

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

## ICT trade and policy trends

*Scarlett Fondeur Gil*

*Science, Technology, and ICT Branch*



**UNCTAD**

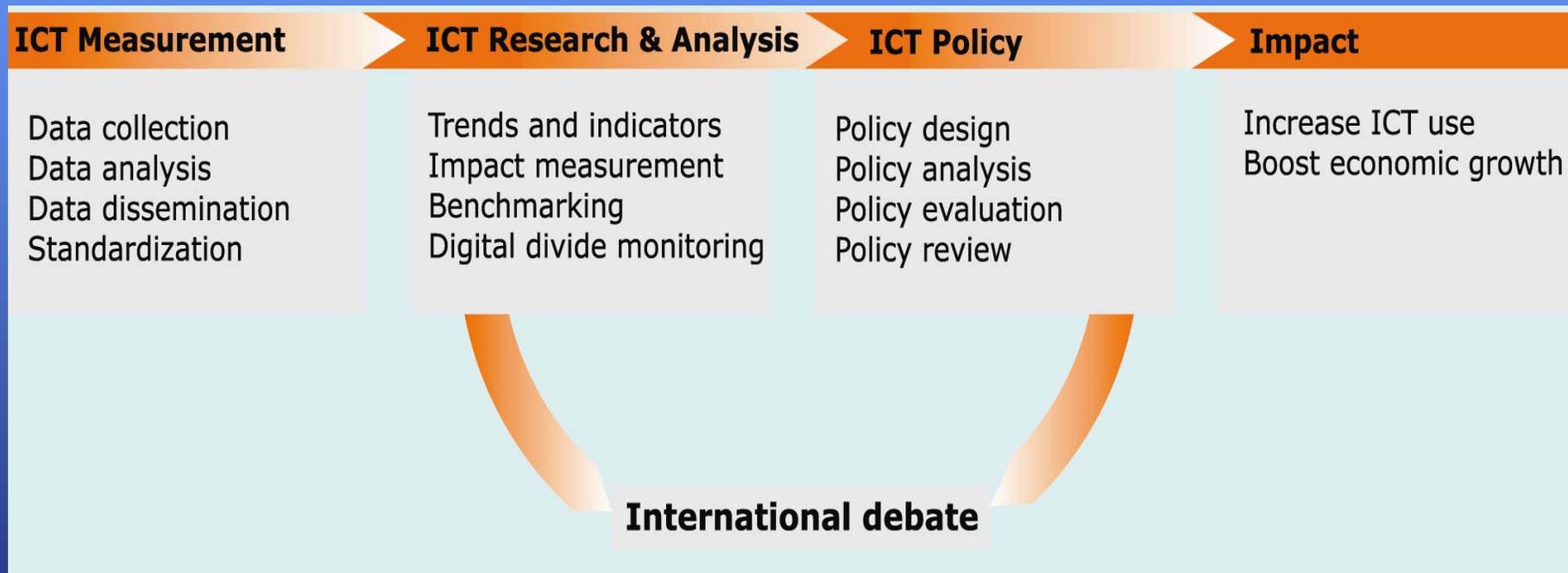
UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT



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## UNCTAD and ICT for development



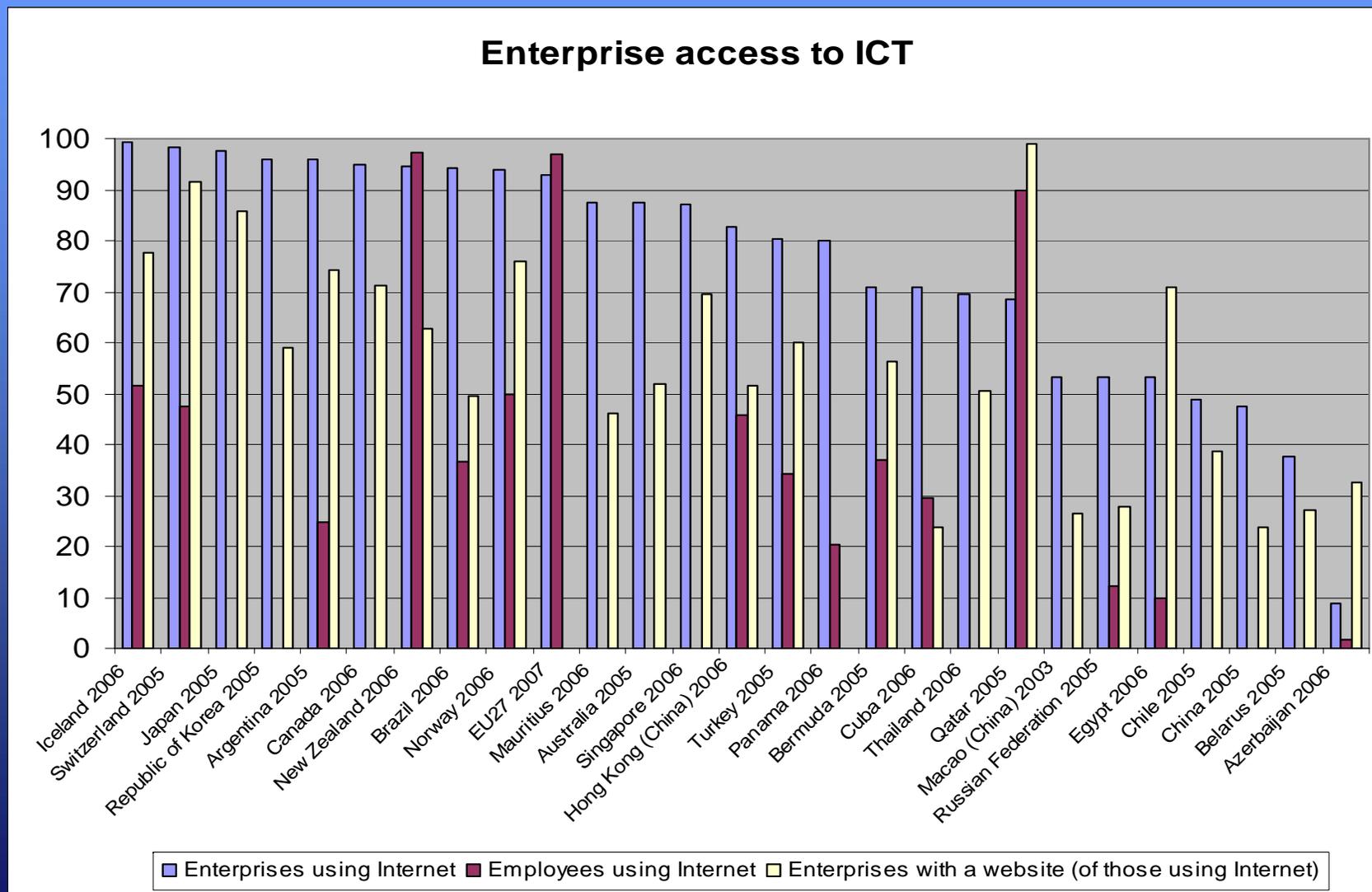
- Science, Technology and ICT Branch (former ICT and E-Business Branch)



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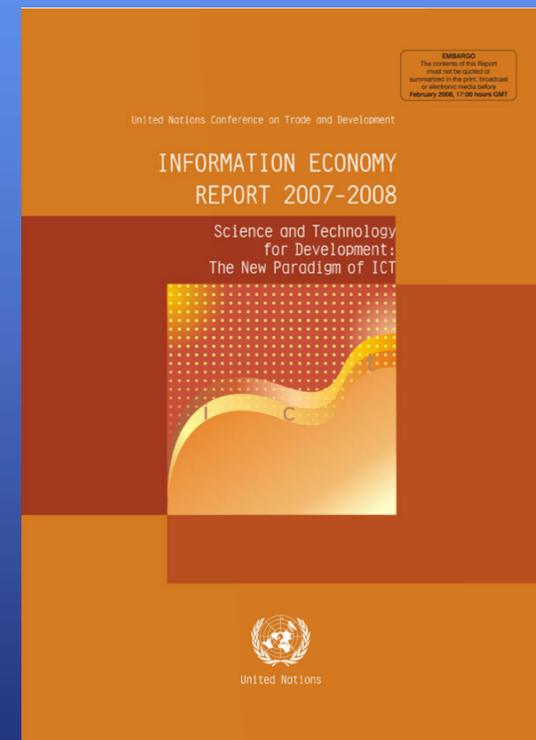
# ICT access and use by enterprises



Source: UNCTAD and Eurostat

## 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

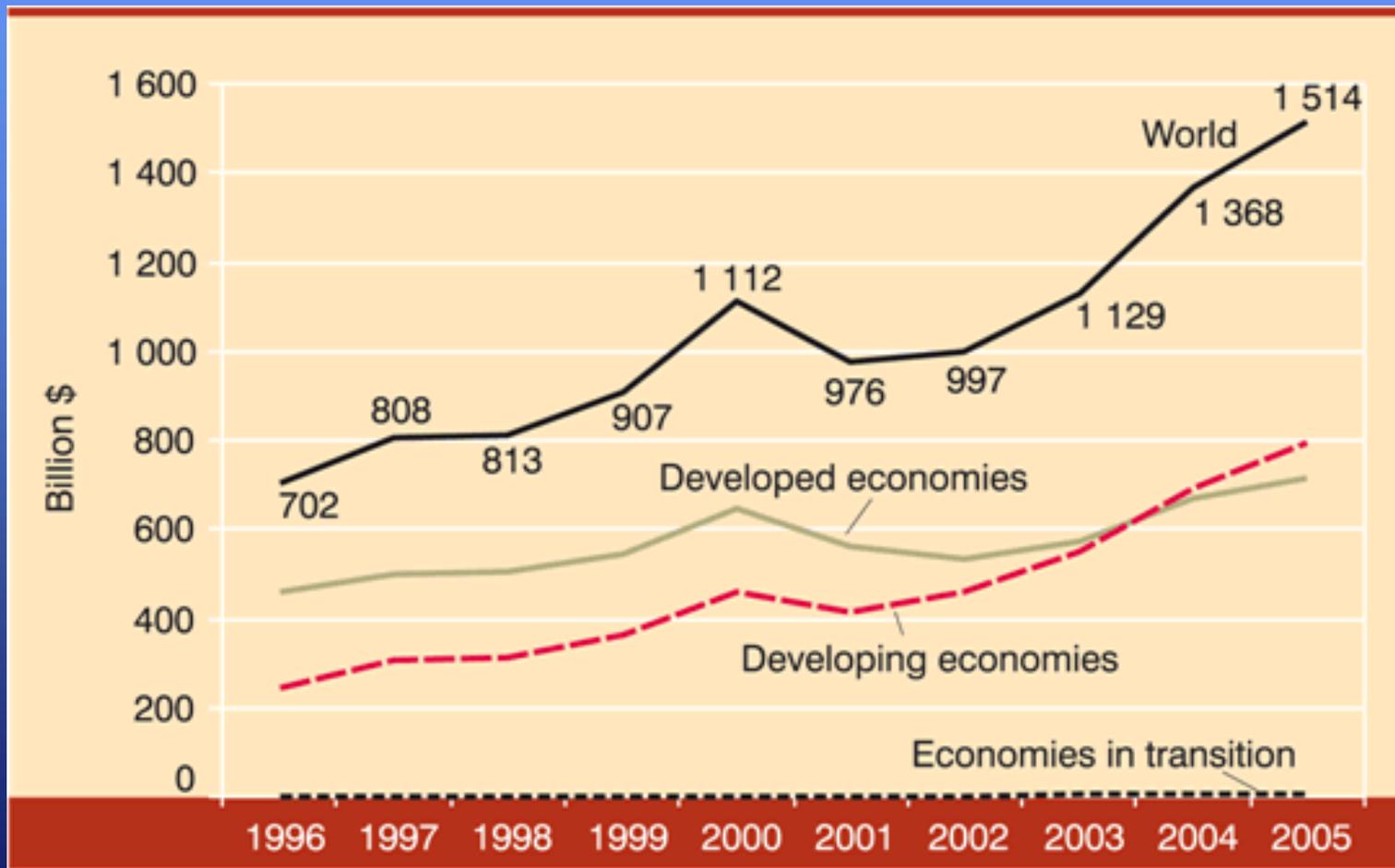
Impact analysis of ICT use on labour productivity in Thailand  
(at the firm level) – preliminary results

- 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)



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# World exports of ICT goods, 1996 - 2005

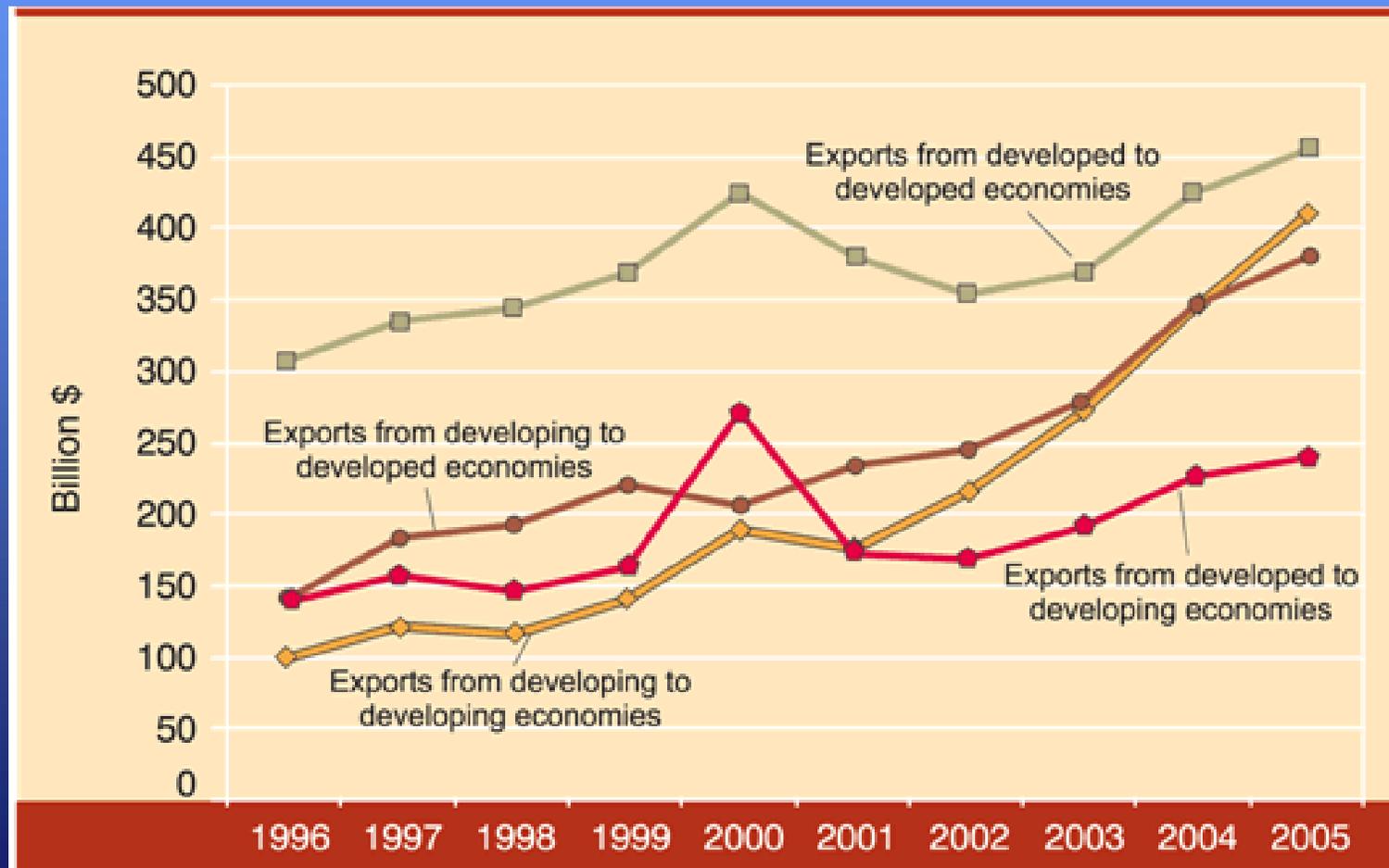


Source: UN COMTRADE



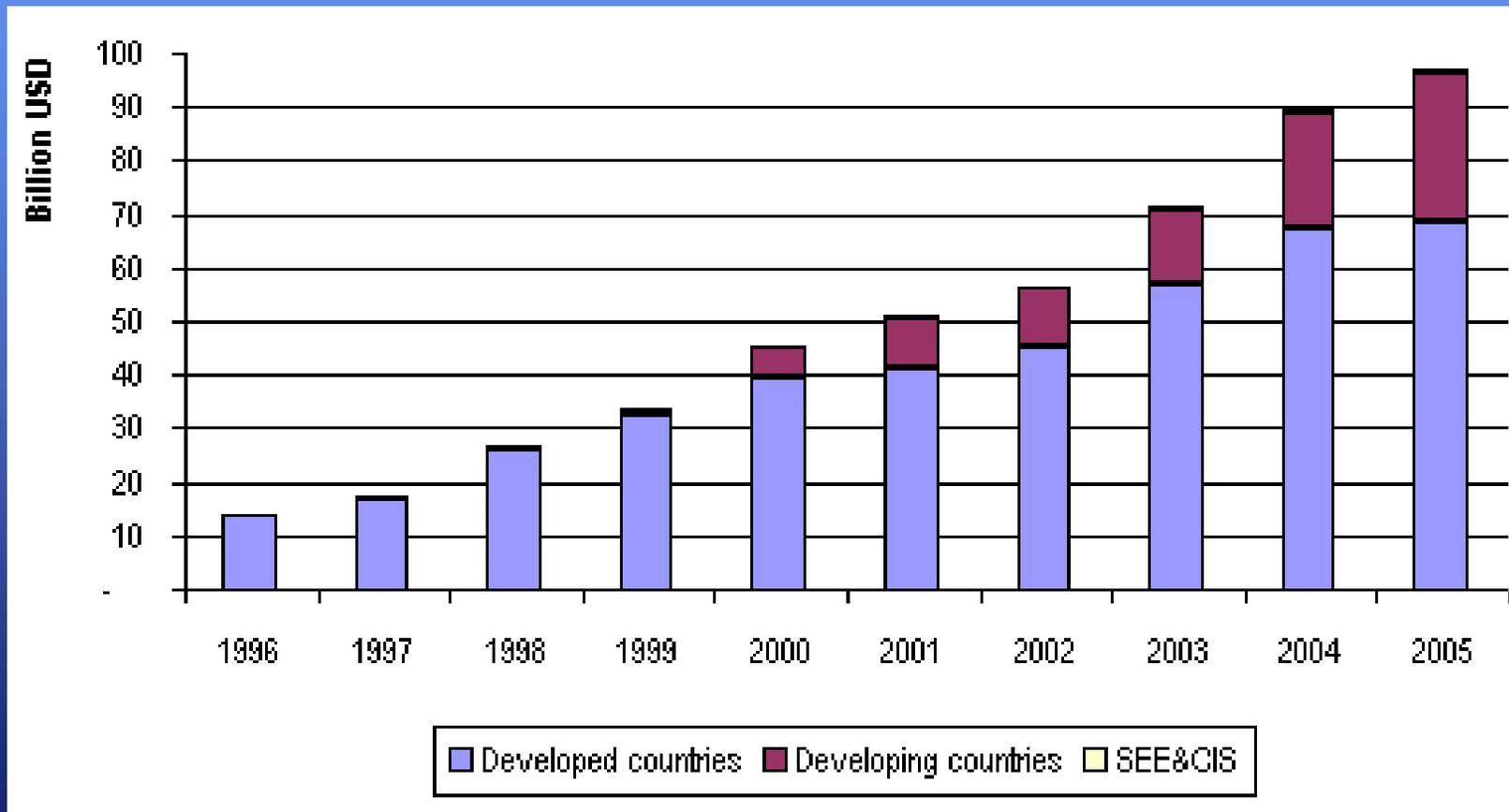
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## Direction of ICT goods trade originating in developed and developing economies, 1996-2005



Source: UN COMTRADE

## Exports of computer and information services by level of development



Source: IMF BOP data and UNCTAD calculations



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# Thank you

Scarlett Fondeur Gil  
Associate Economic Affairs Officer  
Science, Technology and ICT Branch  
UNCTAD

[emeasurement@unctad.org](mailto:emeasurement@unctad.org)

<http://measuring-ict.unctad.org>

[www.unctad.org/ecommerce](http://www.unctad.org/ecommerce)