Connectivity Scorecard 2011

Turkey

Turkey
5.51

	Score	Weight
Consumer Infrastructure	0.67 (0.88)*	0.16
Consumer Usage and Skills	0.55 (0.70)*	0.16
Business Infrastructure	0.55 (0.64)*	0.56
Business Usage and Skills	0.41 (0.71)*	0.04
Public sector Infrastructure	0.38 (0.83)*	0.06
Public sector Usage and Skills	0.36 (0.68)*	0.00

*The score of the leading performer for this component

Table 1: Component Scores & Weights 2011

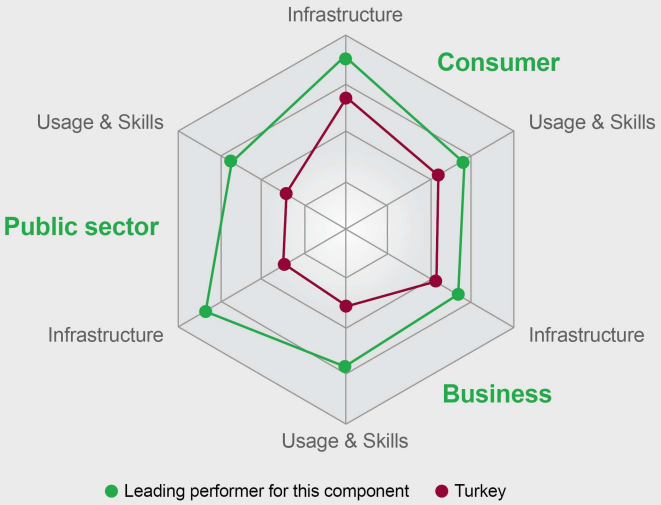

Fig 1: Component Scores 2011

Overview

Turkey scores 5.51 and climbs three places to rank 4th among the Resource and Efficiency-driven[1] economies in the Connectivity Scorecard 2011 index. This compares with a rank of 7th and a score of 5.09 in 2010. Turkey is helped by strong scores on the consumer infrastructure component of the scorecard and reasonable performances on consumer usage and business infrastructure.

Strengths

Turkey's performance is propelled by its relatively superior deployment and adoption rates of typical consumer telecom infrastructures. Notably, Turkey is among the highest performers in terms of broadband penetration within the group of Resource and Efficiency countries; it also scores relatively well on mobile penetration and on basic fixed telephony penetration. On the consumer usage component, Turkey is a strong performer on adult literacy, on Internet users as a share of the total population, and on the use of mobile messaging and mobile e-mail services. On the business infrastructure component, Turkey scores highly on the penetration rate of secure Internet servers, on the penetration rate of personal computers and on the amount of available international internet bandwidth. Similarly, Turkey's performance on some aspects of the business usage and skills component is reasonably good. For example, secondary school enrolment rates (a measure of skills in the available and emerging workforce), and on enterprise mobile data spending per capita (a measure of the intensity with which businesses use mobile data services).

[1] As defined by The World Economic Forum www.weforum.org

Weaknesses

Conversely, there are many areas where Turkey's performance falls short of the levels required for it to reach the very top of the Resource and Efficiency economy rankings. It must be said, however, that Turkey like many other Resource and Efficiency nations was penalised somewhat by the decision to include data on ICT exports and imports. Particularly with respect to ICT exports, of both goods and services, Turkey is some way behind the leading nations on these metrics. Further, Turkey does not score highly on some more "main-stream" measures. For instance, performance on most measures of spending on corporate-facing IT and telecoms services is mediocre or moderate at best. On the government or "public sector" infrastructure and usage metrics, Turkey's performance is almost always weak or mediocre - this includes both the measures of government, education sector and healthcare sector spending on IT, hardware and software derived from the WITSA Digital Planet publication, and also the indicators of online service availability and opportunities for e-participation derived from the United Nations' rankings.

Conclusions

Turkey is a relatively strong performer on the 2011 Connectivity Scorecard. However, its relatively high income levels probably play a role in driving relatively good scores on consumer-oriented indicators that were used in this year's Scorecard. The performance on the business-related components of the Scorecard is more moderate, and the performance on the government components of the Scorecard is disappointing. There are also some areas, such as relatively low minutes of use per capita, where existing policies that heavily tax tele-communications services make a direct contribution to lowering Turkey's overall score.

2011 vs 2010

Turkey scores 5.51 and climbs three places to rank 4th in this year's index, compared with a rank of 7th and a score of 5.09 in 2010. The difference between scores and rankings in 2011 as compared to 2010 can be explained by two factors[2]: first, there is a change in the weighting system, and secondly, there have been extensive changes to the data indicators used. With respect to the Resource and Efficiency economies, for the first time ever, we used specific data on the relative contributions of ICT investment (i.e., "ICT capital deepening") and human capital (i.e., "labour composition") to GDP growth. These new weightings tended to place substantially more weight on the "infrastructure" as opposed to "usage and skills" components for the business and public sector parts of the Scorecard. Had we used the same weights as in 2010, Turkey would have finished 7th on the Scorecard with a final score of 5.09. The use of the new weights in 2011 helped to increase Turkey's score as they diverted weight away from the business usage and skills category (in which Turkey's performance is relatively weak) and towards the business infrastructure category (where Turkey's performance is relatively strong).

Second, owing to data constraints relating to other indicators in the business infrastructure and business usage and skills components, we included data on ICT exports of goods (under infrastructure), and ICT imports of goods and exports of services (under usage). The justification for these seemingly idiosyncratic choices is as follows: high levels of ICT exports are likely to be quite correlated with the development of a reasonably strong

Rank [*]	Country	Connectivity Score
1 [1]	Malaysia	6.61
2 [3]	Chile	6.21
3 [5]	Russia	5.68
4 [7]	Turkey	5.51
5 [4]	Argentina	5.46
6 [6]	Brazil	5.14
7 [8]	Mexico	4.87
8 [10]	Ukraine	4.81
9 [2]	South Africa	4.68
10 [9]	Colombia	4.06
11 [12]	Thailand	3.68
12 [13]	Tunisia	2.79
13 [15]	Vietnam	2.73
14 [17]	China	2.72
15 [14]	Iran	2.41
16 [19]	Philippines	2.15
17 [n/a]	Syria	2.11
18 [20]	Indonesia	2.01
19 [16]	Sri Lanka	2.01
20 [18]	Egypt	1.89
21 [21]	India	1.25
22 [25]	Pakistan	1.14
23 [23]	Nigeria	1.09
24 [22]	Kenya	0.95
25 [24]	Bangladesh	0.90

*last year's rank in parenthesis

Table 2: Connectivity Scorecard 2011 Results – Resource & Efficiency-driven Economies

[2] For more information download the Connectivity Scorecard 2011 Report from www.connectivityscorecard.org

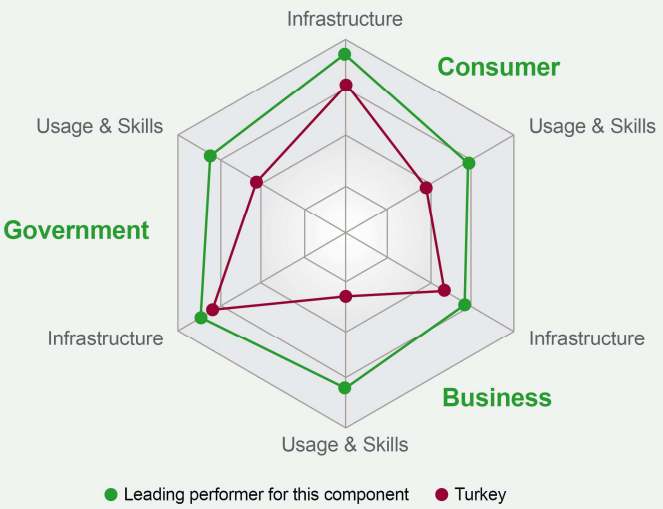

Fig 2: Component Scores 2010

ICT ecosystem. Similar to the car industry, ICT manufacturing in one area is likely to spawn spill-over effects into ICT in other manufacturing and ICT investment in complementary areas. For instance, an initial advantage in computer assembly might lead to the location of mobile handset assembly in the country. This in turn will likely have positive spill-over effects into the wider economy. Not all countries are ICT exporters or need to have ICT or export-led growth strategies, however. Here high levels of ICT imports might suggest a high level of domestic demand for ICT and thus be correlated with high levels of usage.[3] High levels of ICT service exports are very likely to correlate with the presence of a critical mass of ICT user skills in the economy, which in turn could enable countries to support strong ICT sectors despite large sections of the population without ICT skills.

In common with many other countries, however, Turkey suffers from not being an extensive manufacturing centre for ICT, which means that the relevance of ICT exports, re-exports, imports, and re-imports is relatively small compared to the relevance of the same factors in the economies of some Asian nations that have set themselves up as major manufacturing hubs for ICT goods, or in the Indian case, of ICT services. Had we not included these ICT trade indicators, Turkey's score would have been 6.06, although the country would still have finished fourth.

The Connectivity Scorecard is based on comparative scores between countries, and, therefore, each country's performance is measured in relation to the best performing nation in each component at a given point of time. As with other indices of relative rankings, it is therefore hard to interpret the Connectivity Scorecard in terms of absolute "improvements" or "deteriorations" and to make comparisons of scores over time.

About Connectivity Scorecard

The Connectivity Scorecard is a global ICT index which, unlike other available research, is the first of its kind to rank countries in terms of "useful connectivity". That is, not only on the deployment of ICT infrastructure but also to measure the extent to which consumers, businesses and the public sector "make use" of connectivity technologies to enhance social and economic prosperity. This "useful connectivity" is defined as the bundle of infrastructure, complementary skills, software and informed usage that makes ICT the key driver of productivity and economic growth.

Commissioned by Nokia Siemens Networks, the study was created by Professor Leonard Waverman, Dean, Haskayne School of Business, University of Calgary, and Fellow, London Business School. The study was conducted by the consulting firms Berkeley Research Group and Communicea.

For more information on the Connectivity Scorecard, visit www.connectivityscorecard.org

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[3] In fact, a good argument could be made that the "ICT imports" indicator should be included under the "business infrastructure" category since they could also be correlated with business investment. This does not, however, make much of a difference to the overall scores.