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latin american newsletters conferences





the internet in latin america: investigating the boom

11 and 12 October 2000 The Conference Forum, London E1 8DX, England

icts, internet and industrial development strategy – the price of leapfrogging

paper presented by:

francisco sercovich senior policy advisor, unido

THE INTERNET IN LATIN AMERICA -- Investigating the Boom, 11-12 October 2000

ICTs, INTERNET AND INDUSTRIAL DEVELOPMENT STRATEGY

What price leapfrogging?

F. Sercovich

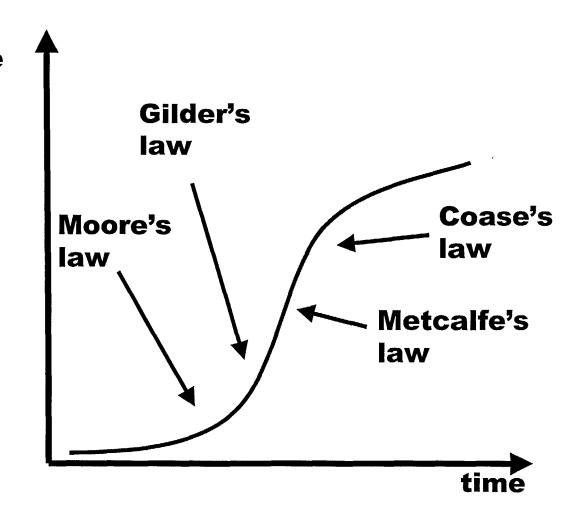
OVERVIEW

- I. ICTs diffusion and productivity growth: a long term development perspective
- II. E-readiness: where do LA countries stand?
- III. The basic economics of leapfrogging
- **IV.** Closing remarks

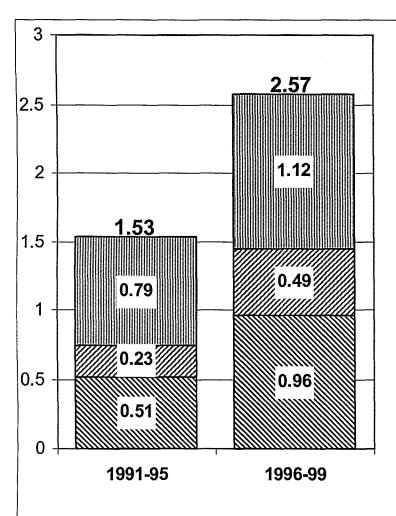


I.1. DECONSTRUCTING ICT'S IMPACT ON ECONOMY-WIDE PRODUCTIVITY GROWTH

Economy-wide productivity growth from ICT diffusion



II.2 CONTRIBUTION OF ICTs TO LABOUR PRODUCTIVITY GROWTH IN THE US



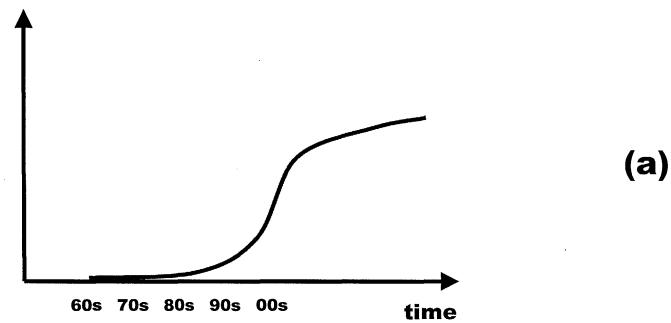
Memorandum: The rate of labor productivity growth increased 1.04 percentage points between 1991-95 and 1996-99. Over two thirds of this increase (.71 of the 1.04 percentage points were owed to IT).

- All Other Contributions
- ☑ IT Contribution Through MFP Growth

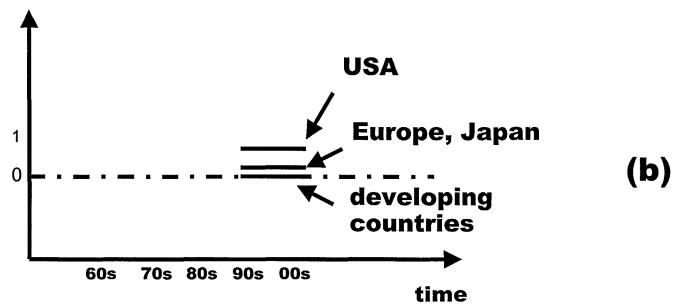
Source: Oliner and Sichel (May 2000). Table 2, p. 25 and Table 4, p.27

I.3. LEADS AND LAGS IN PRODUCTIVITY SURGE FROM ITCs DIFFUSION

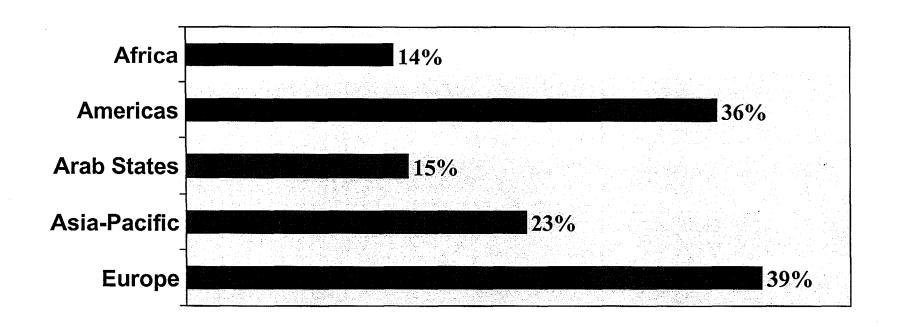




productivity surge from from ICT diffusion (%)



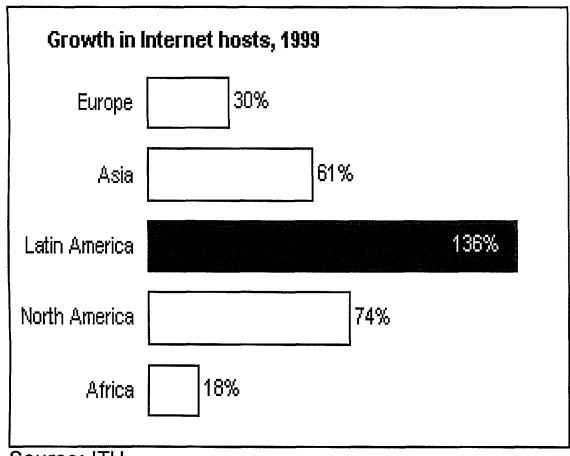
II.1. PLUSES AND MINUSES OF INTERNET'S DEVELOPMENT LATIN AMERICA



✓ Latin America is the developing region with the highest percentage of countries that allow competition in basic telecom services (1999)



II.2. PLUSES AND MINUSES OF INTERNET'S DEVELOPMENT LATIN AMERICA

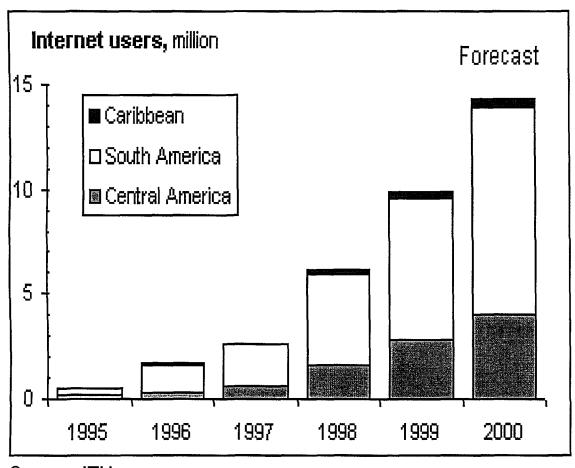


✓ In 1999, growth of Internet hosts was larger than in any other region

Source: ITU



II.3. PLUSES AND MINUSES OF INTERNET'S DEVELOPMENT LATIN AMERICA



√ The number of Internet users is expanding very rapidly

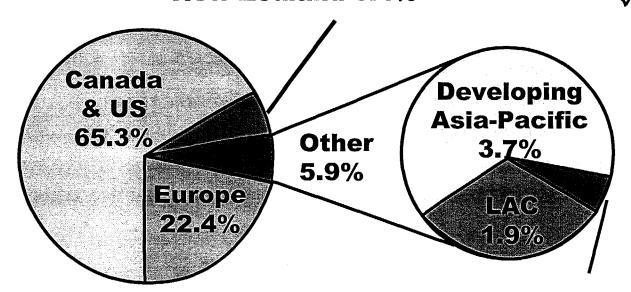
Source: ITU



II.4. PLUSES AND <u>MINUSES</u> OF INTERNET'S DEVELOPMENT LATIN AMERICA

Distribution of Internet hosts, July 1999

Australia, Japan & New Zealand 6.4%



✓ Despite high growth rates, LA still has a very small share of Internet hosts (China already has 70 per cent more users than the whole of LA)

Africa 0.3%

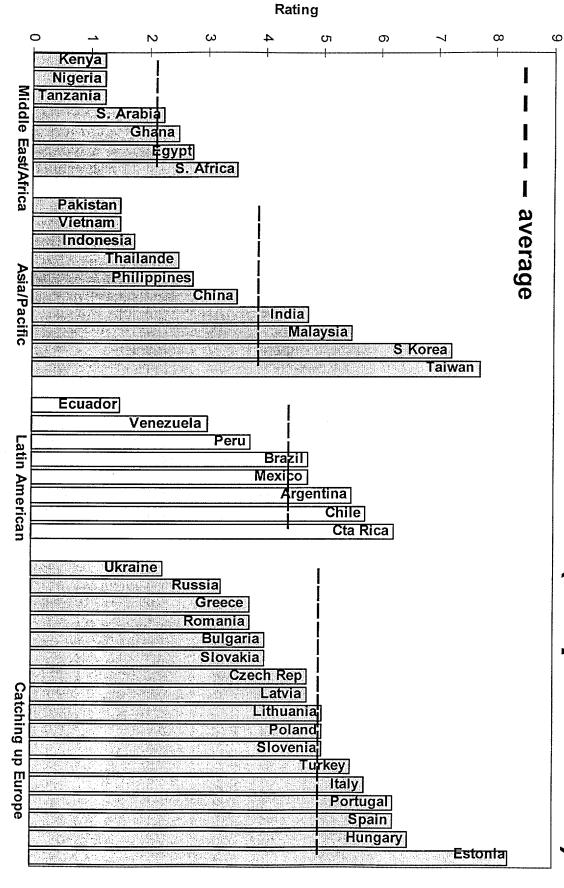
Source: ITU

II.5. PLUSES AND <u>MINUSES</u> OF INTERNET'S DEVELOPMENT LATIN AMERICA

- ✓ Costs of Internet access are still high
- ✓ It can take up to several months to get connected to the Internet
- ✓ Only a small fraction of the population has access to PCs and most potential users lack computer literacy
- √ The potential of e-commerce (B2C) is limited because of weak information security regimes and "credit card culture"

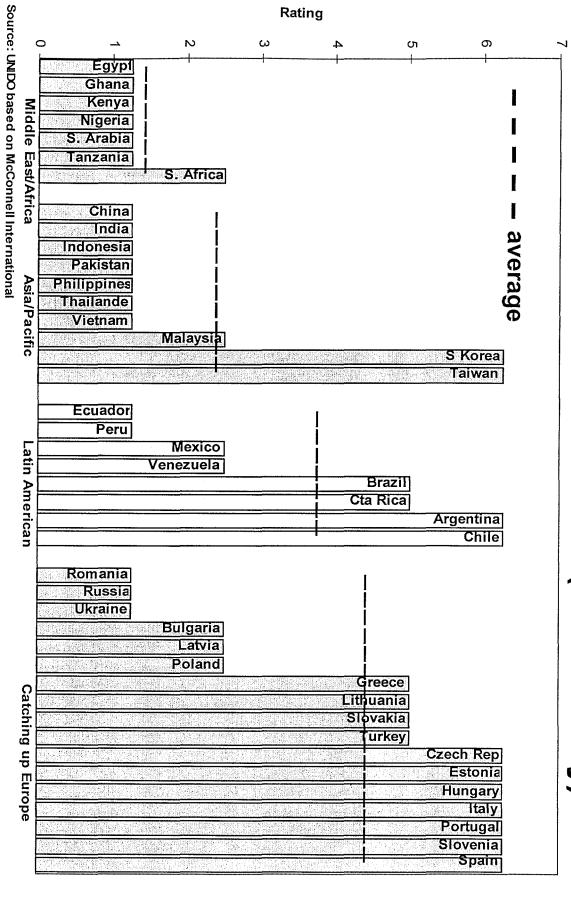


E-READINESS BY **REGION** (composite index)



EVELOPMENT ORGANIZAT

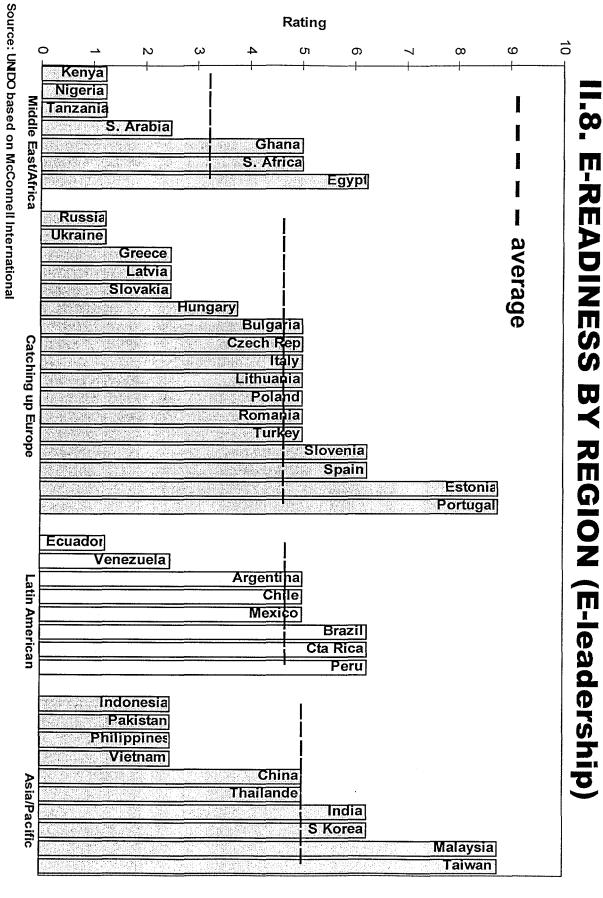
E-READINESS BY **REGION** (connectivity)



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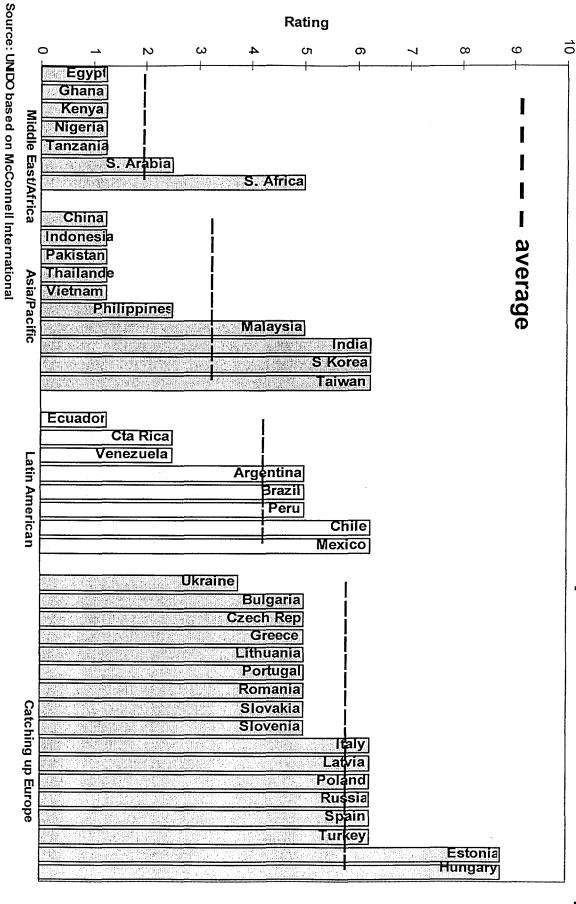
DEVELOPMENT

ORGANIZAT



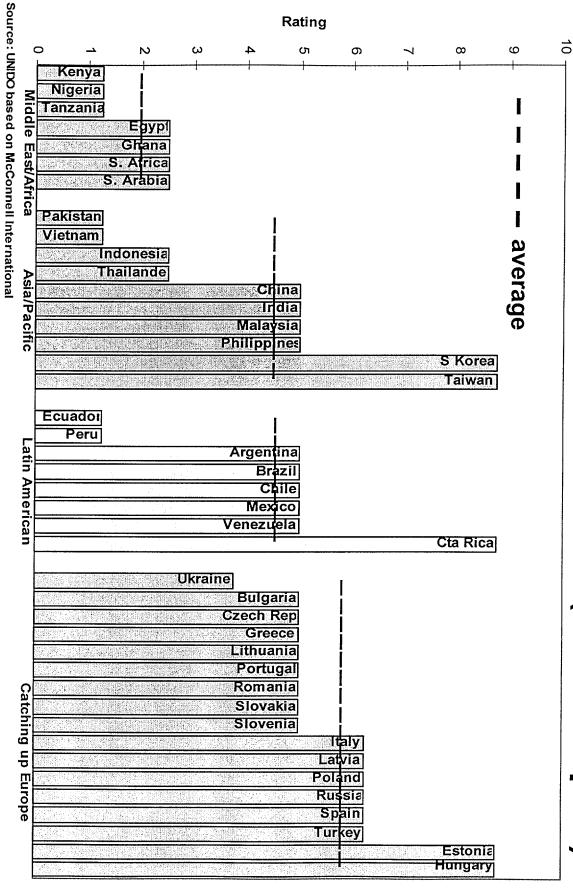
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1.9 E-READINESS BY REGION (Information security)



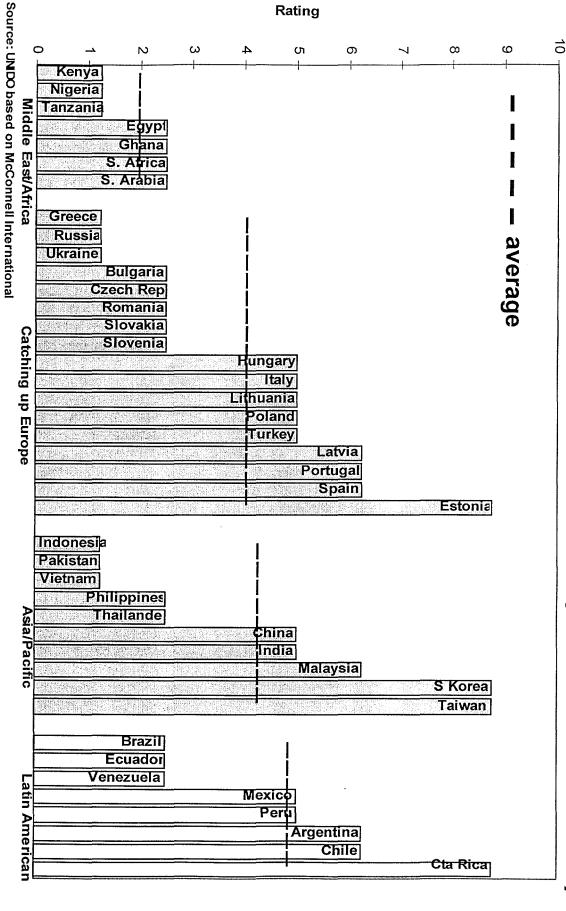


E-READINESS BY REGION (Human capital)



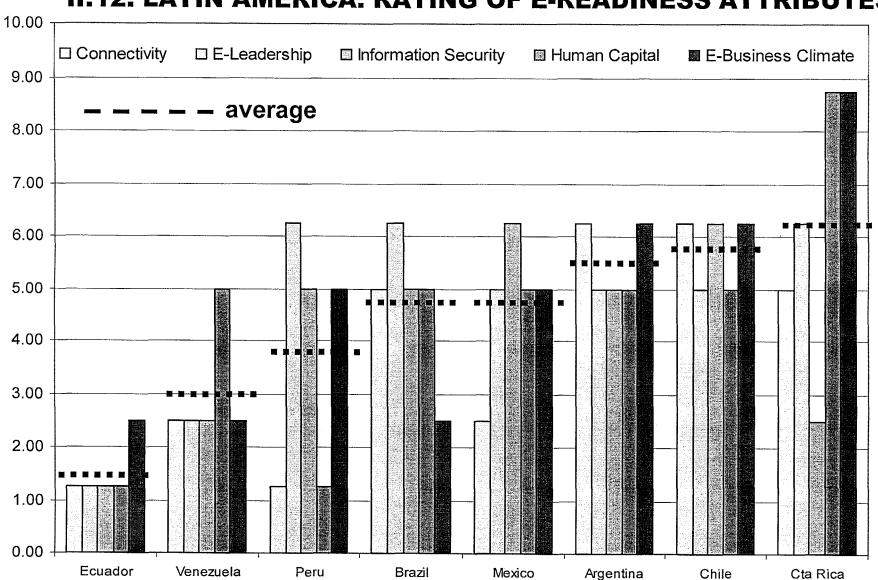


E-READINESS BY REGION (Business climate)



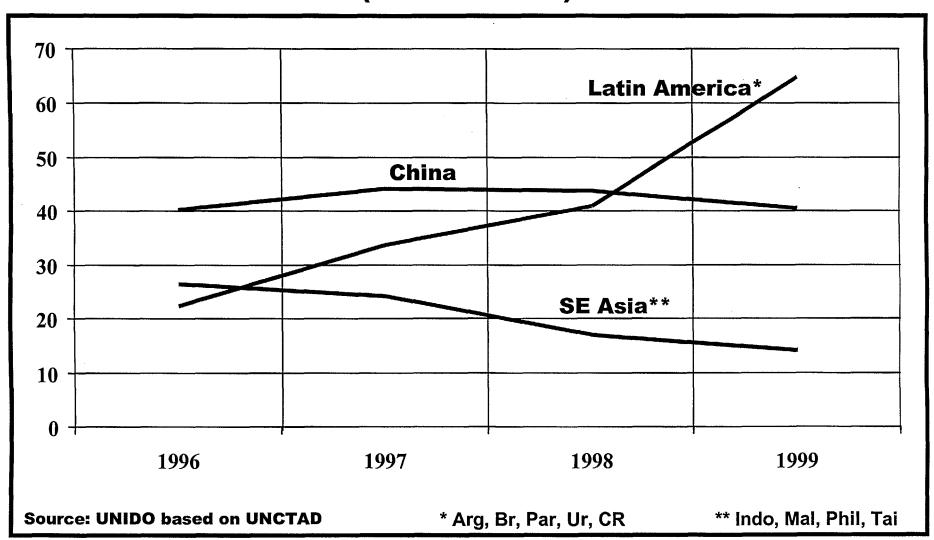


II.12. LATIN AMERICA: RATING OF E-READINESS ATTRIBUTES



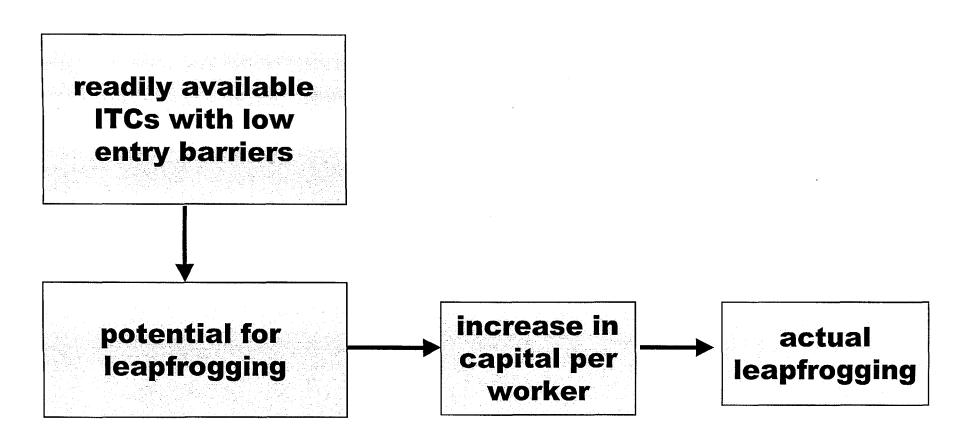


II.13. FDI in LA, SE Asia and China (US\$ billions)





III.ii. Will ICTs narrow or widen the productivity divide? (Catching up – weak version)





III.ii. Will ICTs narrow or widen the productivity divide? Catching up – strong version)

Readily available ITCs
-- at a cost

potential for leapfrogging

SOCIAL CAPABILITIES

- √ Macroeconomic stability
- √Good governance
- √ Human capital (skills and capabilities, entrepreneurship)
- ✓Institutional capital (i.e. risk markets)
- √Physical capital

COMPETITIVE CAPABILITIES

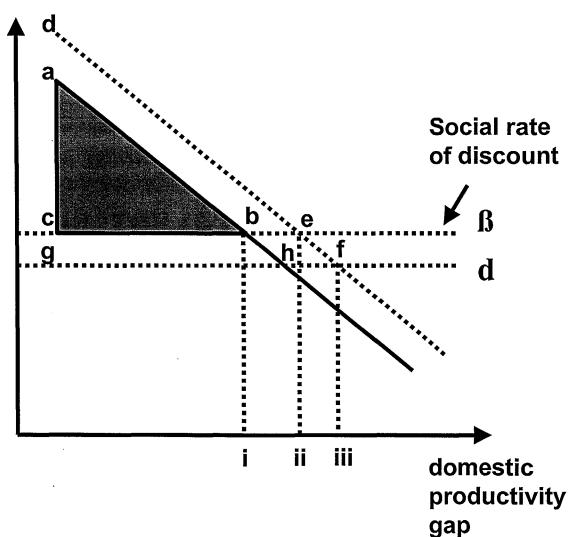
- √Technological learning
- **✓**Productivity growth
- √Threshold factors overcome
- √Structural change

actual leapfrogging



III.iii. Will ICTs narrow or widen the productivity divide?

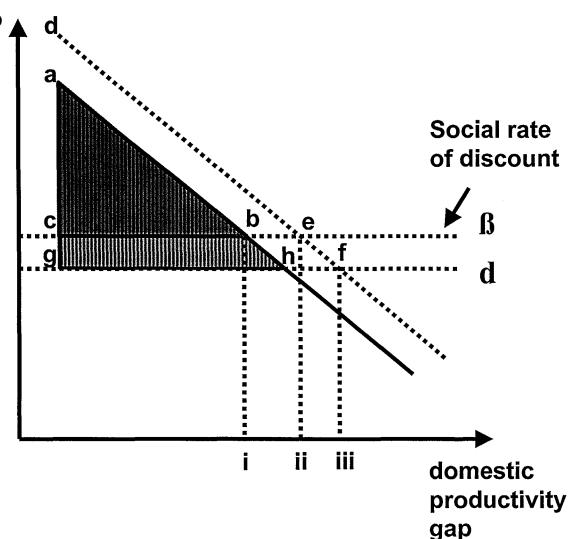
Social return to investment in catching up





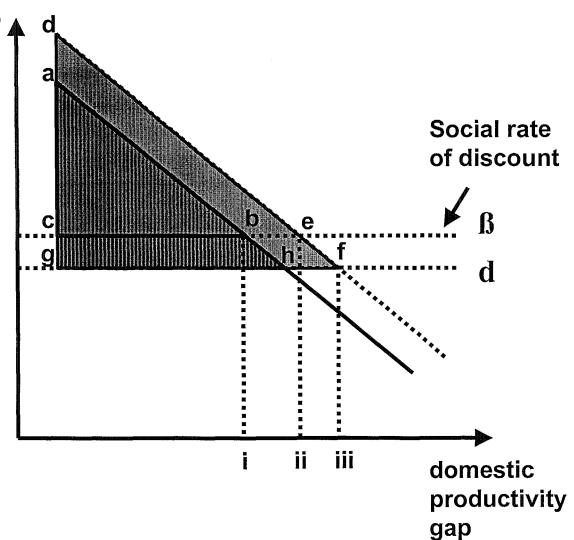
III.iii. Will ICTs narrow or widen the productivity divide?

Social return to investment in catching up



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Social return to investment in catching up





IV.1. Concluding remarks

subsidized (or crosssubsidized) infant Internet industry

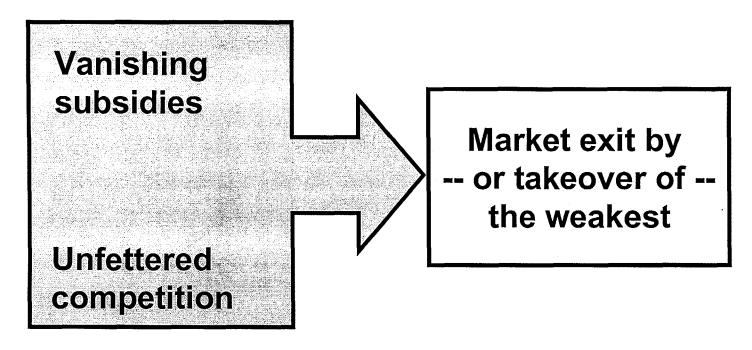
global capital mobility

borderless flow of information

compression of stages from the idea through R&D to the market Emergence of startups everywhere



IV.2. Concluding remarks



- √ The smallest the market, the less scope for subsidization or cross-subsidization and therefore for fuelling market growth
- ✓ Only those who manage to carve niches for specialized, high value-added services, will be able to avoid exit



IV.3. Concluding remarks

"We have always kept manufacturing at 20 to 25 per cent of GDP because we did not want to be hollowed out"

George Yeo, Minister of Trade, Singapore, comparing his country with Hong Kong in Internet business development

(June 2000)



IV.4. Concluding remarks

Moving along the value added chain (Taiwanese vision of shifting barriers to entry)

