

A Policy Index to Create a Sustainable, Shared-Prosperity Economy¹

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Abstract

This paper creates a policy index that measures the system of national policies (regulations and programs) for fifty countries. The Sustainable, Shared-Prosperity Policy Index (SSPI) integrates three pillars (Sustainability, Market Structure, and Public Goods and Services) that represent the government functions of protecting the environment, structuring markets, and delivering programs and services. The three pillars are further divided into thirteen policy categories, which together contain 54 policy indicators. Nations vary widely in their policies to structure economic and social life, and the SSPI provides a ranking of countries by their SSPI scores and by their Pillar scores. These scores allow us to compare how countries vary in their policies in terms of where they are weak or strong, and discuss how countries can improve. The advanced European countries rank toward the top of the SSPI, along with Australia and Canada, although their positions vary across the Pillars. Then we analyze how the SSPI and the three Pillars relate to widely used measures of economic performance and well-being, and find that the SSPI and all three Pillars positively track the measures of economic performance. However the SSPI and the Sustainability and Market Structure Pillars do not track GDP per capita, but the Public Goods and Services Pillar positively tracks GDP per cap. Fortunately policies do not appear to depress national output across countries. Overall the SSPI shows how you can measure and compare policies across countries, and indicates that policies are related to broad measures of economic performance.

I. Introduction

This paper creates an index of the national policies (regulations and programs) of fifty countries that structure economic and social life. We call this the Sustainable Shared-Prosperity Policy Index (SSPI). Then we explore how the SSPI varies across countries, and then analyze how the SSPI relates to widely used measures of economic performance and well-being. Most economic indices measure economic performance or outcomes. A policy index, such as the SSPI, differs from a performance or well-being index or metric, which range from the well-known monthly measure of market output (Gross National Product) to the widely used Human Development Index (HDI) to broader indices such as the Better Life Index with its dashboard of

¹ This paper is based upon an earlier working paper (September 2019) co-authored with Brown's student research team, which included Ekaterina Fedorova, Tai Lohrer, Simon Saellstroem, Michelle Tan. An expanded team, including MacCoy Cantwell, Ryusuke Kondo, and Jeffrey Suzuki, is working on a revised SSPI based upon excellent feedback from expert reviewers. The new working paper and revised SSPI will be available in February 2020. For this reason, the current SSPI tables are incomplete and should not be circulated.

many indicators.² To our knowledge, no other broad policy index exists across countries. Some indices have been developed for a specific type of policy, such as OECD's development of standards, with the stated goal of ensuring policies are cost efficient and benefit the population.³ OECD has developed over 450 international standards, which range from legal instruments to policy recommendations that reflect best practices over a broad range of issues, including taxation, female rights, climate finance, biological diversity, and agriculture. Another example of a specific policy index across countries and over time is the Competition Law Index, which measures the competition laws from 1889 to 2010 across 123 countries in order to examine trends in the intensity of competition regulations.⁴

Our broad policy index that is estimated across countries rests upon the assumption that all market economies require government rules and structures so that markets operate with rule of law, protection of private property (including intellectual property), monetary and banking systems, and capital markets. Governments also provide an array of social programs, such as health care and education, and raise revenue through taxation to pay for these programs. Nations vary in their regulations and social programs, as well as their economic and social outcomes.

We design the Sustainable, Shared-Prosperty Policy Index (SSPI) in three pillars, which represent three essential areas of government policies:

- Sustainability policies that regulate interactions with the critical planetary systems that must be safeguarded, including atmosphere, biodiversity, land, fresh water, oceans, and nitrogen-phosphorus;
- Market Structures that regulate employment, taxes, and property;
- Public Goods and Services that provide health care, education, infrastructure, rights, public safety, and global role.

Below we provide a framework for analysis and describe how we create our composite index for fifty countries. We discuss the how the three pillars are constructed using categories that are composed of the 54 policy indicators. Details of the method and the data used are available in public file

https://docs.google.com/document/d/1fm_sZze9TNuaeiacgR2peWM_mEus23Nda6lNe-MlQ1M/edit#heading=h.rvedc5g3oq4r.

After discussing the SSPI ranking by country, we look at the statistical relationship of the SSPI with well-known metrics of economic performance to document how well policies track socio-economic performance across fifty countries. Our goal is to provide a policy index that

² See UN *Human Development Indicator*; OECD *Better Life Index*; UN *Sustainable Development Goals*; Legatum *Prosperity Index*; *Genuine Progress Indicator*; *Social Progress Index*; Bhutan *Gross Happiness Index*; *Happy Planet Index*; *Spirit Level Well-Being Index*

³ For a summary of OECD programs and studies, see OECD, *Raising the Bar: Better Policies for Better Lives*, 2019. <http://www.oecd.org/about/document/raising-the-bar.pdf> OECD also examined if countries procedures for making regulations follow good regulatory practices.

<http://www.oecd.org/gov/regulatory-policy/indicators-regulatory-policy-and-governance.htm>

⁴Anu Bradford and Adam S. Chilton (2018), *Competition Law Around the World from 1889 to 2010: The Competitive Law Index* www.comparativecompetitionlaw.org

documents a broad range of policies being used by countries in order to understand how this system of national policies is related to how market economies work and perform. With the SSPI, countries can explore how their policies are performing relative to policies in other countries. They can learn from and build on their strong policy areas, as they also work on how to modify or strengthen policies with weak scores.

II. Background and Framework

To understand the role that economic policies play, economists and political scientists have studied a variety of policies and how they influence specific outcomes.⁵ Joseph Stiglitz and Tony Atkinson explain how capitalist systems choose their level of inequality, and present a wide array of policies that create an a more equitable market economy, which Stiglitz terms “progressive capitalism” and political scientists term social democracy.⁶ One criticism of studies of the relationship of policies and outcomes is that they do not show causality. More rigorous statistical studies of the causal impact of a well-defined policy on a specific outcome entails setting up an experiment, where people are randomly placed in a treatment group (with the policy) or a control group (without the policy). Although a randomized controlled trial shows statistically how specific people in a specific situation are impacted by a policy, we cannot necessarily say other groups will be similarly affected. This is because policies are interdependent and operate as a system within a culture, and thus a single policy does not operate independently of the economic system. Although studies on specific health care or education or taxation policies are informative, we must be careful in applying their findings across countries.

The Framework.

To analyze a policy system and interpret how it performs, we need to state our underlying assumptions of how the economy operates. A broad literature exists that classifies economies by their values and underlying structures. Here we simplify the discussion by contrasting models that represent different world views are the free market economy and an institutional market economy. The free market economy, as developed by Friedman and Becker,⁷ assumes markets are competitive with many sellers and no company has market power; people are rational, selfish, and materialistic and maximize their income and consumption; and buyers and sellers have perfect information. An institutional market economic system, as articulated by a broad range of economists,⁸ is based on the assumptions that social norms, culture, and business practices shape behavior and structure market forces. In this paper an institutional framework integrates the ecological assumption that people are interdependent with the environment, the

⁵ For example, Steven K. Vogel, *Marketcraft: How Governments Make Markets Work*, Oxford University Press, 2018; Peter Hall and David Soskice, *Varieties of Capitalism*, Oxford University Press, 2001; Jeffrey Sachs, *Building the New American Economy*, Columbia University Press, 2017.

⁶ Stiglitz, *The Price of Inequality*; Atkinson, *Inequality: What Can Be Done?* Harvard, 2015.

⁷ Friedman, ; Becker,

⁸ Commons, *Institutional Economic*, 1934; Hall and Soskice (op cit) contrast coordinated market economies with liberal market economies. Social democracies are a well-known example of Examples of an alternative economic system are found in Clair Brown, *Buddhist Economics*; Kate Raworth, *Doughnut Economics*; and Joseph Stiglitz, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent*.

psychological assumption that people are altruistic and care about others as well as self-regarding, and the ESG assumption that companies care about workers and community as well as profits. In the free market model, government regulations or taxation are assumed to interfere with how well markets function, so less government is advocated. In contrast, the institutional model the government plays an important role in structuring markets and providing social programs to support people's well-being and to protect the planet's ecosystems.

Who is in charge of policies to structure markets and create public programs determines economic and social outcomes.⁹ Big business and the rich favor the free market model that provides the rich with higher incomes, lower taxes and more control over the economy, along with fewer resources and less security provided to the rest of society. In contrast, market regulations, tax systems, and social programs can provide the desired outcomes of basic consumption and a strong safety net, along with health care, education, clean air and water in a healthy environment, with a dignified life and opportunities for everyone.

The rules that structure markets affect profits by affecting the costs of production (supply) and the price paid by consumers (demand), as well as how much society pays directly, e.g., subsidies to companies, or indirectly e.g., health problems from air pollution. Who sets the market rules has power over how the markets operate and therefore the economic social outcomes. Market rules can be set by the government for the common good (social democracy), or they can be handed off to Big Business under the guise of "free markets" (neoliberalism). When markets are concentrated with a few large companies dominating an industry, deregulation does not increase competition. Instead deregulation replaces government rules with company policies, and power shifts from the government to the large companies.

Government provision of public goods and services to enhance people's well-being, such as education and health care, can be comprehensive or scaled back to provide minimal (or no) services. Taxation policies to pay for government programs can vary in who is taxed, e.g., people or companies, and the degree of progressivity. Government also regulates how the economy impacts the environment, e.g., the use of fossil fuel energy, water, and pesticides. Thus, the policies of capitalist systems end up affecting market production, the distribution of resources, and greenhouse gas emissions, so the well-being of the country depends on the policy choices that are made.

The goal of the SSPI is to document policies have been adopted by countries to create a market economy that focuses on the well-being of people and the environment, and to explore the relationship between the SSPI and various economic and social outcomes. One can think of the policy variables as indicating the extent to which national markets are structured and programs are created to support specific outcomes that improve the well-being of the people or protect the environment. Low scores indicate lack of such policies, or weak versions of these policies, which might be viewed as a free market economy with fewer market regulations and social programs and lower government spending.

The underlying data used to create the SSPI indicators, which aggregate into the categories, and then the pillars, is publicly available (Table 3). Readers can replicate the SSPI, and also create their own indices by using different weights as well as adding or dropping indicators, and exploring how the policy index is related to outcomes. We view the SSPI for 2018 as a first step

⁹ Steven K. Vogel, *Marketcraft: How Governments Make Markets Work*. Oxford University Press, 2018.

in understanding the economic policies observed across countries and the relationship between national policies and economic performance.

III. Methodology and Data

The SSPI is calculated for fifty countries, which include the thirty-six relatively advanced economies of the Organisation for Economic Cooperation and Development (OECD), plus the eight members of the large economies of the Group of Twenty (G20) that are not OECD members, plus another six countries classified as ‘High income’ (World Bank, 2018) selected based on data availability, country size and regional importance. This group of fifty countries includes the largest and the most industrialized economies, which also have much of the policy data available.¹⁰ These countries collectively account for 90% of world GDP and approximately 67% of the world population.¹¹

The SSPI is an aggregation of three layers: Pillars, Categories, Indicators. The overall SSPI score is based on a country’s score the three pillars, with each pillar composed of three to six categories and each category composed of two to seven indicators. Each policy indicator is normalized to a value between 0 and 1, so that their various data have comparable units.

The policy indicators were selected based on data availability, reliability, and objectivity (Table 3). Our starting point was to locate all data sources for a specific policy area, and then filter out the ones that do not qualify based on our criteria. We only used data from credible organizations with extensive data covering many countries and preferably across years. Objective administrative data is selected over subjective survey data, and only publicly available data are used. In order to evaluate if two policy variables represented the same information, and were thus interchangeable, correlations of the variables were compared. If correlation between two indicators was 0.75 or higher, then the indicator with more country observations or higher quality data was used.

Setting up the Three Pillars.

The SSPI’s three pillars—Sustainability, Market Structure, and Public Goods and Services—represent different types of policies. Public Goods and Services is the broadest pillar and includes the goods and services that are typically directly supplied by the government. What unifies the Public Goods and Services policies is that they are to a high degree under direct control of the national or regional government. Thus, the Public Goods and Services pillar include six categories: Education, Health Care, Infrastructure, Rights, Public Safety, and Global Role.

The Market Structure pillar brings together a wide array of policies that regulate and structure the how markets function. In contrast to the Public Goods and Services policies, Market Structure policies do not include any form of direct provision by the government. The

¹⁰ Databases use different names for the same countries. We generally follow the World Bank naming convention except in one case and use “Russia” instead of “Russian federation”.

¹¹ World Bank. “GDP (current \$)” World Development Indicators, The World Bank Group, 2019, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>. Accessed 2 Aug. 2019. World Bank. "Population, total" World Development Indicators, The World Bank Group, 2019, <https://data.worldbank.org/indicator/SP.POP.TOTL>. Accessed 2 Aug. 2019.

three Market Structure categories are Employment, Taxation, and Property, which includes policies that shape the conditions and incentives of labor, capital, and production.

The policies in Market Structure and Public Goods and Services pillars do not capture the responsibility that governments have to protect the environment for people today and for future generations, which explains the role of the Sustainability pillar. The Sustainability policies relate to the direct use of natural resources and the externalities resulting from degradation of our ecosystems. A company's production decisions are based on its costs, which typically do not include external costs related to public health or environmental deterioration. The public ends up paying the external costs of production through worsened health or a degraded environment. Sustainability policies measure the extent to which governments have policies in place to deal with the environment. The pillar includes five categories: Ecosystem, Land and Soil Use, Energy Generation, Waste Management, and Transport.

Pillars and the categories should be thought of as policies that operate within a system, rather than as individual policies that can be analyzed separately. For example, many types of policies affect how markets operate, or the health of the environment, or the quality of life. The question is to what degree a specific policy influences quality of life or the environment within the overall socio-economic system. For example, the Infrastructure category brings together a wide range of policies that together support daily activities in a community and also affect the environment.

Normalization and aggregation method.

We imputed missing data points when necessary. We used alternative data sets for the policy indicator when only a few countries lacked data. We ran regressions to ensure that the data sets were highly correlated when this method was used. When no specific variable was found for some policies, we used proxy measures of the policy indicator.

Indicators are normalized based upon minimum and maximum goalposts, which represent the hypothetical minimum and hypothetical maximum for the policy variable, using the following formula:

$$\text{Normalized indicator value} = \frac{(\text{observed value} - \text{min goalpost})}{(\text{max goalpost} - \text{min goalpost})} \times 100$$

Category and Pillar scores are aggregated using the arithmetic mean with equal weighting of the terms. The SSPI score is calculated using the geometric mean.

The weights attached to each variable for aggregation can be an important determinant of an index. For this reason, we conducted sensitivity tests to analyze the impact of different weightings of categories on the aggregation of Pillar scores and of different weightings of pillars on the aggregation of the SSPI score.

We conducted sensitivity tests on the weights used at the two levels of aggregation—pillars and categories. For each weighting scheme, the rankings of countries were compared to the rankings achieved under equal weighting of categories. The results of the SSPI sensitivity analysis indicated that the overall ranking of countries by SSPI varied little for most countries by how the weighting of the three pillars was done. Addendum with details of the weight sensitivity tests and results is available.

V. Description of Results

The SSPI scores for 2018 range from top-ranked Sweden at 81.0 to bottom-ranked Qatar at 51.7 (Table 1A). The SSPI allows us to compare to what extent each country has created policies for the three Pillars, according to how close the country's Pillar score is to the upper goalpost.

Comparing the scores for the Pillars (Table 1B), we see that country policies are weakest for Sustainability (top-ranked Sweden scores 78 and bottom-ranked Kuwait scores 30; mean 61) and are strongest for Public Goods and Services (top-ranked Sweden scores 89 and bottom-ranked India scores 56; mean 77). Market Structure policies fall in between (top-ranked Austria scores 80 and bottom-ranked Qatar scores 44; mean 67).

The scores for the categories in each pillar indicate how a country might improve policies in specific areas. For example, the Sustainability category Greenhouse Gases has the lowest mean score (46) of all the SSPI categories, which indicates that countries can improve their policies in this category, which is composed of policy indicators for alternative energy, energy intensity, air pollution, and green transport. Even top-ranked Sweden in the Greenhouse Gases category with score 68 is weak on alternative energy policy with score 47. However all countries score poorly on alternative energy policies (mean score 12), with only France (score 50) ranking above Sweden on this policy indicator. These low scores highlight the world's heavy reliance on fossil fuels for energy. In contrast, Sweden scores high on the energy intensity policy indicator (score 85), yet Sweden ranks only in the middle of the rankings with a median score, which indicates that most countries are doing well on reducing the energy required in production of goods and services. Air pollution and green transport indicators, both with median scores of 50, show that most countries still have room to improve these policies.

VI. Relationship of SSPI to Economic Performance

Here we examine the statistical relationship between the SSPI and its categories with five widely used measures of economic performance: UN Human Development Index (HDI)¹², the Sustainable Development Index (SDG)¹³, the Legatum Prosperity Index (LPI)¹⁴, the Social Progress Index (SPI)¹⁵, and the Cantril Life Satisfaction Ladder (CL)¹⁶. A policy (input) index and a performance (output) index are not always clearly delineated. Because of data limitations, a performance index may include a policy variable as a proxy for an outcome. Likewise the SSPI sometimes uses an outcome variable to proxy for a specific policy when data for the policy variable is not available.

¹² <http://hdr.undp.org/en/2016-report>

¹³ <http://www.sdgindex.org/assets/files/2018/01%20SDGS%20GLOBAL%20EDITION%20WEB%20V9%20180718.pdf>

¹⁴ <https://www.prosperity.com/rankings>

¹⁵ <https://www.socialprogress.org/>

¹⁶ Helliwell, Layard & Sachs. World Happiness Report. (2018). Retrieved from <https://worldhappiness.report/ed/2018/>

As Table 2 shows, the SSPI tracks the five economic performance indices to varying degrees (all significant at 1% level). As expected, the CL has only a weak relationship with the SSPI, because the CL is composed of one subjective variable about life satisfaction. Even so, the CL does track the SSPI across countries (SSPI is .05 CL; $R^2=.24$). Of the four broad index variables, the HDI has the weakest relationship with the SSPI, because the HDI was designed to compare economic welfare in low-income countries. Even so, the HDI statistically tracks the SSPI fairly well in the fifty mostly high-income countries (SSPI is .51 HDI; $R^2=.36$). The SDG tracks the SSPI across the fifty countries much better (SSPI is .70 SDG; $R^2=.79$), which is not surprising because the two metrics are set up for the advanced countries and share some of the same sustainability variables. The LPI tracks the SSPI similarly to the SDG (LPI is .69; $R^2=.60$), and the SPI tracks the SSPI even more closely (SSPI is .87 SPI; $R^2=.63$). The close statistical relationship of the SSPI with the SPI and LPI across countries indicates that policies and economic and social performance move together, which supports our goal of creating a policy index that is related to outcomes. The statistical relationship for the five economic performance measures indicates that policies matter, and the differences in the policy structures across countries can be useful in thinking about how to evaluate policies or how to improve a country's policies.

Interestingly economic performance measured as Gross National Product (GDP) per capita (or its log) does not have a significant relationship with the SSPI. This finding is reassuring because it is consistent with creating a policy index that tracks broad measures of well-being or quality of life rather than income per capita.

Using simple linear regressions, we also examined the statistical relationship of the three SSPI pillars with the economic performance measures (Table 2). Here we point out a some of the findings. The Sustainability pillar is significantly tracked by the SDG (Sustainability is .41 SDG; $R^2=.45$) as we would expect because they share some variables. Sustainability is also significantly (1% level) tracked by SPI and LPI. The relationship between Sustainability and HDI is weaker with lower significant (5% level), and Sustainability and the Cantril Ladder are weakly significantly related (10% level). Neither of these two measures include sustainability variables. When we examined the relationship between Sustainability and measures of ecological degradation, we find Sustainability is negatively related (1% significant) to the Carbon Footprint (Sustainability is -.10 Carbon Footprint; $R^2=.26$) but not significantly related to Production-based or Consumption-based Ecological Footprints. Overall these weak relationships between Sustainability policies and ecological outcomes reinforce our earlier finding that countries need to strengthen Sustainability policies.

The public often worries that the introduction of "green" policies might be detrimental to the country's economic performance. However, the log GDP per capita is not significantly related to the Sustainability or the Market Structure pillars, and log GDP per capita is positively related to Public Goods and Services pillar (1% significant). Of course this doesn't exclude the possibility of more complex statistical relationships. However knowing that Sustainability and Market Structure policies do not have a simple direct relationship with market output, which has a positive relationship with Public Goods and Services, is reassuring.

The Market Structure pillar is positively related to our five broad economic performance measures (1% significant). Because Market Structure is not statistically related to GDP per capita or to labor productivity, we look in more detail at the relationship between the Market Structure categories (Employment, Taxes and Property) and economic performance. (See Methods and Data file.) We find that Employment and Tax policies are both positively related (1% significant)

to the five economic performance measures. Employment policies are also positively related (1% significant) to the log GDP per capita and to labor productivity, while tax policies are not statistically related to either of these two economic variables. It is reassuring that policies to structure employment and to tax progressively do not have a simple negative relationship with national output and labor productivity across countries. We also see that both Employment and Tax policies have a positive relationship (1% significant) with corruption perception, so policies to structure markets trend with executives' negative perceptions about corruption across countries. Policies supporting private property have a positive relationship with the SDG Index (1% significant), the Legatum Prosperity Index (5% significant), and the Social Progress Indicator (5% significant), and are not statistically related to executives' perception of corruption. However Property is negatively related (5% significant) to labor productivity, GDP per cap (but not the log), the Carbon Footprint, and the Consumption Ecological Footprint, which means that policies supporting private property trend with lower labor productivity and output and worse carbon and ecological footprints across countries. Overall these relationships indicate that policies that structure employment and taxes for the common good are either positively related to economic performance outcomes or are not related, while property policies move in the opposite direction.

The Public Goods and Services pillar is statistically related to a broad range of outcome measures, including the five economic performance measures and specific policy outcomes, such as corruption perception, life expectancy, and neonatal mortality rate. These relationships between Public Goods and Services policies and specific outcome measures reinforces the finding that policies matter.

VII. Discussion and Future Research

The difficulty in finding data on specific policies indicates several underlying problems, including the complexity of policies that makes it hard to define and quantify across countries, and the cultural differences in policies across countries that reflect social norms about how to achieve specific goals. Also policies may be made at the local or regional level rather than the national level, and integrating local policies into a country variable is challenging.

Using a simple linear regression to estimate to what extent policies and outcomes move together across countries can be misleading if the relationship is not be linear, or it evolves over many years or is cyclical, or it works. The regressions at most demonstrate a relationship pattern across countries without providing information on causality or on mechanism of action.\

Our initial goal in developing the SSPI was to find data for as many countries as possible. For example, widely used outcome indices have data for many countries. The HDI ranks 189 countries in 2017,¹⁷ and the Legatum Prosperity Index ranks 148 countries plus Hong Kong in 2018.¹⁸ The Social Progress Index ranks 50 countries in 2018. The SDG Index, which uses a broad array of indicators to measure countries' performance on the 17 Sustainable Development Goals, demonstrates the problem with finding data to measure outcomes in many countries. Although the 2018 SDG Index and Dashboard report covers all 193 United Nations member states, the data are spotty for many countries with the most extensive data for the OECD countries. The 2018 report provides a survey of the government policy actions to implement the SDGs in the G20

¹⁷ <http://hdr.undp.org/en/faq-page/human-development-index-hdi>

¹⁸ <https://www.prosperity.com/rankings>

countries, and the 2019 report expands the survey to cover 43 countries. In addition, the SDG reports provide a spillover variable that measures the how policies in one country impact outcomes in other countries. The SDG data also demonstrates problems in comparing performance of high-income versus low-income countries in specific areas, because realistic goals for lower-income countries, such as for indoor sanitation facilities, would result in all higher-income countries having the top score. Therefore some SDG goals are set at different levels for higher- and lower-income countries.¹⁹

The 2018 SSPI includes all major higher-income economies as well as the largest lower-income economies. In the future we will expand the number of countries covered when data are available and reliable. Similar to the broad performance measures (HDI, SDG Index, LPI, and SPI), the SSPI will add or revise policy variables as they become available or are improved. We invite readers suggestions for policy variables to be considered.

VIII. Conclusion

Our development of the Sustainable Shared-Prosperty Policy Index provides an index that encompasses the system of policies for fifty countries. This systematic policy map divides policies into three pillars (Sustainability, Market Structure, and Public Goods and Services) that represent the government functions of structuring markets, delivering programs and services, and protecting the environment. The three pillars are further divided into thirteen categories, which together contain 54 policy indicators. The indicators, which are normalized to range from 0 to 100 with higher scores always better, display varying patterns across countries. Aggregations of indicators into categories, then into Pillars, and then into the SSPI are done using arithmetic means with equal weights. The 2018 SSPI rankings range from top-ranked Sweden (score 81.0) down to bottom-ranked Qatar (score 51.7). The patterns change somewhat for each Pillar, although countries tend to have somewhat similar rankings (high, medium, low) across Pillars. Northern European countries scored at the top for Sustainability and Public Goods and Services, but are more widely dispersed for Market Structure. The countries towards the bottom tended to display more variation in rankings.

Overall the Sustainability pillar is the weakest of the three pillars, which means that government sustainability policies are farther from the desired goalposts compared to the policies for structuring markets or providing public goods and services. The United Nations COP 21 meeting in Paris made the world realize that strong national policies, especially by the world's largest economies, are required to mitigate the climate crisis. Thus, the relatively low scores for the Sustainability Pillar is a cause for concern. When we compare countries across Sustainability Categories, we find that even top-ranked countries can improve in specific policy areas such as in alternative energy generation and in green transportation. This is one example of policies where all countries tend to have low policy scores. For other policies, countries tend to have high policy scores. An example is the Public Goods and Services category Education (median 89),

¹⁹ <https://sdgindex.org/reports/sdg-index-and-dashboards-2018/> and https://s3.amazonaws.com/sustainabledevelopment.report/2019/2019_sustainable_development_report.pdf

whose four policy indicators have medians ranging from 77 to 99. Overall the wide array of policy indicators displays a variety of score patterns.

The SSPI allows a direct comparison of two countries with very different scores across categories and pillars. Our country comparisons demonstrate how even countries with similar scores can vary greatly in their policy systems.

Our simple linear estimations show how the SSPI varies positively and significantly with five well-known economic performance indices across countries, but the SSPI is not statistically related to the log GDP per capita. The three pillars also vary positively and significantly with the five economic performance indices with the exception of the Cantril Ladder. The Sustainability and Market Structure pillars are not statistically related to the log GDP per capita, but the Public Goods and Services pillar is positively related to log GDP per cap.

These results indicate that policies are related to broad measures of economic performance, and policies do not tend to depress national output across countries with the exception that Public Goods and Services policies are positively related to national output. These results encourage countries to design policies to support the environment and reduce inequality along with provide social programs that improve quality of life.

In summary, the SSPI shows how you can measure and compare policies across countries, and demonstrates that policies matter for performance Hopefully the SSPI will be useful in discussing and comparing policies across countries.

Tables

Table 1A. The Sustainable Shared-Prosperty Index 2018 (under revision)

SSPI overall (2018)		
Rank	Country	Score
1	Sweden	81.0
2	Finland	80.1
3	Denmark	80.0
4	France	78.8
5	Austria	78.4
6	Germany	77.6
7	Norway	77.3
8	Australia	76.3
9	Canada	75.5
10	Slovenia	75.3
11	Estonia	75.0
12	United Kingdom	75.0
13	Slovak Republic	74.9
14	Belgium	74.6
15	Latvia	74.2
16	Switzerland	73.7
17	Czech Republic	73.7
18	Japan	73.6
19	Netherlands	73.2
20	Lithuania	73.1
21	Iceland	73.0
22	Ireland	72.5
23	Luxembourg	72.3
24	Poland	71.7
25	Spain	71.2
26	Portugal	71.2
27	Hungary	70.9
28	Italy	68.6
29	New Zealand	68.3
30	Argentina	67.1
31	Uruguay	66.4
32	Greece	66.3
33	Chile	65.4
34	Brazil	64.3
35	Russian Federation	62.9
36	United States	62.7
37	Korea, Rep.	62.5
38	Singapore	60.8
39	Indonesia	60.0
40	Mexico	58.8
41	Turkey	58.7
42	Israel	57.9
43	South Africa	57.6
44	India	56.9
45	China	55.4
46	Oman	55.3
47	Saudi Arabia	53.5
48	Kuwait	53.2
49	United Arab Emirates	52.8
50	Qatar	51.7

Table 1B. SSPI Pillar Rankings 2018

Sustainability Pillar (2018)			Market Structure (2018)			Governance Pillar (2018)		
Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
1	Sweden	78.1	1	Austria	79.9	1	Sweden	88.6
2	Latvia	75.7	2	Denmark	79.2	2	Norway	88.5
3	France	75.2	3	France	79.0	3	Luxembourg	88.0
4	Finland	74.9	4	Australia	78.7	4	Finland	87.5
5	Denmark	74.0	5	Finland	77.8	5	Denmark	86.8
6	Slovenia	73.9	6	Germany	77.2	6	Austria	85.4
7	Estonia	73.9	7	Canada	77.1	7	Iceland	84.8
8	United Kingdom	72.6	8	Sweden	76.4	8	Belgium	84.7
9	Germany	71.8	9	Norway	74.8	9	New Zealand	84.7
10	Lithuania	71.5	10	Slovak Republic	73.7	10	Netherlands	84.3
11	Belgium	70.4	11	Japan	73.3	11	Germany	84.0
12	Switzerland	70.1	12	Slovenia	72.1	12	Switzerland	83.0
13	Austria	70.0	13	Iceland	72.1	13	Canada	82.8
14	Slovak Republic	70.0	14	Italy	71.7	14	United Kingdom	82.7
15	Czech Republic	69.4	15	Czech Republic	71.4	15	Australia	82.5
16	Uruguay	68.7	16	Ireland	71.3	16	France	82.1
17	Norway	68.7	17	Portugal	70.6	17	Spain	81.7
18	Australia	67.8	18	New Zealand	70.4	18	Ireland	81.6
19	Poland	67.3	19	Estonia	70.4	19	Slovak Republic	81.0
20	Argentina	67.1	20	Netherlands	70.1	20	Portugal	81.0
21	Japan	67.0	21	Luxembourg	69.8	21	Estonia	80.8
22	Brazil	67.0	22	United Kingdom	69.7	22	Lithuania	80.7
23	Hungary	66.7	23	Belgium	68.7	23	Japan	80.4
24	Canada	66.6	24	Poland	68.6	24	Czech Republic	80.2
25	Spain	66.1	25	Latvia	68.4	25	Slovenia	79.9
26	Netherlands	65.1	26	Hungary	68.3	26	Poland	79.1
27	Ireland	64.5	27	Switzerland	68.0	27	Latvia	78.5
28	Russian Federation	63.2	28	Chile	67.8	28	Italy	78.4
29	Iceland	62.3	29	Lithuania	67.2	29	Hungary	77.7
30	Portugal	61.9	30	Korea, Rep.	66.9	30	Greece	76.7
31	Luxembourg	59.0	31	Spain	65.7	31	Korea, Rep.	75.4
32	Greece	58.5	32	Israel	65.1	32	Singapore	74.1
33	Indonesia	57.8	33	Argentina	64.5	33	Chile	73.8
34	Mexico	57.4	34	Russian Federation	64.4	34	United States	73.3
35	Italy	55.8	35	Greece	63.9	35	Kuwait	71.5
36	India	54.8	36	Brazil	61.9	36	Qatar	71.1
37	South Africa	54.7	37	United States	60.0	37	Israel	71.1
38	United States	54.6	38	Uruguay	60.0	38	Uruguay	70.4
39	Chile	54.5	39	India	59.7	39	Argentina	69.7
40	Turkey	50.8	40	Singapore	59.3	40	Saudi Arabia	67.1
41	New Zealand	49.7	41	Turkey	58.1	41	Turkey	67.1
42	Singapore	48.8	42	Kuwait	57.9	42	Oman	66.1
43	China	48.6	43	South Africa	57.8	43	United Arab Emirates	65.9
44	Korea, Rep.	45.1	44	Mexico	57.6	44	China	65.3
45	Oman	42.5	45	Indonesia	57.5	45	Indonesia	64.7
46	United Arab Emirates	41.1	46	Oman	57.2	46	Brazil	63.9
47	Qatar	39.9	47	Saudi Arabia	55.5	47	Mexico	61.4
48	Saudi Arabia	38.0	48	China	52.5	48	Russian Federation	61.0
49	Israel	37.4	49	United Arab Emirates	51.5	49	South Africa	60.4
50	Kuwait	30.3	50	Qatar	44.0	50	India	56.4

Table 2. The Relationship Between SSPI and Selected Outcomes

Various measures of progress regressed on SSPI 2018 (Aug 7th rev.)												
VARIABLES	(1) Human Development Index	(2) SDG Index	(3) Legatum Prosperity Index	(4) Social Progress Indicator	(5) Cantril Ladder	(6) Log of GDP per capita	(7) Human Development Index	(8) SDG Index	(9) Legatum Prosperity Index	(10) Social Progress Indicator	(11) Cantril Ladder	(12) Log of GDP per capita
SSPI	0.513*** (0.115)	0.703*** (0.0585)	0.689*** (0.0708)	0.871*** (0.103)	0.0483*** (0.0141)	0.0124 (0.0123)						
Sustainability							0.176** (0.0665)	0.394*** (0.0551)	0.335*** (0.0606)	0.417*** (0.0977)	0.0166* (0.00874)	-0.00537 (0.00632)
Market Structure												
Governance												
Constant	50.51*** (8.469)	25.76*** (4.212)	23.31*** (5.046)	21.61*** (7.583)	3.173*** (1.009)	9.643*** (0.895)	74.70*** (4.593)	49.57*** (3.644)	49.83*** (3.895)	55.48*** (6.701)	5.449*** (0.572)	10.82*** (0.430)
Observations	49	50	50	49	50	50	49	50	50	49	50	50
R-squared	0.358	0.791	0.598	0.634	0.244	0.036	0.083	0.485	0.275	0.260	0.056	0.013
Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1												
VARIABLES	(13) Human Development Index	(14) SDG Index	(15) Legatum Prosperity Index	(16) Social Progress Indicator	(17) Cantril Ladder	(18) Log of GDP per capita	(19) Human Development Index	(20) SDG Index	(21) Legatum Prosperity Index	(22) Social Progress Indicator	(23) Cantril Ladder	(24) Log of GDP per capita
SSPI												
Sustainability												
Market Structure	0.530*** (0.133)	0.693*** (0.0765)	0.669*** (0.100)	0.860*** (0.117)	0.0501*** (0.0144)	0.0113 (0.0144)						
Governance							0.702*** (0.0891)	0.686*** (0.0541)	0.782*** (0.0470)	0.959*** (0.0666)	0.0649*** (0.0118)	0.0367*** (0.00875)
Constant	50.10*** (9.476)	27.34*** (5.272)	25.57*** (7.023)	23.60*** (8.383)	3.115*** (1.010)	9.737*** (1.018)	31.87*** (7.154)	21.14*** (4.303)	10.46*** (3.723)	7.743 (5.398)	1.498 (0.946)	7.685*** (0.712)
Observations	49	50	50	49	50	50	49	50	50	49	50	50
R-squared	0.352	0.711	0.521	0.596	0.243	0.027	0.674	0.769	0.784	0.833	0.448	0.315
Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1												

Table 3. Indicator Descriptions and Sources (under revision)

Sustainability

Category	Indicator	Policy	Description	Source	Goalpost	Mean	Min	Max
<i>Ecosystem</i>	Biodiversity Protection	Protection of Biodiversity	Percentage of important sites for terrestrial, freshwater and marine biodiversity that are covered by protected areas, by ecosystem type. UN SDG 14.5.1, 15.1.2	UN SDG	(0, 100)	55.71	3.67	96.86
<i>Ecosystem</i>	IUCN Red List Index	Endangered Species Protection	Changes in aggregate extinction risk across groups of species based on the number of species in each category of extinction risk on the IUCN Red List of Threatened Species. SDG 15.5.1	UN SDG	(0, 1)	0.87	0.62	0.99
<i>Land</i>	Fertilizer Use	Sustainable Agriculture Practice	Quantity of plant nutrients used (kg) per hectare of arable land. Traditional nutrients--animal and plant manures--are not included. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	World Bank	(0, 750)	992	18	30238*
<i>Land</i>	Nitrogen Management Index	Sustainable Agriculture Practice	An index measuring the sustainability of Nitrogen management based on Nitrogen use efficiency (in agriculture) and land use efficiency (crop yield).	EPI	(0, 100)	44.21	0	72.38
<i>Land</i>	Freshwater Management	Water Conservation	Freshwater withdrawal as a proportion of available freshwater resources. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	UN SDG	(0, 100)	153.51	1.10	2603*

<i>Waste</i>	Stockholm Convention Compliance	Chemical Waste Management	Percent of provisions concerning Persistent Organic Pollutants from Stockholm Convention ratified and followed.	UN SDG	(0, 100)	69.15	0	100
<i>Waste</i>	Municipal Waste Generation	Waste Management	Total municipal waste kg/per capita per day. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	World Bank	(0, 5.5)	1.77	0.11	5.72*
<i>Greenhouse Gases</i>	Alternative Energy Generation	Renewable Energy Incentives	Alternative energy generation as a percentage of a country's total energy use. Alternative energy sources are noncarbohydrate based that do not emit carbon dioxide when generated, including hydropower, nuclear, geothermal, and solar power.	World Bank	(0, 100)	11.97	0	49.59
<i>Greenhouse Gases</i>	Energy Intensity	Energy Efficiency	Energy intensity level of primary energy measured in megajoules per constant 2011 purchasing power parity GDP. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	UN SDG	(0, 27.9)	4.64	1.95	12.00
<i>Greenhouse Gases</i>	Air Pollution	Pollution Limitation	Annual mean levels of fine particulate matter (PM2.5 and PM10) in cities (population weighted). This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	UN SDG	(0, 25)	19.7	5.73	90.35*
<i>Greenhouse Gases</i>	Green Transport Index	1) Taxes on gas/petrol 2) Transportation CO2 Limitation	This measure is an aggregation using the simple mean of the following measures: 1) Average fuel price. The pump prices of the most widely sold grade of gasoline. Prices are in USD per liter. 2) Transport emissions in kilograms of CO2 per capita. Inversed variable such that the minimum goalpost (0) yields the higher normalized indicator score.	1) World Bank 2) OECD	(0, 3.33) (0, 6000)	1.15 2247	0.24 200	1.78 9543*

Market Structure

Category	Indicator	Policy	Description	Source	Goalpost	Mean	Min	Max
<i>Employment</i>	Unemployment Benefits Coverage	Unemployment benefits	Percentage of unemployed receiving unemployment benefits.	ILO	(0, 100)	37	0	100
<i>Employment</i>	Fatal Workplace Injuries	Health and safety regulation	Number of fatal injuries per 100,000 workers.	ILO	(0, 25)	8.7	0.6	19.9
<i>Employment</i>	Weekly Full-time Hours Worked	Work-life balance policies	Mean weekly hours actually worked per employee. This indicator is inversed such that the minimum goalpost (30) yields the higher normalized indicator score.	ILO	(30, 60)	38.8	32	53
<i>Employment</i>	Minimum Relative to Mean Wage	Labor power	The central government minimum wage as a proportion of the mean wage.	OECD	(0, 0.65)	0.40	0.24	0.52
<i>Employment</i>	Labor Force Participation	Job placement policies	Sum of all employed workers ages 25-54 divided by the total number of people in that age group.	OECD	(40, 100)	85.0	67.6	91.9
<i>Employment</i>	Paid Maternity Leave	Maternity leave	Paid parental leave available to mothers (full-rate equivalent) in weeks during the first year.	OECD	(0, 52)	22	0	52
<i>Employment</i>	Child Labor Rate	Child labor laws	Percentage of children 5-14 years involved in child labor.	SDG	(0, 15)	1.51	0.00	12.4
<i>Taxes</i>	Gini-coefficient after Taxes and Transfers	Progressive or regressive taxation	A Gini index of 0 means that every household earns exactly the same income, while an index of 1 means that one household in the country makes all the income. This indicator is inversed such that the minimum goalpost (20) yields the higher normalized indicator score.	CIA	(20, 70)	35	24	63

<i>Taxes</i>	Corporate Tax Rate	Corporate tax	Tax imposed on the net income of the company.	Deloitte	(0, 40)	21	0	34
<i>Taxes</i>	Tax Revenue	Role of public sector	Tax revenue as percentage of GDP.	IMF	(0, 45)	22	1	46
<i>Taxes</i>	Applied Tariff Rate	Openness to trade	Simple mean applied tariff is the unweighted average of effectively applied rates for all products subject to tariffs calculated for all traded goods. Data are classified using the Harmonized System of trade at the six- or eight-digit level. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	World Bank	(0, 20)	3.5	0.2	13.4
<i>Property</i>	Property Rights Index	Property rights	Country expert survey responses to the following question: "Do men/women enjoy the right to private property?". The answer choices range from 1-6. 1: Virtually no one enjoys private property rights of any kind. 2: Some enjoy some private property rights, but most have none. 3: Many enjoy many private property rights, but a smaller proportion enjoys few or none. 4: More than half enjoy most private property rights, yet a smaller share of men have much more restricted rights. 5: Most enjoy most private property rights, but a small minority does not. 6: Virtually all enjoy all, or almost all property rights.	V-Dem	(1, 6)	4.9	2.0	5.6
<i>Property</i>	Patent Rights Index	Protection of intellectual property	Uses the Patents Rights Index (2015) which is the unweighted sum of five separate scores. These are: (1) coverage (inventions that are patentable); (2) membership in international treaties; (3) duration of protection; (4) enforcement mechanisms; and (5) restrictions (for example, compulsory licensing in the event that a patented invention is not sufficiently exploited).	Patent Rights Index	(0, 5)	4.2	2.8	4.9
<i>Property</i>	Anti-competitive Agreements	Anti-trust legislation	"Anti-Competitive Agreements" is one out of four pillars of the Competition Law index. The Anti-Competitive Agreements pillar aggregates country measures of price fixing, market sharing, output limitations, bid rigging, tying, exclusive dealing, resale price maintenance, eliminate competitors, efficiency defense, public interest defense.	Bradford and Chilton (2018)	(0, 1)	0.64	0.10	1.00

Public Goods and Services

Category	Indicator	Policy	Description	Source	Goalpost	Mean	Min	Max
<i>Education</i>	Primary School Net Enrollment	Accessibility of primary education	The ratio of the number of children of official primary school age who are enrolled in primary education to the total population of children of official primary school age, expressed as a percentage.	UIS	(0, 100)	96.0	80.0	100.0
<i>Education</i>	Lower Secondary Net Enrollment	Accessibility of lower secondary education	The net total of students in the lower secondary school age group who are enrolled in lower secondary or in any lower grade (primary education), as a proportion.	UIS	(0, 100)	88.3	61.8	99.9
<i>Education</i>	Years of Compulsory Primary and Secondary School	Guaranteed education	Number of years of compulsory primary and secondary education guaranteed in legal frameworks. The number of years of free education is generally more than the compulsory number of years.	UIS	(0, 13)	9.7	0.0	12.0
<i>Education</i>	Pupil to Teacher Ratio	Investment in teachers	Average number of pupils per teacher in primary school, based on headcounts of both pupils and teachers. This indicator is inversed such that the minimum goalpost (10) yields the higher normalized indicator score.	UIS	(10, 40)	14.7	8.3*	35.2

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<i>Healthcare</i>	Births Attended by Skilled Health Personnel	Basic healthcare	Sum of all employed workers age 25-54 divided by the total number of people age 25-54.	<u>WHO</u>	(0, 100)	98.6	81.4	100.0
<i>Healthcare</i>	Infant DTP Vaccine Coverage	Preventative health	The estimated percentage of children aged 12–23 months who received three doses of the combined diphtheria, tetanus toxoid and pertussis vaccine time before the survey.	<u>WHO</u>	(0, 100)	94.8	79.0	99.0
<i>Healthcare</i>	Physicians per 10,000	Investments in healthcare	Number of medical doctors (physicians), both generalists and specialists, expressed per 10,000 people.	<u>UN/WHO</u>	(0.2, 80)	30.7	2.0	62.6
<i>Healthcare</i>	WHO Core Capacities Fulfillment	Health regulations	Percentage score from the 13 indicators of the International Health Regulations (2005) monitoring framework. The core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; (13) Radio nuclear emergencies.	<u>WHO</u>	(0, 100)	78.0	59.2	95.8
<i>Healthcare</i>	Unmet Need for Family Planning	Family planning	Modeled data on unmet need for family planning is defined as the percentage of women of reproductive age, either married or in a union, who have an unmet need for family planning (any modern method). This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	<u>UN</u>	(0, 50)	16.4	4.6	37.9
<i>Healthcare</i>	Child Stunting	Nutrition	Estimated prevalence of stunting in children under 5 (%). This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	<u>IHME</u>	(0, 15)	5.60	0.96	41.3
<i>Infrastructure</i>	Availability and Quality of Electricity	Electrification	Executive opinion survey responses to the question: “In your country, how would you assess the reliability of the electricity supply (lack of interruptions and lack of voltage fluctuations)? [1 = not reliable at all; 7 = extremely reliable].”	<u>WEF</u>	(0, 1)	0.84	0.43	0.98
<i>Infrastructure</i>	Safely Managed Drinking Water	Water Infrastructure	Percentage of population using safely managed drinking water services.	<u>WHO/UNICEF</u>	(0, 100)	37	0	100
<i>Infrastructure</i>	Basic Sanitation Services	Sanitation infrastructure	The percentage of people using at least basic sanitation services, that is, improved sanitation facilities that are not shared with other households.	<u>WHO/UNICEF</u>	(0, 25)	8.7	0.6	19.9
<i>Infrastructure</i>	Internet Access	Connectivity policy	Percentage of households with internet access at home.	<u>World Bank</u>	(0, 30)	38.8	32	53*
<i>Infrastructure</i>	Bank Account Ownership	Financial infrastructure	Account ownership at a financial institution or with a mobile-money-service provider (% of population ages 15+).	<u>World Bank</u>	(0, 0.65)	0.40	0.24	0.52
<i>Infrastructure</i>	Rail and Road Transportation	Transport infrastructure	Sum of available road and rail network length (km), divided by population estimates.	<u>World Bank & CIA</u>	(0, 50000)	14026	0	83019*
<i>Rights</i>	Rule of Law Index	Judicial system	The rule of Law Index measures the extent to which laws are transparently, independently, predictably, impartially, and equally enforced, and extent to which the actions of government officials comply with the law. Measured from low to high 0-1.	<u>V-Dem</u>	(0, 1)	0.83	0.18	0.99
<i>Rights</i>	Quality of Public Services and Government	Government and civil service	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Measured from -2.5 to 2.5.	<u>WGI</u>	(-2.5, 2.5)	1.03	-0.22	2.21
<i>Rights</i>	Electoral Democracy Index	Political participation and influence	Data from the Electoral Democracy Index: the electoral principle of democracy seeks to embody the core value of making rulers responsive to citizens, achieved through electoral competition for the electorate’s approval under circumstances when suffrage is extensive; political and civil society organizations can operate freely; elections are clean and not marred by fraud or systematic irregularities; and elections affect the composition of the chief	<u>V-Dem</u>	(0, 1)	0.70	0.03	0.91

			executive of the country. In between elections, there is freedom of expression and an independent media capable of presenting alternative views on matters of political relevance.					
<i>Rights</i>	Adoption of Key UN Conventions	Basic rights	Proportion of 18 core international UN conventions and optional protocols that have been ratified, acquired or succeeded.	<u>UN</u>	(0, 1)	0.75	0.33	1.00
<i>Rights</i>	Political Legal Gender Equality Index	Equality in political power and equality before the law	<p>This indicator is an aggregation of three measures using the simple mean. The measures are first normalized then aggregated.</p> <p>1) World Bank’s “Women, Business and the Law index”, an average of several indicators on women's freedom. There are 8 dimensions measured. Each dimension has 4 or 5 binary questions that indicate the extent legal rights for women in that dimension. The dimensions are: Going places, Starting a job, Getting paid, Getting Married, Having Children, Running a Business, Managing Assets, Getting a Pension.</p> <p>2) The proportion of women in the national parliament</p> <p>3) The equality of political power expert assessment. An aggregated evaluation of the question, "Is political power distributed according to gender?" measured on a scale of 1 to 5. 1: Men have a near-monopoly on political power. 2: Men have a dominant hold on political power. Women have only marginal influence. 3: Men have much more political power, but women have some areas of influence. 4: Men have somewhat more political power than women. 5: Men and women have roughly equal political power. Reported data is normalized between 0 and 1 where “1” is that men and women have roughly equal political power.</p>	<p>1) <u>World Bank</u></p> <p>2) <u>IPU</u></p> <p>3) <u>V-Dem</u></p>	<p>(0, 100)</p> <p>(0, 50)</p> <p>(0, 1)</p>	<p>84.4</p> <p>26.3</p> <p>0.63</p>	<p>25.6</p> <p>1.2</p> <p>0.04</p>	<p>100.0</p> <p>43.6</p> <p>0.87</p>
<i>Public Safety</i>	Intentional Homicide	Gun control and police enforcement	Intentional homicides are estimates of unlawful homicides purposely inflicted as a result of domestic disputes, interpersonal violence, violent conflicts over land resources, intergang violence over turf or control, and predatory violence and killing by armed groups. Intentional homicide does not include all intentional killing; individuals or small groups usually commit homicide, whereas killing in armed conflict is usually committed by cohesive groups. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	<u>World Bank/UN</u>	(0, 0.65)	0.40	0.24	0.52
<i>Public Safety</i>	Global Cybersecurity Index	National cybersecurity laws, institutions and competence	<p>The Global Cybersecurity Index (GCI) is a composite index combining 25 indicators into one benchmark.</p> <p>(1) Legal: existence of legal institutions and frameworks dealing with cybersecurity and cybercrime. (2) Technical: existence of technical institutions and framework dealing with cybersecurity. (3) Organizational: existence of policy coordination institutions and strategies for cybersecurity development at the national level. (4) Capacity building: existence of research and development, education and training programmes, certified professionals and public sector agencies fostering capacity building. (5) Cooperation: existence of partnerships, cooperative frameworks and information sharing networks.</p>	<u>ITU</u>	(0, 100)	85.0	67.6	91.9

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<i>Public Safety</i>	Security Apparatus	Capability of the security apparatus	The Security Apparatus is a component of the Fragile State Index. It considers the security threats to a state such as bombings, attacks and battle-related deaths, rebel movements, mutinies, coups, or terrorism. It evaluates four aspects of security: Monopoly on the Use of Force (existence of militias, guerillas etc.), Relationship Between Security and Citizenry (professional police, state violence, government response to threats), Force (proper use of), Arms (proliferation etc.). This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	The Fund for Peace	(0, 10)	3.45	0.70	8.80
<i>Global Role</i>	Arms Transfers	Arms policy	Arm transfers cover the supply of military weapons through sales, aid, gifts and those made through manufacturing licenses. Data cover major conventional weapons such as aircraft, armored vehicles, artillery, radar systems, missiles, and ships designed for military use. Excluded are transfers of other military equipment such as small arms and light weapons.	SIPRI	(0, 1500)	557	0	10508*
<i>Global Role</i>	Military Expenditure	Defense policy	Military expenditure in local currency at current prices is presented according to both the financial year of each country and according to the calendar year as a percentage of GDP. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	SIPRI	(0, 6)	2.2	0.0	12.1
<i>Global Role</i>	Official Development Aid	Humanitarian aid	Official Development Assistance (ODA) as a percentage of GNI. ODA flows are defined as flows to countries and territories in the DAC List of ODA Recipients. These flows must be administered with the promotion of the economic development and welfare of developing countries as its main objective; and are concessional in character such the grant element exceeds at least 45% for bilateral aid to the official sector. Other ODA flows have lower grant element requisites.	OECD	(0, 0.7)	0.39	0.08	1.03*
<i>Global Role</i>	Green Climate Fund Contributions	Support of green global development	Pledged contributions (as a percentage of GDP) to the Green Climate Fund, which aids developing countries reduce greenhouse gas emissions and adapt to climate change.	Green Climate Fund	(0, 0.07)	0.01	0.00	0.10*
<i>Global Role</i>	Financial Secrecy Index	Tax evasion allowance	The index ranking is based on combining a qualitative measure (a secrecy score, based on 20 secrecy indicators) with a quantitative measure (the global weighting to give a sense of how large the offshore financial center is). The indicators used in creating the index can be classified under the headings Ownership Registration, Legal Entity Transparency, Integrity of tax and financial regulation, and International Standards and Cooperation. This indicator is inversed such that the minimum goalpost (0) yields the higher normalized indicator score.	Tax Justice Network	(60, 1590)	345	35	1590