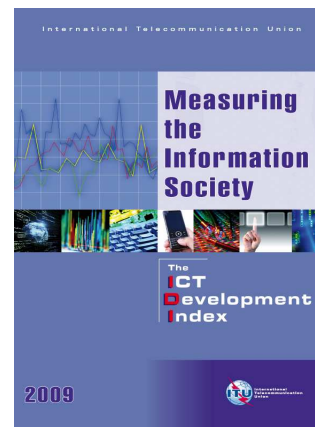


Seminar on ICT Measurement and Indicators

New Delhi, India

12-14 May 2009



The ICT Development Index (IDI)

Susan Teltscher

Head, Market Information and Statistics Division
International Telecommunication Union

This presentation

- Development of the ITU IDI
- Objectives and methodology of the IDI
- IDI main results
- Objectives and methodology of the ICT Price Basket
- ICT Price Basket main results
- Conclusions

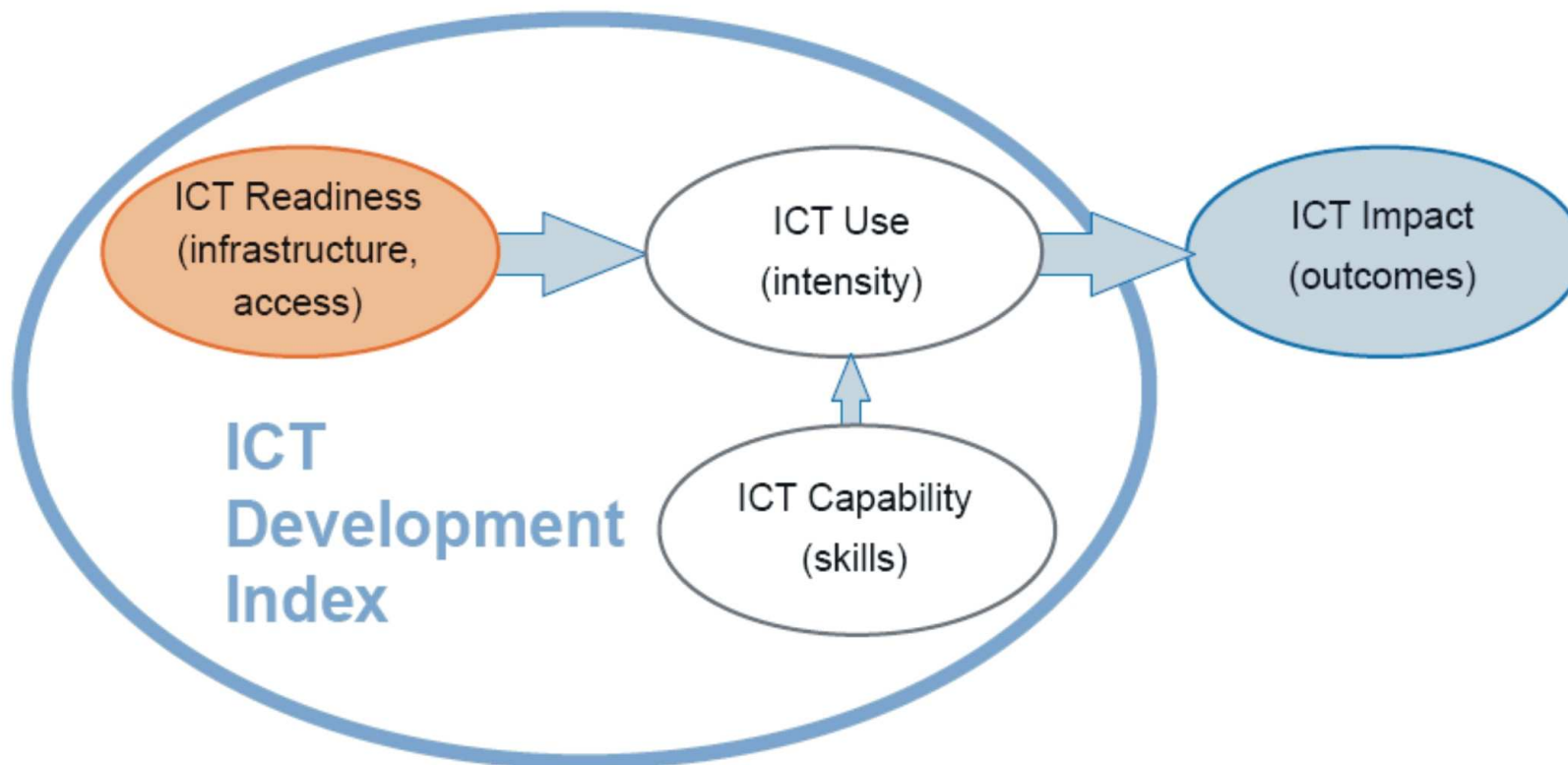
Towards an ITU Single Index

- Goal: merge ICT-OI and DOI into a single ICT index
- Mandates: WTDC-06, ITU Plenipotentiary 2006, WSIS
- Process: outcomes of 6th WTIM 2007, single index forum, experts
- Role of ITU: respect for neutrality, use of standard statistical methods

Main objectives of index

- Track ICT progress *over time*
- Address all countries - *global* index
- Measure *digital divide*
- Capture ICT *development potential*

Three stages in the evolution towards an information society



IDI Methodology - steps

- Selection of indicators: objectives and conceptual framework, availability of data, results of PCA, recommendations of experts
- Normalization of data: distance to reference value (goalpost)
- Rescaling of data (1-10)
- Weighting (incl. rounded PCA results)

Key: easy replication of the computation of the index

IDI Data series

- 11 indicators
- Two years: 2002 and 2007
- 154 economies

ITU approached all countries to verify data to be included in the IDI (November 2008)

ICT Development Index

ICT access	Ref. Value	(%)
1. Fixed telephone lines per 100 inhabitants	60	20
2. Mobile cellular telephone subscriptions per 100 inhabitants	150	20
3. International Internet bandwidth (bit/s) per Internet user	100'000*	20
4. Proportion of households with a computer	100	20
5. Proportion of households with Internet access at home	100	20

40

ICT use	Ref. Value	(%)
6. Internet users per 100 inhabitants	100	33
7. Fixed broadband Internet subscribers per 100 inhabitants	60	33
8. Mobile broadband subscriptions per 100 inhabitants	100	33

40

ICT skills	Ref. Value	(%)
9. Adult literacy rate	100	33
10. Secondary gross enrolment ratio	100	33
11. Tertiary gross enrolment ratio	100	33

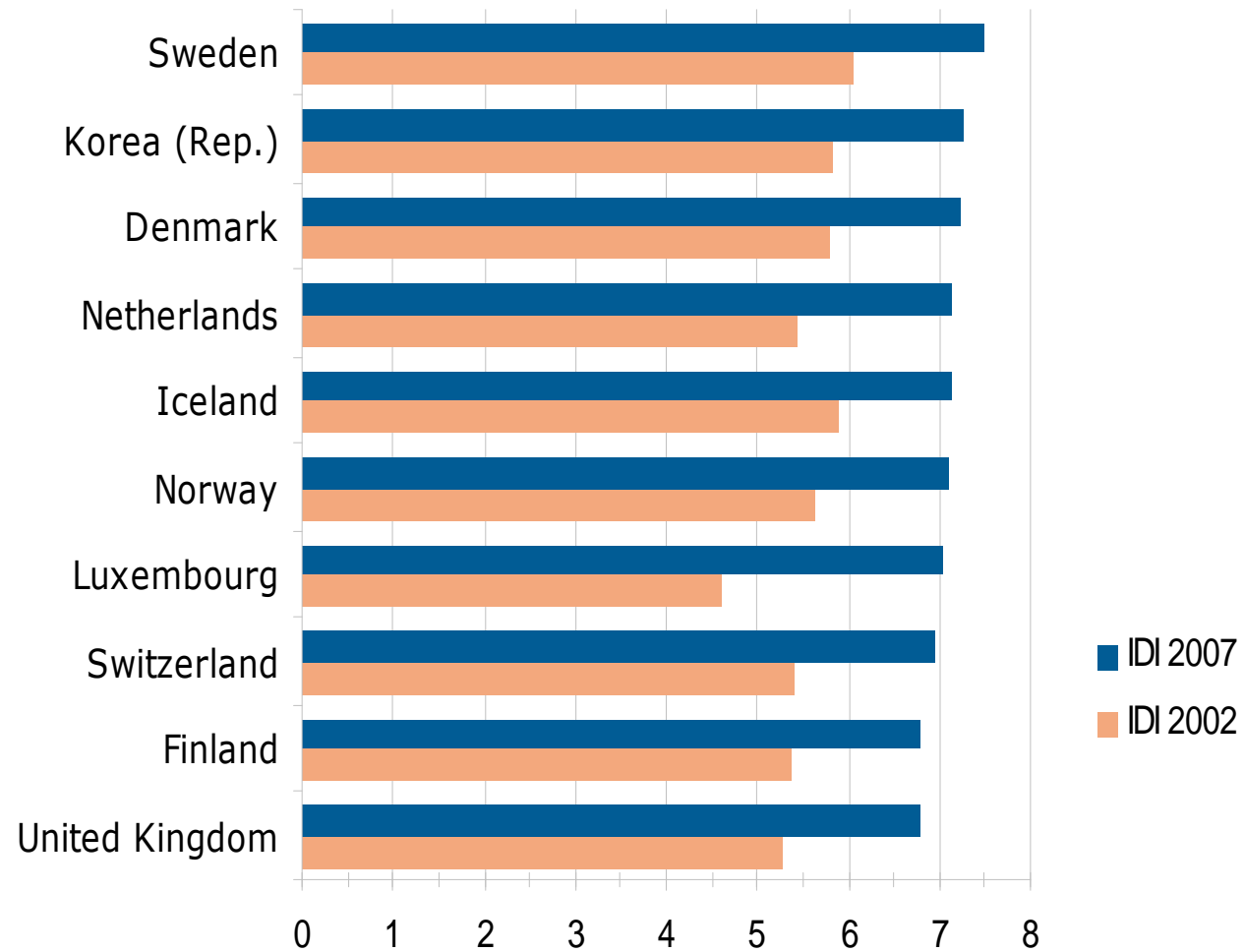
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ICT
Development
Index

IDI main results

- Top countries and regions
- Most dynamic countries
- By level of development
- Link between ICT levels and GNI per capita
- Regional perspective (Asia-Pacific)
- Digital divide

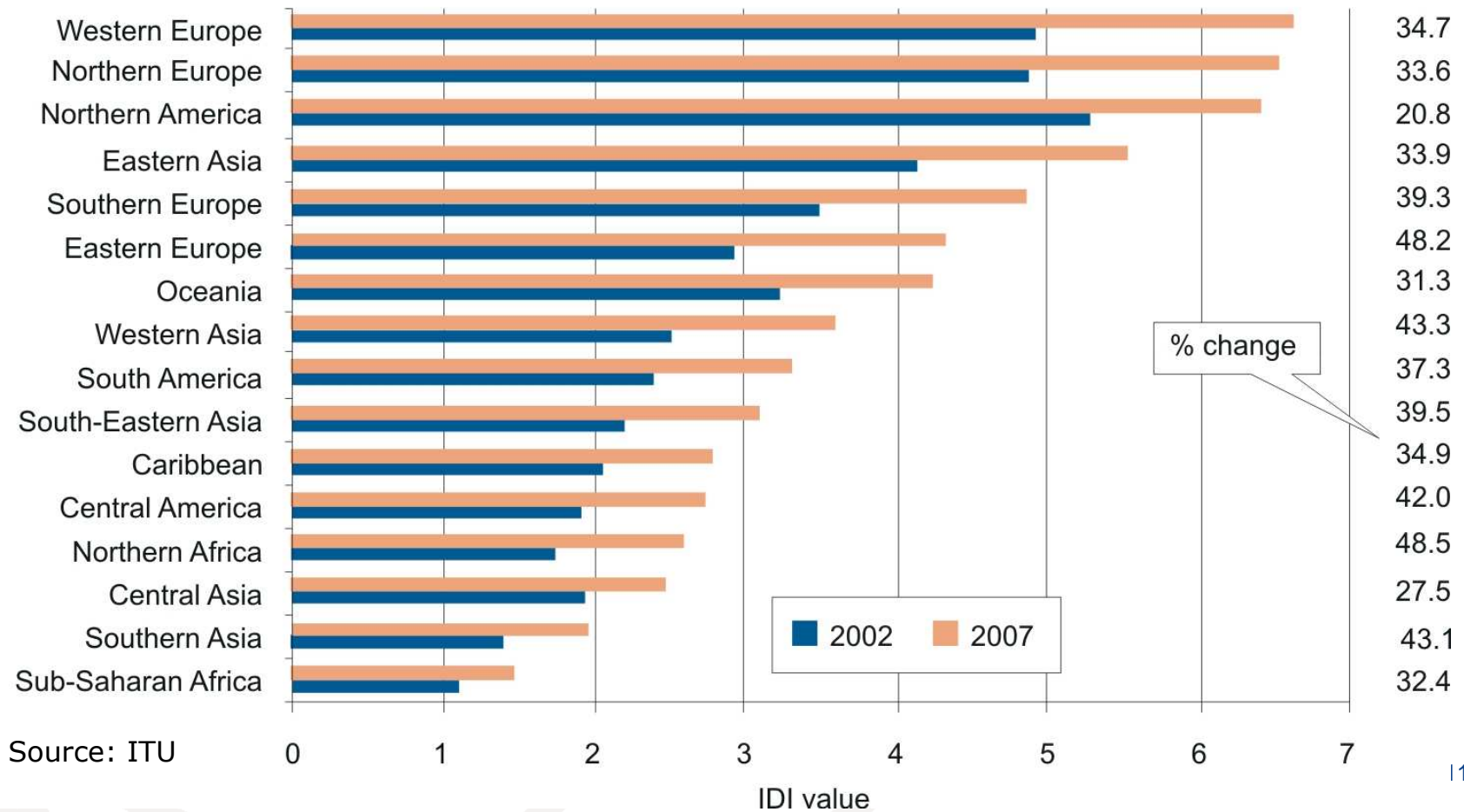
Top ten IDI countries mainly from Europe



Source: ITU

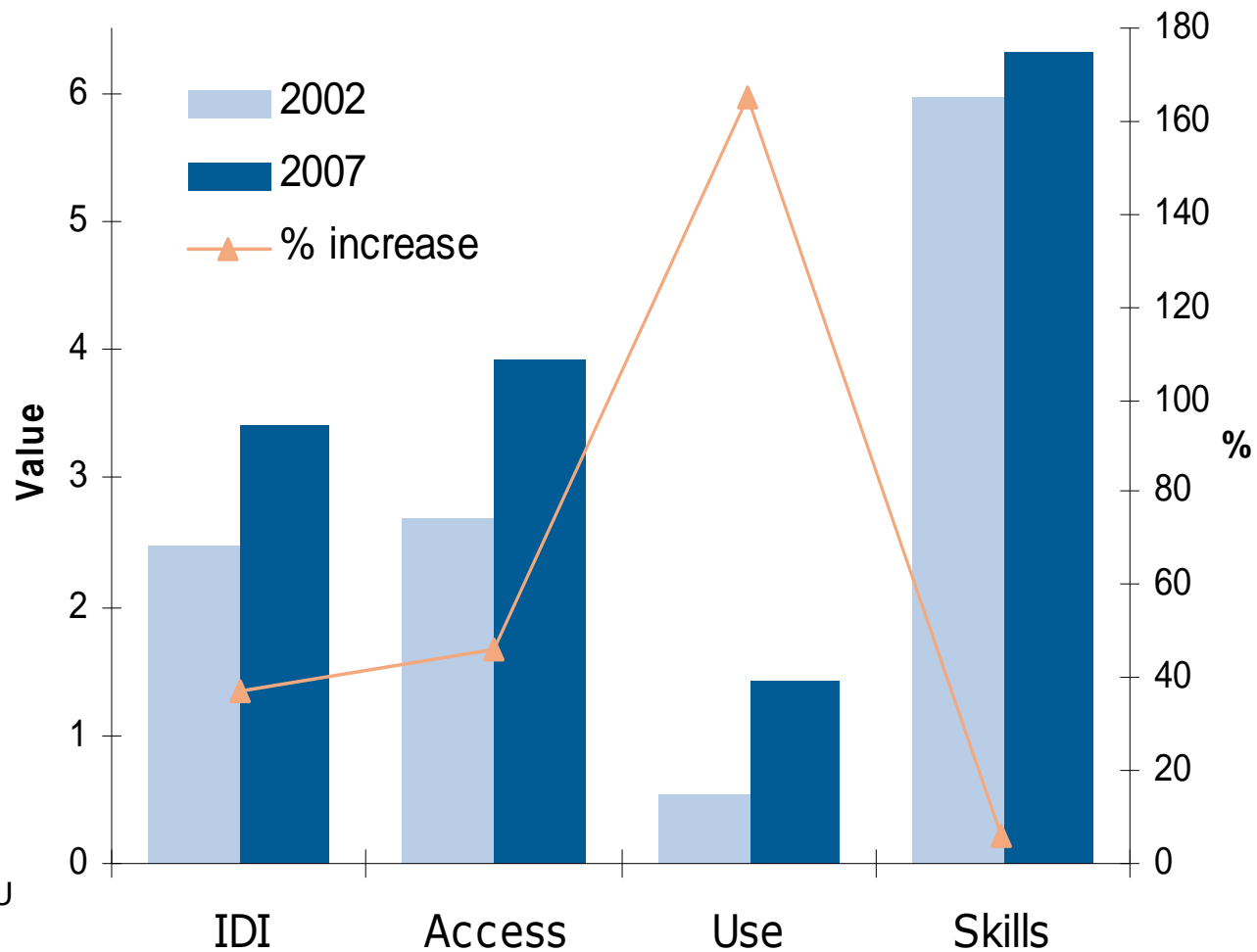
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Highest growth in Eastern Europe, Northern Africa



Source: ITU

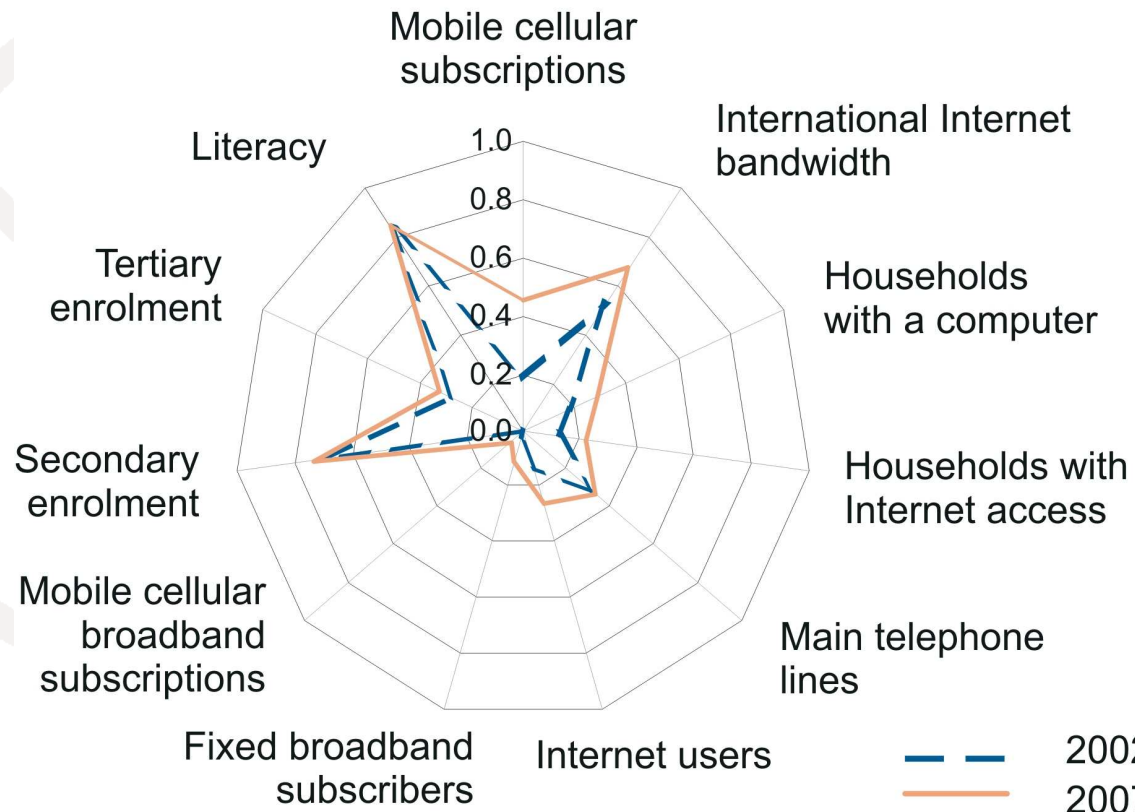
Biggest relative increase in ICT use, but still low intensity



Source: ITU

Highest average increase on mobile cellular subscriptions

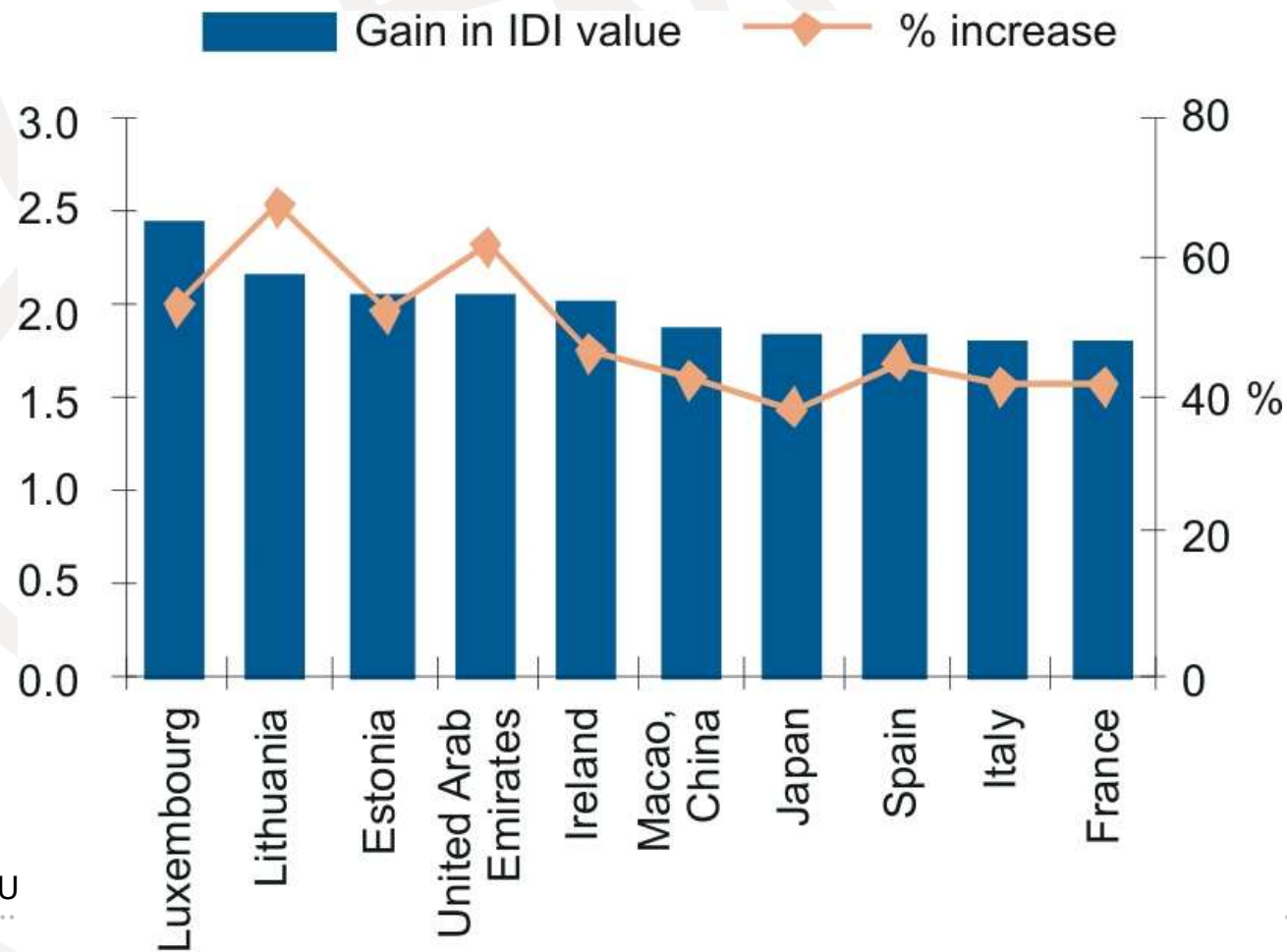
Global averages



Source: ITU

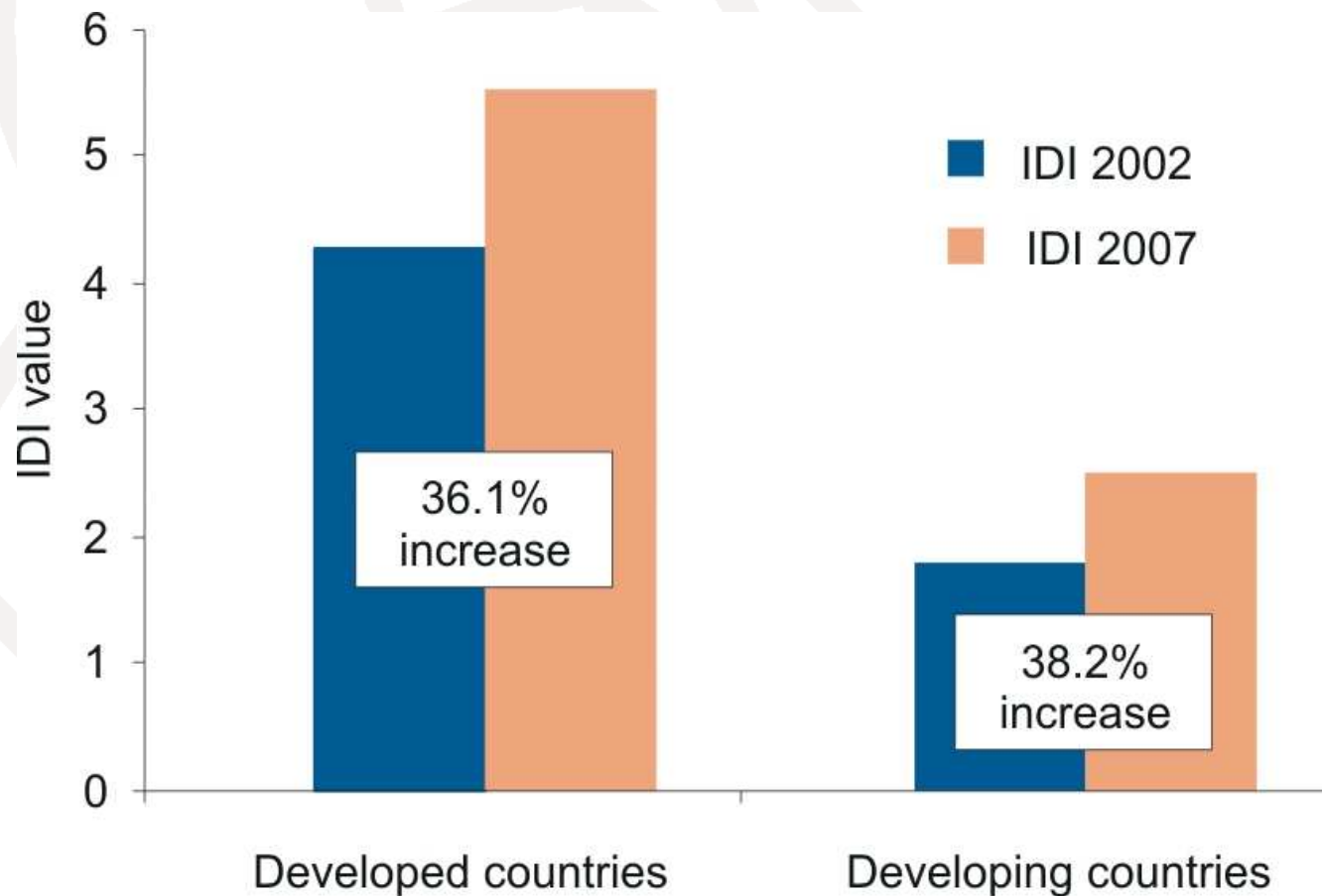
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Economies with highest absolute IDI increases, 2002-2007



Source: ITU

Developing countries lower ICT levels, but strong growth

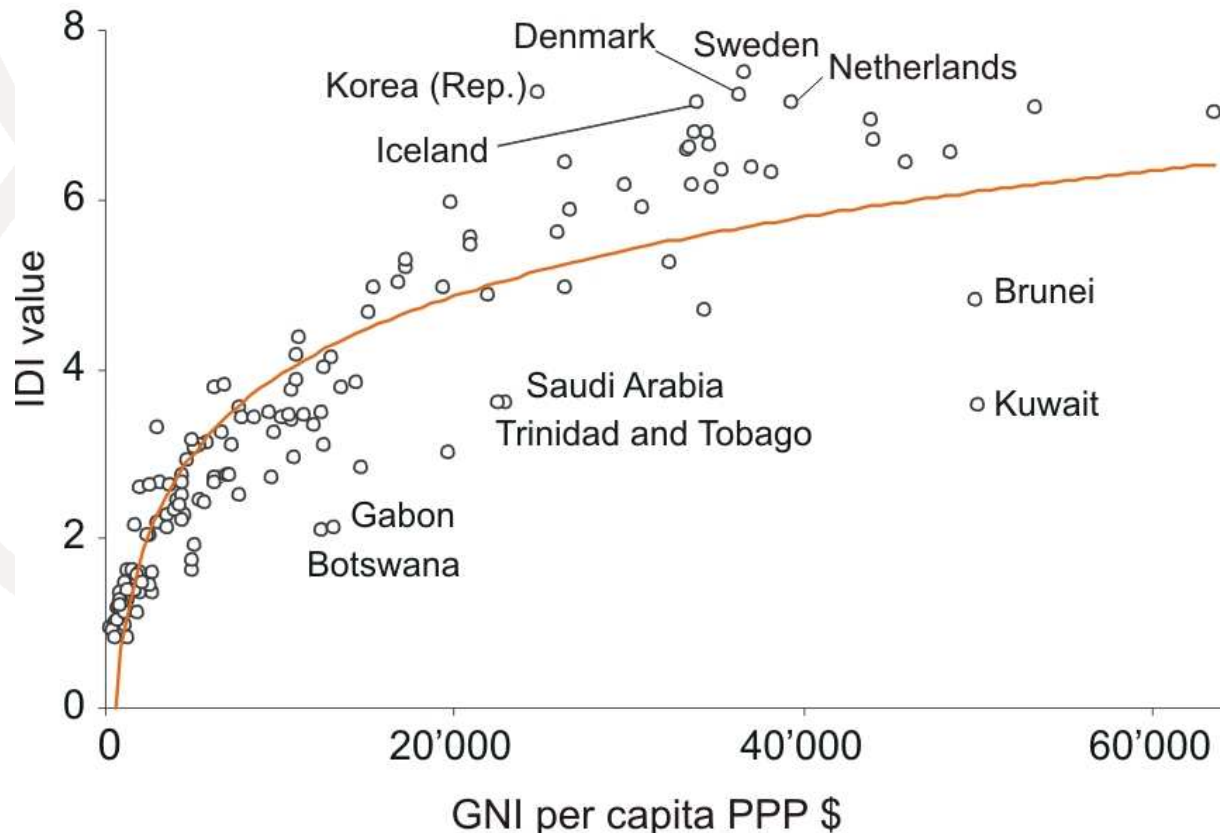


Source: ITU

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Income plays a critical role, but not the only one

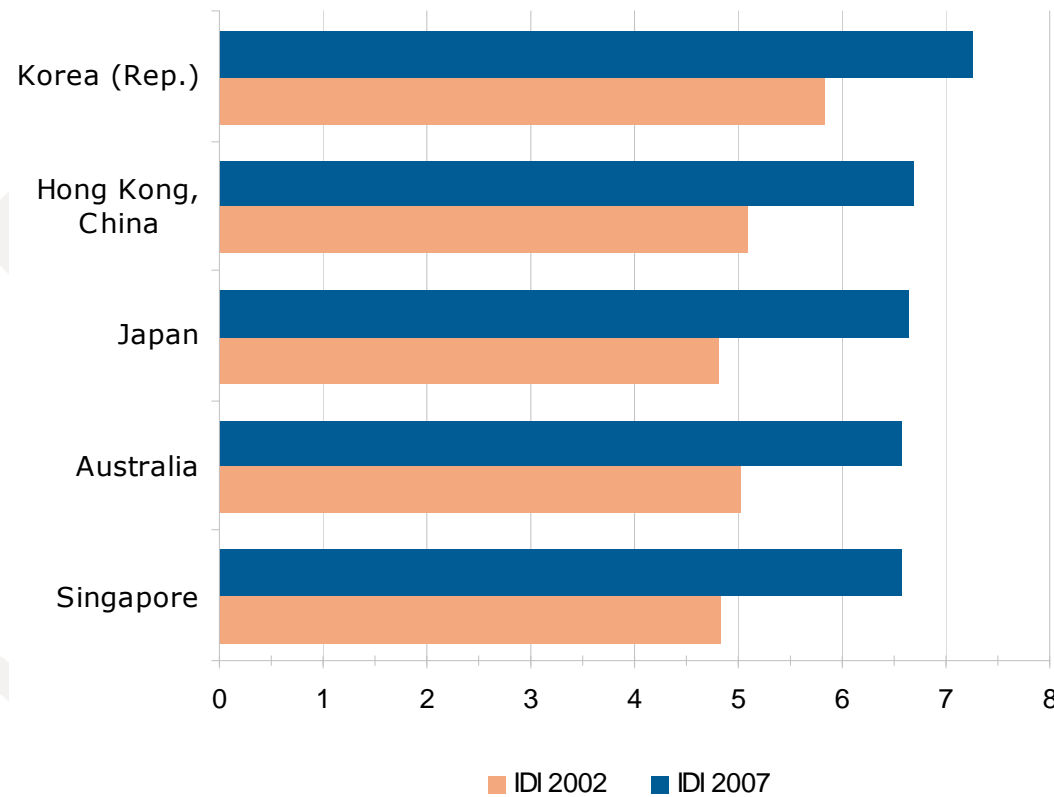
Relation IDI and GNI per capita, 2007



Source: ITU

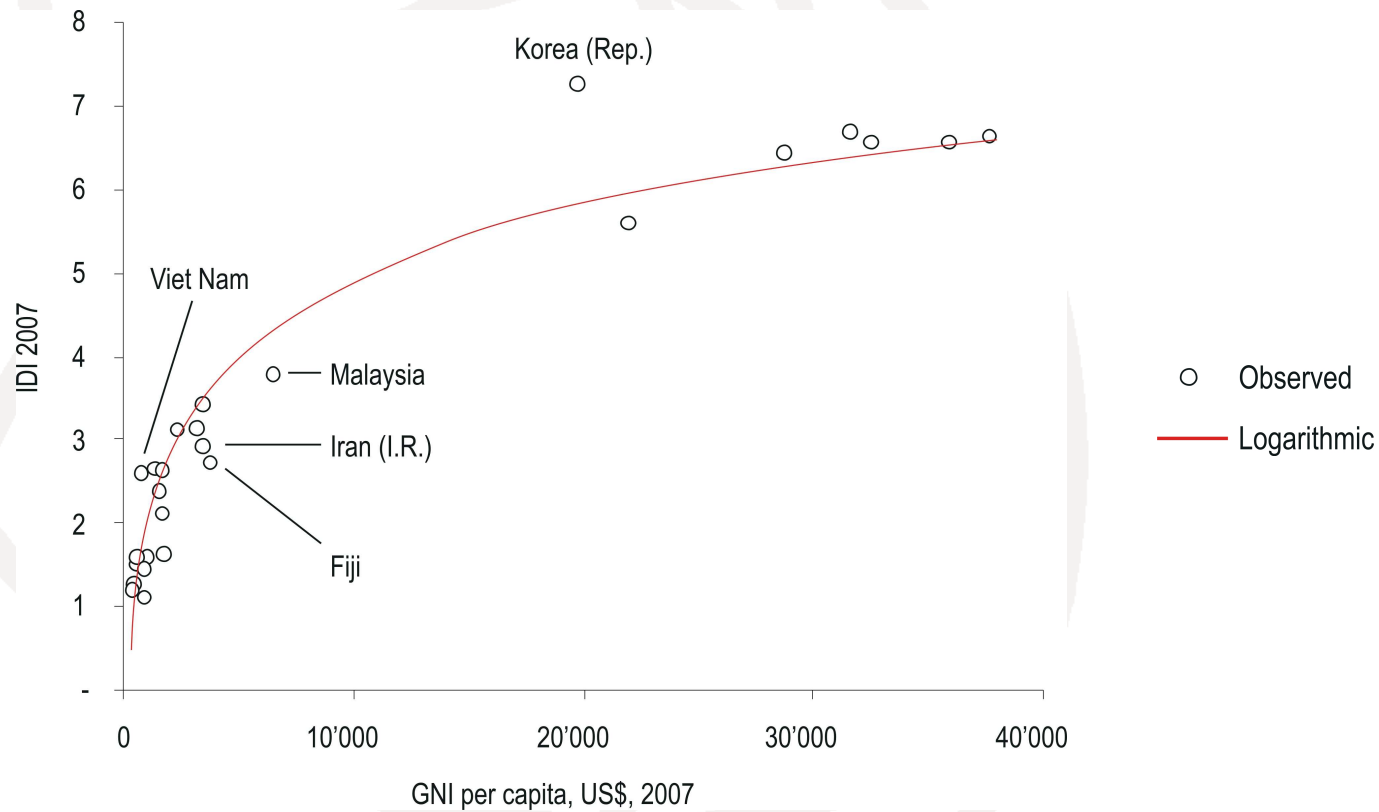
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Regional IDI (Asia and the Pacific): top five economies



Source: ITU

Regional IDI (Asia and the Pacific): High correlation of ICT levels and income levels



Source: ITU

IDI sub-indices

- IDI sub-index **Access**
- IDI sub-index **Use**
- IDI sub-index **Skills**
- For more detailed analysis and identification of progress made/ gaps to be addressed

What about the Digital Divide?

- Key objective of IDI
- Major policy interest
- Methodology adopted from Orbicom/ICT-OI

Key question:

How has it evolved over time?

Four IDI country groups

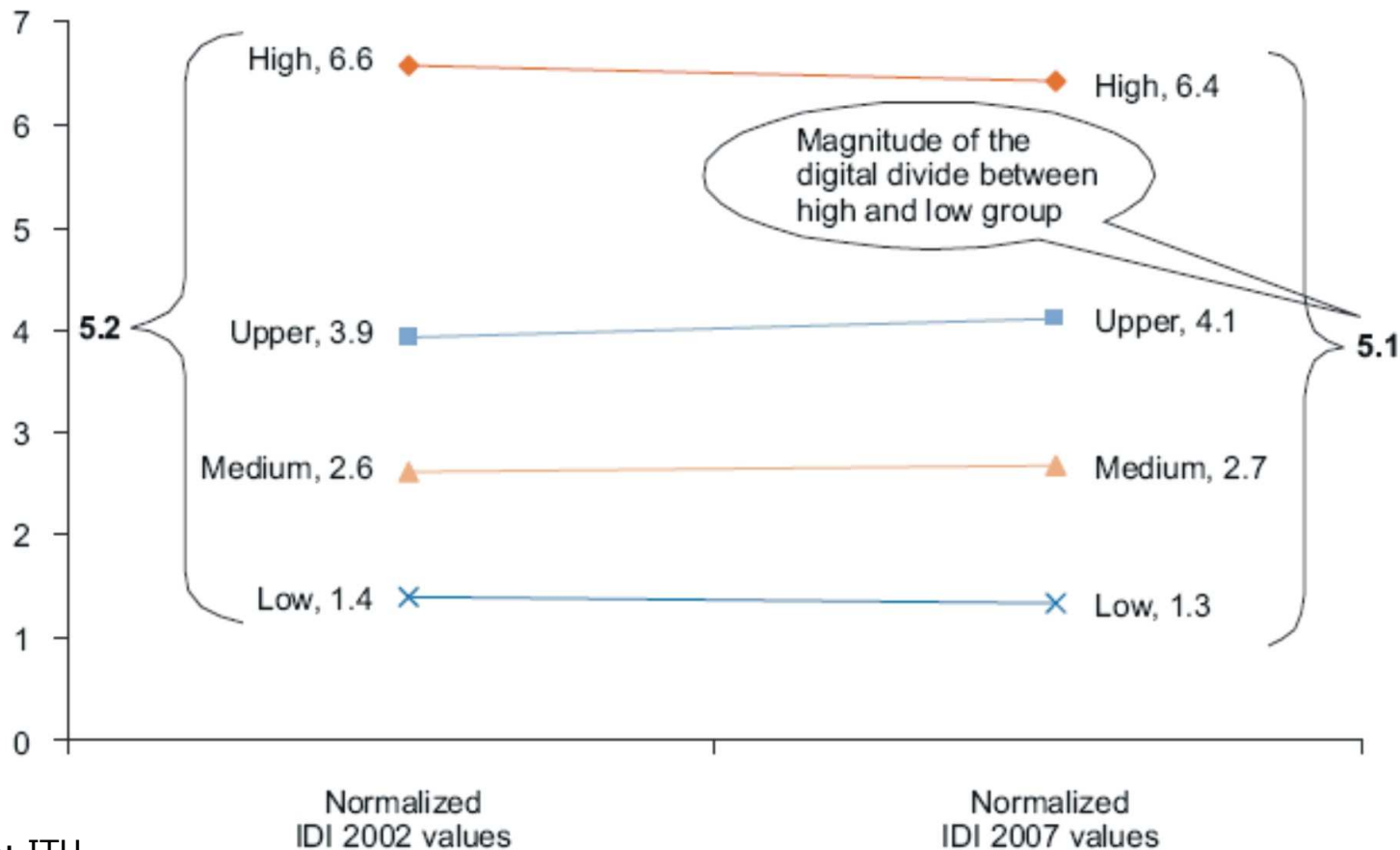
Group	Number of countries	Share in population (%) [*]	IDI 2007	
			Minimum	Maximum
High	33	15.1	5.29	7.50
Upper	33	11.9	3.41	5.25
Medium	44	37.4	2.05	3.34
Low	44	35.6	0.82	2.03
All countries	154	100.0	0.82	7.50

Note: * The 154 economies included in the IDI accounted for 97.6 per cent of the total world population in 2007.

Source: ITU

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The digital divide remains significant



Source: ITU

**But how much do ICT
services cost?**



The ICT Price Basket

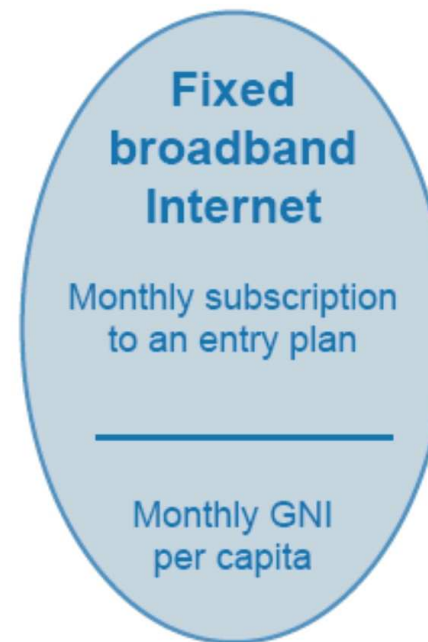
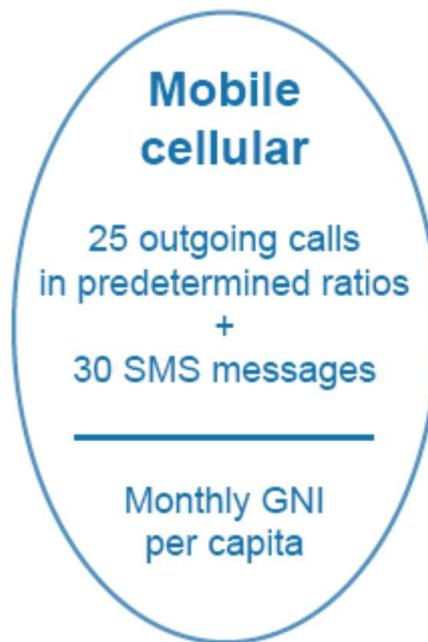
The ICT Price Basket - objectives

- To illustrate, and raise awareness of, the importance of ICT prices for ICT uptake
- To allow policy makers evaluate the cost of ICTs in their countries
- To provide a tool for benchmarking ICT prices globally
- To monitor ICT prices and affordability over time

ICT Price Basket methodology

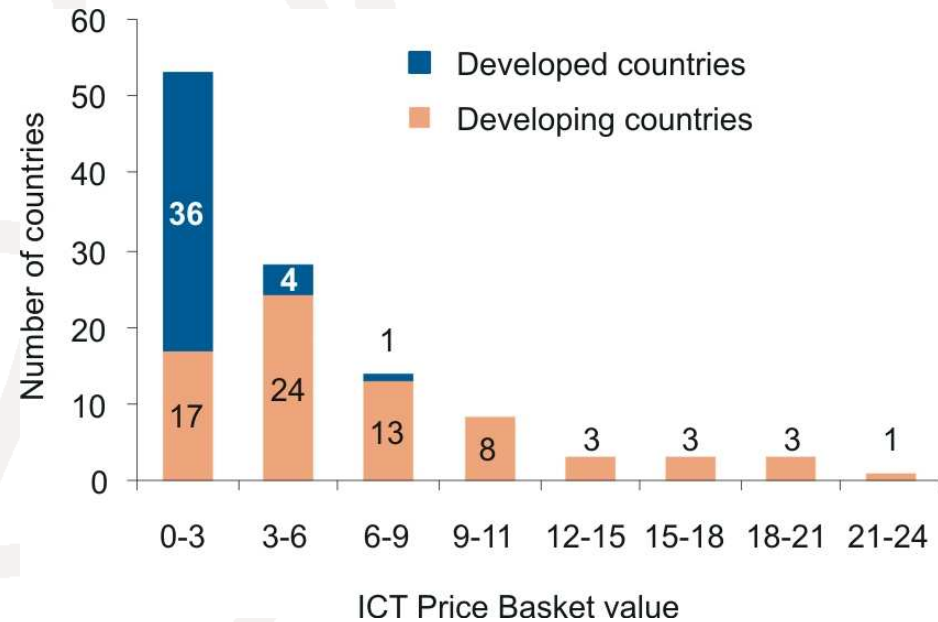
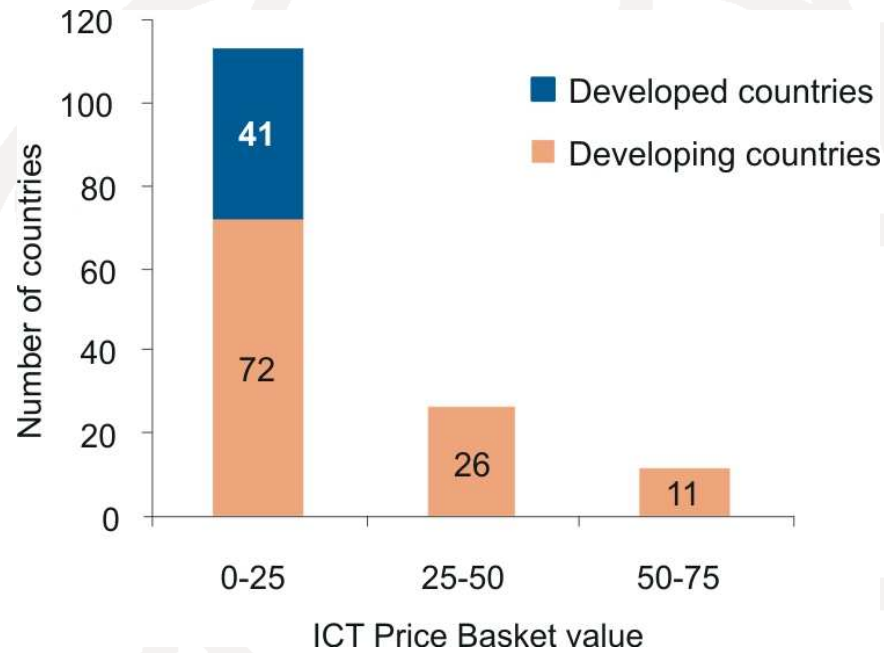
- Three sub-baskets: fixed telephone, mobile cellular, fixed broadband Internet
- Three calculations per sub-basket: US\$, PPP\$, % monthly GNI p.c.
- **Final ICT Price Basket: average of the three sub-baskets (US\$) as % of monthly GNI p.c.**
- 2008 data collected by ITU

ICT Price Basket methodology



3 = **ICT Price Basket**

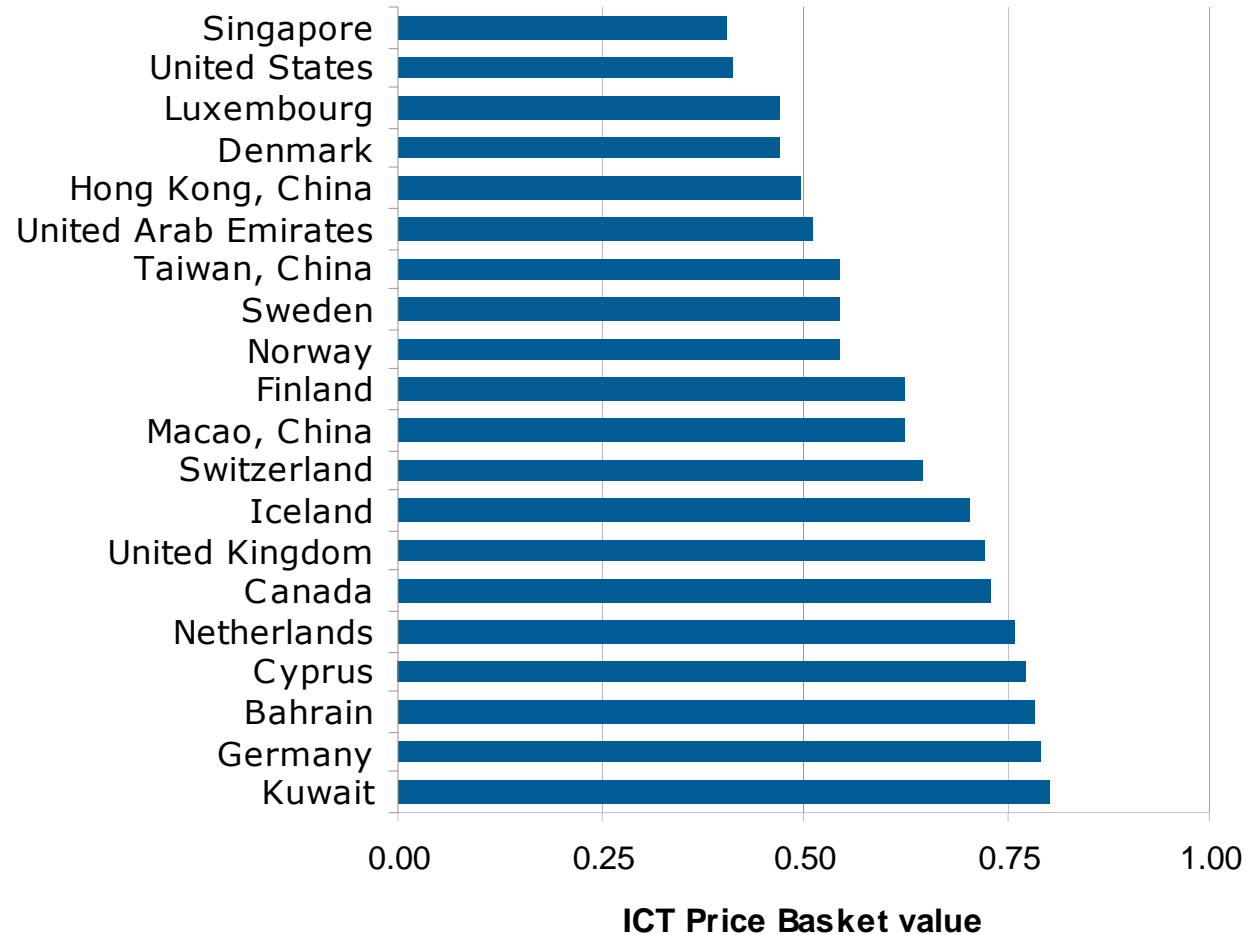
Developing countries are paying more



Source: ITU

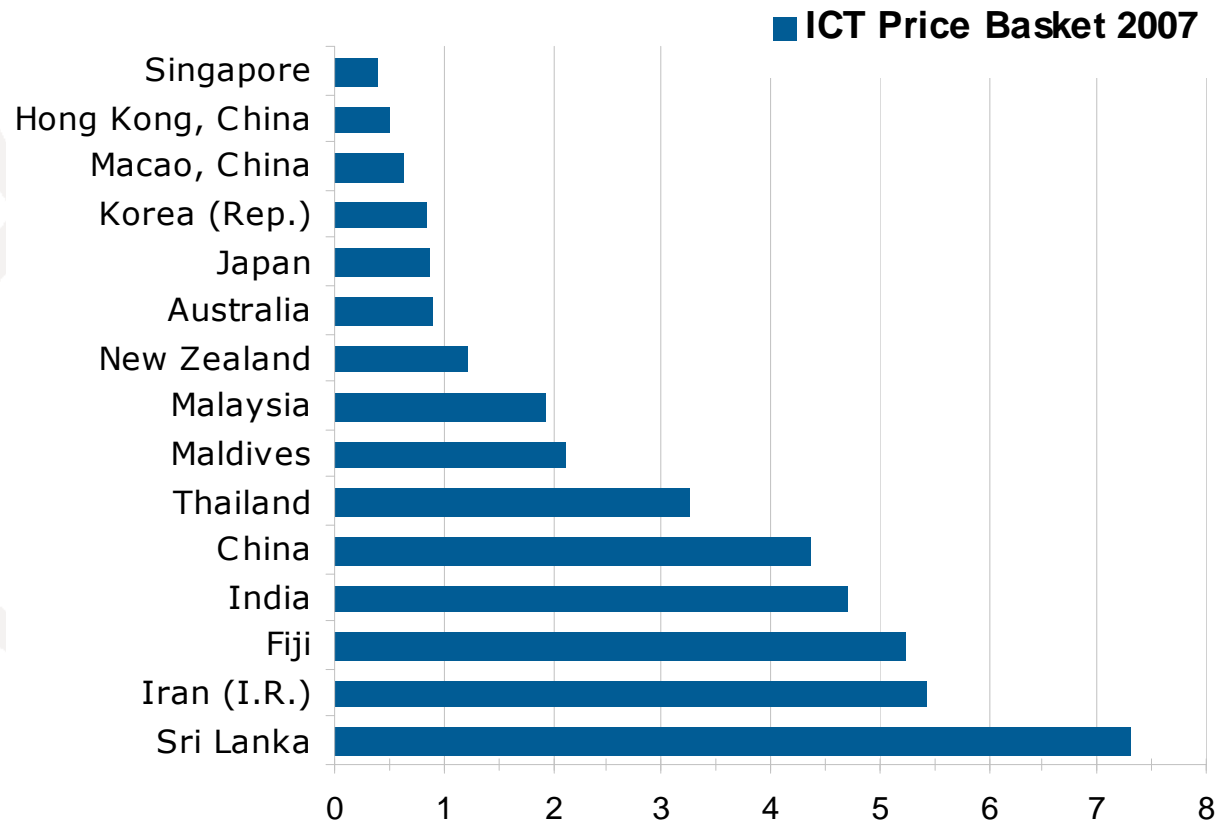
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Economies with lowest ICT prices (2008)



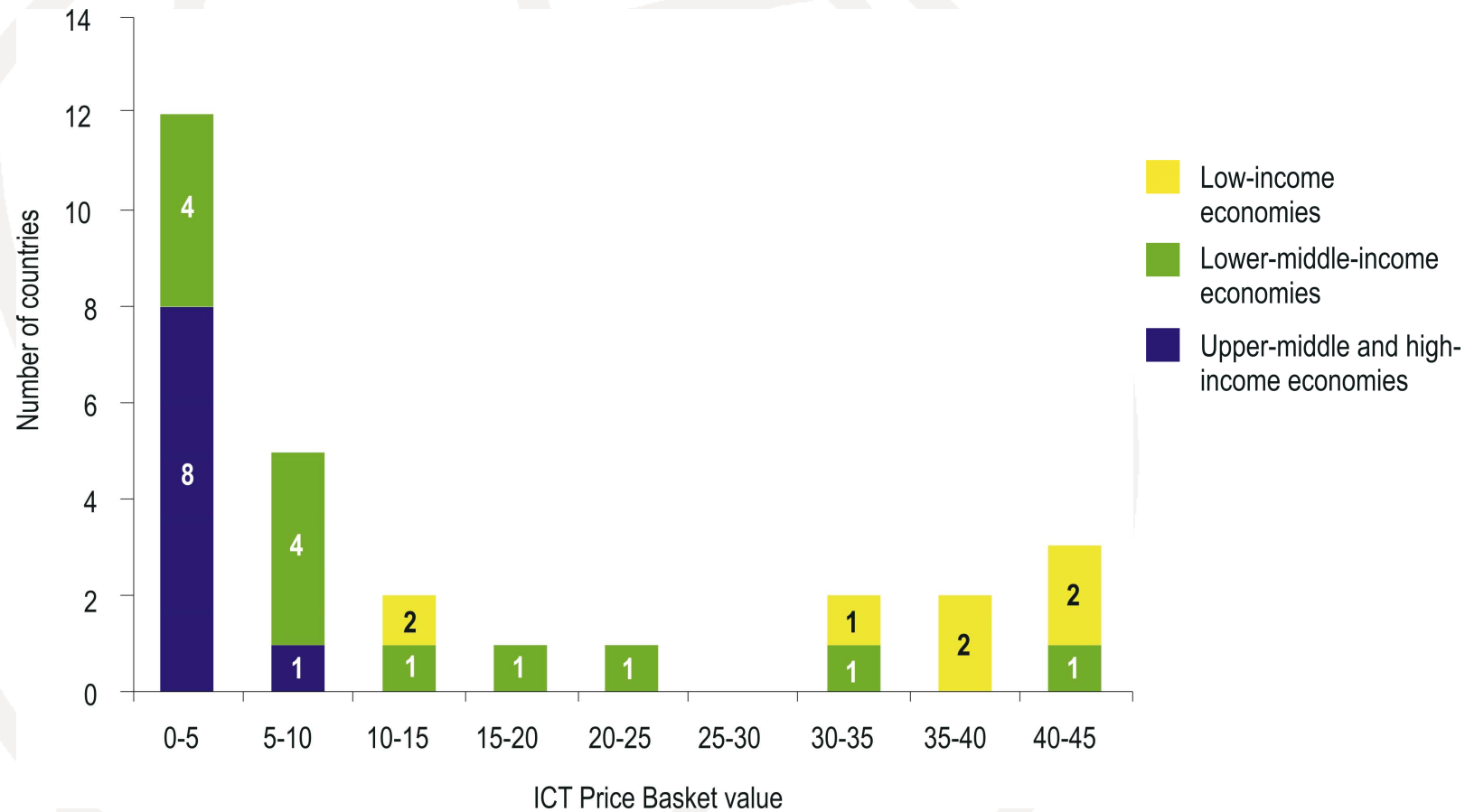
Source: ITU

Regional ICT Price Basket (Asia-Pacific): economies with lowest ICT prices



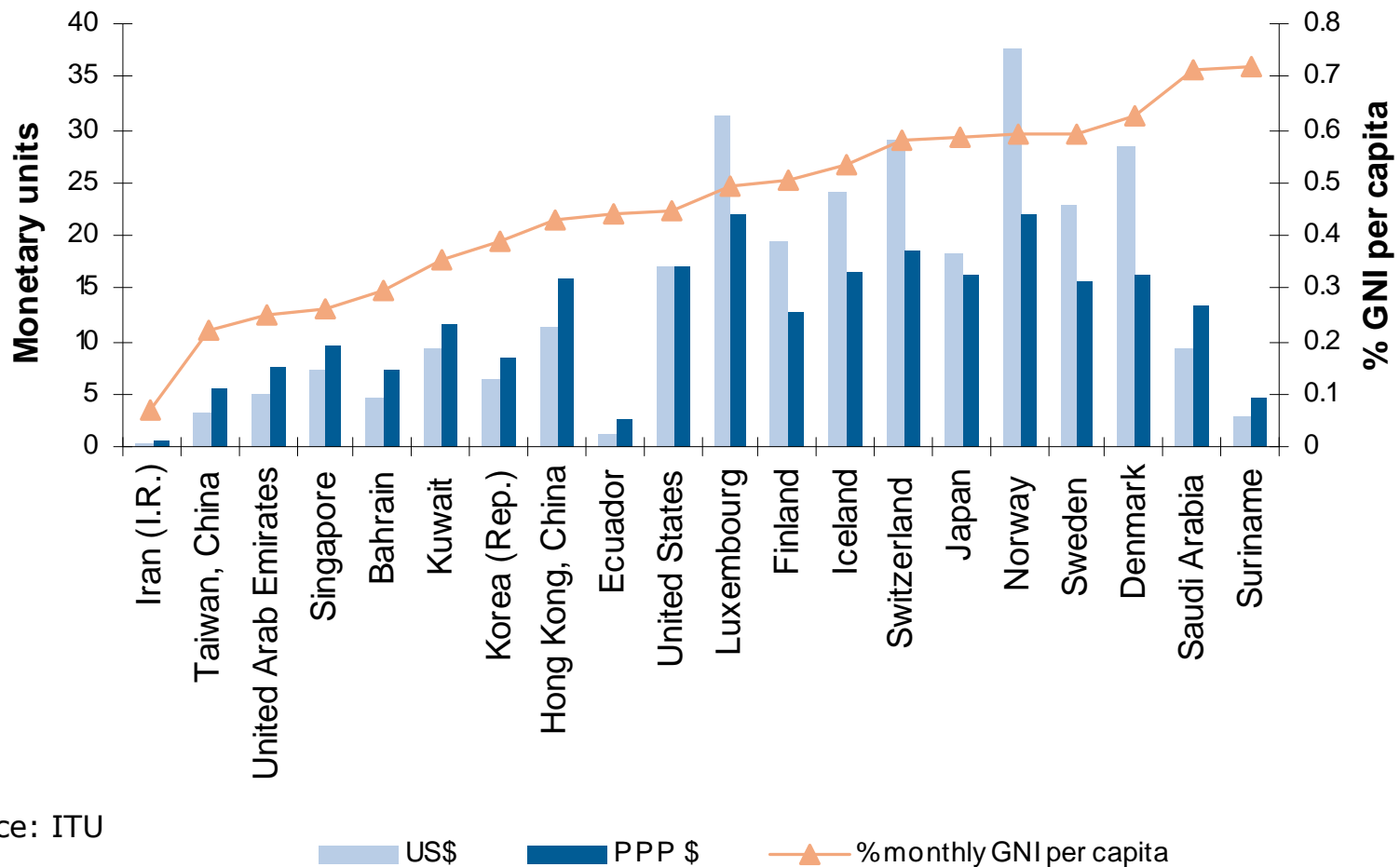
Source: ITU

Regional ICT Price Basket (Asia-Pacific): differences according to income levels



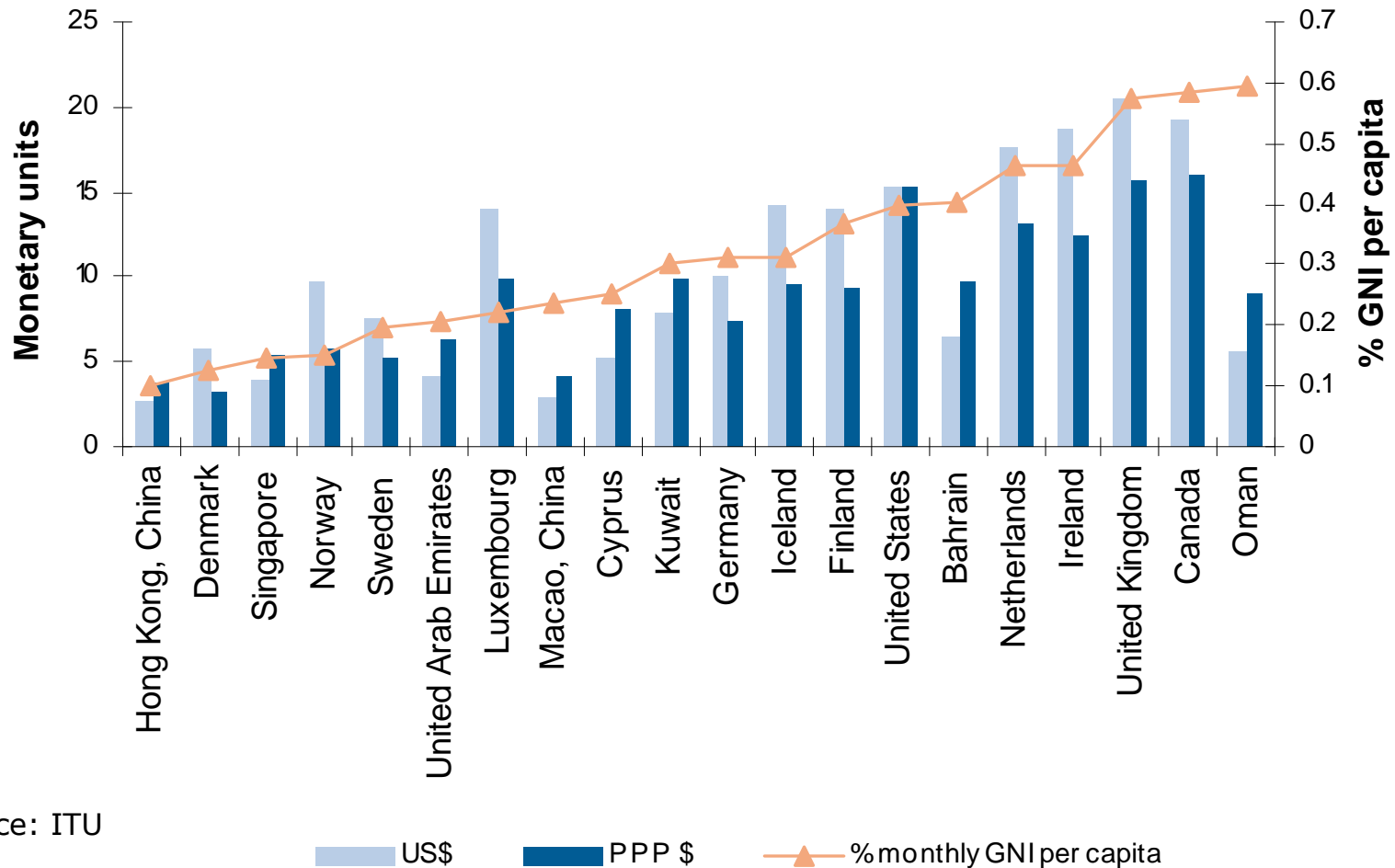
Source: ITU

Economies with lowest fixed telephone prices



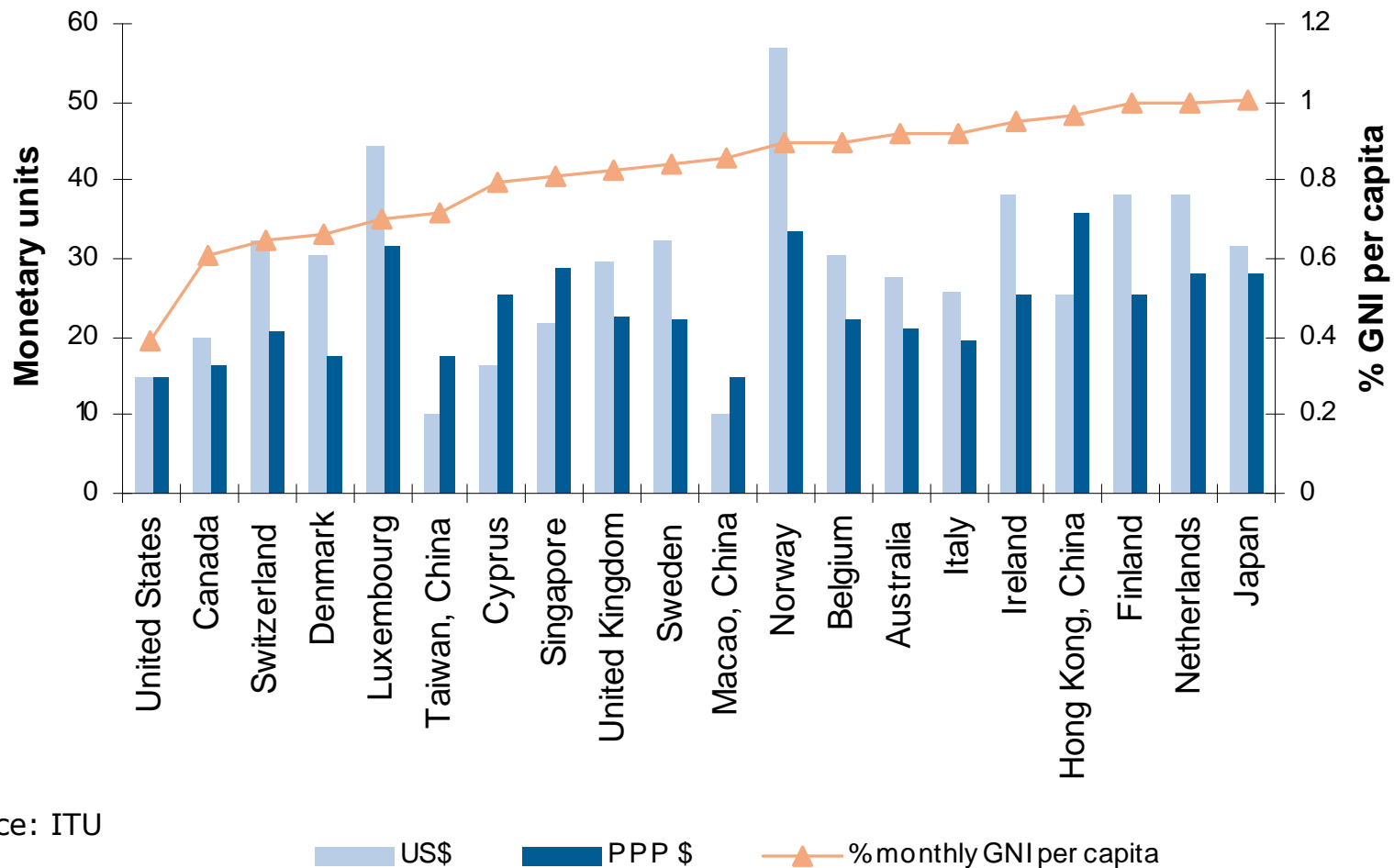
Source: ITU

Economies with lowest mobile cellular prices



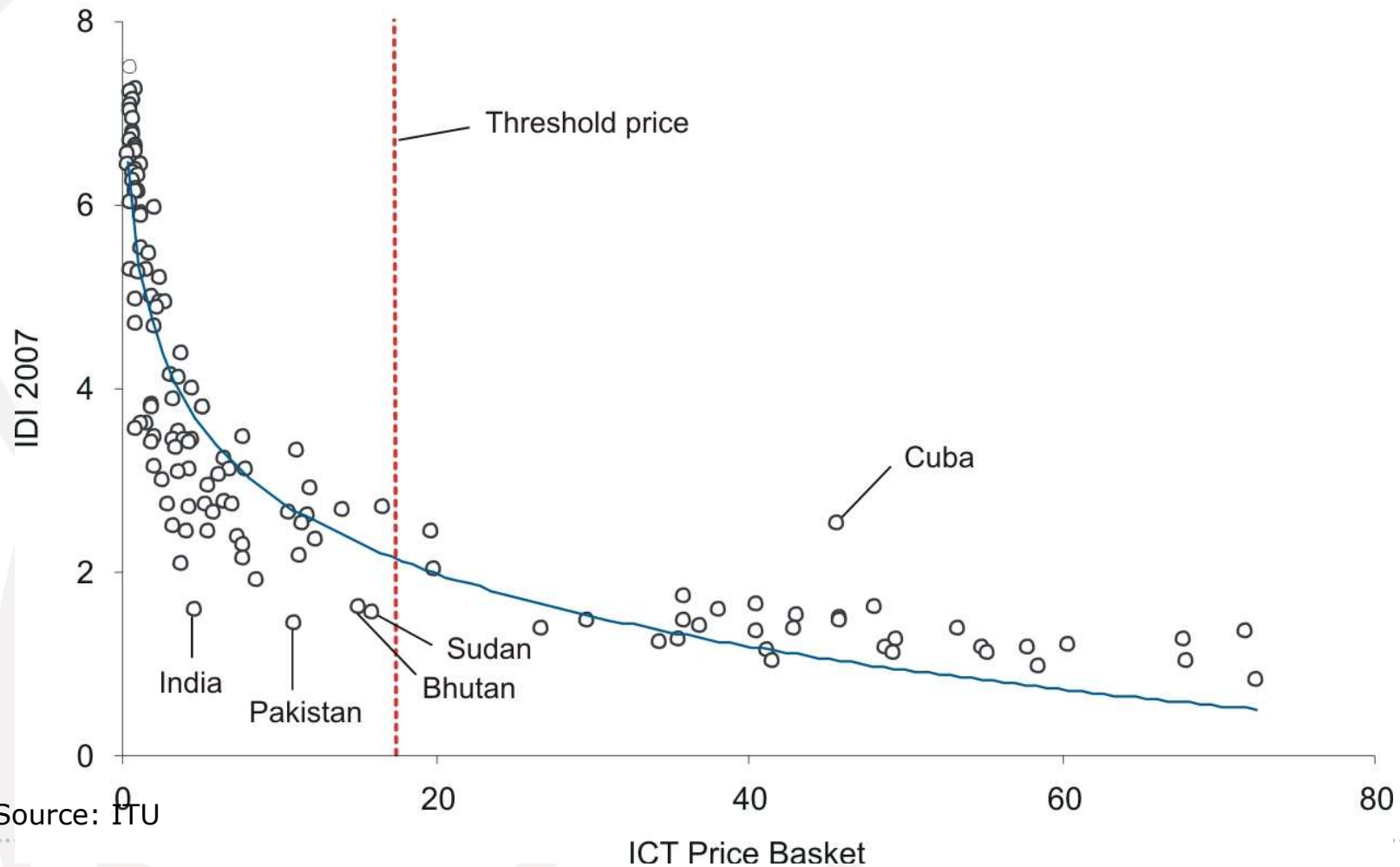
Source: ITU

Economies with the lowest fixed broadband Internet prices



Source: ITU

ICT levels (**IDI**) and ICT prices are strongly linked



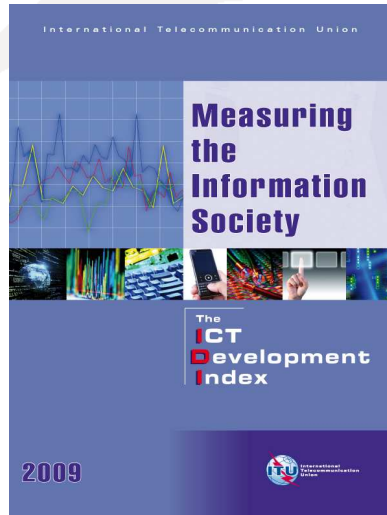
Source: ITU

Conclusions (global)

- Information society growing worldwide
- Digital divide persists but decreasing between top ICT countries and others
- ICT policies can accelerate ICT advancements
- High cost of Internet broadband access in some developing countries major barrier that needs to be addressed.

Conclusions (Asia and Pacific)

- In the last decade, the Asia and the Pacific region has emerged as a world leader in several key ICT indicators.
- It remains a challenge to improve ICT penetration in lower-middle and low-income economies of the region (including LDCs and SIDS).
- There is a strong link between ICT uptake and income, yet some countries such as Korea (Rep.), China or Viet Nam stand out positively.
- Bridging the broadband divide in the Asia and the Pacific region remains a major task for national and regional policy-makers.



Thank you

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