Pandemics. *International Journal of Political Economy*, 50(3), 244–256. <https://doi.org/10.1080/08911916.2021.1984977>
30. Vidya, C. T., & Prabheesh, K. P. (2020). Implications of COVID-19 Pandemic on the Global Trade Networks. *Emerging Markets Finance and Trade*, 56(10), 2408–2421. <https://doi.org/10.1080/1540496X.2020.1785426>
31. Wang, L., & Li, Y. (2020). The negotiation of EU–China comprehensive agreement on investment and its potential impact in the post-pandemic era. *Journal of Chinese Economic and Business Studies*, 18(4), 365–372. <https://doi.org/10.1080/14765284.2020.1855846>
32. Xing, Y. (2022). China and global value chain restructuring. *China Economic Journal*, 15(3), 310–329. <https://doi.org/10.1080/17538963.2022.2117198>
33. Zhao, Y., Zhang, H., Ding, Y., & Tang, S. (2021). Implications of COVID-19 Pandemic on China’s Exports. *Emerging Markets Finance and Trade*, 57(6), 1716–1726. <https://doi.org/10.1080/1540496X.2021.1877653>