

UK Business Data User Conference 2021

# Research on Digital Trade: Microdata analysis

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Department for  
International Trade



Department for  
Digital, Culture  
Media & Sport



cambridge  
econometrics

clarity from complexity

# Overview

- Motivation for the study and the concept of digital trade
- Dataset
- Findings: UK E-commerce exports
- Upcoming developments to measuring digital trade

# Background and aims

- Follows the recommendations to explore innovative, non-conventional, methods to improve the evidence base on cross-border digital trade
- [Previous study](#) looked at definition of digital trade and available data
  - The framework for measuring digital trade has started emerging
  - Currently, there are no dedicated datasets to measure digital trade
- This study fills in some of the data gaps, providing policymakers with further insights that cannot be obtained from other sources



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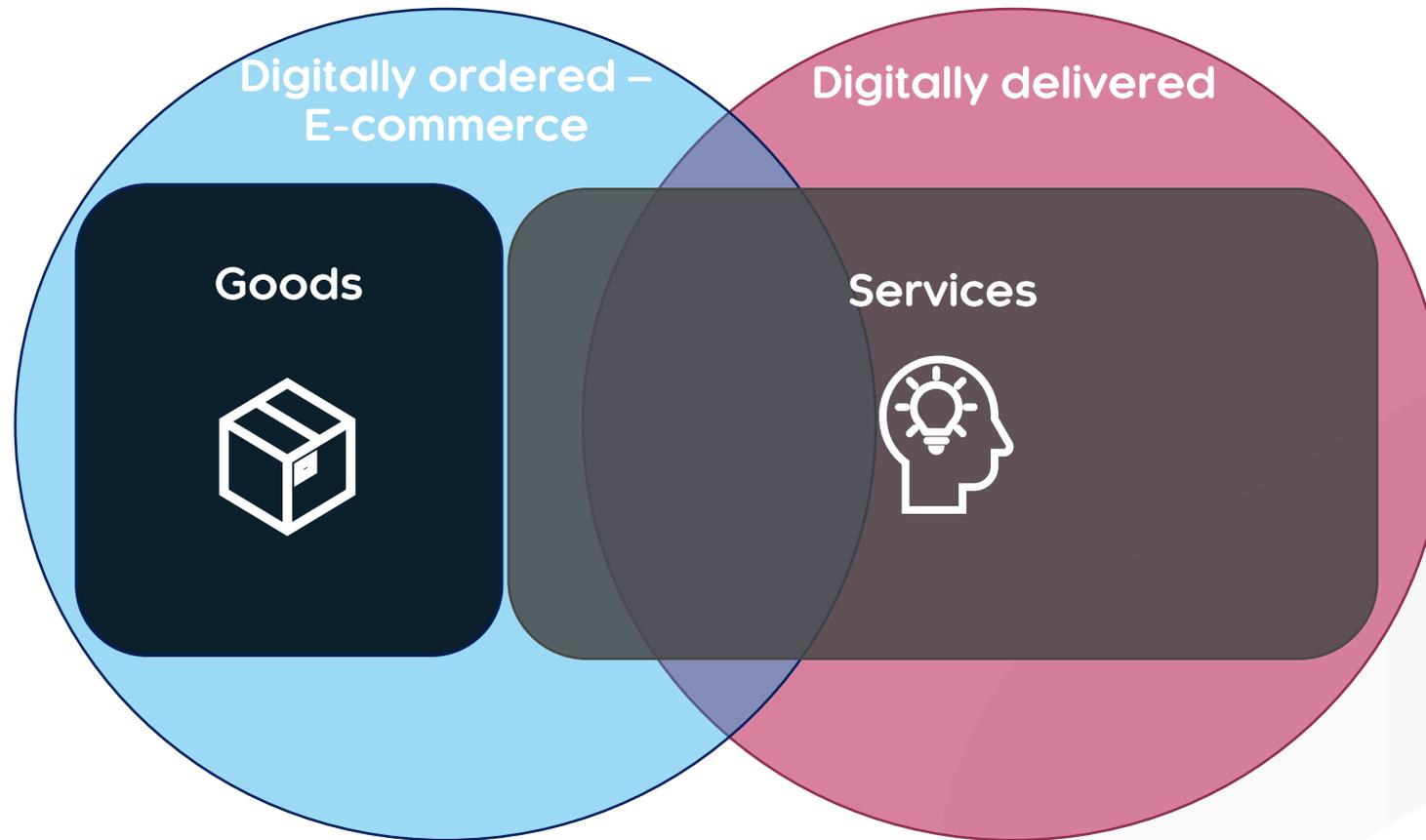


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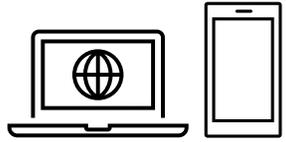


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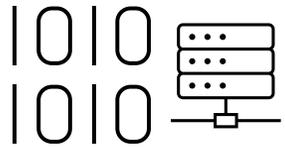
# Digital trade concepts



# Types of e-commerce channels

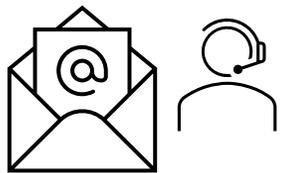


Orders placed through a website or an application



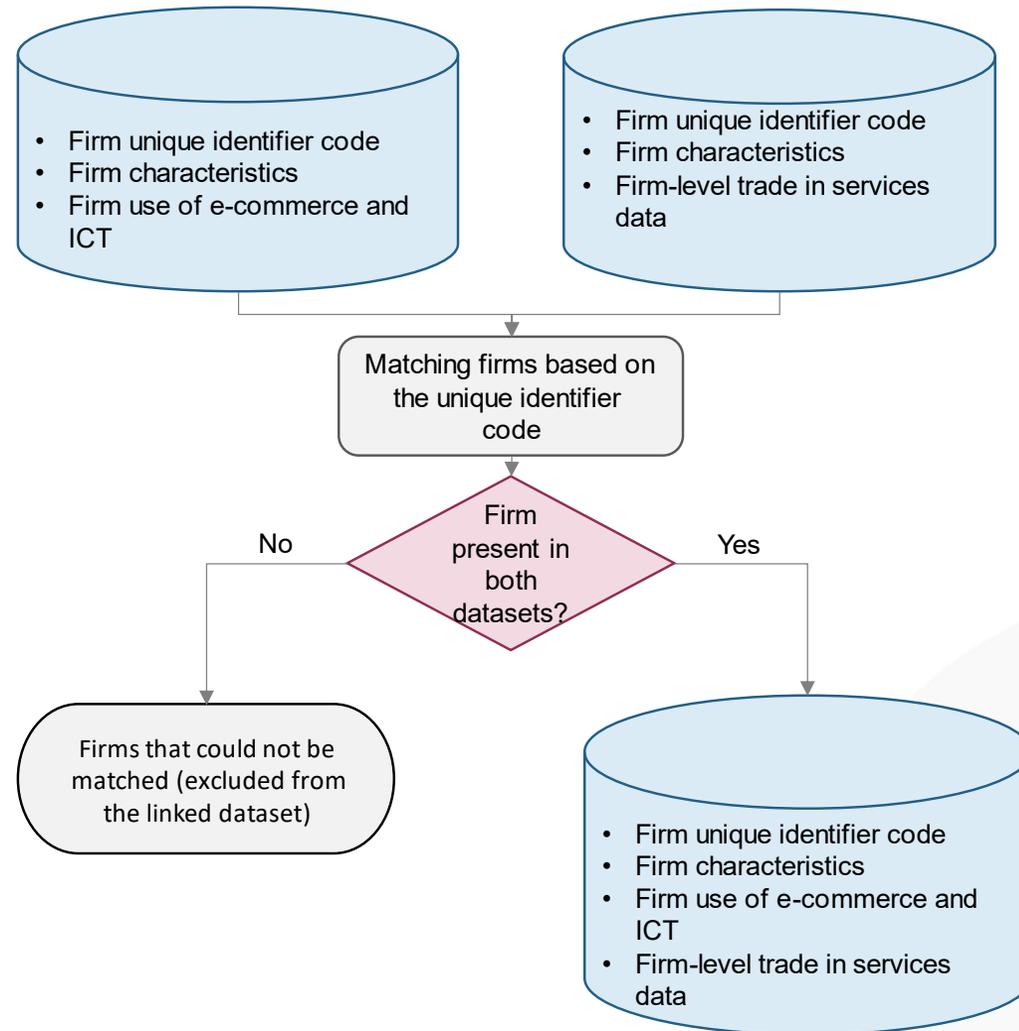
Electronic Data Interchange (EDI) methods

– automated processing, such as non-internet EDI, XML or EDIFACT

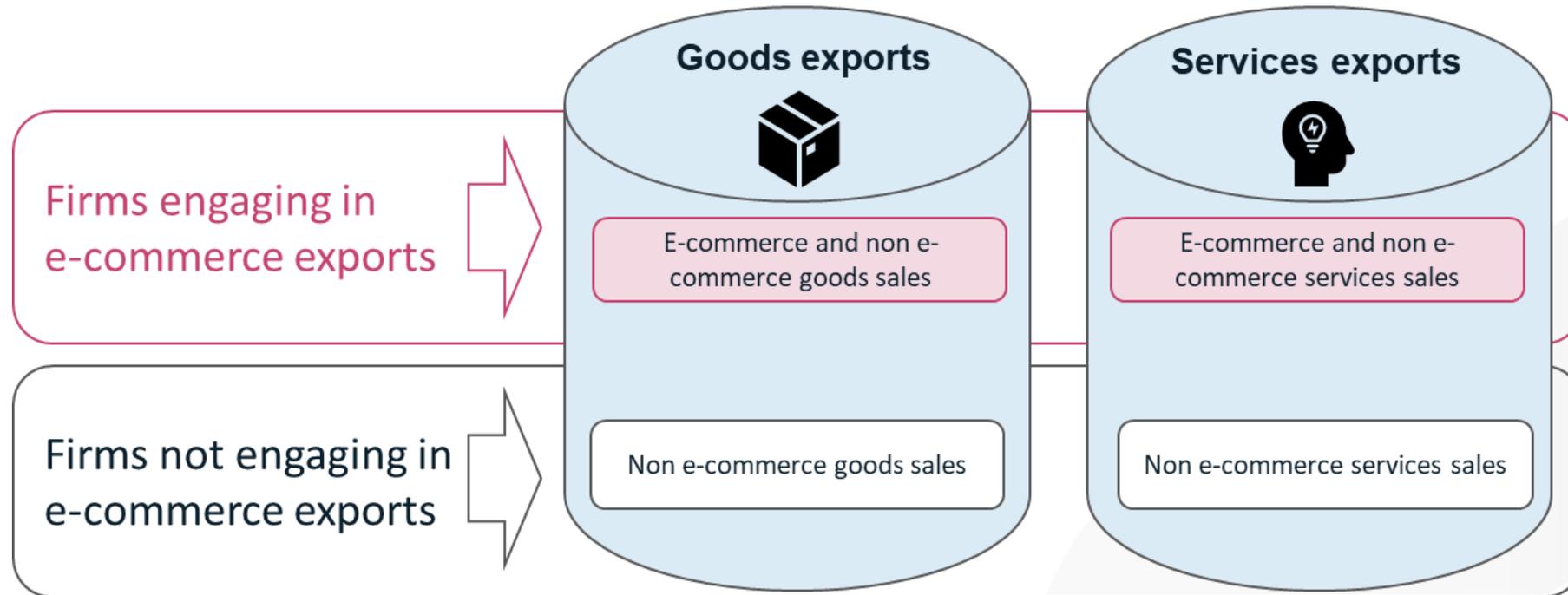


Exclude manually-typed e-mails, fax and phone orders.

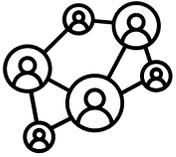
# Linking microdata: E-commerce and ITIS surveys



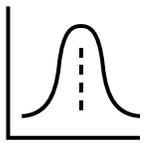
We can identify firms engaging in e-commerce exports, but cannot zoom in on their specific activities



# Other limitations apply to our analysis:

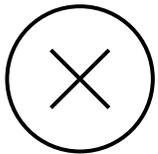


Changing sampling methods of the E-commerce Survey and the ITIS Survey impair comparability across years



The linked dataset sample size is relatively small

- Varies across years (1,000 to 2,000 firms)
- Limits the reliability of analysis in certain subgroups or years



Excludes certain sectors and firm sizes



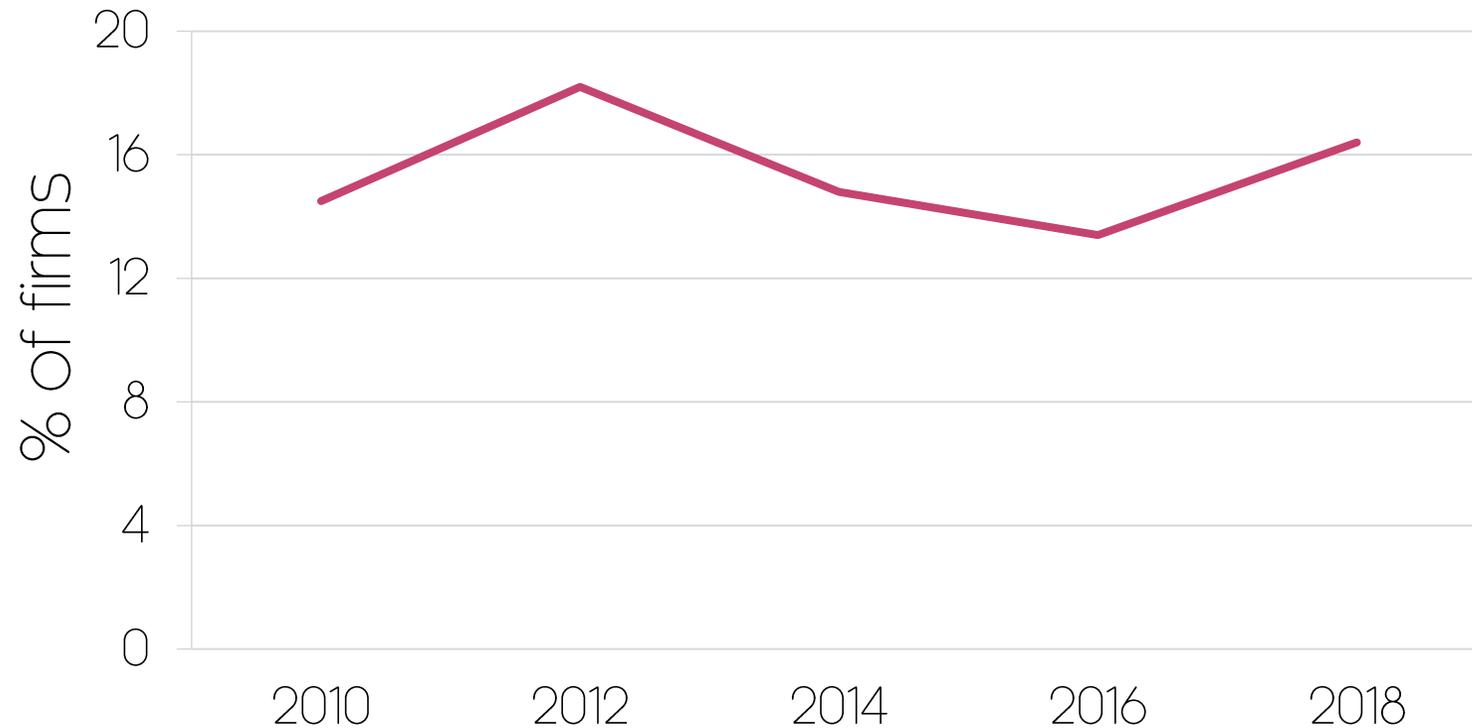
The definition of e-commerce activity changed over the years

- We analysed years 2010-2018, the questions of interest were included every other year

Findings: UK E-commerce exports using a website or an app

The presented estimates are preliminary and not  
to be shared further or quoted

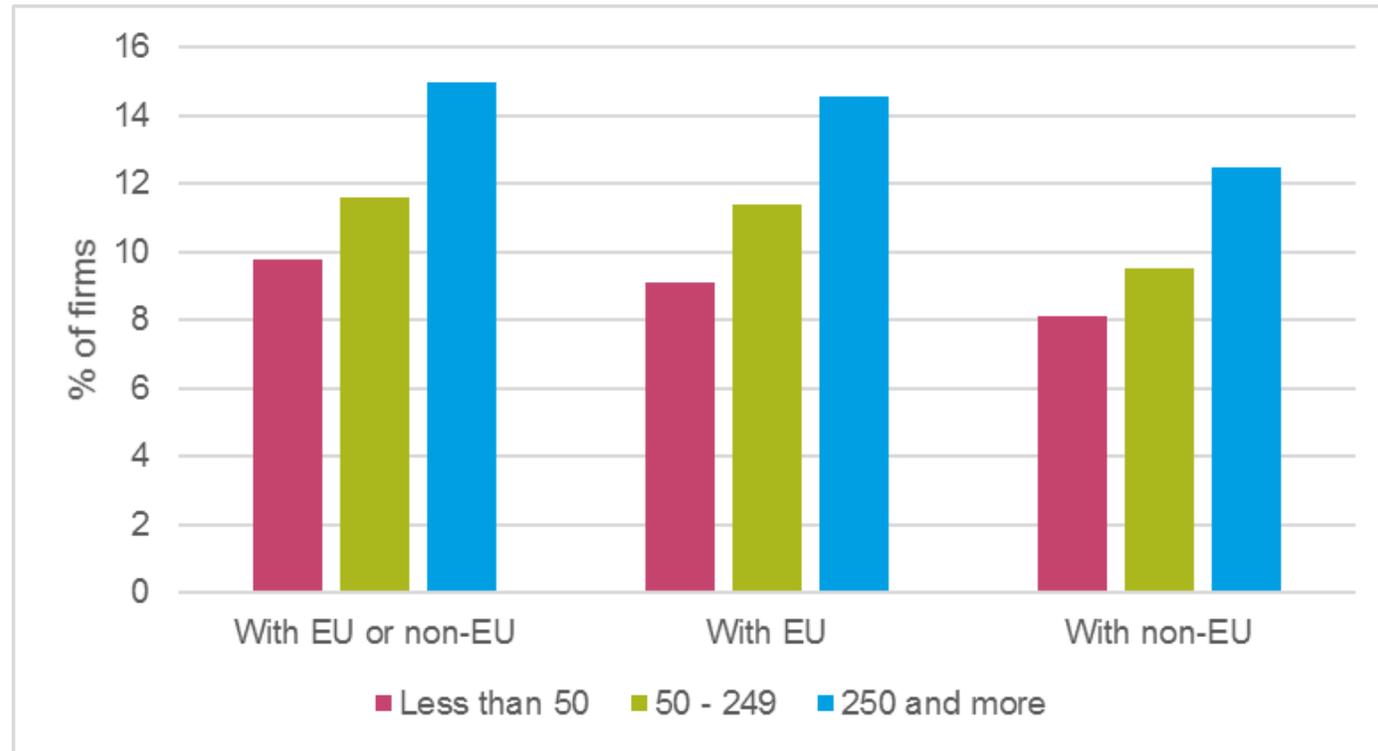
The share of firms exporting using a website or an app remained relatively unchanged



**Notes: The presented estimates are preliminary and not to be shared further or quoted.**

Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

The propensity to export using a website or an app is higher among larger firms



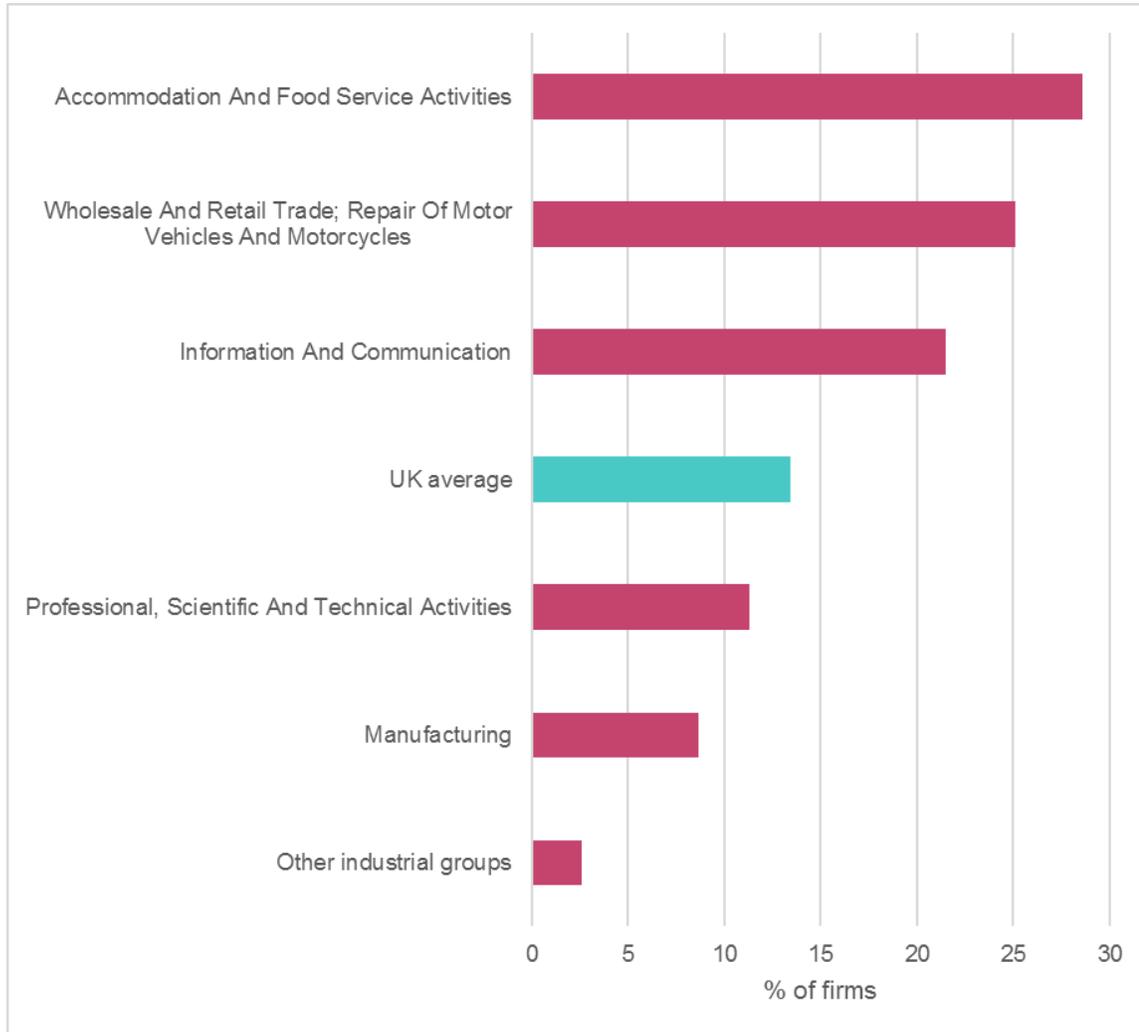
**Notes:** The presented estimates are preliminary and not to be shared further or quoted. Based on year 2016 data.  
Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

Firms located in London and East Midlands have the highest propensity to export using a website or an app



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Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

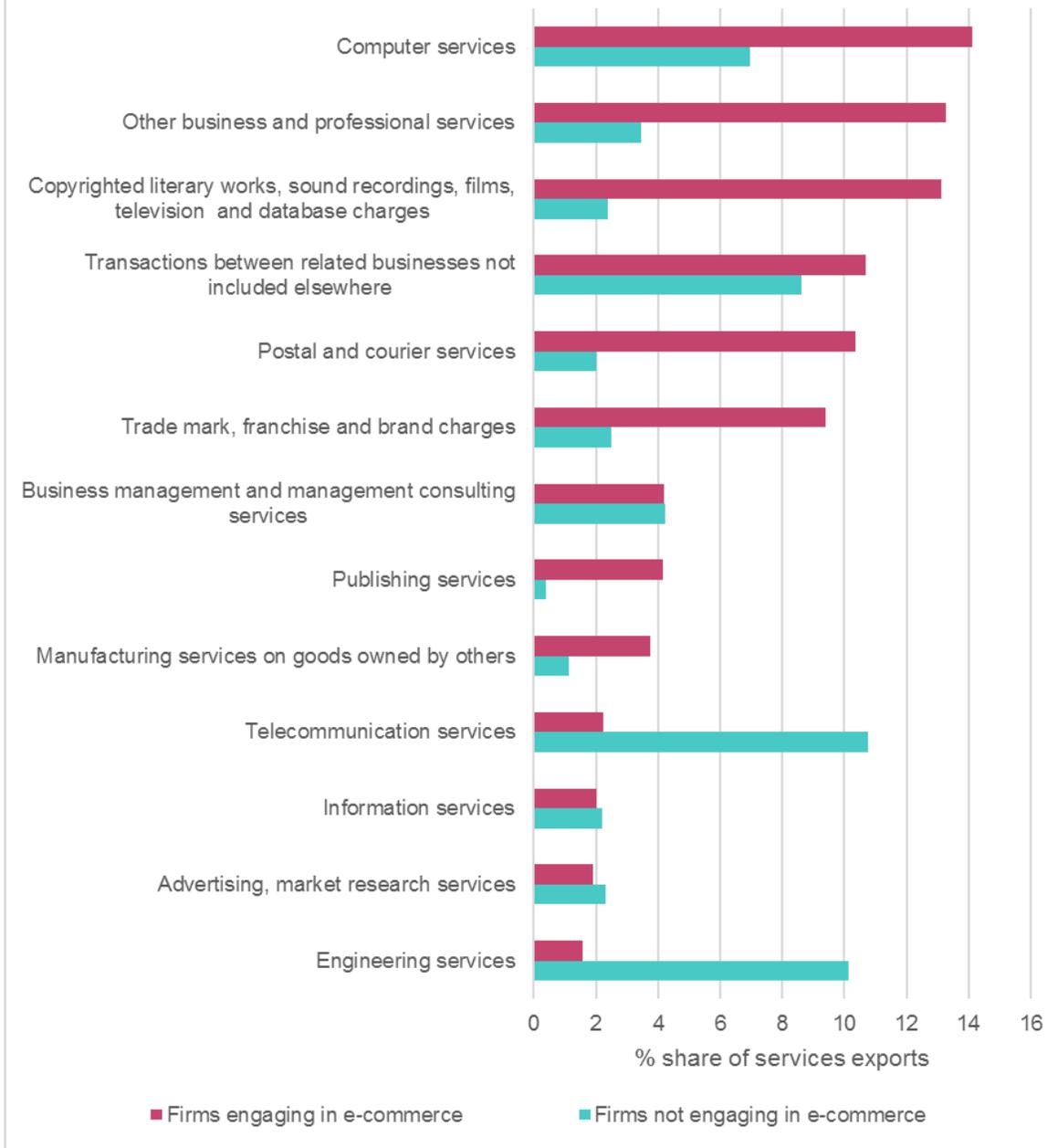
Propensity to export using a website or an app varies across sectors



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Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

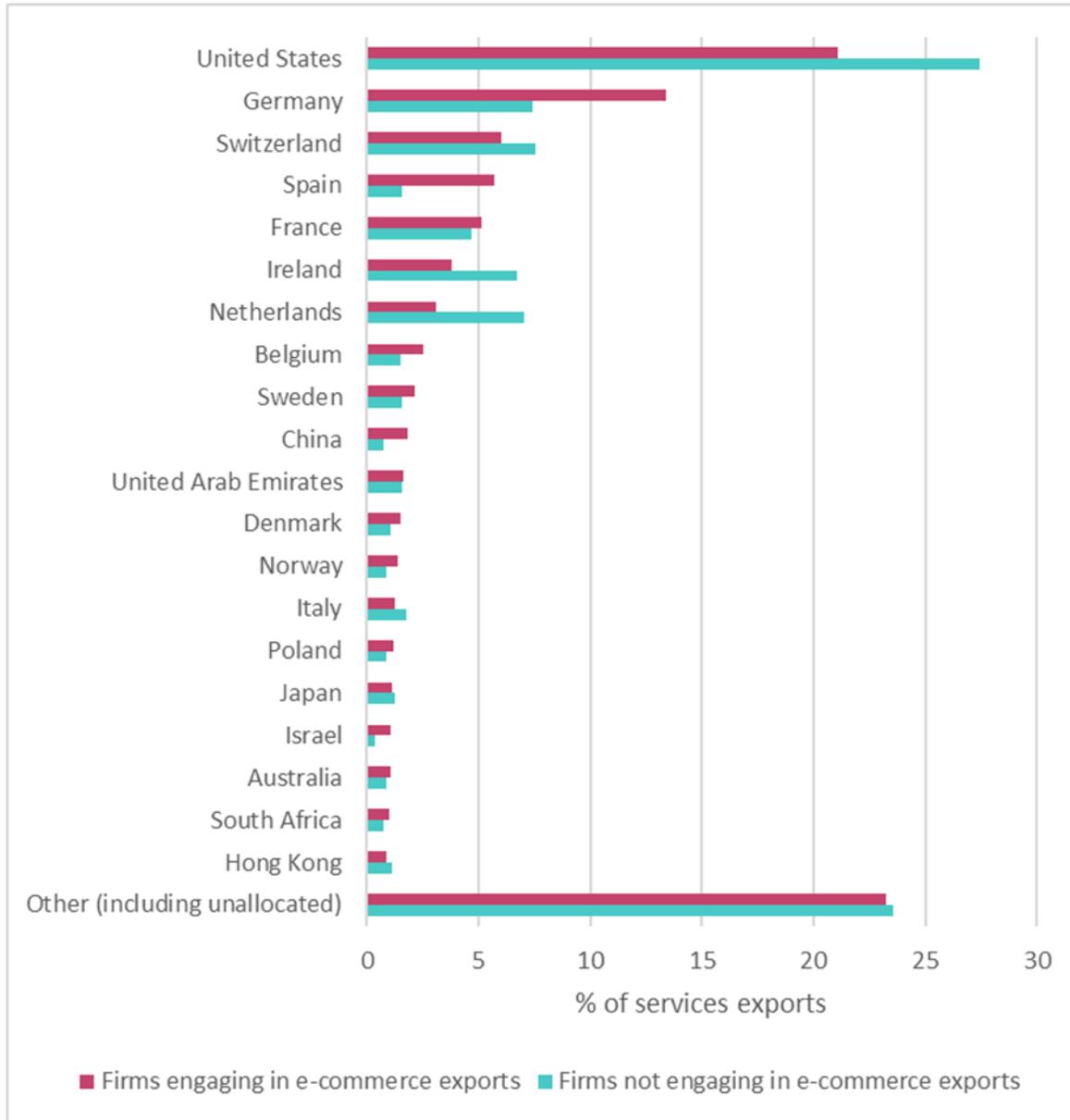
Firms engaging in e-commerce exports primarily export services such as computer services, professional services and copyrighted works



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Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

Germany, Spain and Belgium are relatively more important as services exports destinations for firms engaging in website or app exports



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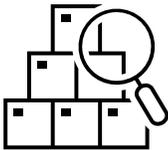
# Performance: firms engaging in e-commerce exports (against not engaging)



Not more likely to increase their **employment**



Only slightly more likely to increase the **share of e-commerce** sales in their turnover



Not more likely to increase the **range of exported services**



Not more likely to increase the **range of destination countries** for services exports

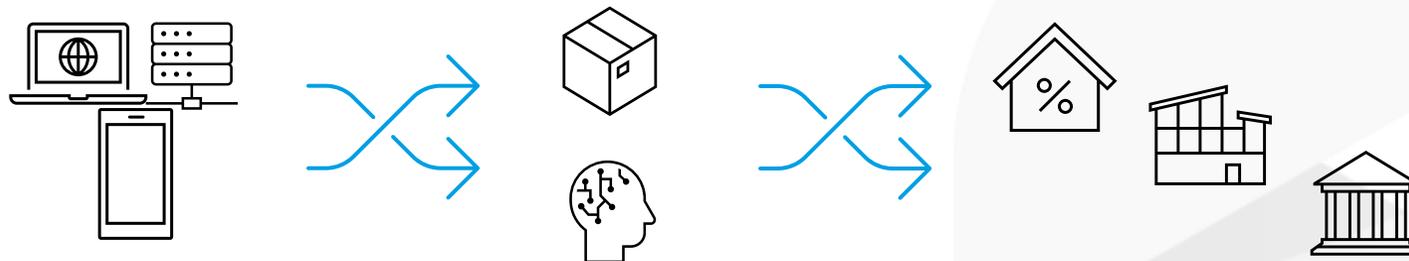
**Notes: The presented estimates are preliminary and not to be shared further or quoted.** Based on year 2010-2018 data

Sources: CE calculations based on ONS E-commerce Survey Secure Access and ONS International Trade in Services Survey Secure Access.

Improving data collection to develop better measures of digital trade

# Recent developments

- The publication of the first report on digital trade gave a big impetus to the ONS to develop better and more granular statistics on digital trade
- Since then, the Department for International Trade has been working closely with the ONS towards developing an improved E-commerce Survey
- New survey is expected to be launched next year, addressing some of the earlier discussed limitations



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