

Europe and the Issue of Competitiveness

Europe in International Economy

2017

Industrial and Competitiveness Policy

- **ICP** (contemporary definition):
 - is designed to **improve country's economic performance**;
 - **not to specify** and enforce particular **outcomes** – rather to alter market processes by **attacking the rigidities** (which impede the market selection);
 - private sector **flexibility** is **encouraged** and **adjustment** to shocks is **facilitated**;
- **Formerly** (19th – 1980s):
 - attempt to lead the private sector through a **planning procedure** (picking the **winners**) – predicting emergence of **sunrise** (+ subsidizing **sunset**; post-indu.) sectors;
- Contemporary ICP: also **providing** industry with appropriate **resources** - **educated** and trained **labor** force + an appropriate **research** base and **infrastructure**.

ICP in European Context

- **1940s–1960s orthodoxy:** government to **correct market failures** by **microeconomic intervention** in specific sectors;
- **1970s** ICP aimed to **create super-firms** to compete with the US giants (EoS);
- since **1980s:** stressing the role or **market forces** (neoliberal-monetarist turn);
- since **1990s** – EU Commission's view:
 - governments should **promote adaptation** to industrial **change** in open and **competitive market**;
 - **firms** and **sector specific policies** are treated with **suspicion** Vs. approves horizontal/general policies to support **economic activity** in general:
 - **specific** industrial policy (by states) **constrained** by EU rules on **state aid** (US, GER, FRA, JAP);
 - (microeconomic) policy is often **contradictory** – **governments tend to simultaneously support sunrise and sunset** industries;

Instruments:

- **Traditional** industrial policy: **subsidies** and tax breaks, channeling **investments, protection** from competition;
- **Contemporary:** deregulation; reorientation of **public services** (education); subsidization of **infrastructure** and **research**;

Industrial agglomerations

- **Information/ideas circulate** informally within an **agglomeration**:
 - **speeding up** the process of **product development**;
 - **technology spillovers** are **concentrated** locally;
- **Pull factors** :
 - **reducing costs** for members of agglomeration = **positive externalities** based on production of **specialized inputs** (specialized **labor**, specialized **services**, shared **consumers**, shared **infrastructure** – e.g. universities, information flow);
- **Agglomeration**:
 - reduces cost by allowing **firms** to **contract out** all but their **core activities** – only efficient if the **specialized suppliers** can themselves operate on a large enough scale;
 - while agglomeration is **large** – most **firms** will be **small** (extremely **specialized** and operating on sufficient scale);
- **EoS** -> **oligopolistic** competition (non-price comp.), **rents** -> AGLO – NI (**GOV role**)!
 - **Centripetal** and **centrifugal** tendencies.

Research and development

- **Innovation** as a **good** – production process driven by **profit** but unique characteristics;
- **Firms invest** heavily in R&D only if they **can appropriate** the knowledge for themselves (vs. leak -> positive extern. -> commonweal);
 - **Innovation by firm:**
 - **positive externalities** for **other firms** (better and cheaper products + new scientific/non-patented information);
 - as well as **ensuring** firm's own **survival** through the patented knowledge (**competitive advantage**);
 - **Innovations** are **non-rival** (easily to be **copied**) – **lower incentive** to innovate (than social optimum) (FR);
 - Suggested policy: **patent system** and **public funding** of **basic research**;
- **Government** indirectly **promotes** innovative **industries** by **sponsoring R&D**:
 - **less risky than picking the winners**;
 - **spillovers** (loops, linkages, feedbacks) – helps to **translate** scientific **knowledge** into **commercially useful innovations**.
- **Countries** strong in **R&D**:
 - Acquire a **comparative advantage** in the form of **human capital** endowments that may **persist** for some time;
- **Rule** : the **further away from** the **marketplace** and the **more general** the type of research, the **more appropriate** it is for **public funding**...

2014	Bill. USD (PPP)	Percent of GDP (PPP)	Spending per capita (PPP)
South Korea	91.6	4.292%	1,518.47
Israel	11.2	4.109%	1,361.56
Japan	170.8	3.583%	1,344.31
Finland	7.0	3.174%	1,290.58
Sweden	14.2	3.161%	1,460.98
Denmark	7.6	3.051%	1,361.51
Taiwan	32.4	3.006%	1,383.84
Austria	10.9	3%	1,416.14
Switzerland	13.1	2.967%	1,647.90
Germany	106.5	2.842%	1,313.46
United States	473.4	2.742%	1,442.51
Belgium	11.9	2.465%	1,063.38
Slovenia	1.5	2.386%	712.63
France	58.4	2.256%	914.54
Australia	23.3	2.12%	986.86
China	344.7	2.046%	270.56
Singapore	8.7	2%	1,608.86
Czech Republic	6.3	1.997%	600.04
Netherlands	16	1.973%	946.25
European Union	334.3	1.94%	657.48
Iceland	0.27	1.891%	832.59
Norway	5.9	1.705%	1,145.18
United Kingdom	43.7	1.701%	677.44
Canada	25.7	1.612%	724.87
Ireland	3.6	1.519%	779
Estonia	0.53	1.432%	399.24
Hungary	3.4	1.371%	343.01
Italy	27.4	1.287%	452.14
Portugal	3.6	1.285%	347.84
Luxembourg	0.67	1.256%	1,226.35
Spain	19.2	1.222%	413.46
Russia	42.6	1.187%	290.21

General observations (neoliberal)

- ICP should not target specific firms or sectors, but aim at **improving** the **general functioning of markets**;
 - difference between **offering incentives** to **specific investor** to invest into country and to make the country **more likely to attract investment**;
- It is **not enough** to demonstrate existence of **market failure**:
 - **government action is costly** and quickly **becomes politicized** and **selective**;
 - **once supported** by industrial policy (public) funds – **sector grows** beyond their market - determined size;
 - exercising **political influence** - enjoying political **support** (employment, GDP share);
 - industrial policies become **path-dependent** and self-perpetuating;

Oligopolistic Competition in High-tech

(150+ passengers airplane – example of **natural monopoly**)

Boeing having **head start**

	Airbus: producing	Airbus: not producing
Boeing: producing	B: -5 A: - 5	B: 100 A: 0
Boeing: not producing	B: 0 A: 100	B: 0 A: 0

Industrial policy of EU – **subsidy 25**

	Airbus: producing	Airbus: not producing
Boeing: producing	B: -5 A: 20	B: 100 A: 0
Boeing: not producing	B: 0 A: 125	B: 0 A: 0

Critique of competitiveness concept

- Clinton (Tyson, Thurow 1992) – **states** as big **corporations** competing on world market (US vs. JAP);
- Krugman 1994 (De Grauwe 2010):
 - **Corporations** (almost) completely competing - selling vs. **states** produce (80%) for own citizens;
 - **Rival** corporations are consuming only fraction of their respective production vs. States are important consumers (of each others' products);
 - States: much important source of improvement in standard of living is **productivity** growth (not larger sales at someone's expense); they are **mutual** consumers (trade) and employers (FDIs)...

Weaknesses of Europe (Eichengreen)

- **R&D spending** + limited cooperation between industry and academia;
- **Small, new firms** (tend to pioneer new niches, e.g. **IT**) – greater difficulties to cope with the complexity of European **regulation**;
- Europe: **immigration-unfriendly policies** (less attractive for H-T specialist from Asia);
- Lower **hiring and firing costs** make it easier for US entrepreneurs to **experiment** with unproven technologies (...of great promise but uncertain commercial potential);
- European **financial system** – well suited to mobilizing saving and deploying it for investment by **incumbent firms** - does not go to the **start-ups** and small firms (engines of output and productivity growth);
- **IT producing sector** is where US excels – but only 6% GDP – **cannot explain** differences in productivity trends:
 - **US productivity** advantage since 1990s centered in **retail trade**, wholesale trade, financial services – **ICT using activities**;
- Europe has faster productivity growth in **telecommunications** (**privatization** and uniform product standards);
- Higher **cost** etc. computer hardware in Europe (**localizing costs**) – itself a barrier;

Employment (%)

	1970	1980	1990	2003	2014
EU 15 (2014: EU28)					
Overall employment	59	60	62	64	65
Employment male	80	78	74	73	70
Employment female	39	43	49	56	60
Employment 15–24	51	45	45	40	33
Employment 25–54	65	70	73	77	76
Employment 55–64	47	44	39	42	52
US					
Overall employment	64	67	72	71	67
Employment male	83	80	81	77	78
Employment female	46	55	64	66	62
Employment 15–24	53	59	60	54	48
Employment 25–54	70	74	80	79	84
Employment 55–64	60	54	54	60	61

EU: SWE 75% (AUT, UK, DEN, NETH, GER) vs. GRE 49% (SPA, ITA, CRO)

Strengths of Europe

- Europeans have greater amounts of **leisure time** (Vs. **US**, **CH**);
- Higher level of **earnings equality** - more people with **health insurance**, infant mortality rates are lower, **poverty rates** are **lower**, rates of **violent crime** are lower;
 - Number of prisoners is only 128/100k vs. 716 in US (2013, 22% of world total); homicide (per 100k) 2,7 vs. 5,9;
- Rigidities have not stood in the way of rapid **export growth**;
 - European **exporters** dominate in **quality** HVA, H-T; premium goods; **precision manufactures**;
- Moving into **H-T** and **premium** goods is potential source of **insulation** from high **competition** of **EM**:
- Europe has not been subject to the kind of great **financial scandals**;

Worked hours per head (hours/year)

	1950	1973	1998
UK	871	753	682
France	905	728	580
Germany	974	811	670
Italy	800	669	637
US	756	704	791

	2003	2014
UK	1674	1677
France	1484	1473
Germany	1425	1371
Italy	1816	1734
US	1800	1789
Greece	2091	2042
Japan	1799	1729
China		2316

Output per head and hour of work (%)

	1913	1929	1938	1950	1973	2003	2014
Product per WORKER as a % of US level							
France	66	68	73	55	79	73	-
Germany	69	59	82	41	72	64	-
Italy	48	45	54	37	64	66	-
UK	93	80	102	73	72	72	-
EU15 (aver.)	57	55	66	47	65	72	-
Product per HOUR as a % of US level							
France	56	-	-	46	74	102	96
Germany	59	-	-	32	79	98	94
Italy	42	-	-	35	78	85	75
UK	84	-	-	63	60	81	76
EU15 (aver.)	61	-	-	44	71	-	-
Japan	-	-	-	-	-	65	63

Lisbon Agenda

- Lisbon European Council **2000**: new **strategic goal** till **2010** – to become the **most competitive** and dynamic **knowledge-based** economy in the world capable of **sustainable** economic **growth** with **more and better jobs** and greater **social cohesion**;
- Strategy **aimed to**:
 - transition to a knowledge-based economy by better **policies** for the **information society** and **R&D**;
 - **structural reform** for **competitiveness** and innovation and by completing the **internal market**;
 - **modernize** the European **social model**, investing in **people** and **combating social exclusion**;
- **All-embracing** - result of **bargaining process** + **disagreement** how economic performance should be improved;
- **Open method of coordination**:
 - **Council** agreeing **guidelines** that contains **targets** and **recommendations** which are adopted at the discretion of **member states** (**intergovernmental** process);
 - policy operates **via reports** – containing the policy, objectives and **progress**;
 - „**enforcement**“ is **by recommendation**, peer pressure and **benchmarking**;
 - **no penalties** – government implement policies in line with their **own priorities**;

- EU continued to **lag behind** – also in **amount of inputs** used: slower population growth and **rigid labor markets** (*late from school, less hours, early retirement + higher benefits and less part-time jobs*);
- Lisbon is about everything and thus nothing (**Kok's Report 2004**);
 - commitments are **rhetorical** (agreed at the height of the Dotcom boom);
 - states are committed only to **parts of agenda**;
- **Mid-term review** (2005): **Barroso's** Commission's plans – three **priorities** for the policy concentrating on **growth** and **jobs** (**Revised Lisbon Agenda**) :
 - **more attractive** place to **invest and work** – completing the **Single Market** and **business-friendly** regulation;
 - **knowledge and innovation** for growth: raising **expenditure on R&D to 3%** of GDP;
 - creating **more and better jobs** – increase employment by making the labor force more **adaptable** through raising the level of **education and skills**;
- **Concerns** that slimmer agenda downgraded the **environmental** and **social aspects** of agenda;

Strategy Europe 2020

- **Global crisis** destroyed progress reached in last years (20 years of attempts for **fiscal consolidation** – in 2009 average fiscal deficit 7% and public debt 70%) + there have to be careful **management of exit** fiscal **stimulus's**;
- **Goals:**
 - **intelligent growth** → economy based on knowledge and innovations;
 - **sustainable growth** → support for more **competitive** and **ecological** economy less **energy** intensive;
 - growth supporting **social inclusion**;
- **Targets - 2020:**
 - **Higher employment** for 20-64 year old (from 69% to 75%);
 - **Increase investment** into **RD** up to 3% GDP EU (US 2,9% vs. EU 1,7%);
 - In **energetic policy** reach the goal **20-20-20** (less greenhouse gases, more renewable, more energy efficiency);
 - Share of **tertiary educated** from 31% to 40%;
 - 25% less people living in poverty (from 20 mil.);

Table 1: The Global Competitiveness Index 2016–2017

Country/Economy	SUBINDEXES							
	OVERALL INDEX		Basic requirements		Efficiency enhancers		Innovation and sophistication factors	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Switzerland	1	5.81	2	6.29	3	5.62	1	5.80
Singapore	2	5.72	1	6.37	2	5.73	12	5.25
United States	3	5.70	27	5.43	1	5.85	2	5.63
Netherlands	4	5.57	4	6.12	9	5.38	6	5.52
Germany	5	5.57	10	5.94	7	5.40	3	5.61
Sweden	6	5.53	7	6.06	12	5.31	5	5.54
United Kingdom	7	5.49	23	5.61	5	5.55	9	5.30
Japan	8	5.48	22	5.62	10	5.37	4	5.57
Hong Kong SAR	9	5.48	3	6.23	4	5.58	23	4.80
Finland	10	5.44	12	5.88	14	5.26	7	5.47
Norway	11	5.44	6	6.06	11	5.34	13	5.21
Denmark	12	5.35	13	5.85	17	5.19	10	5.27
New Zealand	13	5.31	8	5.98	8	5.38	26	4.73
Taiwan, China	14	5.28	14	5.81	16	5.20	17	5.05
Canada	15	5.27	17	5.72	6	5.42	25	4.74
United Arab Emirates	16	5.26	11	5.90	15	5.22	21	4.91
Belgium	17	5.25	24	5.56	18	5.18	14	5.16
Qatar	18	5.23	5	6.09	21	5.00	18	5.04
Austria	19	5.22	18	5.72	22	5.00	11	5.26
Luxembourg	20	5.20	9	5.95	23	4.99	16	5.07
France	21	5.20	25	5.54	19	5.14	15	5.07
Australia	22	5.19	15	5.81	13	5.27	27	4.65
Ireland	23	5.18	21	5.63	20	5.10	19	5.01
Israel	24	5.18	28	5.37	25	4.95	8	5.41
Malaysia	25	5.16	26	5.49	24	4.96	20	4.94

Korea, Rep.	26	5.03	19	5.71	26	4.88	22	4.81
Iceland	27	4.96	16	5.79	32	4.75	24	4.75
China	28	4.95	30	5.34	30	4.79	29	4.22
Saudi Arabia	29	4.84	32	5.21	33	4.74	36	4.10
Estonia	30	4.78	20	5.68	28	4.80	33	4.15
Czech Republic	31	4.72	31	5.27	27	4.85	35	4.13
Spain	32	4.68	33	5.15	29	4.80	34	4.15
Chile	33	4.64	37	5.08	31	4.77	56	3.73
Thailand	34	4.64	44	4.95	37	4.56	47	3.85
Lithuania	35	4.60	35	5.14	36	4.59	43	4.01
Poland	36	4.56	45	4.91	34	4.64	55	3.74
Azerbaijan	37	4.55	49	4.86	59	4.23	49	3.83
Kuwait	38	4.53	36	5.10	70	4.08	79	3.49
India	39	4.52	63	4.62	46	4.41	30	4.22
Malta	40	4.52	29	5.36	41	4.49	41	4.02
Indonesia	41	4.52	52	4.78	49	4.38	32	4.16
Panama	42	4.51	34	5.15	51	4.36	44	3.93
Russian Federation	43	4.51	59	4.68	38	4.56	66	3.62
Italy	44	4.50	47	4.86	43	4.43	28	4.39
Mauritius	45	4.49	39	5.05	62	4.19	48	3.85
Portugal	46	4.48	43	4.97	39	4.52	38	4.08
South Africa	47	4.47	84	4.37	35	4.62	31	4.18
Bahrain	48	4.47	40	5.04	40	4.52	42	4.01
Latvia	49	4.45	41	5.02	42	4.44	58	3.71
Bulgaria	50	4.44	60	4.67	44	4.43	71	3.57
Mexico	51	4.41	71	4.56	45	4.41	50	3.83
Rwanda	52	4.41	53	4.74	81	3.93	54	3.76
Kazakhstan	53	4.41	62	4.62	50	4.37	76	3.51
Costa Rica	54	4.41	57	4.70	52	4.34	45	3.93
Turkey	55	4.39	56	4.70	53	4.32	65	3.63

Table 2: Education and skills pillar: Preliminary country/economy rankings

Economy	5th pillar: Education and skills		A. Skills of the current workforce		B. Skills of the future workforce	
	Rank	Value	Rank	Value	Rank	Value
Denmark	1	6.18	3	6.13	5	6.22
Switzerland	2	6.17	1	6.56	12	5.79
Norway	3	6.12	4	6.13	9	6.12
Netherlands	4	6.11	9	5.92	2	6.29
Sweden	5	6.09	6	5.97	6	6.22
Australia	6	6.04	10	5.89	7	6.18
United Kingdom	7	6.00	8	5.93	10	6.07
Germany	8	5.93	2	6.20	15	5.67
New Zealand	9	5.92	17	5.57	4	6.27
Belgium	10	5.89	13	5.63	8	6.15
Finland	11	5.88	23	5.33	1	6.43
United States	12	5.82	5	6.05	18	5.58
Iceland	13	5.78	24	5.29	3	6.28
Singapore	14	5.76	12	5.79	13	5.73
Canada	15	5.69	7	5.94	19	5.44
Ireland	16	5.64	27	5.26	11	6.01
Estonia	17	5.61	15	5.58	16	5.64
Israel	18	5.53	11	5.86	25	5.19
Slovenia	19	5.49	20	5.38	17	5.59
Czech Republic	20	5.46	16	5.58	22	5.33
Lithuania	21	5.45	18	5.53	20	5.36
Korea, Rep.	22	5.23	26	5.27	24	5.20
Latvia	23	5.22	21	5.37	30	5.07
France	24	5.22	22	5.33	28	5.10
United Arab Emirates	25	5.15	50	4.60	14	5.70
Japan	26	5.12	19	5.39	39	4.85
Austria	27	5.12	34	5.09	26	5.15

Business dynamism

Country/Economy	Rank	Score
United States	1	6.12
Sweden	2	5.88
Norway	3	5.85
Netherlands	4	5.82
Denmark	5	5.81
United Kingdom	6	5.81
New Zealand	7	5.79
Iceland	8	5.77
Switzerland	9	5.71
Germany	10	5.70
Finland	11	5.66
Singapore	12	5.62
Ireland	13	5.62
Taiwan, China	16	5.53
Australia	14	5.55
Belgium	15	5.54
Estonia	17	5.52
Canada	18	5.49
Israel	19	5.48
Japan	20	5.47
Malaysia	21	5.41
Korea, Rep.	22	5.38
United Arab Emirates	23	5.29
France	24	5.28
Portugal	25	5.25
Qatar	26	5.24
Macedonia, FYR	27	5.21
Slovenia	28	5.16
Austria	29	5.14
Chile	30	5.11
Latvia	31	5.10
Lithuania	32	5.09

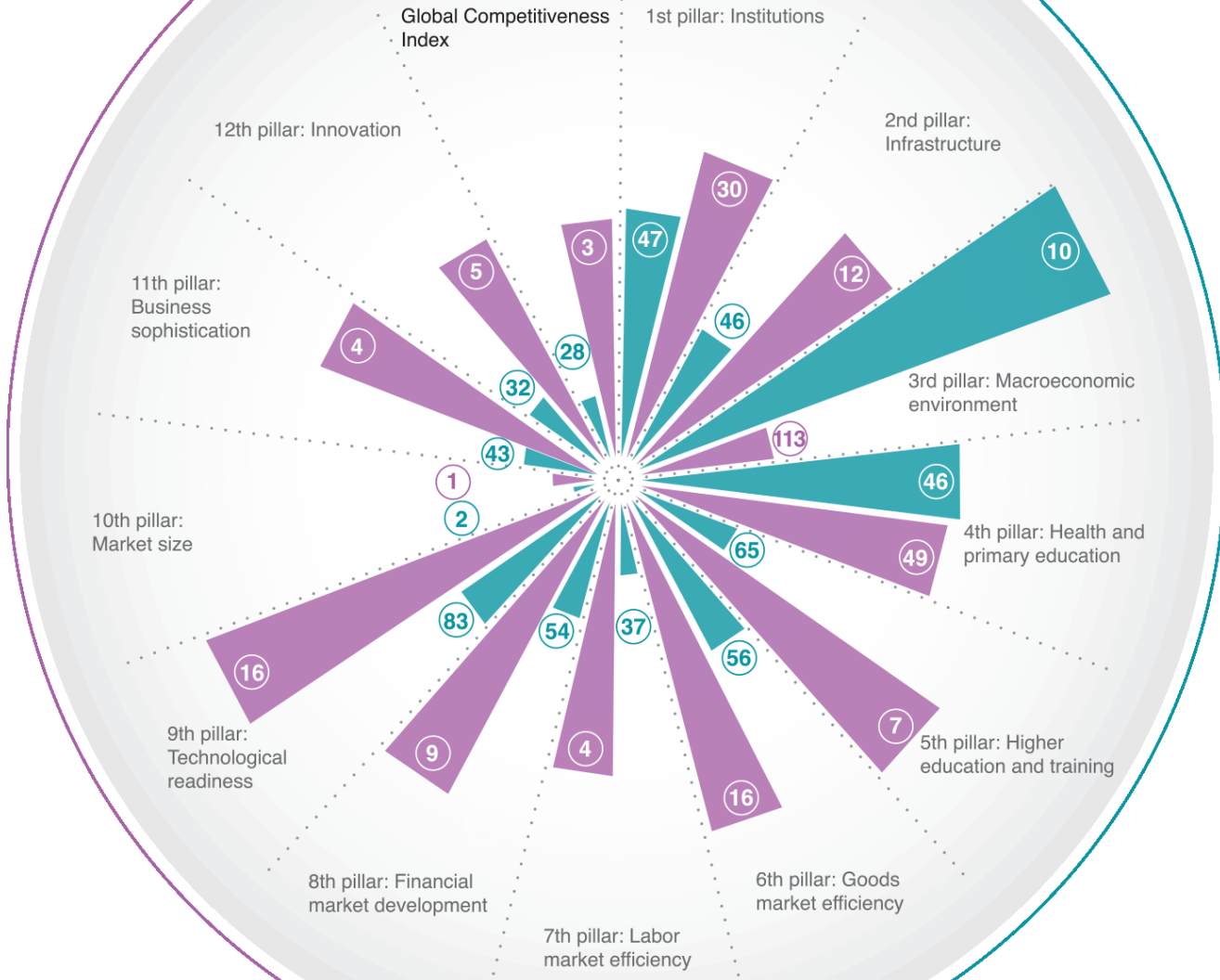
Inovative capacity

Country/Economy	Rank	Score
Switzerland	1	5.93
Sweden	2	5.92
Netherlands	3	5.68
Germany	4	5.66
Denmark	5	5.48
United States	6	5.46
Luxembourg	7	5.42
Finland	8	5.39
Israel	9	5.36
Austria	10	5.32
Taiwan, China	11	5.26
United Kingdom	12	5.25
Singapore	13	5.16
Iceland	14	5.13
Norway	15	5.11
Korea, Rep.	16	5.06
Ireland	17	5.06
Belgium	18	5.03
Japan	19	4.97
France	20	4.86
New Zealand	21	4.71
Canada	22	4.51
Australia	23	4.47
Qatar	24	4.32
Estonia	25	4.31
Malaysia	26	4.25
Slovenia	27	4.21
Italy	28	4.15
Portugal	29	4.12
Spain	30	4.11
United Arab Emirates	31	4.07
Czech Republic	32	4.05

US

China

How the two countries rank against each other and the world*



* 2014-2015 rank out of 144 economies

Germany

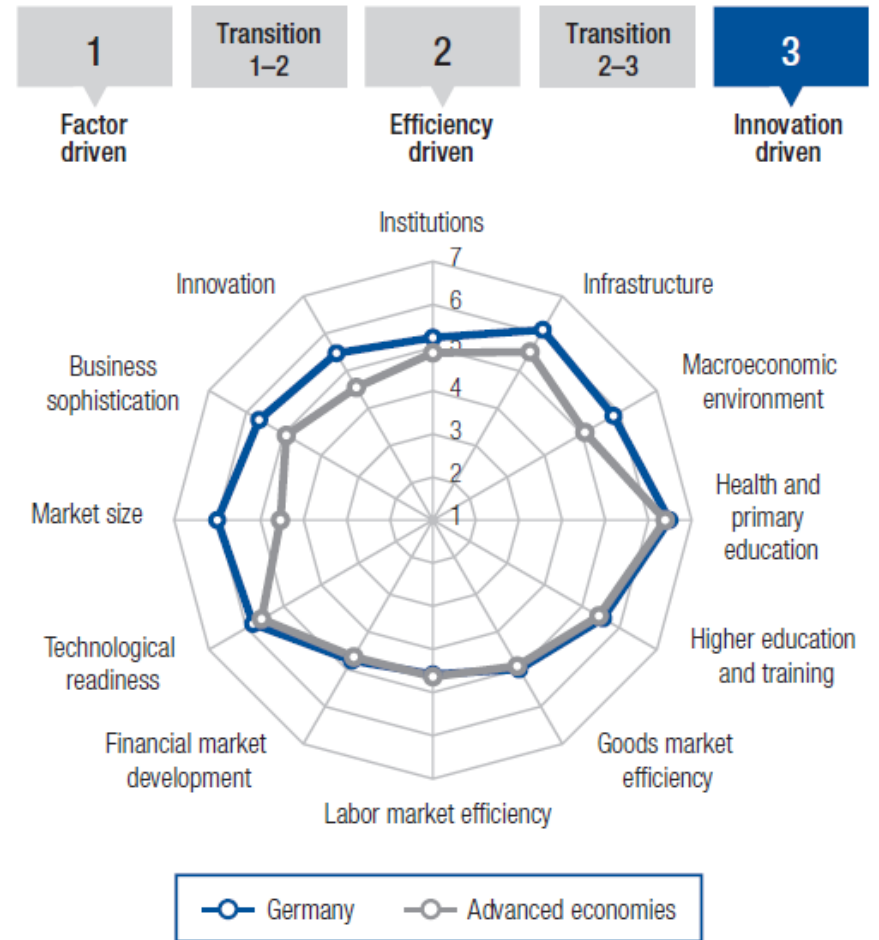
	Rank (out of 144)	Score (1–7)
GCI 2014–2015	5	5.5
GCI 2013–2014 (out of 148).....	4	5.5
GCI 2012–2013 (out of 144).....	6	5.5
GCI 2011–2012 (out of 142).....	6	5.4

Basic requirements (20.0%)	11	5.9
Institutions	17	5.2
Infrastructure	7	6.1
Macroeconomic environment	24	5.8
Health and primary education.....	14	6.5

Efficiency enhancers (50.0%)	9	5.3
Higher education and training.....	16	5.6
Goods market efficiency	19	5.0
Labor market efficiency	35	4.6
Financial market development.....	25	4.8
Technological readiness.....	13	5.8
Market size.....	5	6.0

Innovation and sophistication factors (30.0%)	4	5.6
Business sophistication	3	5.6
Innovation.....	6	5.5

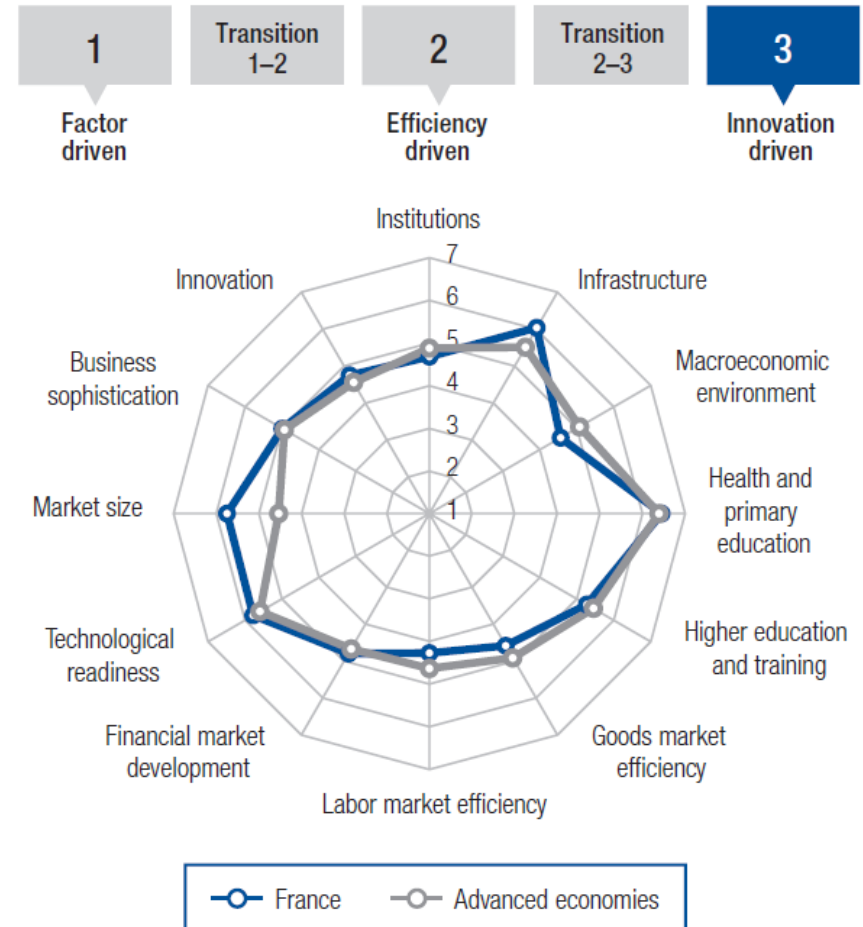
Stage of development



France

	Rank (out of 144)	Score (1–7)
GCI 2014–2015	23	5.1
GCI 2013–2014 (out of 148).....	23.....	5.1
GCI 2012–2013 (out of 144).....	21.....	5.1
GCI 2011–2012 (out of 142).....	18.....	5.1
Basic requirements (20.0%)	26	5.4
Institutions.....	32.....	4.7
Infrastructure.....	8.....	6.0
Macroeconomic environment.....	82.....	4.6
Health and primary education.....	18.....	6.4
Efficiency enhancers (50.0%)	19	5.1
Higher education and training.....	28.....	5.3
Goods market efficiency.....	46.....	4.6
Labor market efficiency.....	61.....	4.3
Financial market development.....	23.....	4.8
Technological readiness.....	17.....	5.8
Market size.....	8.....	5.7
Innovation and sophistication factors (30.0%)	19	4.9
Business sophistication.....	22.....	5.0
Innovation.....	19.....	4.7

Stage of development

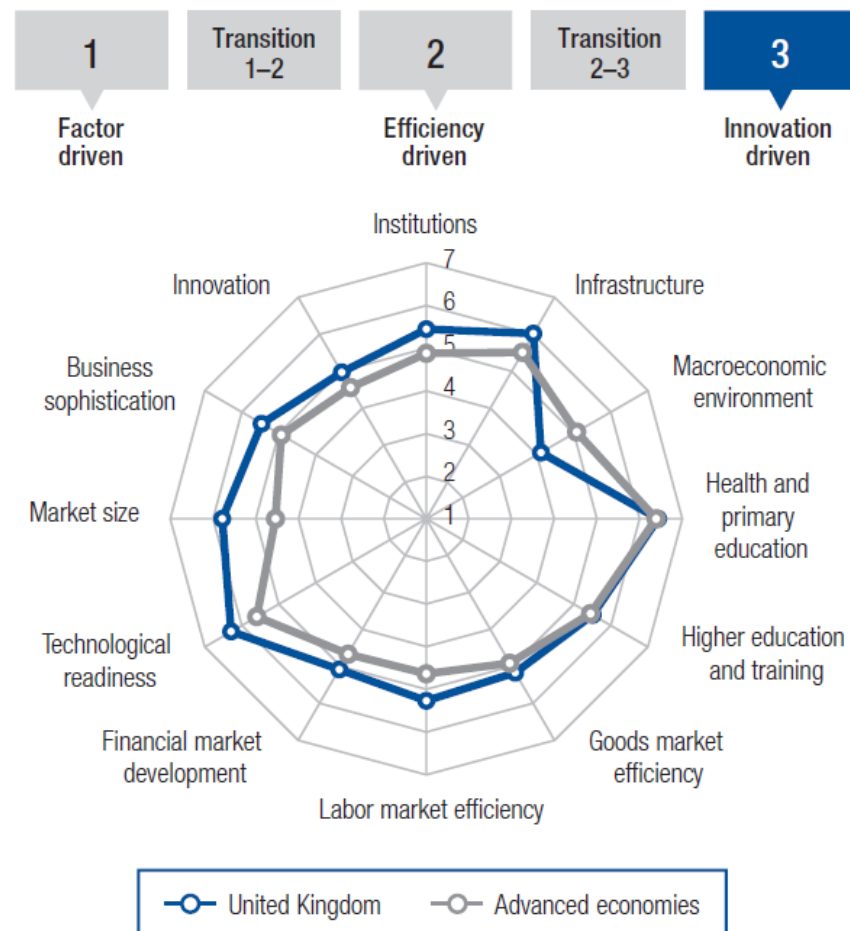


United Kingdom

Global Competitiveness Index

	Rank (out of 144)	Score (1-7)
GCI 2014-2015	9	5.4
GCI 2013-2014 (out of 148).....	10.....	5.4
GCI 2012-2013 (out of 144).....	8.....	5.4
GCI 2011-2012 (out of 142).....	10.....	5.4
Basic requirements (20.0%)	24	5.5
Institutions.....	12.....	5.4
Infrastructure.....	10.....	6.0
Macroeconomic environment.....	107.....	4.1
Health and primary education.....	21.....	6.4
Efficiency enhancers (50.0%)	4	5.5
Higher education and training.....	19.....	5.5
Goods market efficiency.....	13.....	5.2
Labor market efficiency.....	5.....	5.3
Financial market development.....	15.....	5.1
Technological readiness.....	2.....	6.3
Market size.....	6.....	5.8
Innovation and sophistication factors (30.0%)	8	5.2
Business sophistication.....	6.....	5.5
Innovation.....	12.....	5.0

Stage of development



GLOBAL COMPETITIVENESS INDEX

Basic requirements subindex

- Pillar 1. Institutions
- Pillar 2. Infrastructure
- Pillar 3. Macroeconomic environment
- Pillar 4. Health and primary education



Key for
factor-driven
economies

Efficiency enhancers subindex

- Pillar 5. Higher education and training
- Pillar 6. Goods market efficiency
- Pillar 7. Labor market efficiency
- Pillar 8. Financial market development
- Pillar 9. Technological readiness
- Pillar 10. Market size



Key for
efficiency-driven
economies

Innovation and sophistication factors subindex

- Pillar 11. Business sophistication
- Pillar 12. Innovation



Key for
innovation-driven
economies