



MULTI-YEAR EXPERT MEETING ON

Trade, Services and Development

9th session

4–6 July 2022, Hybrid (online and Palais des Nations, Room XVII), 2.30–4.30 p.m. CEST

Session 2. *The potential for diversification towards and through digitally deliverable services*

Digitalization of services: What does it imply to trade and development?

Ms. Xiaolan Fu, Professor, University of Oxford, United Kingdom of Great Britain and Northern Ireland

*The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.





Digitalization of Services: What Does It Imply to Trade and Development?

Xiaolan Fu

TECHNOLOGY AND MANAGEMENT CENTRE FOR DEVELOPMENT

UNIVERSITY OF OXFORD

TRADE IN DIGITALLY DELIVERABLE SERVICES: ANOTHER ENGINE OF GROWTH?

- The role of services in growth and structural transformation
- The promise of digital transformation in services:
- Disembody labour from services delivery, “third unbundling”
- Make hundreds of millions of services jobs tradable, “virtual immigration”
- 1st stages: growth of existing e-services.
- 2nd stage: new possibilities ‘telepresence’, ‘telerobotics’ and other breakthroughs.

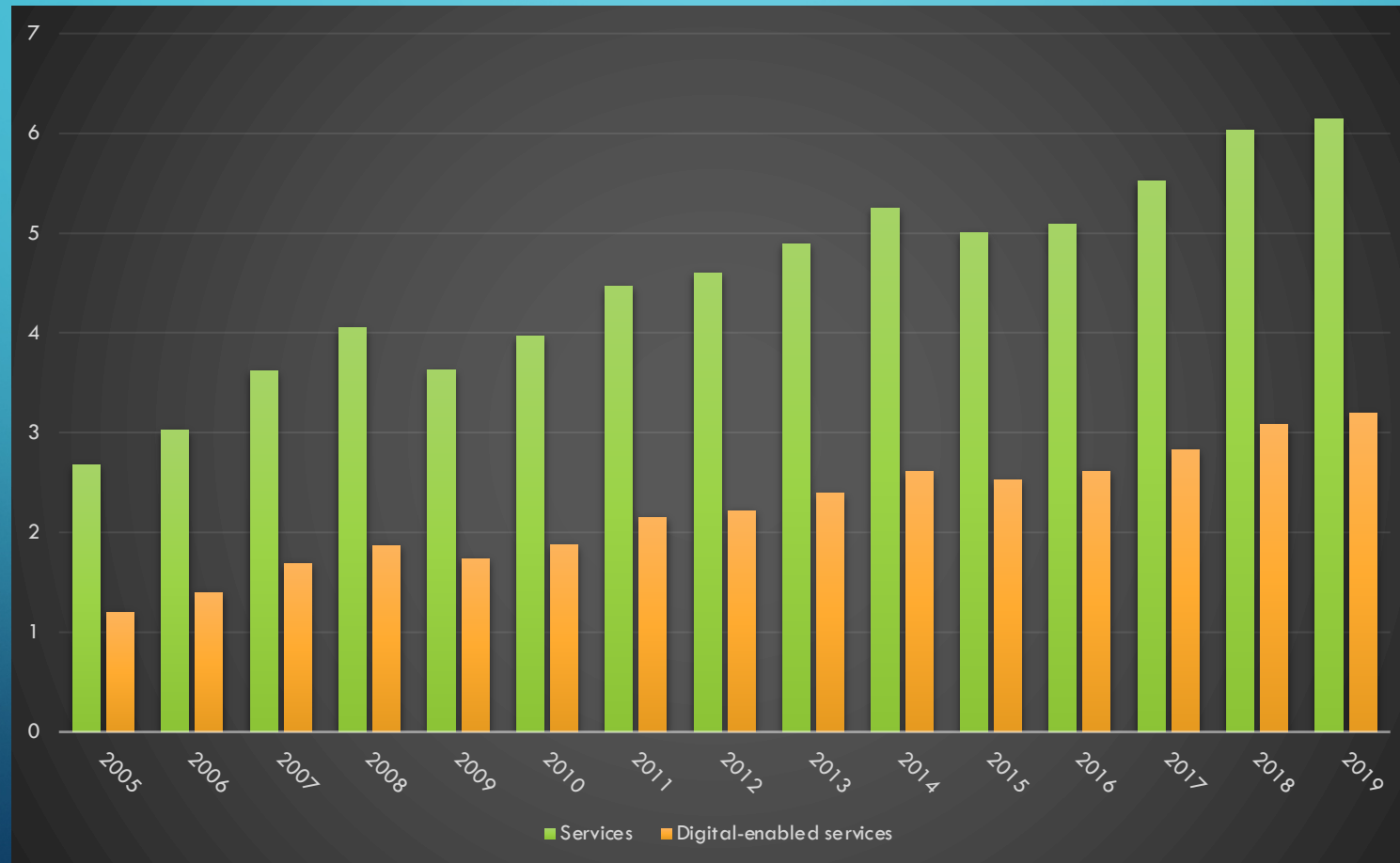


- The latest trends in trade and application of digitally deliverable services (DDS)
- Transformative impact of DDS on the “modes” of supply of services
- Digital transformation of services in education, health, and agricultural sectors
- Opportunities arising from DDS
- Challenges in promoting DDS

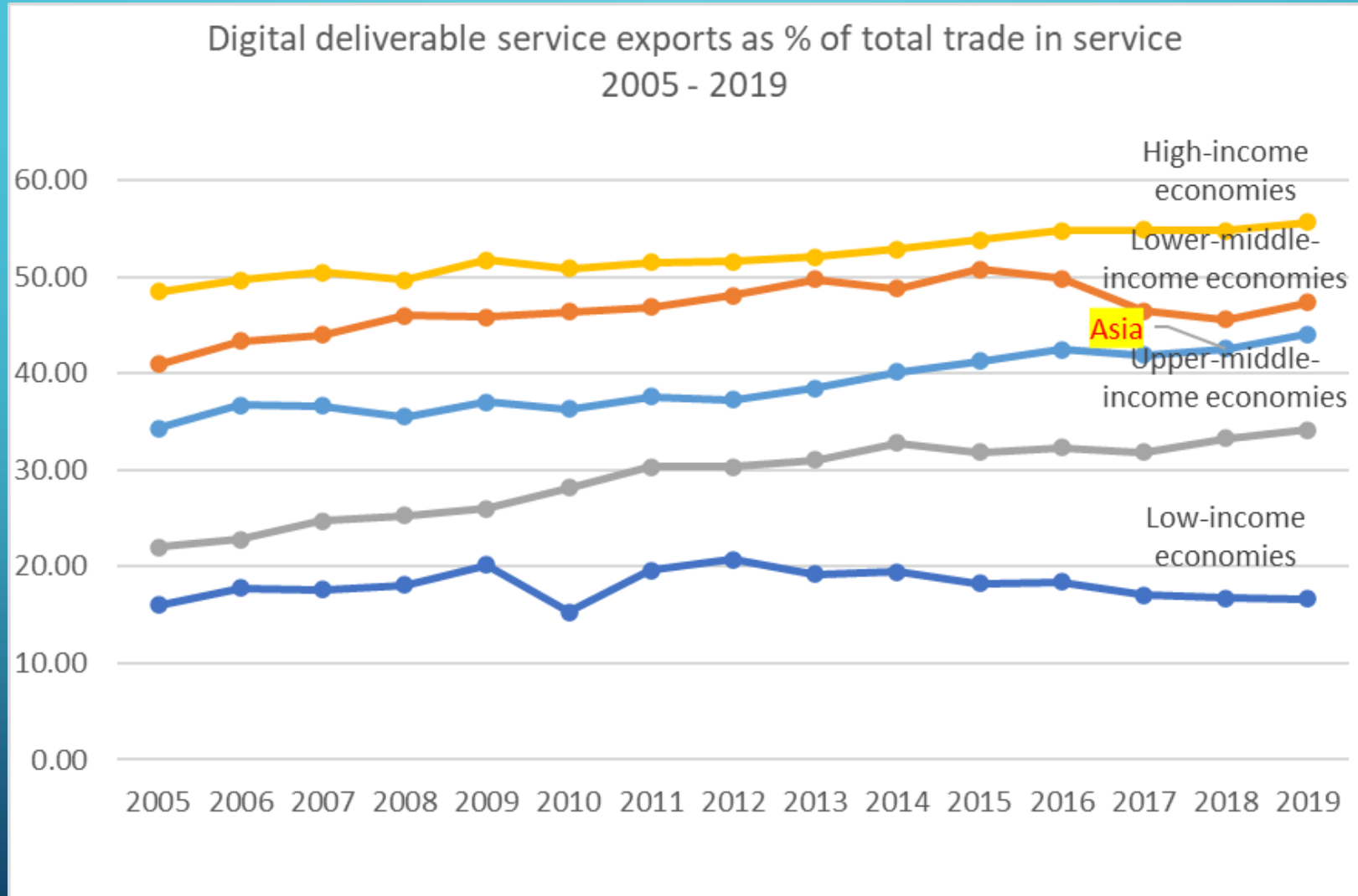
Digitally deliverable services (DDS) include ICT services themselves, sales and marketing services, insurance and financial services, professional services, back-office services, research and development (R&D), and education and training services, health care services, among others (UNCTAD, 2015).

The Latest Trends In Trade And Application of DDS

Exports of Services And DDS, US\$ Trillions

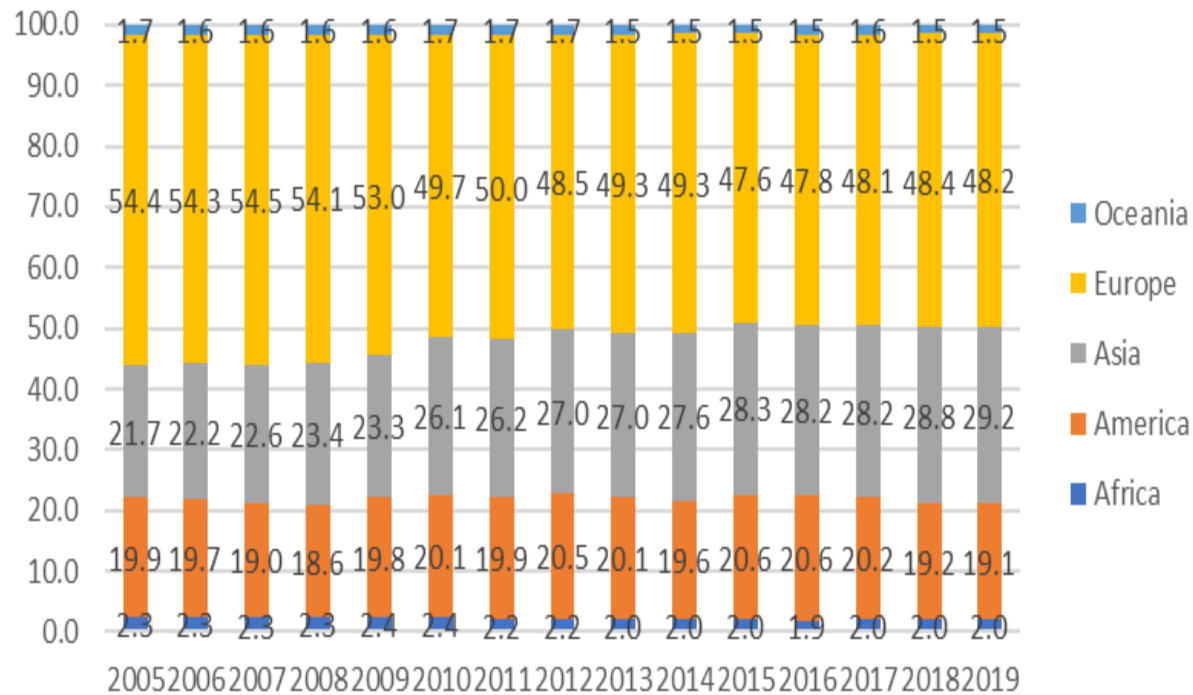


An Increasing Trend of Digitalising Service



UNEVEN GLOBAL DISTRIBUTION OF DDS

The share of global service exports (in %), 2005 - 2019

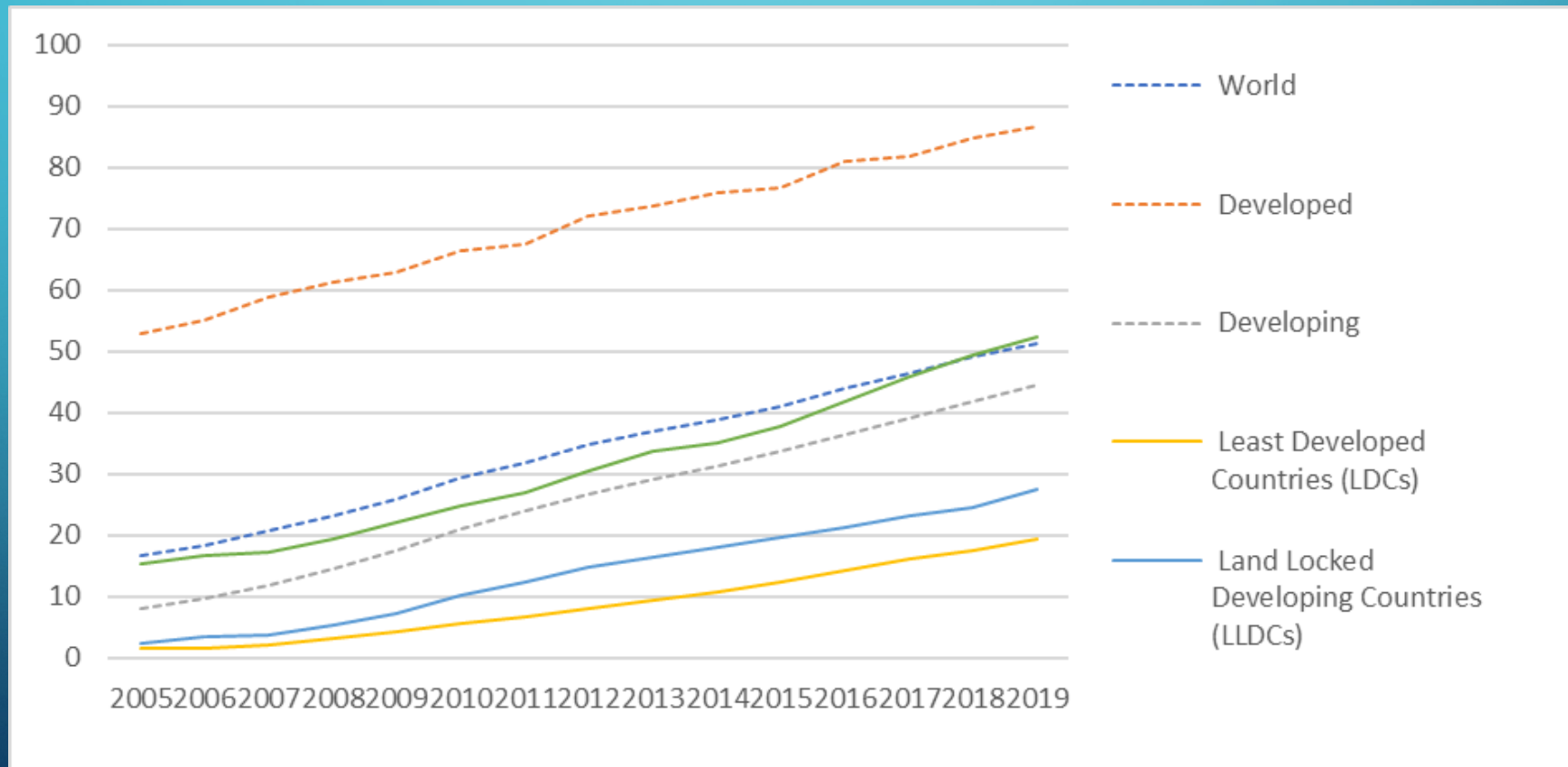


Top 10 Countries	Share of global digitally deliverable service exports, average 2015 - 2019
United States	17.30
United Kingdom	9.96
Germany	6.57
Ireland	5.68
Netherlands	5.37
France	5.02
India	4.45
China	3.94
Japan	3.56
Singapore	3.42

Source: Fu et al (2021) based on data collected from UNCTAD Stat

Digital Divide Prevents Low-income Countries from Participating in Trade in DDS

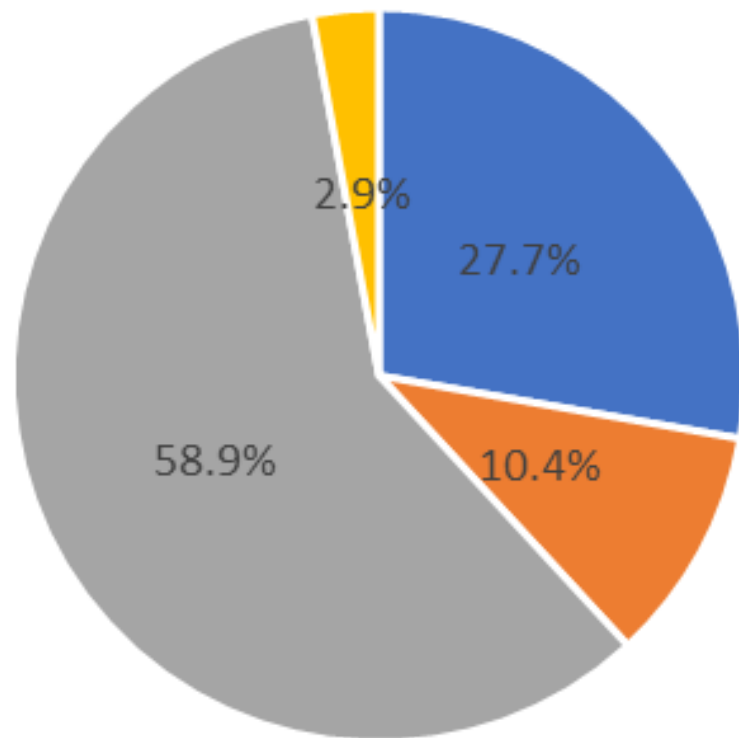
- Individuals using the internet (per 100 inhabitants) 2005-2019



The background is a dark blue gradient. In the four corners, there are white, stylized circuit board traces. These traces consist of straight lines that turn at right angles, ending in small white circles, resembling electronic components or nodes on a circuit.

Transformative Impact Of DDS On The “Modes” of Supply of Services

Commercial Services Trade By Modes Of Supply, Estimated Percentages In 2017



- Mode 1: Cross-border transactions
- Mode 2: Consumption abroad
- Mode 3: Commercial presence in another country
- Mode 4: Presence of individuals in another country

Examples of Services Trade Changed By Digitalization

Digital technology & tools (In addition to ICT technology)	Example	Shifts between Modes of Supply
Digital (e-commerce) platforms: (e.g.) e-commerce platform, data processing tools, blockchain, virtual assistants	Amazon, Alibaba, Booking, Airbnb Virtual assistants for customer service, AI integration in automotive industry	From Mode 3 to Mode 1
Video Coding and streaming: (e.g.) video conferencing, online education, market information	Massive Open Online Courses (MOOC) Online agricultural extension and market information services	From Mode 2/Mode 3 to Mode 1
Artificial intelligence, robotics: (e.g.) telemedicine	AI Robotics in medical services	From Mode 2/Mode 4 to Mode 1

Modes of S. Trade

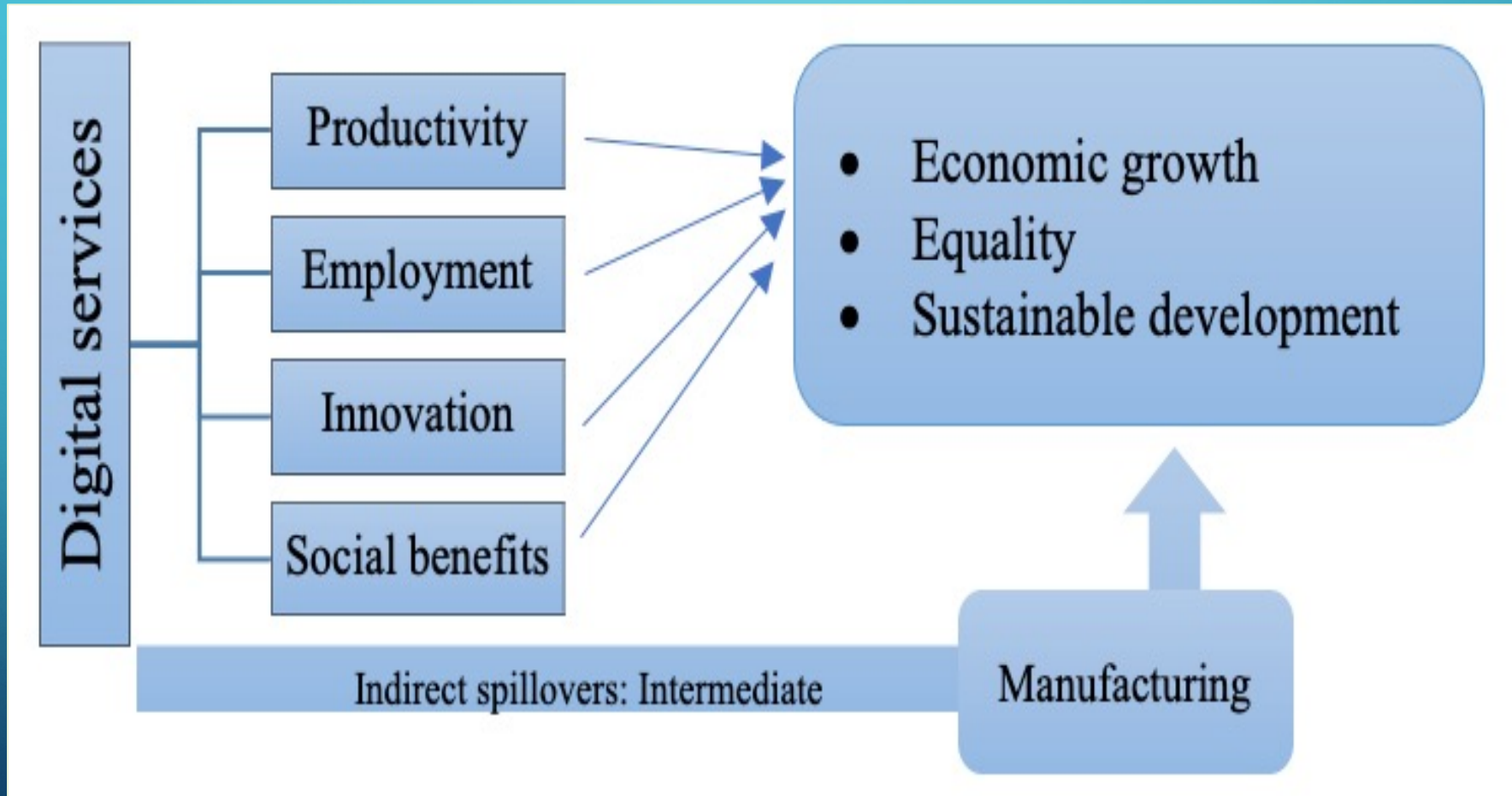
- M1 (Cross-border supply)
- M2 (Consumption abroad)
- M3 (Commercial presence)
- M4 (Presence of natural persons)

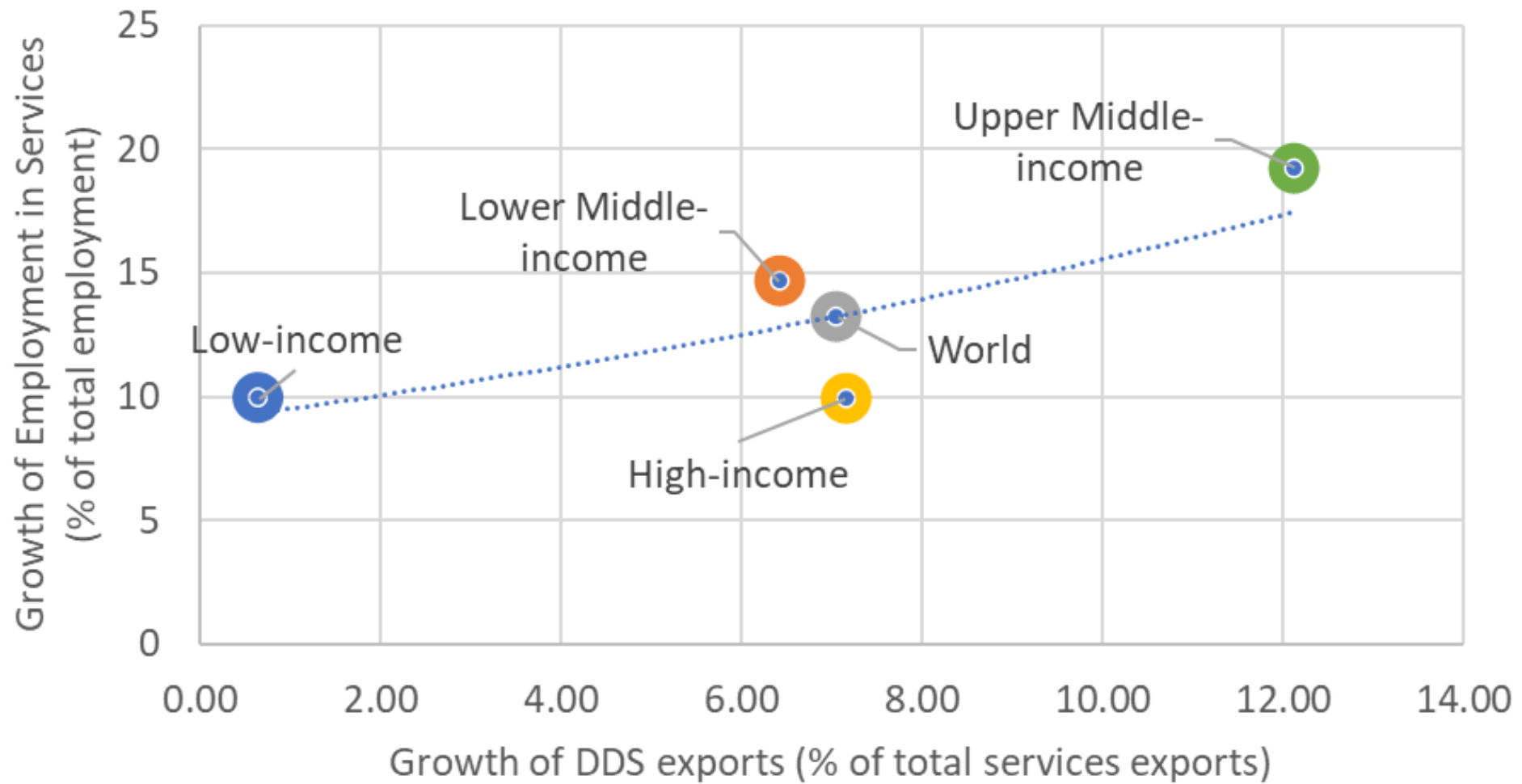
EXAMPLES

- **Online education services**
- **Digitalisation of health services**
- **Digitalisation of services and agriculture**
 - ✓ Production and market Information sharing
 - ✓ Facilitating business transactions
 - ✓ Automating the irrigation



Opportunities Arising from DDS for LDCs





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Challenges In Promoting DDS in LDCS

- **Digital divide**
- **Lack of skills**
- **Lack of infrastructure**
- **Baumol trap in the job market**
- **Regulatory and institutional challenges in labour market**

COVID-19, OPPORTUNITIES & CHALLENGES

- The COVID-19 pandemic has drastically accelerated the digitalization.
- It offers opportunities, new drivers of economic growth through services' direct contribution and provision of higher quality intermediaries
- Promoting structural transformation, and a resilient and dynamic Asia.
- But also risks of increasing disparities in digital services trade and subsequently increasing inequalities in income btw & within countries.
- The competitiveness in digital services determined by *intangibles*, and also enhances the *intangible assets* of a company/nation.
- Greater requirement to regulation, and great challenges to data privacy.

Approaches To DDS Policy Formulation

- **A “whole-of-government approach” in policymaking for the services sector development.**
- **Building trust and confidence in trade in DDS**
- **Promoting entrepreneurship and multi-stakeholder collaboration**
- **Promoting digital competencies through public-private partnership**
- **Promoting international dialogue on trade rules**

Legal and Institutional Measures Relevant to Digital Service Trade

Measures	May be applied to...
Mandatory localization requirements	Increase the need to set up local representative office/branch, or to set up data centre locally Call for special standards for digital service equipment or services
Market entry restrictions	Limit digital service providers or digital platforms to operate in a country's jurisdiction
Consumer rights protection	Restrict the cross-border movement of data
Intellectual property protection	Ensure application of service-importing country's privacy protection rules Protect digital copyright, digital trademark rights
Unclear legal responsibilities	Control cross-border fraud
Content inspection	Ensure privacy protection



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