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**Industrial Performance Scoreboard and
Report on Member States' Competitiveness Performance and Policies
- Part 4 -**

Accompanying the document

**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee and the Committee of the Regions**

**A Stronger European Industry for Growth and Economic Recovery
Industrial Policy Communication Update**

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4. ANNEX: METHODOLOGY AND INDICATORS USED

4.1. Definitions of the indicators

TABLE: Indicators

Name of Indicator		Definition
<i>Innovative industrial policy</i>		
	Labour productivity per hour worked	Gross Domestic Product in Purchasing Power Standards per hour worked relative to EU-27 (EU-27=100) <i>Source: Eurostat</i>
	Labour productivity per person employed	Gross Domestic Product in Purchasing Power Standards per person employed relative to EU-27 (EU-27=100) <i>Source: Eurostat</i>
	Labour productivity in manufacturing per person employed	Gross value added in Purchasing Power Standards per person employed <i>Source: Eurostat</i>
	Unit labour costs in manufacturing	Development (2000=100) of the following ratio: Total compensation of employees in manufacturing (in nominal values) divided by total valued added in manufacturing (in constant prices). <i>Source: OECD</i>
	Percentage of employees in manufacturing with high educational attainment	Data are calculated from the annual labour force survey using the International Standard Classification of Education (ISCED), levels 5 and 6 – i.e. employees in manufacturing with first and second stages of tertiary education. <i>Source: Eurostat</i>
	Tertiary graduates in science and technology per 1000 of population aged 20-29	Number of new science and technology graduates (levels 5 and 6 of the International Standard Classification of Education-ISCED97) divided by 20-29 years old population and then multiplying by 1000. The term ‘science’ includes the following fields of education (ISCED): life sciences, physical sciences, mathematics, statistics and computing, while technology refers to graduates in engineering, manufacturing and construction. The indicator includes new tertiary graduates in a calendar year from both public and private institutions completing graduate and post graduate studies compared to the age group of 20-29 years old population that corresponds to the typical graduation age in most countries. <i>Source: Eurostat</i>
	R&D performed by businesses	The indicator covers all expenditures for R&D performed within the business enterprise sector (BERD) on the national territory during a given period, regardless of the source of funds. The data on this indicator are gathered by Eurostat which applies the guidelines laid out in the Frascati Manual, the ‘Proposed standard practice for surveys of research and experimental development’ (OECD, 2002).

		<p>Note: Gross domestic expenditure on R&D is composed of Business enterprise expenditure on R&D, Higher education expenditure on R&D, Government expenditure on R&D and Private non-profit expenditure on R&D.</p> <p><i>Source: Eurostat</i></p>
	Public R&D expenditure	The indicator covers all R&D expenditures in the government sector (GOVERD) and the higher education sector (HERD).
	Country share of total EU goods exports	<p>International trade in goods covers both extra- and intra-EU trade. Extra-EU trade statistics cover the trading of goods between Member States and non-member countries. Intra-EU trade statistics cover the trading of goods between Member States. ‘Goods’ means all movable property including electricity.</p> <p><i>Source: Eurostat.</i></p>
	Share of high-tech exports	<p>Share (in %) of intra- and extra-EU27 exports of all high technology products in total intra- and extra-EU27 exports.</p> <p>High technology products comprise: Aerospace, Computers office machines, Electronics-telecommunications, Pharmacy, Scientific instruments, Electrical machinery, Chemistry, Non-electrical machinery, Armament.</p> <p><i>Source: Eurostat.</i></p>
	Trade balance of goods (% of total exports of goods)	<p>Net exports (exports minus imports) of goods divided by total exports of goods (all in current prices). The aggregate EU trade balance includes trade with third countries only.</p> <p><i>Source: Eurostat.</i></p>
	Trade balance of services (% of total exports of services)	<p>Net exports (exports minus imports) of services divided by total exports of services (all in current prices). The aggregate EU trade balance includes trade with third countries only.</p> <p><i>Source: Eurostat.</i></p>
	Real effective exchange rate	<p>Nominal effective exchange rate deflated by nominal unit labour costs (total economy) relative to a panel of 36 countries (EU-27 + 9 other industrial countries: Australia, Canada, United States, Japan, Norway, New Zealand, Mexico, Switzerland, and Turkey). 1999=100 for all countries. A rise in the index suggests deterioration in competitiveness. The figure for each country is calculated against the rest of the countries belonging to the panel. The EU aggregate figure is calculated against the non-EU-27 countries belonging to the panel.</p> <p><i>Source: European Commission (DG ECFIN)</i></p>
	Key enabling technologies (KETs)	<p>KETs are composed of six core technologies: micro-/nanoelectronics, nanotechnology, photonics, advanced materials, industrial biotechnology and advanced manufacturing technologies.</p> <p><i>Source: Calculations by European Commission/ZEW/NIW based on Patstat and UN Comtrade data</i></p>
<i>Sustainable industry</i>		
	Energy intensity in industry (including construction) and the energy sector	<p>Energy consumption in kg of oil equivalent per euro of gross value-added (chain-linked volumes, reference year 2000, at 2000 exchange rates).</p> <p>Energy consumption refers to: B_101800 - Final energy consumption in industry (including construction) + B_101600 - Final Non-energy consumption + B_101300 - Consumption in Energy Sector.</p>

		<p>GVA refers to NACE sections C: Mining and Quarrying, D: Manufacturing, E: Electricity, Gas and Water Supply and F: Construction.</p> <p><i>Source: Eurostat ("environment and energy" and "national accounts")</i></p>
	CO2 intensity in industry (including construction) and the energy sector	<p>CO2 emissions in kg per euro of gross value-added (chain-linked volumes, reference year 2000, at 2000 exchange rates).</p> <p><i>Sources:</i></p> <p><i>European Environment Agency</i> for the figures on the CO2 emissions. The relevant categories are 1.A.1. (Energy Industries) + 1.A.2. (Manufacturing Industries and Construction) + 2. (Industrial Processes) + 3. (Solvent and Other Product Use). <i>Eurostat</i> for the figures regarding GVA. GVA refers to NACE sections C: Mining and Quarrying, D: Manufacturing, E: Electricity, Gas and Water Supply and F: Construction.</p>
	Environment Protection Expenditures in industry (% of GDP)	<p>The Classification of Environmental Protection Activities (CEPA 2000) distinguishes nine environmental domains: protection of ambient air and climate; wastewater management; waste management; protection and remediation of soil, groundwater and surface water; noise and vibration abatement; protection of biodiversity and landscape; protection against radiation; research and development and other environmental protection activities. Industry excludes recycling.</p> <p><i>Source: Eurostat</i></p>
	Exports of environmental goods	<p>Intra- and extra-EU27 exports of goods from 'eco-industries' divided by total intra- and extra-EU27 exports of goods (in nominal values).</p> <p>The notion of 'eco-industry' refers to sectors whose products measure, prevent, limit, minimise or correct environmental damage. The trade codes considered to cover eco-industry goods are those identified in the Ecorys study on the 'Competitiveness of the EU eco-industry' (pages 190/191) of 22 October 2009, carried out for DG Enterprise and Industry.</p> <p>Due to the reclassification of the Comext products codes, please find the updated list below (TABLE: Comext eco-products codes and descriptions)</p> <p><i>Source: European Commission (DG Enterprise and Industry) calculations on the basis of Eurostat/COMEXT data.</i></p>
Business Environment and entrepreneurship		
	Starting a business (days)	<p>Time needed to start a business, recorded in calendar days. It is the median duration that incorporation lawyers indicate as necessary. It is assumed that the minimum time required for each procedure is one day.</p> <p><i>Source: World Bank Doing Business.</i></p>
	Business environment score	<p>Score calculated from Doing business data with seven indicators: Starting a business, Dealing with construction permits, Registering property, Getting credit, Protecting investors, Enforcing contracts and Resolving insolvency. Each indicator is normalised to a figure between 0 and 1, where 0 is the worst possible member State performance and 1 the best one. The country score for a given year is the simple average of the seven figures.</p> <p><i>Source: World Bank Doing Business</i></p>
	Enterprise survival rate after 2 years	<p>Number of enterprises started in year t and which still existed in year $(t+2)$, divided by the total number of enterprises that started in year t</p>

		<i>Source: Eurostat</i>
	Business churn	Sum of the number of enterprise starts and exits (“births’ plus ‘deaths”) in the reference period (year <i>t</i>), divided by the total number of enterprises active in year <i>t</i> . <i>Source: Business Demography (Eurostat).</i>
	Share of high-growth enterprises	Enterprises with average annualised growth greater than 20 % in the number of employees, over a three-year period, and with ten or more employees at the beginning of the observation period, divided by the total number of active enterprises at the beginning of the three year period. <i>Source : Eurostat</i>
	Early stage financing	The indicator measures early stage financing as % of GDP. Venture capital investment data are broken down into ‘early stage’ (seed and start-up) and ‘expansion and replacement’ capital. Seed capital is defined as financing provided to research, assess and develop an initial concept before a business has reached the start-up phase. Start-up is defined as financing provided for product development and initial marketing, manufacturing and sales. <i>Source: Eurostat, using data from the European Private Equity and Venture Capital Association (EVCA).</i>
	Access to Bank Lending for SMEs	Score calculated from the Eurobarometer survey data with six indicators expressed as the percentage of respondents to the following questions: Net increase in the need for bank loans in the past six months; Not applying for a loan in the past six months for fear of rejection; Applying for a loan in the past six months but being rejected, or rejecting the offer because of too high costs; Net improvement in the availability of loans in the past six months; Net increase in the size of bank loans in the past six months; Net improved willingness of banks to provide a loan in the past six months. 0 indicates the worst possible situation and 1 the best possible one. <i>Source: Flash Eurobarometer</i>
	Duration of payments by public authorities	Effective payment duration in days. <i>Source: European payment Index by Intrum Justitia.</i>
	Venture capital	Venture Capital: Data measure all venture capital investment as a percentage of GDP. <i>Source: European Private Equity and Venture Capital Association (EVCA)</i>
	Licenses	The indicator measures the time (in days) required to obtain licenses following the Commission’s methodology and models, i.e.: the licenses required for 5 ‘benchmark’ model companies: Hotel with a restaurant, Plumbing company, Wholesale or retail distributor, Manufacturer of steel products, Manufacturere of small IT devices. <i>Source: Graph adapted by the European Commission based on the study: Business Dynamics: Start-ups, Business Transfers and Bankruptcy, Final Report, January 2011</i>
	Number of Hours to Comply Across the European Union	Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay three major types of taxes and contributions: the corporate income tax, value added or sales tax, and labour taxes, including payroll taxes and social contributions. <i>Source: European Commission based on the study PWC, Paying Taxes</i>

2012, <i>The Global Picture</i>		
Services sector		
	Electricity prices for medium-sized enterprises	Average national price in Euro per kWh excluding taxes, applicable for the first semester of each year for medium-sized industrial consumers (annual consumption between 500 and 2000 MWh). The indicator does not cover small enterprises for reasons of data availability, nor large enterprises, since the latter often have individual contracts with energy providers. Prices refer to the second half of the year. <i>Source: Eurostat</i>
	Infrastructure expenditures per inhabitant	Sum of investment and maintenance expenditures on rail, road, inland waterways, maritime ports and airports infrastructure. <i>Source: OECD International Transport Forum Statistics.</i>
	Satisfaction with the quality of infrastructure	Average mark given by business executives in a World Economic Forum survey to the quality of rail, roads, ports and airports (1 = underdeveloped; 7 = extensive and efficient by international standards). <i>Source: Global Competitiveness Report 2011-2012 of the World Economic Forum.</i>
	Availability of high-speed broadband infrastructure	Percentage of broadband lines with speed above 10 MBps <i>Source: European Commission, DG INFSO Communications Committee Working Document</i>
	Services in the overall economy	Share of economic sectors in total gross value added (at basic prices) belonging to the NACE categories: A+B; C+D+E; F; G+H+I; J; K; L+M+N+O+P+Q <i>Source: Eurostat, National Accounts</i>
Public administration		
	Legal and regulatory framework	Average evaluation (0 = negative; 10 = positive) of the statement ‘ <i>The legal and regulatory framework encourages the competitiveness of enterprises</i> ’ in an IMD survey of businesspeople. <i>Source: IMD (International Institute for Management Development).</i>
	Burden of government regulation	Average mark given by business executives in a World Economic Forum survey to the question ‘ <i>How burdensome is it for businesses in your country to comply with governmental administrative requirements (e.g., permits, regulations, reporting)?</i> ’ (1 = extremely burdensome; 7 = not burdensome at all) <i>Source: Global Competitiveness Report 2011-2012 of the World Economic Forum</i>
	E-government usage by enterprises	Share of enterprises using the internet to interact with public authorities (i.e. having used the Internet for one or more of the following activities: obtaining information, downloading forms, filling-in web-forms, full electronic case handling). Data are expressed in % of enterprises with 10 or more persons employed and belonging to the NACE 2.0 sections C, D, E, F, H, I, J, L, division 69-74 and group 95.1. <i>Source: Eurostat, Survey on ICT usage and e-commerce in enterprises</i>

TABLE: Comext eco-products codes and descriptions

OLD Comext code	NEW Comext code	Product description
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84 10 11 00	84 10 11 00	HYDRAULIC TURBINES AND WATER WHEELS, OF A POWER <= 1.000 KW (EXCL. HYDRAULIC POWER ENGINES AND MOTORS OF HEADING 8412)
84 10 12 00	84 10 12 00	HYDRAULIC TURBINES AND WATER WHEELS, OF A POWER > 1.000 KW BUT <= 10.000 KW (EXCL. HYDRAULIC POWER ENGINES AND MOTORS OF HEADING 8412)
84 10 13 00	84 10 13 00	HYDRAULIC TURBINES AND WATER WHEELS, OF A POWER > 10.000 KW (EXCL. HYDRAULIC POWER ENGINES AND MOTORS OF HEADING 8412)
84 10 90 90	84 10 90 00	PARTS OF HYDRAULIC TURBINES AND WATER WHEELS N.E.S.; HYDRAULIC TURBINE REGULATORS
84 13 70 21	84 13 70 21	SUBMERSIBLE PUMPS, SINGLE-STAGE
84 17 80 90	84 17 80 30	OVENS AND FURNACES FOR FIRING CERAMIC PRODUCTS
	84 17 80 50	OVENS AND FURNACES FOR FIRING CEMENT, GLASS OR CHEMICAL PRODUCTS
	84 17 80 70	INDUSTRIAL OR LABORATORY FURNACES, INCL. INCINERATORS, NON-ELECTRIC (EXCL. FOR THE ROASTING, MELTING OR OTHER HEAT TREATMENT OF ORES, PYRITES OR METALS, BAKERY OVENS, OVENS AND FURNACES FOR FIRING CERAMIC PRODUCTS, OVENS AND FURNACES FOR FIRING C
84 17 80 10		
84 17 90 00	84 17 90 00	PARTS OF INDUSTRIAL OR LABORATORY FURNACES, NON-ELECTRIC, INCL. INCINERATORS, N.E.S.
84 19 11 00	84 19 11 00	INSTANTANEOUS GAS WATER HEATERS (EXCL. BOILERS OR WATER HEATERS FOR CENTRAL HEATING)
84 19 19 00	84 19 19 00	INSTANTANEOUS OR STORAGE WATER HEATERS, NON-ELECTRIC (EXCL. INSTANTANEOUS GAS WATER HEATERS AND BOILERS OR WATER HEATERS FOR CENTRAL HEATING)
84 21 29 90	84 21 29 00	MACHINERY AND APPARATUS FOR FILTERING OR PURIFYING LIQUIDS (EXCL. SUCH MACHINERY AND APPARATUS FOR WATER AND OTHER BEVERAGES, OIL OR PETROL-FILTERS FOR INTERNAL COMBUSTION ENGINES AND ARTIFICIAL KIDNEYS)
84 21 39 30	84 21 39 20	MACHINERY AND APPARATUS FOR FILTERING OR PURIFYING AIR (EXCL. ISOTOPE SEPARATORS AND INTAKE AIR FILTERS FOR INTERNAL COMBUSTION ENGINES)
84 21 39 71	84 21 39 60	MACHINERY AND APPARATUS FOR FILTERING OR PURIFYING GASES (OTHER THAN AIR), BY A CATALYTIC PROCESS (EXCL. ISOTOPE SEPARATORS)
84 21 39 51	84 21 39 80	MACHINERY AND APPARATUS FOR FILTERING AND PURIFYING GASES (OTHER THAN AIR AND EXCL. THOSE WHICH OPERATE USING A CATALYTIC PROCESS, AND ISOTOPE SEPARATORS)
84 21 39 55		
84 21 39 99		
84 21 99 00	84 21 99 00	PARTS OF MACHINERY AND APPARATUS FOR FILTERING OR PURIFYING LIQUIDS OR GASES, N.E.S.
85 41 40 00	85 41 40 10	LIGHT EMITTING DIODES
85 41 40 90	85 41 40 90	PHOTOSENSITIVE SEMICONDUCTOR DEVICES, INCL. PHOTOVOLTAIC CELLS
85 41 40 91		
90 26 80 91	90 26 80 20	ELECTRONIC INSTRUMENTS OR APPARATUS FOR MEASURING OR CHECKING VARIABLES OF LIQUIDS OR GASES, N.E.S.
90 26 80 99	90 26 80 80	NON-ELECTRONIC INSTRUMENTS OR APPARATUS FOR MEASURING OR CHECKING VARIABLES OF LIQUIDS OR GASES, N.E.S.
90 27 10 10	90 27 10 10	ELECTRONIC GAS OR SMOKE ANALYSIS APPARATUS
90 27 10 90	90 27 10 90	NON-ELECTRONIC GAS OR SMOKE ANALYSIS APPARATUS

4.2. Public administration

4.2.1. *Indicators used in the spider diagram illustrating the links between public administration and competitiveness (section on public administration in country chapters)*

The spider diagram illustrates, for each country, a summary assessment of the performance against the EU average by public administration – competitiveness link, highlighting the weaknesses/strengths. It is based on the framework to assess the quality of public administration for competitiveness purposes developed by the 2012 Study on *Excellence in public administration for competitiveness in Member States* realised for DG Enterprise and Industry by WIFO (Austrian Institute of Economic Research).

The high number of (potential) interactions between the public administration and enterprises, as well as the various channels of transmission through which administrative quality impacts a country's competitiveness, make it difficult to fully capture the complexity of this relationship. Nevertheless, the aim was to construct an assessment framework that covers the characteristics of excellence in public administration and its links to competitiveness in a concise and comparable way with a tractable number of indicators.

Three general links were distinguished, which cover overarching influences that affect the quality of the public administration and its relation to the business environment:

- A. General governance
- B. Tools for administrative modernisation
- C. Corruption and fraud.

'*General governance*' captures the multi-dimensional concept of administration quality. '*Tools for administrative modernisation*' refers to the use of instruments to enhance the capacities of the administration and maps developments in the general sophistication of service provision. '*Corruption and fraud*' captures assessments of the extent to which the powers of government and administration are exercised for private gain. The link covers all forms of corruption, including state capture by vested private interests.

In addition, four more specific links were considered, concerning issues of:

- D. Starting a business and licensing
- E. Public procurement
- F. Tax compliance and tax administration
- G. Efficiency of civil justice.

These links explicitly relate the quality of an administration to the business environment, capturing the most important interactions and contact points between the public administration and private companies. The analyses do not focus on industry-specific interactions between public administration and certain branches. Rather, the links have been selected with the intention of drawing a broad and at the same time concise picture of the degree of excellence of public administration at the Member State level.

The broadness of the links requires the selection of more than one representative indicator in order to comprehensively capture the different aspects of how the quality of public administration affects the overall business environment. Although the selection of the indicators for each of the links is driven by the intention to draw a broad and comprehensive picture of the quality of public administration, it should be noted that the selection of any one indicator is restricted by the availability, quality, country coverage, timeliness and representativeness of the data. Thus, certain prudence is required when interpreting the results.

The selected indicators are described in the following table:

TABLE: The assessment framework: links, indicators and data sources

EPA-competitiveness link	Unit	Data source
A) General governance		
1) Government effectiveness	Index range -2.5 to +2.5, higher values indicate better performance	World Bank - Worldwide Governance Indicators
B) Tools for administrative modernisation		
1) Availability of 8 business related E-Government services	% of total of 8 services	European Commission: E-Government Benchmarking Reports
2) Use of Evidence-Based Instruments	Index 0 to 10, high values indicate intensive reliance	Bertelsmann Stiftung - Sustainable Governance Indicators
3) Post-bureaucracy Index	Index 0 to 100, high values indicate intensive reliance	Demmke and Moilanen (2010)
C) Corruption and fraud		
1) Diversion of public funds	Index on a scale from 1 (very common) to 7 (never occurs)	WEF Global Competitiveness Report 2011-12
2) Irregular payments and bribes	Index on a scale from 1 (very common) to 7 (never occurs)	WEF Global Competitiveness Report 2011-12
3) Experience of corruption	% share of respondents reporting an incident	European Commission: Special Eurobarometer
D) Starting a business and licensing		
1) Fully operational one stop shop to start up a company	does not exist =0, does exist = 1	European Commission: Monitor start-up procedures
2) Time required to start up a company	number of calendar days	World Bank – Doing Business
3) Cost to start up a company	% of income per capita	World Bank – Doing Business
4) Index of total licensing complexity	range 1 to 26, high values indicate high complexity	European Commission (DG Enterprise): Business Dynamics
E) Public procurement		
1) Total person-days per individual firm per competition	authority days + (firm days * average number of bids)	European Commission: Cost and effectiveness of Public procurement
2) Typical cost of a competition for firms per competition	% of per capital GDP	European Commission: Cost and effectiveness of Public procurement
3) Average delay in payments from public authorities	days	Intrum Justitia - European Payment Index
F) Tax compliance and tax administration		
1) Time to prepare and file tax returns and to pay taxes	hours per year	World Bank - Paying Taxes
2) Administrative costs of taxation	per 100 units of revenue collection	OECD – Tax Administration in OECD and

		Selected Non-OECD Countries
G) Efficiency of civil justice		
1) Enforcing contracts: Time	Calendar days	World Bank – Doing Business
2) Enforcing contracts: Cost	Percentage of claim	World Bank – Doing Business
3) Resolving insolvency: Time	Calendar days	World Bank – Doing Business
4) Independent judiciary	Index from 1 to 7, high values indicate independence	WEF - Global Competitiveness Report 2011-12

4.2.2. Normalisation and computation of composite indicators

Except for link (A) all links are described by more than one indicator. This requires constructing composite indicators in order to compare the performance of member states at the 'link-level'. The construction of indicators relies on the good practice outlined in the *Handbook on Constructing Composite indicators: Methodology and User Guide* (OECD/EC JRC, 2008). In a first step, raw indicator values were normalized into the [0,1] range using the min-max method. Higher scores represent a better performance, or, in the case of tools, the enhanced use of instruments associated with a modernised public administration:

For indicators where high values indicate better performance, e.g. index for independent judiciary

$$\text{normalized value}_i = \frac{(\text{value}_i - \text{minimum})}{(\text{maximum} - \text{minimum})}$$

For indicators where low values indicate better performance, e.g., experience of corruption,

$$\text{normalized value}_i = \frac{(\text{maximum} - \text{value}_i)}{(\text{maximum} - \text{minimum})}$$

'Minimum' refers to the minimal value of an indicator, 'maximum' to its maximum value. We considered also other normalization techniques (z-scores). Results using different methods of normalization did not lead to different results.

Potentially problematic indicators that could bias the composite indicators as those having skewness greater than 2 and a kurtosis greater than 3.5 were identified using the normalized data. Two problematic indicators were identified:

- In the case of indicator (F.2) *Administrative costs per 100 units of revenue collection* the observation for Cyprus was winsorised (the country value for Greece was assigned the next highest value).
- For (G.1) *Enforcing contracts: Time*, das was leaved as it is. This entails the risk that composite indicator for Efficiency of Judicial Systems for Italy and Slovenia may be biased.

In addition, a limited number of indicators are unavailable for some countries. For the purpose of computing composite indicators, the missing values were imputed (using cross-sectional regression based imputation). The following indicators were concerned:

- (B.2) *Use of Evidence-Based Instruments* - 8 missing values
- (E.3) *Average delay in payments from public authorities* (in days) – one missing value for (Luxembourg), and
- (F.2) *Administrative costs per 100 units of revenue collection*, one value missing for Greece.

4.2.3. Methodological note on the introductory graph in the country chapters

The graphs present, for each indicator, the distance of the respective Member State from the EU average. This distance is expressed in terms of standard deviations, which is a common measure of the spread of observations in a distribution (in this case, a measure of the variation of Member State performance around the EU average). This enhances the comparability of the presentation of indicators with different measurement units and distributions across Member States.

The data are presented in the country graphs in such a way that a bar pointing to the right always indicates a positive performance. Likewise, a bar pointing to the left always indicates a performance below average. This is straightforward for indicators, e.g. labour productivity, where high values are strived for. However, for those indicators where low values are the objective, the data bars in the graph have been converted so that a positive deviation from the average (bar pointing to the right) represents a *lower* value of the indicator than the average. These conversions enable an easy reading of the country profiles, since all bars presenting positive values in the country profile suggest a level of performance of the respective Member State which is better than the EU average and all bars presenting negative values suggest a level of performance of the respective Member State which is below EU average.

The indicators for which such conversions have been carried out are: (1) energy intensity in industry in kg of oil equivalent per euro of gross value-added at constant prices; (2) carbon intensity per ton of oil equivalent of energy consumption; (3) electricity prices for medium-sized enterprises, (4) time required to start a business; (5) duration of payments by public authorities.

The indicators presented in the above table (under 1.2) for which the distance from the EU average would not be meaningful (exchange rates and trade balances) are quoted in the text.

The EU averages used to show the respective standard deviations in the country profiles are the values for the EU as a whole and, hence, weighted averages of Member States performance. For the following indicators, however, unweighted arithmetic averages have been used due to missing EU totals: share of science and technology graduates, satisfaction with quality of infrastructure, legal and regulatory framework, time required to start a business, business environment score, enterprise survival rate, business churn, early stage financing, access to bank lending, duration of payments by public authorities, share of high-growth enterprises as percent of all enterprises.

Data used to show the respective standard deviations in the country profiles are the values for the EU as a whole and, hence, weighted averages of Member States performance where data are available. For the following indicators, however, unweighted arithmetic averages have been used due to missing EU totals: share of science and technology graduates, satisfaction with quality of infrastructure, legal and regulatory framework, time required to start a business, business environment score, enterprise survival rate, business churn, early stage financing, access to bank lending, duration of payments by public authorities, share of high-growth enterprises as percent of all enterprises.

4.3. Data sets

Data tables underlying graphs in section 3 and introduction of country chapters

TABLE: The country codes used in the tables are:

Country	Code
Belgium	BE
Bulgaria	BG
Czech Republic	CZ
Denmark	DK
Germany	DE
Estonia	EE
Ireland	IE
Greece	EL
Spain	ES
France	FR
Italy	IT
Cyprus	CY
Latvia	LV
Lithuania	LT
Luxembourg	LU
Hungary	HU
Malta	MT
Netherlands	NL
Austria	AT
Poland	PL
Portugal	PT
Romania	RO
Slovenia	SI
Slovakia	SK
Finland	FI
Sweden	SE
United Kingdom	UK

TABLE: Innovative industrial policy

Policy objective / indicators	Labour productivity per hour worked (EU27=100; 2010) Source: Eurostat	Labour productivity per person employed (EU27=100; 2010) Source: Eurostat	Labour productivity per person employed in manufacturing (1000 PPS; 2011) Source: Eurostat	% of employees in manufacturing with high educational attainment (2011) Source: Eurostat	Unit labour costs, level in manufacturing (2005 = 100; 2010) Source: OECD	Tertiary graduates in science and technology (% of 20-29 years old population; 2010) Source: Eurostat	R&D performed by businesses (% of GDP; 2010) Source: Eurostat	Share of high-tech exports in total exports (2009) Source: Eurostat	Real effective exchange rates deflated by nominal unit labour costs (total economy) against a panel of 36 countries (1999=100; Q4 2010) Source: DG ECFIN	Trade balance of goods as % of total exports of goods (2010) Source: Eurostat	Trade balance of services as % of total exports of services (2010) Source: Eurostat
BE	136 *	128	75	29.1	107	12.2	1.3	8.8	107 *	4	10
BG	41	41	:	14.0	133 *	11.4	0.3	4.6	146	-23	39
CZ	68	73	37	8.9	89	16.5	1.0	15.2	166	5	19
DK	120	112	53	22.8	99	16.5	2.1	12.3	116	13	14
DE	124	105	68	23.0	108	14.8	1.9	14.0	88	16	-11
EE	61	69	30	22.5	114	11.3	0.8	6.9	142	-6	38
IE	126	137	153 *	39.4	72	20.1	1.2	22.1	119	48	-10
EL	78	95	49	15.5	137	12.8	0.2 *	6.6	109	-195	47
ES	108	109	69	32.5	112	13.9	0.7	4.7	113	-28	30
FR	134	116	55	26.8	110	20.4 *	1.4	19.7	108	-16	9
IT	102	109	48	8.6	116	11.3 *	0.7	6.8	114	-8	-12
CY	81	90	33	18.3	116 *	5.1	0.1	20.1	115	-511	59
LV	47	55	28	16.8	178 *	10.7	0.2	5.3	132	-23	40
LT	55	62	43	23.9	123 *	18.7	0.2	5.8	121	-13	31
LU	:	:	52 *	23.1	109	3.1	1.2	41.8	:	-22	45
HU	60	71	39	11.1	101	8.3	0.7	22.3	133	8	20
MT	83 *	91	48	8.7	103 *	8.0	0.4	43.8	117	-66	39
NL	136	113	75	21.5	103	9.2	0.9	18.4	111	10	10
AT	115	115	73	15.3	103	15.5	1.9	11.7	96	-4	32
PL	54	67	33	16.2	83	15.8	0.2	5.7	107	-11	9
PT	65	77	32	7.5	104 *	14.4	0.7	3.7	111	-55	38
RO	43	49	27 *	11.7	134 *	15.6	0.2	8.2	173	-25	-8
SI	80	80	40	14.9	106	14.8	1.4	5.5	111	-3	28
SK	75	81	50	9.7	105	18.3	0.3	5.9	177	-1	-17
FI	110	112	66	31.6	95	24.2	2.7	13.9	106	2	1
SE	116	115	69	17.1	102	14.0	2.4	14.8	99	6	27
UK	105 *	107	:	28.5	117	18.7	1.1	18.2	89	-38	33
weighted EU27	100	100	51 *	19.8		12.5	1.2	13.7	110		11
EU27 unweighted	89	92	54	19.2		13.9	1.0	13.6			
max	136	137	153	39.4	177	24.2	2.7	43.8	177	48	59
min	41	41	27	7.5	72	3.1	0.1	3.7	88	-511	-17

Standard deviation	31	25	26	8.4		4.7	0.7	10.3			
	<p>Note: Labour productivity per hour worked - BE, MT & UK (2009) Labour productivity per person employed in manufacturing – IE & EU (2010); RO (2009); LU (Source: STATEC) Unit labour costs, level in manufacturing - BG, CY, LV, LT, MT, PT & RO (2008) Share of science and technology graduates – FR (2009), IT (2008) R&D performed by businesses - EL (2007) Real effective exchanges rates - BE & LU values together</p>										

TABLE: Sustainable industry

Policy objective / indicators	Energy intensity in industry and the energy sector (kg oil eq. / euro GVA; reference year 2000; 2010) Source: Eurostat	CO2 intensity in industry and the energy sector (kg CO2 / euro GVA; reference year 2000; 2009) Sources: EEA, Eurostat	Environmental protection expenditure in Europe (Euro per capita and % of GDP; 2009) Source: Eurostat	Exports of environmental goods as % of all exports of goods (2011) Source: Eurostat (COMEXT)
BE	0.35	0.9	:	0.54
BG	0.83	7.6	0.8	0.19
CZ	0.42	2.9	0.8	1.11
DK	0.11	0.8	0.4	0.47
DE	0.19	1.0	:	1.24
EE	0.35	5.8	0.7	0.20
IE	0.04	0.4	:	0.29
EL	0.25	2.6	0.4	0.43
ES	0.22	1.0	0.3	0.60
FR	0.24 *	0.6 *	0.2	0.48
IT	0.18	0.5	:	0.50
CY	0.17	2.5	0.4	4.66
LV	0.39	4.1	0.7	0.15
LT	0.44	0.6	0.5	0.20
LU	0.23	7.8	0.1	1.63
HU	0.36	0.1	0.4	0.76
MT			0.7	0.02
NL	0.35	0.4	0.3	1.03
AT	0.19	3.5	0.3	0.78
PL	0.32	0.4	0.9	0.31
PT	0.29	1.2	0.3	0.42
RO	0.57	3.0	0.7	0.25
SI	0.19	1.1	0.8	1.06
SK	0.50	2.0	0.6	0.23
FI	0.29	0.8	0.4	0.55

SE	0.19	0.3	:	0.54
UK	0.14	0.8	0.3	0.64
weighted EU27	0.21	1.0	0.4	0.77
EU unweighted	0.30	2.0	0.5	0.71
max	0.83	7.8	0.9	4.66
min	0.04	0.1	0.1	0.02
Standard deviation	0.16	2.2	0.2	0.87

Note:
Energy intensity in industry - FR (2009)
CO₂ intensity in industry - FR (2008)

TABLE: Business Environment and entrepreneurship

Policy objective / indicators	Time required to start a business (days; 2010/11) Source: World Bank Doing Business 2012	Business environment score (1= best 0 = worst; 2010/11) Source: Calculation done by European Commission based on data from World Bank Doing Business 2012	Enterprise survival rate after two years (2009) Source: Eurostat	Business churn (enterprise entries and exits as % of existing stock; 2008) Source: Eurostat	Share of high-growth enterprises as % of all enterprises (2009) Source: Eurostat	Early stage financing (% of GDP; 2011) Source: EVCA	Access to bank lending for SMEs (1 = best 0 = worst; 2011) Source: Calculation done by European Commission	Duration of payments by public authorities (days; 2011) Source: European Payment Index 2012 by Intrum Justitia
BE	4	0.72	75	16 *	:	0.019	0.64	73
BG	18	0.53	68	31	:	0.000	0.59	52
CZ	20	0.54	68	13	4.1	0.002	0.63	42
DK	6	0.75	:	:	:	0.023	0.59	37
DE	15	0.65	63	:	:	0.017	0.68	36
EE	7	0.60	52	26 *	5.7 *	0.008	0.52	25
IE	13	0.83	:	:	:	0.030	0.19	48
EL	10	0.40	:	:	:	0.004	0.15	174
ES	28	0.60	65	17	2.9	0.007	0.39	160
FR	7	0.60	:	22 *	7.7	0.013	0.47	65
IT	6	0.52	76	15	3.1	0.003	0.53	180
CY	8	0.53	:	5	:	:	0.59	83
LV	16	0.67	57	30	:	0.012	0.74	38
LT	22	0.64	31	54	:	:	0.62	56
LU	19	0.49	79	17	3.8	0.014	0.57	:
HU	4	0.53	62	22	3.7	0.031	0.45	57

MT	17 *	:	96 *	11 *	:	:	0.62	:
NL	8	0.65	69	22	:	0.019	0.45	44
AT	28	0.60	77	13	:	0.018	0.70	44
PL	32	0.47	:	:	:	0.003	0.70	39
PT	5	0.70	49	34	3.3	0.005	0.34	139
RO	14	0.56	74	25	0.5	0.000	0.58	45
SI	6	0.60	81	19	3.6	0.003	0.38	45
SK	18	0.60	50	30	:	:	0.65	62
FI	14	0.74	67	17	:	0.028	0.79	24
SE	15	0.73	87	13	5.0 *	0.033	0.72	35
UK	13	0.84	78	24	:	0.017	0.43	43
weighted EU27						0.014		
EU unweighted	14	0.62	68	22	3.9	0.013	0.54	66
max	32	0.84	96	54	7.7	0.033	0.79	180
min	4	0.40	31	5	0.5	0.000	0.15	24
Standard deviation	8	0.11	14	10	1.8	0.011	0.16	46
<p>Note: Time required to start a business: MT (Source: MT's National Statistical Office) Enterprise survival rate after two years: MT (Source: MT's National Statistical Office) Business churn - BE, EE, FR (2009); MT (Source: MT's National Statistical Office) Share of high-growth enterprises as % of all enterprises - EE (2008); SE (2008)</p>								

TABLE: Services sector and Public administration

Policy objective / indicators	Electricity prices for medium size enterprises (euro per kWh; 2011) Source: Eurostat	Infrastructure expenditures (euro per inhabitant; 2010) Source: OECD, Eurostat calculation	Satisfaction with quality of infrastructure (rail, road, port and airport) (1=underdeveloped / 7=extensive and efficient by int'l standards; 2010-11) Source: The Global Competitiveness Report 2011-2012	% of broadband lines with speed above 10 MBps (2011) Source: DG INFESO	Legal and regulatory framework (0= neg. / 10=pos.; 2011) Source: IMD World Competitiveness Center	Burden of government regulation (1 = burdensome 7 = not burdensome; 2010-11) Source: The Global Competitiveness Report 2011-2012	% of e-government usage by enterprises (2010) Source: Eurostat, Survey on ICT usage and e-commerce in enterprises
BE	0.1147	296 *	5.9	57	3.9	2.5	77
BG	0.0667	55	3.3	74	3.7	3.1	64
CZ	0.1082	231	4.7	28	3.8	2.6	89
DK	0.0927	241	6.1	48	6.5	4.0	92
DE	0.1243	236	6.1	31	5.7	3.0	67
EE	0.0751	154	4.5	10	5.9	4.3	80
IE	0.1294	243	4.9	13	5.8	3.4	87

EL	0.1111	:	4.0	54	2.9	2.3	77
ES	0.1156	410	5.8	34	4.1	2.8	67
FR	0.0809	279	6.2	55	3.8	2.6	78
IT	0.1668	:	4.1	9	2.9	2.1	84
CY	0.2109	:	5.4	5	:	3.9	74
LV	0.1101	98	4.2	41	:	3.3	72
LT	0.1038	168	4.6	42	4.0	2.8	95
LU	0.1000	:	5.5	27	6.2	3.6	90
HU	0.0995	116	4.1	41	3.9	2.3	71
MT	0.1800	86 *	4.9	12	:	2.8	77
NL	0.0936	:	6.1	57	6.0	3.5	95
AT	0.1072 *	:	5.5	13 *	5.4	3.5	75
PL	0.0941	193	3.0	12	4.1	2.6	89
PT	0.1011	202	5.3	73	3.5	2.5	75
RO	0.0803	160	2.7	60	4.3	2.8	50
SI	0.0964	182	4.4	26	3.1	3.0	88
SK	0.1261	127	3.8	25	3.3	2.7	88
FI	0.0750	256	6.0	33	6.7	4.4	96
SE	0.0828	335	5.8	48	6.6	3.9	90
UK	0.1044	213	5.5	45	5.0	3.1	67
weighted EU27	0.1117	190		39			76
EU unweighted	0.1093	204	4.9	36	4.6	3.1	80
max	0.2109	410	6.2	74	6.7	4.4	96
min	0.0667	55	2.7	5	2.9	2.1	50
Standard deviation	0.0324	86	1.0	20	1.3	0.6	11

Note:
Electricity prices for medium size enterprises - AT (2008)
Infrastructure expenditure - BE (2009); MT (MT's National Statistical Office)
% of broadband lines with speed above 10 MBps - AT (2010)

TABLE: Public administration dataset

	Composite Indicator	original	Composite Indicator	original values			normalized values		
country	A. Governance	A. Governance	B. Tools for administrative modernisation	B.1 EGOV-8	B.2 Evidence-based	B.3 PBI	B.1 EGOV-8	B.2 Evidence-based	B.3 PBI
AT	0.84	1.89	0.62	100.00	6.33	23.70	1.00	0.64	0.22
BE	0.71	1.59	0.30	88.00	1.00	18.60	0.76	0.00	0.15
BG	0.00	0.01	0.33	75.00		28.90	0.50	0.19	0.29
CY	0.67	1.50	0.38	75.00		9.70	0.50	0.60	0.03
CZ	0.45	1.01	0.84	100.00	6.33	73.00	1.00	0.64	0.89
DK	0.97	2.17	0.87	100.00	7.67	68.20	1.00	0.80	0.82
EE	0.54	1.22	0.76	100.00		38.30	1.00	0.85	0.42
FI	1.00	2.24	0.87	100.00	9.33	53.40	1.00	1.00	0.62
FR	0.64	1.44	0.41	88.00	4.00	16.30	0.76	0.36	0.12
DE	0.64	1.44	0.64	100.00	7.67	16.60	1.00	0.80	0.13
EL	0.23	0.52	0.13	63.00	2.00	7.20	0.26	0.12	0.00
HU	0.31	0.70	0.18	50.00	3.70	22.90	0.00	0.32	0.21
IE	0.58	1.31	0.58	100.00	6.33	13.60	1.00	0.64	0.09
IT	0.23	0.52	0.54	100.00	4.67	20.40	1.00	0.44	0.18
LV	0.31	0.70	0.65	100.00		40.20	1.00	0.51	0.44
LT	0.32	0.72	0.36	75.00		24.30	0.50	0.34	0.23
LU	0.76	1.71	0.18	75.00	1.33	7.20	0.50	0.04	0.00
MT	0.52	1.16		100.00		29.30	1.00		0.30
NL	0.77	1.73	0.74	88.00	8.67	47.10	0.76	0.92	0.54
PL	0.31	0.71	0.49	88.00	4.67	27.70	0.76	0.44	0.28
PT	0.46	1.04	0.53	100.00	5.00	16.30	1.00	0.48	0.12

RO	0.06	0.14	0.29	75.00		19.70	0.50	0.19	0.17
SK	0.38	0.85	0.54	88.00	3.33	51.00	0.76	0.28	0.59
SI	0.46	1.03	0.46	88.00		29.50	0.76	0.31	0.30
ES	0.43	0.98	0.47	100.00	3.00	19.10	1.00	0.24	0.16
SE	0.90	2.02	0.88	100.00	6.33	81.40	1.00	0.64	1.00
UK	0.70	1.57	0.92	100.00	9.33	64.10	1.00	1.00	0.77
HR	0.27	0.62		88.00			0.76		
	Composite Indicator	original values			normalized values				
country	C. Corruption	C.1 Diversion	C.2 Irreg	C.3 Experience	C.1 Diversion	C.2 Irreg	C.3 Experience		
AT	0.69	5.30	5.80	0.11	0.71	0.72	0.67		
BE	0.81	5.20	5.70	0.03	0.69	0.69	0.93		
BG	0.14	2.90	3.60	0.25	0.14	0.03	0.20		
CY	0.68	4.70	5.00	0.06	0.57	0.47	0.83		
CZ	0.25	2.30	3.90	0.18	0.00	0.13	0.43		
DK	0.98	6.50	6.70	0.02	1.00	1.00	0.97		
EE	0.74	4.80	5.50	0.05	0.60	0.63	0.87		
FI	0.92	6.20	6.50	0.04	0.93	0.94	0.90		
FR	0.80	5.10	5.60	0.03	0.67	0.66	0.93		
DE	0.82	5.60	5.90	0.05	0.79	0.75	0.87		
EL	0.29	2.70	3.50	0.15	0.10	0.00	0.53		
HU	0.26	2.60	4.30	0.20	0.07	0.25	0.37		
IE	0.87	5.40	6.10	0.02	0.74	0.81	0.97		
IT	0.42	3.20	4.10	0.12	0.21	0.19	0.63		
LV	0.36	3.30	4.20	0.16	0.24	0.22	0.50		

LT	0.19	3.00	4.50	0.27	0.17	0.31	0.13
LU	0.92	6.10	6.40	0.03	0.90	0.91	0.93
MT	0.66	4.20	4.80	0.04	0.45	0.41	0.90
NL	0.93	6.00	6.20	0.01	0.88	0.84	1.00
PL	0.50	4.10	4.90	0.14	0.43	0.44	0.57
PT	0.65	3.90	5.10	0.05	0.38	0.50	0.87
RO	0.07	2.80	4.00	0.31	0.12	0.16	0.00
SK	0.09	2.50	3.70	0.27	0.05	0.06	0.13
SI	0.57	3.40	4.90	0.07	0.26	0.44	0.80
ES	0.68	3.90	5.00	0.03	0.38	0.47	0.93
SE	0.97	6.40	6.60	0.02	0.98	0.97	0.97
UK	0.87	5.70	5.90	0.02	0.81	0.75	0.97
HR		2.90	3.80		0.14	0.09	

	Composite Indicator	original values				normalized values			
country	D. Starting Business	D.1 One stop shop	D.2 Time start up	D.3 Cost start up	D.4 Licencing compl.	D.1 One stop shop	D.2 Time start up	D.3 Cost start up	D.4 Licencing compl.
AT	0.42	1	28.00	5.20	22.00	1.00	0.14	0.74	0.09
BE	0.78	1	4.00	5.20	13.80	1.00	1.00	0.74	0.51
BG	0.60	1	18.00	1.50	20.40	1.00	0.50	0.93	0.17
CY	0.61	1	8.00	13.10	15.20	1.00	0.86	0.35	0.43
CZ	0.57	0	20.00	8.40	4.00	0.00	0.43	0.58	1.00
DK	0.83	1	6.00	0.00	14.60	1.00	0.93	1.00	0.46
EE	0.89	1	7.00	1.80	8.00	1.00	0.89	0.91	0.80
FI	0.73	1	14.00	1.00	15.00	1.00	0.64	0.95	0.44
FR	0.83	1	7.00	0.90	13.00	1.00	0.89	0.96	0.55
DE	0.43	0	15.00	4.60	21.20	0.00	0.61	0.77	0.13
EL	0.30	0	10.00	20.10	18.60	0.00	0.79	0.00	0.26
HU	0.77	1	4.00	7.60	12.40	1.00	1.00	0.62	0.58
IE	0.71	0	13.00	0.40	7.40	0.00	0.68	0.98	0.83
IT	0.54	1	6.00	18.20	16.20	1.00	0.93	0.09	0.38
LV	0.59	0	16.00	2.60	11.20	0.00	0.57	0.87	0.64
LT	0.59	1	22.00	2.80	17.00	1.00	0.36	0.86	0.34
LU	0.65	1	19.00	1.90	15.60	1.00	0.46	0.91	0.41
MT		0			21.50	0.00			0.12
NL	0.58	0	8.00	5.50	14.80	0.00	0.86	0.73	0.45
PL	0.21	0	32.00	17.30	12.00	0.00	0.00	0.14	0.60
PT	0.73	1	5.00	2.30	20.00	1.00	0.96	0.89	0.19
RO	0.63	1	14.00	3.00	19.40	1.00	0.64	0.85	0.22

SK	0.54	0	18.00	1.80	14.00	0.00	0.50	0.91	0.49
SI	0.73	1	6.00	0.00	21.60	1.00	0.93	1.00	0.11
ES	0.40	1	28.00	4.70	23.80	1.00	0.14	0.77	0.00
SE	0.69	1	15.00	0.60	17.20	1.00	0.61	0.97	0.33
UK	0.81	1	13.00	0.70	9.80	1.00	0.68	0.97	0.71
HR			7.00	8.60	21.80		0.89	0.57	0.10

	Composite Indicator	original values			normalized values		
country	E. Procurement	E.1 Person unit costs	E.2 Cost competition	E.3 Pay delay	E.1 Person unit costs	E.2 Cost competition	E.3 Pay delay
AT	0.53	20.00	0.26	14.00	0.58	0.10	0.91
BE	0.71	14.00	0.18	28.00	0.83	0.50	0.78
BG	0.54	25.00	0.20	22.00	0.38	0.40	0.84
CY	0.41	29.00	0.24	23.00	0.21	0.20	0.83
CZ	0.77	15.00	0.16	12.00	0.79	0.60	0.93
DK	0.68	18.00	0.19	12.00	0.67	0.45	0.93
EE	0.73	16.00	0.18	10.00	0.75	0.50	0.95
FI	0.90	10.00	0.14	4.00	1.00	0.70	1.00
FR	0.88	10.00	0.12	21.00	1.00	0.80	0.85
DE	0.71	17.00	0.18	11.00	0.71	0.50	0.94
EL	0.14	25.00	0.27	114.00	0.38	0.05	0.00
HU	0.73	15.00	0.16	27.00	0.79	0.60	0.79
IE	0.82	15.00	0.13	13.00	0.79	0.75	0.92
IT	0.27	20.00	0.28	90.00	0.58	0.00	0.22
LV	0.74	14.00	0.18	18.00	0.83	0.50	0.87

LT	0.78	13.00	0.15	26.00	0.88	0.65	0.80
LU	0.91	11.00	0.08		0.96	1.00	0.79
MT		34.00	0.23		0.00	0.25	
NL	0.76	13.00	0.17	19.00	0.88	0.55	0.86
PL	0.84	11.00	0.14	19.00	0.96	0.70	0.86
PT	0.41	16.00	0.25	79.00	0.75	0.15	0.32
RO	0.67	15.00	0.21	20.00	0.79	0.35	0.85
SK	0.34	30.00	0.26	32.00	0.17	0.10	0.75
SI	0.87	12.00	0.12	15.00	0.92	0.80	0.90
ES	0.60	14.00	0.15	80.00	0.83	0.65	0.31
SE	0.69	17.00	0.20	7.00	0.71	0.40	0.97
UK	0.61	17.00	0.23	18.00	0.71	0.25	0.87
HR							

	Composite Indicator	original values		normalized values	
country	F. Tax compliance & tax administration	F.1 Time pay tax	F.2 Administrative cost	F.1 Time pay tax	F.2 Administrative cost
AT	0.86	170.00	0.85	0.78	0.94
BE	0.83	156.00	1.40	0.81	0.86
BG	0.49	500.00	1.37	0.11	0.86
CY	0.78	149.00	7.37	0.82	0.73
CZ	0.42	557.00	1.46	0.00	0.85
DK	0.90	135.00	0.67	0.85	0.96
EE	0.97	85.00	0.40	0.95	1.00

FI	0.93	93.00	0.87	0.93	0.93
FR	0.86	132.00	1.31	0.85	0.87
DE	0.81	221.00	0.79	0.67	0.94
EL	0.70	224.00		0.67	0.73
HU	0.72	277.00	1.20	0.56	0.89
IE	0.93	76.00	1.08	0.97	0.90
IT	0.72	285.00	1.20	0.55	0.89
LV	0.71	290.00	1.14	0.54	0.89
LT	0.83	175.00	1.18	0.77	0.89
LU	0.95	59.00	1.13	1.00	0.90
MT			0.48		0.99
NL	0.88	127.00	1.11	0.86	0.90
PL	0.67	296.00	1.72	0.52	0.81
PT	0.71	275.00	1.44	0.57	0.85
RO	0.81	222.00	0.72	0.67	0.95
SK	0.68	231.00	2.41	0.65	0.71
SI	0.76	260.00	0.90	0.60	0.93
ES	0.83	187.00	0.97	0.74	0.92
SE	0.94	122.00	0.40	0.87	1.00
UK	0.90	110.00	1.14	0.90	0.89
HR		196.00		0.72	

	Composite Indicator	original values				normalized values			
country	G. Effective Civil justice	G.1 Enforcing time	G.2 Enforcing cost	G.3 Insolvency time	G.4 Indep. judiciary	G.1 Enforcing time	G.2 Enforcing cost	G.3 Insolvency time	G.4 Indep. judiciary

AT	0.77	397.00	18.00	1.10	5.54	0.88	0.64	0.81	0.74
BE	0.74	505.00	17.70	0.90	5.27	0.77	0.66	0.86	0.67
BG	0.34	564.00	23.80	3.30	2.94	0.72	0.39	0.19	0.07
CY	0.66	735.00	16.40	1.50	5.29	0.55	0.71	0.69	0.68
CZ	0.29	611.00	33.00	3.20	3.70	0.67	0.00	0.22	0.27
DK	0.78	410.00	23.30	1.00	6.55	0.87	0.42	0.83	1.00
EE	0.58	425.00	22.30	3.00	5.51	0.85	0.46	0.28	0.73
FI	0.89	375.00	13.30	0.90	6.41	0.90	0.85	0.86	0.96
FR	0.69	331.00	17.40	1.90	4.90	0.94	0.67	0.58	0.58
DE	0.85	394.00	14.40	1.20	6.33	0.88	0.80	0.78	0.94
EL	0.50	819.00	14.40	2.00	3.33	0.46	0.80	0.56	0.17
HU	0.63	395.00	15.00	2.00	3.92	0.88	0.77	0.56	0.32
IE	0.71	650.00	26.90	0.40	6.27	0.63	0.26	1.00	0.93
IT	0.29	1210.00	29.90	1.80	3.99	0.08	0.13	0.61	0.34
LV	0.48	369.00	23.10	3.00	3.81	0.91	0.42	0.28	0.30
LT	0.57	275.00	23.60	1.50	3.39	1.00	0.40	0.69	0.19
LU	0.85	321.00	9.70	2.00	6.09	0.95	1.00	0.56	0.88
MT					5.13				0.63
NL	0.73	514.00	23.90	1.10	6.35	0.76	0.39	0.81	0.95
PL	0.52	830.00	12.00	3.00	4.33	0.45	0.90	0.28	0.43
PT	0.62	547.00	13.00	2.00	3.93	0.73	0.86	0.56	0.33
RO	0.31	512.00	28.90	3.30	3.11	0.77	0.18	0.19	0.12
SK	0.21	565.00	30.00	4.00	2.66	0.71	0.13	0.00	0.00
SI	0.43	1290.00	12.70	2.00	3.78	0.00	0.87	0.56	0.29
ES	0.62	515.00	17.20	1.50	3.92	0.76	0.68	0.69	0.32
SE	0.60	508.00	31.20	2.00	6.47	0.77	0.08	0.56	0.98
UK	0.74	399.00	24.80	1.00	6.20	0.88	0.35	0.83	0.91

HR	0.47	561.00	13.80	3.10	3.05	0.72	0.82	0.25	0.10
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TABLE: Average number of days to get licenses in Europe

Country	days
AT	68.5
BE	49.1
BG	93.4
CY	105.4
CZ	8.5
DE	79.6
DK	82.7
EE	55.1
EL	78.2
ES	116.1
FI	49.9
FR	48.9
HU	53.2
IE	75.8
IT	34.3
LT	84.1
LU	65.1
LV	46.0
MT	108.5
NL	53.2
PL	57.6
PT	81.5
RO	85.2
SE	72.1
SI	72.5
SK	52.8
UK	27.9
EU 27	67.04
HR	71.9

TABLE: Sectoral specialisation of manufacturing (2009)

Code / Sector / Country		BE	BG	CZ	DK	DE	EE	IE	EL	ES
C	Manufacturing	44,746.5	3,883.3	26,175.3	24,846.9	381,547.6	1,582.0	28,407.9	16,901.2	100,824.6
C10	Manufacture of food products	5,574.3	554.7	2,026.8	3,761.1	27,911.0	218.4	4,514.5	3,336.6	14,819.4
C11	Manufacture of beverages	1,352.3	205.7	787.8	427.7	4,842.5	62.3	442.6	1,072.9	4,634.1
C12	Manufacture of tobacco products	c	63.5	c	c	1,253.8	0.0	c	309.8	467.1
C13	Manufacture of textiles	1,071.9	68.2	456.5	236.4	3,077.2	53.3	90.9	399.2	1,454.2
C14	Manufacture of wearing apparel	280.9	386.0	231.3	108.7	2,074.1	56.5	40.7	625.9	1,986.4
C15	Manufacture of leather and related products	c	53.0	71.0	21.4	680.7	11.8	7.4	108.0	984.4
C16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	772.9	73.9	801.0	521.6	5,073.4	212.7	18.5	295.1	2,199.3
C17	Manufacture of paper and paper products	1,829.1	75.3	499.0	412.0	9,131.5	32.6	142.0	376.3	3,036.9
C18	Printing and reproduction of recorded media	1,258.4	90.9	500.0	528.1	7,612.9	52.8	461.9	414.9	3,206.8
C19	Manufacture of coke and refined petroleum products	753.6	c	83.3	c	2,391.9	47.8	c	1,287.9	1,509.7
C20	Manufacture of chemicals and chemical products	5,558.7	141.9	889.1	1,346.0	29,790.5	55.1	743.3	815.9	5,986.0
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	3,647.8	c	394.0	2,832.3	15,273.4	8.1	13,075.4	640.6	3,907.1
C22	Manufacture of rubber and plastic products	1,773.8	184.4	2,378.8	1,293.6	19,406.4	50.2	380.8	674.1	4,921.0
C23	Manufacture of other non-metallic mineral products	2,385.6	359.6	1,596.6	1,016.3	12,529.2	68.6	503.7	1,415.8	7,514.8
C24	Manufacture of basic metals	2,263.2	211.5	824.2	217.4	15,991.8	-0.7	26.0	805.8	3,244.0
C25	Manufacture of fabricated metal products, except machinery and equipment	3,397.0	350.5	2,714.1	2,205.6	35,276.0	188.2	519.5	1,586.3	11,636.9
C26	Manufacture of computer, electronic and optical products	1,715.4	75.1	630.3	1,493.6	18,155.3	83.3	2,841.8	139.9	1,872.9
C27	Manufacture of electrical equipment	1,067.4	179.8	1,728.4	810.6	31,084.1	85.3	224.1	382.8	4,348.3
C28	Manufacture of machinery and equipment n.e.c.	2,928.9	213.0	2,653.8	4,397.3	59,825.1	58.3	819.5	573.3	5,897.4

C29	Manufacture of motor vehicles, trailers and semi-trailers	2,391.4	58.1	4,033.7	241.9	43,639.2	43.0	159.6	126.5	7,071.4
C30	Manufacture of other transport equipment	c	49.0	488.8	124.0	8,118.0	12.5	184.0	394.3	3,135.0
C31	Manufacture of furniture	703.1	109.9	385.2	713.9	5,972.0	80.8	c	441.0	2,506.9
C32	Other manufacturing	c	52.1	637.8	1,171.2	10,720.3	35.2	2,800.6	253.1	1,462.9
C33	Repair and installation of machinery and equipment	1,005.0	179.7	c	593.6	11,717.3	65.9	153.3	425.1	3,021.7
Code / Sector / Country		FR	IT	CY	LV	LT	LU	HU	MT	NL
C	Manufacturing	180,452.0	180,256.8	1,188.6	1,230.5	2,178.4	1,126.8	15,447.7	n.a.	54,156.7
C10	Manufacture of food products	26,759.9	17,761.8	333.3	258.8	508.0	c	1,540.5	n.a.	8,126.0
C11	Manufacture of beverages	5,007.1	2,701.4	89.9	55.1	122.9	54.7	367.2	n.a.	1,144.0
C12	Manufacture of tobacco products	595.7	273.7	c	c	c	c	53.6	n.a.	1,657.6
C13	Manufacture of textiles	1,991.5	5,354.3	11.3	23.3	70.0	c	89.8	n.a.	631.3
C14	Manufacture of wearing apparel	2,249.9	6,628.0	16.5	47.7	115.2	c	189.1	n.a.	131.6
C15	Manufacture of leather and related products	1,363.3	4,369.2	2.3	1.7	6.9	0.0	83.3	n.a.	97.2
C16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	3,020.7	4,127.6	80.0	221.1	169.7	41.2	173.4	n.a.	928.8
C17	Manufacture of paper and paper products	4,001.3	3,603.3	21.8	24.8	50.7	c	284.6	n.a.	1,350.3
C18	Printing and reproduction of recorded media	3,799.9	3,942.9	46.3	34.2	37.6	c	215.5	n.a.	1,873.9
C19	Manufacture of coke and refined petroleum products	2,304.5	1,185.1	c	0.2	c	0.0	1,153.5	n.a.	1,148.2
C20	Manufacture of chemicals and chemical products	12,652.9	7,736.2	27.2	38.9	129.5	c	452.2	n.a.	6,112.5
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	8,728.3	7,231.9	50.1	c	25.1	c	967.5	n.a.	2,166.8
C22	Manufacture of rubber and plastic products	10,347.6	8,895.3	45.2	30.6	110.8	c	848.1	n.a.	2,158.4
C23	Manufacture of other non-metallic mineral products	8,095.1	10,066.6	182.6	51.9	79.4	c	595.6	n.a.	1,998.9
C24	Manufacture of basic metals	4,922.7	5,542.6	24.6	38.6	5.2	c	270.2	n.a.	1,363.9

C25	Manufacture of fabricated metal products, except machinery and equipment	16,321.2	23,394.8	121.5	81.3	109.7	177.5	909.3	n.a.	5,832.6
C26	Manufacture of computer, electronic and optical products	8,979.6	6,087.3	4.6	37.2	51.1	c	1,427.4	n.a.	2,418.5
C27	Manufacture of electrical equipment	8,077.6	8,644.2	20.5	27.0	26.1	c	705.5	n.a.	1,956.4
C28	Manufacture of machinery and equipment n.e.c.	11,879.6	23,952.6	16.9	37.0	62.0	c	2,128.7	n.a.	5,158.9
C29	Manufacture of motor vehicles, trailers and semi-trailers	10,914.0	7,602.4	10.2	10.9	13.9	c	2,129.0	n.a.	1,497.5
C30	Manufacture of other transport equipment	10,530.0	5,163.1	0.5	21.6	47.5	c	114.1	n.a.	1,322.6
C31	Manufacture of furniture	2,440.6	5,747.7	36.6	47.1	180.1	8.9	175.4	n.a.	1,174.3
C32	Other manufacturing	4,419.3	4,433.4	20.7	c	59.7	21.1	236.0	n.a.	983.3
C33	Repair and installation of machinery and equipment	11,049.7	5,811.6	19.4	84.8	82.3	34.9	338.2	n.a.	2,923.3

Code / Sector / Country		AT	PL	PT	RO	SI	SK	FI	SE	UK
C	Manufacturing	41,218.4	45,725.8	16,686.8	11,454.9	5,320.7	6,279.1	22,713.7	39,112.9	143,494.1
C10	Manufacture of food products	3,308.2	6,770.9	2,180.4	1,474.3	351.5	493.2	1,938.9	2,746.1	20,485.9
C11	Manufacture of beverages	1,098.1	2,023.5	691.2	639.7	101.5	160.5	388.0	436.6	c
C12	Manufacture of tobacco products	c	352.6	c	c	0.0	c	c	c	c
C13	Manufacture of textiles	416.6	611.1	730.5	200.3	111.9	56.0	193.0	233.2	2,032.3
C14	Manufacture of wearing apparel	313.4	790.8	1,003.6	805.2	83.7	119.6	112.5	64.9	729.5
C15	Manufacture of leather and related products	187.7	234.5	581.6	313.4	59.1	112.2	c	38.5	265.1
C16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1,746.6	1,499.0	601.9	461.6	158.2	131.8	826.5	1,635.9	2,230.6
C17	Manufacture of paper and paper products	1,552.1	1,416.3	641.0	147.0	178.7	261.9	1,929.5	2,952.8	2,933.2
C18	Printing and reproduction of recorded media	1,092.6	671.4	524.0	228.2	137.9	114.7	559.1	820.4	5,565.3
C19	Manufacture of coke and refined petroleum products	c	114.7	c	c	c	c	c	386.2	1,424.1
C20	Manufacture of chemicals and chemical products	1,727.3	2,255.9	605.2	500.6	249.3	155.7	1,259.3	1,944.3	10,480.9
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	1,333.7	1,092.6	c	197.2	621.1	c	c	c	8,746.1
C22	Manufacture of rubber and plastic products	1,758.8	3,193.9	811.6	623.8	374.9	497.8	846.0	1,086.5	7,444.1
C23	Manufacture of other non-metallic mineral products	2,153.9	3,146.1	1,537.3	924.9	232.7	414.4	951.7	1,018.8	3,954.7
C24	Manufacture of basic metals	3,298.1	1,247.2	168.9	191.1	148.0	366.1	684.9	1,428.7	3,506.7
C25	Manufacture of fabricated metal products, except machinery and equipment	4,424.1	4,458.8	1,996.2	796.2	683.1	535.6	2,147.1	3,606.5	13,213.5
C26	Manufacture of computer, electronic and optical products	1,689.0	1,227.9	280.5	395.8	137.3	330.0	2,771.7	3,721.2	7,989.4
C27	Manufacture of electrical equipment	3,331.3	2,246.7	719.6	426.4	505.9	307.2	1,339.6	1,687.0	4,534.0
C28	Manufacture of machinery and equipment n.e.c.	5,129.8	3,091.2	561.6	616.6	385.6	507.0	3,275.1	4,002.3	11,852.5

C29	Manufacture of motor vehicles, trailers and semi-trailers	2,448.1	3,794.8	932.5	1,251.8	394.7	1,115.7	303.7	2,265.6	6,565.1
C30	Manufacture of other transport equipment	542.8	1,134.7	148.1	437.1	c	83.6	387.8	1,128.0	8,944.1
C31	Manufacture of furniture	1,164.0	1,941.2	492.3	419.7	158.3	159.4	339.3	703.5	2,740.4
C32	Other manufacturing	933.0	596.8	267.3	92.5	93.9	81.8	243.1	1,053.7	4,193.0
C33	Repair and installation of machinery and equipment	1,173.9	1,812.9	540.8	274.7	134.2	219.8	830.3	1,023.3	5,828.7

Code	Sector	Group
C10	Manufacture of food products	Food, beverages and tobacco
C11	Manufacture of beverages	
C12	Manufacture of tobacco products	
C13	Manufacture of textiles	Textiles, apparel and leather
C14	Manufacture of wearing apparel	
C15	Manufacture of leather and related products	
C16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Wood, paper and printing
C17	Manufacture of paper and paper products	
C18	Printing and reproduction of recorded media	
C19	Manufacture of coke and refined petroleum products	Chemicals, pharma, petroleum, minerals and rubber
C20	Manufacture of chemicals and chemical products	
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	
C22	Manufacture of rubber and plastic products	
C23	Manufacture of other non-metallic mineral products	
C24	Manufacture of basic metals	Metals
C25	Manufacture of fabricated metal products, except machinery and equipment	
C26	Manufacture of computer, electronic and optical products	Electronics, electrics and machinery
C27	Manufacture of electrical equipment	
C28	Manufacture of machinery and equipment n.e.c.	
C29	Manufacture of motor vehicles, trailers and semi-trailers	Cars and transport
C30	Manufacture of other transport equipment	
C31	Manufacture of furniture	Other
C32	Other manufacturing	
C33	Repair and installation of machinery and equipment	
Source: Eurostat		