

Bulgaria

Key indicators

Population (millions)	7.7
GDP (US\$ billions)	50.8
GDP per capita, PPP\$	14,234.6
Income group	Upper-middle income
Region	Europe

	Score (0–100) or value (hard data)	Rank
Global Innovation Index (out of 142).....	41.3	41
Innovation Output Sub-Index	38.7	38
Innovation Input Sub-Index	44.0	50
Innovation Efficiency Ratio	0.9	35
Global Innovation Index 2012 (based on GII 2012 framework)	40.7	43

1 Institutions.....68.0 51

1.1 Political environment.....	61.2	56
1.1.1 Political stability*.....	73.6	51
1.1.2 Government effectiveness*.....	38.7	67
1.1.3 Press freedom*.....	71.4	71
1.2 Regulatory environment	77.2	39
1.2.1 Regulatory quality*	64.2	45
1.2.2 Rule of law*.....	44.7	65
1.2.3 Cost of redundancy dismissal, salary weeks	8.0	1 ●
1.3 Business environment.....	65.5	64
1.3.1 Ease of starting a business*.....	90.9	28
1.3.2 Ease of resolving insolvency*.....	34.3	82
1.3.3 Ease of paying taxes*.....	71.3	60

2 Human capital & research.....35.7 55

2.1 Education	55.4	63
2.1.1 Current expenditure on education, % GNI.....	4.4	57
2.1.2 Public expenditure/pupil, % GDP/cap.....	26.6	19 ●
2.1.3 School life expectancy, years.....	14.0	53
2.1.4 PISA scales in reading, maths, & science.....	432.1	43
2.1.5 Pupil-teacher ratio, secondary	12.1	44
2.2 Tertiary education.....	42.5	37
2.2.1 Tertiary enrolment, % gross.....	56.9	41
2.2.2 Graduates in science & engineering, %	19.8	49
2.2.3 Tertiary inbound mobility, %.....	3.5	43
2.2.4 Gross tertiary outbound enrolment, %	4.8	15 ●
2.3 Research & development (R&D).....	9.4	69
2.3.1 Researchers, headcounts/mn pop.	1,948.8	36
2.3.2 Gross expenditure on R&D, % GDP.....	0.6	54
2.3.3 QS university ranking, average score top 3*.....	0.0	68 ○

3 Infrastructure.....40.0 43

3.1 Information & communication technologies (ICTs).....	35.5	71
3.1.1 ICT access*.....	59.7	49
3.1.2 ICT use*.....	30.4	50
3.1.3 Government's online service*.....	49.0	71
3.1.4 E-participation*.....	2.6	116 ○
3.2 General infrastructure.....	35.2	44
3.2.1 Electricity output, kWh/cap.....	6,103.1	36
3.2.2 Electricity consumption, kWh/cap.....	4,471.3	45
3.2.3 Logistics performance*.....	55.3	36
3.2.4 Gross capital formation, % GDP.....	24.1	57
3.3 Ecological sustainability	49.2	18 ●
3.3.1 GDP/unit of energy use, 2000 PPP\$/kg oil eq	4.9	84
3.3.2 Environmental performance*.....	56.3	51
3.3.3 ISO 14001 environmental certificates/bn PPP\$ GDP	9.2	8 ●

4 Market sophistication.....43.9 83

4.1 Credit.....	40.7	58
4.1.1 Ease of getting credit*.....	75.0	38
4.1.2 Domestic credit to private sector, % GDP.....	72.1	47
4.1.3 Microfinance gross loans, % GDP	1.3	33

4.2 Investment	17.0	114 ○
4.2.1 Ease of protecting investors*.....	60.4	54
4.2.2 Market capitalization, % GDP.....	15.4	83 ○
4.2.3 Total value of stocks traded, % GDP.....	0.5	85 ○
4.2.4 Venture capital deals/tr PPP\$ GDP.....	0.0	74 ○
4.3 Trade & competition	74.0	88
4.3.1 Applied tariff rate, weighted mean, %.....	1.6	11
4.3.2 Non-agricultural mkt access weighted tariff, %.....	2.3	102 ○
4.3.3 Intensity of local competition†.....	55.5	98 ○

5 Business sophistication.....32.2 65

5.1 Knowledge workers.....	45.2	59
5.1.1 Knowledge-intensive employment, %.....	23.5	50
5.1.2 Firms offering formal training, % firms.....	30.7	64
5.1.3 R&D performed by business, % GDP.....	0.3	41
5.1.4 R&D financed by business, %	30.2	52
5.1.5 GMAT mean score.....	578.7	16 ●
5.1.6 GMAT test takers/mn pop. 20–34.....	358.7	12 ●
5.2 Innovation linkages	19.9	100 ○
5.2.1 University/industry research collaboration†	33.4	114 ○
5.2.2 State of cluster development†	41.2	79
5.2.3 R&D financed by abroad, %.....	8.4	43
5.2.4 JV–strategic alliance deals/tr PPP\$ GDP	0.0	73
5.2.5 Patent families filed in 3+ offices/bn PPP\$ GDP	0.1	49
5.3 Knowledge absorption.....	31.4	50
5.3.1 Royalty & license fees payments, % service imports.....	2.9	48
5.3.2 High-tech imports less re-imports, %	7.8	70
5.3.3 Comm., computer & info. services imports, %.....	7.6	28
5.3.4 FDI net inflows, % GDP.....	4.8	46

6 Knowledge & technology outputs.....35.0 36

6.1 Knowledge creation.....	17.0	54
6.1.1 Domestic resident patent ap/bn PPP\$ GDP.....	2.8	45
6.1.2 PCT resident patent ap/bn PPP\$ GDP.....	0.3	50
6.1.3 Domestic res utility model ap/bn PPP\$ GDP.....	2.0	18
6.1.4 Scientific & technical articles/bn PPP\$ GDP.....	20.5	47
6.1.5 Citable documents H index.....	129.0	44
6.2 Knowledge impact.....	55.7	8 ●
6.2.1 Growth rate of PPP\$ GDP/worker, %.....	5.5	7 ●
6.2.2 New businesses/th pop. 15–64.....	7.2	17 ●
6.2.3 Computer software spending, % GDP.....	0.3	37
6.2.4 ISO 9001 quality certificates/bn PPP\$ GDP	49.5	1 ●
6.2.5 High- & medium-high-tech manufactures, %	15.6	59
6.3 Knowledge diffusion.....	23.4	85
6.3.1 Royalty & license fees receipts, % service exports	0.2	68
6.3.2 High-tech exports less re-exports, %.....	3.8	48
6.3.3 Comm., computer & info. services exports, %.....	9.7	43
6.3.4 FDI net outflows, % GDP	0.4	60

7 Creative outputs.....42.4 49

7.1 Intangible assets.....	44.7	61
7.1.1 Domestic res trademark reg/bn PPP\$ GDP.....	79.0	16 ●
7.1.2 Madrid trademark registrations/bn PPP\$ GDP	2.3	13
7.1.3 ICT & business model creation†.....	51.1	94 ○
7.1.4 ICT & organizational model creation†.....	46.5	92
7.2 Creative goods & services.....	41.6	47
7.2.1 Audio-visual & related services exports, %.....	0.5	25
7.2.2 National feature films/mn pop. 15–69.....	2.7	50
7.2.3 Paid-for dailies, circulation, % pop. 15–69.....	19.9	23 ●
7.2.4 Printing & publishing manufactures, %.....	1.5	64 ○
7.2.5 Creative goods exports, %.....	1.4	44
7.3 Online creativity	38.5	41
7.3.1 Generic top-level domains (TLDs)/th pop. 15–69.....	25.9	29
7.3.2 Country-code TLDs/th pop. 15–69.....	23.1	70
7.3.3 Wikipedia monthly edits/mn pop. 15–69.....	4,822.0	31
7.3.4 Video uploads on YouTube/pop. 15–69.....	77.1	52

NOTE: ● indicates a strength; ○ a weakness; * an index; † a survey question.