Next generation technologies and the future of global trade

Mark Purdy
Purdy & Associates
Evidence on technology and trade

New technologies can dramatically alter the extent and nature of international trade. Examples: the printing press, the telegraph, modern shipping containers, etc.
Evidence on technology and trade

- The internet has transformed trade in multiple ways:
  - Two-sided digital platforms
  - Lower costs of international market entry
  - Emergence of digital native companies
  - Workflow technologies to co-ordinate global production chains
- A variety of empirical studies have broadly confirmed the positive and statistically significant impact of internet adoption on bilateral trade (e.g., Osnago and Tan, 2016; Rodriguez-Crespo et al, 2021)
International trade in digitally-deliverable services has been growing steadily.

International trade in digitally-deliverable services (share, %)

- World
- Americas
- Asia
- Europe
Next, next-generation technologies will reshape trade in at least two major ways:

Technologies that dramatically reduce trade frictions related to borders, supply chains, and trade finance:
- AI / Machine learning, e.g., instant language translation, computer vision and sensors for supply-chain tracking; intelligent document processing for customs procedures;
- Distributed ledger technologies (e.g., blockchain), e.g., real-time verification of credit or supply-chain transactions

Technologies that reduce the role of distance, borders, and materiality in trade:
- 3-D printing
- Virtual / augmented reality; the emergent metaverse
- Computer-generated holography