



Munich Personal RePEc Archive

**Achieving innovativeness through
participation in global value chains views
of managers of Bulgarian furniture
enterprises**

Ventsislavova Georgieva, Daniela

Economic Research Institute at the Bulgarian Academy of Sciences

2024

Online at <https://mpra.ub.uni-muenchen.de/121809/>
MPRA Paper No. 121809, posted 28 Aug 2024 13:31 UTC

ACHIEVING INNOVATIVENESS THROUGH PARTICIPATION IN GLOBAL VALUE CHAINS: VIEWS OF MANAGERS OF BULGARIAN FURNITURE ENTERPRISES

Daniela Ventsislavova Georgieva

Abstract: Global value chains (GVCs) are a driver of economic transformation and growth of local economies. They are a channel for the dissemination of technological knowledge, entrepreneurial culture and innovation capacity. Global leaders can create opportunities for local producers to improve their position in the supply chain. A large part of Bulgarian enterprises do not participate in such chains. Presently, with Western markets experiencing stagnation, anticipations arise for disruptions within the Bulgarian furniture industry, likely to exert a substantial impact on the GVCs and hence on their innovativeness. The paper aims to outline the current state, trends and challenges ahead of the Bulgarian furniture enterprises, related to achieving innovativeness through participation in GVCs. It is done through a survey of managerial vision and opinion related to achieving innovativeness through participation in such chains. Data from online questionnaires distributed among managers of Bulgarian furniture companies between November 2023 and February 2024 is presented. The study of statistical relationships and dependencies is based on the Chi-square test with the program IBM – SPSS Statistics. The study supports the literature concerning the involvement of furniture companies in GVCs.

Keywords: global value chain, innovation, furniture enterprises, questionnaires

1. INTRODUCTION

The companies engaged in global trade and manufacturing are progressively developing through participation in GVCs. These chains encompass all the tasks undertaken by companies and employees to take a product from its inception through production to its utilization and eventual disposal (Gereffi & Fernandez-Stark, 2011). Criscuolo and Timmis (2017) argue that participation in GVCs benefits companies by focusing on specialization in the core business activities and offshoring of other activities. This approach involves importing foreign products that are either lower in cost or of superior quality, generating competitive influences within domestic markets, and fostering knowledge diffusion facilitated by multinational corporations (MNCs). Advancements in technology, cost factors, resource and market accessibility, as well as trade policies, contribute to the geographical division of production processes globally based on the competitive advantages of specific locations. This worldwide fragmentation of production is a significant driver of efficiency and enhances the competitiveness of businesses. The ongoing advancement and innovation within the value chain have become essential due to the broadening array of product categories. This is a direct result of the escalating intensity of global competition, the shortened lifespan of products, and the emergence of entry barriers in certain industries. Through innovations, companies can strategically position themselves, gaining both pricing and competitive advantages within a particular chain or network. Value creation is not

confined solely to "high-end" activities such as design or branding but it can occur at any stage within the chain (Abonyi, G., 2006, p. 16-21). The furniture industry represents a global business characterized by an extensive and intricate value chain consisting of numerous consecutive phases. Each phase of value-adding requires supporting products and services (Epede & Wang, 2022). Tasks within the furniture value chain range from production activities, which are adaptable and can be executed anywhere by any participant in the chain, to retailing activities, which, in contrast, are restricted and can only occur within the country of the ultimate target market (Kaplinsky et al., 2003). The global furniture industry is experiencing heightened global competition, marked by numerous middle-income countries ascending to stronger competitive positions. High-income countries, which previously held dominance in this sector, are encountering challenges in sustaining their competitive edge. The primary challenge facing companies involved in the global furniture market is imperative to consistently enhance their capabilities by transitioning towards higher value-added activities (Epede & Wang, 2022). Bulgarian furniture firms have yet to fully capitalize on global value chains as a primary catalyst for innovation. Their involvement in the GVC remains limited and largely revolves around collaborating with foreign material suppliers (Georgieva et al., 2023).

The main author hypothesizes is that there are no sufficient managerial practices in terms of participation in GVCs by Bulgarian furniture enterprises due to (1) a lack of understanding of the benefits for the company's competitiveness and (2) fear of being dependent on MNCs. The primary purpose of the paper is to study the managerial point of view related to the risks and benefits of the participation of Bulgarian furniture enterprises in GVCs and the development of innovation and innovation collaboration with external stakeholders as factors for participating in such chains. Subject under analysis are furniture companies' managers who have worked at the firm for at least 2 years and have an understanding of innovation and GVCs participation. The applied research methods are based on the logical, deductive and comparative methods, content analysis and synthesis of specialized literature texts. Data from an author's questionnaire survey conducted among furniture companies in Bulgaria reveals that they do not dependent on GVCs for achieving innovativeness even though they see it as a factor for new partnerships, transfer of knowledge and cost reduction.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

GVCs have three dimensions: (1) structure of input-output flows; (2) territorial (spatial) dispersion; (3) management structure. Without belittling the importance of the three structures an object of further analysis is the managerial dimension in which three main types of GVCs can be outlined - production-related; customer-driven and multi-polar (Abonyi, G., 2006, p. 11-12). In the furniture industry, the value chain is buyer-driven. This signifies that major retailers, marketers, and manufacturers hold crucial positions in establishing decentralized production networks. Consequently, their influence significantly shapes the enhancement patterns of other participants involved in the chain (Epede & Wang, 2022). Having a capacity for innovation is important for enhanced involvement in the GVCs, which contributes to economic development (Fagerberg et al., 2018). Outsourcing certain production activities fosters innovation development, enabling leading firms to streamline costs and allocate more resources to R&D (Vivek et al., 2009). Consequently, companies gain access to new knowledge, concepts, and

technology transfers, fostering innovation. Due to the pressures of globalization, national and regional economies are directing efforts towards enhancing their competitive positions within the GVC by prioritizing investments in scientific research and innovation. Companies within the furniture industry are required to make substantial investments in capital, technology, and human resources to manage diverse production stages effectively. Continuous adaptation to evolving consumer trends necessitates ongoing innovation efforts, consuming significant resources in the process (Phuoc et al., 2023, p. 3). Therefore, a subject to analysis is the impact of the GVCs' participation in Bulgarian furniture companies over their innovativeness. To address this goal, the following hypothesis is formulated: *(H1) There is a statistically significant relationship between participation in GVCs and the development of innovation with higher added value.* The furniture industry holds substantial potential for innovation growth, particularly through network participation and collaboration with other stakeholders which allows firms to foster innovation (Hatzichronoglou, T., 1997). Collaboration with entities within the surrounding business environment can improve the innovativeness of the industry by offering better fundamental research, skilled human resources, facilitating knowledge transfer, and conducting training programs. These elements collectively contribute to the development and growth of the furniture sector (Beer, P., 2013 cited in Ratajczak-Mrozek & Herbec, 2014). Considering this the second hypothesis is as follows: *(H2) There is a statistical relationship between the innovation collaboration of the furniture enterprises with other stakeholders and the participation in GVCs.*

For small businesses situated in less developed countries, like Bulgaria, engaging in GVCs serves as a method to acquire insights into the demands of global markets and facilitates entry into them (Pietrobelli & Rabellotti, 2006, p.9). GVCs' participation provides access to imported products, diffusion of knowledge and positive effects of global competition (Crisuolo & Timmis, 2017), positive effects on employment (Lopez-Gonzalez, 2016), and increasing sectoral added value (Kummritz et al. 2017). GVCs offer new prospects for smaller firms in developing and emerging market economies as companies are not compelled to manage independently every stage of the production processes to engage in the global economy and hence they do not need to oversee all the complexities of the production chain. According to Humphrey and Schmitz (2002), companies engaging in GVCs can create process innovation which reduces the cost of manufacturing by enhancing efficiency in converting inputs and resources into the final output. Firms can develop product innovation with higher quality, which can benefit their market positioning. By developing organizational innovations furniture companies can improve their organizational structures or processes to enhance the value derived from human labor, potentially increasing productivity or effectiveness. Engaging in GVCs enables companies to diversify their product portfolio by entering into intensive and high-tech industries, broadening their range of offerings and market presence. Rodrik (2013) contends that firms engaged in GVCs tend to excel in assimilating advanced technologies but might not experience the same level of success in labor recruitment. In contrast, Baldwin (2014) suggests that GVCs enable access to global markets for manufactured goods, initially leading to a rapid boost in productivity and employment. However, it may underestimate industrialization and capacity building which in the long term, might lead to development stagnation. The Bulgarian furniture industry relies on exports, making it susceptible to disruptions in external markets. Hence, some risks related to GVCs participation can affect the

managerial decision of such participation. A drawback of participating in GVCs, in contrast to the local value chains, is the augmented expenses which stem from higher transportation expenses, extended delivery durations, increased intricacy, and a propensity for further amplifying operational expenses, especially for distant destinations (Strange, R., 2020). Gereffi (2013, p. 10) emphasizes that export-oriented industrialization does not guarantee a successful economic development. Hence, the sectors that are relatively productive and integrated into GVCs often do not contribute significantly to the local economy. The spillover effects, or the positive externalities and impacts on other local sectors, tend to be minimal. Moreover, there exist structural tensions between the central company (focal firm) and the networks of supplier firms within these chains. This can lead to imbalances that are disadvantageous, particularly towards the lower-value-added segments of the chain (Kano et al, 2020).

3. SURVEY METHODOLOGY, RESULTS AND DISCUSSIONS

An online survey among managers of Bulgarian furniture enterprises was conducted, covering the period November 2023 - February 2024. The final questionnaire was filled in by 106 respondents and it consisted of 3 main groups of questions: (1) socio-demographic questions; (2) questions related to the innovativeness of the company and its added value; (3) questions related to GVCs participation and cooperation with external stakeholders. The main goal of the survey is to address the above hypotheses as well as to outline the risks and opportunities to achieve innovativeness through GVCs participation from the managerial point of view. IBM – SPSS Statistics, ver. 19 is used to analyze the collected data. The study of statistical relationships and dependencies is based on the Chi-square test. From a socio-demographic point of view around 42% of the respondents are founders and the rest are representatives of the management departments of the furniture enterprises. 83% are presenting companies that operated in cities while 17% are from small villages. The main market for 2.8% of the enterprises is local (no more than 30 km from their factories), 68% sell only in the territory of the country while 29,2% are focused in the international market as well. From those selling abroad primarily targeted markets are Germany (38,7%); Romania (18,7%); France (9,7%); Greece, Italy and Austria (6,5%). The majority of the surveyed managers see participation in GVCs as leading to positive effects such as the use of cheaper resources (17,9%); conquering new markets (12,3%); new partnerships (12,3%); exchange of knowledge and dissemination of established practices (11,3%); sharing technological and other innovations (9,4%) and access to customers (9,4%). Still, only 34,9% consider that their company participate in GVCs. Around 95% of the surveyed companies have introduced new or improved products or services during the last 12 months before the survey. However, only 15% of them have developed those innovations in collaboration with external stakeholders. Even though the rest claim that they have developed the innovation by themselves only 17% state that the company have an R&D department. In those departments, the majority of the employed personnel (33,3%) is up to 2 staff members. Around 20% claim that they have R&D expenses of which around 32% report them to the National Statistical Institute. The main obstacles to the development of innovation were stated to be: high economic risk and instability (20%); high costs for R&D (17%); lack of sources of funding (13%); lack of qualified staff (10%); presence of undertakings dominating the market (5%); lack of information about the markets

(6%); Lack of specific regulatory framework for promoting innovation (4%). 70,8% of the respondents do not think that participation in GVCs can lead to the development of innovation with higher added value to the company. However, when testing the author's hypothesis and based on the analysis of the collected data (see Table 1) it is confirmed the existence of a weak statistical relationship between participation in GVCs and the development of innovation with higher added value. All conditions for the Chi-square test application are fulfilled but the significance level is 0,415, therefore, it is statistically insignificant. Around 69% of the respondents claim that they do not have any contracts for innovation collaboration. Of the rest (31%), around 2% have such contracts with other enterprises from the same industry, 8% - with enterprises from other industries, 14% - with suppliers, 3% - with multinational corporations, 2% - with research institutions and universities, 2% - with consulting agencies. The calculations based on the provided data prove a weak (but insignificant) statistical relationship between the participation in GVCs and the innovation collaboration of the furniture enterprises with other stakeholders (H2, see Table 1).

Table 1. Chi-square tests and Symmetric measures data

Hypothesis	Pearson Chi-Square value	Level of significance	Degree of freedom	Asymp. Sig. (2-sided)	Cramer's V value	Approx. Sig.
(H1)	0,665	$\alpha=0.05$	n=1	,415	,079	,415
(H2)	0,425	$\alpha=0.05$	n=1	,515	,063	,515

Source: own calculations, n=106.

If we check the level of statistical relationships between the different types of collaboration that the studied furniture enterprises have and their participation in GVCs, there is evidence of weak statistical relationship between: (1) innovation collaboration contracts with other enterprises from the same industry and participation in GVCs (Cramer's V: 0.189, $p<0.05$); (2) the innovation collaboration contracts with enterprises from other industries and participation in GVCs (Cramer's V: 0.090, $p<0.05$); (3) innovation collaboration contracts with suppliers and participation in GVCs (Cramer's V: 0.043, $p<0.05$); (4) innovation collaboration contracts with multinational corporations and participation in GVCs (Cramer's V: 0.125, $p<0.05$); (5) innovation collaboration contracts with research institutions and universities and participation in GVCs (Cramer's V: 0.102, $p<0.05$); and (6) of innovation collaboration contracts with consulting agencies and participation in GVCs (Cramer's V: 0.010, $p<0.05$). From all those cases only for the third one the conditions for the Chi-square test application are fulfilled meaning that for the other cases, we should be skeptical when accepting statistical relationships.

4. CONCLUSIONS

The analysis of the collected data from Bulgarian furniture enterprises confirms that there is a statistical relationship between the participation in GVCs and (1) the development of innovation with higher added value and (2) the innovation collaboration of the furniture enterprises with other stakeholders. Still, the majority of the surveyed manager do not consider GVCs as factors that improve their company's innovativeness. Even understanding the benefits

of participation in GVCs the managers refrain from such considering the main risks as dependence on other companies, restriction of freedom of decision-making and delay in delivery which can negatively affect the R&D and innovation development in furniture companies. This data supports the studies of Strange, R. (2020). In addition, the surveyed managers state that Bulgarian enterprises do not know how to manage the risks of GVCs (24,5%) and hence the managerial practices are influenced by the impact of other participants (29,2%) or are involved in such chains only if a foreign investor requires it (9,4%). There is a lack of managerial understanding of the essence of GVCs (13,2%) and because of the low level of participation in such chains, the competencies of management teams are limited (3,8%).

Acknowledgements: The paper presents primary data from Project No КП-06-H55/8 from 16.11.2021 funded by the National Science Fund.

REFERENCES

1. Abonyi, G. (2006): Linking Greater Mekong Subregion Enterprises to International Markets: The Role of Global Value Chains, International Production Networks and Enterprise Clusters, United Nations publication, ISBN 13: 978-92-1-120492-6.
2. Baldwin, R. (2014): Trade and industrialization after globalization's second unbundling: How building and joining a supply chain are different and why it matters, DOI 10.3386/w17716.
3. Beer, P. (2013): Naszym „produktem” jest absolwent. Rozm. przepr. Meble News. cited in: Ratajczak-Mrozek, M.; Herbec, M. (2014): *Furniture companies cooperation and their innovativeness – industrial network approach*. Annals of Warsaw University of Life Sciences, 2014(85):81-94.
4. Criscuolo, C.; Timmis, J. (2017): *The relationship between global value chains and productivity*. International Productivity Monitor, (32): 61–83.
5. Epede, M. B.; Wang, D. (2022): *Competitiveness and upgrading in global value chains: A multiple-country analysis of the wooden furniture industry*, Forest Policy and Economics, Volume 140, issue C, DOI: 10.1016/j.forpol.2022.102737.
6. Fagerberg, J.; Lundvall, B. Å.; Srholec, M. (2018): *Global value chains, national innovation systems and economic development*. The European Journal of Development Research. 30(3): 533–556. doi.10.1057/s41287-018-0147-2.
7. Georgieva, D.V.; Neykov, N.; Barčić, A.P.; Čurić, P.; Klarić, K. (2023). *Participation of Bulgarian Furniture Manufacturing in Global and Local Value Chains as a Factor Supporting Their Innovation Activities*, Sustainability, 15(17):13260, pp.1-15.
8. Gereffi, G. (2013): *Global value chains in a post-Washington Consensus World*. Review of International Political Economy, 1–29. <https://doi.org/10.1080/09692290.2012.756414>.
9. Gereffi, G.; Fernandez-Stark, K. (2016): *Global Value Chain Analysis: A Primer*. Durham, Duke Center on Globalization, Governance & Competitiveness.
10. Hatzichronoglou, T. (1997): *Revision of the High-Technology Sector and Product Classification*, OECD Science, Technology and Industry Working Papers [1997/02].
11. Humphrey, J.; Schmitz, H. (2002): *How does insertion in global value chains affect upgrading in industrial clusters?*, Regional Studies, 36(9): 1017–1027.

please cite as: GEORGIEVA, V.D. (2024). ACHIEVING INNOVATIVENESS THROUGH PARTICIPATION IN GLOBAL VALUE CHAINS: VIEWS OF MANAGERS OF BULGARIAN FURNITURE ENTERPRISES, GREEN DEAL INITIATIVES, SUSTAINABLE MANAGEMENT, MARKET DEMANDS, AND NEW PRODUCTION PERSPECTIVES IN THE FORESTRY-BASED SECTOR, WOODEMA, I.A., PP. 145-151, ISBN: 978-953-8446-02-3

12. Kano, L.; Tsang, E W; Yeung, H.W.-C. (2020): *Global value chains: A review of the multi-disciplinary literature*. Journal of International Business Studies, 51 (2020): 577-622.
13. Kaplinsky, R.; Memedovic, O.; Morris, M.; Readman, J. (2003): The global wood furniture value chain: what prospects for upgrading by developing countries, UNIDO Sectoral Studies Series Working Paper, <http://dx.doi.org/10.2139/ssrn.420080>.
14. Kummritz, V.; Taglioni, D.; Winkler, D. (2017): Economic upgrading through global value chain participation: Which policies increase the value added gains? (World Bank Policy Research Working Paper 8007). Washington, DC: The World Bank.
15. Lopez-Gonzalez, J. (2016): Using foreign factors to enhance domestic export performance: A focus on Southeast Asia (OECD Trade Policy Papers, No. 191). Paris: OECD Publishing.
16. Phuoc, D.M.; Tai, D. Q.; Phuong, V.H.; Tung, V.V.; Hung, T.X. (2023): *Product Innovation Among Furniture Firms: The Case of the Private Economy Area*. Journal of Law and Sustainable Development, 11(11):e1648, pp. 01-17, DOI: 10.55908/sdgs.v11i11.1648.
17. Pietrobelli, C.; Rabellotti, R. (2006): Clusters and Value Chains in Latin America, Upgrading to Compete Global Value Chains, Clusters, and SMEs in Latin America, Inter-American Development Bank, David Rockefeller Center for Latin American Studies, Harvard University.
18. Rodrik, D. (2013): *Unconditional convergence in manufacturing*. The Quarterly Journal of Economics, (128): 165–204.
19. Strange, R. (2020): *The 2020 Covid-19 pandemic and global value chains*, Journal of Industrial and Business Economics (2020) 47:455–465.
20. Vivek, S. D.; Richey, R.; Dalela, V. (2009): *A longitudinal examination of partnership governance in offshoring: A moving target*. Journal of World Business, 44(1): 16–30.

Authors address:

Georgieva, V. D.¹;

1 Economic Research Institute, Bulgarian Academy of Sciences,

*Corresponding author: danielagr999@gmail.com