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DOING BUSINESS: RATINGS TRUMP RANKINGS

Abstract

The World Bank Doing Business results are widely used to promote reform. The headline score is the country ranking. Until 2014, this was based entirely on ranks in each of the underlying indicators merged together. Rankings imply an equal spread between consecutive ranks and effectively ignore shortcomings in the research methodology. Rankings can mislead – countries can fall in the rankings, even when they have improved, if others have done even better. Responding to criticism, in DB2013, the Bank introduced a 'distance to frontier' score, intended to give a more sophisticated understanding of what each country had to do to reach the position of the best. In DB2015 it went further and adjusted the way that the rank is calculated, so that it is now dependent on the DTF score, rather than the rank of each of the indicators. This is an improvement, but the Bank could go much further and simply use the rating scores to show each country's performance.

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Doing Business: Ratings trump Rankings

Doing Business and economic development

Since 2003, when the World Bank published its first Doing Business report, it has been assessing countries on a number of investment climate factors (such as starting in business, closing a business, protecting investors, paying taxes, seeking a construction permit) based on factual evidence and then deriving an overall rank of the 'ease of doing business' and presented the results in a league table. These factors have changed a little over time with, for example, access to a reliable electricity supply being added and employment regulations dropped.

The Doing Business league table has prompted governments to do much more to improve their investment climates, in the belief that improvement can make a big difference to whether there is a vibrant private sector and to the rate of economic growth. Research by the World Bank (2005) and Djankov et al (2006) suggests that countries that reduce regulatory burdens tend to enjoy greater rates of business growth. The World Bank (2005) estimates that an improvement in the ease of doing business which raises a country from the bottom quartile of the country league table to the top quartile could add two percentage points to annual economic growth.

Considerable effort is made therefore – by donors and multilateral agencies – to promote regulatory reform in developing countries. The World Bank says that governments increasingly recognise that their policies shape their investment climates and so seek to minimise additional burdens on business. The report stresses that "a good investment climate improves outcomes for society as a whole" (2004: 2) through driving economic growth and raising productivity. Doing Business 2008 offers more evidence highlighting the boom in new businesses that can follow regulatory reform and notes that "higher rankings on the ease of doing business are associated with more growth, more jobs and a smaller share of the economy in the informal sector" (World Bank, 2007: 5).

The Doing Business reports have become influential. The World Bank (2005) believes that its Doing Business reports have stimulated and inspired many regulatory reforms with a number of countries, for example, making it easier to start in business by reducing the number of regulations and easing the complexity of those that remain. Not all observers are quite so positive. The Economist (2014) comments on the significant rise in international rankings and the draws attention to the ways in which these are abused – and thus ignored – by many. Hoyland et al warn against "rank seeking behaviour" (2012: 2) in which policy makers amend laws and regulations solely to improve their position in the league table. Arruñada criticises the "sports league format" (2007: 732).

Some countries seem very happy to set targets – and then to miss them by a wide margin. Tanzania, for example, set a target to get into the top 99 by 2011 (United Republic of Tanzania 2011: 1) though was ranked at 127 in Doing Business 2012 (World Bank 2011), barely changed from the year before and has fallen since. In Kenya, ranked at 136, the Principal Secretary at the Ministry of Industrialisation and Enterprise Development, Dr Wilson Songa, says that the Government of Kenya has set a target to reach position 20 by 2020 (KEPSA press release 30 Sep 14): given the efforts being made by other countries this is unlikely and will therefore ultimately be demoralising to the public servants and others who are trying to make a difference.

There is considerable argument about whether Doing Business measures appropriate indicators, whether the evidence is wholly accurate and whether the ranking is fair. In the past, Hoyland et al (2008, 2012) have questioned the relationship between the ranking in the Doing Business report, which seems so precise, and the measure of the underlying factor, which is rather imprecise, firstly because all sub-factors are regarded as equally important and secondly because some of the differences in the results may simply be due to measurement error or what Hoyland et al describe as random noise. A consequence is that "the indicators fail to conclusively distinguish between a very large proportion of the economies" (2008: 3). Hoyland et al therefore questioned the apparently firm conclusions presented in Doing Business regarding how particular economies are improving compared to others. This should now change following the World Bank's decision to base the rankings on the their 'distance to the frontier' score.

The primary objective of Doing Business, of course, is to provide better information to policy makers – by allowing them to compare their performance to that of others. Doing Business is intended, inter alia, to stimulate debate about where the balance of regulation, and cost to business, should lie. In that, it has been remarkably successful, but it could be better.

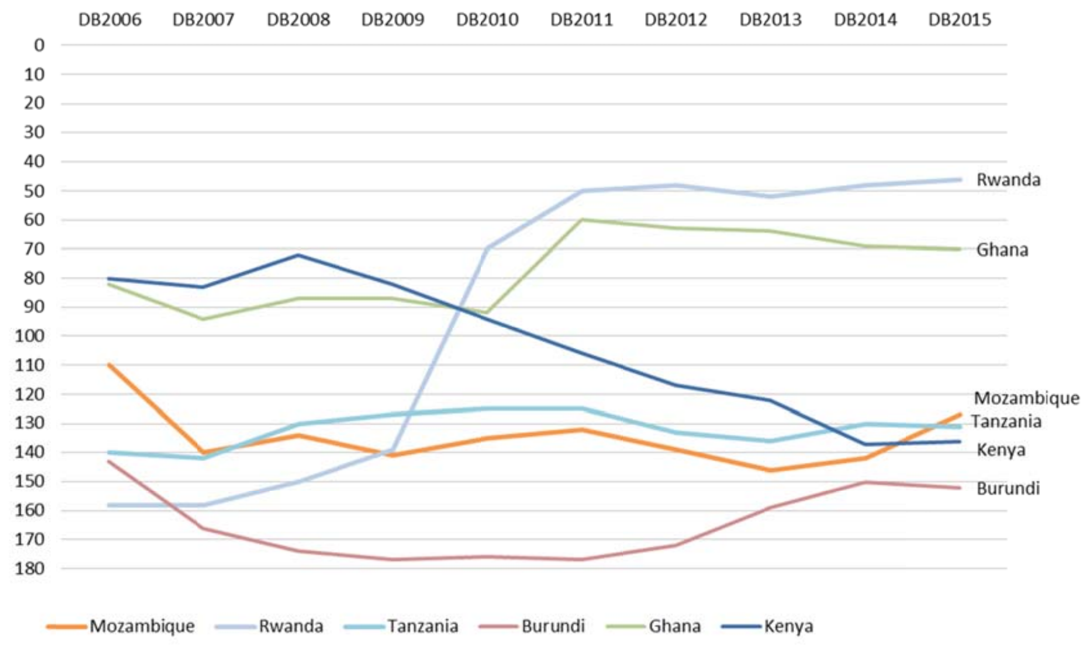
Ranking

Doing Business gathers evidence for the cost and time for a number of standardised requirements, such as registering a business, so that the results are broadly comparable across borders. Businesses are not surveyed – for example to establish what happens to them when they attempt to complete the requirement . As Arruñada (2007) observes, this can lead to considerable anomalies. Businesses are not asked about their perceptions – and investment decisions are based on businesses' understanding of reality rather than on factual evidence.

The Doing Business Methodology has evolved over the years. Until Doing Business 2013 (World Bank 2012), Doing Business focused solely on ranking countries for each factor and then combining the rankings to give an overall rank. As is apparent, this does not tell the whole story and, arguably, hides positive approaches. Djankov et al (2005) argue on the Bank's behalf that a single, overall rank is easily understood by politicians, journalists and others and it is this that creates pressure for reform. The Bank also argues that it measures impact from reform, though the rank itself cannot in any sense demonstrate impact: that requires closer evaluation of the underlying indicators.

Figure 1 shows how the rankings for six countries in sub-Saharan Africa changed from DB2006 to DB2015. The World Bank is careful to note that the data that has been collected, the way in which it has been collected and the need for occasional corrections means that it is not always appropriate to compare rankings from one year to another. One of the challenges now, of course, is that the new methodology gives a different ranking. This may be more accurate but makes comparisons with previous years more difficult. The Banks has recalculated the rankings for 2013, but has not gone further back, so time series still rely on the old figures for comparisons. However, there is little option if one wants to look at progress over time.

Figure 1: Doing Business rankings



Source: World Bank Doing Business reports (DB2006-DB2015)

Unadjusted rankings are therefore shown in the figure. The ranking suggests that there is an enormous gulf between Rwanda and Burundi. Rwanda, which was bottom of the selected list in 2006, apparently made enormous progress. Kenya made some progress to DB2008, and then deteriorated. Tanzania has more or less stood still.

However, the rankings do not show whether countries have improved, only how their relative position in a league table has changed. A country might have improved – but other countries have improved more, so it falls in the ranking. Or it may have deteriorated – but other countries have deteriorated more, so it rises in the ranking. It is, therefore, arguable whether using rankings alone is sufficient.

Furthermore, the indicators that make up the index are largely within the control of government, so it is possible for governments to make a significant difference quickly. Hoyland et al (2008) observe that it is easy to design policies to move up the league table, without necessarily making any difference to the underlying business environment. In many developing countries, businesses complain about infrastructure including power, roads, ports and airports etc but these require investment and longer timescales. Some score cards and indices look at more than just regulation. One, prepared annually by the US based Milken Institute (2007), looks at wage costs, tax burdens, electricity costs, industrial rent and office rent. This could be valuable for potential investors but, in developing countries, data may not be easily available or may be too variable. So, the Doing Business research, for all its faults, is the primary source of data – and key influencer – on regulatory environment reform.

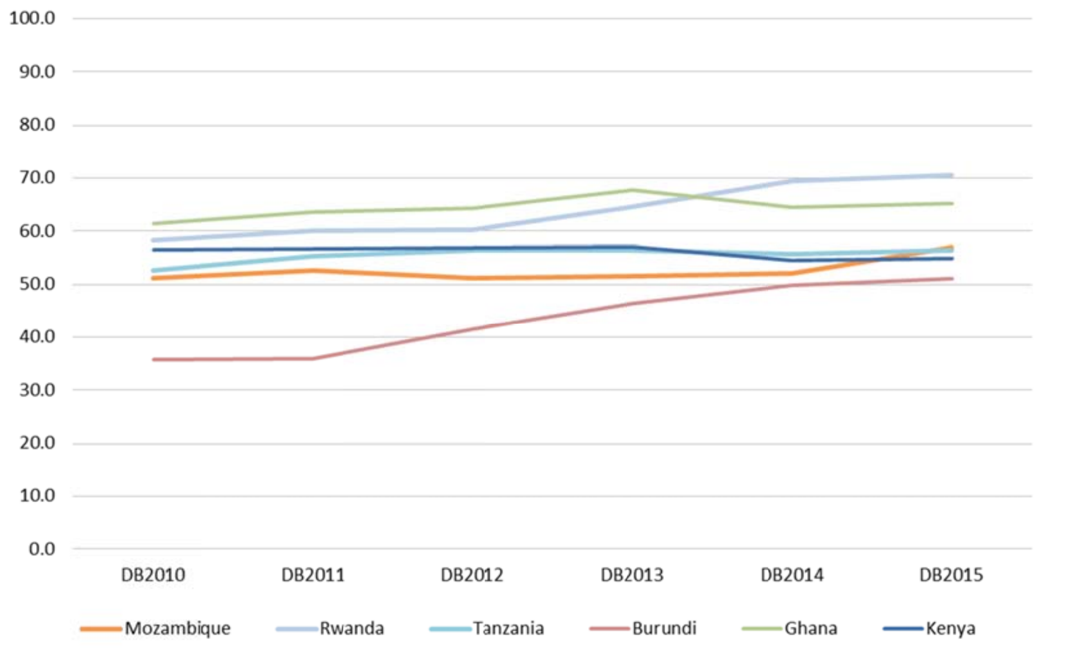
Distance to the frontier

This leads to the question of whether the results of the research could be reported differently. The problem with ranking countries is that it does not show relative performance. Indeed, an evaluation of the Doing Business process makes the point that relying on “successive stages of ordinal rankings obscures the underlying cardinal values” (Independent Evaluation Group, World Bank, 2008: 18). The use of the DTF score is intended to change this.

In DB2013 (World Bank 2012), reacting to criticism about the way in which the rankings were calculated and thus the results, the World Bank introduced the concept of the Distance to the Frontier (DTF). This is intended to provide a means to benchmark countries. DB2013 explains that this shows “how much the regulatory environment […] has changed over time in absolute terms” (World Bank 2012: 131). Doing Business calculates the distance to the frontier first by normalising and rescaling the individual indicator scores and secondly by aggregating the scores through simple averaging. They use the DB2006 data as the baseline and they mitigate the effect of outliers by using the 95 centile as the worst score. For indicators that use an index (such as extent of director liability) the target is the best possible score and the DTF score, which ranges from 0 to 100, gives an indication of how close the country is to the ‘frontier’ for that indicator set. For indicators that simply count days or procedures or whatever (such as number of procedures to start a business or days to start a business), the DTF uses the best score achieved. The indicator DTFs are combined to give an overall Distance to the Frontier score. This new score makes a number of assumptions, not least that the best score is the one achieved by the best performer in each indicator (implying that there is no room for the best performers to improve). Whilst this only started in DB2013, scores have been calculated for most countries back to 2010 and for some countries much further back.

In calculating and reporting the DTF, the World Bank has seemingly acknowledged the criticisms that ranking “can measure the regulatory performance of economies only relative to the performance of others” and “it does not provide information on how the absolute quality of the regulatory environment is improving over time” (World Bank 2012: 133). It is commendable that the World Bank has introduced this new scoreboard. The results are shown in figure 2 and show the six countries now much closer together. This is a major step towards using ratings – but it is not quite there. It does give a much better indication of performance, but is still based on comparison with the best.

Figure 2: Distance to Frontier



Source: World Bank Doing Business reports (DB2006-DB2015)

In DB2015, the way in which the ranking is calculated has been changed, so that the ranking reflects each country's DTF score rather than being just a percentile rank. Basing the rank on the DTF score is expected to make a difference to the position of those countries with greater variance across the indicators.

Ratings

Genuine ratings would offer Governments and others a more precise measure still. They would show the extent of improvement in their regulatory environment – and would, in all probability, encourage governments to do more – irrespective of their rank in the league table. Government would have something less ephemeral at which to aim.

Doing Business gathers a range of data for each of its indicators. The most immediate problem is that in DB2015 (World Bank 2014)the World Bank has broadened some of the indicators. This, the World Bank acknowledges, compromises comparability over time, though they do suggest that much of the data remains comparable. At least for a few years, until there are enough years using the new indicators, this can be accommodated simply by changing the weighting of the sub-components. This is no different in principle to changes in the basket of goods that are used to calculate the RPI or the companies that comprise a stock market index.

The World Bank makes all its data, including historical data, available through the Doing Business website (www.doingbusiness.org).

Data from DB2006 to DB2015 was downloaded. For each component of each indicator, such as number of procedures or cost, the results were turned into an index in the range 0-10. In most cases, the original range varies from zero upwards. A very small number of countries, for some components, have extremely high figures.

This data needs to be normalised. Roodman (2006) suggests that there are four requirements:

- Normalised scores should fall into a range that is easy to grasp, such as 0-10;
- They should all have the same average, say five, on a scale of 0-10;
- They should have the same standard deviation; and

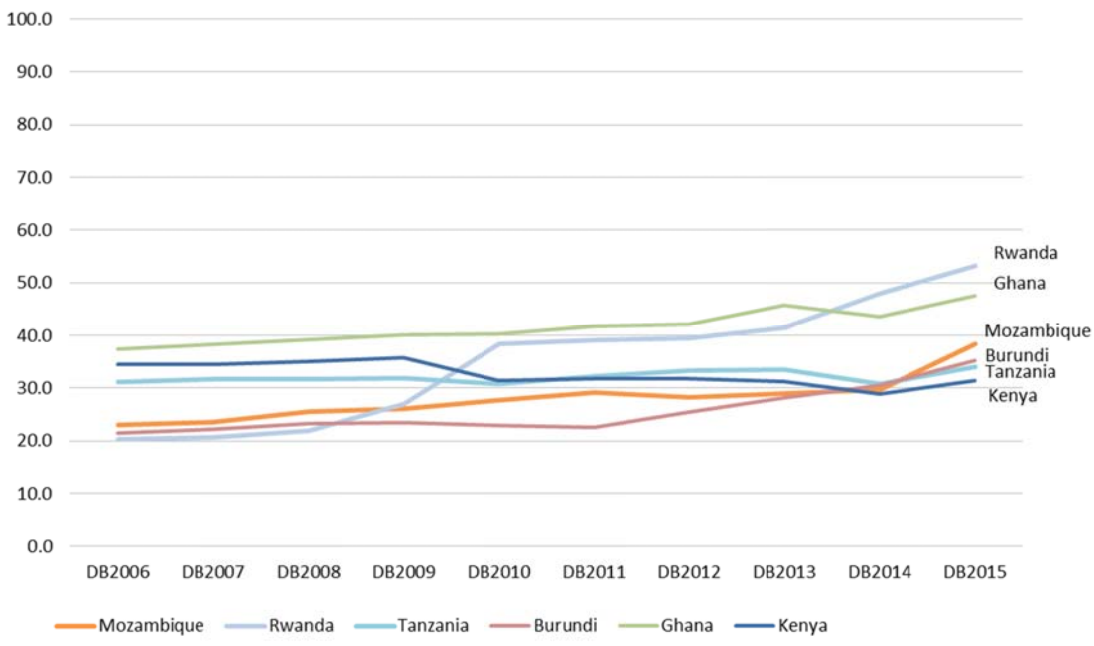
- Zero should map to zero, so that a score which represents the worst possible result is zero.

Roodman observes that if normalisation is to produce linear scores, then there are two degrees of freedom per indicator, and so it is not possible to satisfy all four requirements. In his work compiling the Commitment to Development Index, Roodman focused on the second and fourth (2006: 5). Roodman explains that he normalised by dividing the individual score by the average and multiplying by five, though then had to force into the range some results which fell outside the range. He also ran into an early problem in that he normalised the scores each year based on that year's average which made inter-year comparison impossible; he subsequently changed the calculation, so that the first year average was five and then used that as the scale in later years.

For example, DB2010 reports that it takes 694 days to start a business in Surinam. The mean is 34 and the median is 19, so converting to a range of 0-10 using the mean would have most of the results bunched close together. An alternative to Roodman's approach to normalisation might have been to set a maximum, based on a centile designed to eliminate just two or three outliers, as the World Bank has done with the distance to the frontier. This ensures that almost all countries are 'on the scale' – but does gives the challenge of which centile to pick and justifying it.

On the basis that it is the countries with the worst scores that are likely to make the most effort to improve, the mean is likely to reduce more rapidly than the median, so ratings have been calculated using Roodman's approach but based on the median rather than the mean. Given the change in methodology in DB2015, the ratings for all years have been calculated using the DB2015 median. No approach is perfect. For days to start a business, a score of 10 is unlikely unless the World Bank starts to measure in fractions of a day. A score that is worse than twice the median will map to zero, meaning that countries could still make efforts to improve which would not be picked up by the rating, but knowing the median score for each indicator could provide a good initial target.

Figure 3: Ratings derived from Doing Business data



Source: derived from rating data available at doingbusiness.org (DB2006-DB2015)

To combine component indices to give indicator indices, the weightings used by the World Bank when it calculates its factor ranks were applied. The indicator ratings were then combined into an overall 'ease of doing business' rating, using the same weighting as the World Bank – which actually weights them all equally, though one might question whether that is appropriate. As discussed earlier, one of the factors is the ease of starting in business. If that is too difficult, it may well stop people from starting in the first place (van Stel et al (2007) argue that it doesn't, but anecdotal evidence in countries such as Nigeria and Tanzania suggest that it is a major barrier to the creation of formal businesses), but there is only a need to do it once. Another factor is closing a business. Similarly, rather than looking generally at licensing and regulation, obtaining a construction permit is used as a proxy, yet some businesses may never need such a permit, but struggle to secure a trading licence and some countries require a new application every year or two. On the other hand, getting credit, paying taxes, trading across borders and enforcing contracts are factors that may make a difference every day, so arguably should be given more weight. Since the distance to the frontier uses a scale of 0-100, the ratings were rebased to that scale as well.

Like the distance to the frontier, the selected countries are much closer together than in the rankings. However, the ratings give a slightly narrower spread. It is clear that countries' scores are much closer than implied by the rankings. Rwanda still started worst and improved considerably. Burundi and Mozambique have both done well recently.

It is particularly interesting to look at Kenya. In the rankings, it has dropped from 80 to 136 but in the ratings it has fallen rather less obviously, starting at 34.5 in DB2006 and achieving 31.4 in DB2015. This seems to be the classic case where it has done little to improve its enabling environment, at least since the election at the end of 2007, allowing countries that have been making more effort to move ahead of it in the ranking, but it has not specifically taken actions which would make the environment less conducive to business. This is also different to the distance to the frontier which shows a very small deterioration from 56.6 to 55.

Clearly, it is impossible for every country to be in the top ten or top 30 – but it is quite possible for every country to have a rating in the top quarter or top tenth of a cardinal scale.

Conclusion

This paper has looked briefly at the disadvantages of focusing on rankings, which may well drive behaviour that ultimately makes little difference or, increasingly, may simply be ignored. It then looks at the merits of using a rating to assess countries' performance in creating an investment climate that is conducive to business. Ratings have been calculated for selected countries to illustrate the difference between using rankings and ratings.

It may be helpful to assume that there is a best case position for every indicator, say one day for registering a business, and to adjust the scoring based on a minimum as well as a maximum. On the assumption that everyone is aiming to improve, it may be that using a lower maximum, perhaps defined by the 95th centile, would give wider spacing to the better performers, and thus more incentive to do more to improve. These are refinements, however, that could be applied if countries feel that monitoring ratings would help them in their efforts to promote reform.

Hoyland et al argue that the ranking distinguishes poorly between many economies and so countries should not be "seduced by their numerical ranking" (2008: 12). They stress that rankings seemingly provide a clear-cut order when in fact the differences are so small that it is difficult to separate the countries (Hoyland et al 2012) and that, instead, policy makers should be encouraged to focus on the factors that would make the biggest difference to business. This could be addressed by using ratings.

Using ratings would enable countries to see immediately how well they are performing in making improvements rather than how well they are doing compared to others. It would enable them to set targets for improvements that they might have a realistic chance of attaining. And they would not be discouraged by falling down the ranking even when they think they have made a positive effort.

Biographical note

David Irwin co-founded Project North East, one of the UK's first enterprise agencies. In 2000, he was appointed founder CEO of the UK Government's Small Business Service. He now consults in enterprise and economic development, working with business support initiatives, social enterprises and regulatory reform programmes, mainly in Africa and the UK.

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