

Policy Briefing

Brexit and Digital Technology Adoption of UK SMEs

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A large body of literature supports a strong link between digital technology adoption and productivity gains at both the national and the firm level. This correlation becomes especially relevant in the context of Brexit, which has negatively impacted the UK economy and led to a deceleration in productivity. It is therefore essential to examine the responses of the largest group of private firms, small and medium-sized enterprises (SMEs). Despite their crucial role as the backbone of the UK economy, these businesses are often overlooked in research due to limited data availability, leading to a significant gap in the literature. By focusing on the adoption of digital technologies by UK SMEs from 2013-2019, this study contributes to filling this gap. We combine survey data from the Longitudinal Small Business Survey (LSBS) with novel data on digital technology adoption from firms' websites, with which we provide detailed and timely measurements to gain deeper insights into SMEs' ability to adapt to the profound changes brought about by Brexit.

Key findings

Our study assesses the impact of the Brexit referendum on digital technology adoption by UK SMEs from 2013 to 2019. Through a blend of existing survey measures and novel data from firms' websites and their adoption of digital technologies, we are able to provide a more detailed and nuanced understanding of how SMEs respond to a major policy shock. We exploit the Brexit referendum as a trade policy uncertainty shock, using a differences-in-differences approach to study how SMEs engaged in trade with the EU have adjusted their behaviour. The findings indicate that these SMEs reduced their adoption of e-commerce and other critical digital technologies following the referendum. Various technologies that were trade-enhancing were affected, with the reduction in technology adoption observed across multiple sectors. Additionally, there was a significant decline in non-commerce-related technologies, including basic website functionalities. Thus, our results underscore the broad, sweeping impact of Brexit on the digital technology adoption among SMEs, an effect that extends well beyond the limits of the trade channel.

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Understanding SMEs' adjustment in digital technology adoption

The objective of our study is to provide a comprehensive understanding of how major trade policy uncertainty shocks, exemplified by the Brexit referendum, affects SMEs' decision to adopt digital technologies. To do so, we develop novel measures for technology adoption, by linking existing survey data to novel online data sources, leveraging ever-increasing volumes of data available from businesses' websites. Our findings reveal that SMEs react to this shock by decreasing their adoption of e-commerce-related technologies, as well as other digital technologies. We suggest several possible factors are at play behind this effect. For instance, SMEs' need for these technologies may suffer from reduced trade opportunities, or from budget cuts to technology investments made in response to Brexit uncertainties. Alternatively, it might be the result of a strategic realignment, with SMEs focusing more on mitigating Brexit's negative impacts than on pushing growth-oriented strategies. Overall, these findings into SMEs' adjustments in digital technology strategies in the face of significant policy shifts such as Brexit can provide critical guidance for policymakers, stakeholders, and academics.

Policy implications

The findings of this study carry important policy implications for policymakers and stakeholders aiming to support SMEs in the context of a post-Brexit UK. These include addressing uncertainties and potential trade costs arising from Brexit to mitigate the adverse effects on SMEs' ability to stay abreast technology innovations. This could be achieved through clear, targeted policies that provide guidance and financial support for SMEs to navigate the changing trade landscape and encourage investment in digital technologies. Additionally, policymakers should consider sector-specific interventions to assist industries, such as manufacturing, education, the primary sector, retail, and information services, that have experienced significant decreases in technology adoption. Another proposal would see collaboration programmes with digital platforms, educational institutions, and non-profit organisations to promote digital literacy and provide training programmes for SMEs, enhancing their digital capabilities and resilience in the face of sizeable policy shocks. By addressing these areas, policymakers can foster a more supportive environment for SMEs to adapt, innovate, and thrive in the post-Brexit era.

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