



Global ICT Index

Which economies are best
poised to take advantage of ICTs?



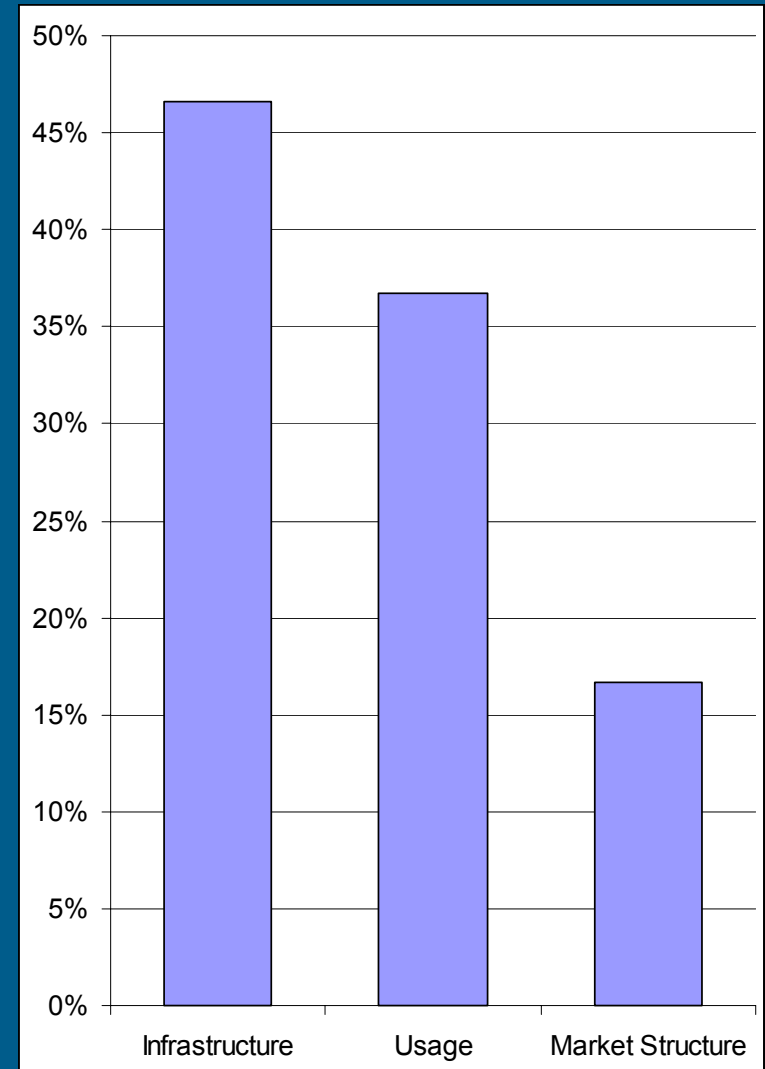
What is E-readiness?

- A measure of current information and communication technologies (ICT) development
- A measure of an economy's ability to take advantage of ICTs in the future



E-Readiness Components

- Infrastructure
46%
- Usage
37%
- Market Structure
17%





Infrastructure

- Main lines
 - Cellular subscribers
 - Estimated Internet users
 - Personal computers
 - International Internet bandwidth (Mbps)
 - Broadband subscribers
-
- Included if three of the six variables were present



Network Usage

- Total national telephone traffic
 - International outgoing telephone traffic
 - International incoming telephone traffic
 - Telecom revenue
 - Settlement rates per minute with US
 - Cost of three minute local call
-
- Included if three of the six variables were present



Market Structure

- Privatized incumbent?
- Years incumbent has been private
- Separate regulator?
- Years regulator has been separate
- Market structure for local services
- Market structure for long distance
- Market structure for international calls
- Market structure for mobile
- Market structure for leased lines
- Market structure for Internet service providers
- Included if five of the ten variables were present



ICT Index Top 15

Country	Index	Rank	GDP
Hong Kong, China	63.56	1	\$20'832
Sweden	61.79	2	\$23'161
Norway	58.30	3	\$28'623
Luxembourg	57.11	4	\$45'950
Denmark	55.92	5	\$26'241
Iceland	55.83	6	\$28'781
Switzerland	54.93	7	\$27'522
Netherlands	54.73	8	\$24'977
United States	54.44	9	\$32'633
Bermuda	53.93	10	na
Canada	51.64	11	\$26'910
United Kingdom	49.95	12	\$22'502
Korea, Rep.	48.69	13	\$15'444
Singapore	47.87	14	\$20'495
Finland	47.50	15	\$24'101
Macao, China	24.93	47	\$15'816
China	12.07	123	\$3'834



ICT Index Bottom 15

Country	Index	Rank	GDP
Guinea-Bissau	1.94	208	\$519
Korea, Dem. Rep.	2.82	207	na
Iraq	2.85	206	na
Comoros	3.11	205	\$1'379
Samoa	3.95	204	\$4'067
Benin	4.02	203	\$946
Djibouti	4.05	202	na
Myanmar	4.23	201	na
Chad	4.93	200	\$859
Liberia	5.33	199	na
Tonga	5.78	198	na
Rwanda	5.87	197	\$926
Gambia, The	5.97	196	\$1'611
Swaziland	5.98	195	\$3'942
Vanuatu	6.09	194	\$3'078



Chinese Highlights

	<u>Overall</u>	<u>Infrastructure</u>	<u>Usage</u>	<u>Market Structure</u>
Hong Kong, China	1	7	2	4
Macao, China	47	50	20	na
China	123	117	122	93

- Hong Kong, China has the number one position in the world
- Macao, China is doing well at 47 out of 208
- China does better than Gabon, Saudi Arabia, Thailand, and Tunisia despite having a lower GDP per capita



Methodology: Variables

- All individual variables are normalized to one so they can be combined into a composite variable.

	<u>Mobile Users/100</u>	<u>Score/Max</u>	<u>Mobile Ratio</u>
Hong Kong	64.14	$64.14 / 64.14 = 1$	1
Finland	63.37	$63.37 / 64.14 = 0.988$	0.988



Methodology: Groups

- The variables in each group are aggregated to form the three index components

Infrastructure

<u># of Variables</u>	<u>Weight</u>
6 of 6	1/6
5 of 6	1/5
4 of 6	1/4
3 of 6	1/3
Less than 3	Dropped

Usage

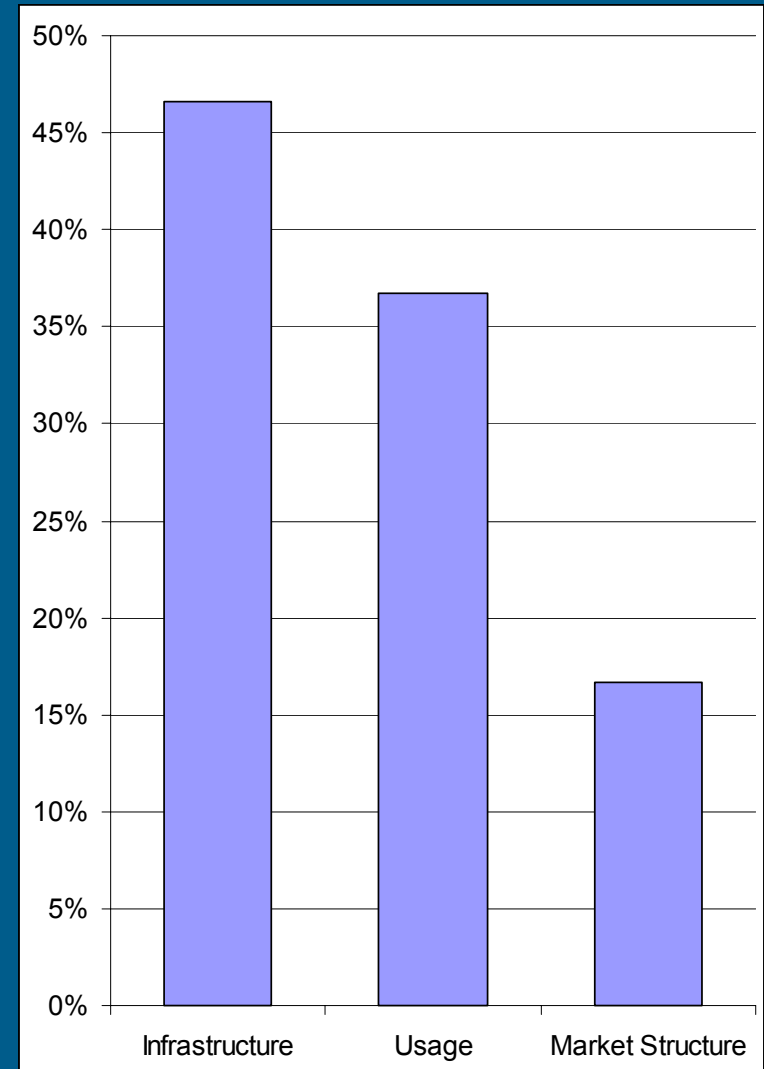
<u># of Variables</u>	<u>Weight</u>
6 of 6	1/6
5 of 6	1/5
4 of 6	1/4
3 of 6	1/3
Less than 3	Dropped

Market Structure

<u># of Variables</u>	<u>Weight</u>
10 of 10	1/10
9 of 10	1/9
8 of 10	1/8
7 of 10	1/7
6 of 10	1/6
5 of 10	1/5
Less than 5	Dropped

Methodology: Weighting

- Factor analysis on 3 composite variables.
- 177 Economies
- Year 2000 Data





Methodology: Index

- Factor analysis assigns a weight to each of the categories (line 1)
- If a category is missing, the weight shifts proportionately to the remaining categories
- Any economy missing the infrastructure category is dropped

<u>Infrastructure</u>	<u>Usage</u>	<u>Market</u>	<u>Total</u>
46.62%	36.69%	16.69%	100.00%
55.96%	44.04%		100.00%
73.64%		26.36%	100.00%
100.00%			100.00%
	68.73%	31.27%	dropped