

EU External Trade Trends in ICT Services in the Pre- and Post-Covid Era: A Comparative Analysis*

Joanna STEFANIAK¹, Jacek WINIARSKI¹ and Joseph JANUSZEWICZ²

¹University of Gdansk, Faculty of Economics; Poland
²Geisel School of Medicine at Dartmouth, Hanover, USA

Correspondence should be addressed to: Joanna STEFANIAK, joanna.stefaniak@ug.edu.pl

* Presented at the 45th IBIMA International Conference, 25-26 June 2025, Cordoba, Spain

Abstract

The rapid digitalization of global economies has elevated ICT services as key drivers of international trade, yet comprehensive analysis of the EU's external trade position in this sector remains limited, particularly regarding the transformative impact of COVID-19. This study addresses a critical gap in literature by providing systematic analysis of the EU's evolving role from technology consumer to digital services exporter, challenging prevailing perceptions of EU ICT import dependence.

Using Eurostat data from 2010-2023, we employ comparative analytical methods, concentration ratios, Trade Balance Index (TBI), and Revealed Symmetric Comparative Advantage (RSCA) indicators to examine trade dynamics across three ICT service categories: telecommunications, computer, and information services. The analysis divides the period into pre-COVID (2010-2019), COVID year (2020), and post-COVID (2021-2023) phases to assess pandemic impact on trade patterns and geographical structures.

Findings reveal remarkable transformation in EU's ICT trade position, with external exports increasing fourfold from €71 billion to €295.3 billion, generating a trade surplus of €167.2 billion by 2023. Computer services emerged as the dominant category, representing 89.5% of exports by 2023, while geographical analysis shows strategic diversification toward North America and Asia. Despite initial disruptions, COVID-19 accelerated digitalization and strengthened the EU's competitive position, particularly in advanced computer services. The study demonstrates that the EU has evolved into a significant global exporter of ICT services, fundamentally reshaping its role in the digital economy and challenging assumptions about European technological dependence.

Keywords: ICT services, European Union, international trade, COVID-19 impact