ICT trade and policy trends

Scarlett Fondeur Gil

Science, Technology, and ICT Branch
### UNCTAD and ICT for development

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- **International debate**

- Science, Technology and ICT Branch (former ICT and E-Business Branch)
Measuring the economic impact of ICT

- **Three ways** to examine link between ICTs and growth:
  1. ICT producing sector
  2. ICT investments (all industries)
  3. ICT use by firms

- For literature review, see chapter 3 of the UNCTAD Information Economy Report
The impact of ICT on labour productivity in OECD countries (at the firm level)

- Similar technologies impact differently on firms in different markets - a 10% increase in the share of employees using computers results in:
  
  - 1.8% higher labour productivity in manufacturing and 2.8% in services in Finland (Maliranta & Rouvinen, 2003)
  - 1.3% higher labour productivity in the entire business sector in Sweden (Hagén & Zeed, 2005)
  - 2.1% higher labour productivity in manufacturing and 1.5% in services in the UK (Farooqui, 2005)
Joint UNCTAD – Thailand NSO Project

Impact analysis of ICT use on labour productivity in Thailand
(at the firm level) – preliminary results

- Manufacturing firms with a 10% higher share of employees using computers have on average 3.5% higher labour productivity
- Basic technologies such as computers still make up for an important share of differences between firms in developing countries
- A higher share of employees using computers makes most difference in terms of production efficiency in:
  - Large firms (more than 80 employees)
  - Middle-aged firms (founded between 1991 and 1996)
  - Firms located in the South
  - Firms engaged in the wood industry (ISIC 20) and machinery & equipment (ISIC 29)
World exports of ICT goods, 1996 - 2005

Source: UN COMTRADE
Direction of ICT goods trade originating in developed and developing economies, 1996-2005

Source: UN COMTRADE
Exports of computer and information services by level of development

Source: IMF BOP data and UNCTAD calculations
Thank you

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