

# RANKING I:

*Economic Complexity Index*

**RANKING 1** shows the Economic Complexity ranking. Here countries are sorted based on the amount of productive knowledge that is implied in their export structures (see Part 1, Section 2: *How do we measure economic complexity?*). The countries in the top ten of this ranking are Japan, Germany, Switzerland, Austria, Sweden, South Korea, Finland, Czech Republic, the UK and Singapore. Immediately after the top 10 we have France and the US. Of the top 20 countries, 11 are in Western Europe, 3 are in East Asia, and surprisingly 4 are in Eastern Europe. Israel closes the list of the top 20. Mexico is the most complex Latin American country, ranked at 24, way ahead of Brazil, Argentina and Chile, ranked 46, 60 and 68, respectively. High-ranking countries possess productive structures that are able to hold vast amounts of productive knowledge, and manufacture and export a large number of sophisticated goods. Of the bottom 16 countries, 12 are from Sub-Saharan Africa. Mongolia, Libya, Papua New Guinea and Yemen are the least complex countries outside of Sub-Saharan Africa. *Figure 1* illustrates the relative levels of economic complexity of countries in Ranking 1 by plotting ECI as a function of a country's current level of GDP per capita. In *Map 1*, countries are color coded according to their position in ranking 1.

Interestingly among the least complex countries in Western Europe are Portugal (35) and Greece (49), two countries whose high income cannot be explained by either their complexity or their natural resource wealth. We do not think that this is unrelated to their present difficulties: their current income has been propped up by massive capital inflows and, as these decline to more sustainable levels, internal weaknesses come to the fore. The ECI, however, illustrates clearly how these mismatches can be identified from the data.

#### BY REGION:

By region, the most complex economies in Eastern Europe and Central Asia are the Czech Republic, Hungary and Slovenia, while the worst performing ones are Tajikistan, Turkmenistan and Azerbaijan. In Latin America and the Caribbean the best performer is Mexico (ranked 24). Brazil ranks third (46 in the worldwide scale) followed by Uruguay (51). Panama ranks high at 43, but this is probably due to the misclassification of ships and electronics re-exports as if they were locally produced. The worst performers are Ecuador (92), Bolivia (94), Venezuela (103) and Nicaragua (106). In East Asia and the Pacific, the best performers are Japan (1), Korea (6) and Singapore (10) followed by China (26), Thailand (28), Malaysia (32) and Hong Kong (40). The worst performers are Lao (98), Mongolia (115) and Papua New Guinea (119). In South Asia, the best performing country is India (55) followed by Sri Lanka (80) and Pakistan (90). The list is closed by Bangladesh (112).

In the Middle East and North Africa, the best performers are Israel (20), Jordan (45), Lebanon (47), United Arab Emirates (48) and Tunisia (53). The worst performers are Algeria (95), Iran (96), Libya (116) and Yemen (121), where the overwhelming presence of oil indicates a narrow base of productive knowledge.

Finally, In Sub-Saharan Africa the most complex economies are South Africa (54), Botswana (56), Mauritius (72) and Kenya (85). The worst performers are Sudan (124), Guinea (125), Cameroon (126), Angola (127) and Nigeria (128). We note that many African countries are not in the ranking because they did not satisfy our data filtering criteria (see Part 1, Section 7: *Which countries are in the Atlas?*). ●

## RANKING I. ECONOMIC COMPLEXITY INDEX

RANK ECI (2010)	REGIONAL ECI RANKING	COUNTRY NAME	ISO CODE	ECI 2010	RANK INCOME 2010 [USD]	INCOME 2010 [USD]	REGION
1	1/16	Japan	JPN	2.17	14	43,063	East Asia and Pacific
2	1/16	Germany	DEU	1.96	17	39,852	Western Europe
3	2/16	Switzerland	CHE	1.90	3	67,644	Western Europe
4	3/16	Austria	AUT	1.73	12	44,885	Western Europe
5	4/16	Sweden	SWE	1.71	6	49,257	Western Europe
6	2/16	Korea. Rep.	KOR	1.69	30	20,540	East Asia and Pacific
7	5/16	Finland	FIN	1.69	13	44,091	Western Europe
8	1/27	Czech Republic	CZE	1.68	31	18,789	Eastern Europe and Central Asia
9	6/16	United Kingdom	GBR	1.67	20	36,186	Western Europe
10	3/16	Singapore	SGP	1.65	16	41,987	East Asia and Pacific
11	7/16	France	FRA	1.53	19	39,170	Western Europe
12	1/2	United States	USA	1.51	7	46,702	North America
13	2/27	Hungary	HUN	1.44	38	12,863	Eastern Europe and Central Asia
14	3/27	Slovenia	SVN	1.44	27	22,898	Eastern Europe and Central Asia
15	4/27	Slovak Republic	SVK	1.43	33	16,036	Eastern Europe and Central Asia
16	8/16	Italy	ITA	1.40	21	33,788	Western Europe
17	9/16	Ireland	IRL	1.36	10	45,873	Western Europe
18	10/16	Denmark	DNK	1.31	4	56,278	Western Europe
19	11/16	Belgium	BEL	1.23	15	42,833	Western Europe
20	1/16	Israel	ISR	1.21	25	28,522	Middle East and North Africa
21	5/27	Poland	POL	1.13	40	12,303	Eastern Europe and Central Asia
22	12/16	Netherlands	NLD	1.08	8	46,597	Western Europe
23	13/16	Spain	ESP	1.05	24	30,026	Western Europe
24	1/21	Mexico	MEX	0.98	49	9,133	Latin America and the Caribbean
25	6/27	Croatia	HRV	0.90	36	13,774	Eastern Europe and Central Asia
26	4/16	China	CHN	0.88	74	4,433	East Asia and Pacific
27	7/27	Estonia	EST	0.81	35	14,045	Eastern Europe and Central Asia
28	5/16	Thailand	THA	0.80	70	4,614	East Asia and Pacific
29	8/27	Romania	ROU	0.78	57	7,539	Eastern Europe and Central Asia
30	2/2	Canada	CAN	0.78	9	46,212	North America
31	9/27	Belarus	BLR	0.75	63	5,819	Eastern Europe and Central Asia
32	6/16	Malaysia	MYS	0.74	53	8,373	East Asia and Pacific
33	10/27	Ukraine	UKR	0.70	83	2,974	Eastern Europe and Central Asia
34	11/27	Serbia	SRB	0.69	66	5,273	Eastern Europe and Central Asia
35	14/16	Portugal	PRT	0.68	28	21,358	Western Europe
36	12/27	Latvia	LVA	0.67	44	10,723	Eastern Europe and Central Asia
37	13/27	Lithuania	LTU	0.67	42	11,046	Eastern Europe and Central Asia
38	14/27	Bosnia and Herzegovina	BIH	0.63	75	4,427	Eastern Europe and Central Asia
39	15/27	Bulgaria	BGR	0.62	60	6,335	Eastern Europe and Central Asia
40	7/16	Hong Kong SAR. China	HKG	0.61	23	31,758	East Asia and Pacific
41	15/16	Norway	NOR	0.59	1	85,443	Western Europe
42	16/27	Turkey	TUR	0.47	46	10,050	Eastern Europe and Central Asia
43	2/21	Panama	PAN	0.45	55	7,614	Latin America and the Caribbean

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44	17/27	Russian Federation	RUS	0.40	45	10,481	Eastern Europe and Central Asia
45	2/16	Jordan	JOR	0.36	76	4,370	Middle East and North Africa
46	3/21	Brazil	BRA	0.35	43	10,993	Latin America and the Caribbean
47	3/16	Lebanon	LBN	0.33	48	9,227	Middle East and North Africa
48	4/16	United Arab Emirates	ARE	0.33	18	39,625	Middle East and North Africa
49	16/16	Greece	GRC	0.28	26	26,433	Western Europe
50	8/16	New Zealand	NZL	0.26	22	32,620	East Asia and Pacific
51	4/21	Uruguay	URY	0.25	41	11,742	Latin America and the Caribbean
52	9/16	Philippines	PHL	0.24	94	2,140	East Asia and Pacific
53	5/16	Tunisia	TUN	0.24	78	4,194	Middle East and North Africa
54	1/26	South Africa	ZAF	0.24	59	7,272	Sub-Saharan Africa
55	1/4	India	IND	0.21	101	1,375	South Asia
56	2/26	Botswana	BWA	0.20	58	7,427	Sub-Saharan Africa
57	5/21	Costa Rica	CRI	0.19	54	7,774	Latin America and the Caribbean
58	6/21	Colombia	COL	0.12	61	6,238	Latin America and the Caribbean
59	6/16	Saudi Arabia	SAU	0.11	32	16,423	Middle East and North Africa
60	7/21	Argentina	ARG	0.10	50	9,124	Latin America and the Caribbean
61	8/21	El Salvador	SLV	0.04	82	3,460	Latin America and the Caribbean
62	18/27	Macedonia, FYR	MKD	-0.02	73	4,434	Eastern Europe and Central Asia
63	19/27	Moldova	MDA	-0.03	97	1,632	Eastern Europe and Central Asia
64	7/16	Kuwait	KWT	-0.03	11	45,437	Middle East and North Africa
65	10/16	Indonesia	IDN	-0.08	85	2,952	East Asia and Pacific
66	8/16	Qatar	QAT	-0.10	2	72,398	Middle East and North Africa
67	9/16	Egypt, Arab Rep.	EGY	-0.10	90	2,698	Middle East and North Africa
68	9/21	Chile	CHL	-0.12	39	12,640	Latin America and the Caribbean
69	11/16	Australia	AUS	-0.21	5	50,746	East Asia and Pacific
70	12/16	Vietnam	VNM	-0.25	106	1,224	East Asia and Pacific
71	10/16	Syrian Arab Republic	SYR	-0.27	86	2,893	Middle East and North Africa
72	3/26	Mauritius	MUS	-0.27	56	7,584	Sub-Saharan Africa
73	11/16	Oman	OMN	-0.28	29	20,791	Middle East and North Africa
74	10/21	Dominican Republic	DOM	-0.30	67	5,195	Latin America and the Caribbean
75	20/27	Georgia	GEO	-0.32	91	2,614	Eastern Europe and Central Asia
76	21/27	Uzbekistan	UZB	-0.36	100	1,377	Eastern Europe and Central Asia
77	11/21	Cuba	CUB	-0.40	64	5,397	Latin America and the Caribbean
78	12/21	Jamaica	JAM	-0.41	68	5,133	Latin America and the Caribbean
79	13/21	Guatemala	GTM	-0.42	87	2,873	Latin America and the Caribbean
80	2/4	Sri Lanka	LKA	-0.45	92	2,400	South Asia
81	14/21	Trinidad and Tobago	TTO	-0.47	34	15,614	Latin America and the Caribbean
82	15/21	Peru	PER	-0.48	65	5,292	Latin America and the Caribbean
83	16/21	Paraguay	PRY	-0.48	88	2,840	Latin America and the Caribbean
84	12/16	Morocco	MAR	-0.48	89	2,795	Middle East and North Africa
85	4/26	Kenya	KEN	-0.50	117	795	Sub-Saharan Africa
86	22/27	Kyrgyz Republic	KGZ	-0.53	114	880	Eastern Europe and Central Asia

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87	23/27	Kazakhstan	KAZ	-0.56	51	9,070	Eastern Europe and Central Asia
88	24/27	Albania	ALB	-0.61	81	3,701	Eastern Europe and Central Asia
89	5/26	Zimbabwe	ZWE	-0.61	120	595	Sub-Saharan Africa
90	3/4	Pakistan	PAK	-0.62	113	1,019	South Asia
91	17/21	Honduras	HND	-0.66	95	2,019	Latin America and the Caribbean
92	18/21	Ecuador	ECU	-0.67	79	4,008	Latin America and the Caribbean
93	6/26	Zambia	ZMB	-0.68	104	1,253	Sub-Saharan Africa
94	19/21	Bolivia	BOL	-0.70	96	1,979	Latin America and the Caribbean
95	13/16	Algeria	DZA	-0.71	71	4,567	Middle East and North Africa
96	14/16	Iran, Islamic Rep.	IRN	-0.80	72	4,526	Middle East and North Africa
97	7/26	Liberia	LBR	-0.81	128	247	Sub-Saharan Africa
98	13/16	Lao PDR	LAO	-0.82	108	1,158	East Asia and Pacific
99	8/26	Malawi	MWI	-0.83	127	339	Sub-Saharan Africa
100	9/26	Namibia	NAM	-0.84	69	4,876	Sub-Saharan Africa
101	25/27	Turkmenistan	TKM	-0.90	80	3,967	Eastern Europe and Central Asia
102	10/26	Uganda	UGA	-0.92	122	515	Sub-Saharan Africa
103	20/21	Venezuela, RB	VEN	-0.94	37	13,658	Latin America and the Caribbean
104	14/16	Cambodia	KHM	-0.96	116	795	East Asia and Pacific
105	11/26	Senegal	SEN	-0.98	112	1,034	Sub-Saharan Africa
106	21/21	Nicaragua	NIC	-0.99	110	1,139	Latin America and the Caribbean
107	12/26	Mali	MLI	-1.00	119	613	Sub-Saharan Africa
108	13/26	Tanzania	TZA	-1.02	121	527	Sub-Saharan Africa
109	26/27	Azerbaijan	AZE	-1.03	62	5,843	Eastern Europe and Central Asia
110	27/27	Tajikistan	TJK	-1.04	115	820	Eastern Europe and Central Asia
111	14/26	Madagascar	MDG	-1.05	124	421	Sub-Saharan Africa
112	4/4	Bangladesh	BGD	-1.07	118	675	South Asia
113	15/26	Ghana	GHA	-1.09	102	1,319	Sub-Saharan Africa
114	16/26	Gabon	GAB	-1.14	52	8,768	Sub-Saharan Africa
115	15/16	Mongolia	MNG	-1.14	93	2,250	East Asia and Pacific
116	15/16	Libya	LBY	-1.24	47	9,957	Middle East and North Africa
117	17/26	Mozambique	MOZ	-1.26	125	394	Sub-Saharan Africa
118	18/26	Côte d'Ivoire	CIV	-1.27	107	1,161	Sub-Saharan Africa
119	16/16	Papua New Guinea	PNG	-1.31	99	1,382	East Asia and Pacific
120	19/26	Ethiopia	ETH	-1.41	126	358	Sub-Saharan Africa
121	16/16	Yemen, Rep.	YEM	-1.53	103	1,291	Middle East and North Africa
122	20/26	Congo, Rep.	COG	-1.55	84	2,970	Sub-Saharan Africa
123	21/26	Mauritania	MRT	-1.58	111	1,045	Sub-Saharan Africa
124	22/26	Sudan	SDN	-1.66	98	1,538	Sub-Saharan Africa
125	23/26	Guinea	GIN	-1.69	123	474	Sub-Saharan Africa
126	24/26	Cameroon	CMR	-1.75	109	1,147	Sub-Saharan Africa
127	25/26	Angola	AGO	-2.28	77	4,322	Sub-Saharan Africa
128	26/26	Nigeria	NGA	-2.31	105	1,242	Sub-Saharan Africa

MAP 1:

► Countries are color coded according to their ranking in Economic Complexity Index.

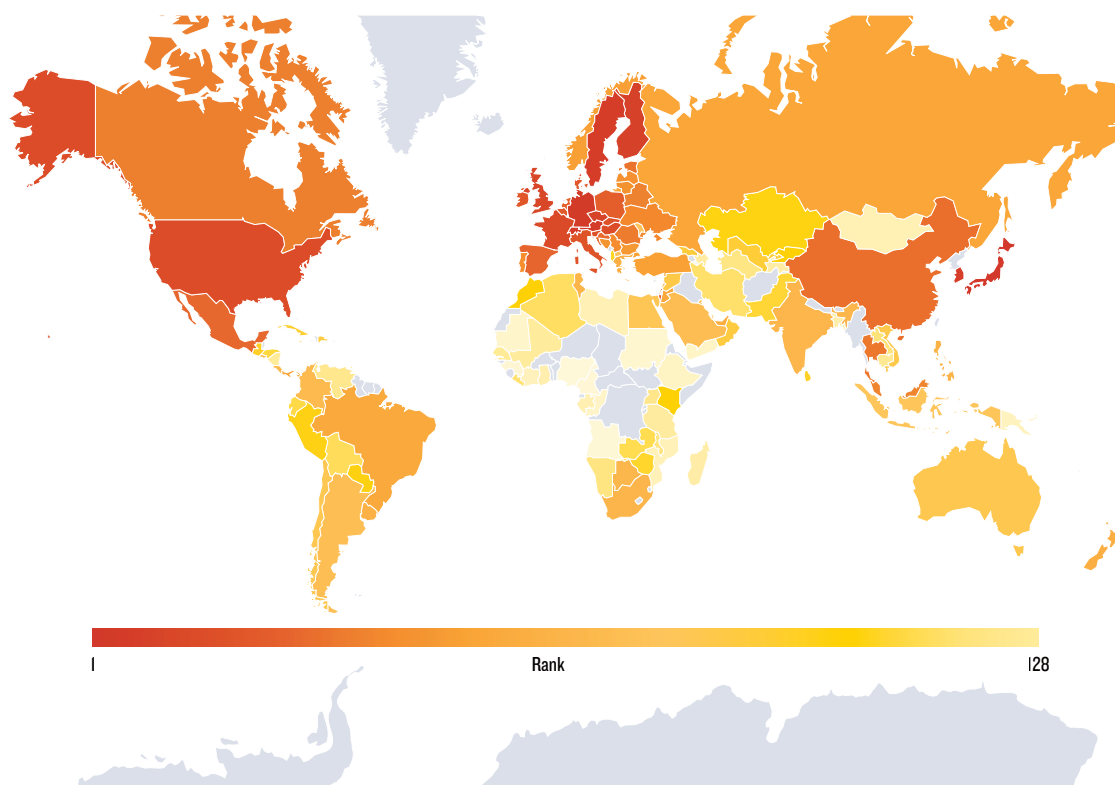
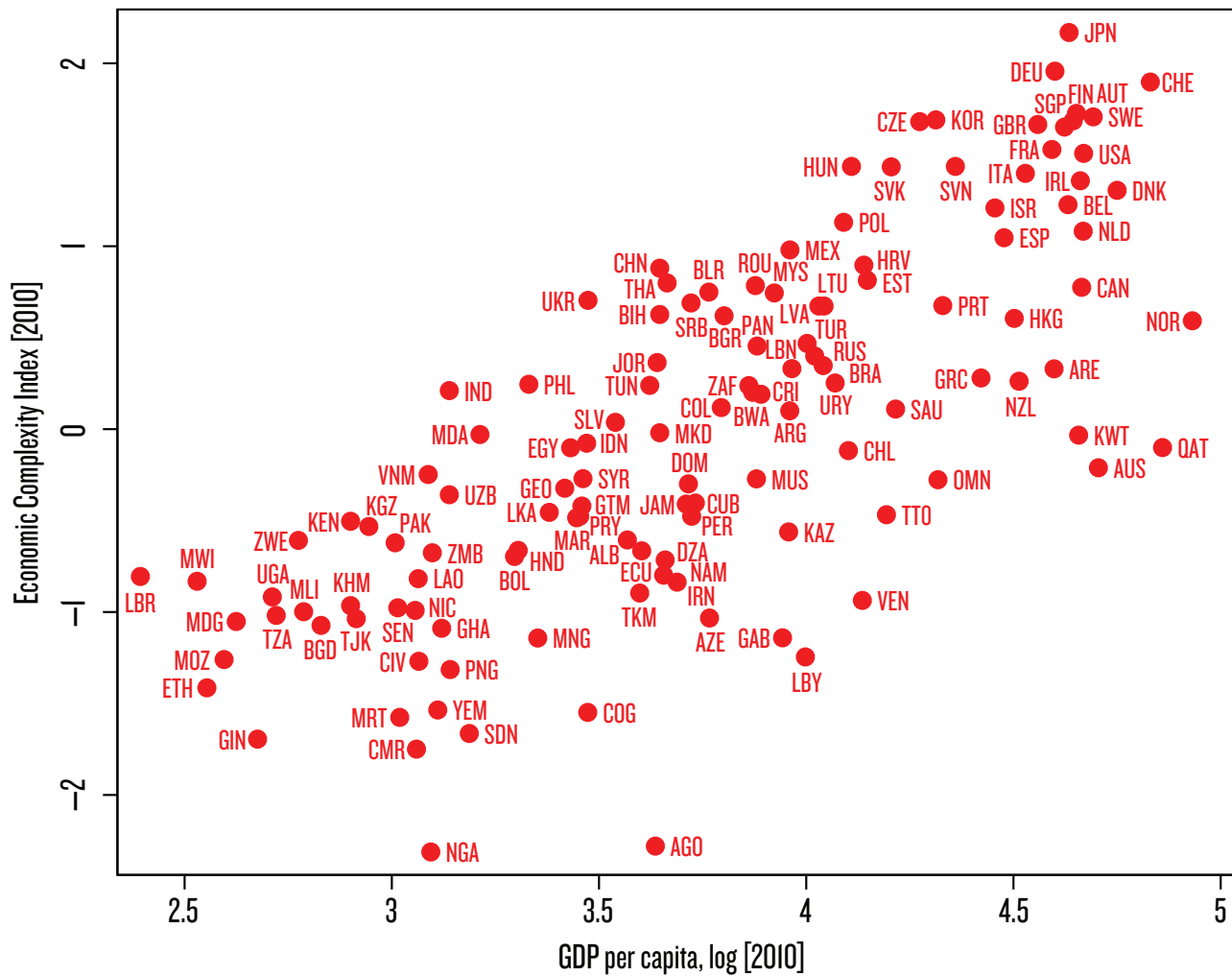


FIGURE 1:

► Illustrates the relative levels of economic complexity of countries in Ranking 1 by plotting ECI as a function of a country's current level of GDP per capita.



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# The Atlas of Economic Complexity

## Mapping Paths to Prosperity

**By:** Ricardo Hausmann, César A. Hidalgo, Sebastián Bustos, Michele Coscia, Alexander Simoes, Muhammed A. Yildirim

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## THE ATLAS OF ECONOMIC COMPLEXITY MAPPING PATHS TO PROSPERITY

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