

BLOOMBERG RANKINGS

GLOBAL INNOVATION INDEX

Rank	Country	Bloomberg Innovation Quotient	Factor Rank						
			R&D Intensity	Manufacturing Capability	Productivity	Hi-tech Density	Tertiary Efficiency	Researcher Concentration	Patent Activity
1	Finland	140.00	3	10	15	7	2	1	21
2	Singapore	139.24	12	4	6	9	N/A	5	45
3	South Korea	137.54	7	5	30	5	1	20	5
4	Japan	137.49	4	17	25	11	19	3	6
5	Sweden	135.41	2	20	14	2	11	4	18
6	Germany	135.16	9	12	16	3	50	15	12
7	United States	134.18	6	39	3	1	25	6	13
8	Switzerland	132.14	5	15	20	14	28	12	31
9	France	131.54	11	57	8	8	9	17	14
10	Austria	131.44	13	18	9	13	39	18	23
11	Ireland	131.25	23	11	4	17	6	22	36
12	Slovenia	131.15	21	14	28	N/A	34	23	16
13	Iceland	131.01	8	59	22	N/A	18	2	76
14	Denmark	130.13	10	37	18	18	15	7	42
15	United Kingdom	129.71	18	42	10	22	10	14	26
16	Netherlands	129.31	17	38	13	6	33	21	39
17	Belgium	129.30	14	36	5	16	24	19	46
18	Czech Republic	129.08	22	9	34	N/A	42	30	32
19	Canada	128.90	15	58	12	21	12	11	41
20	Belarus	127.25	37	13	52	N/A	7	N/A	4
21	Norway	127.02	20	62	2	15	21	8	40
22	Russia	126.68	26	45	47	33	3	16	1
23	Ukraine	126.58	28	23	63	N/A	5	N/A	2
24	Lithuania	125.79	41	29	39	N/A	13	25	22
25	Italy	125.61	27	24	17	20	26	37	8
26	Hungary	125.34	31	8	36	19	38	33	34
27	Slovakia	125.21	47	16	32	N/A	29	28	37
28	Australia	124.08	16	67	7	24	4	9	19
29	Israel	123.29	1	78	23	4	16	N/A	50
30	Luxembourg	122.95	19	68	1	30	71	10	38
31	Estonia	122.83	36	41	38	N/A	37	24	69
32	China	122.42	25	3	70	12	68	42	15
33	Spain	121.25	30	50	21	49	14	26	28
34	Poland	120.93	46	31	37	27	17	32	11
35	Croatia	120.25	34	27	33	42	57	35	48
36	Malaysia	119.76	44	2	44	23	41	52	53
37	Portugal	119.59	32	46	35	40	23	27	60
38	New Zealand	119.28	24	66	29	39	8	13	30
39	South Africa	118.98	33	35	50	29	N/A	51	3
40	Malta	118.76	50	25	31	N/A	64	40	52
41	Chile	118.29	42	44	45	N/A	45	44	62
42	Hong Kong	118.26	40	77	11	10	30	29	59
43	Argentina	118.10	52	19	43	N/A	52	41	49
44	Bulgaria	117.60	49	43	51	N/A	46	36	24
45	Thailand	116.30	61	1	65	26	35	N/A	54
46	Mexico	116.14	53	21	40	N/A	61	50	64
47	Romania	116.10	54	26	53	48	32	39	7
48	Latvia	115.96	51	65	46	34	27	34	20
49	Macedonia, FYR	115.45	57	40	42	N/A	62	45	33
50	Iran, Islamic Republic	115.35	38	72	48	N/A	54	N/A	25

GLOBAL INNOVATORS BREAKDOWNS

R&D INTENSITY

Rank	Country	Overall rank
1	Israel	29
2	Sweden	5
3	Finland	1
4	Japan	4
5	Switzerland	8
6	United States	7
7	South Korea	3
8	Iceland	13
9	Germany	6
10	Denmark	14

MANUFACTURING CAPABILITY

Rank	Country	Overall rank
1	Thailand	45
2	Malaysia	36
3	China	32
4	Singapore	2
5	South Korea	3
6	Philippines	55
7	Indonesia	64
8	Hungary	26
9	Czech Republic	18
10	Finland	1

PRODUCTIVITY

Rank	Country	Overall rank
1	Luxembourg	30
2	Norway	21
3	United States	7
4	Ireland	11
5	Belgium	17
6	Singapore	2
7	Australia	28
8	France	9
9	Austria	10
10	United Kingdom	15

HI-TECH DENSITY

Rank	Country	Overall rank
1	United States	7
2	Sweden	5
3	Germany	6
4	Israel	29
5	South Korea	3
6	Netherlands	16
7	Finland	1
8	France	9
9	Singapore	2
10	Hong Kong	42

RESEARCHER CONCENTRATION

Rank	Country	Overall rank
1	Finland	1
2	Iceland	13
3	Japan	4
4	Sweden	5
5	Singapore	2
6	United States	7
7	Denmark	14
8	Norway	21
9	Australia	28
10	Luxembourg	30

TERTIARY EFFICIENCY

Rank	Country	Overall rank
1	South Korea	3
2	Finland	1
3	Russia	22
4	Australia	28
5	Ukraine	23
6	Ireland	11
7	Belarus	20
8	New Zealand	38
9	France	9
10	United Kingdom	15

PATENT ACTIVITY

Rank	Country	Overall rank
1	Russia	22
2	Ukraine	23
3	South Africa	39
4	Belarus	20
5	South Korea	3
6	Japan	4
7	Romania	47
8	Italy	25
9	Moldova	52
10	Armenia	60

TOP INNOVATORS BY REGION

ASIA

Rank	Country	Overall rank
1	Singapore	2
2	South Korea	3
3	Japan	4
4	China	32
5	Malaysia	36
6	Hong Kong	42
7	Thailand	45

LATIN AMERICA AND THE CARIBBEAN

Rank	Country	Overall rank
1	Chile	41
2	Argentina	43
3	Mexico	46
4	Brazil	57
5	Venezuela	62

MIDDLE EAST AND AFRICA

Rank	Country	Overall rank
1	Israel	29
2	South Africa	39
3	Iran	50
4	Tunisia	51
5	Egypt	61

EMERGING CENTRAL AND EASTERN EUROPE

Rank	Country	Overall rank
1	Slovenia	12
2	Czech Republic	18
3	Belarus	20
4	Russia	22
5	Ukraine	23
6	Lithuania	24
7	Hungary	26
8	Slovakia	27
9	Estonia	31
10	Poland	34
11	Croatia	35
12	Bulgaria	44

METHODOLOGY: To create the Bloomberg Innovation Quotient, we ranked countries on a scale of 0 to 100% on seven factors for each of 10 years. Factors and weightings below. We derived a weighted average score for each year for countries that had sufficient data for each factor with at least five of the seven factors, and averaged the scores to determine each country's overall rank. Countries had to be ranked for at least five of the 10 years to qualify. N/A indicates that the country did not have sufficient data for five or more years. However, that factor might have been used to calculate a country's score in specific years. The final universe consisted of 81 countries or sovereign regions.

We modeled the Bloomberg Innovation Quotient after IQ scales, assigning a score of 140 to the top-ranked country and a score of 100 to the 81st country. The scores for the remaining countries were calculated based on their distance from the first- and last-ranked countries.

Data used was from 2000 through 2010 except for R&D-related data. The latest figures available from the World Bank were for 1998 through 2008.

WEIGHT	FACTOR	EXPLANATION
20%	R&D Intensity	R&D as percentage of GDP
20%	Manufacturing Capability	Manufacturing value-added as a percentage of GDP; products with high R&D intensity (aerospace, computers, pharmaceuticals, scientific instruments and electrical machinery) as a percentage of total manufactured exports
10%	Productivity	GDP per employed person, total annual hours worked
10%	High-tech Density	High-tech public companies -- such as aerospace and defense, biotechnology, hardware, software, semiconductors, internet software & services and renewable energy companies -- as a percentage of publicly listed companies
10%	Tertiary Efficiency	Enrollment and graduation ratios in all subjects for post-secondary students; tertiary graduation ratio of students who majored in science, engineering, manufacturing and construction; annual new graduates as a percentage of the total workforce (population aged 15-64)
20%	Researcher Concentration	R&D researchers per one million people
10%	Patent Activity	Patents granted as percentage of applications submitted and applications granted worldwide; resident filings per \$1 million of R&D spent