

# ***ICT statistics for benchmarking economic performance***

**Dr Tim Kelly,  
Head, Strategy & Policy Unit,  
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delegation”  
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# Benchmarking can be a useful tool ...



## FIFA/Coca Cola World Rankings

1. France	802 points
4. Colombia	728 points
....	
42. Senegal	599 points
50. China PR	566 points

**But rankings don't necessarily predict who will qualify**

**... nor who will win!**



# Agenda

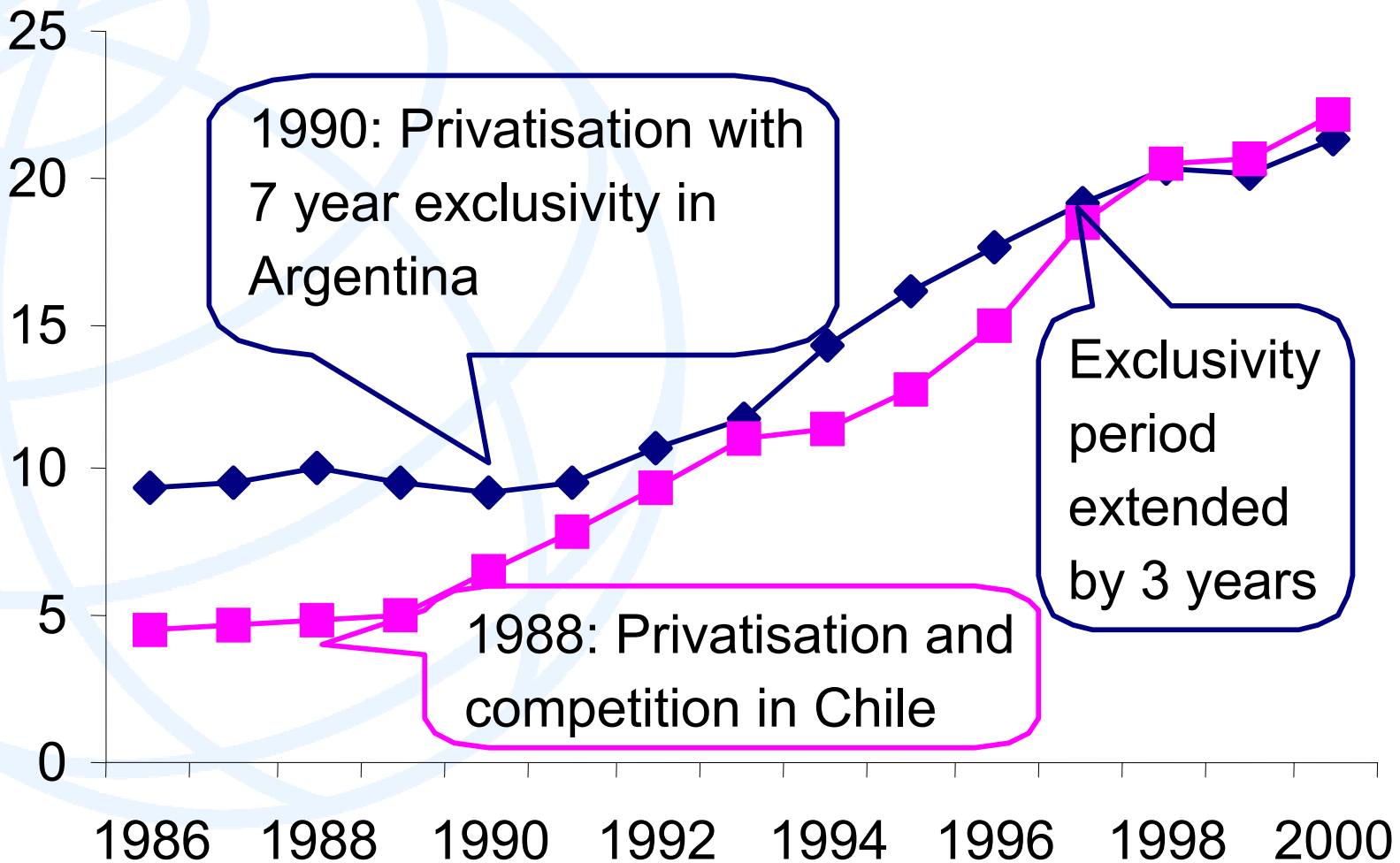
- **Why benchmarking for ICTs?**
  - **Benchmarking for policy-makers**
  - **Benchmarking for company managers**
- **Benchmarking tools**
  - **Network growth and development**
  - **Price comparisons**
  - **Key indicators and ratios**
  - **Rankings**
- **China's case**
  - **Charting an economic phenomenon**



# Benchmarking for policy-makers

- **For policy analysis**
  - **Comparisons before and after policy change**
  - **Measuring impact of ICTs on general economic investment and performance**
- **For regulatory purposes**
  - **ICT sector policy: e.g., tariff rebalancing, including wholesale pricing arrangements among service providers**
  - **Competition policy: e.g., market share, growth rates and measures of market dominance**
- **For international comparisons**
  - **Aggregation of national statistics to allow comparison with other countries**
  - **Comparisons of change in rankings**

# Benchmarking Example (1): Teledensity in Chile and Argentina



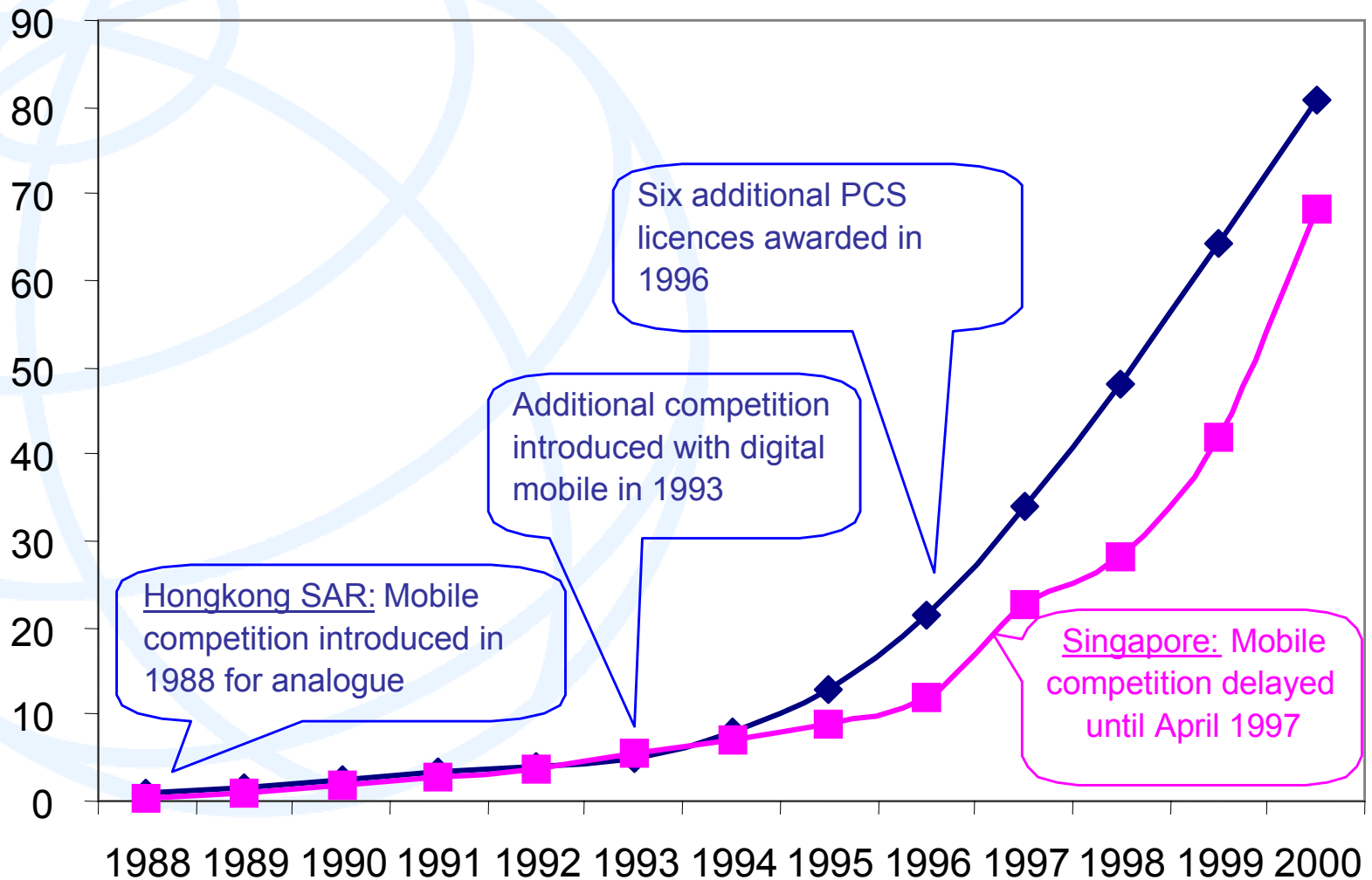


# Benchmarking for company managers

- **Comparing expected performance against actual**
  - **Implementing and monitoring business plan**
- **Comparing performance against competitors**
  - **Market share, price comparisons, quality of service indicators etc**
- **Measuring customer satisfaction**
  - **Level of complaints**



# Benchmarking example (2): Mobile density in Hongkong and Singapore





## Benchmarking tools

- **Network development and growth**
  - e.g. teledensity, mobile density, growth rates
  - e.g. Internet penetration, broadband take-up
- **Price comparisons**
  - OECD/Teligen price comparison model: Covers business and residential, fixed and mobile, voice and data services
- **Quality of service comparisons**
- **Financial measures**
  - e.g. average revenue per user (ARPU), revenue per employee, return on capital investment etc





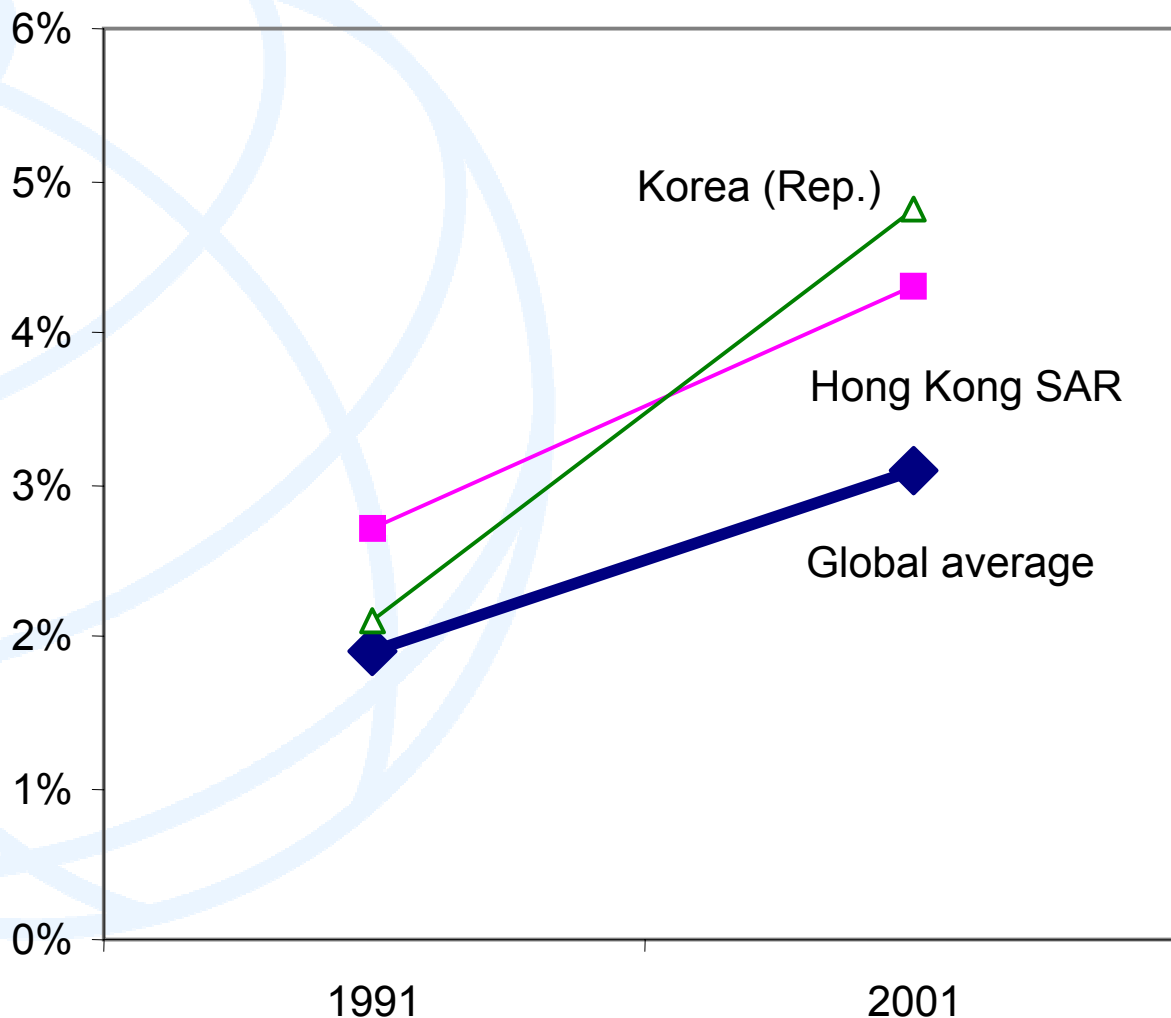
# Key ICT indicators and ratios for general economic performance

- **Penetration level (density)**
  - **Network connections (fixed-line, mobile, Internet) per 100 inhabitants, 100 households, 100 businesses**
- **Telecoms as a % of GDP**
  - **Rising fast during the 1990s**
- **Performance in leading ICT sectors**
  - **Broadband, 3G mobile, digital broadcasting**
- **Pricing and usage**
  - **How affordable are ICTs? How widely are they being used?**



# Benchmarking example (3):

**Telecoms as % of GDP in “broadband economies”**





# Top 10 performers, 1990-2000 by total teledensity rank

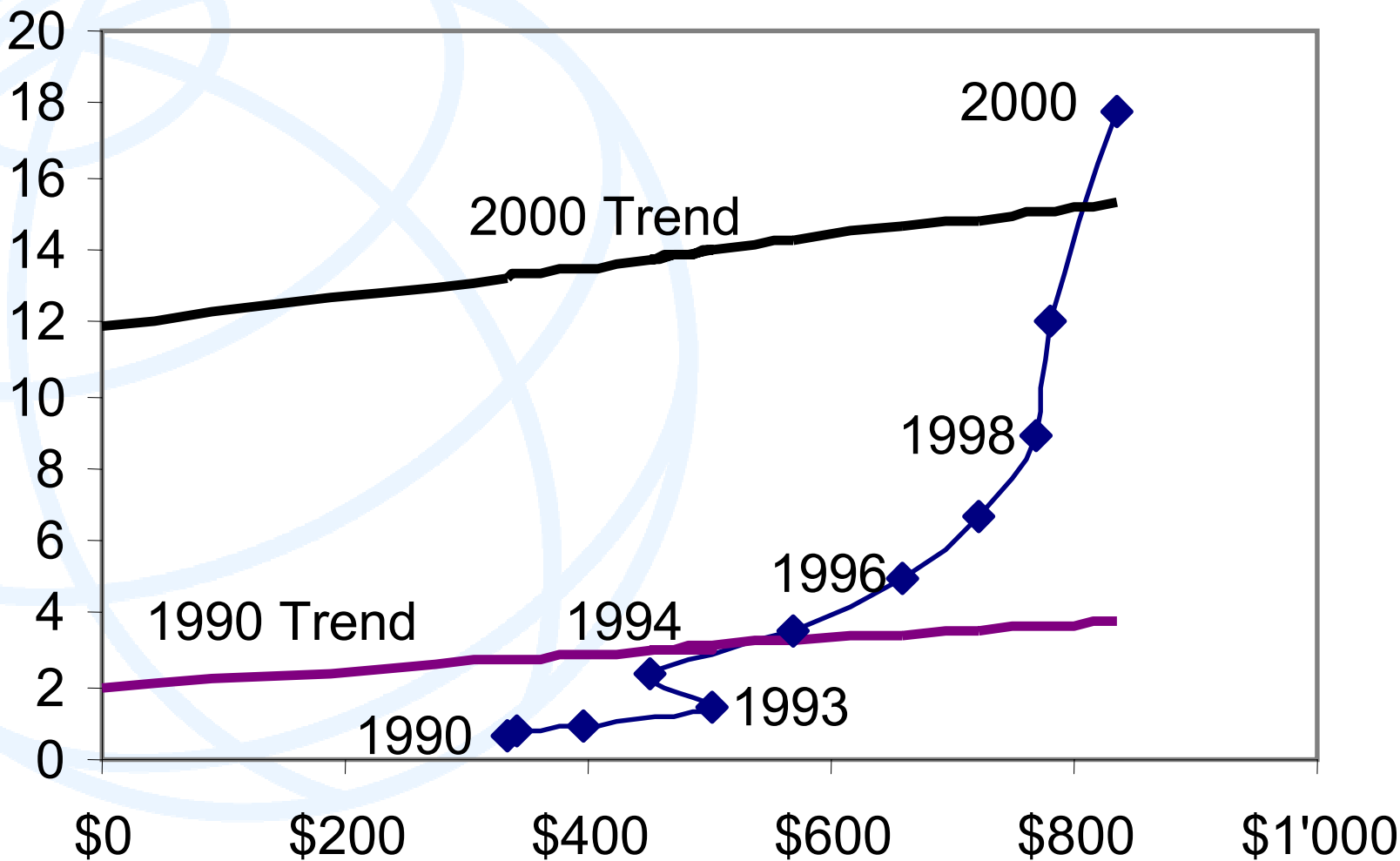
<b>Country</b>	<b>2000</b>	<b>1990</b>	<b>Rank 2000</b>	<b>Rank 1990</b>	<b>Change</b>
China	17.8	0.6	107	171	+64
Viet Nam	4.2	0.1	155	201	+46
Hungary	67.4	9.6	50	89	+39
Botswana	21.6	2.1	103	140	+37
Jamaica	34.1	4.5	82	117	+35
El Salvador	21.8	2.4	102	136	+34
Mauritius	38.6	5.4	78	111	+33
Chile	44.4	6.7	72	104	+32
Portugal	109.5	24.3	22	53	+31
Philippines	12.4	1.0	125	155	+30

*Note: Based on total teledensity (fixed lines plus mobile subscribers, per 100 inhabitants). Shows top ten ITU Member States in terms of improvement in ranking, 1990-2000.*

*Source: ITU World Telecommunication Indicators Database.*



# China's performance: Teledensity and GDP per capita



# ITU country case studies

[www.itu.int/ni](http://www.itu.int/ni)

- **Internet diffusion studies**
  - **ASEAN, Bolivia, Egypt, Hungary, Nepal, Uganda**
- **Broadband**
  - **Australia, Italy, Malaysia, South Africa, Korea (Rep.)**
- **3G Mobile**
  - **China, Chile, Ghana, Hongkong SAR, Japan, Venezuela**
- **Cyber-security**
  - **Brazil, Canada, Korea (Rep.), Netherlands**
- **Effective regulation**
  - **Botswana, Brazil, Morocco, Peru, Singapore**

