

SPECIAL SECTION: IMPACTS OF GLOBAL CHALLENGES FROM A REGIONAL PERSPECTIVE

Globalization is associated with a high level of interdependence among economies in an increasingly integrated world (Rodrik, 2024). This phase is characterized by rapid and profound technological change (Autor, 2015; Baldwin, 2022), as well as rising financial instability (International Monetary Fund, 2024). Among the factors that may explain the success of globalization are higher growth rates compared to previous periods (Barro and Sala-i-Martin, 1990), driven by exports and market-friendly institutions.

However, since 2008, the global economy has faced a series of crises: the Great Recession, trade and technology conflicts between the United States and China, the pandemic, and wars in Ukraine and the Middle East, among others. As a result, economic globalization indicators have shown erratic behavior (Gygli et al., 2019), although they remain at relatively high levels.

Global trade, which gained in both importance and growth relative to global output between 1990 and 2008, has maintained high levels since the Great Recession (above 50% of GDP), but with an unstable trajectory and marked regional disparities. Meanwhile, indicators of Foreign Direct Investment (FDI) and Global Value Chains (GVCs) have remained at early 21st-century levels and reflect the rise of emerging economies (United Nations Conference on Trade and Development, 2025, 2024). All signs suggest that the link between growth and exports has weakened, while the visible hand of governments has become more prominent (Rodrik, 2025), particularly in the case of China.

These trends have been shaped by the unintended consequences, limitations, and erosion of the institutional framework established in the 1980s and 1990s (Stiglitz and Rodrik, 2024). This is evident in the stagnation of the World Trade Organization (WTO), which has been overshadowed by regional integration agreements, rising tariffs and trade barriers, and growing trade tensions. It is also reflected in the expansion of unconventional measures, the issuance of Special Drawing Rights (SDRs), and fiscal and monetary activism in response to the pandemic—measures that have not resolved asymmetric adjustments (Rogoff, 2025; Ocampo, 2021), inequitable biases, or the privileges of the U.S. dollar.

Addressing these challenges to avoid scenarios of weaponized interdependence, conflict, or collapse requires rejecting beggar-thy-neighbor policies,

minimizing asymmetric effects, and respecting social consensus and national specificities (Rodrik, 2024; Stiglitz and Rodrik, 2024). However, applying these principles requires a deep understanding of the elements shaping global realities. This includes recognizing that globalization remains highly prevalent, even if it has lost its hegemonic status in international affairs. It also means acknowledging that while global governance can create a fair and efficient framework, it can also impose asymmetric constraints on weaker actors. Furthermore, we live in a world marked by global public goods and externalities—such as climate change, health, and knowledge—that require minimum levels of international coordination.

Lastly, this is a world in which spaces and territories have been reconfigured, meaning that states can no longer fully shield themselves from external influences, impacts, or shocks. This discussion can be illustrated by the ongoing debate on the role of trade policy in promoting economic growth (Rodríguez and Rodrik, 2000). One of the main arguments is that higher levels of economic growth during the globalization era have contributed to greater spatial disparities (Piketty, 2014), leading to the territorialization of economic activity within countries. In this regard, it is crucial for the world economy to gather information from territories to ensure effective policymaking. The issue of territorialization has experienced a burgeoning body of academic literature, particularly since the emergence of New Economic Geography (NEG), initiated by the seminal work of Krugman (1991). This special issue pays particular attention to this last dimension, in which territories and regions have emerged as a relevant unit of analysis.

Although NEG initially proposed the existence of spatial disparities due to uneven industrial concentration in specific geographical areas, several issues—such as historical evolution and explanatory factors—were largely overlooked in the discussion (Martin and Sunley, 2011). This led to the emergence of Evolutionary Economic Geography (EEG), which incorporates concepts from Evolutionary Economics—such as selection, path dependency, chance, and increasing returns—to complement NEG (Boschma and Lambooy, 1999).

In this context, there appears to be a causal connection between the world economy and territories, as patterns, flows, and processes originating from the global economy are applied to EEG and, consequently, to regional economic development (Essletzbichler et al., 2023). However, in light of Evolutionary Economics, the focus has shifted from traditional to emerging subjects of interest. Traditional topics such as industrial policy and technology remain relevant, but more recently, issues such as social inequalities, the public sector, and political institutions have gained increasing attention and can be considered as emerging (Kogler et al., 2023).

In previous special issues of the *Journal of World Economy*, certain factors shaping the world economy, such as COVID-19 (de Paz Bañez and Asensio, 2020), industrial policy (García and Fernández, 2021), and, more recently, innovation (Urraca, 2024), have been carefully addressed. In this special issue of the *Journal of World Economy* entitled “Impacts of Global Challenges from

a Regional Perspective,” we aim to complement and enrich this perspective by strengthening the connection between the impact of the global challenges that pertain to the world economy on territories. More broadly, we seek to examine how territories respond to changes in the world economy. To illustrate this, we present a collection of eight articles covering a range of fields, including macroeconomics, subjective well-being, sustainability transition, technological change, and international economics, among others. Below, we provide a brief description of each article to highlight the specific contribution to this special issue.

In the first article, entitled “Regionalising global chains in critical inputs: South America in the face of recent transformations and expected effects on the Global North and South”, Hernán Alejandro Roitbarg and Víctor Ramiro Fernández of the Universidad del Litoral (Argentina) evaluate the results of reducing critical extra-regional inputs in Global Value Chains (GVCs) through hypothetical extraction in a multi-country input-output model. Their findings reveal the dependence of the Sino-Asian region on the Global South, and significant opportunities for South America in the medium and high-technology sectors. These results are crucial to understand the impact of territorialization on the world economy, given the importance of GVCs to foster local economic development and value creation, among other aspects (Krishnan et al., 2023).

In the second article, “Shedding light on global competitiveness by analyzing regional competitiveness within the European Monetary Union”, Emilio J. González, Rubén Mora, Susana Cortés and Olga Butenko from Universidad Autónoma de Madrid and Universidad Nebrija, develop a novel measure of regional regional exchange rate for European Union regions as a proxy of regional competitiveness. They find that regional competitiveness is unevenly distributed across space and over time, and that there is spatial dependence in competitiveness.

In the third article “Evolution of global well-being in the European regions: analysis through a multidimensional synthetic indicator”, Sergio Pérez Ruiz, Rosa Santero Sánchez and Miguel Ángel Marcos Calvo from King Juan Carlos University of Madrid propose an alternative approach to regional development by incorporating subjective well-being into the discussion. They develop a regional indicator of subjective well-being for European regions for the period 2000–2018. Their results suggest the existence of a spatial divide in terms of well-being, as the indicator tends to follow a positive trend in German, Spanish, and French regions, while other regions, such as those in Bulgaria, Portugal, and Romania, show a more stable or even declining trend.

The fourth article, titled “The Effect of National Productive and Technological Capabilities on Foreign Direct Investment” was written by Franklin Moya and Isabel Álvarez González. The results of the panel data estimations for Ibero-American countries indicate that productive and technological capabilities have a positive effect on Foreign Direct Investment (FDI), both inward and outward. The results also confirm the importance of FDI in developing institutional and business capabilities in host countries.

In the fifth article, entitled “Economic Globalization as a Determinant of Ultranationalist Parties in Italy: An Empirical Study At the Subnational Level”, Javier Matamoros-Becerra from Universidad de Extremadura, use a longitudinal study between 2014-2024 to analyze the relationship between globalization and support for ultranationalist parties in Italian provinces. He find that immigration from developing countries is the only globalization factor that explain the support for ultranationalist parties.

In the sixth article, Marcos Fernández Gutiérrez, Alejandro Bedia-Carral, Ana Lara Gómez, and Marina Gutiérrez present the study “*The Intra-Regional Divide in the Face of the Green Transition: Empirical Analysis for the Municipalities of Cantabria.*” All the authors are affiliated with the University of Cantabria (Spain). This article provides a more detailed analysis of territorialization, as it focuses on the municipalities of the Spanish region of Cantabria. The authors estimate a Green Transition Vulnerability Index for 102 Cantabrian municipalities in 2023 and combine cluster analysis with spatial correlation techniques. Their results suggest the existence of an intra-regional divide in terms of the green transition, with the effect being more pronounced in rural and depopulated municipalities.

The seventh article, “The electric vehicle battery value chain: Challenges for public policy in the automotive industry”, has been developed by Miguel Ángel Crespo-Velando, Jesús Lampón and Hugo Pérez Moure, from the universities of Vigo and King Juan Carlos University of Madrid, respectively. The authors rely on a qualitative approach based on interviews with relevant actors at different levels of decision-making within the value chain, including academics, businesses, and the innovation system, for the years 2022 and 2023. Their results suggest that the electric battery value chain could be spurred by new regional locations; however, location does not appear to be relevant in explaining high-value-added and recycling activities. In light of the need to redefine industrial policy toward strategic activities for the post-pandemic world economy (García and Fernández, 2021), these results could help policymakers gain a deeper understanding of the Spanish economy, given the importance of the automobile sector in shaping Spain’s trade specialization patterns.

In the eighth and last article, “Bridging Deep-Tech Ecosystems and Global New Industrial Policies: A Regional Perspective”, Nuria Esther Laguna and Oihana Basilio, from Universidad Autónoma de Madrid, analyze the regional dimension of deep-tech ecosystems in Spanish regions. Methodologically, they combine a quantitatively methodologies, principal components analysis, with an in-depth case study of Nanostine, a Spanish deep-tech venture. They find that the dynamism of deep-tech ecosystems is influenced by funding diversity, regional institutional quality, and stakeholder collaboration.

This special issue has maintained an important diversity, with female participation approaching 40% in contributions encompassing nine institutions, mostly represented by universities. Among Spanish institutions, there is a strong representation, including universities from Madrid –Autónoma de Madrid, Rey Juan Carlos, and Complutense, among others– alongside other Spa-

nish universities such as Cantabria, UNED and Vigo. Beyond Spain, the issue also features contributions from the Instituto de Humanidades y Ciencias del Litoral in Argentina.

All these articles address topics that fall within EEG, highlighting not only the interaction between the classic and recent challenges, but also the characteristics of complexity and, more importantly, adaptability (Kogler et al., 2023). To sum up, we would like to highlight the main limitation that should be addressed in future research: data paucity must be carefully considered when examining the linkages between the world economy and territories. Given the difficulty of obtaining data for some territories due to the absence of official statistics, an initial approach could be to isolate the regions to which these territories belong, as done in some articles of this special issue and further enrich the methodological framework by incorporating qualitative methodologies. Although this special issue offers a fresh view on the linkages between the world economy and territories, it is necessary to broaden the framework for future academic research along with the evolution of the world economy and the main challenges related to structural change. Among these challenges, in this special issue, we pay particular attention to technological change, emphasizing the key role of emerging technologies, as seen in the article devoted to deep tech written by Nuria Laguna and Oihana Basilio. Considering changes induced by Artificial Intelligence would be desirable, as this topic is of growing interest (Acemoglu and Restrepo, 2018; Sargent, 2025). As a closing remark, global challenges seem to be at the forefront, as some countries, such as Germany (Bickenbach et al., 2025), explicitly consider them in their national policymaking. In this context, it would be desirable to enrich the discussion by incorporating territorialization.

Javier Barbero
Universidad Autónoma de Madrid

Ewa Lechman
Gdansk University of Technology

Javier Lucena-Giraldo
Universidad Autónoma de Madrid

Ernesto Rodríguez-Crespo
Universidad Autónoma de Madrid

ACKNOWLEDGEMENTS

Ernesto Rodríguez-Crespo thanks financial support received from Grant TED2021-129600A-I00 funded by MCIN/AEI /10.13039/501100011033 and European Union Next Generation EU/PRTR. Javier Barbero and Ernesto Rodríguez-Crespo thank financial support from Grant PID2022-138212NA-I00 funded by MICIU/AEI /10.13039/501100011033 and ERDF, EU. Javier

Barbero, Javier Lucena-Giraldo and Ernesto Rodríguez-Crespo thank financial support received from Grant PHS-2024/PH-HUM-530, funded by Community of Madrid's Directorate General of Research and Technological Innovation. The guest editors would also like to express their gratitude to the World Economy Society, the Editors-in-Chief of *The Journal of World Economy*, Clara García and Daniel Herrero, all the authors who submitted their manuscripts for consideration in this special issue, and finally, all the anonymous reviewers for their outstanding contributions.

REFERENCES

- Acemoglu, D., & Restrepo, P. (2018). Artificial intelligence, automation, and work. In *The economics of artificial intelligence: An agenda* (pp. 197-236). University of Chicago Press.
- Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3-30.
- Baldwin, R. (2022). *Globotics and macroeconomics: Globalisation and automation of the service sector* (No. w30317). National Bureau of Economic Research.
- Barro, R. J., & Sala-i-Martin, X. (1990). *Economic growth and convergence across the United States*. National Bureau of Economic Research working paper No 3419, Cambridge.
- Bickenbach, F., Bode, E., Dohse, D., Görg, H., Heidland, T., Hinz, J., ... & Schularick, M. (2025). *Dealing with global economic challenges: An agenda for the new federal government* (No. 182). Kiel Policy Brief.
- Boschma, R. A., & Lambooy, J. G. (1999). Evolutionary economics and economic geography. *Journal of Evolutionary Economics*, 9(4), 411-429.
- de Paz Báñez, M. A., & Asensio, M. J. (2020). COVID-19 and World Economy. Preliminary analysis. *World Economy*.
- Essletzbichler, J., Scholz-Wäckerle, M., Gerdes, L., Wieland, H. P., & Dorninger, C. (2023). Geographical evolutionary political economy: linking local evolution with uneven and combined development. *Cambridge Journal of Regions, Economy and Society*, 16(3), 543-560.
- García, C., & Fernández, R. (2021). Desindustrialización y política industrial. *Revista de Economía Mundial*, 59, 17-38.
- Gygli, S., Haelg, F., Potrafke, N., & Sturm, J. E. (2019). The KOF globalisation index—revisited. *The Review of International Organizations*, 14, 543-574.
- Head, K., & Mayer, T. (2004). The empirics of agglomeration and trade. In *Handbook of regional and urban economics* (Vol. 4, pp. 2609-2669). Elsevier.
- International Monetary Fund (2024). *Global financial stability. Steadying the Course: Uncertainty, Artificial Intelligence, and Financial Stability*. International Monetary Fund.

- Kogler, D. F., Evenhuis, E., Giuliani, E., Martin, R., Uyarra, E., & Boschma, R. (2023). Re-imagining evolutionary economic geography. *Cambridge Journal of Regions, Economy and Society*, 16(3), 373-390.
- Krishnan, A., De Marchi, V., & Ponte, S. (2023). Environmental upgrading and downgrading in global value chains: A framework for analysis. *Economic Geography*, 99(1), 25-50.
- Krugman, P. (1991). Increasing returns and economic geography. *Journal of Political Economy*, 99(3), 483-499.
- Martin, R., & Sunley, P. (2011). The new economic geography and policy relevance. *Journal of Economic Geography*, 11(2), 357-369.
- Ocampo, J. A. (2021). *Hacia la reforma del (no) sistema monetario internacional*. Fondo de Cultura Económica.
- Piketty, T. (2014). *Capital in the twenty-first century*. Harvard University Press.
- Rogoff, K. (2025). *Our Dollar, Your Problem: An Insider's View of Seven Turbulent Decades of Global Finance, and the Road Ahead*. Yale University Press.
- Rodriguez, F., & Rodrik, D. (2000). Trade policy and economic growth: a skeptic's guide to the cross-national evidence. *NBER Macroeconomics Annual*, 15, 261-325.
- Rodrik, D (2025). What the Mercantilists Got Right. 2025. <https://tinyurl.com/253r8ln8>
- Rodrik, D (2024). Reimagining the Global Economic Order. *Review of Keynesian Economics*, 12 (3), 396-407.
- Sargent, T. J. (2025). Sources of artificial intelligence. *Journal of Economic Dynamics and Control* 172, 104989
- Stiglitz J.E. y Rodrik, D (2024). Rethinking Global Governance: Cooperation in a World of Power. <https://tinyurl.com/22uzrdex>
- United Nations Conference on Trade and Development (2025). Handbook of Statistics. United Nations.
- United Nations Conference on Trade and Development (2024). World Investment Report 2024. Investment facilitation and digital government. United Nations.
- Urraca, A. (2024). Gender and Innovation: First part. *Revista de Economía Mundial*, 68, 19-22.