

The OECD Fragility Assessment: Reassessment

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Thomas Leo Scherer

The OECD offered the following response in the comments section of the original [post](#):

Mr Scherer's struggle to reproduce our results seems to result primarily from the fact that he is using different datasets and years from those used by the OECD (described in Annex A). Our model is based on 2012 data, while Mr Scherer sometimes uses 2013/4 data. He also used a different source for his Gini coefficient and an incorrect, aggregate index for the World Risk data. His education indicators do not match our Barro-Lee estimates, and the disability-adjusted life years used in our violence index are normalized by population, while his are not.

Mr Scherer also points to a mismatch between his estimates and the graphic, which prompted us to look at our data again. We have indeed caught discrepancies in the graphic representation of the data in the Venn diagram: Colombia, Guatemala, Paraguay and Rwanda belong in the violence/resilience intersection; Afghanistan, Burundi, Nepal and South Sudan in the intersection of all clusters save for resilience. We thank him for pointing this out and will correct the graphic.

Finally, while we recognise that although all the data is openly available, pulling it together from a variety of sources is cumbersome. To help others replicate the model, we will clarify in Annex A that its data are "2012 unless otherwise stated", and will pull together the 15 open-source datasets into one file online.

RESULTS

The clarification helps, but when I incorporate the changes (described below) I still have a lot of differences:

Add: North Korea, Uzbekistan,

Remove: Djibouti, Fiji, India, Kosovo, Panama, Sao Tome and Principe

Move: 28 others.

Number of changes by cluster: 1 peace, 16 justice, 16 inst, 8 econ, 8 resil

Differences remain. I look forward to the OECD posting their data.

DISCUSSION:

Data work is complicated and requires precise descriptions of data sources and calculations. The easiest way to do that is to post replication files.

Bigger picture, as Rex Douglass points out in his comment on the original Monkey Cage post, the fact that using different inputs can lead to such drastic changes is troubling. Change is slow and have a low score in by one economic indicator usually means low scores in others, thus using a different year or a different measure shouldn't lead to big outcome changes. That it does suggests we should take another look at the methodology. Mr. Douglass suggests machine learning to identify similar clusters of countries.

Biggest picture, while I hope this improves how we think about fragility, my main goal with this post is to get producers and consumers of this sort of work to think more about what is going on below the surface. In my short time in DC, I am shocked by how often reports and claims are taken at face value. It just so happens that the OECD Fragility Report was the first instance where I was interested enough in the material to look under the hood myself.

CHANGES TO THE REPLICATION:

2012 vs. 2013/2014

I appreciated the clarification from the OECD, and have changed the following inputs to 2012: BattleDeaths, WGIEstimates, DoingBusiness, GDPGrowth, IncomeInequality,

BirthRegistration - Only the most recent dataset is available to download, and six countries have data from 2013 or 2012-2013. Using the report at http://data.unicef.org/corecode/uploads/document6/uploaded_pdfs/corecode/Birth_Registration_lores_final_24.pdf, I change them to their older value.

DoingBusiness – I think I pulled the 2012 data by grabbing the Doing Business 2013 through creating a custom historical dataset from <http://www.doingbusiness.org/data>. I try using both the DTF (distance to frontier) score and a DTF ranking. I use the ranking since it gives a better match, but it doesn't seem like what we'd want.

*WorldRiskIndex Vulnerability – still use the data from the 2014 report since it is cited specifically.

Violence: Interpersonal Injuries

I now divide the DALY value by the country population. (I thought I saw that mentioned at one point in the report, but couldn't find it later. My apologies if I missed it).

Economic Foundations: Education Years

You're right, I had years of primary education for everyone 15+. Now have total years of school for everyone 15+.

Resilience: Income Inequality - last year of gini measure ranges widely

Not sure what the issue is here. My numbers seems to match the IFs map for 2012 Gini scores.

Resilience: Vulnerability

Roger, I see now that Vulnerability has its own score. Change made.