WTO Symposium on Telecommunications
to Commemorate the 10th Anniversary
of the Fourth Protocol to the GATS

ICT trade and policy trends

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UNCTAD and ICT for development

Â Science, Technology and ICT Branch (former ICT and E-Business Branch)

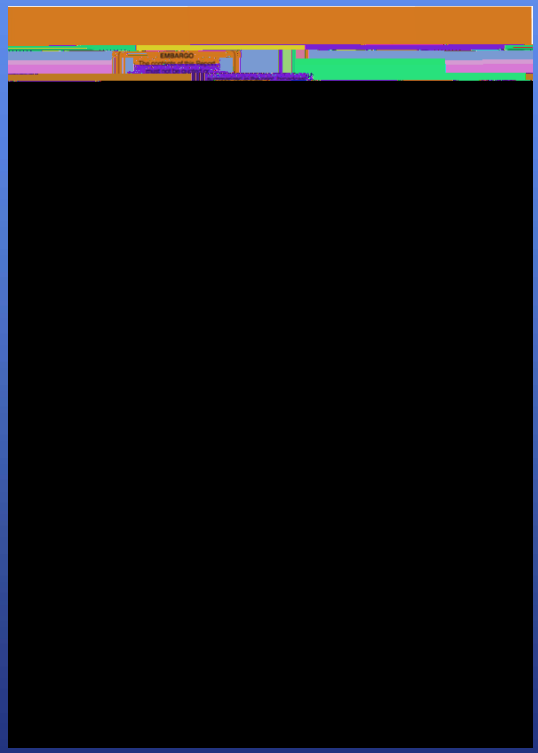
ICT access and use by enterprises

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:

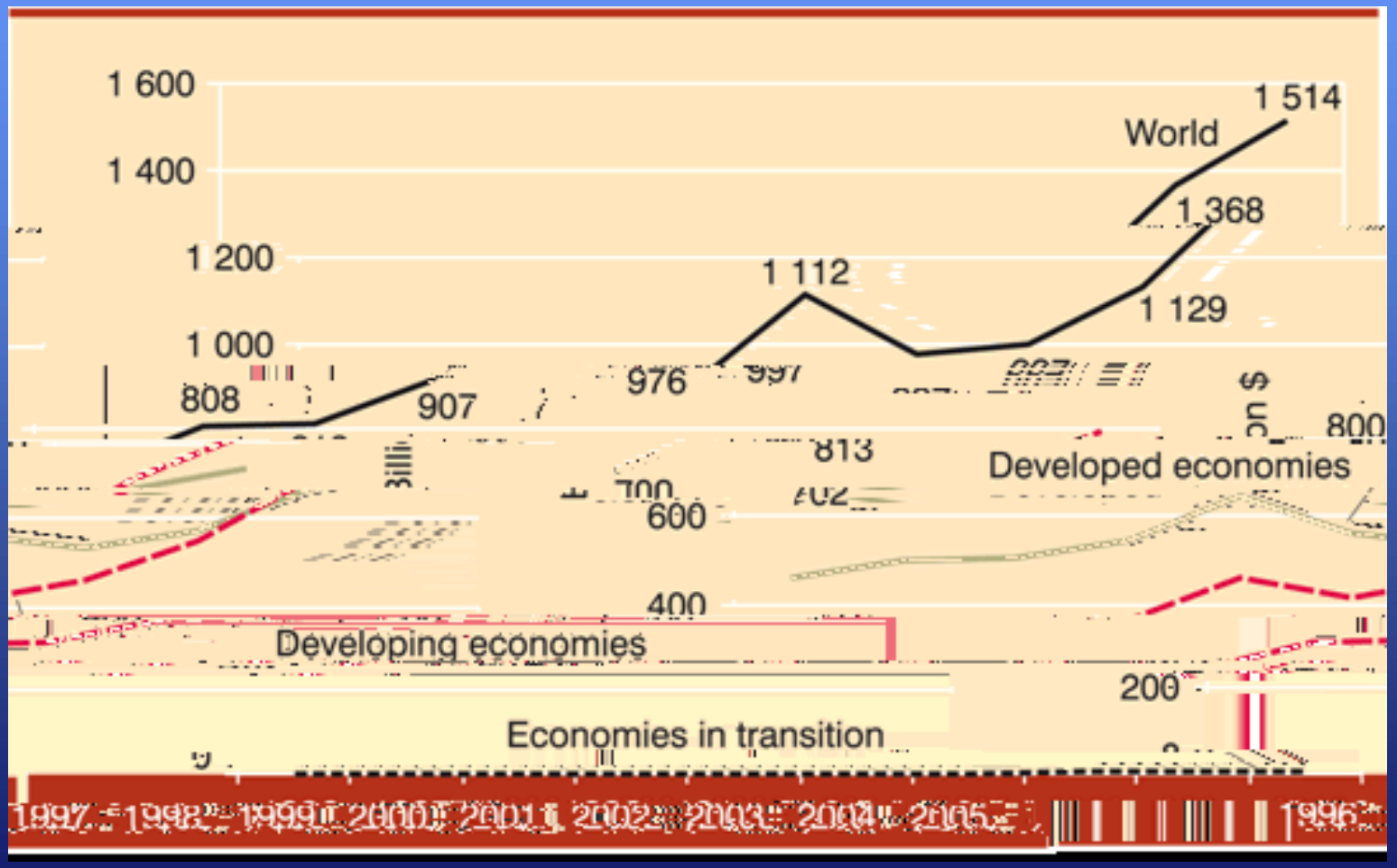
- 1.8% higher labour productivity in manufacturing and 2.8% in services in Finland (*Maliranta & Rouvinen, 2003*)
- 1.3% higher labour productivity in the entire business sector in Sweden (*Hagén & Zeed, 2005*)
- 2.1% higher labour productivity in manufacturing and 1.5% in services in the UK (*Farooqui, 2005*)

Joint UNCTAD – Thailand NSO Project

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

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

World exports of ICT goods, 1996 - 2005



Source: UN COMTRADE

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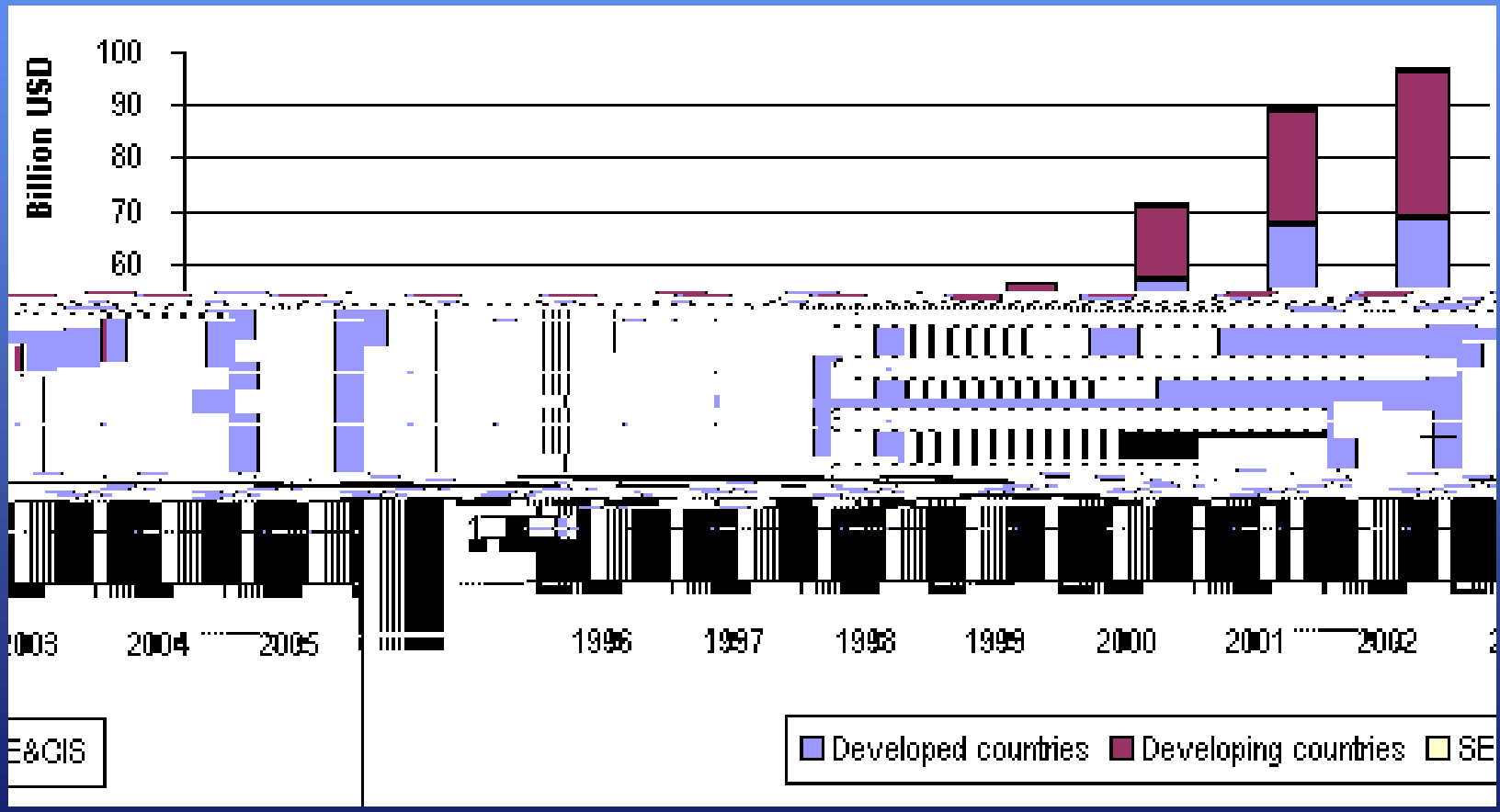
Exports of computer and information services by level of development



Source: IMF BOP data and UNCTAD calculations

Thank you

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