



**Economic Commission for
Latin America
and the Caribbean
Information Society Programme
(DDPE, ECLAC, United Nations)**

**Latin American and Caribbean
Information Societies:**

Challenges and Opportunities for a Developing Region

Lunch Talk at Columbia Institute for Tele-Information



www.eclac.org/SocInfo

Martin Hilbert

Martin.Hilbert@cepal.org

eReadiness of Latin America and the Caribbean as percentage of world leading region



Occupying the middle field

Region/ eReadiness Index	High income: OECD	High income: non OECD	Europe & Central Asia	Latin America & Caribbean	East Asia & Pacific	Middle East & North Africa	South Asia	Sub Saharan Africa	LAC rank among developing regions
ArCo	1.00	0.69	0.60	0.49	0.35	0.42	0.25	0.22	2
DAI	1.00	0.84	0.61	0.61	0.43	0.48	0.36	0.25	2
DOI	0.97	1.00	0.64	0.52	0.53	0.52	0.39	0.39	3
EIU	1.00	0.87	0.60	0.60	0.51	0.42	0.46	0.57	1
HDI	1.00	0.93	0.83	0.82	0.73	0.73	0.64	0.51	2
IKS	1.00	0.94	0.77	0.69	0.72	0.65		0.40	3
KEI	1.00	0.77	0.62	0.49	0.43	0.38	0.25	0.23	2
MDG	1.00	0.75	0.36	0.29	0.13	0.15	0.05	0.05	2
NRI	1.00	0.88	0.36	0.19	0.50	0.43	0.25	0.14	5
Orbicom	1.00	0.68	0.44	0.36	0.22	0.23	0.11	0.12	2
TAI	1.00	0.83	0.72	0.50	0.53	0.41	0.28	0.26	3
UNCTAD	1.00	0.79	0.48	0.47	0.39	0.39	0.37	0.31	2
UNPAN	1.00	0.63	0.62	0.57	0.37	0.39	0.37	0.30	2
AVERAGE	0.998	0.824	0.595	0.521	0.456	0.442	0.324	0.294	2.3



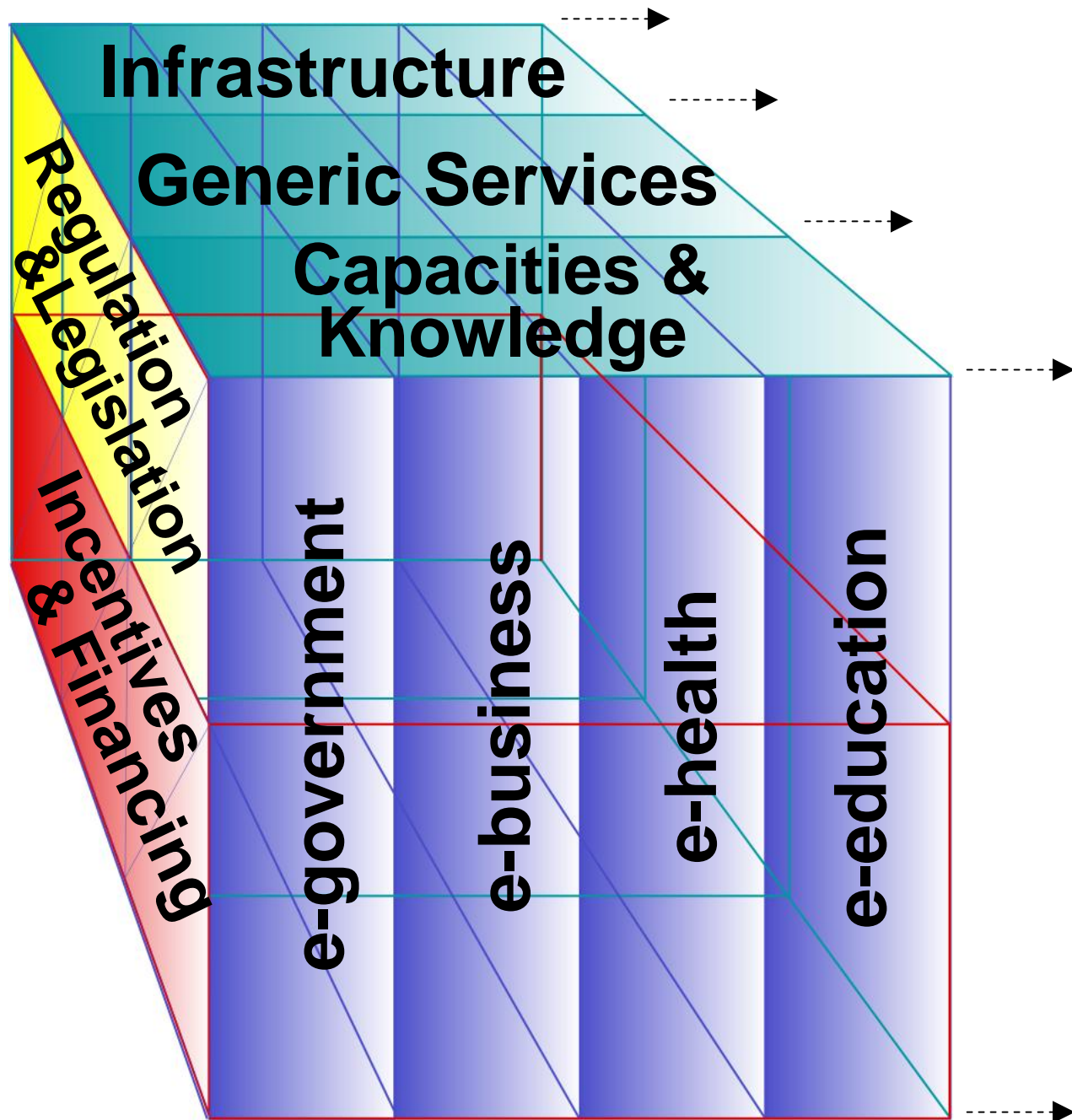
eReadiness of LAC Sub-regions as percentage of LAC region



Neighboring Southern Cone and Andean at the two ends

Region/ Index	LAC	South Cone	Caribbean	Central	Andean
ArCo	1	1.19	0.91	0.97	1.03
DAI	1	1.11	1.07	0.85	0.93
DOI	1	1.12		1.09	0.88
EIU	1	1.13	1.01	1.10	0.87
IKS	1	1.02	0.82	1.11	0.91
KEI	1	1.26	0.93	0.91	0.89
NRI	1	1.62	1.74	0.69	0.31
Orbicom	1	1.35	0.99	0.84	0.88
TAI	1	1.14	0.97	1.00	0.93
UNCTAD	1	1.14	1.03	0.90	0.90
UNPAN	1	1.28	0.91	0.95	1.07
WBICT	1	1.11	0.94	0.97	0.98
HDI	1	1.06	1.00	0.96	0.97
AVERAGE	1	1.19	1.03	0.95	0.89



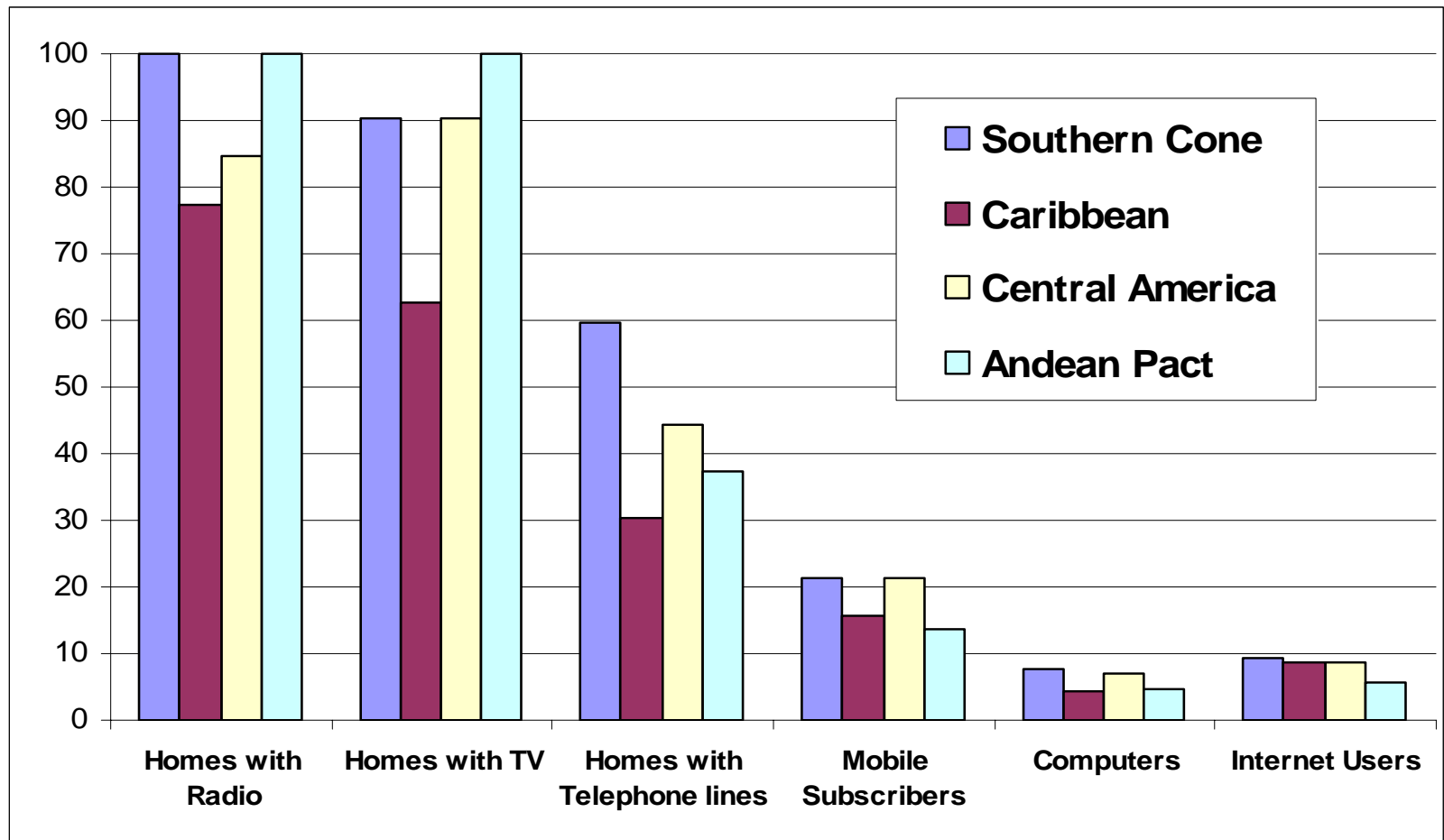


Source: Hilbert, Martin, ECLAC, 2002.

Infrastructure



Penetration of traditional and digital communication technologies, per 100 inhabitants, 2004



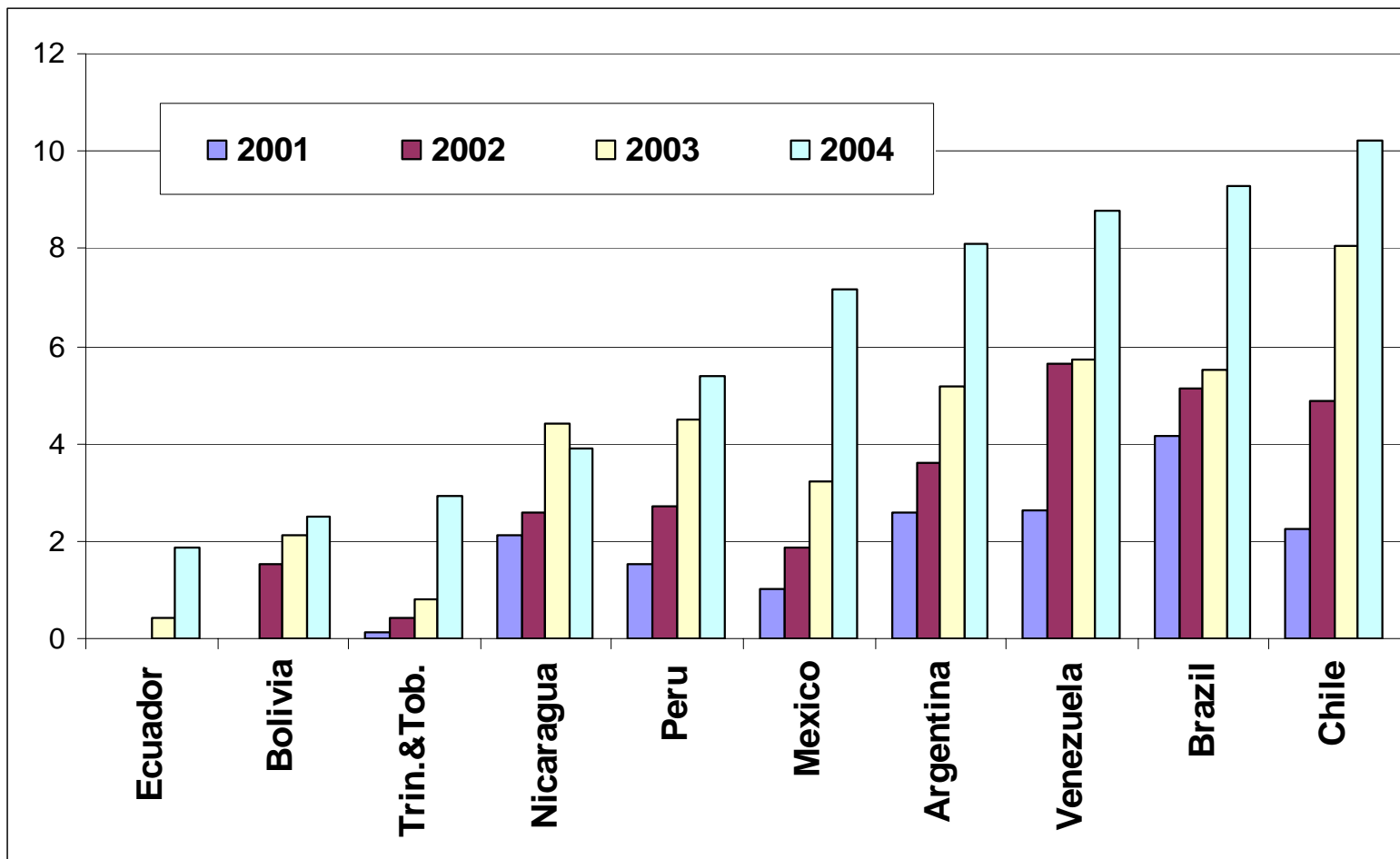
Almost universal radio and TV access, very low digital ICT penetration

Source: ITU, 2005, World Telecommunications Database

Generic Services



Broadband (cable modem, DSL, ISDN) as % of Internet users



Very incipient, but rapidly growing broadband penetration

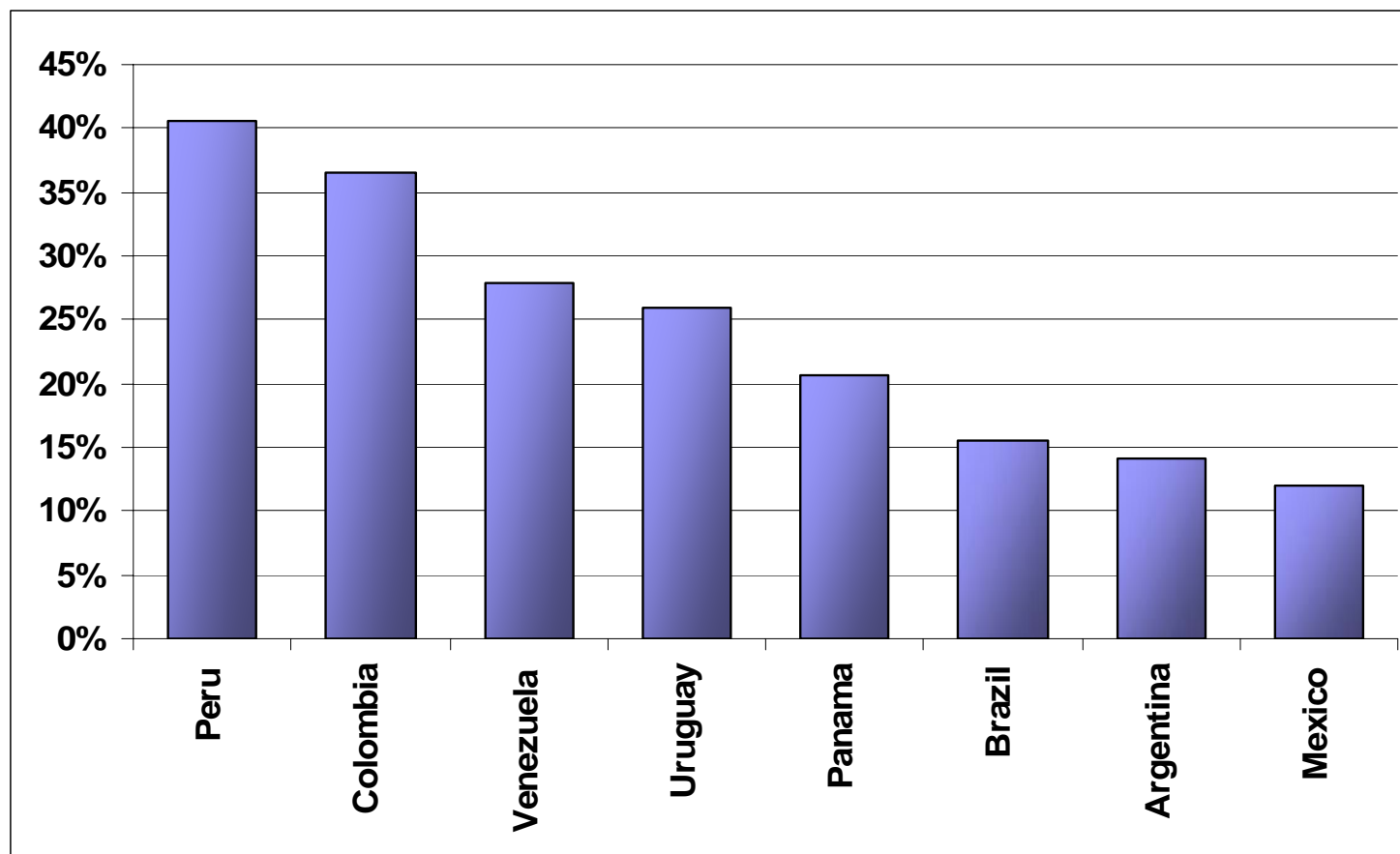
Source: ITU, 2005, World Telecommunications Database.



Generic Services



Proportion of monthly broadband tariff (256Kb/s)
as % of monthly income p.c., 2005



Only affordable for the richest part of society

Source: OSILAC, ECLAC, based on commercial tariffs December, 2005.

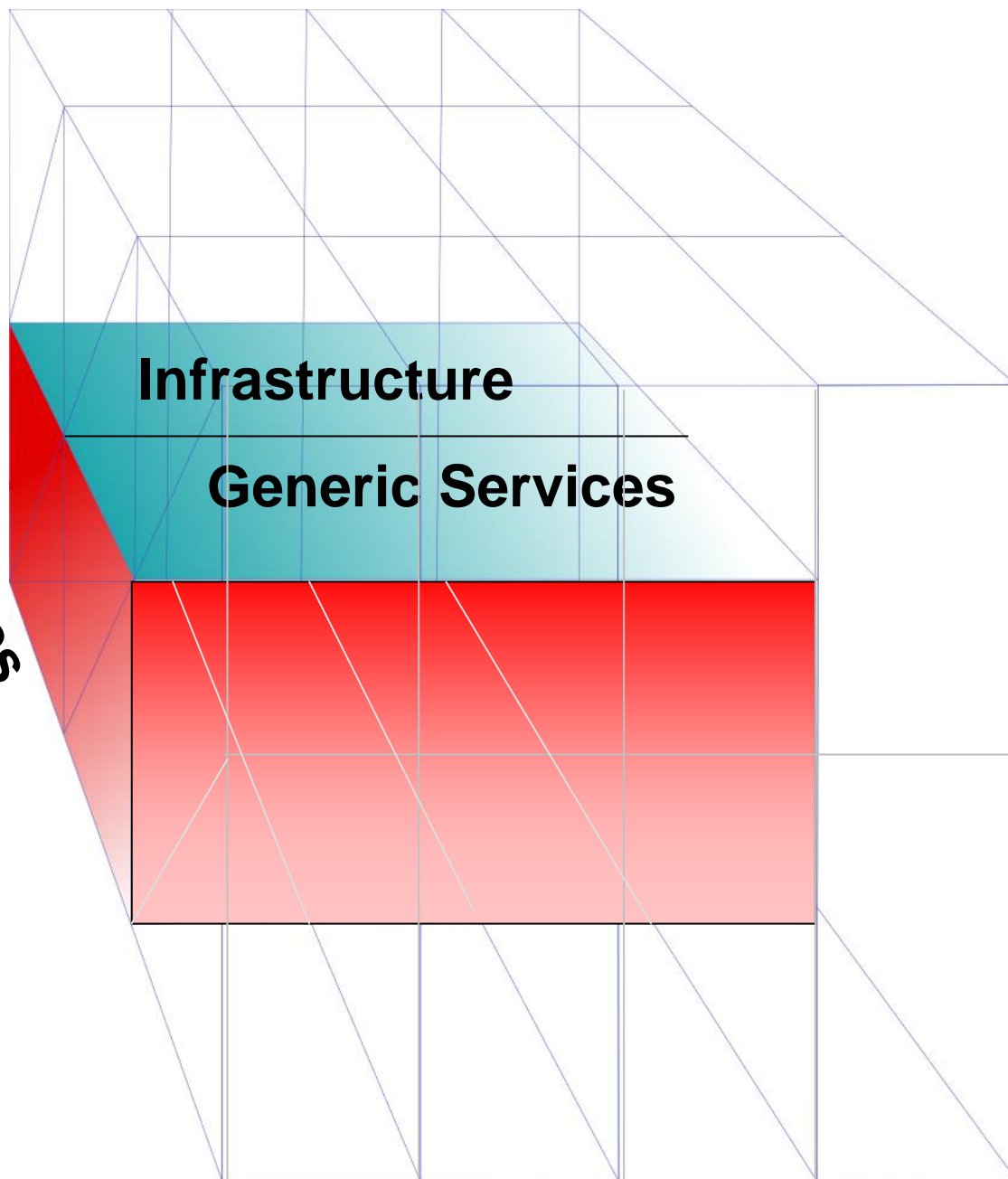


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**Incentives
& Financing**



Source: Hilbert, Martin, ECLAC, 2002.

Incentives and Financing

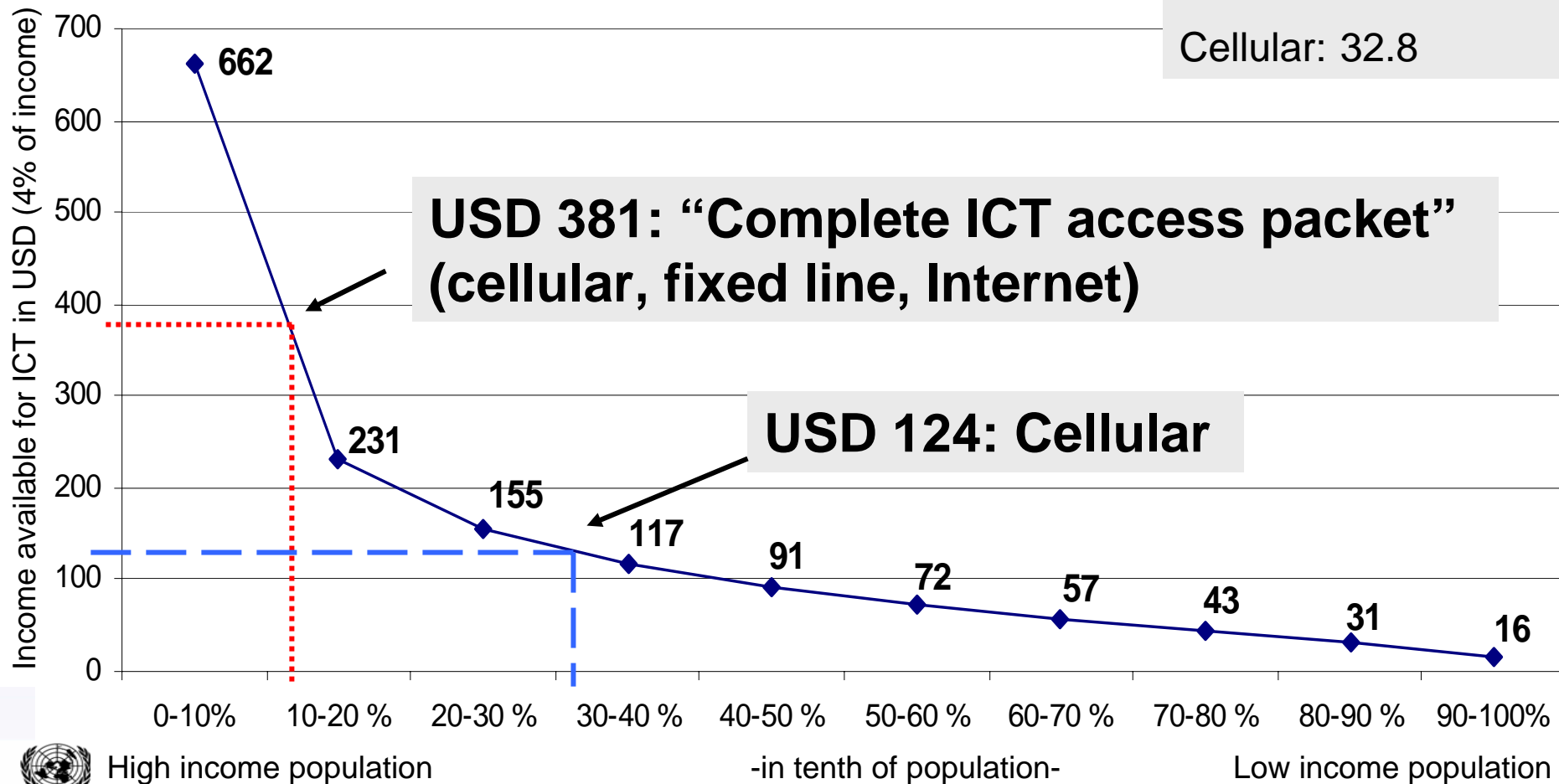


Available resources for ICT expenditures per year in USD, per income segment, Latin America, 2004

Penetration 2004

Internet: 11.5

Cellular: 32.8



High income population

-in tenth of population-

Low income population

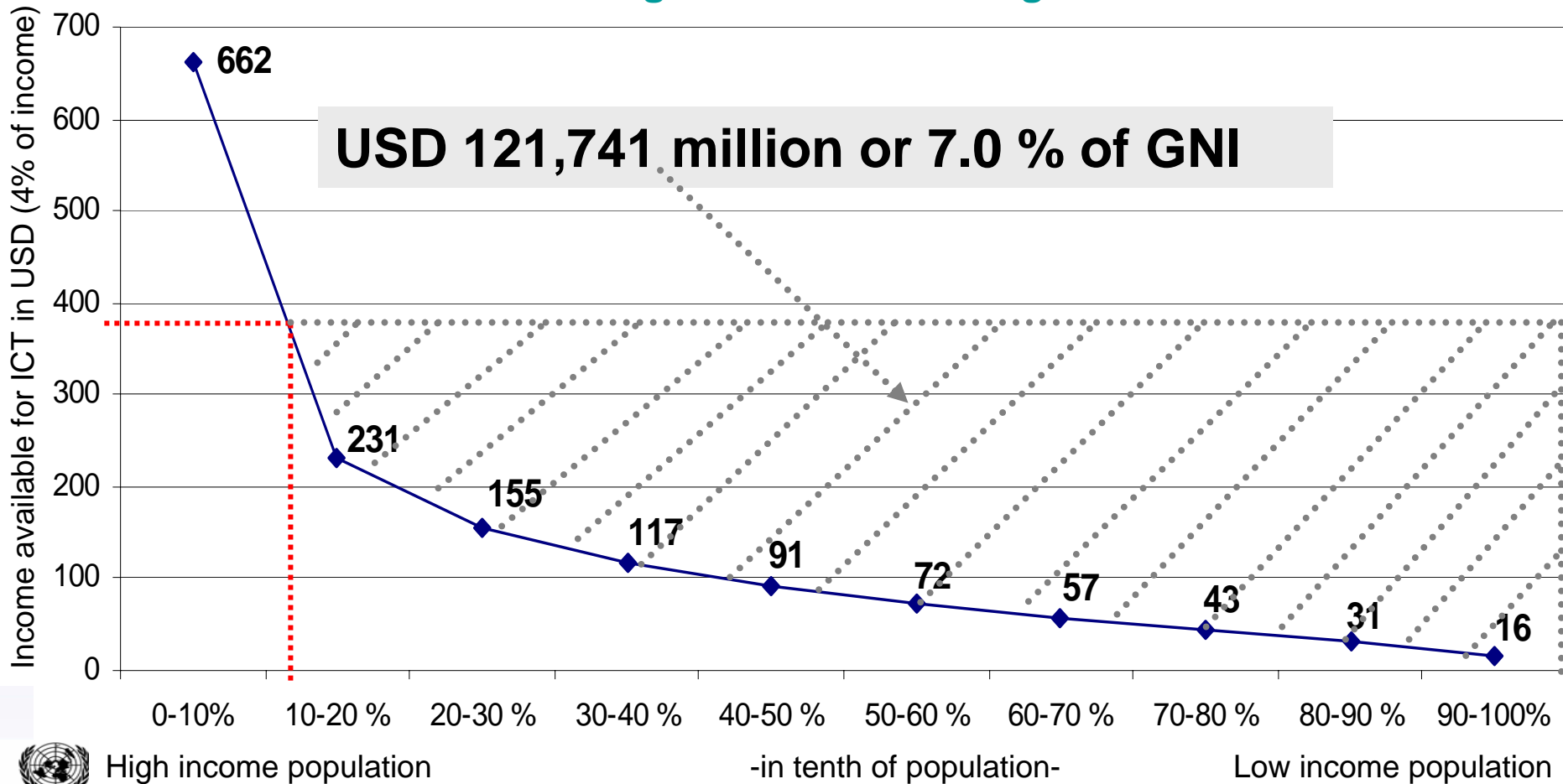


Source: Martin Hilbert, unpublished, based on ECLAC and ITU, 2006.

Incentives and Financing



Available resources for ICT expenditures per year in USD, per income segment, Latin America, 2004
 => Cutting cost or subsidizing?

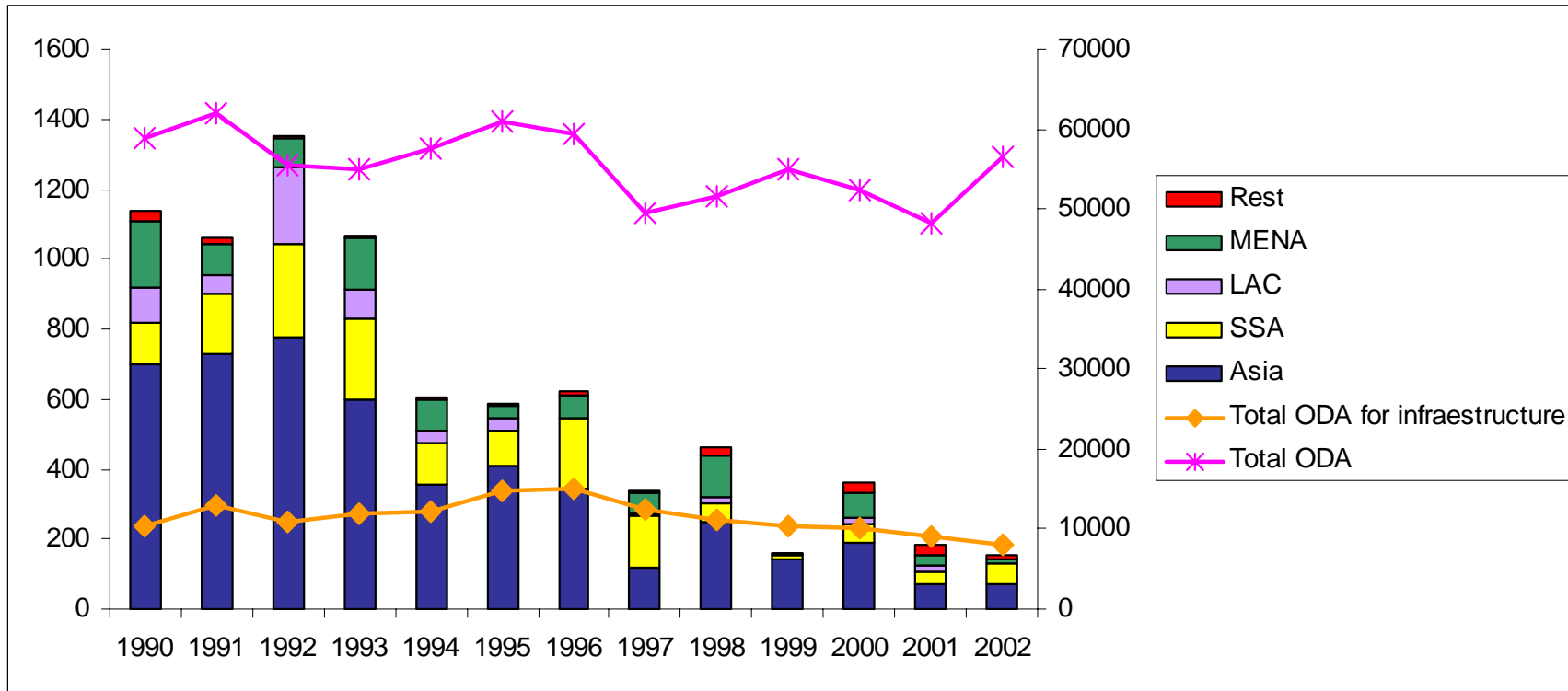


Incentives and Financing



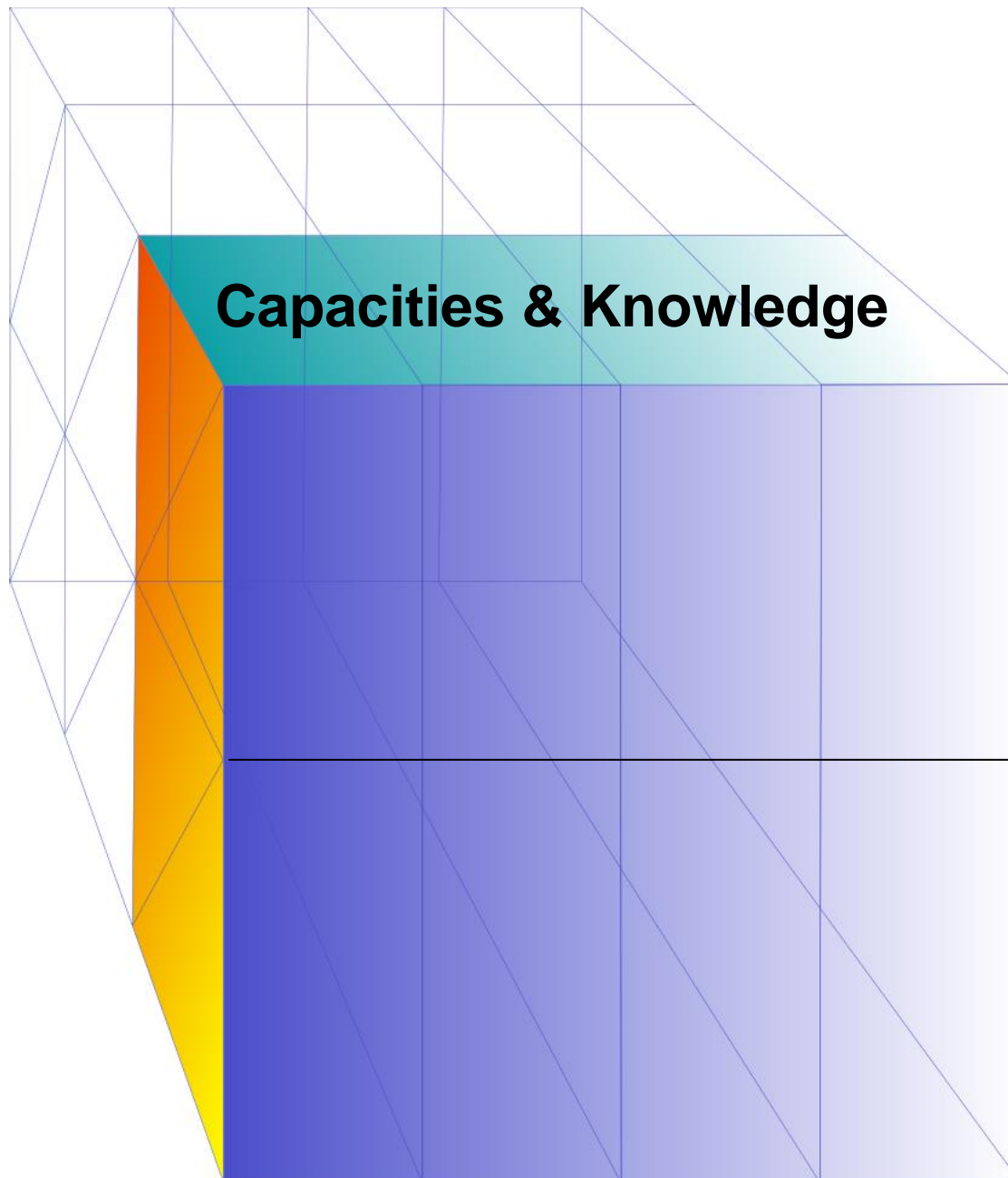
Tendencies in bilateral Official Development Assistance (ODA)

General infrastructure vs. ICT



ICT is not anymore considered as a public infrastructure deserving public support

Source: Development Assistance Committee (DAC), Financing ICTs for Development, Efforts of DAC Members, OECD, 2005.

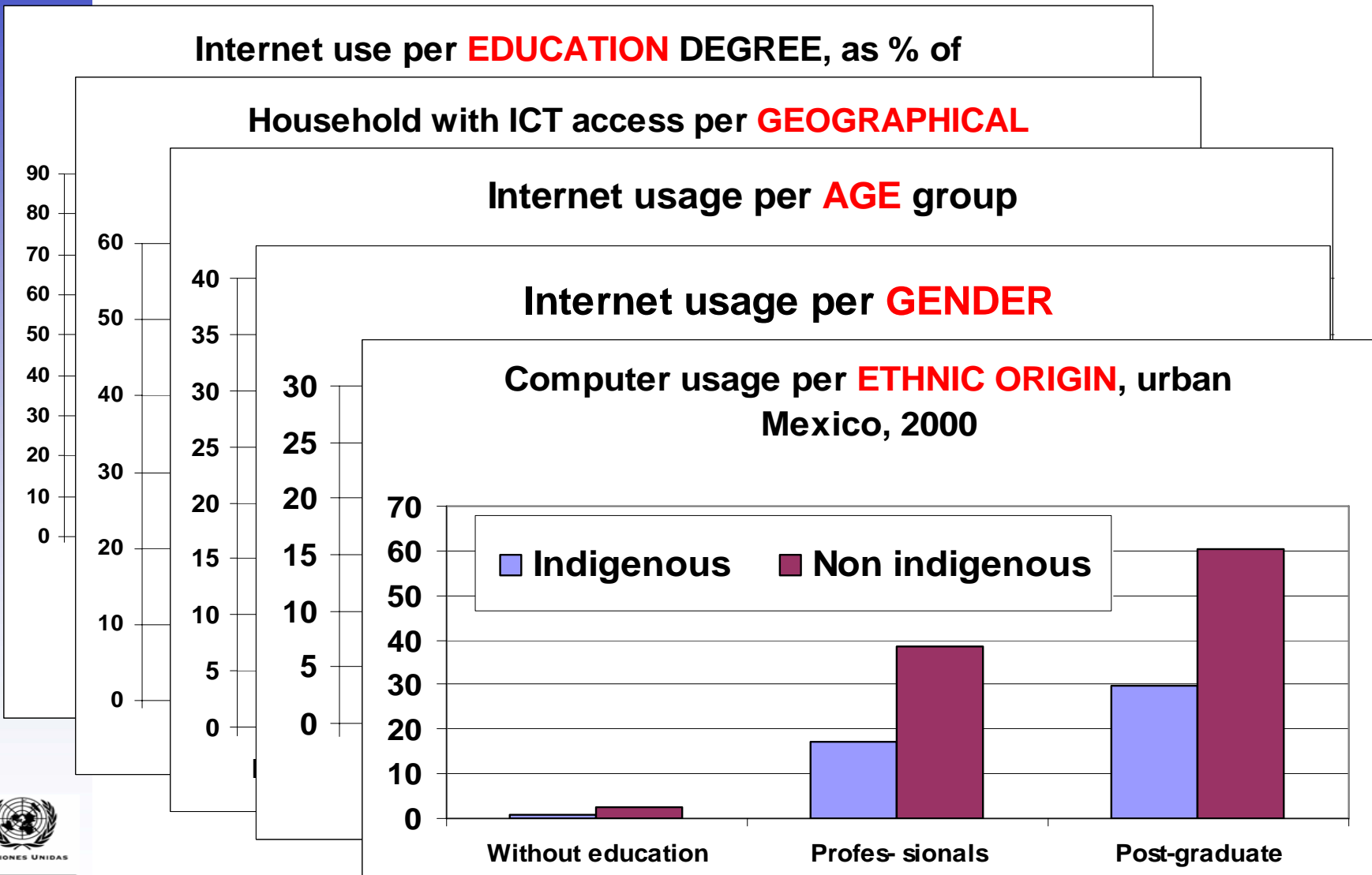


Source: Hilbert, Martin, ECLAC, 2002.

From Infra & Generic Services to Capacities



Five additional dimensions of the digital divide, beyond income



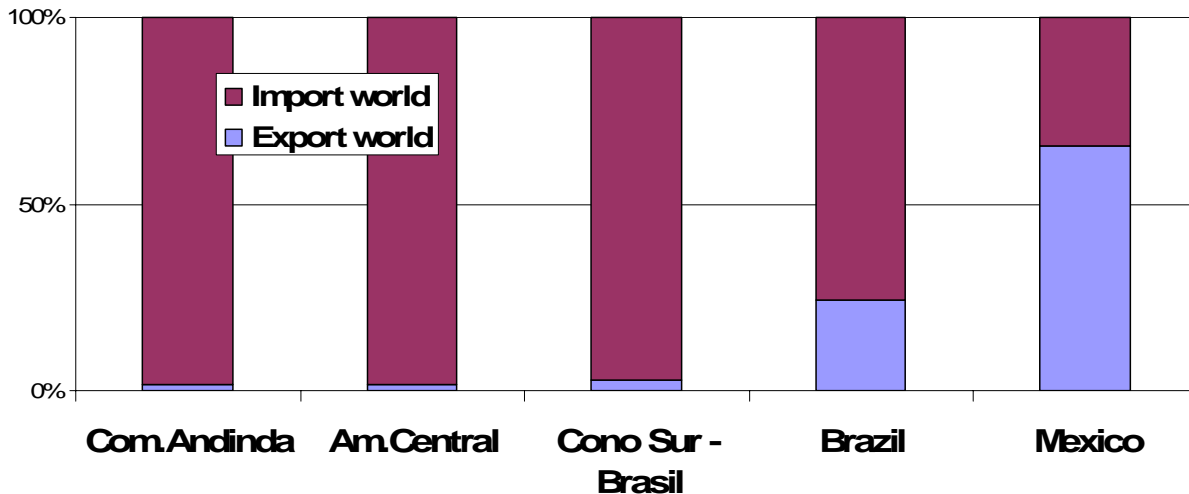
Source: OSILAC, own calculations, based on: Mexico, INEGI 2004; Colombia, National survey of Culture 2002; Argentina, Irol D'Alessio 2003; T&T, NECS 2003; Chile, University of Chile 2000, Dom.Rep., ONE 2005; Brazil, NIC 2005.

Capacities and knowledge



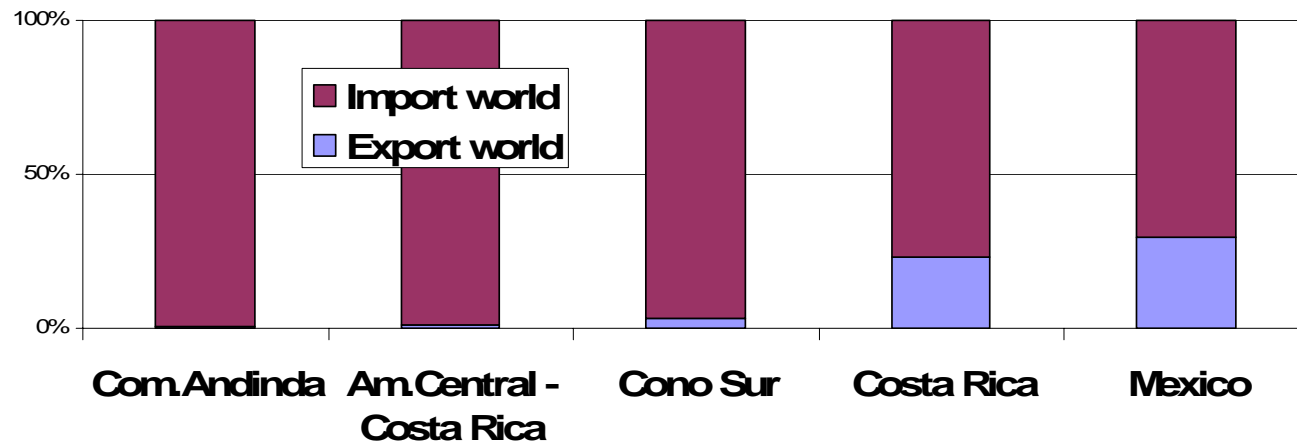
Technology import
vs. export

Automatic data processing machines (computers), last available year +/- 2003 (accrd. HS 1996/ 8471)



Technological trajectories are almost completely exogenous factors for the region.

Diodes, transistors, semi-conductors, etc, last av. year +/- 2003, (accord. HS1996, 8541)



Source: United Nations COMTRADE, 2005.



**Regulation
& Legislation**

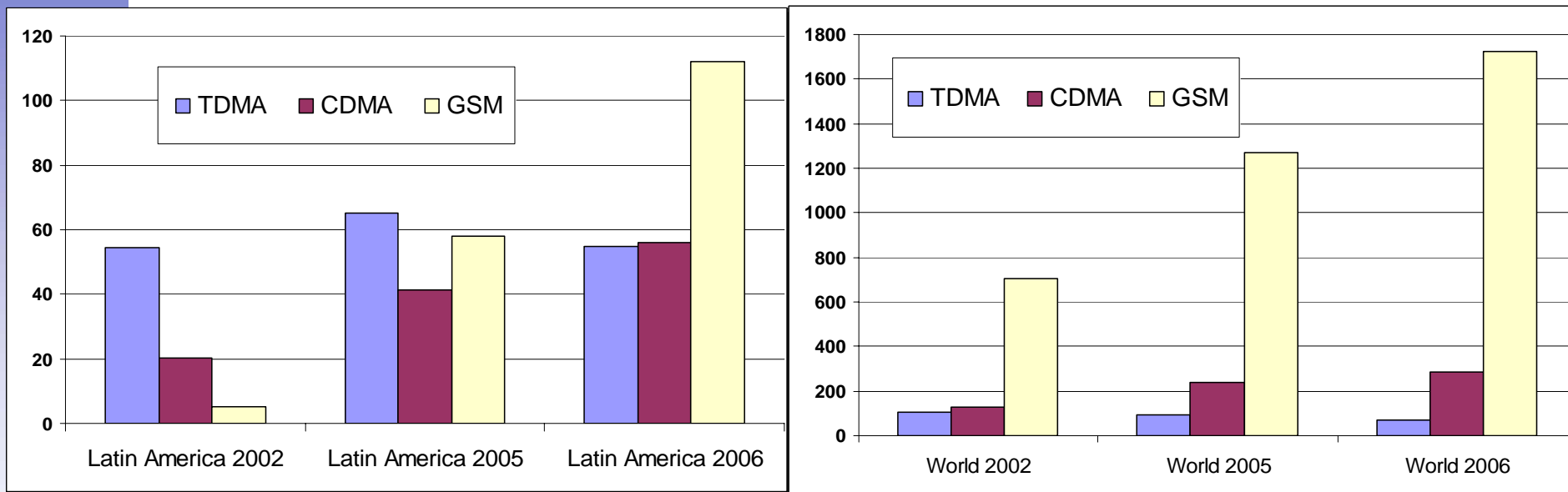


Source: Hilbert, Martin, ECLAC, 2002.

Regulation and Legislation

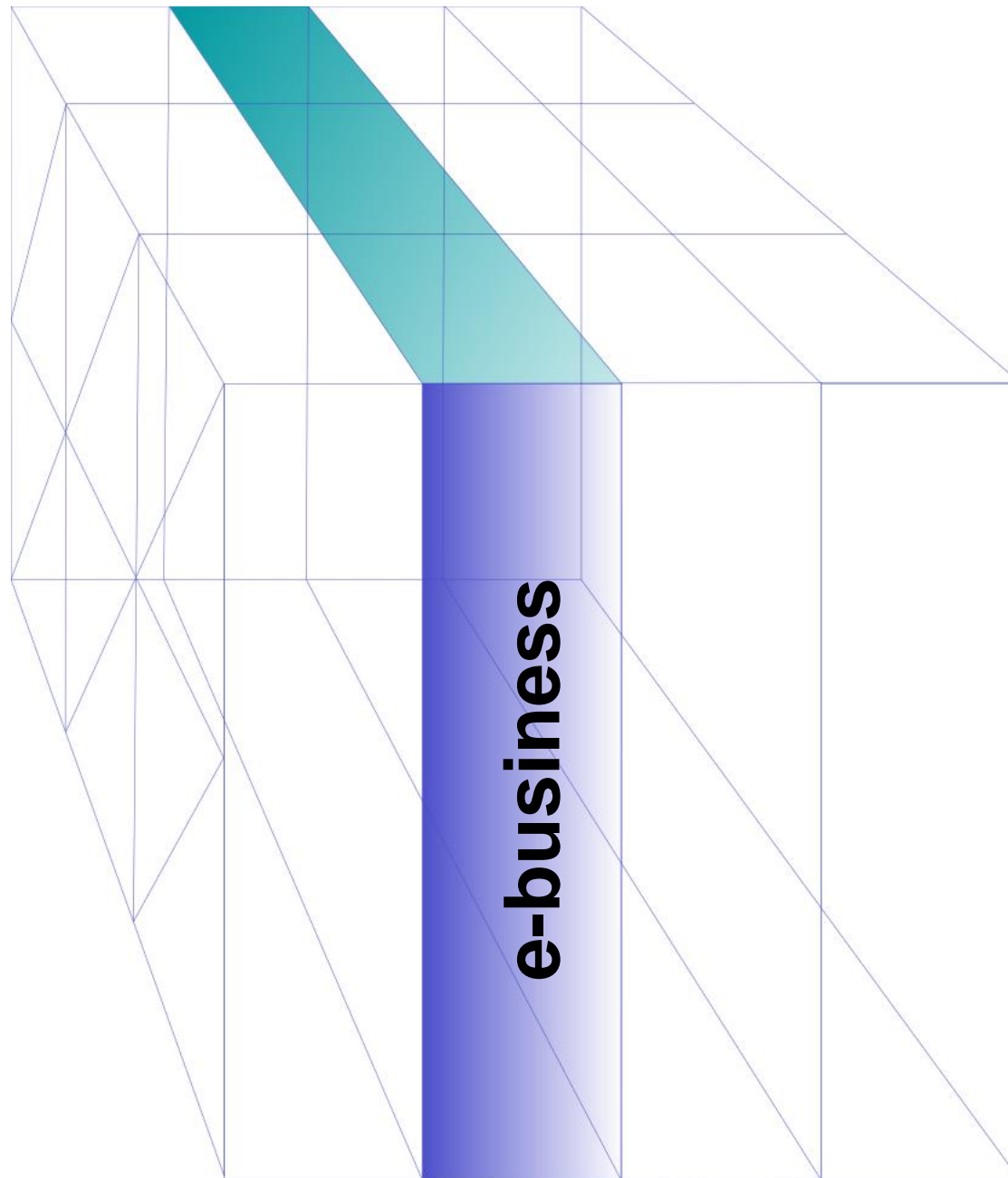


Cellular subscribers in millions by technology,
January of each year



Political decisions that introduce the technology are endogenous to their institutional and socio-economic environment

Source: 3G Americas, www.3gamericas.org, 2002, 2005, 2006.

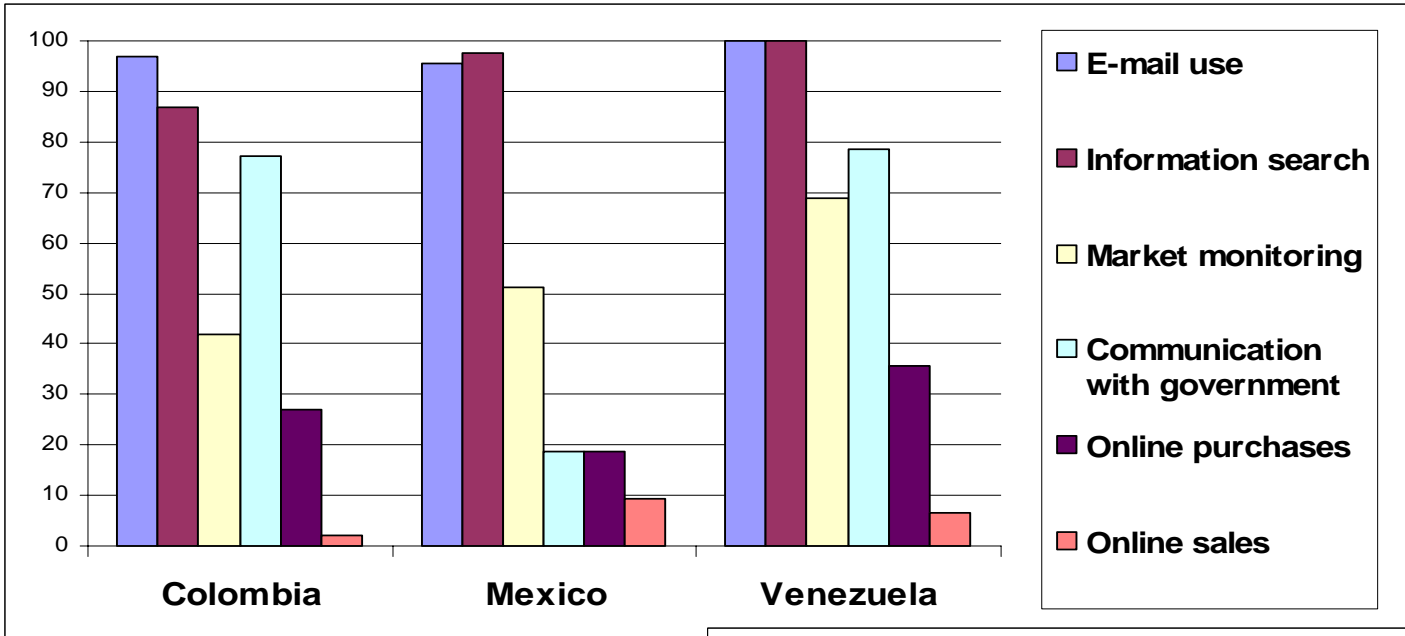


Source: Hilbert, Martin, ECLAC, 2002.

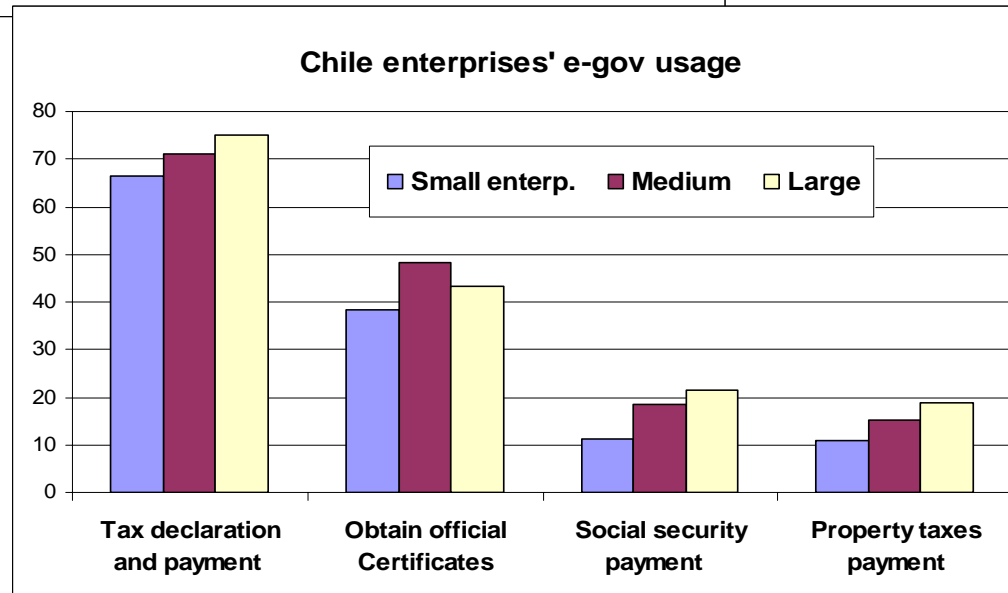
e-business



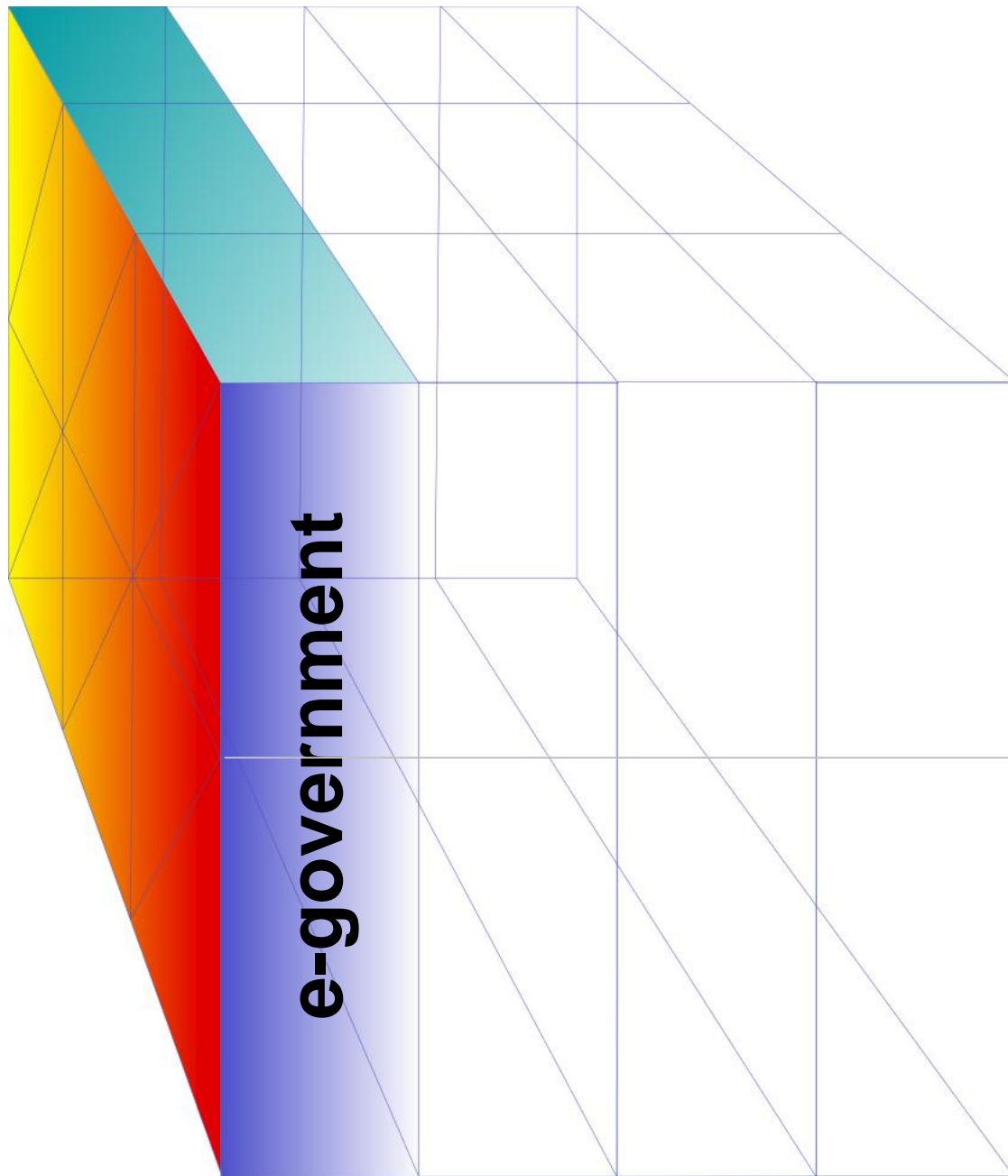
Internet use of enterprises with Internet access, 2004



**Little transactions
(productivity paradox)
and importance of
government as catalyst**



Source: UNCTAD, E-commerce and development report 2004. Subsecretaría de Economía, Gobierno de Chile 2001.



Source: Hilbert, Martin, ECLAC, 2002.

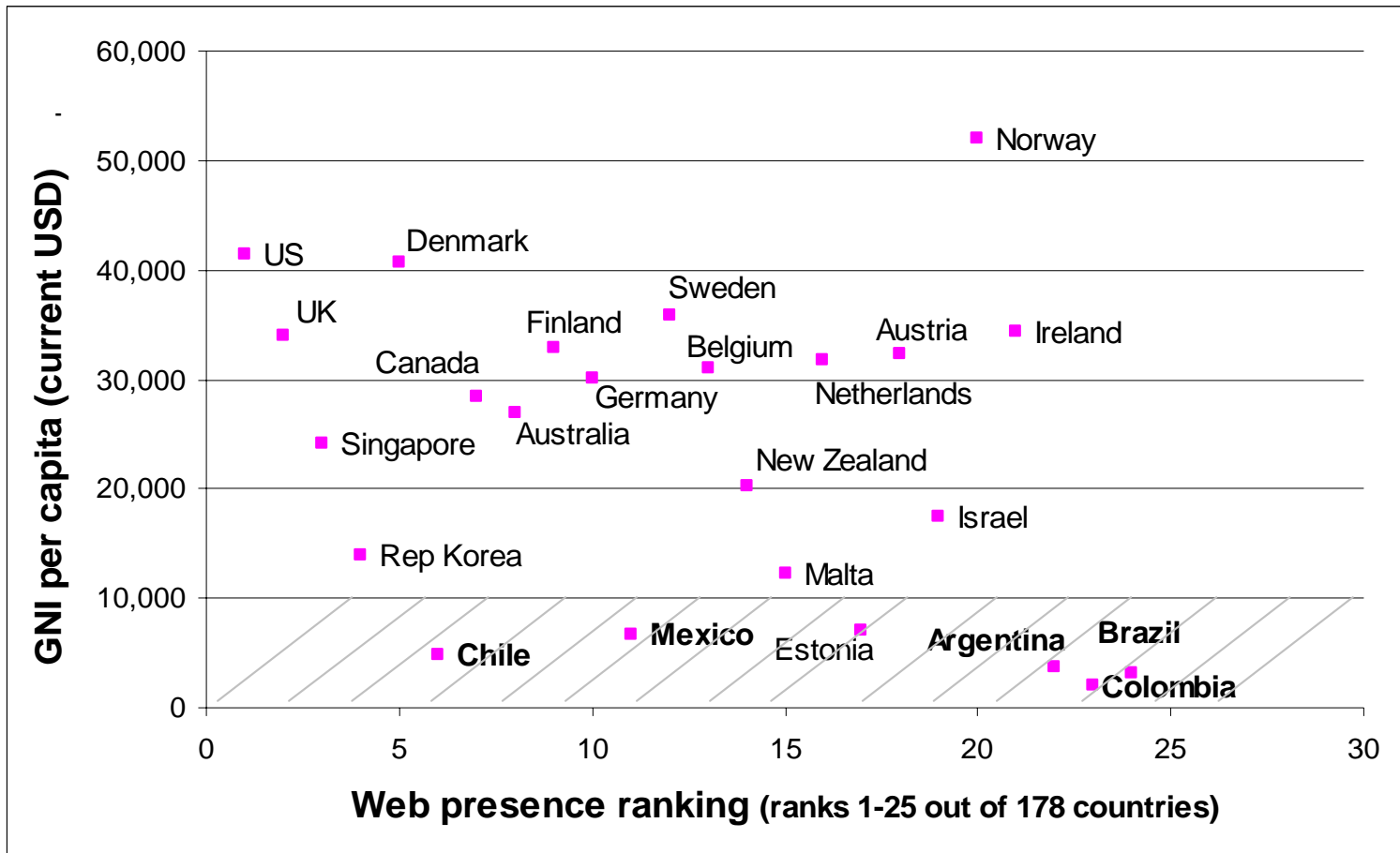


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e-government



Web presence ranking of UN DESA 2004 e-government benchmarking report



Five Latin American countries among the most advanced worldwide

Source: OSILAC, ECLAC, based on commercial tariffs December, 2005.




Conclusions and open research issues




General eReadiness: measuring what and how?

 policy oriented advancement monitoring without solid conceptual model can do major harm to public policy and does not contribute to national coordination of coherent strategies


Structural heritage: technology as the child or parent of wealth?

 structural characteristics of the region seem to repeat the endless vicious circle between inequality and technological modernization, with unclear frontier between market inefficiency and structural exclusion

Catalyzing role of government: big push in the XXI century?

 key position of public sector in bridging the digital divide and overcoming the productivity paradox, but unclear consequences of this “institutional leapfrogging” of the public sector

Dealing with uncertainty: technology dependence without choice?

 technological trajectories are exogenous to the region, policy decisions endogenous; technological evolution complex and fast; wrong decisions extremely costly and future studies are not part of the research agenda



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Thank you for your attention!



More at: <http://www.ECLAC.org/SocInfo>

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Martin.Hilbert@cepal.org , Martin.Hilbert@eclac.org



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