

Economic Freedom without Quality of Government

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Abstract

Starting with the *Economic Freedom of the World* rankings, this paper re-ranks countries by economic freedom without reference to variables whose contemporary variation is driven by the quality of government. That is, I retain only the variables that vary today because governments choose not to do something (such as regulate or spend). Some or all of the measures concerning property rights and the legal system, sound money, and regulation were removed because high scores depend on governments' actively doing something. Removing these variables results in drastically different rankings of economic freedom. I do not argue that markets could not protect property rights or provide sound money in the absence of intervention. However, so long as states are involved in these matters, quality public institutions are important drivers of economic freedom.

JEL Codes: H11; P10

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I. Introduction

Economic freedom is a negative freedom, by definition. It does not pertain to a freedom to have something provided to you, but only the freedom from interference by others. Taxes, regulations, and burglary all constitute infringements on economic freedom. But when we go into the real world, this cut-and-dried distinction is muddled by the government's claimed responsibility for providing two important goods underlying market economies: the protection of life and property, and sound money. Therefore, the variation in economic freedom across the world is caused, to some extent, by whether governments fail to perform the functions they have taken on. In turn, this means that the quality of government has a causal role in determining the level of economic freedom.¹

¹ See Rothstein (2011) for a lengthy discussion of the case for the importance of the quality of government.

This paper removes from the *Economic Freedom of the World* index the elements of economic freedom directly related to quality of government, then recalculates the index. While a majority (twenty-nine of forty-three) of the variables are retained, the removal of the government-quality variables drastically changes the evaluation of which countries possess the most economic freedom. For example, the countries of northern Europe are no longer considered very free economically. Haiti is rated as the ninth-most economically free country.

It is possible that the interrelationships between economic freedom, quality of government, and economic performance are such that a country such as Haiti has low-quality government because it is impoverished, and that low quality in turn causes it to score lower in economic freedom. But that implies that the relationship between economic freedom and economic performance is in part one of backward causality; that is, prosperity causes economic freedom through the channel of the quality of government.

Ott (2022a, 2022b) makes the controversial claim that the size of government should be dropped from economic-freedom indexes and replaced with quality of government. From the standpoint of hypothesis testing and achieving scientific understanding of the benefits and causes of economic freedom, this is simply wrong because the size of government constitutes part of the definition of economic freedom, whereas the quality of government does not (Murphy 2022a, 2022b). Moreover, as it pertains to variation across the world today, the quality of government is an *input* into economic freedom. And *Economic Freedom of the World* already largely captures the quality of government insofar as it matters for economic freedom.

This paper does not take any position on whether markets themselves could protect life and property or provide sound money in the absence of government in the backdrop. Numerous scholars have argued for the possibility or even preferability of the private provision of both legal services (Powell and Stringham 2009; Leeson 2014; Stringham 2015) and money (Selgin and White 1994; Selgin 2008; Boettke, Salter, and Smith 2021). The position taken in this paper holds whether or not these arguments are correct. So long as governments are in the business of providing these goods, it is true, almost tautologically, that higher-quality government corresponds to higher economic freedom.

This paper in part extends the argument made in Murphy (forthcoming) which describes the manner by which state capacity

facilitates most dimensions of economic freedom by broadening the opportunity set of the ruling class, though while harming other dimensions. There, liberalizations are analogized to a series of efficiency-enhancing tax swaps, in which (for instance) the political support previously bought off with a protectionist regulation is replaced with a more efficient means of buying political support, such as a transfer payment. As state capacity rises, governments become capable of shifting from the less efficient means of buying political support to more efficient means of purchasing political support. In this paper, state capacity is conceptually in the background as one of the many causes of the quality of government, which in turn explains the cross-country variation in the protection of life and property and the provision of sound money.

Many proponents of negative freedoms, such as Nock ([1935] 1994) and Rothbard (2002), view the strengthening of state institutions as anathema to the idea of attaining more freedom. As noted above, the purpose of this paper is not to dispute the possibility that entirely market-based arrangements would yield better results than what would be attained through best-case government. Rather, the point is that the variation across countries in economic freedom, as the world exists today, is such that neglecting the elements of economic freedom that are impacted by the quality of government would quickly yield untenable assessments of which countries possess the most economic freedom.

Leeson and Williamson (2009) and Leeson (2014: 197–210) argue that anarchy may be preferable in less developed countries when the quality of their state institutions is sufficiently low and other conditions hold: “Exogenous factors, such as a country’s ‘history,’ shape and constrain what quality governance arrangement of *any* kind [a country, in this case, Somalia] has among its feasible governance alternatives” (Leeson 2014: 198, emphasis in original). But subsequent research has suggested de-emphasizing the influence of history in determining institutions and outcomes today (Kelly 2020); there limits of the extent to which the quality of state institutions should be thought of as exogenous. An alternative interpretation of the contemporary challenge of economic development is that building high-quality state institutions is incredibly difficult, and it must be done much more gradually and slowly than was attempted in the recent past (Andrews, Pritchett, and Woolcock 2017). Similarly, in the developed world, improvements in the quality of government are difficult, but it is not

clear why it is necessary to think of the level of the quality of government as predetermined or exogenous.

All that said, the contribution of this paper is to conduct an empirical exercise demonstrating what measures of economic freedom would look like in the absence of variables pertaining to the quality of government. Section 2 discusses in greater detail the steps taken to reconstruct economic-freedom data and the rationales thereof. I go into some detail to explain why the statistical variations in the variables that I remove are in fact driven by differences across the world in the quality of government. I then present the results of how measured economic freedom shifts when variables related to the quality of government are removed, and I discuss these shifts.

II. Methodology and Data

All data used here originate in the *Economic Freedom of the World* (EFW) index (Gwartney et al. 2022). The data are split into five areas: the (limited) size of government, the quality of the legal system and the protection of property rights, sound money, the freedom to trade internationally, and (limited) regulation. The areas are constructed using variables from independent data sources, with forty-three variables used in total. Scores run from 0 to 10, with 10 always corresponding to more freedom. I focus on 2019 data throughout this paper because they are the most recent data unaffected by COVID-19. In 2019, 165 countries were assigned scores.

I remove each variable whose variation is driven by the quality of government. The question addressed when quantifying economic freedom across the world is not how much freedom there could be, hypothetically, were there radically different institutional characteristics, but how institutions vary across the world here and now. For instance, the variation in the soundness of money is determined not by whether a country has a free-banking system or a central-banking system, but the differential quality of central-banking institutions. In the comparative context, whether we have more economic freedom or less in the area of sound money is at the whim of the quality of the central-banking institutions. There are edge cases—for example, where countries have dollarized²—but these cases do not apply to the bulk of countries in the world and therefore to the variation in the data. The distinction I effectively draw in deciding whether to exclude a variable from the reconstructed measure of

² Cf. Cachanosky, Salter, and Savanti (2022).

economic freedom is whether *the variation* is strongly influenced by whether a government does something *better*, versus its empirical dependence on *choosing* to do nothing (what I call “laissez-faire” variables, although that should not be taken too literally as a line of demarcation).

There is also a semantic issue concerning whether the quality of government reflects the quality of the government or underlying cultural variables. It is not the position here that the quality of government should be thought of as some variable unrelated to other characteristics of a country, and it is almost certainly an outgrowth of variables like culture. But I remove the variables whose variation is driven by the quality of government, whatever the underlying cause of the quality of government.

The variation of the first three variables in the sound-money subindex is determined by the quality of government institutions: the increase in money stock in relation to increases in GDP, the rate of inflation in the most recent year, and the standard deviation in inflation.³ The fourth element, the freedom to own foreign-currency bank accounts, follows the laissez-faire logic and is something a government may merely choose to allow—not something public institutions needs to have any particular skill in accomplishing. (It is added to the “controls on the movement and capital” component of freedom to trade internationally, so its variation is retained and redeployed elsewhere, instead of being removed.)

The legal-system-and-property-rights area is eliminated entirely. The variables in the area are judicial independence, impartial courts, the protection of property rights, military interference in the rule of law and politics, the integrity of the legal system, the legal enforcement of contracts, regulatory restrictions on sale of real property, and the reliability of the police (there are multiple data sources for most of these variables, and they often overlap). Of these, the title “regulatory

³ There may be deeper underlying causes of the quality of central banks, such as central banking independence, whether the ideology of those leading the central bank is more or less influenced by monetarism, or idiosyncratic institutional characteristics influencing the central bankers. Moreover, there is only a trivial difference between what EFW assigns a perfect score for and what mainstream, or even left-of-center economists, would consider ideal. A 4 percent inflation target achieved consistently would result in only a minor decline in a country’s score. Such a country would receive a 9.2 in money growth, a 10.0 in standard deviation of inflation, and a 9.2 in most recent year of inflation. Assuming that the country permits both kinds of foreign-currency bank accounts, the 4 percent inflation-targeting country would receive a 9.6 out of 10, which is a mere 0.08 deduction from the overall index.

restrictions on sale of real property” may sound closest to active policy the government is partaking in (and could just choose to go *laissez-faire*) and not an outgrowth of the quality of government. But what the data are actually measuring is the length of time and cost of transferring landownership. That is a result of the quality of bureaucratic arrangements just as much as (if not more than) specific policy choices undertaken by governments. As long as governments involve themselves in enforcing property rights in real property, the variation in this variable will be driven by the quality of government.⁴

There is a secondary concern that the quality-of-the-legal-system and property rights variables are reflecting “outcomes” like crime rates, and these are driven by informal institutions or culture, rather than formal institutional quality (cf. Williamson 2009). I look at this closely for the protection-of-property-rights variable below since it sounds akin to an outcome. In Appendix A, I evaluate every component of the index and whether it speaks to the quality of formal governmental institutions or an “outcome.” For all but two components, they seem to reflect the quality of formal governmental institutions, and those two components are only partial exceptions.

The primary data source for protection of private property is the *Global Competitiveness Report*, and its survey variable questions businesspeople. They may respond “Property rights, including over financial assets, are clearly defined and well protected by law” at one extreme or property rights are “poorly defined and not protected by law” at the other, on a 1–7 scale. It seems doubtful that businesspeople would answer “clearly defined and well protected by law” if property rights were understood informally and indicated by barking dogs, to use the colorful canonical example of informal demarcation. The secondary source for this variable is the “property rights and rule-based governance rating” from the World Bank’s *Country Policy and Institutional Assessment*, described as follows: “Property rights and ruled-based governance assess the extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property and contract rights are reliably respected and enforced.” This is assessed by expert opinion. It is possible that culture, norms, and mores undergird the legal system and property rights, but it is not social outcomes or informal institutions that are being measured in the legal-system-and-property-rights area, with only

⁴ It is also worth noting that Koyama (forthcoming) uses the legal-system-and-property-rights area to measure “legal capacity,” a subset of state capacity.

very minor qualifications. What I am removing in removing this area is the quality of formal governmental institutions.

The last two variables to remove from EFW are similar insofar as they superficially relate to regulatory “choices” but are actually closely related to the quality of government. Both of these appear in the “business regulation” component of regulation in EFW. The first is “bureaucracy costs,” which in the original data set (IHS Markit) is “Regulatory Burden Risk Ratings,” measuring a blend of low levels of regulation and the quality of the regulatory bureaucracy; it is the “risk that normal business operations become more costly due to the regulatory environment. This includes regulatory compliance and bureaucratic inefficiency and/or opacity.” The second is “impartial public administration,” which originates as the “Rigorous and Impartial Public Administration” variable in the Varieties of Democracy data set. Per Varieties of Democracy, “This question focuses on the extent to which public officials generally abide by the law and treat like cases alike, or conversely, the extent to which public administration is characterized by arbitrariness and biases (i.e., nepotism, cronyism, or discrimination). The question covers the public officials that handle the cases of ordinary people. *If no functioning public administration exists, the lowest score (0) applies*” (emphasis added).

Both questions are geared toward the quality of the bureaucracy, although this is less absolutely clear for the IHS Markit data. What they pose is, given that there is a regulatory apparatus everywhere in the world, how costly is it to deal with it? The variation in economic freedom across countries is in part driven by that costliness. The other variables in the business-regulation component more closely model the extent of laissez-faire (that is, just not having binding regulations), but the two subcomponents we are removing address, primarily, the way in which the quality of government affects economic freedom.

We therefore are left with a three-area economic-freedom index: the size of government, the freedom to trade internationally, and (limited) regulation, with the freedom to own foreign-currency bank accounts appended to freedom to trade internationally. Otherwise, all the standard “rules” by which the index is averaged together normally apply when we reconstruct it.

III. Results

Table 1 reports the adjusted top 25 countries in economic freedom, with the aforementioned variables related to the quality of government excluded. Hong Kong and Singapore remain at the top of the rankings,

now followed by Georgia, Guatemala, Lithuania, Mauritius, New Zealand, Armenia, Haiti, and Malta. The United States falls from 5th to 12th. In the top 25 countries, there remain countries at or near the economic frontier (New Zealand, the United States, Switzerland, Taiwan, and Ireland) and economically free countries that are rapidly advancing (among them, Georgia, Lithuania, and Mauritius). But we also observe a number of countries that combine failed or failing states with relatively liberal economic policies. Many of these countries may have higher economic performance than one may expect (as in Kazakhstan or Cambodia), but others are stagnant (as in Jordan or Haiti).

Table 1. Top 25 countries in economic freedom, institutional-effectiveness variables excluded

New rank	Country	Old rank	Difference
1	Hong Kong	1	0
2	Singapore	2	0
3	Georgia	11	+8
4	Guatemala	33	+29
5	Lithuania	7	+2
6	Mauritius	8	+2
7	New Zealand	3	-4
8	Armenia	17	+9
9	Haiti	102	+93
10	Malta	16	+6
11	Cambodia	61	+50
12	United States	5	-7
13	Albania	31	-18
14	Dominican Rep.	49	+35
15	Switzerland	4	-11
16	Peru	33	+17
17	Taiwan	14	-3
18	Ireland	9	-9
19	Bulgaria	31	+12
20	Cyprus	24	+4
21	Panama	37	+16
22	Malaysia	52	+30
23	Romania	28	+5
24	Jordan	53	+29
25	Kazakhstan	49	+24

Continuation of Table 1, countries ranked 26th–165th

New rank	Country	Old rank	Difference
26	United Kingdom	11	-15
27	Bahrain	56	+29
28	Nigeria	84	+56
29	Estonia	13	-16
30	Uganda	60	+30
31	Jamaica	46	-15
32	Honduras	70	+38
33	Czechia	17	-16
34	Philippines	63	+29
35	Seychelles	41	+6
36	Latvia	21	-15
37	Montenegro	41	+4
38	Somalia	125	+87
39	Mexico	75	+36
40	Australia	10	-30
41	Chile	29	-12
42	El Salvador	63	+21
43	North Macedonia	77	+34
44	Brunei	66	+22
45	Moldova	65	+20
46	Canada	15	-31
47	Spain	24	-23
48	Denmark	6	-42
49	Mongolia	58	+9
50	Slovakia	46	-4
51	Cabo Verde	40	-11
52	Japan	19	-33
53	Serbia	72	+20
54	Germany	24	-30
55	Costa Rica	39	-16
56	Israel	41	-15
57	Luxembourg	24	-33
58	Bosnia	87	+29
59	Ghana	100	+41
60	Indonesia	68	+8
61	Paraguay	79	+18
62	Italy	46	-16
63	Djibouti	112	+49
64	Portugal	35	-29
65	Qatar	79	+14

Continuation of Table 1, countries ranked 26th–165th, *continued*

New rank	Country	Old rank	Difference
66	Netherlands	20	-46
67	Kyrgyz Republic	77	+10
68	Botswana	55	-13
69	Hungary	53	-16
70	Nicaragua	83	+13
71	Nepal	99	+28
72	Korea, South	44	-28
73	Finland	22	-51
74	UAE	67	-7
75	Trinidad & Tobago	71	-4
76	Uruguay	61	-15
77	Iceland	23	-54
78	Bahamas	73	-5
79	Austria	29	-50
80	Gambia	81	+1
81	Croatia	58	-23
82	Comoros	120	+38
83	Mauritania	108	+25
84	Thailand	88	+4
85	Poland	71	-14
86	Benin	104	+18
87	Laos	105	+18
88	Barbados	82	-6
89	Lebanon	90	+1
90	Kuwait	97	+7
91	Belgium	44	-47
92	France	51	-41
93	Kenya	85	-8
94	Zambia	86	-8
95	Sweden	38	-57
96	Sri Lanka	100	+4
97	Colombia	91	-6
98	Madagascar	122	+24
99	Greece	76	-23
100	Norway	36	-64
101	Rwanda	69	-32
102	Slovenia	56	-46
103	Morocco	97	-6
104	Bangladesh	132	+28
105	India	95	-10

Continuation of Table 1, countries ranked 26th–165th, *continued*

New rank	Country	Old rank	Difference
106	Ukraine	127	+21
107	Namibia	96	-11
108	Oman	94	-14
109	Russia	91	-18
110	Burkina Faso	125	+15
111	Saudi Arabia	89	-22
112	Mozambique	113	+1
113	Pakistan	134	+21
114	Ecuador	102	-12
115	South Africa	93	-22
116	Vietnam	118	+2
117	Turkey	111	-6
118	Azerbaijan	116	-2
119	Tajikistan	109	-10
120	Bhutan	110	-10
121	Senegal	124	+3
122	Angola	153	+31
123	Gabon	142	+19
124	Tanzania	107	-17
125	Belize	117	-8
126	Eswatini	130	+4
127	Congo, Dem. Rep.	155	+28
128	Lesotho	114	-14
129	Cameroon	145	+16
130	Cote D'Ivoire	128	-2
131	Fiji	119	-12
132	Guinea	136	+4
133	Mali	140	+7
134	Guinea-Bissau	148	+14
135	China	120	-15
136	Chad	150	+14
137	Ethiopia	143	-9
138	Liberia	129	-9
139	Brazil	106	-33
140	Papua New Guinea	133	-7
141	Bolivia	122	-19
142	Suriname	134	-8
143	Argentina	154	+11
144	Malawi	136	-8
145	Belarus	112	-33

Continuation of Table 1, countries ranked 26th–165th, *continued*

New rank	Country	Old rank	Difference
146	Togo	131	-15
147	Yemen	147	0
148	Zimbabwe	162	+14
149	Sierra Leone	141	-8
150	Tunisia	136	-14
151	Egypt	146	-5
152	Timor-Leste	139	-13
153	Myanmar	152	-1
154	Iraq	156	+2
155	Niger	151	-4
156	Central Afr. Rep.	157	-1
157	Burundi	149	-8
158	Iran	158	0
159	Syria	160	+1
160	Congo, Rep.	161	+1
161	Guyana	144	-17
162	Algeria	159	-3
163	Sudan	164	+1
164	Libya	163	-1
165	Venezuela	165	0

Table 2 reports the biggest declines and biggest rises in measured economic freedom when the variables concerning the quality of government are removed. The biggest declines are all seen in northern Europe and areas adjacent to it. The biggest rises are for countries in sub-Saharan Africa, Latin America, and one in Southeast Asia (Cambodia). Of these ten biggest risers, Mexico and the Dominican Republic are by far the wealthiest. To some extent, these results should be unsurprising, but the degree to which the ratings are reliant on variation caused by the quality of government should raise concerns for anyone downplaying the importance of the quality of government (conditional on its existence). If we want to have anything approaching a reasonable assessment of which countries are the most economically free, it *cannot* only be in reference to the *laissez-faire* variables.

Table 2. 10 largest increases and decreases when institutional effectiveness is excluded***Biggest declines***

Decline rank	Country	New rank	Old rank	Decline
1	Norway	100	36	-64
2	Sweden	95	38	-57
3	Iceland	77	23	-54
4	Finland	73	22	-51
5	Austria	79	29	-50
6	Belgium	91	44	-47
T7	The Netherlands	66	20	-46
T7	Slovenia	102	56	-46
9	Denmark	48	6	-42
10	France	92	51	-41

Biggest rises

Rise rank	Country	New rank	Old rank	Rise
1	Haiti	9	102	+93
2	Somalia	38	125	+87
3	Nigeria	28	84	+56
4	Djibouti	63	115	+52
5	Cambodia	11	61	+50
6	Ghana	59	100	+41
T7	Honduras	32	70	+38
T7	Comoros	82	120	+38
9	Mexico	39	75	+36
10	Dominican Rep.	14	49	+35

I now conduct an exercise to explore very poor economic performance under economic freedom, a bit more systematically. As stated, what is important is identifying instances not of merely impoverished countries (they may be catching up) or countries that are stagnant (they may be rich), but countries that are both. I constructed a simple index to use to identify the countries that are failing on both of these margins. To do so, I created a list of all countries along with two variables: their total real cumulative growth from 2007 to 2021, and the level of the natural log of real GDP per capita in 2021. I then standardized both numbers and chose the *greater* of the two. Countries that perform the worst in the greater of the two numbers are those that are best characterized as neither wealthy nor growing. When reporting, I translate the standardized score into a percentile and multiply it by one hundred for ease of interpretation. I refer to this as the “economic-performance score” below.

I look at the top forty-two countries in both EFW and the data that leave out the variables related to the quality of government. This number of countries was chosen because (1) in the top twenty-five countries in EFW, there are no countries that have anything that comes close to an economy that is both impoverished and stagnant; and (2) forty-two countries are the equivalent of the top quartile and the countries appearing in blue on the front book cover of Gwartney et al. (2022). Table 3 presents these results. For EFW, the worst-performing country is Cabo Verde, with an economic-performance score of 31.00 out of 100.00. In the 2019 data, Cabo Verde ranked fortieth in economic freedom, but it had only recently liberalized, ranking fifty-ninth in 2017 and ninety-fifth in 2013; its poor track record in growth did not actually occur under a free economic regime. The second-weakest-performing economy is Guatemala, with an index score of 48.12. (Again, Guatemala’s lackluster performance here goes to the general point; it arguably has the weakest state of any country in the top quartile in EFW.) No other country in the top quartile of EFW should be characterized as both impoverished and stagnant.

Table 3. Worst economic-performance records of top quartile countries*Economic Freedom of the World*

Rank (worst)	Country	Cumulative growth (2007–21)	RGDPpc (PPP, 2021)	Index of economic performance
1	Cabo Verde	6.30%	\$6,397	31.00
2	Guatemala	22.33%	\$8,893	48.12
3	Armenia	37.17%	\$13,317	64.37
4	Mauritius	35.78%	\$20,244	67.59
5	Montenegro	26.58%	\$20,567	68.08
6	Costa Rica	32.97%	\$21,261	69.09
7	Bulgaria	37.20%	\$23,432	71.99
8	Peru	46.57%	\$12,648	73.62
9	Chile	28.47%	\$25,821	74.74
10	Seychelles	23.71%	\$27,160	76.12

Economic freedom without quality of government

Rank (worst)	Country	Cumulative growth (2007–21)	RGDPpc (PPP, 2021)	Index of economic performance
1	Haiti	-3.95%	\$2,847	21.69
2	Jamaica	-10.93%	\$9,126	40.82
3	Honduras	15.81%	\$5,691	40.92
4	Nigeria	15.88%	\$4,969	41.00
5	Jordan	-12.55%	\$9,969	43.81
6	El Salvador	21.06%	\$8,801	46.71
7	Guatemala	22.33%	\$8,892	48.12
8	Uganda	29.92%	\$2,182	56.57
9	Armenia	37.17%	\$13,317	64.37
10	Mexico	44.34%	\$18,545	64.82

Beneath the results for EFW in table 3 are the bottom ten economic performers among countries in the top quartile for economic freedom rated without the quality-of-government variables. Ranked worst, unsurprisingly, is Haiti, with an economic-performance score of 21.69. Guatemala appears on both lists, but on this one it is ranked seventh worst, with Jamaica, Honduras, Nigeria, Jordan, and El Salvador in between. Uganda is between Guatemala and the countries, beginning with Armenia, that are clearly not both simultaneously stagnant and impoverished. In other words, the group of countries that has liberalized in the sense of *laissez-faire* with an impoverished, stagnant economy goes beyond just Haiti and Jordan, and it actually constitutes one-sixth (seven of forty-two) of the top quartile of countries, when economic freedom is assessed without variables relating to the quality of government. Also notable is that Somalia is in the top quartile when variables concerning the quality of government are removed, and it is not counted among the seven. Adequate GDP data are unavailable to consider Somalia at all, although it is possible that it is growing fast enough from a very low initial level that it would not make the bottom ten countries in our index of economic performance.

Again, we could observe even greater levels of economic freedom were governments to stay out of the businesses of the protection of person and property and the provision of sound money. But if we eliminate the consideration of how well states perform these functions, the top countries in the economic-freedom rankings become countries with states that are *laissez-faire* but are both effective and ineffective. Countries that are not *laissez-faire* but perform their state functions in supporting markets very well are then not rated as having a high degree of economic freedom. That latter group includes much of northern Europe.

At very high levels of aggregation, the first factor or first principal component (it generally does not matter which methodology one chooses) of *all* measures of institutions tends toward a generic effectiveness, especially governmental effectiveness (Drumm 2015; Andrews, Pritchett, and Woolcock 2017: 14–19). It should not be entirely surprising, therefore, for its removal to result in a significant shift in how countries are assessed,⁵ as effectiveness tends to explain a

⁵ The pattern that tends to emerge is that the quality of the legal system and property rights, sound money, the freedom to trade internationally, and regulation receive high loadings in the first principal component or factor when dropped in with other dimensions of institutions (along with effectiveness). The size of government will

substantial portion of variation across countries. When I do not include variables whose contemporary variation is driven by the quality of government (and implicitly, effectiveness), as was done here, Haiti is ranked 9th and Norway is ranked 100th. When I do include those variables, Haiti is ranked 102nd and Norway is ranked 36th. The latter rankings better reflect the vibrancy of market institutions.

The quality of government enters EFW—and contrary to Ott (2022a), it enters essentially the extent to which it should—which is the extent to which quality of government determines economic freedom—which is the extent to which government is in the business of providing the institutions responsible for protecting life and property and for providing sound money. Removing these elements from published versions of economic-freedom data, as is done here, because they are intertwined with the performance of the state is inappropriate, just as is Ott's (2018) suggestion that the size of government be removed from measures of the size of government from economic-freedom indices. All five areas constitute the definition of economic freedom, and removing them invalidates the index as a measure of the concept it claims to be measuring (Murphy 2022a).

IV. Conclusion

What *Economic Freedom of the World* is built to measure is how economic freedom is distributed around the world today. As it is distributed, much of the variation is determined by how effective governments are at performing tasks that they have taken on, which are directly related to specific dimensions of freedom. Namely, these tasks are the protection of property rights and life, and the provision of sound money. So long as the variation across the world in economic freedom is determined by these differentials in efficacy, this is appropriate, even if hypothetical regimes that do not make use of state institutions at all could provide these services better than the best state regimes do today.

In addition to the current distribution of freedom being in part driven by the quality of government, the narrative presented by North, Wallis, and Weingast (2009) strongly indicates that the pathway to a

have a loading around zero. So long as governments are responsible for the protection of life and property and the provision of sound money, it naturally follows that the variation across countries would follow the overall level of effectiveness. The reading of how free trade and regulation also have this same correlation, but the size of government does not, may relate to state capacity, as argued in Murphy (forthcoming).

liberty that is open to all was historically achieved through the gradual development of state, economic, and democratic institutions. Modern counterexamples to this pathway are the rare autocracy, such as Singapore, which has opened up economic freedom and opportunity for all in society without the installation of liberal political institutions (though even here, Singapore has an extremely strong state). Many countries have successfully traversed the kind of institution building that western Europe engaged in during the eighteenth and nineteenth centuries during just the second half of the twentieth century (Murphy 2022c), and there was little, if any, reason to believe this would cease continuing, until the recent rough patch stalling many liberalizations since 2007.

Regardless, an index of *laissez-faire* that does not include variables whose variation reflects the quality of government fails as an economic-freedom index. If it were the case that all that is necessary to begin converging to the economic frontier is to achieve *laissez-faire*, then we should not be able to observe the several countries that conducted the *laissez-faire* reforms and are economically stagnant at a low level of income. Yet we do. Because the quality of government is also an important input into the level of economic freedom, as it is now distributed in the world, this should be unsurprising.

Appendix A: Data Description of Remaining Seven Variables in “Quality of the Legal System and Property Rights” Data

In the main text, justifications were given for why “protection of property rights” and “regulatory restrictions on sale of real property” were removed, and for why they are best thought of as measures of the quality of government, despite how they are named. I consider the remainder of the variables below. There are a few partial exceptions to whether the definition of the variation only relates to the quality of government, but in no case is there reason to believe that the majority of the variation in the data is something besides the quality of government. For example, even if many or most legal conflicts are settled using arbitration or another private mechanism, the questions that the variables pose specifically pertain to the quality of formal public institutions. Another concern is that the variables in question are measuring an “outcome” (for example, crime) that is not necessarily the result of the quality of government. There is more to this, but there is no reason to believe it is making up the majority of the variation for any one component of the subindex.

The first component is “Judicial Independence.” Data from the *Global Competitiveness Report*, Linzer and Staton (2015), and *Varieties of Democracy* are combined as an aggregate measure for this component. The *Global Competitiveness Report* variable answers the question, posed to businesspeople,

“Is the judiciary in your country independent from political influences of members of government, citizens, or firms?” Linzer and Staton (2015) use a rather complicated aggregation method of different measures of judicial independence and proxies for judicial independence.⁶ The Varieties of Democracy data (answered by country experts) used here are “judicial purges,” “government attacks on the judiciary,” “court packing,” “high court independence,” and “low court independence.” When all three variables are available (with the Varieties of Democracy data aggregated into a single variable), all three are used, and in practice, whatever is available is averaged together.

The second component is “Impartial Courts,” which combines data from the *Global Competitiveness Report*, Worldwide Governance Indicators, and Varieties of Democracy. The question from the *Global Competitiveness Report*, posed to businesspeople, is the efficiency and neutrality of “the legal framework in your country for private businesses to settle disputes and challenge the legality of government actions and/or regulation.” The Worldwide Governance Indicators variable is actually called the “Rule of Law” and is an aggregate of a wide assortment of variables. The way in which the variables are aggregated is not done in a transparent way, and the large number of its “Representative Sources” is supplemented further by a set of “Non-representative Sources,” so it is unclear what is being used and how. Some of these sources include variables that are problematic for our purposes, like crime, but the majority of variables appear to be tied to the quality of governmental institutions. Finally, one piece of data is used from Varieties of Democracy: expert responses concerning “judicial corrupt decisions.”

Skipping over the third component, the protection of property rights, the fourth component is “Military Interference in Rule of Law and Politics” from the *International Country Risk Guide*. This variable indicates whether the military or the police influence the courts or politics in a country. The *International Country Risk Guide* uses expert opinions when scoring countries.

The fifth component, “Integrity of the Legal System,” uses data from *International Country Risk Guide* and Varieties of Democracy. There are two pieces from *International Country Risk Guide*: “the strength and impartiality of the legal system” and “popular observance of the law.” The second of these two pieces may have some of its variation influenced by informal institutions and culture rather than formal institutional quality. The data from Varieties of Democracy are country experts’ responses addressing “judicial accountability,” “compliance with the high court,” “judicial review,” “transparent laws with predictable enforcement,” and “access to justice for men” (only data for men were used, as there is a separate adjustment, described below, to account for gender disparities in the legal system).

⁶ If one wishes to see more of what underlies Linzer and Staton (2015), please note that there is a more recent version of data with still more complications added to it found at Harvard Dataverse.

The sixth component is “legal enforcement of contracts,” where two data sources, *Doing Business* and the *Historical Ratings Research Package* by Business Environment Risk Intelligence, are combined. The *Doing Business* figure assesses how much time and money it would take to collect a debt through the courts equal to 200 percent of a country’s per capita income. The Business Environment Risk Intelligence data is an expert assessment regarding the ability to enforce contracts in a country (it is only available for a select number of countries, and it is included primarily to provide more data coverage in the subindex for the period before *Doing Business* and *Global Competitiveness Report* came into existence).

I skip the seventh component, “regulatory costs of the sale of real property,” to consider the eighth component, “reliability of police,” whose source is the *Global Competitiveness Report*. It is businesspeople’s response to the question “To what extent can police services be relied upon to enforce law and order in your country?” This could be construed as to some extent as an “outcome,” but it is framed explicitly in terms of the quality of a government service.

The final data that is used in the construction of the subindex is the gender adjustment for the “quality of the legal system and property rights,” created by Fike (2016). This data is unique, as it is applied in the index as a scalar adjusting scores downward for countries that do not grant women the same rights as men. It does not enter as just another component that could be separated off and appended elsewhere. It is also less easily categorized as a “quality” variable versus a “laissez-faire” variable. Since it is unclear how it would be included in the reconstructed index even if it were determined that it should be retained, the gender adjustment was not included.

As a separate exercise, one can directly test the relationship between culture / informal institutions and the quality of the legal system and property rights by using the measure from Tabellini (2010; cf. Williamson 2009), which is possibly the most exhaustive measure of culture that emphasizes the characteristics that undergird the functioning of markets. The coefficient of determination between these two variables is 0.443, meaning that 56 percent of the variation in the quality of the legal system and property rights remains to be explained. If we look at the top ten positive residuals from the regression, they would constitute no one’s list of the best property rights institutions, but they clearly are disproportionately countries that are above the world average. The top ten and bottom ten in the residuals from this regression are found in Table 4. Even after separating out what is explained by culture, the legal system and property rights still reflect institutional quality.

Table 4. Top ten and bottom ten countries in residual of regression of quality of the legal system and property rights on Tabellini (2010) culture data

Rank	Top	Bottom
1	Singapore	Bangladesh
2	Rwanda	Venezuela
3	Portugal	China
4	Estonia	Iran
5	Luxembourg	Iraq
6	Belgium	Vietnam
7	Austria	Jordan
8	France	Egypt
9	Ireland	Indonesia
10	Iceland	Pakistan

In this thorough inspection of the data on quality of the legal system and property rights, there are two variables, the “Rule of Law” from *Worldwide Governance Indicators* and used in the “Impartial Courts” component, and the “popular observance of the law” portion of the *International Country Risk Guide’s* input into the “Integrity of the Legal System” component, where some of the variation is directly the result of an “outcome.” The remainder appear to be directly measuring, or at least trying to directly measure, the quality of governmental institutions. For both of these partial exceptions, only one of multiple data sources used in assessing the component may reflect outcomes. I do not believe that any component should be thought of having most of its variation being driven by “outcomes” like crime rather than the quality of government. Questions are generally posed to assess formal institutional quality, and not the availability or quality of informal or private methods of conflict resolution or property rights enforcement.

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