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Corso:

Sviluppo Industriale e Innovazione

Docente
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LEZIONE 9

I SISTEMI NAZIONALI DI INNOVAZIONE

La misura del potenziale di innovazione

I ritardi dell'Italia nello sviluppo della "**economia della conoscenza**" sono dimostrati da una serie, ormai ben nota, di statistiche a scala internazionale (cfr. European Commission, Science, Technology and Innovation: Key Figures 2002).

Solo il 43% della **spesa nazionale in R&S** è finanziata in Italia dalle imprese private, contro il 56,3% a scala comunitaria, il 54,1% in Francia, il 66,9% in Germania, il 72,4% in Giappone e il 68,2% negli USA.

Il numero dei **ricercatori** per migliaia di forza lavoro è pari al 2,8 ‰ in Italia, contro il 5,4‰ a scala comunitaria, il 6,20 ‰ in Francia, il 6,45 ‰ in Germania, il 9,26 ‰ in Giappone e l'8,08 ‰ negli USA.

Il numero di **laureati** in tutti i campi di studio è stato nel 1998 pari a 179.431 in Italia, contro 497.188 in Germania e 322.487 in Francia e 465.895 nel Regno Unito.

La percentuale della spesa privata e pubblica nell'**istruzione universitaria** è pari all'0,84% del PIL in Italia, contro l' 1,09% nella Comunità e l'1,04% in Germania, 1,11% nel Regno Unito e 1,13 %in Francia, l'1,02% in Giappone e il 2,29% negli USA.

Cfr. http://ec.europa.eu/research/era/pdf/key-figures-report2008-2009_en.pdf

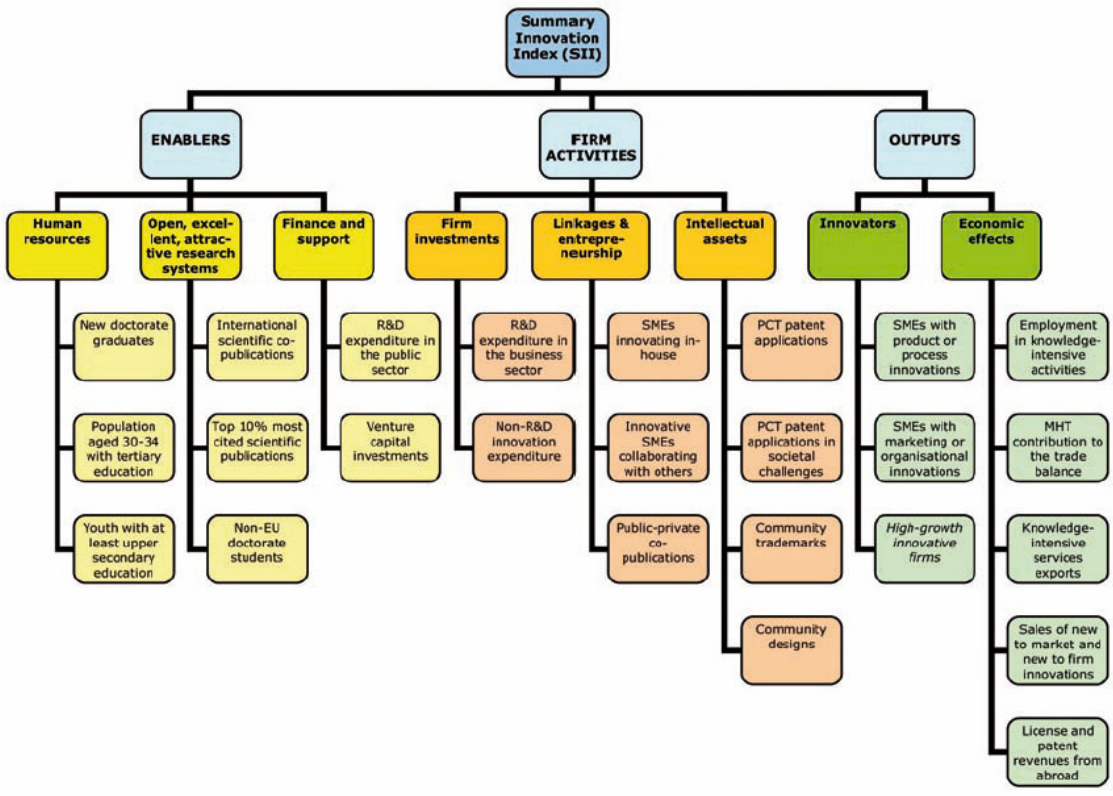
http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf

Executive summary

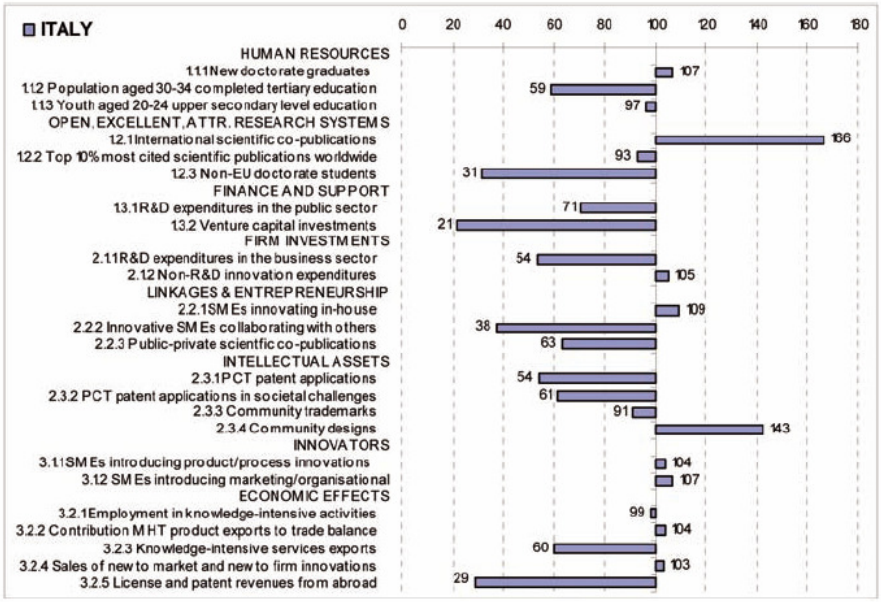
Innovation Union Scoreboard 2013: the first edition reflecting the impact of the economic crisis

This year's edition offers a unique opportunity to measure the first effects of the economic crisis on the research and innovation landscape in Europe. It uses the most recent available data from Eurostat and other internationally recognised sources with data referring to 2011 for 12 indicators and 2010 for 9 indicators and to less recent years for only 3 indicators. Six indicators are derived from the recently published Community Innovation Survey 2010, which investigated the innovation activity of the European enterprises during the crisis years 2008-2010.

Figure 1: Measurement framework of the Innovation Union Scoreboard

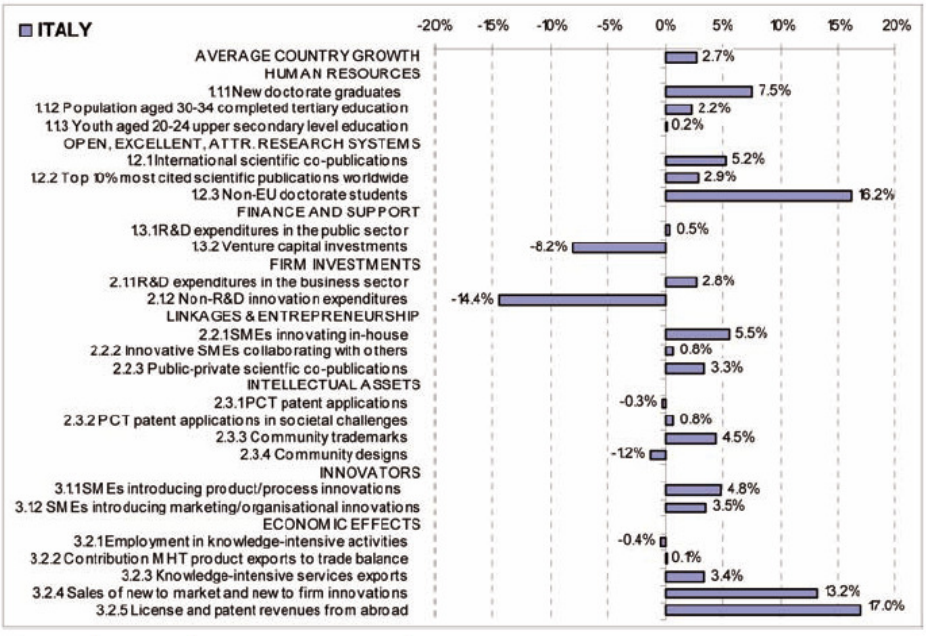


Italy is one of the moderate innovators with a below average performance. Relative strengths are in Innovators and Economic effects. Relative weaknesses are in Finance and support and Firm investments.



Indicator values relative to the EU27 (EU27=100)

High growth is observed for Sales of new-to-market and new-to-firm innovations and License and patent revenues from abroad. A strong decline is observed for Venture capital investments and Non-R&D innovation expenditure. Growth performance in Open, excellent and attractive research systems and Economic effects is well above average and in Firm investments well below average.



Annual average growth per indicator and average country growth

Annex B: Current performance

	EU27	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT	LU	HU	MT
ENABLERS																		
Human resources																		
1.1.1 New doctorate graduates	1.5	1.5	0.5	1.3	2.1	2.7	0.9	1.6	1.2	1.2	1.5	1.6	0.2	0.4	0.9	0.8	0.8	0.2
1.1.2 Population completed tertiary education	34.6	42.6	27.3	23.8	41.2	30.7	40.3	49.4	28.9	40.6	43.4	20.3	45.8	35.7	45.4	48.2	28.1	21.1
1.1.3 Youth with upper secondary level education	79.5	81.6	85.5	91.7	70.0	75.8	82.6	86.9	83.6	61.7	83.8	76.9	87.7	80.4	86.9	73.3	83.3	59.2
Open, excellent and attractive research systems																		
1.2.1 International scientific co-publications	300	1280	205	529	1692	715	734	1131	544	599	683	500	1004	178	265	1428	387	328
1.2.2 Scientific publications among top 10% most cited	10.90	13.59	2.61	5.51	14.60	11.64	7.45	11.38	9.52	10.19	10.33	10.11	8.85	3.95	5.95	10.11	4.91	7.06
1.2.3 Non-EU doctorate students	20.02	19.69	4.13	4.00	15.43	N/A	1.55	22.25	1.00	17.33	31.56	6.24	1.64	0.60	0.24	20.39	2.61	4.05
Finance and support																		
1.3.1 R&D expenditure in the public sector	0.75	0.65	0.26	0.72	0.99	0.94	0.87	0.55	0.43	0.64	0.80	0.53	0.33	0.50	0.68	0.45	0.43	0.24
1.3.2 Venture capital investments	0.094	0.090	0.007	0.010	0.104	0.057	N/A	0.026	0.004	0.050	0.105	0.020	N/A	N/A	N/A	0.243	0.030	N/A
FIRM ACTIVITIES																		
Firm investments																		
2.1.1 R&D expenditure in the business sector	1.27	1.37	0.30	1.11	2.09	1.90	1.49	1.17	0.17	0.67	1.43	0.68	0.08	0.19	0.24	0.98	0.75	0.49
2.1.2 Non-R&D innovation expenditure	0.56	0.53	0.28	0.69	0.51	0.88	1.03	0.30	0.74	0.39	0.25	0.59	1.66	0.36	1.27	0.19	0.40	0.96
Linkages & entrepreneurship																		
2.2.1 SMEs innovating in-house	31.83	39.80	12.98	27.21	40.81	45.25	33.57	38.76	32.70	22.06	29.95	34.79	41.55	14.44	15.67	40.54	11.40	22.49
2.2.2 Innovative SMEs collaborating with others	11.69	20.15	3.33	10.26	15.46	14.01	18.52	11.93	13.31	5.81	11.09	4.41	21.49	4.19	8.76	14.69	6.68	4.56
2.2.3 Public-private co-publications	52.8	97.1	4.1	33.7	179.9	75.5	25.0	34.4	15.8	28.7	49.0	33.4	26.6	2.2	9.6	35.5	31.2	8.4
Intellectual Assets																		
2.3.1 PCT patent applications	3.90	3.73	0.34	0.89	7.04	7.42	2.35	2.76	0.42	1.43	4.20	2.10	0.60	1.21	0.31	1.62	1.48	0.29
2.3.2 PCT patent applications in societal challenges	0.96	0.81	0.12	0.20	2.30	1.85	0.56	0.80	0.10	0.39	1.04	0.59	0.05	0.29	0.05	0.23	0.34	0.00
2.3.3 Community trademarks	5.86	5.89	5.49	3.34	7.93	8.17	8.18	5.92	1.70	6.78	4.21	5.32	14.08	4.18	2.83	14.08	2.41	14.08
2.3.4 Community designs	4.80	4.65	2.01	3.08	7.67	7.70	3.62	1.75	0.48	3.40	3.96	6.84	3.48	3.43	0.89	8.72	1.11	0.93
OUTPUTS																		
Innovators																		
3.1.1 SMEs introducing product or process innovations	38.44	50.34	16.59	33.01	41.60	57.00	45.56	45.50	37.31	28.09	32.68	39.80	34.80	15.78	21.39	47.90	16.76	28.96
3.1.2 SMEs introducing marketing/organisational innovations	40.30	41.73	16.31	41.12	42.64	60.55	35.99	45.04	51.29	27.74	42.80	43.04	36.99	22.68	26.39	58.67	22.36	30.96
3.1.3 Fast-growing innovative firms																		
Economic effects																		
3.2.1 Employment in knowledge-intensive activities	13.60	14.80	8.40	12.30	15.60	15.10	10.70	19.80	11.30	11.80	14.40	13.40	15.00	9.10	9.00	20.00	13.10	16.40
3.2.2 Contribution MHT product exports to trade balance	1.28	2.37	-4.78	3.82	-2.77	8.54	-2.70	2.57	-5.69	3.05	4.65	4.96	1.72	-5.42	-1.27	-3.35	5.84	0.92
3.2.3 Knowledge-intensive services exports	45.14	41.32	26.84	27.26	63.33	56.70	37.40	67.43	5.38	21.61	32.58	27.19	48.48	35.32	13.69	67.43	26.55	13.63
3.2.4 Sales of new to market and new to firm innovations	14.37	12.36	7.58	15.25	14.96	15.50	12.31	9.32	19.23	18.97	14.73	14.86	14.70	3.14	6.64	8.27	13.68	7.41
3.2.5 License and patent revenues from abroad	0.58	0.50	0.03	0.05	0.79	0.40	0.10	1.80	0.02	0.07	0.57	0.17	0.01	0.04	0.00	0.78	0.74	0.30

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Annex B: Current performance

	EU27	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	TR	IS	NO	CH	RS	MK
ENABLERS																		
Human resources																		
1.1.1 New doctorate graduates	1.5	1.9	2.3	0.5	1.9	1.4	1.5	3.1	2.6	2.9	2.3	1.4	0.4	0.8	1.9	3.1	0.6	0.5
1.1.2 Population completed tertiary education	34.6	41.1	23.8	36.9	26.1	20.4	37.9	23.4	46.0	47.5	45.8	24.5	16.3	44.6	48.8	44.0	20.6	20.4
1.1.3 Youth with upper secondary level education	79.5	78.2	85.4	90.0	64.4	79.6	90.1	93.3	85.4	88.7	80.1	95.6	54.3	56.9	71.2	83.0	84.0	85.3
Open, excellent and attractive research systems																		
1.2.1 International scientific co-publications	300	1330	1180	213	678	148	955	379	1323	1604	989	388	71	1692	1483	1692	N/A	134
1.2.2 Scientific publications among top 10% most cited	10.90	15.13	10.92	3.52	10.04	3.77	7.39	3.27	11.48	12.28	13.28	3.20	6.73	11.19	12.17	15.84	N/A	3.08
1.2.3 Non-EU doctorate students	20.02	N/A	8.78	1.91	10.59	1.98	6.54	1.39	5.91	19.99	31.42	2.21	2.52	20.77	30.93	31.56	7.05	7.04
Finance and support																		
1.3.1 R&D expenditure in the public sector	0.75	0.97	0.87	0.53	0.69	0.31	0.64	0.43	1.09	1.03	0.64	0.42	0.49	1.10	0.84	0.79	0.68	0.14
1.3.2 Venture capital investments	0.094	0.105	0.022	0.051	0.032	0.033	N/A	N/A	0.108	0.156	0.239	N/A	N/A	N/A	0.069	0.094	N/A	N/A
FIRM ACTIVITIES																		
Firm investments																		
2.1.1 R&D expenditure in the business sector	1.27	0.89	1.87	0.23	0.73	0.17	1.42	0.25	2.34	2.34	1.09	0.34	0.36	1.64	0.86	2.11	0.10	0.04
2.1.2 Non-R&D innovation expenditure	0.56	0.61	0.35	1.02	0.53	0.46	0.56	0.65	0.51	0.64	N/A	0.61	0.16	N/A	0.14	1.16	1.06	0.90
Linkages & entrepreneurship																		
2.2.1 SMEs innovating in-house	31.83	39.10	36.35	11.34	34.10	10.75	N/A	21.84	33.18	37.68	N/A	25.08	28.18	N/A	23.22	28.20	30.59	11.30
2.2.2 Innovative SMEs collaborating with others	11.69	14.87	20.52	4.15	8.09	2.93	13.63	8.29	16.50	17.47	22.68	9.26	5.28	17.44	9.56	9.40	7.49	9.60
2.2.3 Public-private co-publications	52.8	128.2	86.4	5.3	17.0	8.3	85.4	15.7	97.9	147.0	79.5	27.4	1.7	179.9	115.9	179.9	6.7	0.0
Intellectual Assets																		
2.3.1 PCT patent applications	3.90	6.24	5.11	0.45	0.65	0.18	3.01	0.37	8.93	8.93	3.23	0.62	0.87	3.86	3.61	8.12	N/A	0.18
2.3.2 PCT patent applications in societal challenges	0.96	1.48	1.30	0.12	0.15	0.07	1.46	0.10	1.35	2.01	0.76	0.12	0.08	1.21	0.80	2.30	N/A	N/A
2.3.3 Community trademarks	5.86	7.18	10.22	3.16	4.64	2.14	4.25	2.26	6.68	7.81	5.12	0.52	0.54	3.89	1.59	12.98	0.55	0.26
2.3.4 Community designs	4.80	4.12	8.59	4.51	4.36	0.57	3.56	1.44	4.56	5.09	2.86	0.04	0.47	1.19	0.66	8.56	0.01	0.00
OUTPUTS																		
Innovators																		
3.1.1 SMEs introducing product or process innovations	38.44	46.02	42.20	14.36	45.57	13.17	32.61	26.02	44.75	47.38	21.26	30.40	29.52	55.13	32.79	57.00	36.00	39.20
3.1.2 SMEs introducing marketing/organisational innovations	40.30	36.91	42.33	19.95	47.38	25.54	37.65	27.25	38.89	42.15	30.64	31.91	50.31	45.90	29.13	N/A	39.06	30.80
3.1.3 Fast-growing innovative firms																		
Economic effects																		
3.2.1 Employment in knowledge-intensive activities	13.60	14.90	14.00	9.30	9.10	6.50	13.70	10.50	15.30	17.40	17.60	10.30	4.70	18.50	15.10	20.00	12.84	7.20
3.2.2 Contribution MHT product exports to trade balance	1.28	1.68	3.18	0.88	-1.20	0.38	6.05	4.35	1.69	2.02	3.13	2.98	-2.22	-8.87	-8.87	8.44	N/A	5.42
3.2.3 Knowledge-intensive services exports	45.14	26.31	22.21	26.14	28.99	43.03	20.91	19.63	35.93	38.70	57.59	14.99	18.76	50.32	49.40	26.51	45.20	27.85
3.2.4 Sales of new to market and new to firm innovations	14.37	10.45	11.92	8.00	14.30	14.28	10.65	19.23	15.29	8.37	7.31	10.54	15.82	6.07	6.09	19.23	11.71	9.90
3.2.5 License and patent revenues from abroad	0.58	1.80	0.19	0.05	0.03	0.13	0.17	0.00	1.22	1.16	0.58	0.04	0.00	1.60	0.17	1.80	0.12	0.10

Annex A: Definitions of indicators

	Indicator	Definition numerator	Definition denominator	Interpretation	Source
1.1.1	New doctorate graduates (ISCED 6) per 1000 population aged 25-34	Number doctorate graduates (ISCED 6)	Population between 25 and 34 years	The indicator is a measure of the supply of new second-stage tertiary graduates in all fields of training. For most countries ISCED 6 captures PhD graduates only, with the exception of Finland, Portugal and Sweden where also non-PhD degrees leading to an award of an advanced research qualification are included.	Eurostat
1.1.2	Percentage population aged 30-34 having completed tertiary education	Number of persons in age class with some form of post-secondary education (ISCED 5 and 6)	Population between 30 and 34 years	This is a general indicator of the supply of advanced skills. It is not limited to science and technical fields because the adoption of innovations in many areas, in particular in the service sectors, depends on a wide range of skills. International comparisons of educational levels however are difficult due to large discrepancies in educational systems, access, and the level of attainment that is required to receive a tertiary degree. The indicator focuses on a narrow share of the population aged 30 to 34 and it will more easily and quickly reflect changes in educational policies leading to more tertiary graduates.	Eurostat
1.1.3	Percentage youth aged 20-24 having attained at least upper secondary education	Number of young people aged 20-24 years having attained at least upper secondary education attainment level, i.e. with an education level ISCED 3a, 3b or 3c long minimum	Population between 20 and 24 years	The indicator measures the qualification level of the population aged 20-24 years in terms of formal educational degrees. It provides a measure for the "supply" of human capital of that age group and for the output of education systems in terms of graduates. Completed upper secondary education is generally considered to be the minimum level required for successful participation in a knowledge-based society and is positively linked with economic growth.	Eurostat
1.2.1	International scientific co-publications per million population	Number of scientific publications with at least one co-author based abroad (where abroad is non-EU for the EU27)	Total population	International scientific co-publications are a proxy for the quality of scientific research as collaboration increases scientific productivity.	Science-Metrix / Scopus (Elsevier)
1.2.2	Scientific publications among the top-10% most cited publications worldwide as % of total scientific publications of the country	Number of scientific publications among the top-10% most cited publications worldwide	Total number of scientific publications	The indicator is a proxy for the efficiency of the research system as highly cited publications are assumed to be of higher quality. There could be a bias towards small or English speaking countries given the coverage of Scopus' publication data. Countries like France and Germany, where researchers publish relatively more in their own language, are more likely to underperform on this indicator as compared to their real academic excellence.	Science-Metrix / Scopus (Elsevier)
1.2.3	Non-EU doctorate students as a % of all doctorate holders	For EU Member States: number of doctorate students from non-EU countries (for non-EU countries: number of non-national doctorate students)	Total number of doctorate students	The share of non-EU doctorate students reflects the mobility of students as an effective way of diffusing knowledge. Attracting high-skilled foreign doctorate students will add to creating a net brain gain and will secure a continuous supply of researchers.	Eurostat
1.3.1	R&D expenditure in the public sector (% of GDP)	All R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD)	Gross Domestic Product	R&D expenditure represents one of the major drivers of economic growth in a knowledge-based economy. As such, trends in the R&D expenditure indicator provide key indications of the future competitiveness and wealth of the EU. Research and development spending is essential for making the transition to a knowledge-based economy as well as for improving production technologies and stimulating growth.	Eurostat
1.3.2	Venture capital (% of GDP)	Venture capital investment is defined as private equity being raised for investment in companies. Management buyouts, management buyins, and venture purchase of quoted shares are excluded. Venture capital includes early stage (seed + start-up) and expansion and replacement capital	Gross Domestic Product	The amount of venture capital is a proxy for the relative dynamism of new business creation. In particular for enterprises using or developing new (risky) technologies venture capital is often the only available means of financing their (expanding) business.	Eurostat
2.1.1	R&D expenditure in the business sector (% of GDP)	All R&D expenditures in the business sector (BERD)	Gross Domestic Product	The indicator captures the formal creation of new knowledge within firms. It is particularly important in the science-based sector (pharmaceuticals, chemicals and some areas of electronics) where most new knowledge is created in or near R&D laboratories.	Eurostat
2.1.2	Non-R&D innovation expenditures (% of turnover)	Sum of total innovation expenditure for enterprises, in thousand Euros and current prices excluding intramural and extramural R&D expenditures	Total turnover for all enterprises	This indicator measures non-R&D innovation expenditure as percentage of total turnover. Several of the components of innovation expenditure, such as investment in equipment and machinery and the acquisition of patents and licenses, measure the diffusion of new production technology and ideas.	Eurostat (Community Innovation Survey)
2.2.2	Innovative SMEs collaborating with others (% of SMEs)	Sum of SMEs with innovation co-operation activities, i.e. those firms that had any co-operation agreements on innovation activities with other enterprises or institutions in the three years of the survey period	Total number of SMEs	This indicator measures the degree to which SMEs are involved in innovation co-operation. Complex innovations, in particular in ICT, often depend on the ability to draw on diverse sources of information and knowledge, or to collaborate on the development of an innovation. This indicator measures the flow of knowledge between public research institutions and firms and between firms and other firms. The indicator is limited to SMEs because almost all large firms are involved in innovation co-operation.	Eurostat
2.2.3	Public-private co-publications per million population	Number of public-private co-authored research publications. The definition of the 'private sector' excludes the private medical and health sector. Publications are assigned to the country/countries in which the business companies or other private sector organisations are located	Total population	This indicator captures public-private research linkages and active collaboration activities between business sector researchers and public sector researchers resulting in academic publications.	CWTS / Thomson Reuters
2.3.1	PCT patent applications per billion GDP (in PPP€)	Number of patent applications filed under the PCT at international phase, designating the European Patent Office (EPO). Patent counts are based on the priority date, the inventor's country of residence and fractional counts.	Gross Domestic Product in Purchasing Power Parities	The capacity of firms to develop new products will determine their competitive advantage. One indicator of the rate of new product innovation is the number of patents. This indicator measures the number of PCT patent applications.	OECD / Eurostat
2.3.2	PCT patent applications in societal challenges per billion GDP (in PPP€)	Number of PCT patent applications in Environment-related technologies and Health. Patents in Environment-related technologies include those in General Environmental Management (air, water, waste), Energy generation from renewable and non-fossil sources, Combustion technologies with mitigation potential (eg. using fossil fuels, biomass, waste, etc.), Technologies specific to climate change mitigation, Technologies with potential or indirect contribution to emissions mitigation, Emissions abatement and fuel efficiency in transportation and Energy efficiency in buildings and lighting. Patents in health-related technologies include those in Medical technology (IPC codes (8th edition) A61B, C.D.F.G.H, J.L.M.N.H05G) and Pharmaceuticals (IPC codes A61K excluding A61K8)	Gross Domestic Product in Purchasing Power Parities	This indicator measures PCT applications in health technology and environment-related technologies and is relevant as increased numbers of patent applications in health technology and environment-related technologies will be necessary to meet the societal needs of an ageing European society and sustainable growth.	OECD / Eurostat
2.3.3	Community trademarks per billion GDP (in PPP€)	Number of new community trademarks applications	Gross Domestic Product in Purchasing Power Parities	Trademarks are an important innovation indicator, especially for the service sector. The Community trademark gives the proprietor a uniform right applicable in all Member States of the European Union through a single procedure which simplifies trademark policies at European level. It fulfils the three essential functions of a trademark: it identifies the origin of goods and services, guarantees consistent quality through evidence of the company's commitment vis-à-vis the consumer, and is a form of communication, a basis for publicity and advertising. *Comment: two-year averages have been used*	OHIM[2] / Eurostat

http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf

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	Indicator	Definition numerator	Definition denominator	Interpretation	Source
2.3.4	Community designs per billion GDP (in PPP€)	Number of new community designs applications	Gross Domestic Product in Purchasing Power Parities	A design is the outward appearance of a product or part of it resulting from the lines, contours, colours, shape, texture, materials and/or its ornamentation. A product can be any industrial or handicraft item including packaging, graphic symbols and typographic typefaces but excluding computer programs. It also includes products that are composed of multiple components, which may be disassembled and reassembled. Community design protection is directly enforceable in each Member State and it provides both the option of an unregistered and a registered Community design right, for one area encompassing all Member States. *Comment: two-year averages have been used*	Eurostat (Community Innovation Survey)
3.1.1	SMEs introducing product or process innovations (% of SMEs)	Number of SMEs who introduced a new product or a new process to one of their markets	Total number of SMEs	Technological innovation, as measured by the introduction of new products (goods or services) and processes, is a key ingredient to innovation in manufacturing activities. Higher shares of technological innovators should reflect a higher level of innovation activities.	Eurostat (Community Innovation Survey)
3.1.2	SMEs introducing marketing or organisational innovations (% of SMEs)	Number of SMEs who introduced a new marketing innovation or organisational innovation to one of their markets	Total number of SMEs	The Community Innovation Survey mainly asks firms about their technological innovation. Many firms, in particular in the services sectors, innovate through other non-technological forms of innovation. Examples of these are marketing and organisational innovations. This indicator tries to capture the extent that SMEs innovate through non-technological innovation.	Eurostat (Community Innovation Survey)
3.1.3	High-growth innovative firms	--	--	--	--
3.2.1	Employment in knowledge-intensive activities as % of total employment	Number of employed persons in knowledge-intensive activities in business industries. Knowledge-intensive activities are defined, based on EU Labour Force Survey data, as all NACE Rev.2 industries at 2-digit level where at least 33% of employment has a higher education degree (ISCED5 or ISCED6)	Total employment	Knowledge-intensive activities provide services directly to consumers, such as telecommunications, and provide inputs to the innovative activities of other firms in all sectors of the economy.	Eurostat
3.2.2	Contribution of medium and high-tech products exports to the trade balance	The contribution to the trade balance is calculated as follows: $(X_{MHT}-M_{MHT})$ - (X-M)*[$(X_{MHT}+M_{MHT})$ / (X+M)], where $(X_{MHT}-M_{MHT})$ is the observed trade balance for medium and high-tech products and (X-M)*[$(X_{MHT}+M_{MHT})$ / (X+M)] is the theoretical trade balance (where X denotes exports and M denotes imports of resp. MHT products and all products). MHT exports include exports of the following SITC Rev.3 products: 266, 267, 512, 513, 525, 533, 54, 553, 554, 562, 57, 58, 591, 593, 597, 598, 629, 653, 671, 672, 679, 71, 72, 731, 733, 737, 74, 751, 752, 759, 76, 77, 78, 79, 812, 87, 88 and 891	Value of total exports	The manufacturing trade balance reveals an economy's structural strengths and weaknesses in terms of technological intensity. It indicates whether an industry performs relatively better (or worse) than total manufacturing and can be interpreted as an indicator of revealed comparative advantage that is based on countries' trade specialisation. A positive value indicates a structural surplus, while a negative value indicates a structural deficit. The indicator is expressed as a percentage of total trade in order to eliminate business cycle variations.	UN / Eurostat
3.2.3	Knowledge-intensive services exports as % of total services exports	Exports of knowledge-intensive services are measured by the sum of credits in EBOPS (Extended Balance of Payments Services Classification) 207, 208, 211, 212, 218, 228, 229, 245, 253, 260, 263, 272, 274, 278, 279, 280 and 284	Total services exports as measured by credits in EBOPS 200	The indicator measures the competitiveness of the knowledge-intensive services sector. Knowledge-intensive services are defined as NACE classes 61-62 and 64-72. These can be related to the above-mentioned EBOPS classes using the correspondence table between NACE, ISIC and EBOPS as provided in the UN Manual on Statistics of International Trade in Services (UN, 2002).	UN / Eurostat
3.2.4	Sales of new-to-market and new-to-firm innovations as % of turnover	Sum of total turnover of new or significantly improved products, either new to the firm or new to the market, for all enterprises	Total turnover for all enterprises	This indicator measures the turnover of new or significantly improved products and includes both products which are only new to the firm and products which are also new to the market. The indicator thus captures both the creation of state-of-the-art technologies (new to market products) and the diffusion of these technologies (new to firm products).	Eurostat (Community Innovation Survey)
3.2.5	License and patent revenues from abroad as % of GDP	Export part of the international transactions in royalties and license fees	Gross Domestic Product	Trade in technology comprises four main categories: Transfer of techniques (through patents and licences, disclosure of know-how); Transfer (sale, licensing, franchising) of designs, trademarks and patterns; Services with a technical content, including technical and engineering studies, as well as technical assistance; and Industrial R&D. TBP receipts capture disembodied technology exports.	Eurostat

Annex A: European Innovation Scoreboard 2008 – Current performance

	EU27	BE	BG	CZ	DK	DE	EE	IE	GR	ES	FR	IT	CY	LV	LT	LU	HU
ENABLERS																	
Human resources																	
1.1.1S&E and SSH graduates	40.3	33.1	31.5	25.8	46.8	25.9	38.2	62.1	25.3	27.3	62.0	32.1	19.9	56.4	60.3	--	30.2
1.1.2 S&E and SSH doctorate graduates	1.11	0.94	0.36	0.86	0.93	1.56	0.57	1.11	0.58	0.67	1.13	0.89	0.22	0.24	0.61	--	0.42
1.1.3 Tertiary education	23.5	32.1	22.4	18.7	32.2	24.3	33.3	32.2	22.0	29.0	26.8	13.6	33.1	22.6	28.9	26.5	18.0
1.1.4 Life-long learning	9.7	7.2	1.3	5.7	29.2	7.8	7.0	7.6	2.1	10.4	7.4	6.2	8.4	7.1	5.3	7.0	3.6
1.1.5 Youth education	78.1	82.6	83.3	91.8	70.8	72.5	80.9	86.7	82.1	61.1	82.4	76.3	85.8	80.2	89.0	70.9	84.0
Finance and support																	
1.2.1Public R&D expenditures	0.65	0.57	0.33	0.55	0.88	0.76	0.58	0.44	0.41	0.55	0.74	0.52	0.31	0.42	0.58	0.27	0.46
1.2.2 Venture capital	0.107	0.152	--	0.007	0.088	0.049	--	0.057	0.008	0.123	0.099	0.050	--	--	--	--	0.026
1.2.3 Private credit	1.31	0.92	0.67	0.47	2.02	1.17	0.94	2.47	0.91	1.83	1.23	1.06	2.06	0.93	0.61	1.92	0.62
1.2.4 Broadband access by firms	77.0	86.0	61.0	77.0	80.0	80.0	78.0	68.0	72.0	90.0	89.0	76.0	69.0	57.0	53.0	81.0	70.0
FIRM ACTIVITIES																	
Firm investments																	
2.1.1Business R&D expenditures	1.17	1.30	0.16	0.98	1.65	1.77	0.54	0.88	0.15	0.66	1.31	0.55	0.10	0.21	0.23	1.36	0.49
2.1.2 IT expenditures	2.7	2.8	2.0	3.2	3.2	2.9	2.9	1.5	1.2	1.4	3.1	1.7	--	2.3	1.8	--	2.5
2.1.3 Non-R&D innovation expenditures	1.03	0.73	0.79	0.88	0.51	1.07	3.36	0.96	0.74	0.49	0.33	1.10	2.12	--	0.64	0.90	0.72
Linkages & entrepreneurship																	
2.2.1SMEs innovating in-house	30.0	40.8	15.1	28.0	40.8	48.3	37.1	38.8	32.7	24.6	28.3	28.1	37.5	--	17.7	--	13.2
2.2.2 Innovative SMEs collaborating with others	9.5	16.7	3.8	11.7	14.9	9.0	18.1	11.7	13.3	5.0	11.5	4.3	26.2	5.6	10.3	15.1	6.5
2.2.3 Firm renewal (SMEs entries + exits)	5.1	--	--	4.7	--	--	5.9	--	--	4.1	--	2.3	--	4.0	9.0	3.5	8.7
2.2.4 Public-private co-publications	3.14	4.94	0.5	12.6	108.7	45.9	14.5	14.0	8.7	10.6	27.9	17.2	9.1	0.4	0.0	4.2	16.9
Throughputs																	
2.3.1EPO patents	105.7	129.1	1.4	7.3	174.6	275.0	5.6	64.1	6.5	29.3	119.2	76.1	17.0	5.7	1.3	194.9	7.8
2.3.2 Community trademarks	124.6	121.4	32.8	47.1	212.1	187.7	81.4	172.5	41.9	163.8	94.4	120.0	282.8	23.7	20.4	1220.0	26.0
2.3.3 Community designs	121.8	116.2	19.2	67.7	280.4	222.6	17.9	132.7	7.0	104.5	107.5	184.2	31.2	21.0	2.6	1018.6	18.3
2.3.4 Technology Balance of Payments flows	1.07	0.66	0.25	0.39	--	0.47	0.22	9.92	0.15	0.28	0.42	0.16	0.42	0.16	0.08	1.31	1.49
OUTPUTS																	
Innovators																	
3.1.1SMEs introducing product or process innovations	33.7	45.4	17.8	32.0	35.7	52.8	45.8	43.8	37.3	29.5	29.9	33.0	37.9	14.4	19.7	44.7	16.8
3.1.2 SMEs introducing marketing or organisational innovations	40.0	45.3	15.7	36.2	45.4	68.1	48.4	40.9	51.3	29.5	41.3	37.5	50.9	--	28.5	60.2	26.4
3.1.3 Resource efficiency innovators	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3.1.3a Reduced labour costs	18.0	15.6	15.9	18.2	11.5	15.1	14.3	19.3	26.2	12.9	34.9	18.1	29.2	6.2	10.7	12.9	6.2
3.1.3b Reduced use of materials and energy	9.6	8.8	13.2	14.2	7.3	9.5	7.8	10.2	20.7	8.5	15.9	4.4	19.9	5.4	8.5	6.8	7.2
Economic effects																	
3.2.1Employment in medium-high & high-tech manufacturing	6.69	6.31	5.18	10.85	6.03	10.72	3.90	5.26	2.38	4.47	6.35	7.59	0.90	1.88	2.44	1.08	8.82
3.2.2 Employment in knowledge-intensive services	14.51	15.54	8.35	10.92	15.37	15.58	11.01	16.05	11.06	14.22	15.76	15.57	15.80	10.57	8.19	23.94	11.35
3.2.3 Medium-tech and high-tech manufacturing exports	48.1	48.7	21.2	61.3	41.2	65.5	36.2	51.8	28.3	52.3	58.9	51.1	45.9	23.8	33.1	32.7	69.3
3.2.4 Knowledge-intensive services exports	48.7	43.9	18.2	35.5	67.2	53.8	38.5	70.5	51.8	--	--	--	35.4	37.6	13.8	82.4	25.6
3.2.5 New-to-market sales	8.60	6.16	6.70	9.93	3.79	9.12	4.43	7.19	16.60	7.37	6.16	4.53	5.29	2.10	6.04	5.91	7.82
3.2.6 New-to-firm sales	6.28	7.39	3.59	4.72	4.05	10.11	9.27	5.43	9.04	8.48	5.56	4.52	7.04	1.25	6.39	6.54	2.70

Annex A: European Innovation Scoreboard 2008 – Current performance

	EU27	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	HR	TR	IS	NO	CH
ENABLERS																	
Human resources																	
1.1.1 S&E and SSH graduates	40.3	31.8	36.0	21.6	52.9	30.6	40.9	41.0	24.4	38.3	29.7	52.0	21.9	12.6	45.3	29.4	48.5
1.1.2 S&E and SSH doctorate graduates	1.11	0.03	0.87	1.72	0.86	2.75	0.48	0.96	0.89	2.17	2.25	1.61	0.47	0.12	0.12	0.94	2.33
1.1.3 Tertiary education	23.5	12.5	30.8	17.6	18.7	13.7	12.0	22.2	14.4	36.4	31.3	31.9	16.2	9.7	29.5	34.4	31.3
1.1.4 Life-long learning	9.7	6.0	16.6	12.8	5.1	4.4	1.3	14.8	3.9	23.4	32.0	26.6	2.9	1.5	27.9	18.0	22.5
1.1.5 Youth education	78.1	54.7	76.2	84.1	91.6	53.4	77.4	91.5	91.3	86.5	87.2	78.1	94.6	46.4	49.3	93.3	78.1
Finance and support																	
1.2.1 Public R&D expenditures	0.65	0.21	0.67	0.75	0.38	0.46	0.31	0.60	0.27	0.94	0.99	0.64	0.55	0.37	1.26	0.77	0.69
1.2.2 Venture capital	0.107	--	0.107	0.037	0.017	0.060	0.067	--	0.007	0.183	0.287	0.483	--	--	--	0.117	0.141
1.2.3 Private credit	1.31	1.19	1.95	1.29	0.40	1.69	0.26	0.81	0.42	0.84	1.24	1.90	0.72	0.29	3.20	0.87	1.78
1.2.4 Broadband access by firms	77.0	89.0	87.0	72.0	53.0	76.0	37.0	79.0	76.0	91.0	87.0	78.0	--	80.0	95.0	85.0	85.0
FIRM ACTIVITIES																	
Firm investments																	
2.1.1 Business R&D expenditures	1.17	0.39	1.03	1.81	0.18	0.61	0.22	0.94	0.18	2.51	2.64	1.08	0.38	0.21	1.43	0.81	2.14
2.1.2 IT expenditures	2.7	--	3.3	2.8	2.6	1.8	2.1	2.2	2.5	3.2	3.8	3.5	--	--	--	2.4	3.7
2.1.3 Non-R&D innovation expenditures	1.03	1.10	0.29	--	1.03	0.95	1.08	1.12	1.51	--	0.66	--	0.85	0.16	--	0.17	0.92
Linkages & entrepreneurship																	
2.2.1 SMEs innovating in-house	30.0	--	27.3	41.1	17.2	34.1	17.9	--	17.9	40.9	41.8	--	24.4	28.2	--	25.9	34.4
2.2.2 Innovative SMEs collaborating with others	9.5	5.7	12.5	18.0	9.3	6.7	2.9	15.1	7.2	27.5	16.6	10.7	9.6	5.3	14.0	9.8	12.1
2.2.3 Firm renewal (SMEs entries + exits)	5.1	--	6.3	--	--	4.1	8.7	2.2	4.8	0.7	2.3	10.3	--	--	--	2.9	3.8
2.2.4 Public-private co-publications	31.4	0.0	83.7	58.0	13	4.0	3.1	28.2	4.5	83.1	116.1	54.7	11.9	0.3	94.4	38.5	193.1
Throughputs																	
2.3.1 EPO patents	105.7	21.6	173.3	183.1	3.0	7.4	0.7	32.2	5.8	267.6	184.8	91.4	5.0	1.0	52.6	95.5	411.1
2.3.2 Community trademarks	124.6	127.1	195.8	237.1	33.2	118.5	13.5	68.7	20.6	137.3	201.9	153.1	4.5	1.9	324.8	51.2	350.3
2.3.3 Community designs	121.8	46.7	135.3	284.6	45.5	55.8	3.0	50.5	18.0	116.8	161.9	87.1	2.9	4.5	20.2	67.1	372.7
2.3.4 Technology Balance of Payments flows	1.07	2.77	1.21	0.50	0.40	0.22	0.22	0.46	0.43	1.61	1.45	0.99	0.52	0.12	0.03	0.39	5.48
OUTPUTS																	
Innovators																	
3.1.1 SMEs introducing product or process innovations	33.7	14.4	32.9	47.8	20.4	38.7	19.4	31.7	21.4	44.7	40.7	25.1	28.3	29.5	--	29.8	52.9
3.1.2 SMEs introducing marketing or organisational innovations	40.0	31.8	29.0	54.9	29.1	53.4	35.4	--	21.5	--	--	30.3	38.1	50.3	--	34.7	--
3.1.3 Resource efficiency innovators	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3.1.3a Reduced labour costs	18.0	11.8	16.6	11.9	13.8	22.4	18.3	28.4	8.0	10.7	17.0	--	19.9	19.0	13.8	10.0	--
3.1.3b Reduced use of materials and energy	9.6	7.7	10.5	9.7	11.6	15.0	14.8	17.2	10.8	5.2	7.1	--	15.1	10.2	5.7	4.3	--
Economic effects																	
3.2.1 Employment in medium-high & high-tech manufacturing	6.69	6.16	3.15	6.66	5.50	3.45	5.66	9.09	9.89	7.03	6.20	5.40	4.70	3.60	1.70	4.21	7.19
3.2.2 Employment in knowledge-intensive services	14.51	15.22	17.97	14.15	10.33	9.65	5.26	10.89	9.86	16.49	19.45	18.64	9.71	5.53	17.15	16.05	19.85
3.2.3 Medium-tech and high-tech manufacturing exports	48.1	74.5	48.3	53.2	48.9	38.7	37.5	54.2	57.2	51.5	54.8	58.2	39.5	38.0	15.7	11.4	63.0
3.2.4 Knowledge-intensive services exports	48.7	23.0	39.9	31.3	27.9	27.5	46.6	20.7	20.8	26.7	49.7	8.9	14.8	12.9	20.7	54.8	32.4
3.2.5 New-to-market sales	8.60	24.79	6.02	6.56	4.56	7.17	4.85	5.83	7.79	10.84	8.29	3.70	4.58	4.65	4.88	1.61	4.90
3.2.6 New-to-firm sales	6.28	3.85	4.87	7.08	5.55	6.12	13.69	7.50	8.95	4.83	5.10	4.81	8.45	11.17	7.81	3.17	5.80

Annex E: European Innovation Scoreboard 2008 – Country abbreviations

AT	Austria	IT	Italy
BE	Belgium	JP	Japan
BG	Bulgaria	LT	Lithuania
CH	Switzerland	LU	Luxembourg
CY	Cyprus	LV	Latvia
CZ	Czech Republic	MT	Malta
DE	Germany	NL	Netherlands
DK	Denmark	NO	Norway
EE	Estonia	PL	Poland
ES	Spain	PT	Portugal
EU27	EU27	RO	Romania
FI	Finland	SE	Sweden
FR	France	SI	Slovenia
GR	Greece	SK	Slovakia
HR	Croatia	TR	Turkey
HU	Hungary	UK	United Kingdom
IE	Ireland	US	United States
IS	Iceland		

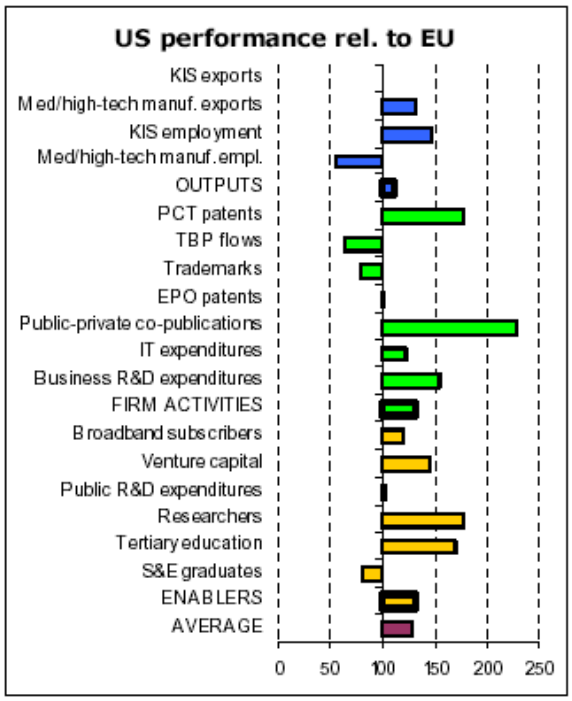
SOURCES:

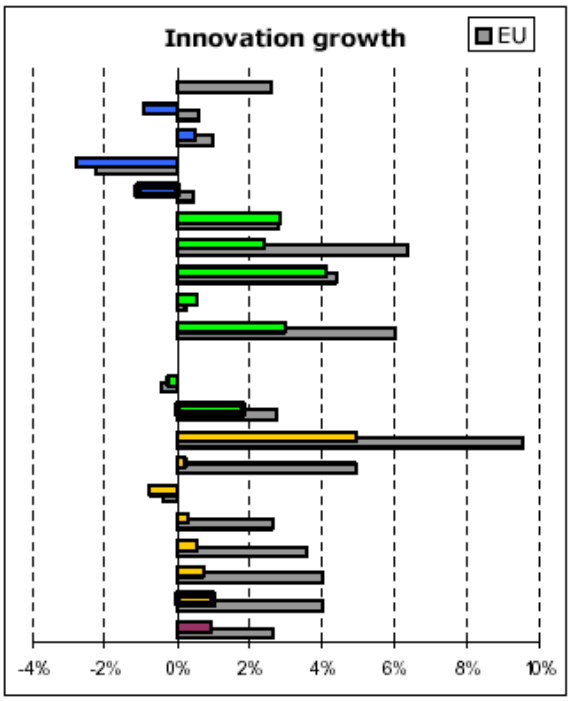
http://www.proinno-europe.eu/EIS2008/website/docs/EIS_2008_Final_report.pdf

http://ec.europa.eu/research/era/pdf/key-figures-report2008-2009_en.pdf

http://ec.europa.eu/research/era/publication_en.cfm

FIGURE 11: EU-US COMPARISON



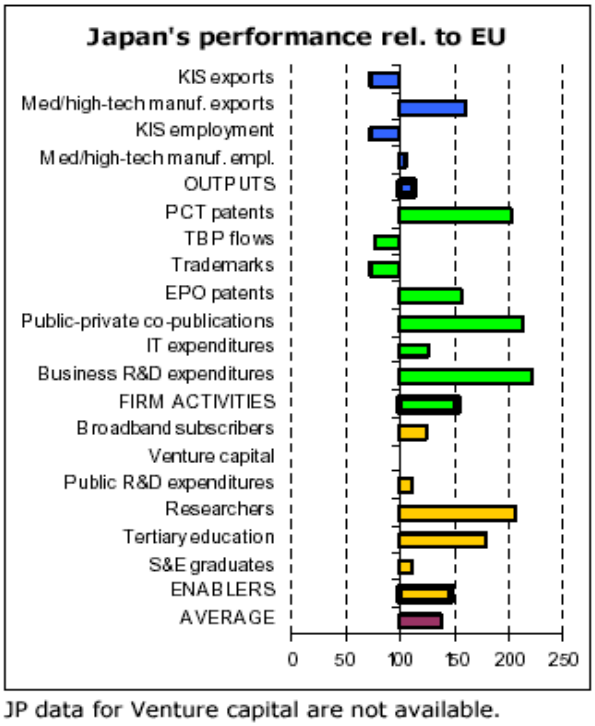


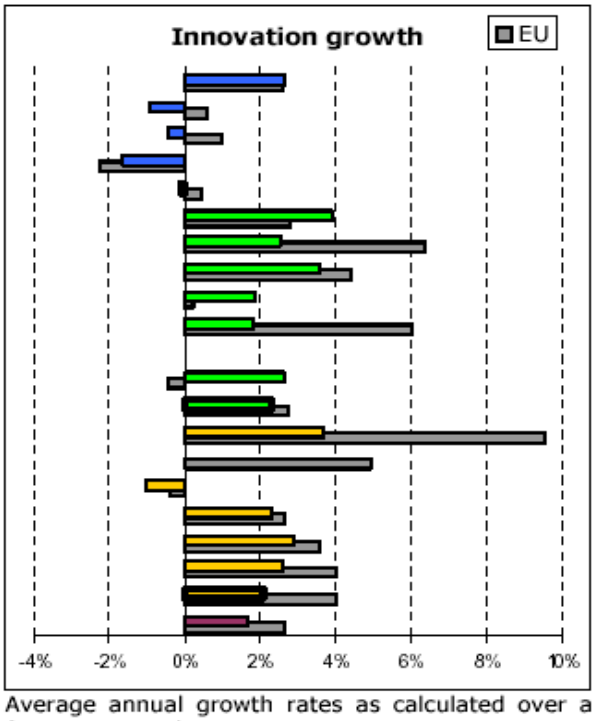
US data for KIS exports are not available.

Average annual growth rates as calculated over a five-year period.

The indicators reflecting Enablers are highlighted in yellow, those reflecting Firm activities in green and those reflecting Outputs in green.

FIGURE 12: EU-JAPAN COMPARISON





JP data for Venture capital are not available.

Average annual growth rates as calculated over a five-year period.

The indicators reflecting Enablers are highlighted in yellow, those reflecting Firm activities in green and those reflecting Outputs in green.

TABLE 3: EU27-US-JAPAN INDICATORS

	Data source	Reference year
ENABLERS		
* S&E graduates per 1000 population aged 20-29	Eurostat	2006
Population with tertiary education per 100 population aged 25-64	Eurostat	2006
* Researchers per 1000 population	OECD (MSTI database)	2006 (2005 for US)
Public R&D expenditures (% of GDP)	Eurostat	2006
Venture capital (% of GDP)	EVCA / Eurostat	2007 (no data for JP)
* Broadband subscribers per 1000 population	World Development Indicators (WorldBank)	2005
FIRM ACTIVITIES		
Business R&D expenditures (% of GDP)	Eurostat	2006
IT expenditures (% of GDP)	EITO / Eurostat	2006
Public-private co-publications per million population	Thomson Reuters / CWTS	2006
EPO patents per million population	Eurostat	2005
* PCT patents per million population	OECD	2005
* Trademarks per million population, average of: • Community trademarks per million population • Trademark applications (residents) per million population	 OHIM / Eurostat World Development Indicators (WorldBank)	 2007 2005
Technology Balance of Payments flows (% of GDP)	World Development Indicators (WorldBank)	2006
OUTPUTS		
Employment in medium-high & high-tech manufacturing (% of workforce)	Eurostat / OECD	2006 (2003 for JP)
Employment in knowledge-intensive services (% of workforce)	Eurostat / OECD	2006 (2003 for JP)
Medium and high-tech manufacturing exports (% of total exports)	Eurostat	2006
Knowledge-intensive services exports (% of total services exports)	Eurostat	2006 (no data for US)

The indicators highlighted with an * are not identical to but proxies for the EIS indicators.

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Table 1.1: Main indicators for population, 1960 and 2012

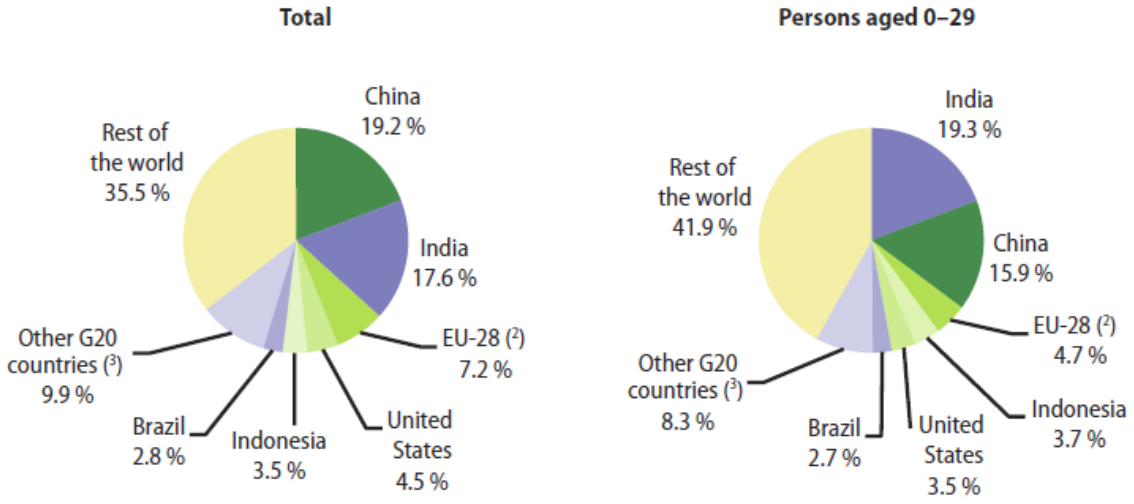
	Population (million)		Share in world population (% of total)		Population density (inhabitants per km²) (²)	
	1960	2012	1960	2012	1960	2011
EU-28 (¹)	*408.4*	*505.2*	*13.4*	*7.3*	*92.9*	*116.9*
Argentina	20.6	41.1	0.7	0.6	7.5	14.9
Australia	10.3	*22.7*	0.3	*0.3*	1.3	*2.9*
Brazil	72.8	198.7	2.4	2.8	8.6	23.3
Canada	17.9	34.9	0.6	0.5	2.0	3.8
China	667.1	1 350.7	22.0	19.2	71.5	144.1
India	449.6	1 236.7	14.8	17.6	151.2	410.7
Indonesia	88.7	246.9	2.9	3.5	49.0	134.6
Japan	92.5	127.6	3.0	1.8	252.3	350.7
Mexico	38.7	120.8	1.3	1.7	19.9	61.4
Russia	119.9	*143.5*	3.9	*2.0*	7.0	8.7
Saudi Arabia	4.1	28.3	0.1	0.4	1.9	12.9
South Africa	17.4	*51.2*	0.6	*0.7*	14.3	41.7
South Korea	25.1	50.0	0.8	0.7	254.0	512.7
Turkey	27.6	75.2	0.9	1.1	35.8	96.4
United States	180.7	313.9	5.9	4.5	19.7	34.1
World	3 036.8	7 046.4	100.0	100.0	23.3	53.6

(¹) 1960 population: excluding French overseas departments and territories. Annual average.
(²) G20 countries: 1961 data for land area used instead of 1960.

Source: Eurostat (online data codes: demo_gind and tps00003), the World Bank (Health Nutrition and Population Statistics), the Food and Agriculture Organisation of the United Nations (FAOSTAT: Resources) and the United Nations Department of Economic and Social Affairs (World Population Prospects: the 2012 revision)

Figure 1.1: Share of world population, 2012 (1)

(%)



(1) Shares do not sum to 100 % due to rounding.
(2) Provisional.
(3) Russia, Japan, Mexico, Turkey, South Africa, South Korea, Argentina, Canada, Saudi Arabia and Australia. Data for Russia, South Africa and Australia: provisional.

Source: Eurostat (online data code: demo_pjangroup) and the World Bank (Health Nutrition and Population Statistics)

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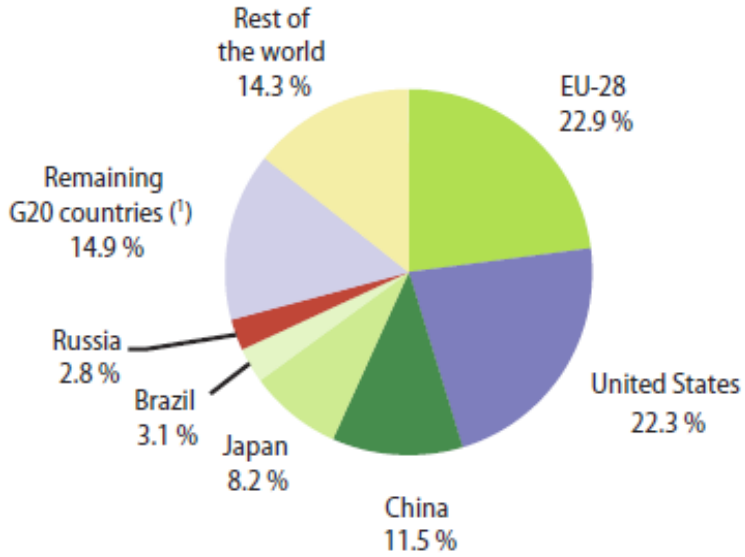
Figure 6.1: Share of world GDP, 2012

(%)



(1) India, Canada, Australia, Mexico, South Korea, Indonesia, Turkey, Saudi Arabia, Argentina and South Africa.

Source: Eurostat (online data code: nama_gdp_c) and the United Nations Statistics Division (National Accounts Main Aggregates Database)

Figure 6.2: Share of world GDP, 2002 and 2012

(%, based on current international PPP)

(1) 2012: value is zero.

Source: the World Bank (World Development Indicators)

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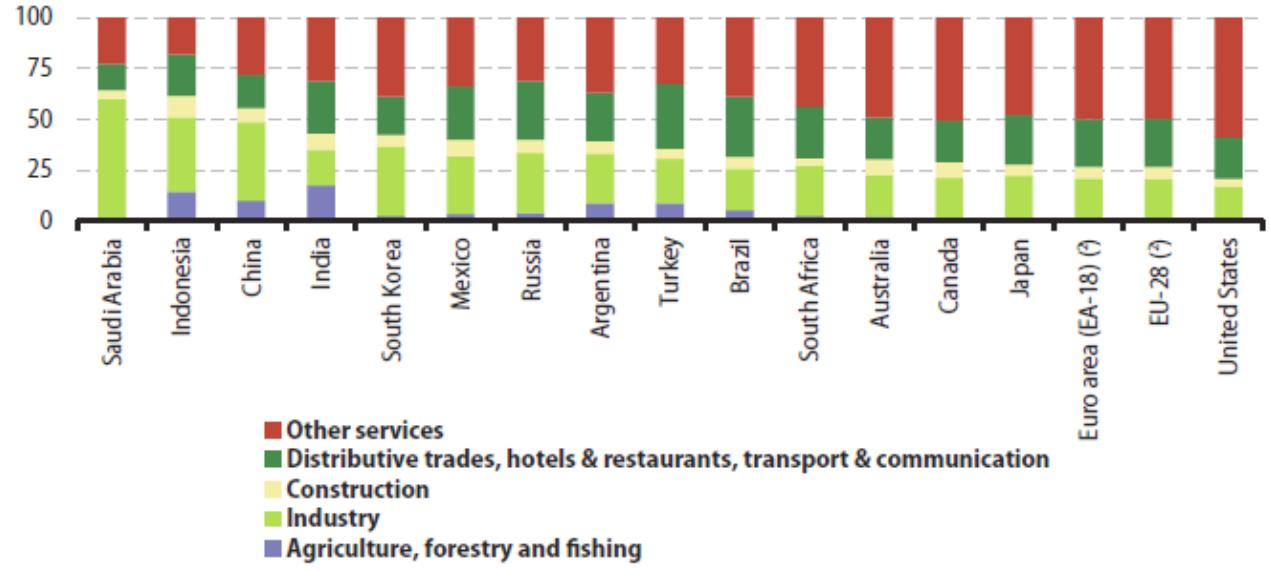
Figure 6.5: Analysis of GDP, 2012 (1)

(% of total)



(1) Ranked on the combined share of distributive trades, hotels and restaurants, transport and communication and other services.
(2) Based on NACE Rev. 2.

Source: Eurostat (online data code: nama_nace10_c) and the United Nations Statistics Division (National Accounts Main Aggregates Database)

Table 6.1: General government finances, 2002 and 2012

(% of GDP)

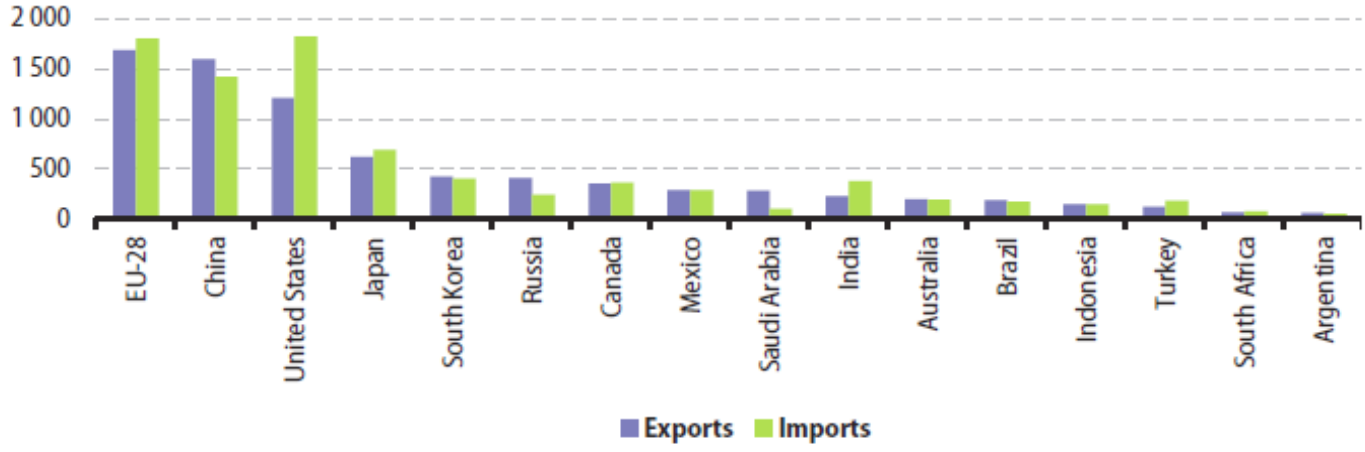
	Expenditure		Revenue		Deficit/ surplus		Gross debt	
	2002	2012	2002	2012	2002	2012	2002	2012
EU-28 (1)	46.6	49.3	43.9	45.4	-2.6	-3.9	60.3	85.1
Euro area (EA-18) (2)	47.5	49.9	44.8	46.3	-2.7	-3.7	68.0	90.5
Argentina	38.9	44.5	23.0	40.2	-15.9	-4.3	165.0	47.7
Australia	35.1	37.1	35.3	33.3	0.2	-3.7	15.1	27.9
Brazil	39.6	40.4	35.1	37.7	-4.4	-2.7	79.4	68.0
Canada	40.6	41.1	40.6	37.8	0.0	-3.4	80.6	85.3
China	18.9	24.9	15.9	22.7	-3.0	-2.2	18.9	26.1
India	27.5	*27.3*	17.8	*19.4*	-9.8	*-8.0*	83.0	*66.7*
Indonesia	18.7	19.7	17.9	18.0	-0.9	-1.7	67.8	24.5
Japan	36.6	*41.3*	28.9	*31.1*	-7.7	*-10.1*	164.0	*238.0*
Mexico (3)	21.9	27.3	18.5	23.6	-3.3	-3.7	43.0	43.5
Russia	36.3	37.0	37.0	37.4	0.7	0.4	40.3	12.5
Saudi Arabia	37.6	36.8	35.9	51.8	-1.7	15.0	93.7	3.7
South Africa	25.8	32.7	24.7	27.9	-1.1	-4.8	36.9	42.3
South Korea (4)	17.9	21.4	21.6	23.3	3.6	1.9	18.6	35.0
Turkey	43.2	36.4	28.8	34.8	-14.4	-1.6	74.0	36.2
United States	34.6	38.8	30.9	30.4	-3.8	-8.3	55.4	102.7

(1) 2002: EU-27.
(2) Expenditure and revenue: EA-17.
(3) Central government instead of general government.
(4) Expenditure, revenue and deficit/surplus: central government instead of general government.

Source: Eurostat (online data codes: gov_a_main and gov_dd_edpt1) and the International Monetary Fund (World Economic Outlook, 2013)

Figure 7.2: Trade in goods, 2012 (1)

(EUR billion)



(1) EU-28: extra-EU flows. Other countries: flows with the rest of the world.

Source: Eurostat (Comext) and the United Nations (Comtrade)

Table 7.1: Trade in goods and services, 2012 (1)

(% of GDP)

	Goods			Services		
	Credits	Debits	Balance	Credits	Debits	Balance
EU-28	13.1	13.6	-0.4	5.1	3.9	1.2
Argentina	17.0	14.4	2.6	3.2	3.9	-0.7
Australia	16.4	16.7	-0.3	3.4	4.1	-0.7
Brazil	10.8	10.3	0.4	1.8	3.6	-1.8
Canada	25.0	26.1	-1.1	4.3	5.8	-1.5
China	24.5	21.7	2.8	2.3	3.4	-1.1
India	15.7	26.1	-10.4	7.5	6.8	0.7
Indonesia	21.4	21.7	-0.2	2.6	3.9	-1.2
Japan	13.4	14.9	-1.5	2.4	3.0	-0.5
Mexico	31.3	32.1	-0.8	1.4	2.5	-1.1
Russia	26.3	16.7	9.6	2.9	5.3	-2.3
Saudi Arabia	54.6	21.9	32.7	1.6	10.3	-8.8
South Africa	22.7	32.3	-9.6	3.9	4.6	-0.7
South Korea	48.5	46.0	2.5	9.8	9.6	0.2
Turkey	19.4	30.1	-10.7	5.4	2.6	2.8
United States	9.5	14.4	-4.9	3.9	2.7	1.2

(1) EU-28: extra-EU flows. Other countries: flows with the rest of the world.

Source: Eurostat (online data codes: bop_q_eu and nama_gdp_c), the World Bank (World Development Indicators, based on International Monetary Fund (Balance of Payments Statistics Yearbook and data files), World Bank and OECD (GDP estimates))

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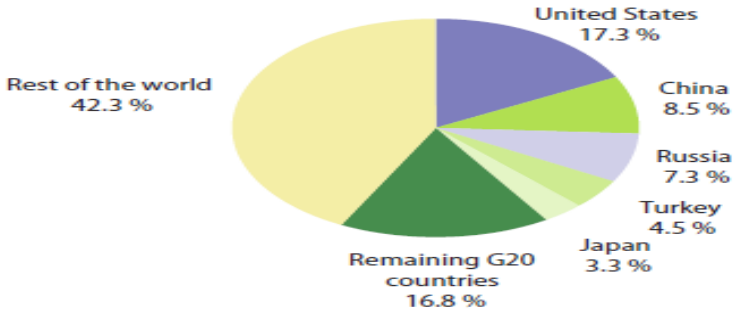
Figure 6.8: Current account balance, 2002 and 2012

(EUR billion)

(1) 2012: estimates.

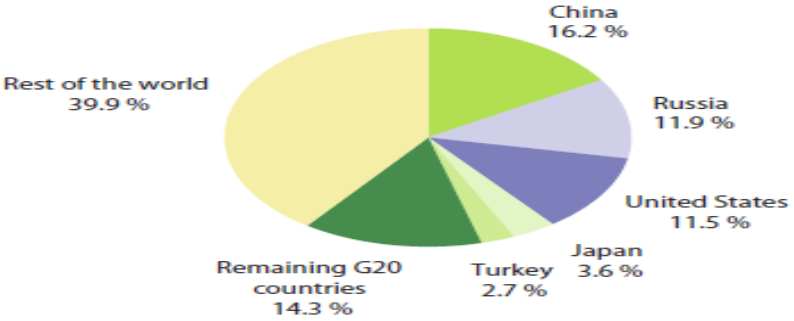
Source: Eurostat (online data codes: bop_q_eu, bop_q_euro and nama_gdp_c) and the International Monetary Fund (World Economic Outlook, 2013)

Figure 7.3: Main G20 trading partners for EU-27 exports of goods, 2012
(% share of extra-EU-27 exports)



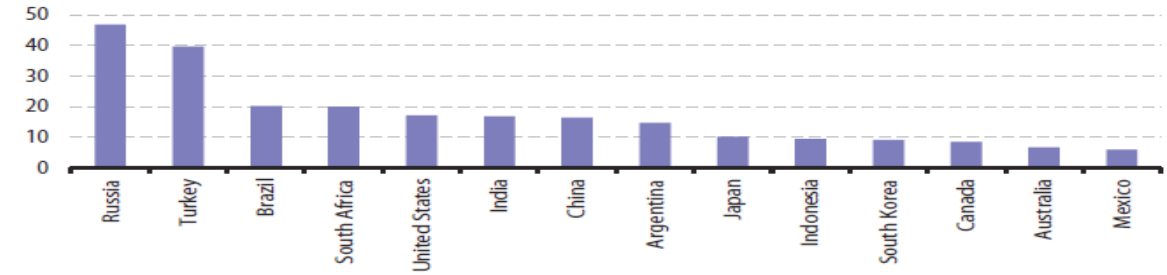
Source: Eurostat (online data code: ext_lt_maineu)

Figure 7.4: Main G20 trading partners for EU-27 imports of goods, 2012
(% share of extra-EU-27 imports)



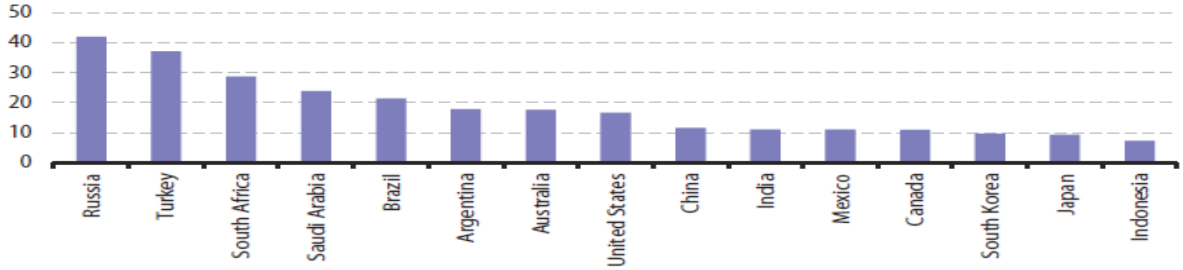
Source: Eurostat (online data code: ext_lt_maineu)

Figure 7.5: Share of EU-28 as destination for all goods exported, 2012 (1)
(%)



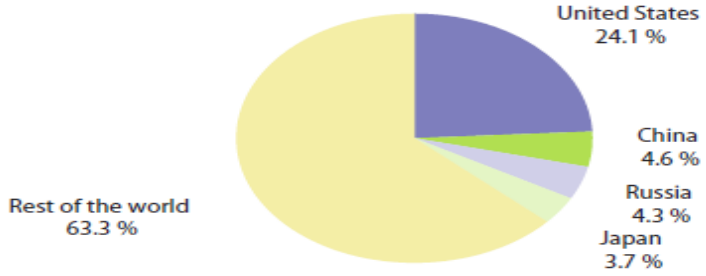
(1) Saudi Arabia: not available.
Source: the United Nations (Comtrade)

Figure 7.6: Share of EU-28 as origin of all goods imported, 2012
(%)



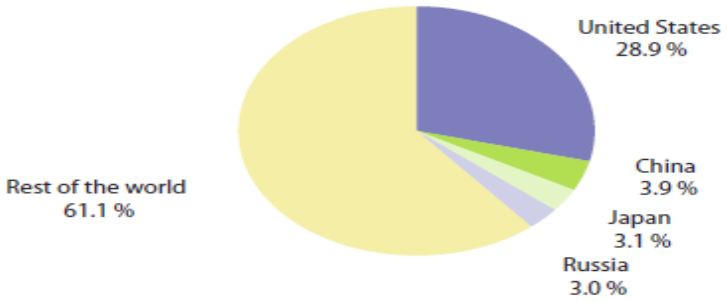
Source: the United Nations (Comtrade)

Figure 7.7: Selected G20 trading partners for EU-27 exports of services, 2012 (1)
(% share of extra-EU-27 exports)



(1) Provisional.
Source: Eurostat (online data code: bop_its_ybk)

Figure 7.8: Selected G20 trading partners for EU-27 imports of services, 2012 (1)
(% share of extra-EU-27 imports)



(1) Provisional.
Source: Eurostat (online data code: bop_its_ybk)

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I sistemi nazionali di innovazione (SIN)

Le attività tramite le quali un'impresa introduce nuovi processi produttivi e crea nuovi prodotti sono influenzate dalle infrastrutture economiche e sociali e dal contesto istituzionale in cui le imprese agiscono.

Lo studio dei sistemi nazionali di innovazione si è occupato dei fattori istituzionali, che hanno determinato la diversità tra i paesi in termini di performance innovativa delle imprese. Esso consiste nello studio dei meccanismi di **coevoluzione** tra lo sviluppo dei **sentieri nazionali di specializzazione** e il **vantaggio competitivo e** lo sviluppo delle **competenze all'interno delle imprese** e della **struttura istituzionale** (Gran Bretagna, Stati Uniti, Germania, Giappone).

Tra i fattori che hanno condizionato il diverso sviluppo economico e tecnologico dei singoli paesi in specifiche fasi storiche in alcuni paesi (Germania) sono: lo sviluppo di un **efficiente sistema educativo e della formazione professionale**, la diffusione di **industrie di beni strumentali**, la creazione di **grandi laboratori di ricerca**, la realizzazione di **reti di infrastrutture di trasporto e comunicazione**, l'adozione di **innovazioni di tipo organizzativo** (taylorismo), lo sviluppo di strette **relazioni industria-università** (formazione di tecnici e stimolo ad innovazioni radicali).

L'insieme delle organizzazioni, istituzioni e infrastrutture di supporto all'attività innovativa delle imprese costituisce **un sistema nazionale o locale dell'innovazione (Freeman 1987).**

I sistemi di innovazione nazionali e locali sono diversi non solo in termini di **performance innovativa**, ma anche in termini di **connettività**, cioè di efficacia nella creazione e trasmissione della conoscenza e delle competenze tra le imprese e le diverse istituzioni e organizzazioni.
Gli elementi di un sistema nazionale di innovazione

Un sistema di innovazione nazionale è dato da un **insieme di componenti economiche e sociali** tra loro interrelate, che contribuisce a **spiegare il comportamento innovativo delle imprese**. Si tratta di **un approccio eclettico e aperto**, in gran parte influenzato dalle **teorie evolutive**.

Il sistema innovativo nazionale rappresenta una rete di istituzioni del settore pubblico e privato le cui attività e interazioni introducono, importano, modificano e diffondono **le nuove tecnologie** (Freeman 1987, Nelson e Rosenberg 1993).

Secondo **un'accezione più ampia**, esso può includere tutti gli aspetti della **struttura istituzionale che influenzano l'apprendimento** e la ricerca del **cambiamento**. L'apprendimento interattivo è favorito dalla **struttura delle relazioni clienti-fornitori**, dalle **relazioni tra le imprese e tra imprese e organizzazioni** (Lundvall 1992).

In questo contesto **l'innovazione è definita in termini ampi**, come capacità di sviluppare **prodotti e processi** che sono **nuovi per l'impresa**, anche se si tratta di innovazioni che **non spostano la frontiera della tecnologia** a scala globale.

Le istituzioni sono tutti gli usi, i costumi, le regole, i sistemi giuridici, le norme consolidate e le leggi che regolano le interazioni tra le persone e le imprese. Le istituzioni assicurano un certo grado di **stabilità istituzionale, culturale e organizzativa** e perciò riducono l'**incertezza** e l'ammontare di **informazioni necessarie** per le scelte e le azioni e permettono di immagazzinare e trasferire conoscenza.

Tra le **organizzazioni o i fattori** più rilevanti sono quindi: **i clienti e i fornitori, le istituzioni pubbliche** dei diversi livelli e le loro politiche tecnologiche, **le istituzioni di formazione e ricerca,** come le università e i laboratori di ricerca pubblici e privati, **le banche e gli altri intermediari finanziari** ed anche **il sistema dei servizi alle imprese specialistici, il sistema delle relazioni industriali e dei rapporti tra imprese e lavoratori e sindacati, il sistema a rete di collaborazioni produttive e tecnologiche e di compartecipazioni finanziarie tra le imprese**.

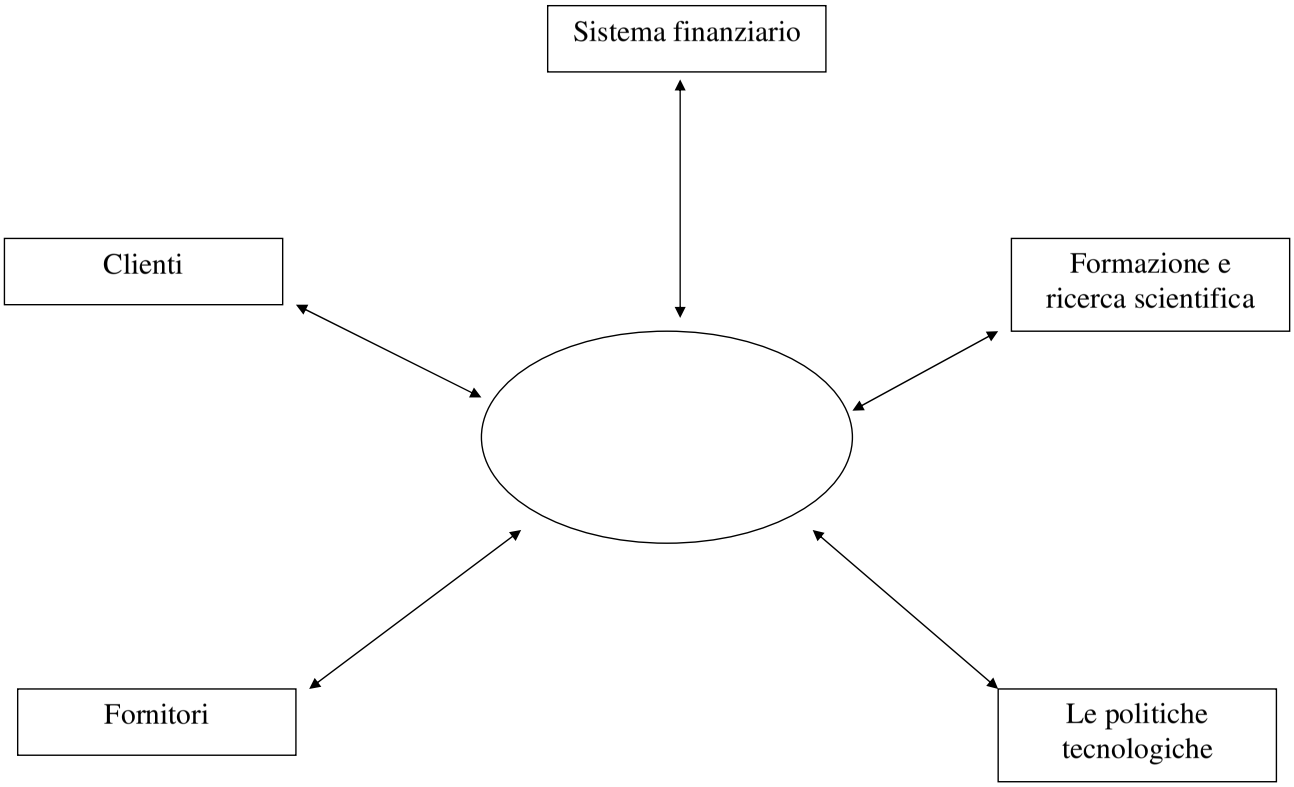
Le politiche seguite in Italia verso:

- mercato del lavoro e il sistema delle relazioni industriali imprese-sindacato
- pubblica amministrazione
- ricerca scientifica e università e politiche della innovazione
- sistema bancario e finanziario
- investimenti in innovazione delle piccole e medie imprese e M&A tra grandi imprese

sono responsabili del basso tasso di crescita del "sistema di innovazione" / economia italiana negli ultimi dieci anni.

La crescita italiana è stata minore di quella di quasi tutti i paesi europei da quasi 20 anni. Infatti, l'OCSE stima (cfr. Looking to 2060: Long-term growth prospects for the world, http://stats.oecd.org/Index.aspx?DataSetCode=EO91_LTB) che l'Italia è cresciuta nel periodo 1995-2011 solo dell'1%, meno di Francia (1,7%) e Germania (1,4%), e prevede che crescerà solo dell'1,3% nel periodo 2011-2030, meno di tutti i paesi europei, Grecia inclusa.

Anche nel periodo 2011-2012 l'economia italiana è cresciuta meno degli altri grandi paesi europei.



Una visione stilizzata del sistema nazionale/locale dell'innovazione

Le interazione tra imprese: le interazione cliente-fornitore (ICF)

Il progresso tecnologico rappresenta un processo generalmente cumulativo che tende a svilupparsi secondo una traiettoria in larga parte determinata dal **quadro cognitivo degli agenti coinvolti**. In questo processo **l'apprendimento interattivo** rappresenta uno dei modi tramite i quali le imprese gestiscono una conoscenza che è in parte tacita e specifica alle singole imprese.

Le imprese possono trarre vantaggio da rapporti stabili con i clienti e con in fornitori, al fine di mettere in moto meccanismi di confronto e di apprendimento interattivo riguardo alle necessità degli utilizzatori e alle opportunità tecnologiche emergenti e fattibilità economica e tecnica dei nuovi processi.

Quanto maggiore è la velocità del cambiamento e l'incertezza, tanto maggiore è l'importanza della stabilità delle relazioni, che permette lo sviluppo di linguaggi e codice di comunicazione comune e di relazioni personali e informali, permette **risparmi in termini di costi di transazione** e riduce i costi legati ad **asimmetrie informative**, quali i rischi di **comportamenti opportunistici** e fenomeni di **selezione avversa**.

Il fenomeno per cui la parte meno informata si trova a trattare (vendita di auto usate, contratti di assicurazione) **con le persone che vorrebbe evitare** si chiama "**selezione avversa**". Gli agenti più informati si autoselezionano in modo da determinare una danno per la parte meno informata **(situazione *ex ante*).**

Inoltre, in un contesto di incertezza e di **difficoltà di controllo** (**moral hazard**) alcuni soggetti potrebbero **essere incentivati a tenere un comportamento sleale** (opportunismo e scarso impegno di un manager scorretto), salvo attribuire il risultato non positivo ad eventi casuali **(situazione *ex post*).**

Le interazione tra imprese: le interazioni verticali e orizzontali

Considerando le **relazioni verticali,** lo sviluppo di attività innovative è favorito dalla **presenza in un dato paese o regione di clienti e produttori di componenti competenti**, che abbiano la capacità di formulare problemi e richieste in maniera appropriata.

I processi di tipo interattivo sono favoriti da una **ridotta distanza geografica e culturale.** Pertanto, le relazioni cliente-fornitore possono essere influenzate da **fattori nazionali specifici**, quali la presenza di **network locali di imprese**, composti principalmente da piccole e medie imprese appartenenti allo stesso settore. Le relazioni tra le imprese sono facilitate dall'**omogeneità sociale e culturale**, che favorisce la **diffusione di modelli organizzativi e di tecnologie appropriate**.

Invece, le **interazioni orizzontali tra le imprese** nel processo innovativo possono essere date dalle **attività di cooperazione tecnologica** tra imprese oppure da **meccanismi competitivi**.

Gli accordi di cooperazione consentono di **mettere insieme le limitate risorse dedicate alla ricerca** delle singole imprese e di avere accesso a competenze chiave per lo sviluppo della conoscenza scientifica. I processi di tipo interattivo sono facilitati dagli **accordi di cooperazione** che creano una situazione in cui le **relazioni sono personalizzate, stabili e di reciproca fiducia**. Tali situazioni possono avere un **carattere locale o nazionale**, dato che la gran parte delle attività di cooperazione tra le imprese avviene a scala locale o nazionale.

Nei singoli paesi emergono diverse forme delle relazioni tra le imprese che hanno favorito la cooperazione tra le stesse. Ad esempio il "network" fatto da interazioni ripetute e da **forti legami di integrazione** delle imprese **nella Silicon Valley (California)** contrasta con la **mera concentrazione**, senza effetti significativi di sinergia, tipico della **Route 128 (Boston), che non ha portato alla creazione di un network**.

I **grandi gruppi industriali giapponesi** sono caratterizzati da soluzioni istituzionali come il **possesso incrociato di azioni** e l'esistenza di momenti specifici di incontro dei **dirigenti aziendali**, dalla condivisione di personale, servizi e attrezzature.

Lo sviluppo della cooperazione può essere giustificato dalla intenzione di **proteggere talune tecnologie chiave**. Inoltre, la cooperazione può tradursi in **strutture oligopolistiche altamente concentrate**, che distorcono il mercato.

I modelli competitivi sono forme istituzionali socialmente costruite e storicamente determinate la cui architettura dipende, in parte, da **scelte di politica industriale**.

L'assetto istituzionale in Giappone sembra aver favorito (Freeman 1987) un tipo di **concorrenza fondata sul progresso tecnico, la qualità e la differenziazione del prodotto** e aver incoraggiato la formazione, la ricerca e le scelte di investimento.

In Asia mercati regolamentati al fine di proteggere e promuovere industrie allo stato nascente possono aver stimolato l'apprendimento cumulativo e lo sviluppo di competenze tecniche a scala nazionale.

Un **mercato dei capitali orientato al profitto di breve periodo**, una **competitività basata principalmente sui costi** non forniscono gli stessi incentivi per **scelte di investimento orientate verso obiettivi di lungo periodo.**

Le istituzioni di ricerca scientifica e il sistema educativo

Alcuni **settori (science based)** sono nati sotto la **spinta esogena (technology push) di nuove scoperte scientifiche**, come ad esempio l'elettricità, la radio e la televisione. In molti altri casi, come nel settore chimico e nel settore aeronautico, sono state **le nuove tecnologie produttive e lo sviluppo di nuovi processi produttivi** a stimolare la ricerca scientifica e a stimolare **l'apertura di nuovi campi di ricerca** (**demand pull**).

Un ruolo fondamentale nell'interfaccia tra le scoperte scientifiche ed il cambiamento tecnologico interno alle imprese è svolto dallo sviluppo delle cosiddette **scienze di trasferimento (transfer sciences**). Le scienze di trasferimento hanno lo scopo di risolvere problemi strettamente connessi con l'attività economica (**ingegneria meccanica, civile, elettrica e chimica, ottica, laser, microelettronica, robotica, scienze informatiche, biotecnologia, microbiologia, chimica e farmaceutica**). In questi campi la ricerca viene finanziata in gran parte dall'industria e **la comunità degli scienziati in tali campi è strettamente legata alla comunità economica**, che ha un interesse immediato nella applicazione dei risultati ottenuti.

Le **competenze tecnico-scientifiche** vengono sviluppate dalle imprese grazie al **rapporto con il sistema educativo, come le università**, e attraverso lo scambio di conoscenza e di personale con **laboratori e centri di ricerca pubblici e privati**. Pertanto, le istituzioni che si occupano dell'avanzamento della frontiera della conoscenza **devono essere studiate in stretta relazione con il tessuto produttivo in cui sono integrate**. L'università fornisce a) **cultura generale** in campo tecnologico, b) **specifiche competenze** tecniche-scientifiche, c) **ricerca scientifica** di base e applicata. L'intensità e la rilevanza dell'interazione tra università e industria cambia considerevolmente nel tempo, nei diversi paesi, lungo i diversi stadi di vita del prodotto e a seconda dei settori. In tempi recenti, le università hanno sviluppato il **cosiddetto "terzo settore" ("third stream")** che accanto alla formazione e alla ricerca assegna un ruolo istituzionale al trasferimento tecnologico e alla collaborazione università-imprese.

Il ruolo del sistema finanziario

Il finanziamento dei costi di ricerca e sviluppo pone il problema della **percepibilità e visibilità dei costi** che l'impresa deve sostenere e di valutare i flussi futuri di reddito attesi dai progetti di RS.

Nel rapporto tra il finanziatore e l'impresa si pongono problemi di **selezione avversa** (non disponibilità di informazioni corrette sugli obiettivi dei manager) e di **moral hazard** (non disponibilità di informazioni corrette sulle azioni dei manager). L'esistenza di "**fallimenti del mercato**" dei capitali possono determinare la situazione in cui **non vengano finanziati progetti di investimento,** che pur hanno un valore attuale netto atteso positivo.

Il **finanziamento sub-ottimale dei programmi di ricerca e sviluppo** può essere determinato da un tasso di sconto troppo elevato (accorciamento dell'orizzonte temporale), dovuto al prevalere di una **logica speculativa di breve periodo**, come è tipico del **mercato borsistico** che dà priorità ai profitti di breve periodo.

I **sistemi bank-based** sembrano incorrere meno nel rischio dello "short-terminism" (miopia). La **proprietà: famiglie e banche** (o il **"private equity")**, mantiene un controllo più diretto sulle imprese e con esso la capacità e la volontà di valutare le prospettive di lungo periodo. Le **relazioni stabili tra finanziatori e imprese favoriscono la comunicazione, la fiducia e la conoscenza e riducono il grado di asimmetria informativa** e quindi il rischio di selezione avversa e di comportamenti opportunistici. Prestiti a lungo termine sono concessi in cambio di una **rinuncia ad una totale autonomia da parte del management delle imprese**.

Peraltro, **se la tecnologia cambia velocemente e la tecnologia è incorporata in nuove imprese**, l'investimento diventa molto rischioso. In questo caso **un sistema basato su relazioni stabili può non essere adeguato**. E' preferibile che gli investitori abbiano **un portafoglio più diversificato** e mirino esplicitamente al **sostegno di imprese nuove piuttosto che delle imprese consolidate**, come nel caso del "**venture capital"**.

Il ruolo del governo e la politica tecnologica

Le politiche tecnologiche possono influenzare le performance innovative delle imprese e dei paesi. Le politiche tecnologiche possono mirare a:
a) creazione e sviluppo di una **tecnologia specifica**, come nel caso del sostegno a specifiche imprese ("**campioni nazionali**"),
b) creazione di **infrastrutture specifiche**, che promuovano il cambiamento tecnico ("**centri di competenza**").

Lo strumento più utilizzato è il **finanziamento della attività di RS**. Più di un terzo della spesa in RS nei paesi OCSE è finanziata dal governo. In alcuni paesi la spesa pubblica in RS è orientata ad **obiettivi militari** (Stati Uniti, Gran Bretagna, Francia, non in Giappone).

La RS militare ha beneficiato l'industria civile quando ha aperto lo sviluppo di **nuove tecnologie generiche** (elettronica), non quando è stata orientata alo sviluppo di prodotti di specifico interesse della **difesa militare**.

Altri governi hanno sviluppato politiche orientate direttamente alla **protezione di industrie nascenti** e allo **sviluppo della industria nazionale** (Giappone).

Inoltre, i governi possono **influire in modo indiretto** sulla propensione delle imprese ad innovare, tramite lo **sviluppo delle competenze tecniche** assicurato dal **sistema educativo** e tramite la **regolazione del grado di esposizione alla concorrenza internazionale**.

Spesso i governi regionali e quelli nazionali hanno adottato politiche volte alla **creazione di infrastrutture specialistiche**, come poli tecnologici, incubatori, università specializzate, programmi di ricerca comune fra università e industria, seminari, fiere, enti, fondazioni, associazioni, infrastrutture fisiche, uffici, parchi scientifici, attrezzature, laboratori, centri di competenza.

Le politiche pubbliche possono **promuovere la connettività tra le diverse istituzioni**, gli accordi di cooperazione tra le imprese e gli istituti di ricerca scientifica e tecnologica, fra imprese e università, anche tramite **contratti di collaborazione** e la **mobilità del personale** fra imprese e centri di ricerca.

In Giappone il **MITI** (ministero del commercio internazionale e dell'industria) ha orientato le politiche a **investimenti di lungo periodo** in tecnologie avanzate e in formazione di competenze.

Le politiche del MITI si sono basate sul **riconoscimento dell'importanza delle esternalità** e degli investimenti in infrastrutture nei processi innovativi.

L'intervento del MITI è stato altamente decentralizzato e focalizzato sulle esigenze locali, con la creazione di circa 200 laboratori di supporto e consulenza tecnica alle imprese.

Le politiche anti-trust e della proprietà intellettuale

Le politiche pubbliche influiscono sulla attività innovativa anche tramite le politiche di **tutela della concorrenza** e la **tutela dei diritti di proprietà intellettuale**.

La **politica anti-trust negli USA** ha facilitato **l'ingresso di nuove imprese in settori ad alta opportunità tecnologica** come la microelettronica, ha scoraggiato la crescita tramite l'acquisizione di altre grandi imprese, stimolando così l'attività interna di ricerca e sviluppo. Peraltro la politica della concorrenza **potrebbe ostacolare le possibilità di cooperazione tecnologica** e ostacolare l'innovazione e il miglioramento della performance di un paese.

Un'**efficiente legislazione brevettuale** favorisce l'appropriazione dei benefici del cambiamento tecnologico e quindi **stimola l'attività innovativa delle imprese**. Peraltro, una tutela dei brevetti troppo stringente **potrebbe ostacolare la diffusione della conoscenza** e la diffusione delle nuove tecnologie.

Le piccole e medie imprese nella microelettronica e nelle biotecnologie si sono potute sviluppare nel secondo dopoguerra grazie anche ad un **sistema di protezione della proprietà intellettuale più permissivo**, che le ha tenute al riparo da costose cause giuridiche.

La diffusione della conoscenza e l'adozione di innovazioni incrementali sono favorite da un'alta propensione a brevettare da parte delle imprese, da un **sistema dei brevetti caratterizzato da costi limitati**, da **un basso grado di novità richiesta e da una durata limitata nel tempo.**

Il paradosso europeo

L'Europa dimostra una performance scientifica migliore della propria performance tecnologica rispetto agli USA. Peraltro, l'Europa è caratterizzata da una **debolezza relativa nelle discipline scientifiche nuove** e direttamente rilevanti per l'innovazione industriale, come alcuni segmenti delle information technologies e biologia molecolare.

Inoltre, **l'Europa è caratterizzata da minori investimenti in R&S** e da un minore numero di ricercatori, ingegneri e tecnici.

Aree di svantaggio relativo dell'Europa sono quelle della **elettronica (tranne le telecomunicazioni)**, **biotecnologie** e tecnologie legate allo sfruttamento delle **risorse naturali**. L'Europa presenta invece un **vantaggio relativo** in settori quali i **macchinari industriali, auto, chimica (e aeronautica)**.

Peraltro, in Europa esistono **forti differenze tra i diversi paesi.**

Gli ostacoli maggiori all'innovazione nel contesto europeo sono:
- **insufficiente ricerca industriale** e dispersione degli sforzi,
- **inadeguata valorizzazione delle risorse umane**: sistemi di istruzione e formazione, mobilità di studenti e ricercatori,
- **strutture di finanziamento all'innovazione arretrate**: grandi imprese, banche, venture capital,
- scarsa **tutela dei diritti di proprietà intellettuale**,
- **inadeguata propensione all'innovazione di molte PMI** ma anche di molte grandi imprese,
- **scarsa efficacia della domanda pubblica** (assenza della spesa militare).

Le politiche europee per l'innovazione

Si è assistito ad un'evoluzione dal **sostegno ai "campioni nazionali**" alla creazione di **reti di relazioni di ricerca**.

Programmi europei, come Esprit, promuovono la collaborazione tra le grandi imprese, ma possono rafforzare la struttura oligopolistica del mercato.

Sono state promosse **reti di innovatori** in diversi settori:
- "big science" e attività di **ricerca pre-competitiva**,
- settori di **priorità tecnologica**,
- **network locali**.

Si è assistito ad un effettivo **allargamento della partecipazione ai network**, ma i risultati in termini di performance innovativa complessiva sono tuttora insufficienti

Testi

Malerba, F. (2001), a cura di, Economia dell'Innovazione. Roma: Carocci Editore. Cap. 13, pp. 375-405.

Altre letture di riferimento:

Malerba, F. (1993), I sistemi innovativi regionali: un paragone tra fra la Lombardia, il Baden Wurttemberg e le West Midlands, in Malerba, F., a cura di, Sistemi innovativi regionali a confronto, pp. 11-55.

Nelson, R. R., National innovation systems: a retrospective on a study, pp. 381-409.

Roveda, C. (1996), Le politiche per la S&T nelle regioni d'Europa, Associazione Impresa Politecnico, Quaderni n. 2.

Temi chiave della lezione 8:"I sistemi nazionali di innovazione"

1. Il confronto degli indicatori europei di innovazione: R&S pubblica e privata, ricercatori, laureati, occupazione nei settori a media-alta tecnologia, ICT, innovazioni (pp. 1-3)
2. gli elementi di un sistema nazionale di innovazione (pp. 4-6)
3. le interazioni cliente-fornitore, l'apprendimento interattivo, interazioni verticali e orizzontali, relazioni a scala locale, modelli gerarchici e modelli competitivi (pp. 7-9)
4. le istituzioni di ricerca e il sistema educativo (p. 10)
5. il ruolo del sistema finanziario (p. 11)
6. il ruolo del governo e la politica tecnologica (pp. 12-13)
7. le politiche della concorrenza e di tutela della proprietà intellettuale (p. 14)
8. gli ostacoli alla innovazione nel contesto europeo e le politiche europee per l'innovazione (pp. 15-16)

Facoltà di Economia
Università di Roma "Tor Vergata"

Corso:

Economia Industriale e dell'Innovazione

Docente
Prof. Riccardo Cappellin

LEZIONE 9

SISTEMI NAZIONALI DI INNOVAZIONE

ALLEGATI

Gli allegati non fanno parte del programma d'esame ma servono per contestualizzare i concetti teorici illustrati nelle lezioni

eurostat newsrelease

World Statistics Day
Service - Professionalism - Integrity

155/2010 - 20 October 2010

20.10.2010: World Statistics Day

A new Eurostat publication on the EU and the G-20

Demography

	Total population, 2010 (in millions)	% of world population		Infant mortality per 1000 live births		Life expectancy at birth, 2007**
		1960	2010	1960*	2008*	
EU27	**501.0**	**13.3**	**7.3**	**36.0**	**4.5**	**79.2**
Argentina	40.7	0.7	0.6	59.7	13.4	75.2
Australia	21.5	0.3	0.3	19.6	4.5	81.5
Brazil	195.4	2.4	2.8	109.4	23.5	72.3
Canada	33.9	0.6	0.5	26.3	4.8	80.7
China	1 354.1	21.4	19.6	120.7	22.9	73.0
India	1 214.5	14.8	17.6	140.7	54.6	63.5
Indonesia	232.5	3.1	3.4	165.8	26.6	70.7
Japan	127.0	3.1	1.8	25.8	3.2	82.7
South Korea	48.5	0.8	0.7	93.2	4.4	79.4
Mexico	110.6	1.3	1.6	88.0	16.7	76.1
Russia	140.4	4.0	2.0	39.7	11.9	66.5
Saudi Arabia	26.2	0.1	0.4	160.0	18.8	72.8
South Africa	50.5	0.6	0.7	86.5	49.1	51.6
Turkey	75.7	0.9	1.1	176.0	27.5	71.8
United States	317.6	6.2	4.6	25.2	5.9	79.2
World	**6 908.7**	**100.0**	**100.0**	**116.0**	**47.3**	**67.6**

Sources: United Nations Population Division, Eurostat

* Non-EU countries: 1960 is 1960-65 estimates and 2008 is 2005-2010 estimates.
** Non-EU countries: 2005-2010 estimates.

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-32-10-333/EN/KS-32-10-333-EN.PDF

Economy

	GDP at current prices (billion euro), 2008	% of world GDP, 2008	Exports (billion euro)		Imports (billion euro)	
			1999	2009	1999	2009
EU27	**12 506**	**30.4**	**683**	**1 094**	**743**	**1 200**
Argentina	223	0.5	22	40	24	29
Australia	690	1.7	51	110	61	114
Brazil	1 096	2.7	45	110	49	92
Canada	952	2.3	224	226	202	230
China	2 941	7.1	183	862	155	721
India	828	2.0	35	127	47	191
Indonesia	350	0.8	46	84	23	69
Japan	3 338	8.1	392	560	291	547
South Korea	632	1.5	135	303	112	312
Mexico	738	1.8	128	165	133	168
Russia	1 093	2.7	68	204	28	115
Saudi Arabia	318	0.8	48	168	26	65
South Africa	188	0.5	:	39	:	46
Turkey	540	1.3	25	73	38	101
United States	9 658	23.4	650	758	994	1 148
World	**41 193**	100.0	:	:	:	:

Sources: The World Bank, United Nations Statistics Division, Eurostat

: Data not available

Social

	Energy consumption per capita (kgoe)		Carbon dioxide emissions per capita (tonnes), 2006*	Number of internet users (per 100 inhabitants aged 16-74), 2008**	Mobile phone subscriptions (per 100 inhabitants), 2008
	1990	2006*			
EU27	**3 532**	**3 616**	**8.2**	**64**	**122**
Argentina	1 414	1 766	4.4	28	117
Australia	5 138	5 917	18.1	56	103
Brazil	936	1 191	1.9	36	78
Canada	7 539	8 262	16.7	73	64
China	760	1 433	4.6	22	48
India	377	510	1.3	7	30
Indonesia	577	803	1.5	11	62
Japan	3 593	4 129	10.1	69	86
South Korea	2 178	4 483	9.9	77	94
Mexico	1 478	1 702	4.1	22	71
Russia	5 927	4 745	10.9	21	132
Saudi Arabia	3 744	6 170	15.8	29	147
South Africa	2 592	2 739	8.6	7	92
Turkey	944	1 304	3.6	33	89
United States	7 717	7 778	19.0	72	89
World	**1 683**	**1 818**	:	**21**	**60**

Sources: The World Bank, United Nations Statistics Division, International telecommunication union, Eurostat

* EU27, 2008 data

** Brazil, Canada, India, Indonesia, Japan, Russia, South Africa, 2007 data.

: Data not available

Italy

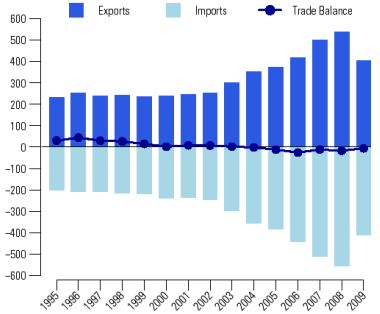
Imports: CIF, by origin/consignment for intra-eu **Exports: FOB, by last known destination** **Trade System: Special**

Overview:

In 2009, exports of Italy decreased by 24.7 percent and amounted to 404.2 bln US$ (see table 1 and graph 1). During the same period, imports likewise decreased by 26.0 percent and amounted to 410.0 bln US$ (see table 2 and graph 1). This resulted in a trade deficit of 5.8 bln US$ compared to 11.9 bln US$ in 2005 (see graph 1). Large deficits were recorded with Eastern Asia (-14.8 bln US$), Northern Africa (-11.9 bln US$) and the Commonwealth of Independent States (-11.4 bln US$) (see graph 2). However, trade recorded surpluses with Developed North America (+11.8 bln US$) and Western Asia (10.7 bln US$). By partner, Italy's trade was highly diversified across partners: even the 25 major partners could not account for 80 percent of exports and 24 major partners accounted for 80 percent of imports (see graph 3).

Graph 1: Total imports, exports and trade balance

(Bln US$ by year)



Exports Profile:

Machinery and transport equipment (SITC section 7) accounted for over a third (36.6 percent) of Italy's exports in 2009 (see table 1). Other major commodity groups included manufactured goods classified chiefly by material (SITC section 6) and miscellaneous manufactured articles (SITC section 8), respectively with 18.5 and 17.6 percent of exported goods. Germany, France and USA were the three main destinations for exported goods: they accounted jointly for nearly a third (29.9 percent) of exports in 2009 (see table 4). Over the last three years, top products for exports were petroleum oils, other than crude (HS code 2710), parts and accessories of the motor vehicles of headings 87.01 to 87.05 (HS code 8708) and medicaments (excluding goods of heading 30.02, 30.05 or 30.06) (HS code 3004) (see table 3).

Table 1: Exports by SITC sections

(Value in million US$, growth and shares in percentage)

SITC	2009	Avg. Growth rates (%) 2005-2009	Avg. Growth rates (%) 2008-2009	2009 share
Total	404220.7	2.0	-24.7	100.0
0+1	30438.1	8.0	-9.9	7.5
2+4	6343.7	3.7	-21.5	1.6
3	14613.3	3.3	-40.6	3.6
5	44748.4	3.2	-16.0	11.1
6	74979.3	-0.3	-31.2	18.5
7	148017.2	1.9	-26.5	36.6
8	71108.5	0.9	-21.5	17.6
9	13972.1	6.1	-14.2	3.5

Table 2: Imports by SITC sections

(Value in million US$, growth and shares in percentage)

SITC	2009	Avg. Growth rates (%) 2005-2009	Avg. Growth rates (%) 2008-2009	2009 share
Total	410051.0	1.6	-26.0	100.0
0+1	37253.8	5.7	-9.0	9.1
2+4	17114.0	-2.9	-37.0	4.2
3	72387.6	12.2	-8.2	17.7
5	57927.6	3.9	-14.2	14.1
6	52530.4	-2.1	-41.2	12.8
7	112881.8	-0.6	-23.2	27.5
8	48154.6	4.2	-12.9	11.7
9	11801.2	-18.6	-75.3	2.9

Table 3: Top 10 export commodities 2007 to 2009

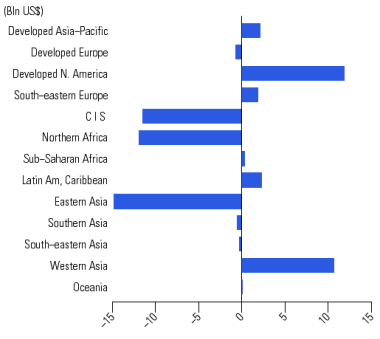
(Value in million US$)

HS code	4-digit heading of Harmonized System 2007	Value (million US$) 2007	2008	2009	Unit value 2007	2008	2009	Unit	SITC code
	All Commodities	500203.4	537075.5	404220.7					
2710	Petroleum oils, other than crude	17103.0	21057.7	12162.4	0.6	*0.9*	0.5	US$/kg	334
8708	Parts and accessories of the motor vehicles of headings 87.01 to 87.05	15524.1	16471.4	10297.7		*7.9*	*8.4*	US$/kg	784
3004	Medicaments (excluding goods of heading 30.02, 30.05 or 30.06)	12734.4	13357.8	12684.0	*88.6*	*91.0*	79.4	US$/kg	542
9999	Commodities not specified according to kind	12633.6	15043.4	10973.8					931
8703	Motor cars and other motor vehicles principally designed for the transport	11608.2	10726.0	7856.5	17.9	20.7	17.8	thsd US$/unit	781
9403	Other furniture and parts thereof	8681.0	9181.4	6745.1					821
8481	Taps, cocks, valves and similar appliances for pipes, boiler shells	7907.7	9274.3	7197.8	19.3	*23.3*	*22.1*	US$/kg	747
6403	Footwear with outer soles of rubber, plastics, leather	8111.7	8471.0	6728.7	47.9	57.9	54.6	US$/pair	851
8479	Machines and mechanical appliances having individual functions	6623.9	6940.4	4999.7					728
8422	Dish washing machines; machinery for cleaning or drying bottles	6026.5	6613.9	5174.9					745

Source: UN Comtrade

Italy

Graph 2: Trade Balance by MDG Regions in 2009



Graph 3: Partner concentration of trade in 2009

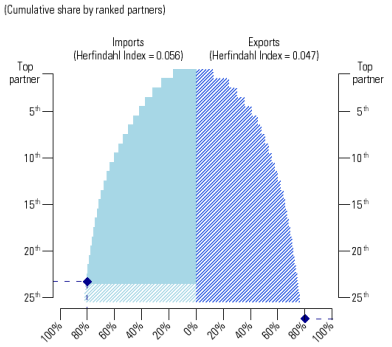


Table 4: Exports by principal countries and SITC sections in 2009

(Value in million US$, percentages of country total)

Country	Total	Shares by SITC sections (%)									
		0+1	2+4	3	5	6	7	8	9	Total
World	404220.7	7.5	1.6	3.6	11.1	18.5	36.6	17.6	3.5	100
Germany	50729.2	12.1	1.7	0.4	12.3	22.0	35.3	13.8	2.4	100
France	46363.9	7.9	1.2	1.6	9.9	21.4	33.7	21.0	3.3	100
USA	23857.0	9.7	2.5	4.4	9.7	13.7	39.1	20.8	0.0	100
Spain	22764.2	5.5	1.3	10.9	12.6	19.6	29.9	17.7	2.4	100
United Kingdom	20588.4	14.2	1.1	1.7	10.4	14.3	32.7	21.1	4.5	100
Switzerland	18960.4	7.3	1.1	4.7	17.5	13.0	20.1	26.2	9.9	100
Belgium	11062.5	8.8	1.1	0.8	27.1	15.0	27.9	16.9	2.5	100
Poland	10853.7	4.1	1.2	0.3	9.6	21.0	50.0	11.5	2.4	100
Netherlands	9755.4	9.6	2.4	2.5	18.5	17.5	28.1	18.7	2.6	100
Austria	9420.4	11.7	3.2	4.4	9.7	21.6	31.9	15.1	2.4	100

Imports Profile:

In 2009, Italy's major commodity group, machinery and transport equipment (SITC section 7), recorded a decrease of 23.2 percent and accounted for 27.5 percent of imports (see table 2). Other major commodity groups included mineral fuels, lubricants and related materials (SITC section 3) and chemicals and related products, n.e.s. (SITC section 5) respectively with 17.7 and 14.1 percent of imported goods. Major imported products were petroleum oils and oils obtained from bituminous minerals, crude (HS code 2709), motor cars and other motor vehicles principally designed for the transport (HS code 8703) and medicaments (excluding goods of heading 30.02, 30.05 or 30.06) (HS code 3004) (see table 5).

Table 5: Top 10 import commodities 2007 to 2009

(Value in million US$)

HS code	4-digit heading of Harmonized System 2007	Value (million US$)			Unit value				SITC code
		2007	2008	2009	2007	2008	2009	Unit	
	All Commodities	511822.5	553962.1	410051.0					
2709	Petroleum oils and oils obtained from bituminous minerals, crude	45327.2	58657.4	33629.2	0.5	0.7	0.4	US$/kg	333
8703	Motor cars and other motor vehicles principally designed for the transport	38025.6	34331.2	29100.3	17.0	18.6	16.2	thsd US$/unit	781
9999	Commodities not specified according to kind	31190.5	43725.9	8212.5					931
3004	Medicaments (excluding goods of heading 30.02, 30.05 or 30.06)	11122.6	12448.0	13545.5	*110.9*	*136.6*	*140.8*	US$/kg	542
2711	Petroleum gases and other gaseous hydrocarbons	1083.4	1227.1	24963.6	0.6	0.8	*0.5*	US$/kg	343
2710	Petroleum oils, other than crude	7605.0	10057.7	6686.4	0.5	0.7	0.5	US$/kg	334
8708	Parts and accessories of the motor vehicles of headings 87.01 to 87.05	8012.1	8373.9	5692.6		*9.0*	*9.5*	US$/kg	784
8517	Electrical apparatus for line telephony or line telegraphy	6545.3	6709.7	5427.4					764
8471	Automatic data processing machines and units thereof	6112.4	5687.5	4796.2	209.0	186.3	181.5	US$/unit	752
7403	Refined copper and copper alloys, unwrought	5568.1	4611.9	2790.5	*7.3*	*7.3*	5.1	US$/kg	682

Source: UN Comtrade

China

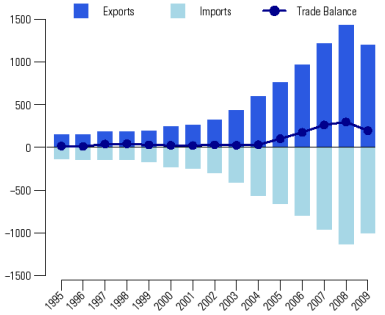
Imports: CIF, by origin | **Exports: FOB, by last known destination** | **Trade System: General**

Overview:

After several years of continuous growth marked by a peak of 1,430.7 bln US$ in 2008, the value of the exports of China dropped by 16 percent in 2009 and amounted to 1,201.6 bln US$ (see table 1 and graph 1), well below its 2007 level. Imports showed a less pronounced development with a decline of 11.2 percent in 2009 to 1,005.6 bln US$ (see table 2 and graph 1). The trade surplus dropped from 298.1 bln US$ in 2008 to 196.0 bln US$ in 2009 (see graph 1). Two MDG regions accounted for a large part of this surplus: Developed North America (+149.2 bln US $) and Developed Europe (+101.6 bln US$) (see graph 2). Trade recorded significant deficits with Developed Asia-Pacific (-52.2 bln US$) and Eastern Asia (-40.6 bln US$). China's trade was diversified across partners: in 2009, 24 (respectively 19) major partners accounted for 80 percent of exports (respectively imports) (see graph 3).

Graph 1: Total imports, exports and trade balance

(Bln US$ by year)



Exports Profile:

In 2009, machinery and transport equipment (SITC section 7) accounted for nearly half of exported goods (49.2 percent) (see table 1). Other major commodity groups included miscellaneous manufactured articles (SITC section 8) and manufactured goods classified chiefly by material (SITC section 6): they accounted respectively for 24.9 and 15.4 percent of exports. Major markets for exported goods were the United States, China, Hong Kong SAR and Japan (see table 4). From 2007 to 2009, top exported commodities were automatic data processing machines and units thereof (HS code 8471), electrical apparatus for line telephony or line telegraphy (HS code 8517) and reception apparatus for television (HS code 8528) (see table 3).

Table 1: Exports by SITC sections

(Value in million US$, growth and shares in percentage)

SITC	2009	Avg. Growth rates (%) 2005-2009	Avg. Growth rates (%) 2008-2009	2009 share
Total	1201646.8	12.1	-16.0	100.0
0+1	34244.5	9.7	-0.1	2.8
2+4	8494.6	2.3	-28.7	0.7
3	20382.8	3.7	-35.8	1.7
5	62007.8	14.7	-21.8	5.2
6	184774.6	9.4	-29.6	15.4
7	591127.5	13.8	-12.3	49.2
8	298986.2	11.4	-10.8	24.9
9	1628.8	0.4	-4.7	0.1

Table 2: Imports by SITC sections

(Value in million US$, growth and shares in percentage)

SITC	2009	Avg. Growth rates (%) 2005-2009	Avg. Growth rates (%) 2008-2009	2009 share
Total	1005555.2	11.1	-11.2	100.0
0+1	16777.9	13.3	5.1	1.7
2+4	148609.3	19.2	-16.2	14.8
3	123962.8	18.0	-26.8	12.3
5	111973.0	9.6	-5.9	11.1
6	107732.0	7.3	0.5	10.7
7	408259.2	8.9	-7.6	40.6
8	84935.0	8.7	-12.8	8.4
9	3306.2	13.3	-25.0	0.3

Table 3: Top 10 export commodities 2007 to 2009

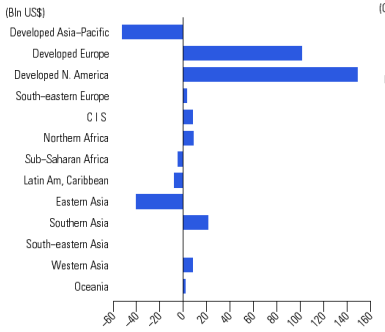
(Value in billion US$)

HS code	4-digit heading of Harmonized System 2007	Value (billion US$)			Unit value				SITC code
		2007	2008	2009	2007	2008	2009	Unit	
	All Commodities	1220.1	1430.7	1201.6					
8471	Automatic data processing machines and units thereof	93.5	105.7	101.6	75.0	84.6	87.7	US$/unit	752
8517	Electrical apparatus for line telephony or line telegraphy	78.7	89.9	86.5					764
8528	Reception apparatus for television	36.6	35.2	26.7	129.2	122.7	100.2	US$/unit	761
8473	Parts and accessories for use with machines of heading 84.69 to 84.72	32.7	32.0	26.2	*24.7*	*26.0*	*28.9*	US$/kg	759
8542	Electronic integrated circuits	23.9	24.7	23.6					776
9013	Liquid crystal devices	20.7	23.6	20.3					871
8443	Printing machinery used for printing by means of the printing type, blocks	18.7	19.9	17.1					726
8901	Cruise ships, excursion boats, ferry-boats, cargo ships, barges	10.6	17.2	23.9	7.1	8.7	12.2	mln US$/unit	793
6110	Jerseys, pullovers, cardigans, waist-coats and similar articles	16.1	16.1	14.9	4.5	4.7	4.5	US$/unit	845
8504	Electrical transformers, static converters	14.2	16.7	14.7					771

Source: UN Comtrade

China

Graph 2: Trade Balance by MDG Regions in 2009



Graph 3: Partner concentration of trade in 2009

(Cumulative share by ranked partners)

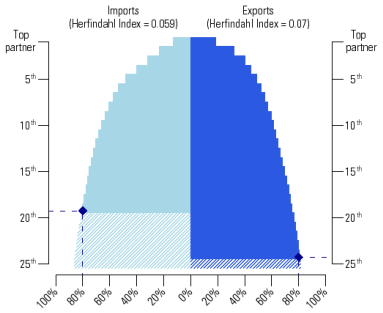


Table 4: Exports by principal countries and SITC sections in 2009

(Value in million US$, percentages of country total)

Country	Total	Shares by SITC sections (%)								
		0+1	2+4	3	5	6	7	8	9	Total
World	1 201 646.8	2.8	0.7	1.7	5.2	15.4	49.2	24.9	0.1	100
USA	221 295.0	1.9	0.4	0.3	3.5	12.0	49.6	32.2	0.1	100
China, Hong Kong SAR	166 216.9	2.0	0.2	2.6	2.0	9.0	65.7	18.5	0.1	100
Japan	97 911.0	7.1	1.4	1.7	5.1	12.0	39.4	32.5	0.9	100
Rep. of Korea	53 679.9	4.3	1.6	4.1	7.2	21.4	48.8	12.5	0.0	100
Germany	49 919.6	2.3	0.9	0.4	5.1	9.8	52.6	29.0	0.0	100
Netherlands	36 682.2	1.9	1.1	0.3	4.6	8.8	62.9	20.5	0.0	100
United Kingdom	31 277.4	1.9	0.6	0.4	3.2	14.1	41.8	38.0	0.0	100
Singapore	30 066.4	1.2	0.3	8.1	3.0	9.3	66.5	11.4	0.1	100
India	29 666.6	0.8	1.1	0.9	16.0	18.0	56.9	6.0	0.4	100
France	21 611.7	1.7	0.4	0.3	3.7	9.5	51.2	33.2	0.1	100

Imports Profile:

In 2009, China's imports were composed of 40.6 percent of machinery and transport equipment (SITC section 7) (see table 2). Other major commodity groups included inedible crude materials (except fuels), animal and vegetable oils, fats and waxes (SITC sections 2+4) and mineral fuels, lubricants and related materials (SITC section 3); they accounted respectively for 14.8 and 12.3 percent of exports. From 2007 to 2009, top imported products were electronic integrated circuits (HS code 8542), petroleum oils and oils obtained from bituminous minerals, crude (HS code 2709) and iron ores and concentrates, including roasted iron pyrites (HS code 2601) (see table 5).

Table 5: Top 10 import commodities 2007 to 2009

(Value in billion US$)

HS code	4-digit heading of Harmonized System 2007	Value (billion US$)			Unit value				SITC code
		2007	2008	2009	2007	2008	2009	Unit	
	All Commodities	956.1	1 132.6	1 005.6					
8542	Electronic integrated circuits	128.7	130.6	120.8					776
2709	Petroleum oils and oils obtained from bituminous minerals, crude	79.9	129.3	89.3	0.5	0.7	0.4	US$/kg	333
2601	Iron ores and concentrates, including roasted iron pyrites	33.8	60.7	50.1	*0.1*	0.1	0.1	US$/kg	281
9013	Liquid crystal devices	45.3	48.5	38.3					871
8471	Automatic data processing machines and units thereof	20.0	22.8	21.8	43.2	43.6	37.6	US$/unit	752
2710	Petroleum oils, other than crude	16.6	30.2	17.0	*0.5*	*0.8*	*0.5*	US$/kg	334
8517	Electrical apparatus for line telephony or line telegraphy	18.8	18.9	19.1					764
1201	Soya beans, whether or not broken	11.5	21.8	18.8	0.4	*0.6*	0.4	US$/kg	222
8541	Diodes, transistors and similar semiconductor devices	15.6	16.7	15.6					776
8473	Parts and accessories for use with machines of heading 84.69 to 84.72	17.5	15.6	13.7	*87.1*	*81.4*	*84.9*	US$/kg	759

Source: UN Comtrade

Table 2.2.1: Trade in goods

(EUR million)

	Exports			Imports		
	1999	2004	2009	1999	2004	2009
Austria	61 982	95 165	98 650	66 918	96 395	102 795
Belgium	168 091	246 697	265 160	154 635	229 617	252 326
Czech Republic	24 917	55 460	81 213	26 706	56 248	75 267
France	305 429	363 458	341 566	296 255	378 603	396 109
Germany	509 982	731 479	803 899	444 780	575 401	668 104
Greece	10 386	12 306	14 377	28 644	42 415	42 881
Hungary	23 487	44 671	60 036	26 286	48 668	56 034
Italy	221 021	284 413	290 113	207 015	285 634	294 213
Netherlands	205 085	287 336	357 342	193 434	256 989	319 451
Poland	25 670	60 332	96 396	43 051	72 109	105 123
Portugal	23 026	28 770	31 085	37 506	44 174	50 074
Romania	7 992	18 935	29 116	9 774	26 281	38 891
Spain	97 985	146 815	156 645	126 990	207 678	206 170
Sweden	79 648	99 097	93 954	64 346	80 740	85 356
United Kingdom	255 364	279 358	252 256	304 841	378 353	344 874
EU-27	683 083	952 955	1 094 417	743 295	1 027 522	1 199 669
Argentina	21 892	27 796	39 912	23 933	18 044	28 888
Australia	51 168	69 489	109 980	61 174	83 414	113 939
Brazil	45 047	77 721	109 689	48 553	50 515	91 517
Canada	224 036	254 973	226 140	202 247	220 173	230 178
China	182 896	476 988	861 519	155 469	451 185	720 931
India	34 641	61 021	126 731	46 923	79 573	190 996
Indonesia	45 661	57 547	83 532	22 521	37 402	69 422
Japan	391 828	454 828	560 232	290 856	365 989	546 698
Rep. of Korea	134 815	204 072	302 555	112 358	180 449	312 067
Mexico	127 850	151 122	164 638	133 192	158 220	168 042
Russia	68 385	145 993	204 387	28 421	60 752	115 229
Saudi Arabia	47 564	101 292	168 448	26 301	35 972	64 679
South Africa	:	32 369	38 618	:	38 269	45 717
Turkey	24 946	50 744	73 228	38 175	78 414	100 996
United States	650 013	657 533	757 608	993 826	1 226 199	1 148 477

Source: Commodity Trade Statistics Database | United Nations Statistics Division; Eurostat (ext_lt_intertrd)

Table 1.6: External trade
(% of GDP)

	Exports of goods and services			Imports of goods and services		
	199	200	2009 (1)	199	200	2009 (1)
Austria	34.9	54.2	50.5	35.8	50.2	46.0
Belgium	65.4	80.2	73.0	61.5	76.2	70.2
Czech Republic	50.7	72.2	69.1	55.1	69.0	63.5
France	22.8	26.1	23.0	21.6	26.9	25.0
Germany	24.0	41.1	40.7	23.5	35.8	36.0
Greece	:	*22.4*	*18.8*	:	*31.6*	*28.5*
Hungary	44.9	66.0	77.9	44.7	67.8	70.9
Italy	25.7	25.9	24.0	21.9	26.0	24.4
Netherlands	59.4	69.6	69.1	53.7	61.1	61.9
Poland	23.2	37.1	38.9	21.0	37.8	38.8
Portugal	27.2	27.8	28.0	33.9	37.2	35.6
Romania	:	33.1	31.2	:	43.2	37.2
Spain	22.4	25.7	23.7	22.4	31.0	25.7
Sweden	39.7	48.4	48.5	32.9	40.6	41.6
United Kingdom	28.2	26.4	27.8	28.4	29.8	30.1
EU-27 (2)	:	17.3	17.2	:	18.0	18.3
Argentina	9.6	25.1	24.6	10.1	19.2	20.3
Australia	18.1	18.7	20.7	20.1	21.2	22.6
Brazil	7.3	15.1	14.3	8.8	11.5	14.2
Canada	37.3	37.8	36.3	34.1	34.0	33.7
China	23.1	37.4	35.0	20.9	31.8	28.4
India	11.0	19.9	24.0	12.2	22.7	30.3
Indonesia	26.3	34.1	29.8	27.6	29.9	28.6
Japan	9.2	14.3	16.1	7.8	12.9	14.8
Rep. of Korea	28.8	39.3	52.9	29.9	36.6	54.1
Mexico	30.4	27.2	28.3	27.7	28.6	30.5
Russia	29.3	35.2	33.4	25.9	21.5	22.5
Saudi Arabia	37.6	60.9	69.9	27.9	27.8	34.8
South Africa	22.8	27.4	36.3	22.1	28.2	40.4
Turkey	19.9	21.9	23.6	24.4	25.4	28.7
United States	11.1	10.6	11.2	12.3	16.4	17.0
World	21.1	26.9	28.3	20.9	27.1	28.5

(1) Argentina, 2007; Canada, Japan, the United States and the world, 2006; all remaining non-EU countries, 2008.
(2) Extra EU-27.

Source: Key Global Indicators | United Nations Statistics Division; Eurostat (nama_exi_c, bop_q_eu and nama_gdp_c)

Table 2.2.1: Trade in goods
(EUR million)

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United States	650 013	657 533	757 608	993 826	1 226 199	1 148 477

Source: Commodity Trade Statistics Database | United Nations Statistics Division; Eurostat (ext_lt_intertrd)

Note that the trade statistics presented in this publication for the EU-27 aggregate consider the EU as a single bloc, and therefore relate only to extra-EU exports and imports, whereas the information presented for individual Member States refers to trade flows with the rest of the world (in other words, including intra-EU exports and imports).

Figure 2.2.1: Share in world exports

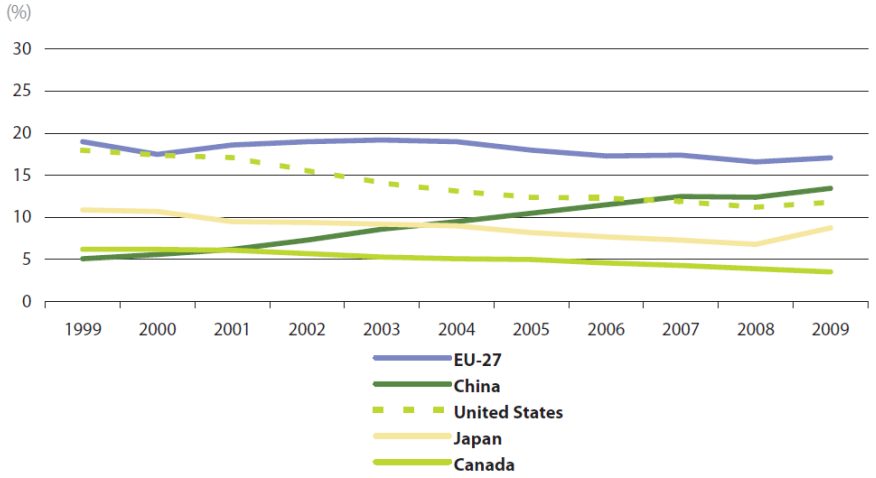
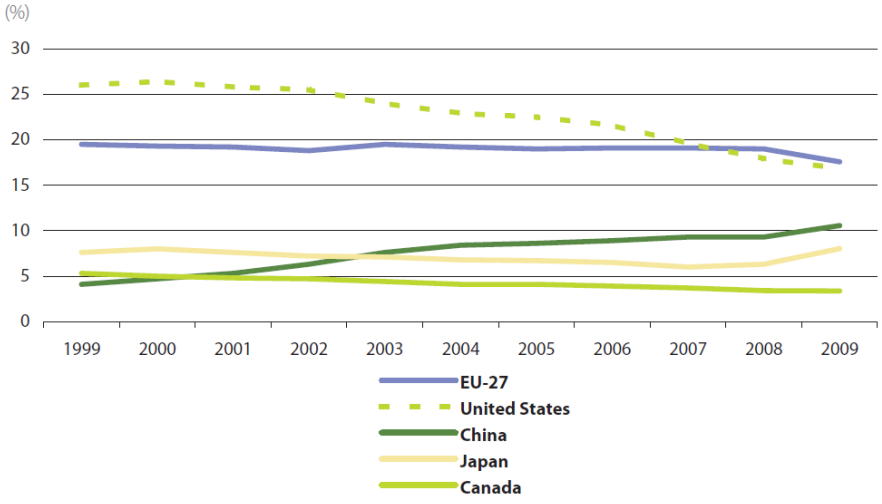


Figure 2.2.2: Share in world imports



Source: Eurostat (ext_lt_introle)

Table 2.2.2: Exports of goods by main products, 2009

(% of total exports)

	Total (EUR million)	Food, drinks & tobacco	Raw materials	Mineral fuels, lubricants	Chemicals & related prod.	Other manu-factured goods	Machinery & transport equip.
Austria	98 650	7.4	3.1	3.3	12.3	34.7	37.6
Belgium	265 160	9.4	2.6	7.1	30.4	25.8	21.6
Czech Republic	81 213	4.3	2.7	3.6	6.1	28.9	53.3
France	341 566	11.9	2.3	3.7	19.4	23.2	37.0
Germany	803 899	5.7	1.9	2.3	15.8	24.5	46.7
Greece	14 377	22.7	6.9	9.5	14.5	30.5	13.6
Hungary	60 036	7.0	2.0	2.6	8.4	17.0	60.2
Italy	290 113	7.6	1.6	3.8	10.9	36.2	36.9
Netherlands	357 342	13.5	5.8	13.4	14.0	18.5	30.3
Poland	96 396	10.9	2.0	3.1	7.6	32.3	43.1
Portugal	31 085	11.1	4.9	5.1	7.4	41.1	27.6
Romania	29 116	6.0	6.0	6.0	5.1	33.0	42.9
Spain	156 645	14.5	3.4	5.7	13.4	25.3	35.6
Sweden	93 954	4.8	6.2	6.6	13.3	29.4	38.7
United Kingdom	252 256	6.4	2.3	11.3	19.5	22.2	31.4
EU-27	1 094 417	5.7	2.5	5.2	17.1	23.4	41.5
Argentina	39 912	38.2	14.8	10.2	9.3	9.7	14.4
Australia	109 980	12.4	25.8	29.5	4.1	9.6	6.1
Brazil	109 689	25.4	23.1	8.9	6.9	15.8	17.2
Canada	226 140	8.6	8.2	22.8	8.9	18.3	26.7
China	861 519	2.8	0.7	1.7	5.2	40.3	49.2
India	126 731	7.3	6.0	13.6	10.5	42.9	15.2
Indonesia	83 532	6.6	20.8	28.3	5.0	24.8	13.8
Japan	560 232	0.5	1.3	2.4	8.8	19.6	62.0
Rep. of Korea	302 555	0.9	1.2	9.1	10.1	22.9	55.4
Mexico	164 638	6.4	1.5	13.3	4.4	17.8	54.3
Russia	204 387	2.9	3.5	66.7	4.4	13.8	3.8
Saudi Arabia	168 448	0.9	0.3	88.1	6.1	2.2	2.4
South Africa	38 618	9.8	15.9	11.2	7.6	35.2	20.0
Turkey	73 228	9.8	2.6	3.8	4.7	45.0	28.2
United States	757 608	7.2	6.2	5.2	15.1	20.3	34.7

Source: Eurostat (ext_lt_intertrd)

Table 2.2.3: Imports of goods by main products, 2009
(% of total imports)

	Total (EUR million)	Food, drinks & tobacco	Raw materials	Mineral fuels, lubricants	Chemicals & related prod.	Other manu-factured goods	Machinery & transport equip.
Austria	102 795	7.4	4.1	9.9	11.9	30.1	33.4
Belgium	252 326	8.3	3.9	11.8	24.2	23.9	24.2
Czech Republic	75 267	6.0	2.5	9.2	11.0	29.2	41.2
France	396 109	8.7	2.5	13.1	13.8	26.8	33.6
Germany	668 104	7.7	3.8	11.5	13.1	25.3	35.4
Greece	42 881	12.9	2.8	4.9	17.5	26.7	34.2
Hungary	56 034	5.3	1.8	11.0	10.6	19.9	49.4
Italy	294 213	9.3	4.2	17.7	13.4	24.8	27.9
Netherlands	319 451	9.6	4.6	16.5	11.7	21.9	31.5
Poland	105 123	7.4	3.0	9.6	13.6	27.5	35.2
Portugal	50 074	12.7	3.5	12.9	12.4	26.3	30.3
Romania	38 891	8.4	2.8	9.4	13.8	30.5	33.7
Spain	206 170	10.0	4.0	16.3	13.7	23.4	31.4
Sweden	85 356	9.6	3.3	11.6	12.1	26.2	35.9
United Kingdom	344 874	10.4	2.6	10.3	12.5	27.5	31.0
EU-27	1 199 669	6.0	3.9	24.2	8.8	24.4	28.5
Argentina	28 888	2.7	3.7	6.0	18.7	21.7	46.4
Australia	113 939	5.2	1.3	12.7	10.8	24.4	38.2
Brazil	91 517	4.8	2.7	14.8	19.8	18.1	39.9
Canada	230 178	7.5	2.8	9.4	11.4	25.2	40.3
China	720 931	1.7	14.8	12.3	11.1	19.2	40.6
India	190 996	1.9	6.3	31.0	10.3	17.9	21.8
Indonesia	69 422	7.9	5.3	19.7	12.2	17.9	37.0
Japan	546 698	7.9	7.4	35.1	7.2	19.9	20.8
Rep. of Korea	312 067	4.0	6.8	32.7	8.4	21.5	26.3
Mexico	168 042	5.9	3.3	6.7	11.8	23.2	47.0
Russia	115 229	15.8	4.0	1.5	14.0	23.2	39.4
Saudi Arabia	64 679	12.4	2.4	0.2	8.9	28.4	47.0
South Africa	45 717	5.6	2.9	21.4	10.5	19.4	34.8
Turkey	100 996	2.9	7.8	14.1	14.2	22.9	29.1
United States	1 148 477	5.1	1.6	17.4	9.6	26.0	36.2

Source: Eurostat (ext_lt_intertrd)

Table 2.2.4: Share of extra EU-27 trade by partner, EU-27

	Exports (%)			Imports (%)			Trade balance (EUR million)
	1999	2004	2009	1999	2004	2009	2009
Argentina	0.94	0.39	0.43	0.66	0.61	0.68	-3 430
Australia	2.03	2.09	1.99	0.96	0.86	0.67	13 739
Brazil	2.11	1.49	1.97	1.89	2.11	2.13	-4 027
Canada	2.47	2.32	2.05	1.88	1.60	1.48	4 644
China	5.20	7.09	9.25	8.55	13.50	18.70	-123 018
India	1.55	1.80	2.51	1.41	1.59	2.12	2 140
Indonesia	0.50	0.51	0.48	1.24	1.02	0.97	-6 399
Japan	5.22	4.56	3.29	10.15	7.27	4.65	-19 849
Rep. of Korea	1.71	1.88	1.97	2.76	2.98	2.67	-10 513
Mexico	1.55	1.55	1.45	0.67	0.67	0.82	5 982
Russia	2.47	4.83	6.00	4.83	8.17	9.62	-49 706
Saudi Arabia	1.52	1.33	1.78	1.14	1.58	0.92	8 457
South Africa	1.43	1.68	1.47	1.46	1.54	1.25	1 145
Turkey	3.17	4.21	4.01	2.15	3.19	3.01	7 792
United States	27.38	24.71	18.69	22.31	15.51	13.34	44 528

Source: Eurostat (ext_lt_maineu)

Table 2.2.9: Trade in services (1)
(EUR million)

	Credits			Debits		
	1999	2004	2009	1999	2004	2009
Austria	21 959	30 516	38 236	16 226	22 542	26 601
Belgium	:	42 396	58 063	:	39 475	53 380
Czech Republic	6 499	7 748	14 575	5 465	7 228	13 578
France	78 284	92 422	100 810	60 354	79 171	90 422
Germany	81 189	117 725	165 837	135 788	157 405	182 580
Greece	15 579	26 741	26 984	8 727	11 277	14 341
Hungary	5 285	8 665	13 061	4 449	8 180	11 586
Italy	55 105	68 193	73 448	54 001	67 000	83 569
Netherlands	50 804	68 262	66 876	48 463	64 097	61 233
Poland	7 847	10 765	20 687	6 551	10 758	17 231
Portugal	8 716	11 853	16 294	6 877	7 838	10 244
Romania	1 282	2 903	7 012	1 653	3 116	7 367
Spain	49 249	69 355	88 074	30 057	47 602	62 377
Sweden	19 181	31 336	43 831	21 377	26 617	33 299
United Kingdom	111 316	159 106	169 968	90 618	120 658	119 795
EU-27	:	365 630	480 805	:	321 013	415 495
Argentina	4 427	4 244	8 220	8 285	5 312	8 824
Australia	17 732	22 900	30 466	17 618	22 464	31 006
Brazil	6 745	10 116	20 700	13 297	13 876	32 035
Canada	33 888	39 993	44 951	38 068	47 424	59 301
China	24 628	50 192	100 022	29 639	57 989	108 053
India	13 613	30 775	70 146	16 205	28 652	36 231
Indonesia	4 315	9 684	10 364	11 612	16 767	19 026
Japan	57 232	78 472	97 704	108 048	108 943	112 587
Rep. of Korea	24 891	33 670	51 666	25 502	40 138	63 043
Mexico	11 010	11 292	12 670	13 578	15 901	17 214
Russia	8 507	16 557	34 883	12 526	26 760	51 915
Saudi Arabia	5 041	4 704	6 544	17 667	20 657	50 711
South Africa	4 888	7 783	8 522	5 403	8 303	11 425
Turkey	15 435	18 458	23 847	8 397	8 170	11 890
United States	262 348	278 350	371 951	186 906	234 918	275 870

(1) Non-EU countries, 2008 instead of 2009.

Source: Key Global Indicators | United Nations Statistics Division; Eurostat (bop_its_det and bop_its_deth)

Table 2.2.10: Credits of services, 2009 (1)
(% of total credits)

	Total (EUR million)	Transportation	Travel	Communications services	Construction services	Insurance services	Financial services	Computer & information services	Royalties & license fees	Other business services	Personal, cultural & recreational services	Government services, n.i.e.
Austria	38 236	19.9	36.4	2.9	2.6	2.2	2.0	3.8	1.4	27.2	0.5	1.1
Belgium	58 063	26.0	12.2	4.8	1.7	1.6	3.9	4.9	3.1	36.7	0.7	2.7
Czech Republic	14 575	26.8	31.8	2.6	2.2	0.8	0.3	6.3	0.5	27.8	0.7	0.2
France	100 810	22.8	34.6	3.3	4.9	0.5	1.4	1.1	6.5	22.8	1.3	0.7
Germany	165 837	22.5	15.0	2.1	5.6	2.2	5.1	6.3	6.0	32.8	0.5	2.0
Greece	26 984	50.2	38.5	1.1	1.0	1.2	0.4	1.1	0.1	5.4	0.6	0.3
Hungary	13 061	18.8	31.3	2.6	2.1	0.1	1.0	6.1	4.4	27.3	5.6	0.7
Italy	73 448	13.1	39.1	1.6	2.8	1.2	7.2	0.7	1.1	30.8	1.1	1.3
Netherlands	66 876	27.2	13.3	4.8	3.0	0.6	1.4	6.2	5.7	34.3	0.9	2.6
Poland	20 687	29.9	31.1	2.2	5.1	0.1	1.5	3.0	0.4	25.6	0.5	0.4
Portugal	16 294	25.4	42.5	3.0	3.1	0.7	0.9	1.6	0.7	19.8	1.4	1.0
Romania	7 012	29.4	12.6	8.9	5.1	0.5	1.8	10.1	1.9	28.4	0.8	0.4
Spain	88 074	14.6	43.3	1.7	3.4	1.5	3.7	4.9	0.8	24.0	1.4	0.7
Sweden	43 831	16.3	19.9	3.1	1.2	1.4	2.1	10.8	7.9	35.9	0.6	0.9
United Kingdom	169 968	14.1	12.8	3.4	1.0	5.6	22.0	4.9	5.4	27.8	1.5	1.4
EU-27	480 805	22.9	14.2	2.5	3.6	3.1	9.0	6.4	5.3	30.5	1.0	1.6
Argentina	8 220	15.4	38.5	2.9	0.2	:	0.1	6.4	0.9	30.8	3.5	1.3
Australia	30 466	17.4	55.2	1.7	0.2	1.4	2.0	3.1	1.5	14.4	1.5	1.6
Brazil	20 700	17.8	19.0	1.5	0.1	2.7	4.1	0.6	1.5	47.1	0.3	5.3
Canada	44 951	17.9	22.9	3.5	0.4	5.4	4.7	7.0	5.2	27.1	3.5	2.5
China	100 022	26.1	27.8	1.1	7.0	0.9	0.2	4.2	0.4	31.5	0.3	0.5
India	56 630	10.7	12.1	2.9	0.5	1.6	2.5	40.9	0.1	28.0	0.4	0.4
Indonesia	10 364	18.4	48.4	7.2	4.4	0.1	2.0	1.2	0.2	14.3	0.5	3.4
Japan	97 704	32.7	7.5	:	:	:	:	:	:	:	:	:
Rep. of Korea	51 666	57.3	11.9	0.9	0.3	0.5	5.0	0.4	3.2	17.3	0.7	2.5
Mexico	12 670	12.8	71.3	1.7	:	11.3	:	:	2.4	:	0.5	0.0
Russia	34 883	29.3	23.3	2.9	9.4	1.0	2.6	3.2	0.9	25.6	0.8	1.2
Saudi Arabia	6 544	25.6	61.4	4.1	:	1.5	4.5	:	:	:	:	2.5
South Africa	8 522	12.3	60.8	:	:	:	:	:	:	:	:	:
Turkey	23 847	22.2	62.8	2.1	3.3	2.1	2.4	0.0	:	0.3	3.5	1.3
United States	371 951	16.6	24.7	1.7	1.4	2.0	11.0	2.3	16.8	16.0	2.5	5.0

(1) Non-EU countries, 2008, except India, 2006.

Source: Key Global Indicators | United Nations Statistics Division; Eurostat (bop_its_det)

Table 2.2.11: Debits of services, 2009 (1)
(% of total debits)

	Total (EUR million)	Transportation	Travel	Communications services	Construction services	Insurance services	Financial services	Computer & information services	Royalties & license fees	Other business services	Personal, cultural & recreational services	Government services, n.i.e.
Austria	26 601	28.7	29.1	3.2	3.0	3.5	1.1	4.3	3.4	21.1	2.4	0.3
Belgium	53 380	23.9	24.0	4.2	1.3	1.6	2.8	3.8	3.9	30.4	0.9	0.4
Czech Republic	13 578	21.2	21.5	4.1	1.4	1.6	1.8	5.2	3.8	28.1	0.8	0.5
France	90 422	26.0	30.8	3.0	2.4	1.4	1.3	1.6	4.0	26.1	2.7	0.7
Germany	182 580	20.6	31.7	2.6	3.9	1.4	2.4	4.8	5.6	25.3	1.1	0.6
Greece	14 341	49.3	16.9	3.4	1.5	6.7	1.4	2.5	3.3	10.8	1.8	2.4
Hungary	11 586	17.7	22.5	2.9	1.8	1.8	1.5	4.4	8.3	32.2	5.5	1.3
Italy	83 569	19.6	23.8	1.8	4.4	2.5	2.7	1.5	1.6	38.8	1.7	1.8
Netherlands	61 233	21.5	24.2	4.9	2.5	1.2	1.6	6.4	4.5	31.1	1.1	1.0
Poland	17 231	21.5	30.3	3.3	4.1	1.9	3.8	3.5	6.4	22.1	1.4	1.7
Portugal	10 244	28.8	26.5	4.4	1.2	1.9	1.8	3.6	3.6	22.5	4.7	1.2
Romania	7 367	27.2	14.3	10.9	5.2	2.5	4.4	7.4	3.3	21.5	2.1	1.2
Spain	62 377	20.4	19.1	3.6	2.7	2.4	5.3	3.1	3.9	36.7	2.3	0.5
Sweden	33 299	15.7	27.3	4.5	1.7	1.0	1.2	6.0	4.2	37.2	0.7	0.4
United Kingdom	119 795	17.0	29.3	4.3	1.5	1.0	6.4	3.4	5.7	26.7	1.0	3.5
EU-27	415 495	21.3	20.8	2.9	2.8	1.7	4.1	3.1	9.4	28.1	1.4	1.8
Argentina	8 824	29.9	35.2	3.4	0.2	2.9	0.6	2.8	9.5	11.0	1.7	2.8
Australia	31 006	32.6	34.8	2.2	:	1.8	1.2	2.9	6.6	13.7	2.7	1.6
Brazil	32 035	22.0	23.3	0.6	0.0	3.5	2.4	5.9	5.7	28.8	1.8	5.8
Canada	59 301	23.2	30.9	2.2	0.3	6.8	4.3	2.5	10.1	15.8	2.6	1.3
China	108 053	31.7	22.8	1.0	2.7	8.0	0.4	2.0	6.5	24.3	0.2	0.6
India	27 282	20.7	17.0	1.5	2.0	2.1	3.0	4.9	2.1	45.4	0.3	1.2
Indonesia	19 026	49.3	19.3	2.8	2.7	2.4	1.2	2.5	4.7	13.7	0.4	0.9
Japan	112 587	32.7	16.9	:	:	:	:	:	:	:	:	:
Rep. of Korea	63 043	40.1	18.5	1.2	0.0	0.9	0.9	0.6	6.0	29.8	0.9	1.0
Mexico	17 214	14.2	33.7	0.4	:	48.3	0.5	:	:	:	0.9	2.1
Russia	51 915	17.0	32.6	2.5	11.6	1.4	2.7	1.9	6.0	20.9	1.1	2.3
Saudi Arabia	50 711	20.9	20.3	0.9	6.0	2.4	2.0	:	:	:	:	34.4
South Africa	11 425	44.7	25.2	:	:	:	:	:	:	:	:	:
Turkey	11 890	43.2	20.1	1.7	1.0	8.1	5.6	0.2	4.2	7.9	1.0	7.1
United States	275 870	25.8	21.1	1.9	0.5	10.6	4.7	4.0	6.6	14.4	0.5	10.0

(1) Non-EU countries, 2008, except India, 2006.

Source: Key Global Indicators | United Nations Statistics Division; Eurostat (bop_its_det)

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Table 1.4: GDP

	GDP at current prices (EUR million)	Share of world GDP (%)		GNI per capita in PPP (world=100)	
	2008	1998	2008	1998	2008 (1)
Austria	283 085	0.7	0.7	412.2	363.8
Belgium	345 006	0.9	0.8	395.0	335.6
Czech Republic	147 879	0.2	0.4	218.5	220.0
France	1 948 511	4.9	4.7	376.5	332.1
Germany	2 495 800	7.3	6.1	382.5	347.0
Greece	239 141	0.5	0.6	268.7	274.9
Hungary	105 536	0.2	0.3	156.2	171.8
Italy	1 567 851	4.1	3.8	375.7	292.1
Netherlands	596 226	1.3	1.4	402.1	402.3
Poland	362 415	0.6	0.9	148.4	167.1
Portugal	171 920	0.4	0.4	238.5	213.2
Romania	139 753	0.1	0.3	84.3	130.3
Spain	1 088 502	2.0	2.6	298.2	300.6
Sweden	334 227	0.8	0.8	381.3	368.6
United Kingdom	1 815 417	4.9	4.4	369.6	348.8
EU-27	12 506 172	30.5	30.4	:	:
Argentina	223 269	1.0	0.5	145.7	135.4
Australia	690 248	1.3	1.7	363.7	328.7
Brazil	1 096 369	2.8	2.7	103.8	97.2
Canada	951 925	2.1	2.3	392.6	349.7
China	2 941 384	3.4	7.1	31.1	58.1
India	827 774	1.4	2.0	21.5	28.6
Indonesia	349 734	0.3	0.8	33.8	37.0
Japan	3 337 824	12.9	8.1	387.5	340.1
Rep. of Korea	631 711	1.2	1.5	213.9	271.5
Mexico	738 341	1.4	1.8	125.6	137.8
Russia	1 093 157	0.9	2.7	95.5	150.9
Saudi Arabia	317 923	0.5	0.8	272.6	230.6
South Africa	188 173	0.4	0.5	98.2	94.4
Turkey	539 998	0.9	1.3	131.0	133.0
United States	9 657 548	29.0	23.4	504.5	453.5
World	41 193 239	100.0	100.0	100.0	100.0

(1) Saudi Arabia, 2007.

Source: World Development Indicators 2009 | The World Bank; Eurostat (nama_gdp_c)

Table 1.7: Energy and the environment

	Energy consumption per capita (kgoe)		Greenhouse gas emissions (1) (million tonnes of CO_2 equiv.)		Carbon dioxide emissions per capita (tonnes)		Carbon dioxide emissions per unit of GDP (kg of CO_2 per EUR)	
	1990	2008 (2)	1990	2008 (2)	1990 (3)	2008 (2)	1990 (4)	2008 (2)
Austria	3 304	4 075	78.2	86.6	8.1	8.9	0.5	0.3
Belgium	4 886	5 463	143.4	133.3	11.9	11.0	:	0.3
Czech Republic	4 730	4 342	195.2	141.4	15.9	11.6	:	0.8
France	3 892	4 278	563.2	527.0	7.0	6.1	0.4	0.2
Germany	5 714	4 180	1 231.8	958.1	13.1	10.1	0.7	0.3
Greece	2 207	2 844	103.3	126.9	8.2	9.8	:	0.5
Hungary	2 764	2 666	97.4	73.1	7.0	5.6	:	0.5
Italy	2 707	3 042	517.0	541.5	7.7	7.9	0.5	0.3
Netherlands	4 565	5 100	212.0	206.9	10.7	10.7	0.7	0.3
Poland	2 629	2 591	453.3	395.6	9.7	8.5	:	0.9
Portugal	1 752	2 347	59.3	78.4	4.4	5.6	:	0.3
Romania	2 746	1 887	242.1	145.9	7.4	4.8	:	0.7
Spain	2 311	3 133	285.1	405.7	5.9	7.5	0.6	0.3
Sweden	5 536	5 444	72.4	64.0	6.6	5.5	0.3	0.2
United Kingdom	3 697	3 572	771.7	628.2	10.3	8.7	0.7	0.3
EU-27	3 532	3 616	5 567	4 940	8.8	*8.2*	0.6	0.3
Argentina	1 414	1 766	:	:	3.5	4.4	:	:
Australia	5 138	5 917	416	536	17.4	18.1	0.9	0.7
Brazil	936	1 191	:	:	1.4	1.9	:	:
Canada	7 539	8 262	592	721	16.2	16.7	0.8	0.6
China	760	1 433	:	:	2.1	4.6	:	:
India	377	510	:	:	0.8	1.3	:	:
Indonesia	577	803	:	:	0.8	1.5	:	:
Japan	3 593	4 129	1 272	1 340	9.5	10.1	0.5	0.4
Rep. of Korea	2 178	4 483	:	:	5.6	9.9	:	:
Mexico	1 478	1 702	:	:	4.6	4.1	:	:
Russia	5 927	4 745	3 326	2 190		10.9	1.7	1.1
Saudi Arabia	3 744	6 170	:	:	13.2	15.8	:	:
South Africa	2 592	2 739	:	:	9.1	8.6	:	:
Turkey	944	1 304	170	332	2.6	3.6	0.4	0.4
United States	7 717	7 778	6 135	7 017	19.0	19.0	0.8	0.6
World	1 683	1 818	:	:	:	:	:	:

(1) Excluding land use, land-use change and forestry (LULUCF); information presented for six greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF_6).
(2) Non-EU countries, 2006.
(3) EU-27, 1995 instead of 1990; France, 1991 instead of 1990.
(4) EU-27, 1995 instead of 1990; Germany, 1991 instead of 1990.

Source: World Development Indicators 2009 | The World Bank; Greenhouse Gas Inventory Data | United Nations Framework Convention on Climate Change; Millennium Development Goals Database | United Nations Statistics Division; Eurostat (nrg_100a, demo_pjan and nama_gdp_c)

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Table 1.1: Land and population

	Land area (1 000 km²) (1)	Population (1 000) (2)		Population density (inhabitants/km²) (3)	
		1960	2010	1960	2010
Austria	83.2	7 030	*8 375*	84.5	*100.6*
Belgium	30.3	9 129	*10 827*	301.5	*357.6*
Czech Republic	77.2	9 638	*10 507*	124.8	*136.0*
France	632.8	45 465	*64 714*	83.6	*102.3*
Germany	357.1	72 543	*81 802*	203.1	*229.1*
Greece	130.8	8 300	*11 295*	63.4	*86.3*
Hungary	93.0	9 961	*10 013*	107.1	*107.6*
Italy	295.1	50 026	*60 340*	169.5	*204.5*
Netherlands	33.8	11 417	*16 578*	338.2	*491.1*
Poland	312.7	29 480	*38 167*	94.3	*122.1*
Portugal	92.1	8 826	*10 638*	95.8	*115.5*
Romania	229.9	18 319	*21 462*	79.7	*93.4*
Spain	506.0	30 327	*45 989*	59.9	*90.9*
Sweden	410.3	7 471	*9 341*	18.2	*22.8*
United Kingdom	243.2	52 200	*62 008*	214.7	*255.0*
EU-27	4 303.6	402 607	*501 064*	93.6	*116.4*
Argentina	2 791.8	20 685	*40 666*	7.4	*14.6*
Australia	7 692.0	10 276	*21 512*	1.3	*2.8*
Brazil	8 514.0	72 744	*195 423*	8.5	*23.0*
Canada	9 093.5	17 909	*33 890*	1.8	*3.7*
China	9 597.0	645 927	*1 354 146*	67.3	*141.1*
India	3 287.3	448 314	*1 214 464*	136.4	*369.4*
Indonesia	1 860.4	93 058	*232 517*	48.9	*122.0*
Japan	376.8	93 189	*126 995*	246.6	*336.0*
Rep. of Korea	96.5	25 068	*48 501*	251.8	*487.0*
Mexico	1 959.2	37 910	*110 645*	19.4	*56.5*
Russia	16 377.7	119 906	*140 367*	7.0	*8.6*
Saudi Arabia	2 149.7	4 075	*26 246*	1.9	*12.2*
South Africa	1 219.1	17 396	*50 492*	14.2	*41.4*
Turkey	769.6	28 233	*75 705*	36.0	*97.0*
United States	9 159.0	186 326	*317 641*	19.4	*33.0*
World	:	3 023 358	*6 908 688*	22.0	*51.0*

(1) Spain, Austria, Poland, Portugal, Argentina, China and India: total surface area instead of land area.
(2) For EU-27 Member States, national reported values of population on 1 January; France, excluding overseas departments and territories in 1960.
(3) See footnotes 1 and 2 for details of exceptions.

Source: World Population Prospects: The 2008 Revision | United Nations Population Division; Eurostat (dem_r_d3area and demo_pjan)

Table 2.1.1: Population change - crude rates (1)
(per 1 000 of population)

	Total population change			Natural change			Net migration (2)		
	1999	2004	2009	1999	2004	2009	1999	2004	2009
Austria	2.5	7.2	2.4	0.0	0.6	-0.1	2.5	6.6	2.5
Belgium	2.5	4.7	*7.1*	0.9	1.5	*2.0*	1.6	3.2	*5.1*
Czech Republic	-1.1	0.9	3.7	-2.0	-0.9	1.0	0.9	1.8	2.7
France	6.4	7.7	*5.4*	3.8	4.5	*4.3*	2.6	3.2	*1.1*
Germany	1.5	-0.4	*-2.4*	-0.9	-1.4	*-2.3*	2.5	1.0	*-0.1*
Greece	3.9	3.8	*3.1*	-0.2	0.1	*0.7*	4.1	3.7	*2.4*
Hungary	-3.1	-1.9	*-1.8*	-4.7	-3.7	*-3.4*	1.6	1.8	*1.6*
Italy	0.3	9.9	*4.9*	-0.4	0.3	*-0.4*	0.6	9.6	*5.3*
Netherlands	6.6	2.9	*5.6*	3.8	3.5	*3.1*	2.8	-0.6	*2.5*
Poland	-0.3	-0.4	0.8	0.0	-0.2	0.9	-0.4	-0.2	0.0
Portugal	4.5	5.2	*1.0*	0.8	0.7	-0.5	3.7	4.5	1.4
Romania	-1.5	-2.4	-1.7	-1.4	-2.0	-1.6	-0.1	-0.5	-0.1
Spain	6.2	16.2	3.5	0.2	1.9	*2.2*	6.0	14.3	*1.3*
Sweden	0.8	4.0	9.1	-0.7	1.2	2.3	1.5	2.8	6.7
United Kingdom	3.5	6.0	*6.7*	1.2	2.2	*3.7*	2.3	3.8	*2.9*
EU-27	2.4	4.8	*2.7*	0.3	0.8	*1.0*	2.0	4.0	*1.7*
Argentina	12.1	9.5	*9.8*	11.7	10.0	*9.6*	0.5	-0.5	0.2
Australia	11.3	12.4	*10.7*	6.3	5.9	*5.8*	5.0	6.5	4.8
Brazil	14.9	13.2	*9.8*	15.1	13.4	*10.0*	-0.3	-0.3	-0.2
Canada	9.2	10.3	*9.6*	4.4	3.4	*3.2*	4.9	6.9	6.3
China	9.0	7.0	*6.3*	9.2	7.4	*6.5*	-0.1	-0.3	-0.3
India	17.9	16.2	*14.3*	18.2	16.5	*14.5*	-0.3	-0.3	-0.2
Indonesia	13.9	13.1	*11.8*	14.8	14.1	*12.5*	-0.9	-0.9	-0.6
Japan	2.0	1.2	*-0.7*	1.9	1.0	*-0.9*	0.1	0.1	0.2
Rep. of Korea	7.8	4.8	*3.9*	8.1	5.1	*4.0*	-0.3	-0.3	-0.1
Mexico	16.5	11.3	*9.9*	18.9	16.6	*14.4*	-2.5	-5.3	-4.5
Russia	-2.5	-4.8	*-4.0*	-5.5	-6.1	*-4.3*	3.0	1.3	0.4
Saudi Arabia	26.2	25.3	*21.2*	25.5	22.7	*20.0*	0.7	2.6	1.2
South Africa	16.2	13.8	*9.8*	15.3	10.8	*7.0*	0.9	3.0	2.8
Turkey	16.5	13.7	*12.4*	16.4	13.9	*12.4*	0.0	-0.2	-0.1
United States	12.3	10.1	*9.6*	6.6	6.3	*6.4*	5.7	3.8	3.3

(1) Data for non-EU countries refers to estimates for average crude rates over 5-year periods, 1995-2000, 2000-2005 and 2005-2010 respectively, expressed per 1 000 of population; crude rate of natural change is the crude birth rate minus the crude death rate; data for EU Member States are based on annual national reported values.
(2) EU Member States, net migration including adjustments.

Source: World Population Prospects: The 2008 Revision | United Nations Population Division; Eurostat (demo_gind)

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Table 1.9: Labour market (1)
(%)

	Employment rate (2, 3)		Unemployment rate (2)			Youth unemployment rate (4)		
	1995	2009	1990	2000	2009	1990	2000	2009
Austria	68.4	71.6	:	4.7	4.9	:	6.3	10.0
Belgium	56.3	61.6	7.3	6.6	8.0	14.5	15.2	21.9
Czech Republic	:	65.4	:	8.8	6.8	:	17.0	16.6
France	59.6	64.2	9.4	10.3	9.1	19.8	20.6	22.6
Germany	64.7	70.9	4.9	8.0	7.8	4.6	8.5	11.2
Greece	54.5	61.2	7.2	11.5	9.6	23.3	29.2	25.8
Hungary	:	55.4	:	6.6	10.1	:	12.3	26.5
Italy	50.8	57.5	9.9	11.0	7.9	28.9	31.5	25.4
Netherlands	64.2	77.0	7.7	2.7	3.4	11.1	5.3	6.6
Poland	:	59.3	:	16.6	8.3	:	35.7	20.6
Portugal	62.5	66.3	4.8	4.0	10.0	10.4	8.2	20.0
Romania	:	58.6	:	7.7	7.2	:	17.8	20.8
Spain	46.8	59.8	16.4	13.9	18.1	31.8	25.3	37.8
Sweden	70.7	72.2	:	5.5	8.5	:	9.5	25.0
United Kingdom	68.1	69.9	7.0	5.6	7.7	10.4	12.0	19.1
EU-27	:	64.6	:	9.4	9.0	:	18.3	19.8
Argentina	53.5	58.4	7.3	15.0	:	13.0	25.9	:
Australia	58.4	61.5	6.9	6.4	4.2	13.0	12.1	9.4
Brazil	61.1	64.5	3.7	:	:	6.7	25.7	:
Canada	58.3	63.5	8.1	6.8	6.1	12.3	12.7	11.2
China	75.8	72.5	2.5	3.1	4.2	:	:	:
India	59.1	55.4	:	4.3	:	:	10.1	:
Indonesia	62.0	61.5	:	6.1	8.4	:	19.9	25.1
Japan	61.4	57.3	2.1	4.7	4.0	4.3	9.2	7.7
Rep. of Korea	60.5	58.9	2.4	4.4	3.2	7.0	11.8	8.9
Mexico	55.7	57.9	:	2.6	3.5	:	5.1	6.7
Russia	56.1	58.8	:	9.8	6.3	:	:	14.5
Saudi Arabia	51.5	51.2	:	4.6	5.0	:	:	:
South Africa	44.3	41.1	:	25.4	22.9	:	44.2	46.9
Turkey	50.8	42.8	7.5	6.5	11.0	16.0	13.1	19.6
United States	62.6	62.3	5.6	4.0	5.8	11.2	9.3	10.5

(1) Non-EU countries, 2007 instead of 2009.
(2) Persons aged 15-64; employment to population ratio.
(3) Employment to population ratio.
(4) Persons aged 15-24.

Source: Millennium Development Goals Database | United Nations Statistics Division; ILO Department of Statistics; Eurostat (lfsa_ergan and lfsa_urgan)

Table 1.10: Education

	Public expenditure on education (% of GDP)		Pupil-teacher ratio in primary education (pupils per teacher)		School expectancy (years)		Tertiary education enrolment (%)	
	2000 (1)	2007 (2)	2000 (3)	2007 (4)	2000 (5)	2007 (6)	2000	2008 (7)
Austria	5.74	5.40	:	13.6	15.5	16.4	56	55
Belgium	:	6.02	:	12.6	18.6	19.6	58	63
Czech Republic	3.97	4.20	21.0	18.7	15.6	17.3	29	59
France	6.03	5.59	19.5	19.7	16.6	16.4	53	55
Germany	4.46	4.50	19.8	18.3	17.2	17.6	:	:
Greece	3.39	:	13.4	10.1	15.0	17.4	51	91
Hungary	4.42	5.20	10.9	10.2	16.1	17.8	37	65
Italy	4.55	4.29	11.0	10.5	16.1	17.0	49	67
Netherlands	4.96	5.32	16.8	15.6	17.2	17.7	52	61
Poland	4.89	4.91	12.7	11.0	16.4	17.9	50	67
Portugal	5.42	5.30	12.4	11.8	16.9	17.0	48	57
Romania	2.86	4.25	:	16.9	13.9	15.9	24	66
Spain	4.28	4.35	14.9	13.6	17.0	17.2	59	71
Sweden	7.21	6.69	12.8	12.3	19.9	19.7	67	71
United Kingdom	4.46	5.39	21.2	19.4	18.9	16.2	58	57
EU-27	*4.88*	*4.98*	:	:	16.7	17.2	:	:
Argentina	4.60	4.51	19.3	16.3	14.7	15.4	53	68
Australia	5.00	5.16	17.9	:	20.4	20.7	65	77
Brazil	4.01	5.05	24.8	23.9	14.5	13.8	16	34
Canada	5.56	4.93	17.4	:	16.1	:	59	:
China	1.91	:	19.4	17.7	10.2	11.4	8	23
India	4.41	3.23	40.0	:	8.4	10.0	10	13
Indonesia	2.46	3.60	22.4	18.8	10.8	12.3	:	21
Japan	3.67	3.48	:	:	14.6	15.0	48	58
Rep. of Korea	3.76	4.43	32.1	25.6	15.6	16.9	20	27
Mexico	4.86	5.46	27.2	28.0	12.0	13.6	78	98
Russia	2.94	3.87	17.6	17.1	:	13.7	:	77
Saudi Arabia	5.94	:	:	11.2	:	13.2	22	30
South Africa	5.58	5.40	33.5	31.0	12.8	13.1	:	:
Turkey	3.46	:	:	:	10.9	11.6	23	38
United States	5.08	5.69	15.0	13.8	15.4	15.8	68	83
World	:	:	:	:	9.8	11.0	:	:

(1) China, Republic of Korea and United States, 1999; Indonesia, 2001.
(2) Non-EU countries, 2006 except Canada, India and the Republic of Korea, 2005.
(3) Australia and China, 1999.
(4) Argentina, 2006.
(5) China, Indonesia and Turkey, 2001.
(6) Argentina, India and South Africa, 2006; Saudi Arabia, 2005.
(7) Greece, Italy, the Netherlands, Poland, Portugal, Argentina and India, 2007.

Source: UIS Data Centre | UNESCO Institute for Statistics; Eurostat (tsdsc510, educ_iste and tps00052)

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Table 1.11: Health

	Healthy life years at birth, 2007 (years)		Expenditure on health (% of GDP)		Number of physicians (per 100 000 inhabitants)	Causes of death - tuberculosis (per 100 000 inhabitants)
	M□les	Fem□les	2000 (1)	2007	2007 (2)	2008 (3)
Austria	58.4	61.1	:	9.8	374.2	0.4
Belgium	63.3	63.7	:	9.8	401.6	:
Czech Republic	61.3	63.2	7.2	6.5	355.7	0.4
France	63.1	64.2	10.6	10.7	335.5	0.6
Germany	58.8	58.4	10.4	10.1	378.1	0.3
Greece	65.9	67.1	:	:	:	0.4
Hungary	55.0	57.6	8.0	7.1	280.6	1.5
Italy	*62.8*	*62.0*	:	:	363.5	0.4
Netherlands	65.7	63.7	9.0	9.0	:	0.2
Poland	57.4	61.3	:	6.0	219.1	1.9
Portugal	58.3	57.3	9.2	:	:	1.5
Romania	60.4	62.4	5.2	5.1	222.0	7.1
Spain	63.2	62.9	7.9	8.2	368.3	0.5
Sweden	67.5	66.6	9.0	8.5	356.6	0.3
United Kingdom	*64.8*	*66.2*	:	:	248.5	0.4
EU-27	*61.6*	*62.3*	:	:	:	*1.0*
Argentina	64	69	9.0	10.0	320	3.1
Australia	72	75	8.3	8.9	100	0.4
Brazil	62	66	7.2	8.4	170	3.8
Canada	71	75	8.8	10.1	190	0.3
China	65	68	4.6	4.3	140	12.0
India	56	57	4.4	4.1	60	23.0
Indonesia	60	61	2.0	2.2	10	27.0
Japan	73	78	7.7	8.0	210	1.4
Rep. of Korea	68	74	4.7	6.3	170	5.5
Mexico	65	69	5.1	5.9	290	1.4
Russia	55	65	5.4	5.4	430	15.0
Saudi Arabia	61	64	3.7	3.4	160	1.2
South Africa	47	48	8.5	8.6	80	39.0
Turkey	64	67	4.9	5.0	150	3.2
United States	68	72	13.4	15.7	270	0.3
World	58	61	9.2	9.7	140	21.0

(1) EU Member States, 2003.
(2) EU Member States, data refer to practising physicians, except France and Italy, professionally active physicians; Czech Republic, France, Germany and Sweden, 2006.
(3) EU-27, France, Italy and the United Kingdom, 2007; for non-EU countries, the rate is for those who are HIV-negative.

Source: World Health Statistics 2010 | World Health Organization; Eurostat (tsdph100 and hlth_sha_hp)

Table 1.2: Life and death

	Infant mortality (per 1 000 live births) (1)				Life expectancy at birth (years) (2)	
	1960	1980	2000	2008	1990	2008
Austria	37.5	14.3	4.8	3.7	75.8	80.6
Belgium	31.4	12.1	4.8	4.0	76.2	79.9
Czech Republic	20.0	16.9	4.1	3.1	71.5	77.3
France	27.7	10.0	4.5	3.8	77.0	81.4
Germany	35.0	12.4	4.4	3.9	75.4	80.2
Greece	40.1	17.9	5.9	3.5	77.1	80.0
Hungary	47.6	23.2	9.2	5.9	69.4	74.2
Italy	43.9	14.6	4.5	3.5	77.1	81.6
Netherlands	16.5	8.6	5.1	4.1	77.1	80.5
Poland	56.1	25.4	8.1	6.0	70.7	75.6
Portugal	77.5	24.3	5.5	3.4	74.1	79.4
Romania	75.7	29.3	18.6	12.0	69.9	73.4
Spain	35.4	12.3	4.4	3.7	77.0	81.2
Sweden	16.6	6.9	3.4	2.5	77.7	81.3
United Kingdom	22.5	13.9	5.6	4.7	:	79.8
EU-27	36.0	15.8	5.9	4.5	:	79.2
Argentina	59.7	32.2	15.0	13.4	72.1	75.2
Australia	19.6	9.9	5.4	4.5	77.7	81.5
Brazil	109.4	63.3	27.3	23.5	67.2	72.3
Canada	26.3	8.9	5.1	4.8	77.9	80.7
China	120.7	39.9	25.6	22.9	68.8	73.0
India	140.7	97.6	61.8	54.6	58.8	63.5
Indonesia	165.8	88.8	34.2	26.6	62.8	70.7
Japan	25.8	6.6	3.0	3.2	79.5	82.7
Rep. of Korea	93.2	27.2	5.1	4.4	72.7	79.4
Mexico	88.0	47.0	20.5	16.7	71.8	76.1
Russia	39.7	25.9	17.3	11.9	66.4	66.5
Saudi Arabia	160.0	56.4	22.4	18.8	68.9	72.8
South Africa	86.5	60.7	59.1	49.1	61.3	51.6
Turkey	176.0	93.0	31.4	27.5	66.2	71.8
United States	25.2	10.3	6.4	5.9	75.7	79.2
World	116.0	73.7	51.7	47.3	64.0	67.6

(1) Non-EU countries: 1960 is 1960-65, 1980 is 1980-85, 2000 is 2000-05 and 2008 is 2005-2010 estimates; France, 1960 and 1980, excluding overseas departments and territories.
(2) Non-EU countries: 1990 is 1990-95 and 2008 is 2005-2010 estimates; France, 1990 excluding overseas departments and territories; EU-27, Belgium, Italy and the United Kingdom, 2007 instead of 2008.

Source: World Population Prospects: The 2008 Revision | United Nations Population Division; Eurostat (demo_minfind and demo_mlexpec)

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Table 1.3: Old-age dependency ratio (1)

(population aged 65 years and over as % of population aged 15-64)

	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
Austria	18.4	22.7	24.3	22.1	22.9	*25.9*	*30.1*	*40.5*	*49.4*	*52.0*
Belgium	18.5	21.2	21.9	22.1	25.5	*26.4*	*32.3*	*40.5*	*45.5*	*46.4*
Czech Republic	14.6	17.9	21.6	19.0	19.8	*21.6*	*30.1*	*33.4*	*39.6*	*48.4*
France (2)	18.7	20.6	22.1	21.1	24.3	*26.2*	*33.9*	*40.9*	*46.3*	*47.3*
Germany	17.0	21.4	23.9	21.6	23.9	*30.9*	*35.5*	*47.6*	*56.8*	*59.1*
Greece	:	17.2	20.6	20.4	24.2	*27.2*	*31.6*	*38.0*	*48.1*	*56.8*
Hungary	13.6	17.0	20.9	20.0	22.0	*23.8*	*29.3*	*31.4*	*36.2*	*44.3*
Italy	14.0	16.7	20.3	21.5	26.8	*31.3*	*36.1*	*43.9*	*57.5*	*62.4*
Netherlands	14.6	16.2	17.4	18.6	20.0	*22.9*	*30.8*	*39.8*	*45.7*	*43.7*
Poland	9.5	12.6	15.5	15.4	17.6	*18.8*	*27.2*	*34.7*	*38.6*	*52.2*
Portugal	12.4	14.9	17.8	20.0	23.7	*26.7*	*31.4*	*39.0*	*49.4*	*58.8*
Romania	:	13.0	16.3	15.6	19.3	*21.3*	*25.5*	*28.5*	*37.8*	*48.9*
Spain	:	:	17.1	20.2	24.5	*25.3*	*28.6*	*35.9*	*48.5*	*59.5*
Sweden	17.8	20.7	25.3	27.7	26.9	*28.1*	*34.0*	*37.5*	*40.5*	*40.5*
United Kingdom	18.0	:	23.3	24.1	24.3	*25.1*	*28.9*	*33.6*	*37.1*	*37.7*
EU-27	:	:	:	20.6	23.2	*26.1*	*31.5*	*38.7*	*46.1*	*50.6*
Argentina	9.0	11.2	13.5	15.3	16.2	*16.6*	*18.6*	*21.0*	*24.1*	*30.2*
Australia	13.8	13.3	14.8	16.8	18.8	*20.7*	*26.9*	*33.6*	*38.0*	*39.9*
Brazil	6.1	6.8	7.1	7.4	8.4	*10.2*	*13.6*	*19.7*	*26.3*	*35.9*
Canada	12.7	12.7	13.9	16.6	18.5	*20.3*	*27.4*	*37.1*	*40.8*	*43.4*
China	8.6	7.7	7.9	8.3	10.1	*11.4*	*16.8*	*23.7*	*34.6*	*38.0*
India	5.4	5.8	6.3	6.6	7.0	*7.7*	*9.4*	*12.2*	*15.4*	*20.2*
Indonesia	5.9	5.7	6.2	6.3	7.5	*9.0*	*10.8*	*15.4*	*22.0*	*29.1*
Japan	8.9	10.2	13.4	17.2	25.3	*35.1*	*47.7*	*52.8*	*65.2*	*74.3*
Rep. of Korea	6.7	6.1	6.2	7.2	10.2	*15.2*	*21.7*	*36.1*	*52.0*	*62.9*
Mexico	6.6	7.5	7.4	7.6	8.5	*10.0*	*13.1*	*18.3*	*27.6*	*35.9*
Russia	9.9	11.7	15.0	15.1	17.8	*17.9*	*22.8*	*29.7*	*31.6*	*38.8*
Saudi Arabia	6.3	6.1	5.3	4.1	4.6	*4.6*	*6.1*	*9.8*	*15.0*	*19.9*
South Africa	7.0	6.3	5.6	5.5	5.8	*7.1*	*9.6*	*11.9*	*12.7*	*14.5*
Turkey	6.4	7.9	8.3	6.8	8.2	*8.8*	*10.8*	*15.1*	*21.4*	*28.7*
United States	15.3	15.9	16.9	18.7	18.7	*19.4*	*24.9*	*31.7*	*34.0*	*35.1*
World	9.2	9.5	10.0	10.0	10.9	*11.6*	*14.2*	*17.8*	*21.9*	*25.3*

(1) Population projections (UN medium variant) from 2010 onwards.
(2) 1960-1990 excluding overseas departments and territories.

Source: World Population Prospects: The 2008 Revision | United Nations Population Division; Eurostat (demo_pjanind)

Table 2.6.1: Arrivals of non-resident tourists (1)

(1 000)

Host country	1995	2000	2005	2006	2007	2008	2009 (2)
Austria	14 045	15 254	17 128	17 562	18 113	19 077	18 534
Belgium	5 560	6 457	6 747	6 994	7 045	7 165	6 814
Czech Republic	:	4 773	6 336	6 435	6 680	6 649	6 032
France	34 512	41 922	41 944	39 476	40 417	39 122	35 882
Germany	14 836	18 939	21 500	23 569	24 393	24 858	24 126
Greece	6 481	8 012	7 349	7 748	8 954	8 886	:
Hungary	2 878	3 214	3 446	3 310	3 451	3 516	3 175
Italy	27 581	35 107	38 055	41 194	42 873	41 797	:
Netherlands	6 574	10 002	10 012	10 739	11 008	10 104	9 921
Poland	3 702	3 117	4 310	4 314	4 387	4 046	3 862
Portugal	4 572	5 599	5 769	6 349	6 788	6 962	6 439
Romania	766	867	1 430	1 380	1 551	1 466	1 276
Spain	17 452	36 887	37 407	43 144	43 953	43 718	39 527
Sweden	:	3 828	4 883	4 696	5 128	4 728	4 855
United Kingdom	19 052	19 005	19 039	20 954	21 063	19 550	:
EU-27	:	*235 948*	*252 279*	*275 059*	*270 948*	*270 948*	*255 258*
Argentina	2 289	2 909	3 823	4 173	4 562	4 665	*4 300*
Australia	3 726	4 931	5 499	5 532	5 644	5 586	*5 600*
Brazil	1 991	5 313	5 358	5 017	5 026	5 050	*4 800*
Canada	16 932	19 627	18 771	18 265	17 931	17 128	*15 800*
China	20 034	31 229	46 809	49 913	54 720	53 000	*50 900*
India	2 124	2 649	3 919	4 447	5 082	5 367	*5 100*
Indonesia	4 324	5 064	5 002	4 871	5 506	6 234	*6 300*
Japan	3 345	4 757	6 728	7 334	8 347	8 351	*6 800*
Rep. of Korea	3 753	5 322	6 023	6 155	6 448	6 891	*7 800*
Mexico	20 241	20 641	21 915	21 353	21 370	22 637	*21 500*
Russia	10 290	21 169	22 201	22 486	22 909	23 676	:
Saudi Arabia	3 325	6 585	8 037	8 620	11 531	14 757	*10 900*
South Africa	4 488	5 872	7 369	8 396	9 091	9 592	*7 000*
Turkey	7 083	9 586	20 273	18 916	22 248	24 994	*25 500*
United States	43 490	51 238	49 206	50 978	55 986	57 900	*54 900*

(1) Data for EU-27 Member States refers to arrivals at accommodation establishments; data for non-EU countries refers to arrivals at the border; therefore, figures are not entirely comparable.
(2) EU-27 total includes estimates for Cyprus, Greece, Ireland, Italy and the United Kingdom.

Source: World Tourism Data | World Tourism Organization; Eurostat (tour_occ_arnat)