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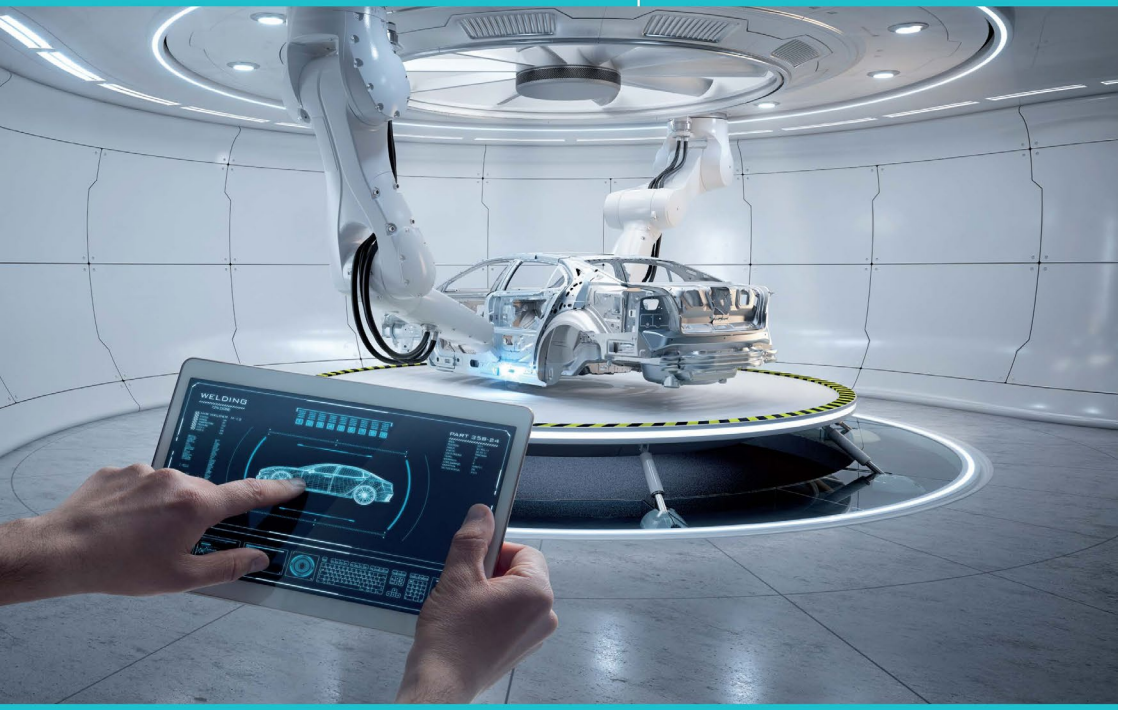
WORLD TRADE REPORT 2018

The future of world trade: How digital technologies are transforming global commerce



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An in-depth look at the World Trade Report 2018

20 November 2018

Structure

Section A – Introduction

Section B – Towards a new digital era

Section C – The economics of how digital technologies impact trade

Section D – How do we prepare for the technology-induced reshaping of trade?

Section C

- The economics of how digital technologies impact trade

Key findings

Digital technologies have the potential to:

- Further reduce trade costs
- Affect what products are traded across borders
- Reshape trade patterns
- Change the nature of GVCs

Trade costs

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We measure trade costs and we find:

- Trade costs have decreased over time >>
- Transport costs and information and transaction costs account for the largest share of the cross-country variation in overall trade >>

How digital technologies affect trade costs?

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- Significantly reduce transportation and logistic costs
  - GPS and self-driving capabilities or real time itinerary mapping reduce costs, enable real-time adjustments and make delivery more secure.
  - 3D printing reduces the need for transportation

- The cost of crossing the border falls with digitalisation >>

….How digital technologies affect trade costs?

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- Digital technologies reduce information and transaction costs.
  - Online platforms help overcome the lack of information
  - Machine translation brings down language barriers.
  - Mobile banking facilitate cross-border payments.
  - Blockchain reduce the cost of cross-border financial services, including trade finance.

Opportunities

- Digital solutions may also facilitate inclusion.

- Trade cost reduction would be especially beneficial for
  - Small enterprises
  - Remote countries and remote areas
  - Women

Challenges

- Many dimensions of digital divide (infrastructure and human capital)
  - Access to ICT >>
  - Digital gender divide
  - Digital divide between small and big firms
  - Digital divide between high and low skilled workers
- Inadequate regulatory framework (eg. IP)
- Concerns about: market concentration (winners-take-it-all dynamics), loss of privacy, security threats

What we trade will change

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- The sectoral composition of trade will be affected
  - Services trade will grow in importance, especially digitally enabled services >>
  - Trade in digitizable goods is likely to continue to fall. >>
  - Trade in time-sensitive, certification-intensive and contract-intensive goods will increase.
  - Mass customization.

Patterns of trade may change

- The importance of skills and capital endowment is likely to be reinforced
- So will energy infrastrucure (power supply) and digital infrastructure
- IP regulatory environment
- … Geographical factors may matter less

The nature of GVCs will change

AI and 3D printing may lead to

- Shorter supply chains (production closer to innovation centers or large customer base)
- Less exchange of goods and more exchange of data, software and blueprints
- .. But hard to say whether we will have more or less GVCs
  - To date, there is no evidence of a significant reshoring trend.

Quantitative impact of digital technologies on trade

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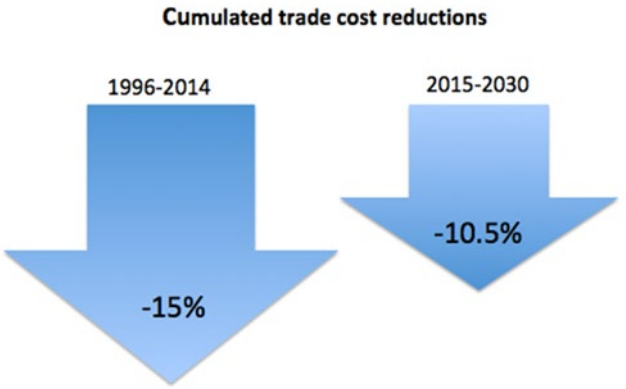
- WTO Global Trade Model



- Look at 3 channels:
  - Fall in trade costs
  - Servicification of production
  - Reallocation of tasks from
  - labour to capital (robotization)

Results

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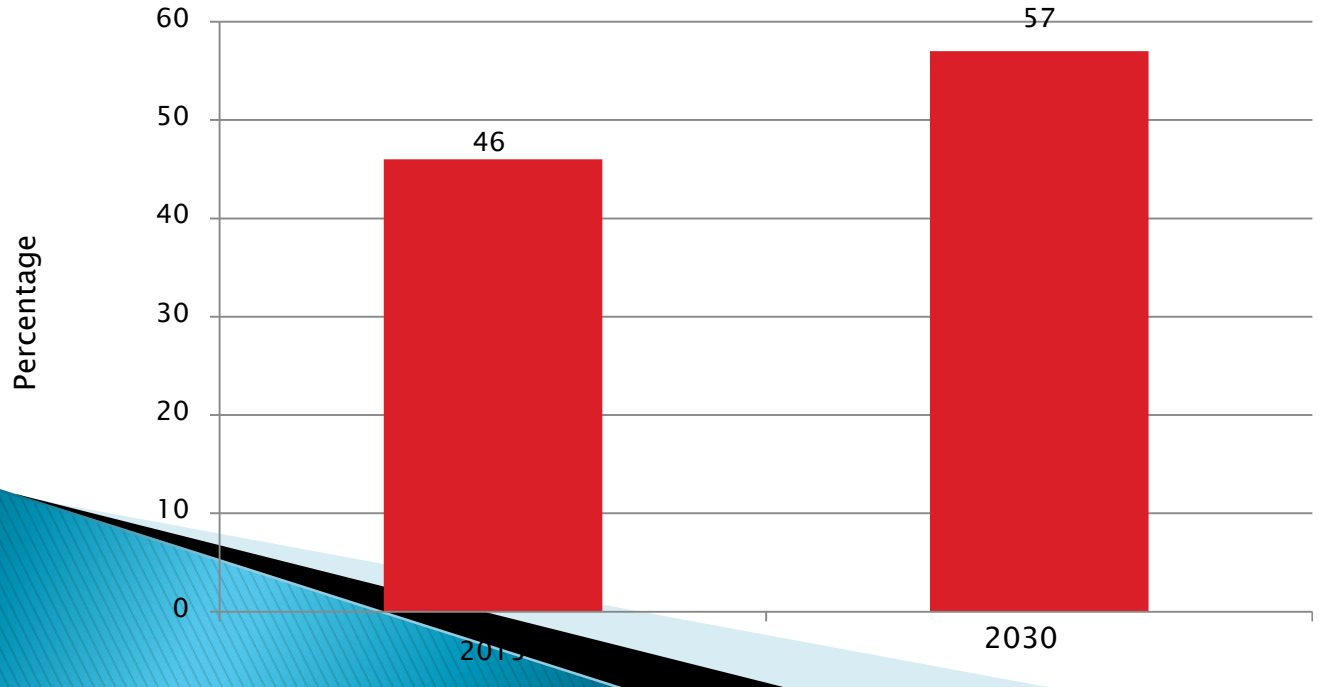
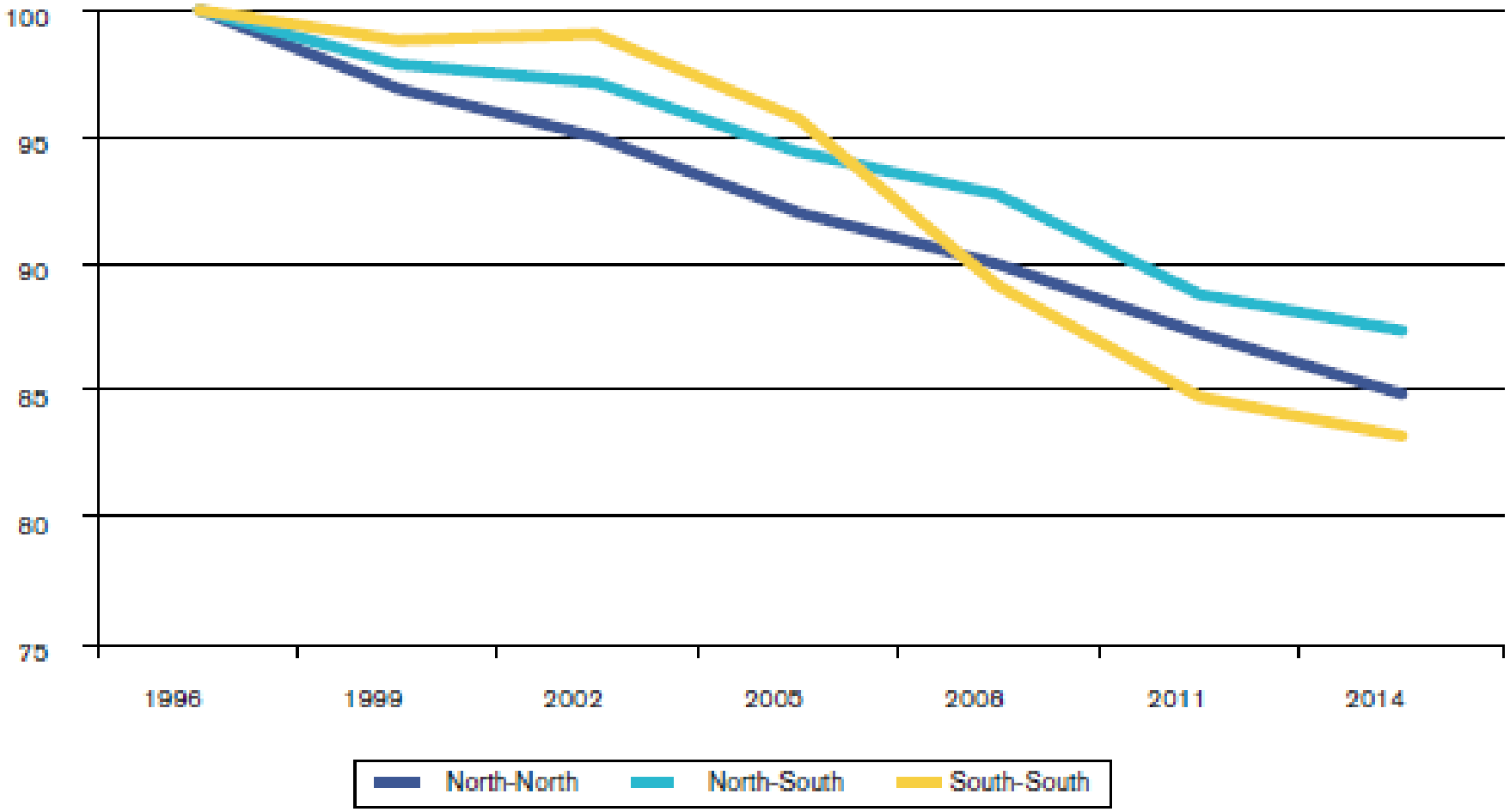
→International trade will grow around 2 percentage points more than the baseline scenario

→Developing countries share of global trade raises to 57%

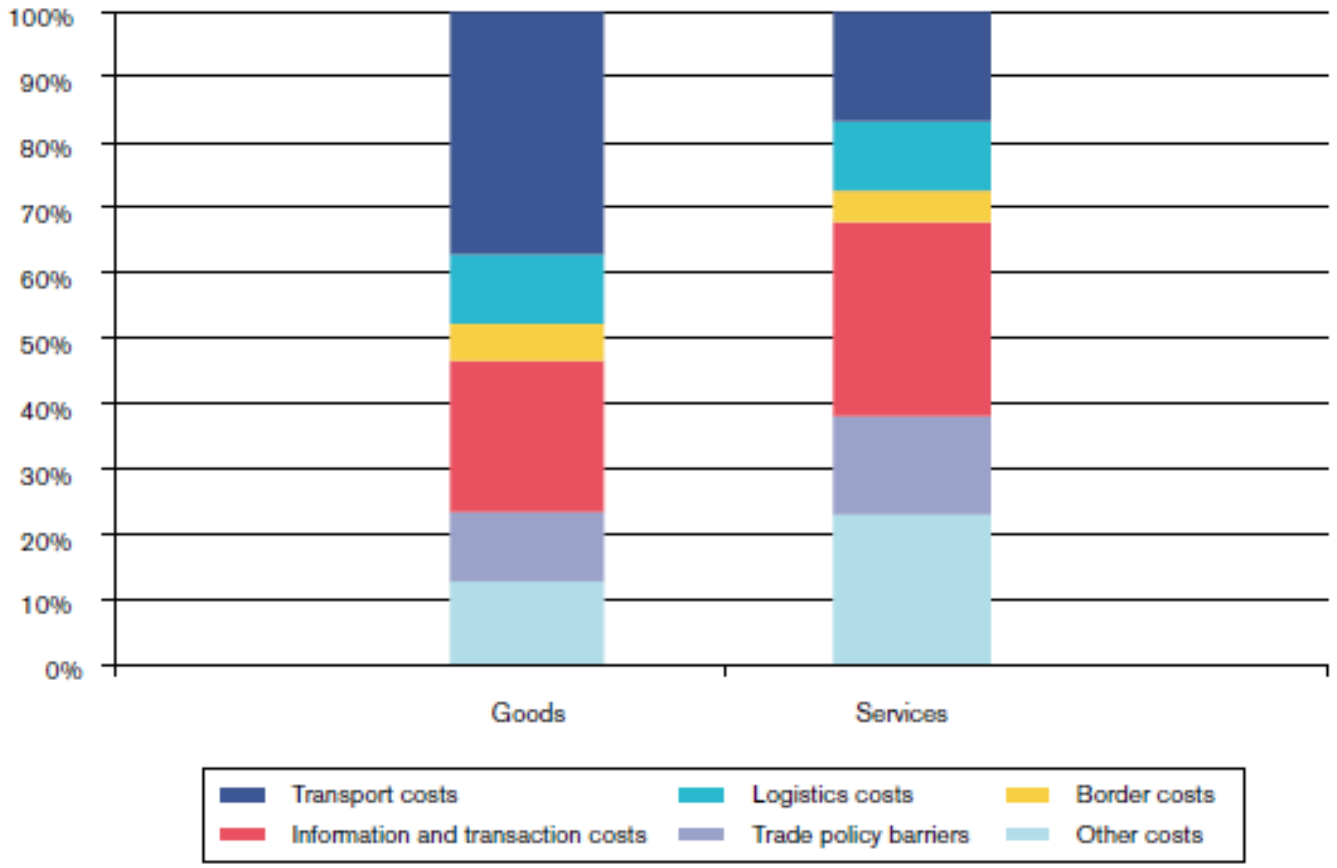


Trade costs fell over time



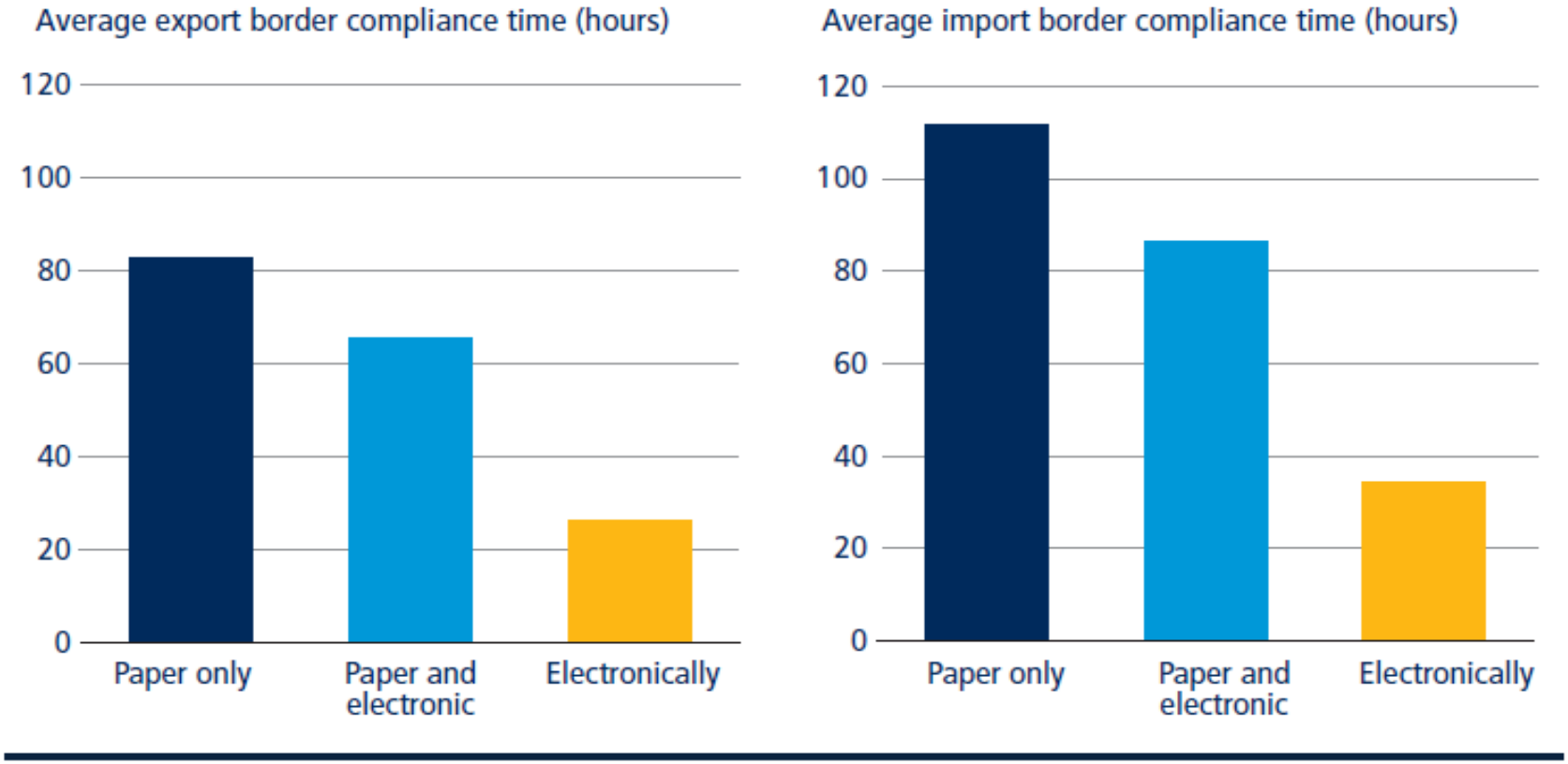
Source: World Bank-ESCAP database on International trade costs.

Trade costs breakdown



Source: WTO calculations using World Input-Output Database (WIOD) data and methodology from Chen and Novy (2011).

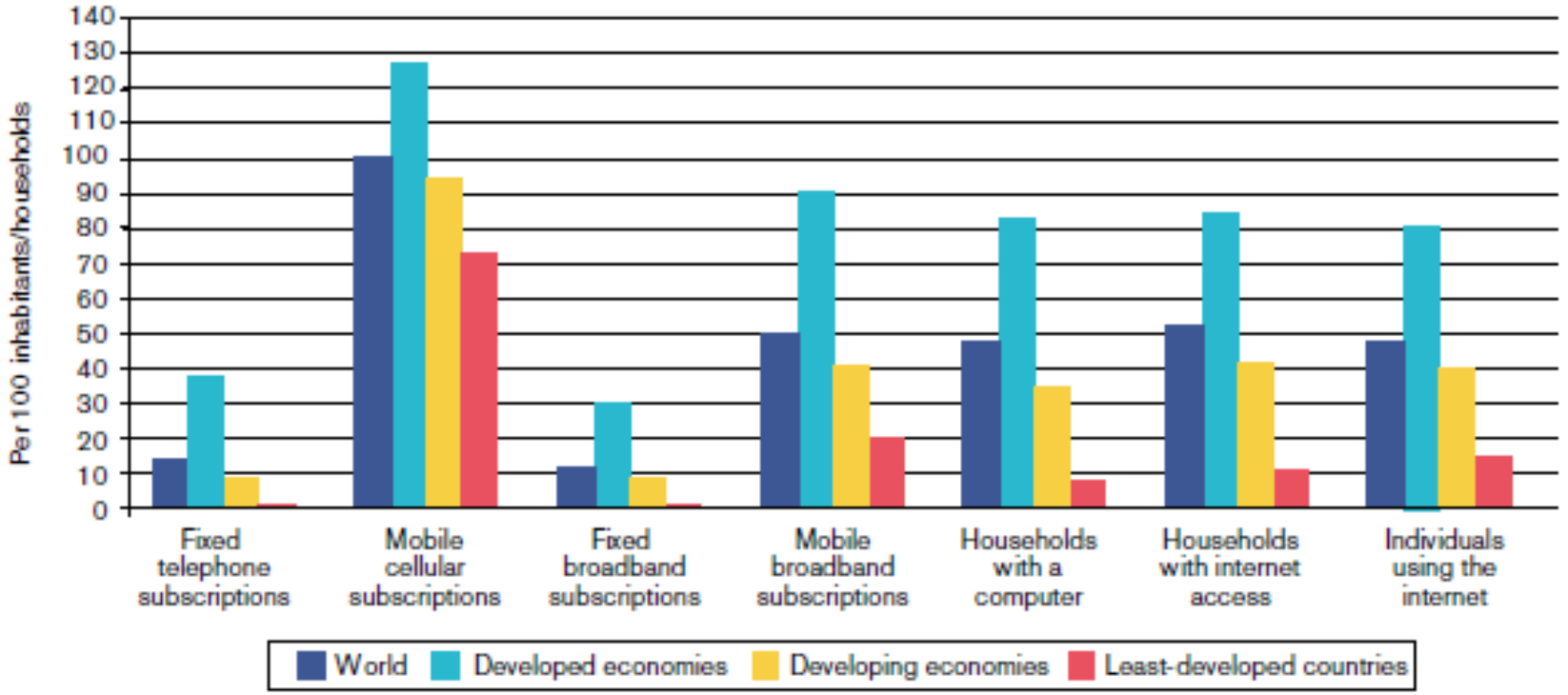
Gains from digitalization of customs documentation



Source: Doing Business database.

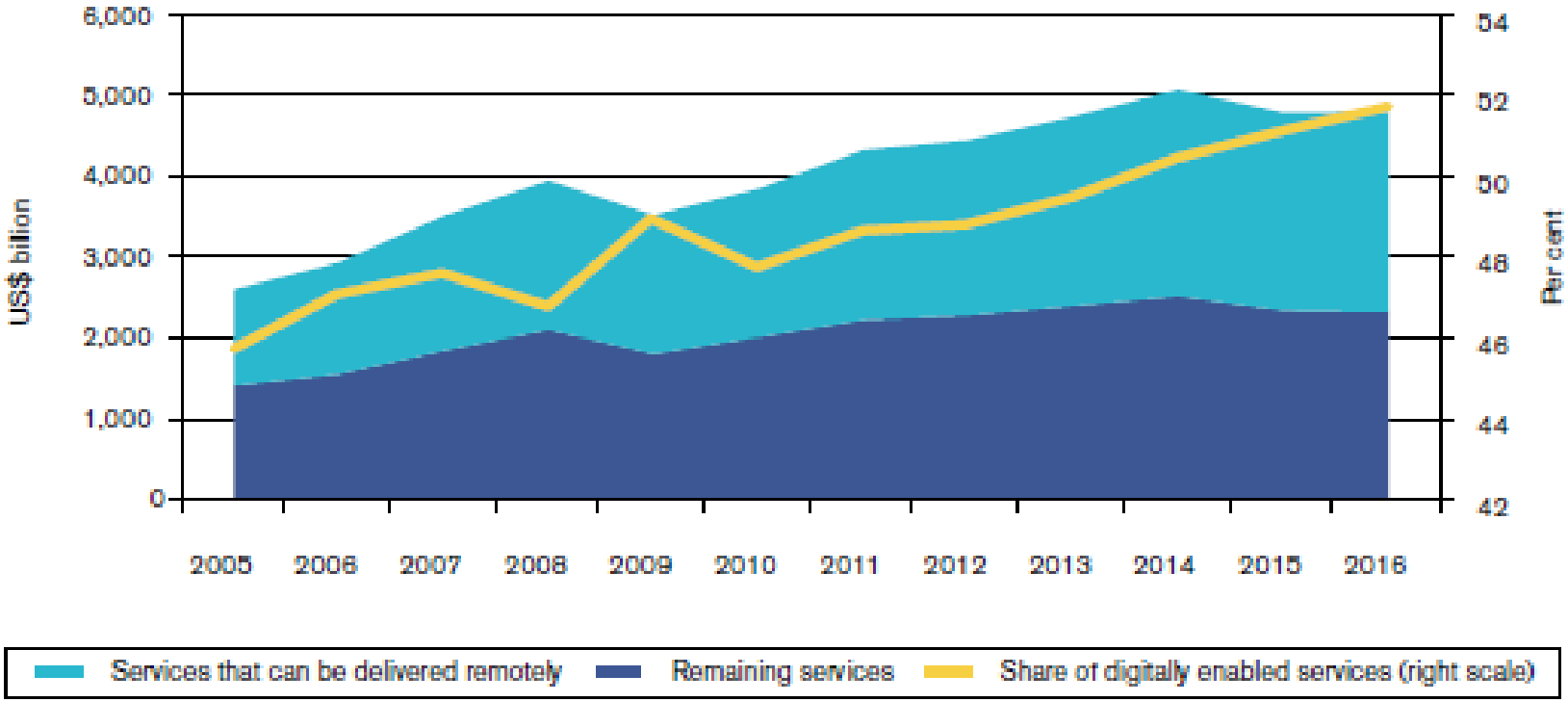
Note: The relationship is significant at the 1% level after controlling for income per capita. The three categories are: only paper submission of customs declaration is possible; both paper and electronic submissions are in use; and only electronic submission is possible. The sample includes 165 economies.

Digital divide – access to ICT



Sources: UNCTAD (2017b), based on ITU data.

Services trade will grow...



Source: Author's calculation based on data from the WTO Trade in Services Database (BPM6).

Trade in digitizable goods... are likely to continue to fall

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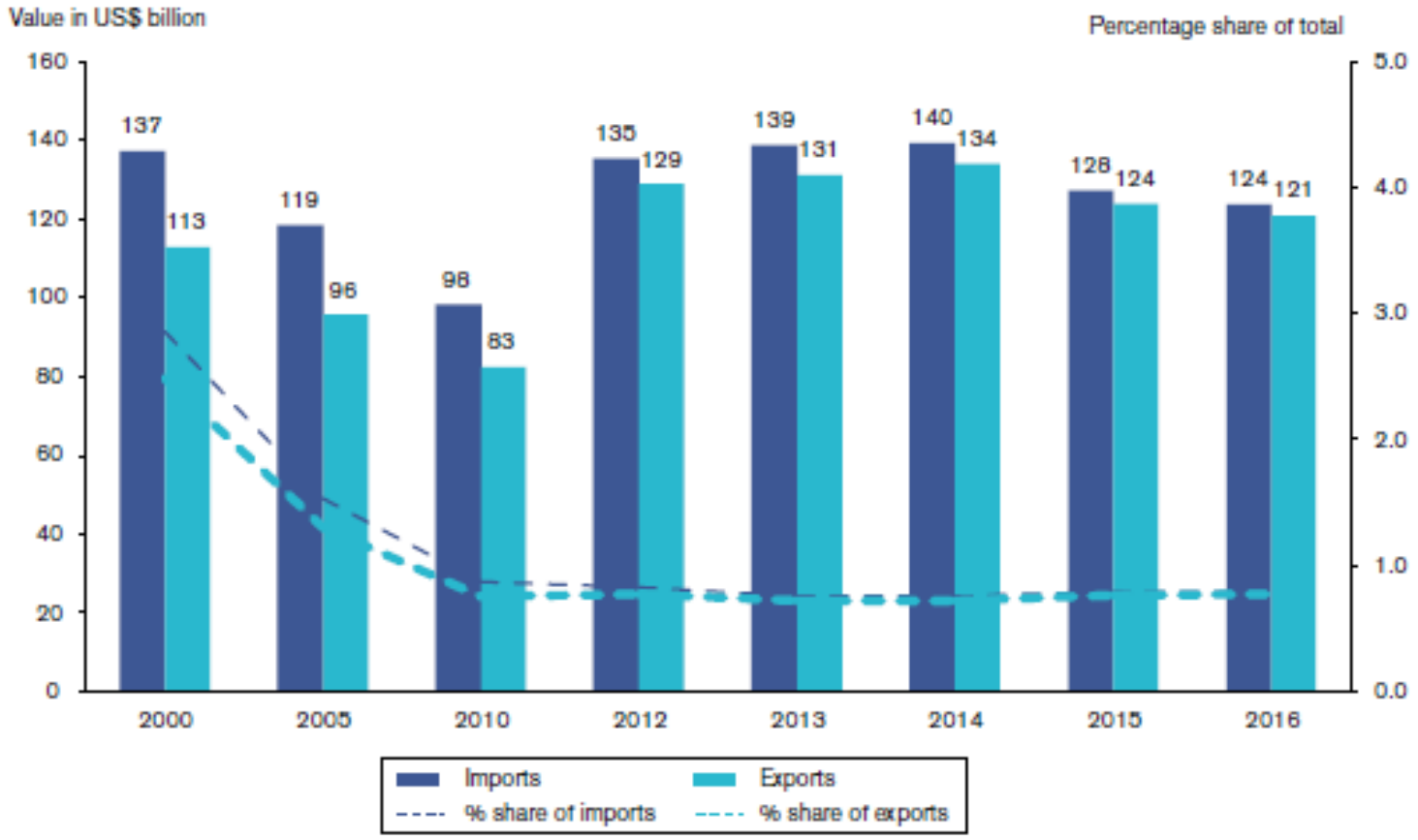

Source: WTO Secretariat calculations based on UN COMTRADE data.

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