The Economist

Which countries are raising the most productive humans?

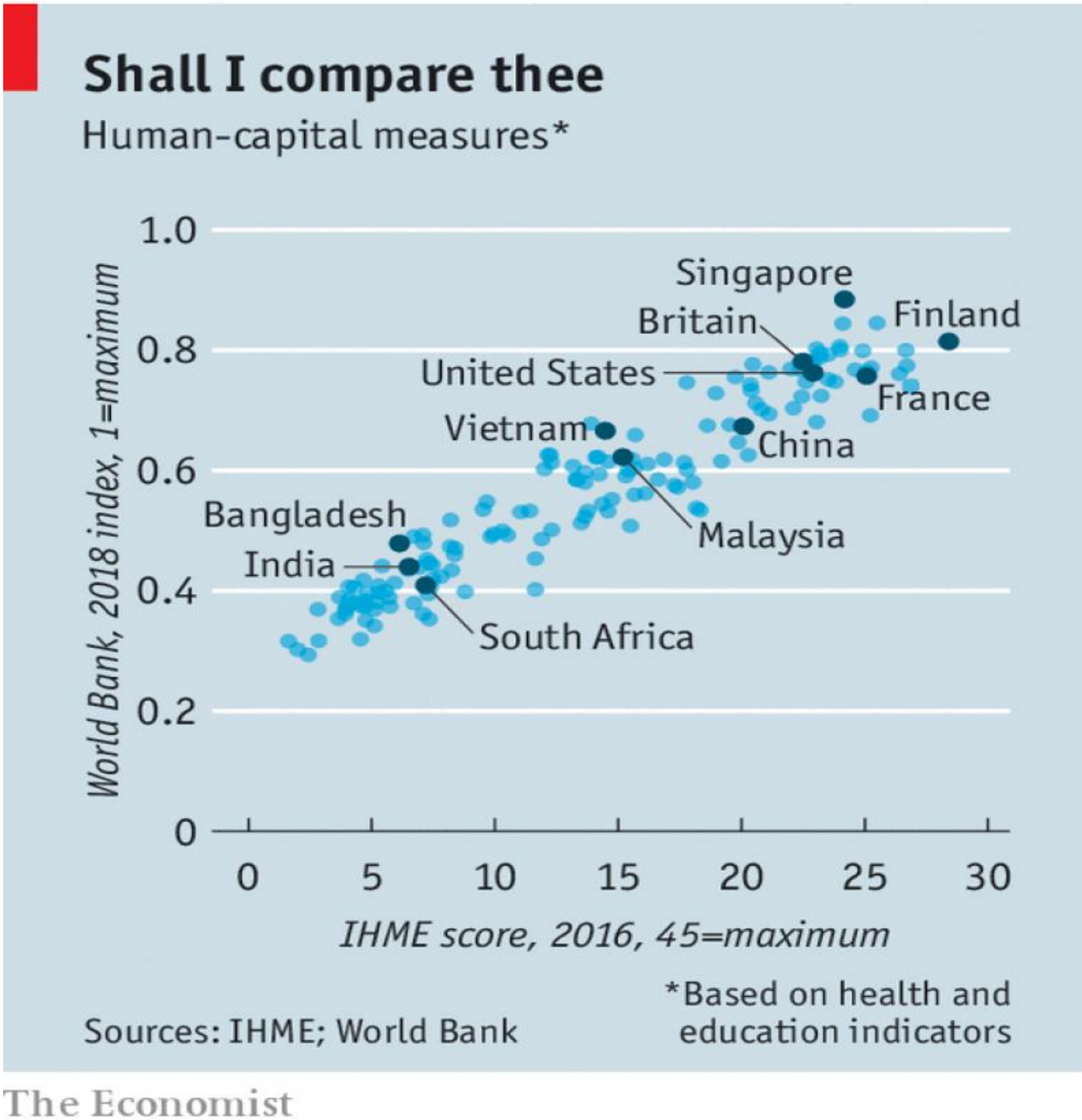
Two indices measure human capital using gauges of health and education

DESPITE their dour reputation, economists frequently play with metaphor and simile, just like literary folk. One familiar example is “human capital”, as Deirdre McCloskey of the University of Illinois has pointed out. Economists have been likening knowledge, skill and stamina to physical capital, such as plant and equipment, since Adam Smith, who counted “the acquired and useful abilities” of a country’s people as one of several kinds of fixed capital, alongside “useful machines” and “profitable buildings”.

But unlike poets, economists prefer to quantify their analogies—to measure whether thou art 15% or 20% more lovely and more temperate. In that spirit, the World Bank this week unveiled a new measure of human capital for 157 countries. Its index combines five indicators of health and education (including the chances of dying before the age of five and between the ages of 15 to 60, the chances of stunted growth, the years of education an average child will complete by age 18, and the score they can expect on school tests) to measure how much human capital a person born today is likely to accumulate. It follows a similar measure for 195 countries from the Institute for Health Metrics and Evaluation (IHME) published in the *Lancet*, a medical journal, in September.

Both indices try to reflect the quality of education, not just the quantity. A growing number of countries now take part in initiatives like PISA, the Programme for International Student Assessment, which in 2015 tested pupils in 72 countries. With a little effort, these various measures can be rendered comparable. That allows researchers to calculate what a year of schooling is worth in different parts of the world. For example, the World Bank calculates that a year of education in South Africa is worth only about 60% as much as one in Singapore.

Unsurprisingly, the correlation between the two indices is close (see chart). America ranks 24th on the World Bank's new index, and 27th on the IHME's. China ranks 46th on the first and 44th on the latter. But there are also notable discrepancies. On the bank's index, Bangladesh does better than India, Vietnam better than Malaysia, and Britain better than France. None of that is true in the IHME's rankings.



Different countries also stand at the top of the two tables. Singapore leads the bank's ranking. But it lies 13th in the IHME index, which instead places Finland top. The divergence reflects two differences in approach. The World Bank's method ignores higher education (which is even more prevalent in Finland than in Singapore). And its measures of health (stunting and survival rates) are too crude to distinguish between Singapore’s healthy population and Finland’s even healthier one.

The indices are not just exercises in measurement. They are also motivational tools. The World Bank worries that governments underinvest in human capital, because the rewards arrive painfully slowly and often without fanfare. By ranking countries, these indices may appeal to governments’ national pride and competitive spirit, much like the bank’s annual assessments of the ease of doing business around the world.

The two indices are also intended to be responsive to reforms. Although investments in human capital can take decades to pay off, countries will not have to wait as long to rise up the two league tables. Both indices are designed to be forward-looking, measuring the human capital that will be accumulated if a newborn grows up in the health and educational conditions prevailing now. For example, France’s decision to start mandatory schooling at age three will improve its ranking when the first toddlers are enrolled, long before the economy feels the benefit.

The bank’s index offers a further prod to reform. It uses research on the economic returns to health and education to weight the components of its index according to their contribution to productivity. If a country doubles its human-capital score it should, in the long run, double its GDP per person, compared with a scenario where its score stayed the same. That prospect should make a government’s eyes widen.

Unfortunately the index is still hobbled by gaps in the data and in economists’ understanding. The link between stunting and productivity, for example, remains murky. Only 65% of the world’s births are registered, as are only 38% of deaths. Many countries test their schoolchildren infrequently, if at all. If pupils are not tested until the age of 15, then any reform that helps primary-schoolers learn will not improve the country’s ranking until they grow old enough to ace the tests.

The World Bank has itself flagged these data shortcomings. It hopes the very existence of its index will motivate governments to collect the data the index needs if it is to work properly. To adapt another metaphor favoured by Ms McCloskey, the World Bank has built a sleek sports car; now it must shame governments into building roads that are worthy of it.

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