Opinion New Technology Policy Forum

The need for quality standards in international comparisons

Eli Noam AUGUST 23 2010

As the world becomes interconnected, the interest in comparisons among countries has grown. A veritable cottage industry of comparison-spewing institutions has emerged, this author not excepted. Who of the 195—plus sovereign nations on this planet is the most democratic? The happiest? The most innovative? The most electronically connected? No problem, lists exist for everything.

There are reasons for this comparison-list phenomenon. In an era of overloaded information and competition, it organizes information in an easy, ordinal structure. Brazil is more democratic than Argentina, but less than Spain. Canadians are happier than Mongolians. There are index numbers attached to these comparisons, and they provide a scientific veneer.

On the positive side of the ledger, one can better put one's own country and others in perspective. One can also use these index numbers in data analysis, using each country as a data point, to tease out correlations and even causalities. Is a country happier because it is more democratic, or rich, or has longer vacations? One could, ideally, identify universality, trends beyond a specific national political constellation, yet one could also find particularity – when a country departs from a bad global trend – and try to learn from it.

But the real motivations are less benign and knowledge-driven. Behind most cross-national comparisons there lurks an agenda. It can be relatively harmless, such as promoting the visibility of the organization that creates the index. The Forbes 400, the Fortune 500, the Freedom House Index – they all provide publicity to their sponsoring organization. But if a purpose of an index is to raise a profile, then it ought to generate headlines. And a headline "Australia edges out Paraguay" is unlikely. Much better to find "U.S. drops precipitously". Hence, there are incentives to stress the provocative items among many other findings.

The problem is worse where parties interested in the result sponsor the comparison. They will tend to show the sponsor either at top, or making great progress, or burdened by problem for which the sponsor advocates some policy action.

And here, too, subtlety gets you nowhere.

Users of a report have their own selection bias. Comparative reports tend to get amplified, magnified, and simplified by those with an axe to gore. A story of decline or poor performance can be leveraged by an opposition party. And stakeholders trumpet scare scenarios, magnifying rival differences into gaping chasms, to mobilize patriotic sentiments for funding and policies.

There are also methodological problems. The social science methodology of comparative studies is surprisingly under-developed. There are problems of definition. An index tends to be based on some murky and often arbitrary 'social indicator' or a cocktail of several such indicators. Like for the proverbial sausage, one is better off not knowing how it was done.

Then, there are issues of comparability ('apples vs. oranges'). National data are often incompatible with each other. And what do we mean by 'national' data, anyway? In Spain, six different studies of the country's internet density were conducted in the same year (2002), and they differed by 250 per cent. Which is then the "true" Spanish figure to be used in an international comparison?

There are definitional issues. Which of these leading cell phone countries has the highest mobile penetration? In one year, it was South Korea, by 20 per cent, counting subscribers. But Switzerland was ahead by 20 per cent if the low-usage prepaid phones were counted, too. And the US was ahead by over 40 per cent, if minutes of use per capita were used as the yardstick. Each can legitimately be proclaimed as the leader or the laggard, and the choice may well depend on the argument being made.

In the murky supply chain of data, there is an even greater problem with national datasuppliers than with the international aggregators. Take the broadband internet, where the debate over national comparisons has been particularly lively. Incentives abound to inflate numbers. For governments, because it makes them look good in terms of high-tech policy. For incumbent phone companies, because a good international standing gives them an argument against re-regulation.

New entrants, too, inflate numbers because it gives them credibility with potential customers and investors. National Governments, to be fair about it, must often rely on company reporting. Yet these can be worthless. In China, an audit found that 81 per cent of firms had falsified their production accounts into a more positive direction. No wonder that China's national statistics tend to look sunny.

The inadequate outputs in terms of data quality are based partly on inadequate inputs. As government jobs go, the statistics jobs in agencies are low-prestige on the totem pole. Statistical offices in agencies are underfunded and first to be cut.

So who is there left on the other side with a reality check? Academia and journalism must provide detached analysis. Alas, both have become more politicized or in need of attention-getting simplifications. Academics, often activists or consultants, have been increasingly using data for ammunition rather than for enlightenment.

In the absence of reliable data provision, data sets from inter-governmental organizations have achieved a near canonical status among researchers. And yet, examples abound of problems in such international data. The World Bank, for example, reports GDP data from around the world, including, as someone observed, about several countries which do not actually report GDP figures. Educated guesses maybe? If so, the estimate of the IMF about the GDP for Zaire were only 60 per cent of those of its sister institution, the World Bank.

The problem with challenging the quality of data and its methodology is that one usually hears only from the losers. Those who come out looking good have no reason to complain. It is easy therefore for a sponsoring organization to dismiss the criticism as 'sour grapes' or jingoism, and to present the criticism, especially from a powerful country or company as an effort to pressure them, while they stand up nobly for truth.

In academia, too, data collection is low in prestige. It is time-consuming and there is little glory or tenure potential. Even where the data is problematic, if everyone else is using it, nobody can object. To the contrary, junior scholars who criticize the data sets used by so many senior scholars do so at their own peril. In many countries, for academics to challenge positive national data would be considered unpatriotic. Thus, the penalties for using mediocre data are low, and the rewards for providing better data are low, too.

Yet the quality of data is important for everyone. Otherwise, we will have a situation like in environmental studies, where data has been abused in several instances, and has lowered the credibility and the effectiveness of a whole field.

What should be done? Here is one step. It would be helpful if one could identify "good practices" for comparative reports. One initiative should therefore be for several national academies of science or International academies to make recommendations about methodologies and procedures for international comparisons. An analogue is the accounting profession which created a series of recommended "generally accepted accounting practices". GAAP does not get into specific firms but addresses broad methodologies of how to treat certain types of issues. Nor does it recommend only one approach. Such an effort should avoid focusing on specific policy disputes, specific countries, or specific companies. It would not compare, but rather provide guidance about how to go about the business of comparing.

If we take this step, we can greatly improve the credibility of international comparisons and with them the quality of public policy.

The writer is professor of finance and economics at Columbia University.

Copyright The Financial Times Limited 2022. All rights reserved.