

An Index of Constructive External Engagement (ICEE)

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Abstract

Borrowing from the Center for Global Development's Commitment to Development Index, I build an index of constructive external engagement for the 21 largest national economies. Developing countries in the group are Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, and Turkey. Available data allow the extension of only the CDI's Trade, Environment, and Security components, so Aid, Migration, Investment, and Technology are dropped.

Wealthy nations do well on the new metric, with the UK edging out France for first and India coming last. However, moving from levels to decadal changes flips the results. India has improved most, followed by Saudi Arabia, Spain, South Korea and Indonesia. Relative to the CDI, the ICEE deemphasizes what nations are doing to help the world's poorest. The interest instead is in how well all nations, especially the most powerful, are contributing to a just, durable, and prosperous global order.

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In 2001, when the Center for Global Development was founded, it was conventional to conceive of the world as split between the rich and the rest. Not long before, the Jubilee 2000 debt cancellation campaign had reached its boisterous and righteous climax, with the G-7 club of wealthy nations “enhancing” the Debt Initiative for Heavily Indebted Poor Countries. The Kyoto Protocol of 1997 drew a sharp line between “Annex I” industrial nations and the rest of the world. China’s economic output barely exceeded California’s.¹

Begun in 2002 and released in 2003, CGD’s Commitment to Development Index embodied and promoted this dichotomous world view (Birdsall and Roodman 2003). It rated and ranked how much the policies of a club of 21 wealthy nations supported prosperity elsewhere. The conceptual split wasn’t perfectly clean—on which side of the divide did Iceland, Israel, and Saudi Arabia belong?—but it was useful.

The shock of 2008 punctuated the long-term erosion of that global split. On a worldwide basis, poverty is falling. Wealth is becoming more dispersed across countries. Soon, few populous nations will be of low-income status, defined as GDP/capita below \$1,000 (Moss and Leo 2011). China has become a significant donor, especially in Africa, and is now the world’s largest greenhouse gas emitter. Economic policies of developing countries drove the build-up of capital account surpluses, which contributed to the recent financial crises in the United States and Europe. In capital flow terms, that reversed the roles for wealthy and poor nations contemplated in the CDI.

The geopolity is becoming multipolar. Powerful nations that are yet poor in per capita terms are wealthy in aggregate. As they are major sources of global problems, they are necessary partners in finding solutions. This gradual but increasingly evident tectonic shift now challenges those involved in global policy to change how they think and what they do.

One exploratory response at CGD has been to revisit the Commitment to Development Index. An index that gives more space to Ireland than India is beginning to look archaic. (Though the Irish still have more per-capita capacity to help the rest of the world, thus more cause to do so out of morality and self-interest.) The CDI is arguably an exercise in symbolism. But the hard math of adapting it to a new group of nations forces important questions. Which countries matter most today? What are their responsibilities to the rest of the world? How should performance be measured, and how should it be adjusted for domestic poverty, which creates pressing responsibilities at home and limits capacity to act on the world stage? Which policy domains should figure? In a phrase, what constitutes citizenship for nations?

To grapple with these questions, this paper extends the CDI framework to a G-20–like list of nations. Where the 2012 CDI puts data availability first—incorporating countries only as

¹ Figures are for 2001, from World Bank, World Development Indicators, series NY.GDP.MKTP.CD (converted to dollars of the day using the exchange rate), <http://j.mp/NqNpBJ>, and U.S. Census Bureau, The 2011 Statistical Abstract, Table 670, <http://j.mp/NqNmpC>.

information needed to compute the CDI are available—the present exercise swaps priorities, sacrificing indicators and whole components if data are missing for the countries to be covered.

The result is an Index of Constructive External Engagement (ICEE). The ICEE does not cover all the policy domains one might want in such an index. Conspicuous by their absence are policies relating to migration, capital flows, illicit finance, and control of (antibiotics-resistant) infectious diseases, to mention a few. But I hope that this first, modest attempt will, through its concreteness, provoke further dialog that will move us closer to the ideal, and thereby assist CGD and others concerned with global development to adapt our agenda to a changing world.

Wealthy nations do well on the new metric, with the UK edging out France for first and India coming last. However, moving from levels to decadal changes flips the results. India has improved most, followed by Saudi Arabia, Spain, South Korea, and Indonesia. Factors behind their rise include climbing gasoline taxes, more economic growth for the rate of greenhouse gas emissions growth, falling trade barriers, and greater participation in international peacekeeping.

This exercise departs from the vertical framing in the CDI, which places the rich above the poor. Metaphorically, the conception of citizenship expands beyond giving to charity, to participating in the full array of institutions that make a society work for all—voting, paying taxes, respecting the law. The overall goal goes beyond aiding the poor to building a just, durable, and prosperous global order.

Defining a “G-21”

The first step in developing an index for a G-20–like group of countries is defining the G-20–like group of countries.

The G-20’s membership is the obvious candidate. But as the product of particular historical circumstances, the financial crises of the late 1990s, the G-20 list has a few peculiarities. Spain is absent despite having a gross domestic product four times that of members Argentina and South Africa (in 2011, converted using exchange rates). On the other hand, Spain is represented through its membership in the European Union, which is one of the 20 “nations”; and by the same token, G-20 members France, Germany, Italy, and the United Kingdom are doubly represented. Recognizing that the European Union has taken on some characteristics of a state, CGD has recently re-calculated the main CDI while treating the European Union or Europe as a single nation (Barder et al, 2012).² However, most sovereignty within the EU remains with the traditional nation states, so for the present exercise it seems consistent to drop the EU as a state.

² “Europe” includes the European Union, Norway, and Switzerland.

Another source of ideas is the work of Rueda-Sabater, Ramachandran, and Kraft (RSRK, 2009). They ask what a global governing body's membership ought to be if unencumbered by history. Their purpose is at once more practical and ambitious than mine, however: to design a system of global governance that is more effective and representative than the present one. This dual goal leads them to propose two criteria for membership. *Effectiveness* calls for including just the most powerful nations, proxied by total GDP. *Legitimacy* calls for giving representation to as many people as possible by including the most populous nations. RSRK therefore propose that a next-generation Security Council give a seat to any nation responsible for at least 2% of global economic output or population.

Relative to the G-20 membership, the 2% population criterion admits Nigeria, Pakistan, and Bangladesh to the mix. But the 2% GDP criterion, applied by RSRK to 2008 data, excludes Australia, Mexico, South Korea, Turkey, Saudi Arabia, Argentina, and South Africa. The result is a list of 16 nations.³ (See Table 1. Canada is projected to drop below the 2% GDP threshold too if it has not already.)

Reflecting on the RSRK construct forces a clarification of the purpose of the present exercise. Our interest is in assessing whether nation states are filling out the role of global citizen, focusing on the nations on whose size imposes the greatest aggregate obligations. Thus Saudi Arabia has more capacity to contribute than does Bangladesh, which has vastly more people but only a fifth the economic output.

I therefore propose a list of countries based purely on the first metric of Rueda-Sabater, Ramachandran, and Kraft, namely GDP. Since our interest is in influence on the international stage, I use GDP converted to dollars using exchange rates rather than purchasing power parities.⁴ Table 1 shows a selection of major economies sorted by this metric for 2011. The table includes some populous nations such as Vietnam and the Philippines that might make the cut if RSRK's population-based criterion were retained but loosened, say to 1%.

Accepting the GDP metric, the question is where to set the threshold. For this iteration, I set it a bit above \$500 billion. This admits 21 countries the last of which, Saudi Arabia, gives representation to the Arab world. It also creates some symmetry since the CDI started with 21 nations. Fifteen of the new 21 belong to the OECD, which assures availability for them of many data series. (Most CDI data come from the OECD or global-coverage sources such as the United Nations and World Bank.) And increasingly the OECD is collecting data for major non-members within the 21.

³ Rueda-Sabater, Ramachandran, and Kraft propose filling an additional five seats with representatives from the major global regions.

⁴ There is a counterargument for purchasing power parities: domestic activities such as coal burning have international implications not transmitted through cross-border money flows and may be better proxied by PPP-adjusted figures.

Table 1. Possible Groupings of Major Nations

GDP rank	Country	GDP 2011 (\$ billion)	In G-20	Rueda-Sabater, Ramachandran, and Kraft	In OECD
1	United States	15,065	X	X	X
2	China	6,988	X	X	
3	Japan	5,855	X	X	X
4	Germany	3,629	X	X	X
5	France	2,808	X	X	X
6	Brazil	2,518	X	X	
7	United Kingdom	2,481	X	X	X
8	Italy	2,246	X	X	X
9	Russia	1,885	X	X	
10	India	1,843	X	X	
11	Canada	1,759	X	X	X
12	Spain	1,536		X	X
13	Australia	1,507	X		X
14	Mexico	1,185	X		X
15	Korea	1,164	X		X
16	Netherlands	858			X
17	Indonesia	834	X	X	
18	Turkey	763	X		X
19	Switzerland	666			X
20	Sweden	572			X
21	Saudi Arabia	560	X		
22	Poland	532			X
23	Belgium	529			X
24	Taiwan Province of China	505			
25	Norway	479			X
26	Islamic Republic of Iran	475			
27	Argentina	435	X		
28	Austria	425			X
29	South Africa	422	X		
39	Nigeria	247		X	
42	Chile	243			X
47	Philippines	216			
48	Pakistan	204		X	
59	Bangladesh	115		X	
60	Iraq	109			

Source: International Monetary Fund, World Economic Outlook Database, September 2012; Rueda-Sabater, Ramachandran, and Kraft (2009).

Methods

The starting template for this index of constructive external engagement is the Commitment to Development Index. The CDI has seven components, on foreign aid, trade, investment, migration, environment, security, and technology. Each component is based on multiple indicators, most of which are rescaled so that 5 indicates an average score within the peer group in the benchmark year. The score scaling is also done so that “good” indicators such as foreign aid, a 0 would indicate complete absence of the thing while for “bads” such as trade barriers, complete absence would be represented as a 10.

Four CDI components are dropped:

- *Aid.* This component measures quantity and quality of foreign assistance as well as tax incentives for private charity. Two indicators in the component, on marginal and average tax rates, come from the OECD. All the rest come from the databases of the Development Assistance Committee (DAC), whose membership is a subset of that of the OECD. These sources have improving but still limited coverage of non-members. Fundamental statistics are unavailable such as the amount that China spends on Overseas Development Assistance (ODA), a DAC reporting concept that non-members do not use.
- *Investment.* This component, which looks at policies that support constructive cross-border capital flows, might be retainable with significant additional work. The data come from surveys fielded to the embassies of the scored countries, and from analysis of other sources that often involves judgment calls. The cost of this work was prohibitive for the current exercise.
- *Migration.* One major indicator, on the increase of stocks of foreign-born nationals, pertains to 1990–2000. It must soon be dropped from the main CDI if it cannot be updated. Applying it to countries whose circumstances and policies are changing rapidly is even more problematic; for them indicators of policy in the 1990s are less meaningful today. Another major indicator, on immigrant inflows in a recent year, is like the investment indicators, collected with significant labor by the Migration Policy Institute. It was not expanded for this exercise. Two other indicators, relating to tuition for foreign students and number of foreign students, are collected by the OECD and unavailable for non-OECD countries.
- *Technology.* Indicators on R&D spending account for two-thirds of the component’s weight and come from the OECD, which does not cover major non-OECD countries. The remainder, on expansiveness of intellectual property rights, are collected for CGD on contract. They are based on qualitative assessments of complex national policies and might be difficult to obtain for the new countries.

Three components are retained. All needed to be adapted to their new context, partly for lack of data for some indicators, partly to conform to the new conceptual frame. Roodman (2012) and background papers cited therein detail the methodology and sources more fully than is done below.

Trade

The trade component measures openness to imports of goods. Openness to trade on the part of wealthy nations has created huge opportunities for developing countries to industrialize and reduce poverty. With trade also has come interdependence, a force for peace. Surely the rivalry between the United States and China in the Pacific, for instance, is tempered by knowledge of the economic damage both would suffer from a rupture in relations.

Ideally, barriers to trade in services would be assessed along with barriers to trade in goods. A team at the World Bank is developing a database and rating system that may allow this extension, but it is not made here (Borchert, Gootiiz, and Mattoo 2012).

The foundation for the trade metric is the Market Access Map (MAcMap) tariff database of the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). The data set has several strengths, including wide coverage of “preferences” for least-developed countries, such as under the EU’s Everything But Arms program and the U.S. Africa Growth and Opportunity Act. This is made possible by the high detail in the 60 million–row dataset: one tariff estimate for each importer, exporter, and six-digit line in the Harmonized System (HS6) classification of traded goods.

A perennial challenge in averaging tariffs across product categories is choosing meaningful weights. On the one hand, a tariff on a major category such as petroleum products seem to deserve more weight than a tariff on a minor category such as luxury watches; this makes trade volume a natural basis for weighting. But volume is endogenous to protection, which can lead to paradoxes such as zero weight for prohibitive tariffs. As a result, the trade component weights as much as possible by the value of an exporter’s *production* in a given category of goods rather than its *exports* (Roodman 2007b).⁵

Two other trade impediments are factored in. For 2003 and 2004, textile and apparel quotas imposed by Canada, the EU, and the United States are included, using the Francois and Spinanger (2004) estimates of their tariff equivalents. The Uruguay Round WTO treaty terminated these quotas on January 1, 2005. In addition, government subsidies for domestic agricultural production are converted to tariff equivalents, using the methodology of Cline (2004, ch. 3) and drawing on OECD data. The subsidy aggregates exclude some payments that are “decoupled” from current input use or production, since ideally these do not distort markets today. They also exclude the subsidy equivalent for farmers of border tariffs, which the OECD includes in its headline Producer Support Equivalent (PSE) aggregate, but which are duplicative in our context: here, as just set out, tariffs are accounted for separately.⁶

⁵ Unlike in the CDI, tariffs are not also weighted based on the poverty of the exporter.

⁶ Unlike in the 2012 CDI, no weight is given to actual imports. That indicator was conceived on the premise that in the CDI the scored countries had achieved similar levels of industrial development, thus that any major differences in imports levels (such as a low amount for Japan) indicated differences in policy. The premise does not hold across the diverse set of countries assessed here.

The OECD collects the requisite agricultural subsidy data for all its members, including Mexico and Turkey, as well as non-members Brazil, China, and Russia (OECD 2011). It does not cover India, Indonesia, and Saudi Arabia. For these three, a proration is applied. The ratio of the tariff-equivalent of subsidies to actual tariff protection for agriculture is assumed to be the same for the three as it is on average for the 18 countries with data. For index year 2012, that ratio is 0.374.⁷

A major issue that arises in building the time series is that many of the most consequential tariffs, in agriculture, are expressed in physical units such as yen per ton. In *ad valorem* terms, they vary inversely with world prices. As a result, in *ad valorem* terms, the commodity prices swings in the 2000s easily overwhelm policy variation in the data. In order to isolate policy variation, meaning changes in tariffs per physical unit, I multiply early-year *ad valorem*-equivalent tariffs by unit prices of the day, then divide by latest unit prices. Thus if the world price of rice rose from \$100/ton in 2001 to \$300/ton in 2007, then a \$1/ton tariff in 2001, equal then to 1% *ad valorem*, would be re-expressed as a 0.33% tariff, just as a \$1/ton tariff applied in 2007 would be expressed.⁸ The arguable lack of policy change would manifest as a lack of score change.

Environment

The environment component grades countries on how much they are degrading or protecting global commons such as the atmosphere and oceans. It contains eight indicators in three categories. Most indicators are scaled so that 5 is average in the reference year, 2012. (Exceptions are made for yes/no treaty ratification indicators.) The eight scores are then averaged together using weights listed below.

1) *Global climate (60% of total)*

a) *Greenhouse gas emissions plus carbon equivalent of fossil fuel production, all per capita (10%).*

The emissions figures cover all gases for which the UNFCCC provides data: carbon dioxide, methane and other volatile organic compounds, nitrogen oxides, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, carbon monoxide, and sulfur dioxide. Emissions are converted to CO₂ equivalents by the data source, the secretariat of the UN Framework Convention on Climate Change. Carbon emissions caused by deforestation and other forms of land use and land use change are included, as is carbon sequestration from reforestation.

To this emissions tally, much of which is associated with fossil fuel *consumption*, is added the carbon dioxide equivalent of domestic fossil fuel *production*. The rationale is that that fossil fuel use is part of long, international, and economically interdependent chains of production. It is meaningful to attribute side-effects of the chain to all countries along it since all contribute to and benefit from it. Just as the United States, as a beef importer, contributes to the

⁷ This is a ratio of two averages rather than an average of 18 ratios.

⁸ This innovation will probably be incorporated into the 2013 CDI.

clearance of Brazilian forests for cattle grazing, so does Australia contribute to carbon emissions in other countries by exporting coal.

The sum of emissions and the carbon dioxide equivalent of fossil fuel production is divided by country population. Population rather than GDP is the denominator in order to avoid sending the odd message that the richer a country is, the more acceptable it is for it to harm shared resources.

Emissions and fossil fuel production are not government policies but outcomes. But policies ranging from land use planning to utility regulation do affect emissions, and many of these are hard to quantify. So I lean on emissions and fossil fuel production as imperfect proxies.

b) *Average annual change in greenhouse gas emissions per unit GDP, last 10 years (15%).* Most countries' economies are growing faster than their emissions, so that their greenhouse gas intensity (emissions/GDP) is falling. But differences in the rate of decline, at least among countries at similar levels of wealth, tend to reflect policy. The decline rates in the ICEE are "least squares" rates for the last 10 years of available data—2000–10 for the 2012 index year. That is: If declines in emissions/GDP were constant in percentage terms over time, then graphs of the log of emissions/GDP over time would be perfectly linear. In reality, they are not, so log emissions/GDP is regressed on time to find the best fit, and the corresponding average decline rate. This least-squares approach, in contrast to the more obvious approach of looking at the change between first and last years, reduces sensitivity to aberrations such as a cold winter in an end-point year. The GDP figures are converted to dollars on a purchasing power parity (PPP) basis. Here too emissions figures take into account land use and land use change.

c) *Gasoline taxes in PPP dollars per liter (15%).* Gasoline taxes are indicative of motor fuel taxes in general (the other major fuel being diesel), which are the major form of energy taxation in most countries. For lack of data from the OECD for Brazil, China, India, Indonesia, Russia, and Saudi Arabia, the gasoline tax computation for them uses retail price data from GIZ (various years). The tax is estimated as the difference between these prices and a GIZ pre-tax benchmark, which is the average U.S. retail price minus 10 cents per liter.

d) *Consumption of ozone-depleting substances per capita (10%).* Pursuant to the Montreal Protocol on Substances that Deplete the Ozone Layer, most countries have radically reduced their consumption and production of ozone-depleting substances since a hole was discovered in the ozone layer over the Arctic in the 1980s. Wealthy nations committed to earlier phase-outs than developing countries. The indicator used here is consumption of ozone-depleting substances on an ozone-depleting-potential (ODP) basis. ODP-tons are a unit analogous to CO₂-equivalent tons of greenhouse gas emissions, allowing comparison of several different chemicals. The total includes chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and methyl bromide. As with greenhouse gases, consumption of ozone-depleting substances is divided by population. Since the European Union reports as a single country under the Montreal Protocol, France, Germany, the Netherlands, Spain, Sweden,

and the UK receive the same mark on this indicator. The benchmark index year—the one whose average value maps to exactly 5 in the score scaling—is 2003 rather than the usual 2012. The reason is that most scored countries have by now reduced consumption to very low levels. Relative to recent average levels, consumption ten years ago is very high. Using a recent year as a benchmark would lead to scores negative and large enough to dominate results on the environment component.

e) Ratification of the Kyoto Protocol (10%). Finalized in 1997, this is the most important international effort to date to prevent climate change. It set important precedents by establishing emissions targets for industrial countries, and opening the way for international trading in emissions rights. Russia ratified the treaty in November 2004; as a result, it went into effect 90 days later, with only the United States remaining outside the treaty. In 2012, Canada withdrew from the accord. This is a rare indicator with both a clear minimum (no ratification) and clear maximum (ratification). So in a departure from the usual scaling rules, a country gets a simple 10 points for ratification.

2) Fisheries (10% of total)

a) Ratification of the United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (5%). The U.N. fisheries agreement is a treaty that helps nations coordinate management of fish stocks that migrate or are in international waters, including whales. It went into effect in 2001 and most countries have signed on to it—and most therefore get 10 points. Exceptions in the index are China, Mexico, Saudi Arabia, Switzerland, and Turkey.

3) Biodiversity and global ecosystems (30% of total)

a) *Completeness of required reporting to multilateral treaties relating to biodiversity (15%)*. This indicator measures how well countries comply with the reporting requirements of four biodiversity-related treaties: the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Convention on Biodiversity (CBD), the Convention on Migratory Species, and the Ramsar Convention on Wetlands of International Importance. Each treaty requires signatories to report periodically, typically every two or three years, on the compliance actions. Some countries have reported more completely and promptly than others, and this appears to be a good indicator of their commitment to the treaties' aims. The scoring starts by assigning, for each required report, 2 points for complete, on-time reporting; 1 for reporting that is late or contains errors; and 0 when no report is filed or the country is not a member of the convention. Reporting histories back to 2001 are averaged together, with more recent data given more weight, according to a discount rate of 21% per year (50% per typical three-year cycle). Averaged scores for each of the four treaties are in turn simple-averaged for an overall score.

b) *Value of tropical timber imports per capita (15%).* Perhaps no other commodity import is associated with as much environmental destruction as tropical wood. Although there are short-term economic benefits for some in the exporting countries, the lion's share of the income goes to a small group of timber company owners and the government rent-seekers that control timber licenses, while harming those who harvest wood more sustainably or harvest non-timber forest products such as wicker. Because tropical timber ships in many forms—various species, plywood, pulp—it is difficult to measure total imports in physical units. The dollar value of imports is used instead. Some small European countries have extremely high tropical timber imports per capita, probably because they are ports of entry for the entire continent. So all eight European nations are assigned the same, averaged score.

Security

If a monopoly on violence defines the state, and if assuring domestic tranquility is the state's first responsibility, then contributions to international security ought to figure in any assessment of contributions to the global order. The security component captures two kinds of contributions: financial and personnel contributions to peacekeeping and forcible humanitarian interventions; and participation in international security regimes. Additional indicators in the CDI, on arms exports and sea lanes protection, are omitted for lack of data.⁹

1) Contributions to peacekeeping and forcible humanitarian interventions (67% of total)

Examples of peacekeeping and humanitarian interventions operations counted include the Australian-led intervention in East Timor in 1999 to halt Indonesian repression after the territory had voted for independence, and the NATO-led war against the Serbian army in Kosovo. This subcomponent uses data from 1993 to 2011. The rationale for this long period is that total government contributions to such operations is a particularly volatile variable—Kosovo's and East Timor's do not come along that often. A decade or more of history gives more insight than a year into a government's current capacity and willingness to intervene. However, older data get less weight, as explained below.

Because of the inherent controversy in choosing which operations to reward, it seems essential for validity, in considering the universe of interventions over the last decade or so, to apply either a weighting system in counting interventions or a filter, which is actually an extreme form of weighting. Two filters are applied: to be counted, a mission must have been endorsed by an international body such as the U.N. Security Council, NATO, or the African Union; and an operation also must be reasonably describable as primarily intended to help the citizens of the country or countries in question. The practical effect of the second criterion is to exclude the long and large operations in Afghanistan and the post-invasion opera-

⁹ Since the figures for the omitted indicators are collected on contract for CGD, the indicators could in principle be added. And any irremediable gaps in the arms exports data could be readily handled since the indicator now defaults to a set penalty for countries that keep the needed data out of public view.

tions in Iraq, all of which won U.N. Security Council endorsement but were pursued at great scale for traditional foreign policy reasons.

Within this set of admissible operations, five costs are counted, all taken as a share of GDP:

- 1) Dollar contributions to the U.N. peacekeeping budget, averaged over 1998–2011.
- 2) The cost of maintaining capacity for contributing personnel to U.N.-run peacekeeping operations. To estimate this, a country's peak personnel contribution to such operations during 1993–2011 as a share of its standing military forces is computed. This percentage is then applied to its military budget for the year.
- 3) The cost of deploying personnel in U.N.-run peacekeeping operations. This is estimated at \$9,000/person/month. (The full cost is estimated at \$10,000, but the U.N. reimburses contributing countries at the rate of about \$1,000/person/month.) This too is averaged over 1993–2011.
- 4) The cost of maintaining capacity for contributing personnel to peacekeeping and forcible humanitarian operations that are not U.N.-run but receive international approval. This is calculated in the same way as item 2.
- 5) The cost of deploying personnel in such non-U.N. operations—calculated the same way as item 3, except using \$10,000/person/month.

All the averages over time incorporate a discount rate of 7%/annum, equivalent to 50%/decade. And the peaks are discounted too in items 2 and 4.

Results¹⁰

Trade

In the latest tariff data, from 2007, the scored developing countries exhibit a variety of tariff structures. Indonesia, Saudi Arabia, Brazil, and Russia impose low average tariffs on agriculture (5%, 10%, and 13% respectively, *ad valorem*) while India (48%), and Turkey (69%) “out-protect” all but Japan, South Korea, and Switzerland (first column of Table 3). As shown in Table 2, China, like South Korea and Japan, levies its highest agricultural tariffs on rice (about 65% for China, prohibitive values of 300–500% for South Korea and Japan) while India nearly does (70–80%, just behind sugar at 88%). Brazil and Russia offset their low agricultural tariffs with ample trade-distorting subsidies, estimated to be equivalent to 21% and 20% uniform *ad valorem* tariffs (second column of Table 3). Subsidy levels for India, Indone-

¹⁰ A spreadsheet and database containing most calculations in this paper is posted on the home page for this paper. We do not yet have permission to share the detailed tariff data behind the trade component.

sia, and Saudi Arabia are unknown, so their values are imputed as described earlier to avoid rewarding lack of data.

Tariffs outside agriculture are generally low, peaking at an average of 14.5% in Mexico and 18.9% in India (fourth column of Table 3).¹¹ As a result, variation in the overall tariffs on goods (penultimate column of Table 3) is dominated by agriculture. India has the highest overall protection, at 24.1%. China, South Korea, and Switzerland also exceed 15%. Australia and the United States impose the lowest barriers, at 3.2%.

A rich-poor split emerges in the standings. (See Figure 1.) The only developing country in the top half is Saudi Arabia. India places last with a -2.5 . (Recall that in scores on “bads” like trade barriers, 10 indicates complete absence of the bad, 5 indicates an average level, and 0 indicates a level twice the average. So India’s -2.5 happens to signify barriers 2.5 the average.) Among the wealthiest nations, only Japan, South Korea and Switzerland are in the bottom half.

The story for changes over time is different. (See Figure 2.) As high as India’s tariffs are now, they were far higher a decade earlier. India jumped 20 points on the indicator, meaning that in *ad valorem* tariff-equivalents its border measures fell four times the 2012 group average of 9.6 percentage points. Other countries that have improved over the last decade include Saudi Arabia, Mexico, and Brazil. The major backslider is Switzerland.

¹¹ As in the main CDI tariffs are averaged across major product categories, as defined in the GTAP 6.0 database, based on the value of production in the commodity group in non-CDI countries, meaning countries not scored in the main CDI.

Table 2. Estimated uniform ad valorem tariff-equivalents of tariff regimes against agricultural commodities, 2007 (percent)

	Bovine		Bovine meat products	Cereal grains other	Meat			Plant-		Sugar cane, sugar beet	Vegetable		Wheat			
	Animal products other	cattle, sheep and goats, horses			Crops other	Dairy products other	Oil seeds	Paddy rice	based fibers		Processed rice	fats		Vegetables, fruit, nuts		
Australia	0.2%	0.0%	0.0%	0.0%	0.0%	2.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.7%	0.6%	0.0%
Brazil	5.9%	0.7%	8.3%	6.0%	8.1%	21.2%	10.2%	4.2%	8.5%	8.3%	11.9%	15.4%	7.9%	8.2%	8.7%	4.7%
Canada	5.0%	0.0%	5.4%	8.1%	0.5%	140.8%	47.8%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	4.3%	1.2%	38.7%
China	10.7%	4.0%	11.9%	40.6%	7.6%	10.3%	10.3%	5.0%	65.2%	37.4%	63.7%	41.5%	20.0%	9.8%	10.7%	64.9%
France	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
Germany	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
India	21.9%	29.8%	23.6%	50.9%	36.4%	46.9%	56.8%	30.4%	80.0%	10.2%	73.1%	87.5%	30.0%	62.0%	42.2%	99.8%
Indonesia	2.1%	1.5%	5.4%	3.4%	3.9%	5.1%	6.1%	5.0%	10.1%	0.2%	9.2%	15.7%	5.0%	1.6%	3.8%	1.4%
Italy	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
Japan	5.4%	16.3%	33.3%	21.0%	3.1%	76.6%	15.5%	5.3%	477.0%	0.0%	477.0%	43.7%	0.0%	2.5%	19.1%	105.3%
Mexico	9.3%	2.8%	9.0%	20.6%	15.6%	13.0%	9.2%	1.1%	14.2%	5.3%	18.6%	72.2%	7.0%	10.0%	15.1%	57.8%
Netherlands	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
Russia	7.3%	2.9%	15.4%	2.0%	3.1%	12.5%	25.8%	0.8%	13.4%	0.3%	11.4%	51.4%	3.2%	6.7%	8.7%	4.1%
Saudi Arabia	3.4%	0.8%	2.9%	0.3%	32.6%	4.9%	3.3%	2.5%	0.0%	4.8%	0.0%	0.4%	4.7%	3.7%	0.8%	0.0%
South Korea	31.9%	14.5%	32.4%	393.7%	27.6%	68.6%	24.9%	338.9%	315.0%	0.2%	315.0%	16.8%	2.8%	26.1%	83.6%	1.9%
Spain	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
Sweden	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
Switzerland	61.1%	81.3%	263.0%	29.8%	3.6%	112.0%	115.8%	12.2%	0.2%	0.0%	0.7%	78.1%	41.3%	45.1%	32.7%	68.5%
Turkey	9.2%	62.7%	160.6%	93.8%	27.7%	126.4%	88.0%	12.7%	34.1%	0.0%	44.1%	88.4%	19.3%	19.7%	39.2%	23.8%
United Kingdom	3.3%	11.4%	70.9%	9.6%	2.8%	37.4%	20.6%	0.0%	16.0%	0.0%	32.1%	56.0%	162.8%	4.8%	18.2%	5.9%
United States	0.4%	0.1%	3.6%	0.3%	7.6%	17.1%	2.4%	6.5%	2.3%	3.5%	3.9%	21.4%	0.3%	2.3%	3.1%	1.8%
Weight: Global production (billion \$)	302.4	150.3	256.5	103.2	212.4	306.5	305.9	71.4	98.5	39.7	129.7	130.0	35.0	134.3	435.7	95.7

Table 3. Computation of measured protection, ad valorem tariff equivalents, relative to 2007 world prices (%)

	Agricultural commodities			Other goods: Weighted		Score
	Tariffs	Subsidies	Total	Tariffs	average	
Australia	0.4%	8.0%	8.5%	2.6%	3.2%	8.3
Brazil	9.7%	20.9%	32.5%	10.5%	12.7%	3.4
Canada	28.3%	9.7%	40.8%	1.7%	5.5%	7.1
China	20.7%	13.8%	37.4%	14.5%	16.7%	1.3
France	23.3%	12.6%	38.9%	3.6%	7.0%	6.3
Germany	23.3%	13.7%	40.2%	3.6%	7.2%	6.3
India	47.6%	16.5%	71.8%	18.9%	24.1%	-2.5
Indonesia	5.0%	1.7%	6.9%	7.5%	7.5%	6.1
Italy	23.3%	11.2%	37.2%	3.6%	6.9%	6.4
Japan	72.3%	-0.3%	71.9%	2.1%	8.8%	5.4
Mexico	16.3%	7.0%	24.5%	7.0%	8.7%	5.5
Netherlands	23.3%	7.4%	32.5%	3.6%	6.4%	6.7
Russia	12.8%	19.6%	34.9%	9.8%	12.2%	3.6
Saudi Arabia	5.3%	1.8%	7.2%	4.8%	5.1%	7.4
South Korea	84.4%	-0.1%	84.3%	8.5%	15.9%	1.7
Spain	23.3%	13.2%	39.6%	3.6%	7.1%	6.3
Sweden	23.3%	8.9%	34.3%	3.6%	6.6%	6.6
Switzerland	83.7%	13.2%	108.0%	6.2%	16.1%	1.6
Turkey	68.9%	12.6%	90.3%	5.4%	13.6%	2.9
United Kingdom	23.3%	13.0%	39.3%	3.6%	7.1%	6.3
United States	5.7%	11.3%	17.6%	1.7%	3.2%	8.3
Weight: world production (billion \$)			2,337	21,741		
Average					9.6%	

Note: For lack of data, tariff-equivalent of subsidies for India, Indonesia, and Saudi Arabia, estimated based on the average for the other countries.

Figure 1. Trade scores 2012

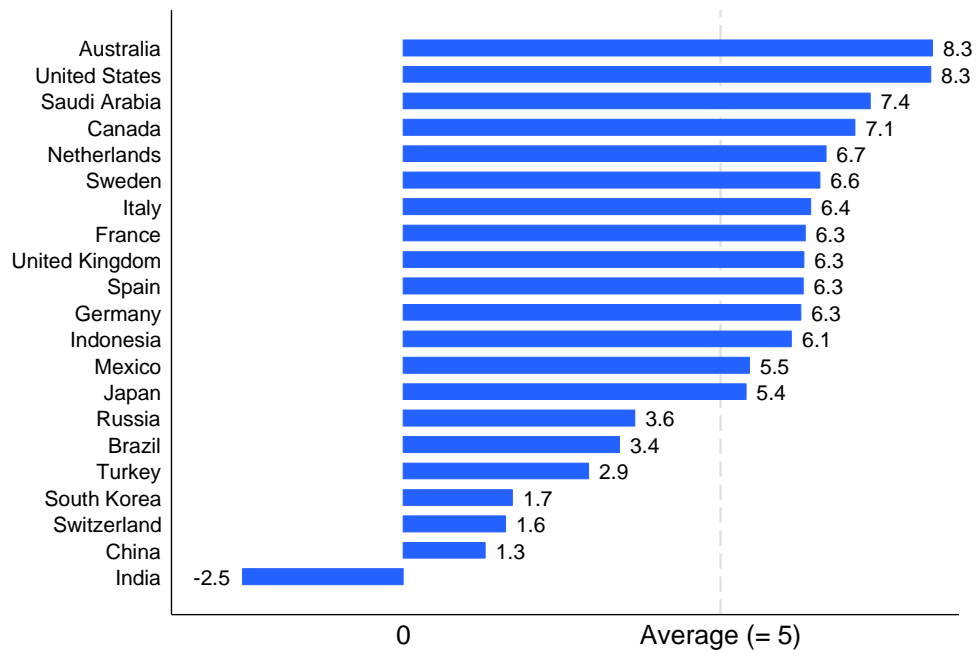
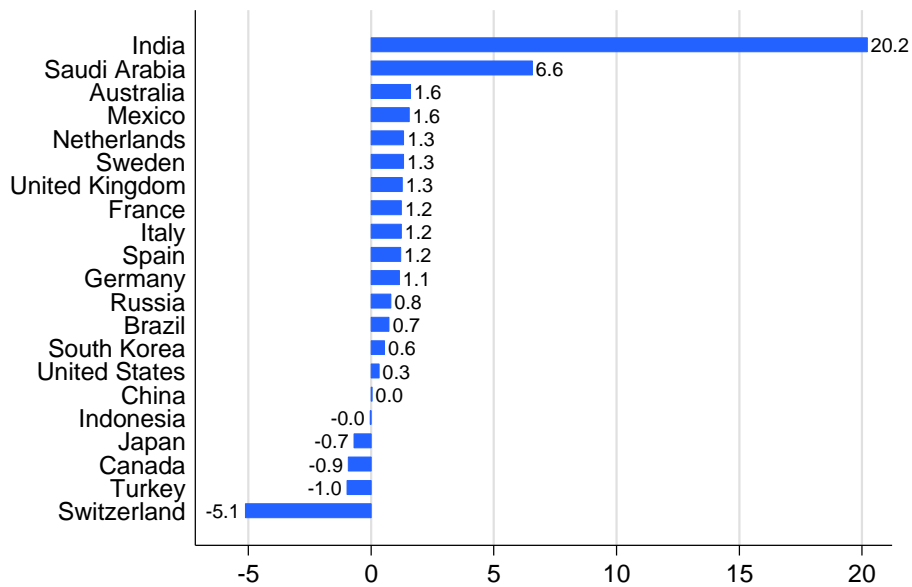


Figure 2. Trade scores, change during 2003–12



Environment

Table 4 presents the values for all indicators in the environment component. Some notable results:

- The greenhouse gas indicator—the sum of greenhouse gas emissions and carbon dioxide equivalent of fossil fuels extracted—is extremely high for Saudi Arabia. But it is only slightly lower for Australia, a major coal producer.
- Most of the poorer countries perform well on annual change in greenhouse gas emissions/GDP. Their economies are growing significantly faster than their emissions.
- In Saudi Arabia, gasoline is sold well below world prices, implying a subsidy. The imputed gasoline tax rate in Russia is low. The highest tax by far in PPP terms is Turkey's, at \$2.89/liter.
- Most poorer nations consume ozone-depleting chemicals at much higher per-capita levels, presumably in accordance with the differentiated time tables of the Montreal Protocol and its amendments.
- Only the United States and Canada remain outside the Kyoto Protocol. Among the poorer nations, only Russia is an Annex I country subject to emissions caps under the treaty. For the others, ratification brought few obligations.
- Most of the scored developing countries have not joined the UN Fisheries agreement governing management of migratory and straddling fish stocks, which is meant to prevent overexploitation of these fisheries.
- Most scored developing countries also have performed poorly in joining and reporting to multilateral environmental treaties.

Table 5 and Figure 3 show the standardization of these indicators into scores and the calculation of the overall environment scores. More than with trade, rich and poor countries intermix. India prevails because of low per-capita greenhouse gas emissions and fossil fuel production per capita, as well as gasoline taxes at \$1.19/liter PPP. Indonesia and Russia lead on the decline of greenhouse gas emissions/GDP, at -4.2% and -5.0% per year respectively.

As for changes in performance over the last decade (Figure 4), Indonesia and Turkey perform well. Turkey greatly increased its gas tax, from \$1.76 to \$2.89 per liter PPP. Perhaps this helps explain why Turkey's greenhouse gas emissions flipped from exceeding economic growth by 1.5% /year in 1991–2001 to lagging it by 0.6% in 2000–10. Similarly, in Indonesia a 38¢ /liter gasoline subsidy became a 19¢ tax while the excess of economic over emissions growth rose from 2.2% to 4.2% . At the other extreme, China's performance dropped on a massive expansion of coal use, from 809 million tons of oil equivalent in 2002 to 1,800 in 2011.

Table 4. Indicators used in environment component

	Global climate					Fisheries	Biodiversity and global ecosystems	
	Greenhouse gas emissions + fuel production/ capita, 2010	Annual change in greenhouse gas emissions/ PPP GDP, 2000–10 (%)	Gasoline taxes, 2011 (PPP \$/ liter)	Consumption of ozone-depleting substances/ capita, 2010 (ODP metric tons)	Kyoto Protocol ratification, end-2011	UN Fisheries Agreement ratification, end-2011	Biodiversity treaties participation (average for 4 treaties, 2=full)	Tropical timber imports/ capita, 2010 (\$)
Australia	38.9	-2.9	0.46	-0.3	✓	✓	1.2	17.32
Brazil	8.3	-3.0	0.96	6.1	✓	✓	1.0	0.06
Canada	25.4	-1.5	0.46	1.9		✓	1.0	4.31
China	6.7	-2.2	0.77	15.9	✓		1.1	3.27
France	3.8	-2.3	1.14	-2.1	✓	✓	1.6	7.15
Germany	7.0	-1.9	1.16	-2.1	✓	✓	1.7	7.15
India	1.5	-3.2	1.19	1.6	✓	✓	1.4	1.15
Indonesia	6.6	-4.2	0.19	1.8	✓	✓	1.0	0.54
Italy	3.9	-1.8	1.13	-2.1	✓	✓	1.6	7.15
Japan	4.7	-1.5	0.74	4.7	✓	✓	1.2	23.82
Mexico	5.9	+0.2	0.24	14.2	✓		1.1	1.26
Netherlands	10.7	-2.2	1.32	-2.1	✓	✓	1.5	7.15
Russia	17.4	-5.0	0.34	7.5	✓	✓	1.0	0.15
Saudi Arabia	41.1	+1.7	-0.72	62.6	✓		0.6	11.38
South Korea	7.3	-1.6	1.21	43.5	✓	✓	1.0	16.17
Spain	3.7	-2.8	0.95	-2.1	✓	✓	1.5	7.15
Sweden	1.8	-3.7	0.97	-2.1	✓	✓	1.6	7.15
Switzerland	3.5	-1.8	0.69	0.1	✓		1.2	7.15
Turkey	2.5	-0.6	2.89	7.8	✓		1.1	1.85
United Kingdom	7.5	-3.2	1.24	-2.1	✓	✓	1.5	7.15
United States	16.5	-2.7	0.10	10.7		✓	1.2	5.63
Average	10.7	-2.2	0.83	42.2			1.2	6.86

Table 5. Summary of environment component

	Global climate					Fisheries	Biodiversity and global ecosystems		Overall
	Greenhouse gas emissions + fuel production/capita, 2008	Annual change in greenhouse gas emissions/PPP GDP	Gasoline taxes	Consumption of ozone-depleting substances/capita	Kyoto Protocol ratification	UN Fisheries Agreement ratification	Biodiversity treaties participation	Tropical timber imports/capita	
Australia	-8.2	6.5	2.8	10.0	10.0	10.0	4.8	-2.6	3.9
Brazil	6.1	6.8	5.8	9.3	10.0	10.0	4.0	10.0	7.5
Canada	-1.9	3.4	2.8	9.8	0.0	10.0	4.0	6.9	4.3
China	6.9	5.1	4.7	8.1	10.0	0.0	4.6	7.6	5.8
France	8.2	5.3	6.9	10.2	10.0	10.0	6.3	4.8	7.3
Germany	6.7	4.3	7.0	10.2	10.0	10.0	6.7	4.8	7.1
India	9.3	7.3	7.2	9.8	10.0	10.0	5.5	9.2	8.3
Indonesia	6.9	9.5	1.1	9.8	10.0	10.0	3.8	9.6	7.3
Italy	8.2	4.0	6.8	10.2	10.0	10.0	6.4	4.8	7.2
Japan	7.8	3.4	4.5	9.4	10.0	10.0	4.7	-7.4	4.5
Mexico	7.3	-0.4	1.4	8.3	10.0	0.0	4.3	9.1	4.7
Netherlands	5.0	5.0	8.0	10.2	10.0	10.0	6.2	4.8	7.1
Russia	1.9	11.5	2.1	9.1	10.0	10.0	4.0	9.9	7.2
Saudi Arabia	-9.2	-4.0	-4.3	2.6	10.0	0.0	2.5	1.7	-0.3
South Korea	6.6	3.7	7.3	4.8	10.0	10.0	4.0	-1.8	5.1
Spain	8.3	6.5	5.7	10.2	10.0	10.0	6.1	4.8	7.3
Sweden	9.2	8.4	5.8	10.2	10.0	10.0	6.4	4.8	7.8
Switzerland	8.4	4.2	4.1	10.0	10.0	0.0	5.0	4.8	5.5
Turkey	8.8	1.3	17.4	9.1	10.0	0.0	4.5	8.6	7.6
United Kingdom	6.5	7.2	7.5	10.2	10.0	10.0	6.2	4.8	7.5
United States	2.3	6.1	0.6	8.7	0.0	10.0	4.9	5.9	4.7
Weight	10%	15%	15%	10%	10%	10%	15%	15%	

Figure 3. Environment scores, 2012

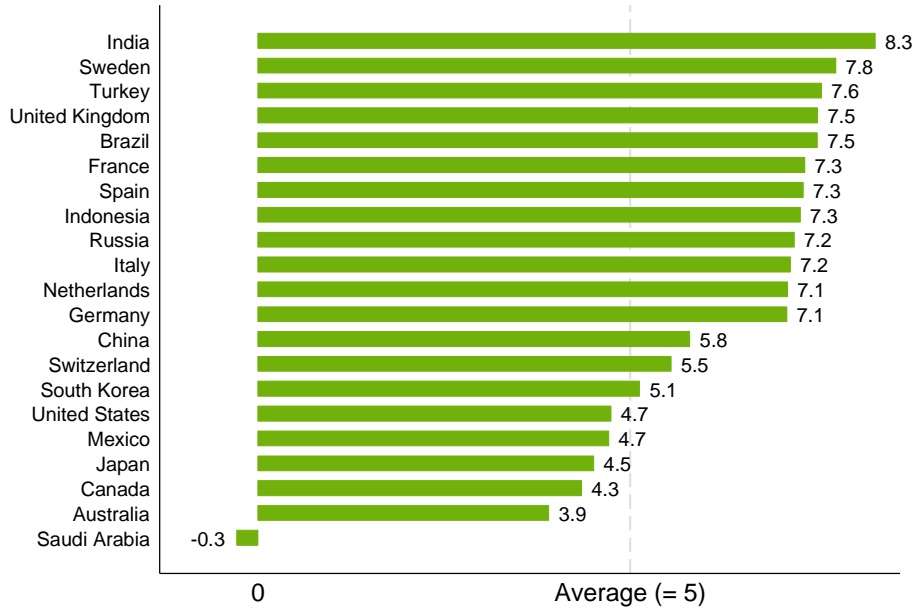
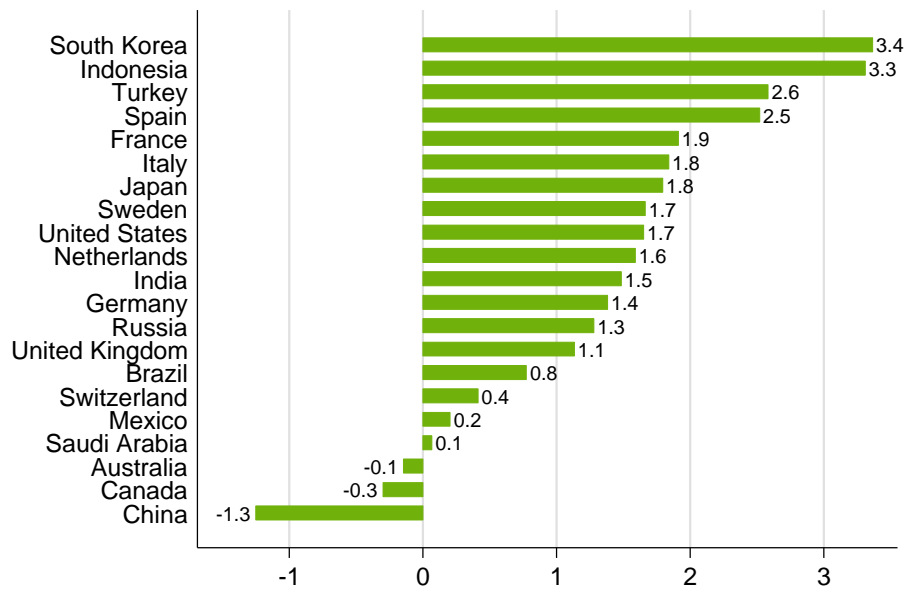


Figure 4. Environment scores, change during 2003–12



Security

The poorer countries devote smaller fractions of their GDP to the UN peacekeeping budget and seconding troops to internationally sanctioned military operations. (See Table 6.) The spending is 0.03% of GDP for India and Russia, 0.02% for Brazil and Indonesia, 0.006% for China, 0.005% for Mexico, and 0.004% for Saudi Arabia. Turkey, the sole NATO member among the developing countries, spends the most, at 0.04% of GDP, which puts it ahead of Japan and South Korea among the richer countries.

The developing nations also lag in joining international security treaties such as the Convention on Cluster Munitions and the International Criminal Court. In this respect, the United States resembles a developing country. (See Table 7.)

Overall, then, a rich-poor bifurcation again emerges, with South Korea the main exception as a developed nation on the low end (Table 8 and Figure 5). Australia comes out on top thanks to proportionally large troop contributions over the years in East Timor and the Solomon Islands. The U.K. is close behind for its roles in the former Yugoslavia and Sierra Leone.

Switzerland is the largest gainer over the last decade, for the simple reason that it only joined the United Nations in 2002 and abstained from peacekeeping before then. Among wealthy nations, Japan also gained significantly, primarily by boosting its contributions to the U.N. peacekeeping budget. Among developing countries, India climbed the most, by putting some 4,500 of its personnel in blue helmets in the Democratic Republic of Congo and another 2,500 in Sudan. Wealthy nations such as the U.K. and Australia declined as the contributions mentioned just above faded into the past. (See Figure 6.)

Table 6. Summary of measurement of contributions to peacekeeping and forcible humanitarian interventions (% of GDP), 2011

	U.N.-run peacekeeping operations and humanitarian interventions			Non-U.N.-run PKO and humanitarian interventions		Total
	Contributions to U.N. peacekeeping	Cost of maintaining forces	Cost of using forces	Cost of maintaining forces	Cost of using forces	
Australia	0.0119	0.0284	0.0063	0.091	0.009	0.147
Brazil	0.0013	0.0106	0.0056	0.000	0.000	0.018
Canada	0.0142	0.0181	0.0062	0.031	0.010	0.079
China	0.0037	0.0011	0.0015	0.000	0.000	0.006
France	0.0182	0.0154	0.0111	0.068	0.029	0.141
Germany	0.0176	0.0045	0.0019	0.023	0.018	0.064
India	0.0005	0.0119	0.0166	0.000	0.000	0.029
Indonesia	0.0005	0.0035	0.0079	0.000	0.000	0.012
Italy	0.0139	0.0187	0.0071	0.034	0.024	0.097
Japan	0.0227	0.0013	0.0004	0.000	0.000	0.024
Mexico	0.0026	0.0000	0.0000	0.001	0.001	0.005
Netherlands	0.0158	0.0201	0.0063	0.040	0.020	0.103
Russia	0.0137	0.0007	0.0012	0.009	0.006	0.030
Saudi Arabia	0.0036	0.0000	0.0000	0.000	0.000	0.004
South Korea	0.0064	0.0024	0.0030	0.000	0.000	0.012
Spain	0.0145	0.0094	0.0050	0.011	0.012	0.052
Sweden	0.0146	0.0157	0.0108	0.031	0.020	0.092
Switzerland	0.0116	0.0049	0.0013	0.042	0.008	0.068
Turkey	0.0011	0.0018	0.0043	0.010	0.019	0.036
United Kingdom	0.0190	0.0259	0.0056	0.070	0.019	0.140
United States	0.0118	0.0025	0.0006	0.058	0.008	0.080

Table 7. Scoring of participation in international security regimes

	Non- Proliferation Treaty	Comprehensive Nuclear Test Ban Treaty	Chemical Weapons Convention	Biological Weapons Convention	Mine Ban Treaty	Convention on Certain Chemical Weapons	Convention on Cluster Munitions	International Criminal Court	Total
Australia	1	1	1	1	1	1	0	1	7
Brazil	1	1	1	1	1	1	0	1	7
Canada	1	1	1	1	1	1	0	1	7
China	1	0	1	1	0	1	0	0	4
France	1	1	1	1	1	1	1	1	8
Germany	1	1	1	1	1	1	1	1	8
India	0	0	1	1	0	1	0	0	3
Indonesia	1	0	1	1	1	0	0	0	4
Italy	1	1	1	1	1	1	0	1	7
Japan	1	1	1	1	1	1	1	1	8
Mexico	1	1	1	1	1	1	1	1	8
Netherlands	1	1	1	1	1	1	0	1	7
Russia	1	1	1	1	0	1	0	0	5
Saudi Ara- bia	1	0	1	1	0	1	0	0	4
South Ko- rea	1	1	1	1	0	1	0	1	6
Spain	1	1	1	1	1	1	1	1	8
Sweden	1	1	1	1	1	1	0	1	7
Switzerland	1	1	1	1	1	1	0	1	7
Turkey	1	1	1	1	1	1	0	0	6
United Kingdom	1	1	1	1	1	1	1	1	8
United States	1	0	1	1	0	1	0	0	4

Table 8. Summary of security component

	Peacekeeping & humanitarian interventions		Security regimes		Overall
	Spending (% of GDP)	Score	Ratifications	Score	
Australia	0.147	12.5	7.0	5.4	10.1
Brazil	0.018	1.5	7.0	5.4	2.8
Canada	0.079	6.7	7.0	5.4	6.3
China	0.006	0.5	4.0	3.1	1.4
France	0.141	12.0	8.0	6.2	10.0
Germany	0.064	5.5	8.0	6.2	5.7
India	0.029	2.5	3.0	2.3	2.4
Indonesia	0.012	1.0	4.0	3.1	1.7
Italy	0.097	8.3	8.0	6.2	7.6
Japan	0.024	2.1	8.0	6.2	3.5
Mexico	0.005	0.4	8.0	6.2	2.3
Netherlands	0.103	8.7	8.0	6.2	7.9
Russia	0.030	2.5	5.0	3.9	3.0
Saudi Arabia	0.004	0.3	4.0	3.1	1.2
South Korea	0.012	1.0	6.0	4.7	2.2
Spain	0.052	4.4	8.0	6.2	5.0
Sweden	0.092	7.8	7.0	5.4	7.0
Switzerland	0.068	5.7	7.0	5.4	5.6
Turkey	0.036	3.0	6.0	4.7	3.6
United Kingdom	0.140	11.8	8.0	6.2	10.0
United States	0.080	6.8	4.0	3.1	5.6
Average	0.096		6.4		
Weight		67%		33%	

Figure 5. Security scores, 2012

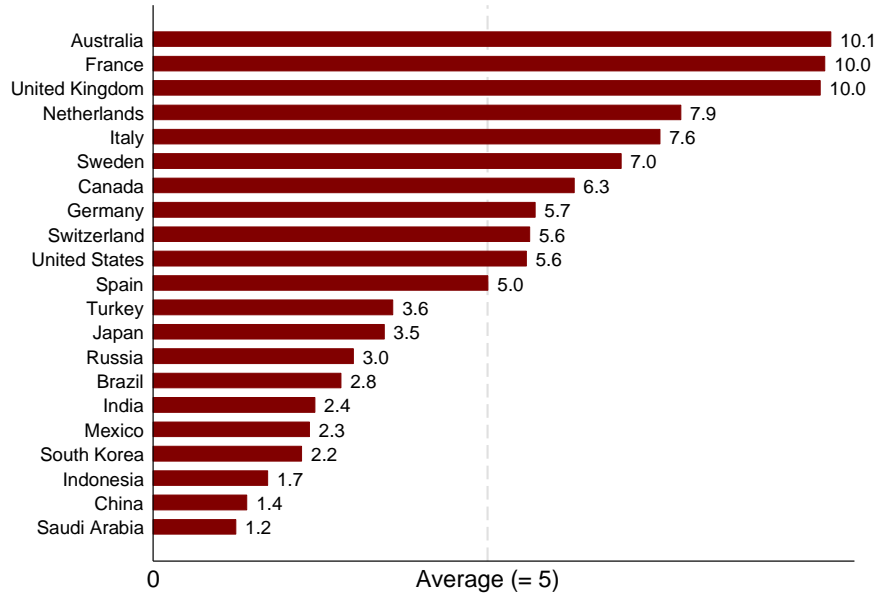
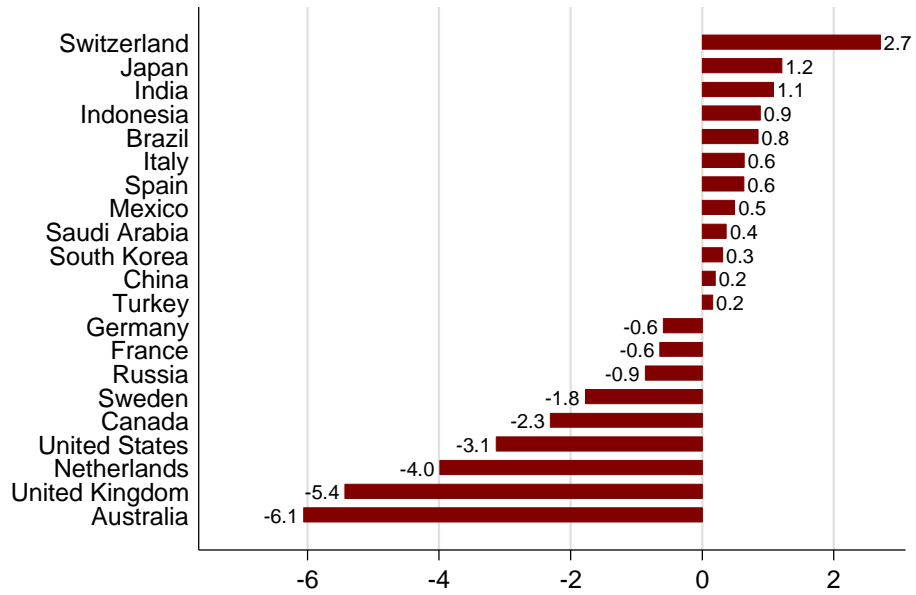


Figure 6. Security scores, change during 2003–12



Overall

Averaging the trade, environment, and security components produces a fairly sharp contrast between wealthier and poorer countries. This is unsurprising given that the trade and security components do the same, but perhaps was not easily predicted at the start of this exercise. (See Table 9 and Figure 7.) However, looking at changes over time, in Figure 8, produces an opposite picture. Three of the top five improvers are absent from the Commitment to Development Index—India, Saudi Arabia, and Indonesia—and another joined later than most, South Korea. Factors behind their rise include climbing gasoline taxes, more economic growth for the rate of greenhouse gas emissions growth, falling trade barriers, and greater participation in international peacekeeping. Wealthier nations have made less progress on these dimensions and some are especially pulled down by the historical passage of major peacekeeping operations such as in the former Yugoslavia.

In sum, wealthy nations are the most constructively engaged on the international stage as measured here—the most upstanding global citizens. But poorer ones are closing the gap.

Table 9. Scores, 2012

	Trade	Environment	Security	Average	Rank
Australia	8.3	3.9	10.1	7.5	3
Brazil	3.4	7.5	2.8	4.6	13
Canada	7.1	4.3	6.3	5.9	10
China	1.3	5.8	1.4	2.8	19
France	6.3	7.3	10.0	7.9	1
Germany	6.3	7.1	5.7	6.4	7
India	-2.5	8.3	2.4	2.7	21
Indonesia	6.1	7.3	1.7	5.0	11
Italy	6.4	7.2	7.6	7.0	6
Japan	5.4	4.5	3.5	4.5	15
Mexico	5.5	4.7	2.3	4.2	17
Netherlands	6.7	7.1	7.9	7.2	4
Russia	3.6	7.2	3.0	4.6	13
Saudi Arabia	7.4	-0.3	1.2	2.8	19
South Korea	1.7	5.1	2.2	3.0	18
Spain	6.3	7.3	5.0	6.2	8
Sweden	6.6	7.8	7.0	7.1	5
Switzerland	1.6	5.5	5.6	4.3	16
Turkey	2.9	7.6	3.6	4.7	12
United Kingdom	6.3	7.5	10.0	7.9	1
United States	8.3	4.7	5.6	6.2	8
Average	5.0	6.1	5.0	5.4	
Standard dev.	2.7	1.9	2.9	1.7	

Figure 7. Scores, 2012

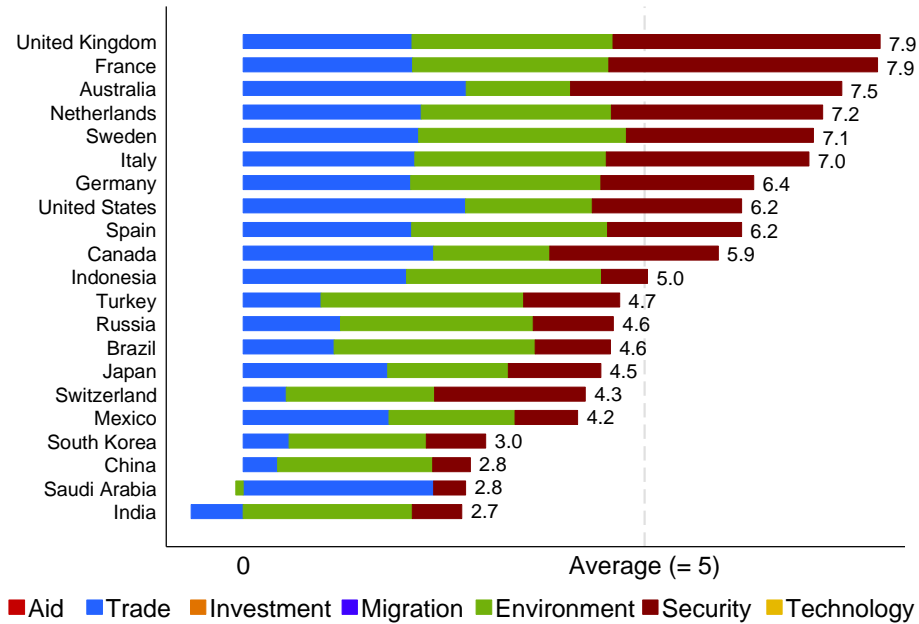
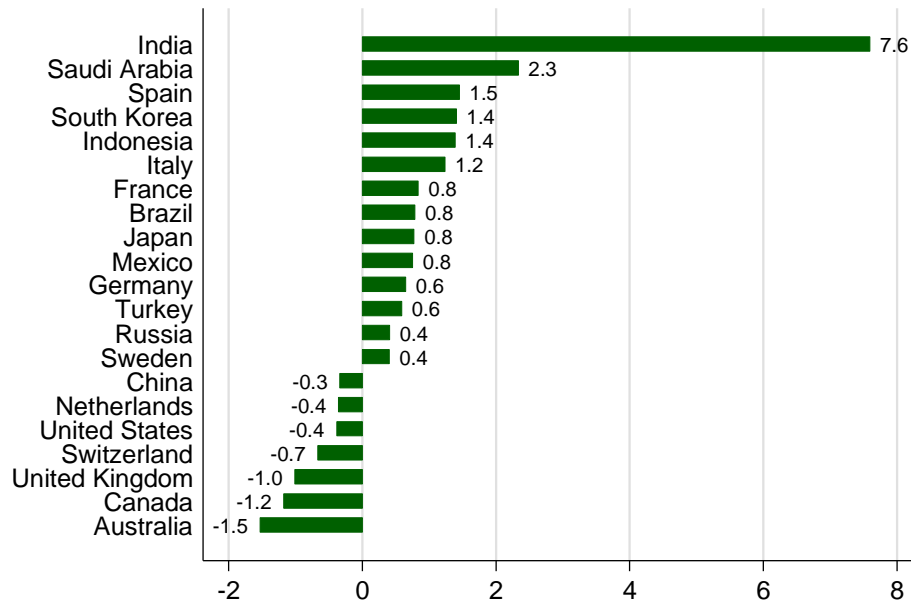


Figure 8. Change, 2003–12



Discussion and conclusion

This exercise can be criticized in three main ways: it measures the right things in the wrong ways; it measures the wrong things; or, regardless of the details, rating and ranking such diverse nations on such a nebulous concept as constructive external engagement is useless or counterproductive.

As a general matter, the first two criticisms must be valid. Individual metrics surely can be sharpened. Legitimate dissent can be voiced over what is in and what is out. This exercise, essentially an extrapolation of an index of something else, cannot be the last word in indexing constructive external engagement. That said, the most efficient way to approach the ideal ICEE is probably to publish an initial attempt like this in order to provoke commentary.

The last potential criticism, that the exercise is counterproductive, seems least. The Commitment to Development Index was conceived from the start as a communications strategy. It was understood that mapping the complexities of government policy onto the number line in order to rank inevitably does violence to reality. Uncertainties about the impacts of rewarded policies on development, itself a poorly defined concept, are acknowledged but sidelined. Moral quandaries about the relative importance of the impacts of various policies are glossed over. Yet the index is worthwhile because of its power to broadcast messages such as about the importance of non-aid policies. Its acknowledged imperfections have not prevented it from serving this purpose, much less distorted the behavior of nations. These arguments carry over to the ICEE.

One discovery emerges from this exercise that is at once obvious and profound. Putting nations that are wealthy, poor, or some of both (as all are) side by side shifts the focus of concern in global policy. The object of the Commitment to Development Index—what states are doing to help the poor beyond their borders—recedes somewhat. What comes to the fore is the broad, pressing question of how all nations should work together to build a just, durable, prosperous global order.

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