TECHNOLOGICAL CHANGE AND GLOBAL NETWORKS

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UNICON Directors Conference
April 24, 2019
NEW FACE OF GLOBALIZATION

- Waves of globalization deeply affected by technologies
- Recent technological changes drastically reduced costs of information movement

- Countries are more and more linked through exchange of information
- Global value chains are shifting from goods to services and data
SERVICES IN GLOBAL VALUE CHAINS

<table>
<thead>
<tr>
<th>Gross services trade</th>
<th>Services embedded in goods trade</th>
<th>Intangibles provided to foreign affiliates</th>
<th>Free cross-border digital services</th>
<th>Adjusted value of services trade in value added</th>
<th>Goods trade in value-added terms</th>
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</thead>
</table>

1. Higher-end estimate.
2. In value-added terms. The value of services embedded in goods trade and the value of goods embedded in services trade have been removed.

NOTE: Services embedded in goods trade defined as services value added in goods trade. Estimate of intangibles provided to foreign affiliates based on company-level data on foreign affiliate economic profit and expenses, adjusted for the share of revenue associated with intangibles produced in headquarters country. Estimate of free cross-border digital services based on the number of foreign users of global websites and the implied value of digital services (such as social media and messaging services).


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8 Some trade in intangible assets is captured in trade statistics through intellectual property charges. Flows are sometimes driven by decisions of multinationals on where to put ownership of these assets on tax considerations. See Thomas Torsvø, Ludvig Wier, and Gabriel Zucman, The missing profits of nations, NBER working paper number 24701, June 2018, revised August 2018; and OECD/G20 Base Erosion and Profit Shifting (BEPS) Project, final report, OECD, May 2015.


10 We remove the value of goods embedded in services trade and the value of services embedded in goods trade.

SERVICES IN GLOBAL VALUE CHAINS

substantial investment driving experience that will define the off the assembly dealers, and sales.

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46 Similarly, trade statistics do not count the value of goods used in services (e.g., paper and equipment used at an accounting firm providing services across borders).

47 This assumes that the drug is manufactured and then exported. In some instances, pharmaceutical companies license drugs to be both manufactured and delivered abroad; when that is the case, the transactions are counted as traded services.

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INTERNATIONAL NETWORKS

- Global chains become more and more knowledge-intensive
- Value creation shifts to upstream activities
  - R&D, design
- Goods production becomes more regionally concentrated
  - Value added of the production itself is declining
  - Goods and marketing are customized for local markets
- Distributed production as a growing model
- In international networks human capital becomes the key
RUSSIA IN GLOBAL NETWORK - SUCCESS STORIES

• Technological companies with Russian "roots"
  • often use distributed production mode

Software
• Parallels/Acronis
• IBS Group
  • IT consulting and outsourcing
• Playrix
  • Games developer

Fintech
• XTX Markets
  • third-largest liquidity provider in the global foreign exchange market
• Revolut
  • Unicorn in digital banking