TECHNOLOGICAL AND INSTITUTIONAL ASYMMETRIES IN THE DIGITAL PERFORMANCE OF EUROPEAN SMEs

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Abstract - This paper investigates how technological and institutional asymmetries shape the digital performance of Small and Medium-sized Enterprises (SMEs) across European countries. Rather than treating digitalisation as a uniform driver of competitiveness, the study starts from the premise that digital technologies and Artificial Intelligence (AI) do not yield equivalent benefits for all firms or in all national contexts. The capacity of an enterprise to convert its digital capabilities into tangible market outcomes is conditioned by the structural, institutional and developmental environment in which it operates, so that comparable levels of technological access may translate into markedly different results. Building on this reasoning, the research examines the relationship between firms' overall level of digitalisation, their engagement with advanced technologies such as AI, and their performance in the digital marketplace, while paying particular attention to how these dynamics diverge across the European Union. The empirical approach relies on regression analysis applied to secondary, cross-country data, allowing enterprises to be compared not only in terms of their digital intensity but also according to firm size and the developmental position of their home country. By grouping countries in line with their level of economic development, the analysis highlights the extent to which structural inequalities may reinforce divergent trajectories of digital competitiveness among European SMEs, distinguishing between the mere adoption of technology and its effective transformation into economic value. The intended contribution of the study is both empirical and conceptual. Empirically, it offers a comparative, cross-country perspective on the digital performance of European SMEs, integrating general digital intensity, the uptake of advanced technologies and market-based outcomes within a single analytical framework. Conceptually, it argues that competitiveness in the digital economy cannot be explained by technological adoption alone, but depends on the uneven institutional and developmental conditions under which firms operate. In doing so, the paper seeks to nuance current debates on technological inequalities, suggesting that cross-country differences, although visible at a descriptive level, may be partly mediated by the actual digital capabilities of firms rather than by national development status as such.

Keywords - Artificial Intelligence, digital performance, digitalisation, European SMEs, technological and institutional inequalities.