

IMD World Competitiveness Yearbook 2022, Digital 2022, Talent 2022: summaries

COUNTRY PROFILE

GERMANY



WORLD COMPETITIVENESS RANKING **2022**

All data are available from the World Competitiveness Online.

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Germany

Competitiveness Trends – Overall

OVERALL PERFORMANCE (63 countries)

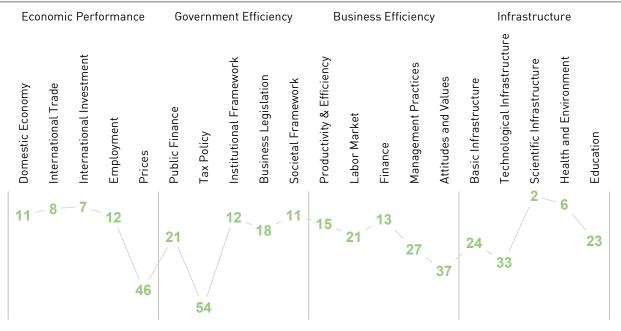


BASIC FACTS

Rank

Capital	Berlin	
Land area (square km '000)	358 ²⁰²¹	
Exchange Rate (per \$)	0.845 2021	
Population - market size (millions)	83.20 ²⁰²¹	10
Gross Domestic Product (GDP) (US\$ billions)	4,223.1 ²⁰²¹	04
GDP (PPP) per capita (US\$)	58,377 ²⁰²¹	16
Real GDP growth (%)	2.9 ²⁰²¹	56
Consumer price inflation (%)	3.21 ²⁰²¹	35
Unemployment rate (%)	3.58 ²⁰²¹	08
Labor force (millions)	43.04 2021	09
Current account balance (% of GDP)	7.43 ²⁰²¹	12
Direct investment stocks inward (\$bn)	1,059.3 ²⁰²⁰	10
Direct investment flows inward (% of GDP)	2.93 ²⁰²⁰	16

COMPETITIVENESS LANDSCAPE



PEER GROUPS RANKINGS



Germany

Competitiveness Evolution & Attractiveness Indicators

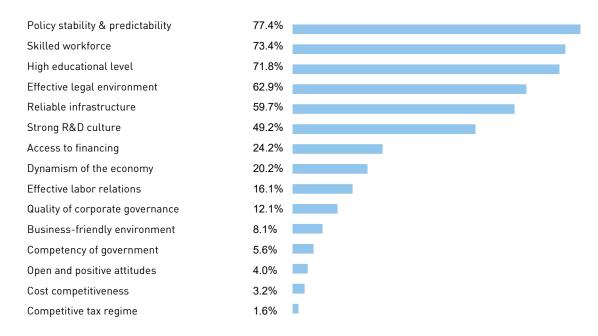
COMPETITIVENESS EVOLUTION

The criteria below highlight the 15 biggest Improvements and the 15 biggest Declines in the overall performance of the economy. They are determined by the largest percentage changes in the value of each criterion from one yearbook to the next.

	WCY	WCY		WCY	WCY
IMPROVEMENTS	2021	2022	DECLINES	2021	2022
1.1.18 Gross fixed capital formation - real growth	-3.14	3.37	1.5.01 Consumer price inflation	0.37	3.21
1.1.14 Real GDP growth	-4.9	2.9	1.4.04 Employment - long-term growth	0.11	-0.30
1.1.15 Real GDP growth per capita	-4.97	2.85	3.2.14 Labor force - long-term growth	2.07	-0.55
2.3.10 Adaptability of government policy	3.04	4.79	1.2.25 Tourism receipts	1.08	0.57
2.5.16 Freedom of the Press	12.16	8.25	4.1.07 Population - growth	0.08	0.04
2.3.11 Transparency	5.06	6.68	2.3.08 Exchange rate stability	0.017	0.024
2.3.09 Legal and regulatory framework	4.40	5.54	2.4.07 Government subsidies	2.09	2.94
1.2.12 Exports of commercial services (\$bn)	305.24	380.78	1.4.10 Youth exclusion	5.7	7.4
2.4.08 Subsidies	4.98	6.16	3.4.13 Entrepreneurial fear of failure	29.68	37.93
2.1.07 Public finances	4.53	5.61	1.4.09 Youth unemployment	5.77	6.95
2.3.12 Bureaucracy	2.53	3.11	1.2.18 Export concentration by product	43.9	52.9
2.4.11 Parallel economy	6.13	7.31	1.5.06 Gasoline prices	1.45	1.74
1.2.08 Exports of goods (\$bn)	1,380.00	1,631.82	4.1.20 Electricity costs for industrial clients	0.146	0.173
2.4.09 State ownership of enterprises	6.61	7.76	2.4.18 Immigration laws	7.07	6.32
3.5.05 Need for economic and social reforms	4.81	5.58	4.1.15 Energy infrastructure	8.13	7.29

KEY ATTRACTIVENESS INDICATORS

From a list of 15 indicators, respondents of the Executive Opinion Survey were asked to select 5 that they perceived as the key attractiveness factors of their economy. The chart shows the percentage of responses per indicator from the highest number of responses to the lowest.



WORLD COMPETITIVENESS DIGITAL RANKING **2022**

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DIGITAL TRENDS - OVERALL

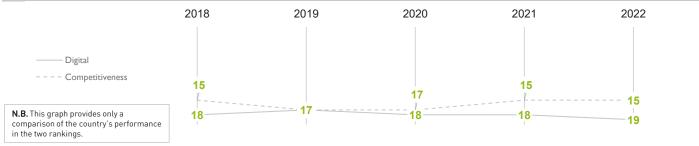
GERMANY

OVERALL PERFORMANCE (63 countries)

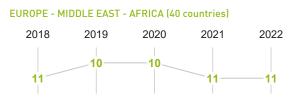


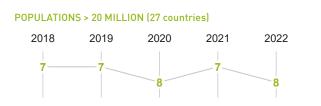
OVERALL & FACTORS - 5 years	2018	2019	2020	2021	2022
OVERALL	18	17	18	18	19
Knowledge	14	12	12	14	11
Technology	21	31	31	31	27
Future readiness	20	16	19	18	19

COMPETITIVENESS & DIGITAL RANKINGS



PEER GROUPS RANKINGS





GERMANY

Overall Top Strengths

 \triangleright Overall Top Weaknesses

KNOWLEDGE

2018	2019	2020	2021	2022
22	25	22	21	20
19	14	17	17	15
10	04	05	06	07
	22 19	22 25 19 14	22 25 22 19 14 17	22 25 22 21 19 14 17 17

Tale	ent	Rank
Edu	cational assessment PISA - Math	19
Inte	rnational experience	14
Fore	eign highly-skilled personnel	15
Man	agement of cities	14
⊳ Digi	tal/Technological skills	52
Net	flow of international students	15

Training & education	Rank
Employee training	04
Total public expenditure on education	36
Higher education achievement	44
 Pupil-teacher ratio (tertiary education) 	03
 Graduates in Sciences 	03
Women with degrees	43

Scientific concentration	Rank
Total expenditure on R&D (%)	10
Total R&D personnel per capita	13
Female researchers	47
R&D productivity by publication	12
Scientific and technical employmer	nt 28
High-tech patent grants	18
Robots in Education and R&D	02

TECHNOLOGY

Sub-Factors	2018	2019	2020	2021	2022
Regulatory framework	23	27	28	25	20
Capital	16	17	16	23	16
Technological framework	27	40	45	43	43

	Regulatory framework	Rank
\triangleright	Starting a business	50
	Enforcing contracts	12
	Immigration laws	23
	Development & application of tech.	40
	Scientific research legislation	17
	Intellectual property rights	06

	Capital	Rank
	IT & media stock market capitalization	11
	Funding for technological development	27
	Banking and financial services	27
►	Country credit rating	01
	Venture capital	30
	Investment in Telecommunications	38

Technological framework	Rank
Communications technology	51
Mobile Broadband subscribers	54
Wireless broadband	45
Internet users	16
Internet bandwidth speed	28
High-tech exports (%)	27
	Communications technology Mobile Broadband subscribers Wireless broadband Internet users Internet bandwidth speed

FUTURE READINESS

Sub-Factors	2018	2019	2020	2021	2022
Adaptive attitudes	22	16	23	23	27
Business agility	20	11	15	15	15
IT integration	18	17	20	20	19

Rank
44
14
23
47
29

	Business agility	Rank
	Opportunities and threats	37
$\[\] \]$	World robots distribution	05
	Agility of companies	34
	Use of big data and analytics	52
	Knowledge transfer	08
	Entrepreneurial fear of failure	13

IT integration	Rank
E-Government	24
Public-private partnerships	43
Cyber security	21
Software piracy	08
Government cyber security capacity	29
Privacy protection by law content	18

WORLD TALENT RANKING **2022**

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GERMANY

OVERALL PERFORMANCE (63 countries)



INVESTMENT & DEVELOPMENT

	INVESTMENT & DEVELOPMENT		Value	2	022 Rank
\triangleright	Total public expenditure on education	Percentage of GDP	4.7	%	39
	Total public exp. on education per student	Spending per enrolled pupil/student, all levels	10,936	US\$	15
	Pupil-teacher ratio (primary education)	Ratio of students to teaching staff	14.86	ratio	32
	Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff	12.64	ratio	38
	Apprenticeships	are sufficiently implemented	8.23	Survey [010]	2
	Employee training	is a high priority in companies	7.60	Survey [010]	4
	Female labor force	Percentage of total labor force	46.57	%	28
	Health infrastructure	meets the needs of society	7.84	Survey [010]	11

APPEAL

	APPEAL		Value	2	2022 Rank
\triangleright	Cost-of-living index	Index of a basket of goods & services in the main city, including housing (New York City = 100)	82.50	index	41
	Attracting and retaining talents	is a priority in companies	7.81	Survey [010]	11
	Worker motivation	in companies is high	6.83	Survey [010]	13
	Brain drain	(well-educated and skilled people) does not hinder competitiveness in your economy	6.13	Survey [010]	16
	Quality of life	is high	9.01	Survey [010]	9
	Foreign highly-skilled personnel	are attracted to your country's business environment	6.52	Survey [010]	15
	Remuneration in services professions	Gross annual income including supplements such as bonuses, US\$	46,639	US\$	9
	Remuneration of management	Total base salary plus bonuses and long-term incentives, US\$	303,570	US\$	3
\triangleright	Collected personal income tax	On profits, income and capital gains, as a percentage of GDP	10.36	%	51
	Justice	is fairly administered	8.08	Survey [010]	9
	Exposure to particle pollution	Mean population exposure to PM2.5, Micrograms per cubic metre	11.93	micrograms	20

READINESS

	READINESS		Value	e 20)22 Rank
\triangleright	Labor force growth	Percentage change	-1.11	%	53
\triangleright	Skilled labor	is readily available	4.74	Survey [010]	40
	Finance skills	are readily available	6.70	Survey [010]	21
	International experience	of senior managers is generally significant	6.52	Survey [010]	14
	Competent senior managers	are readily available	5.56	Survey [010]	31
	Primary and secondary education	meets the needs of a competitive economy	8.00	Survey [010]	8
	Graduates in Sciences	% of graduates in ICT, Engineering, Math & Natural Sciences	35.82	%	4
	University education	meets the needs of a competitive economy	8.24	Survey [010]	6
	Management education	meets the needs of the business community	7.27	Survey [010]	12
	Language skills	are meeting the needs of enterprises	7.05	Survey [010]	27
	Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants	4.43	number	20
	Educational assessment - PISA	PISA survey of 15-year olds	500	Average	18

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