Issue October 2017

European Commission

NEWSLETTER on STI Data and Indicators

DG RTD, A4, Analysis and monitoring of national research policies

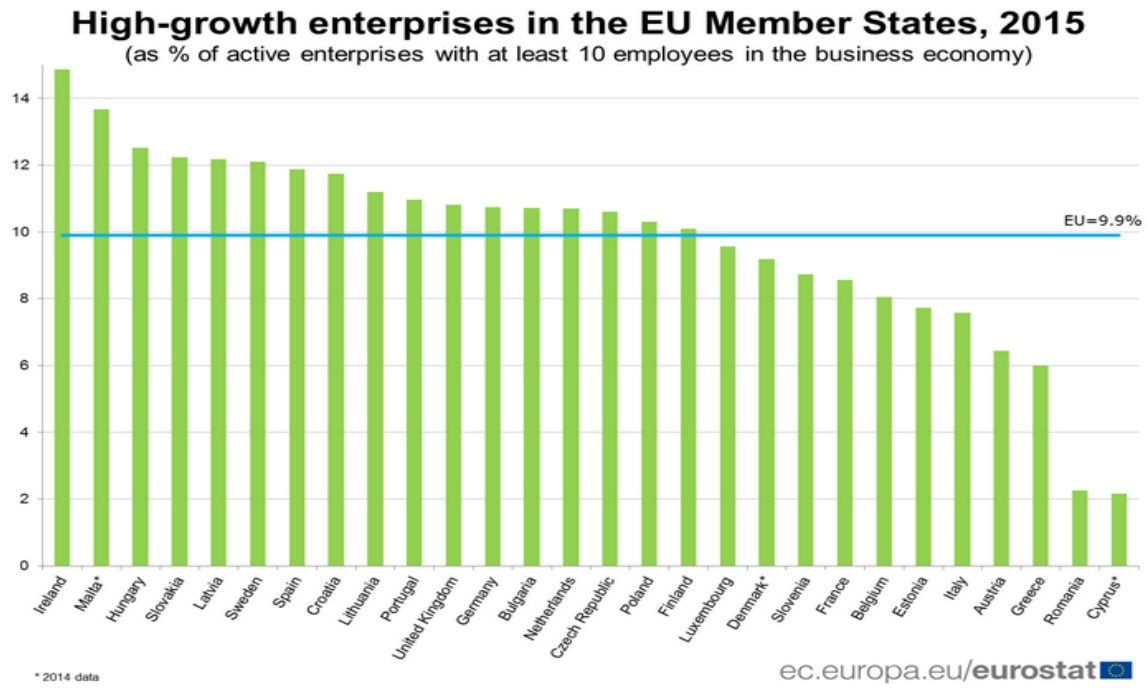
1. Eurostat data on high growth enterprises

On 19 October 2017 **Eurostat** published data on the share of high-growth enterprises in the EU (which are defined as those with an average annual growth in employees of at least 10% in the period 2012-2015). According to Eurostat 1 in 10 enterprises in the EU (9.9%) is recognised as a high-growth enterprise and furthermore:

'In 2015, EU Member States showed considerable variation in the distribution of high-growth enterprises. The highest proportion of high-growth enterprises among all active enterprises with at least 10 employees was recorded in Ireland (14.9%), ahead of Malta (13.7% in 2014), Hungary (12.5%), Slovakia and Latvia (both 12.2%) as well as Sweden (12.1%). At the opposite end of the scale, the lowest shares were registered in Cyprus (2.2% in 2014) and Romania (2.3%), followed by Greece (6.0%), Austria (6.5%), Italy (7.6%), Estonia (7.7%) and Belgium (8.1%).'

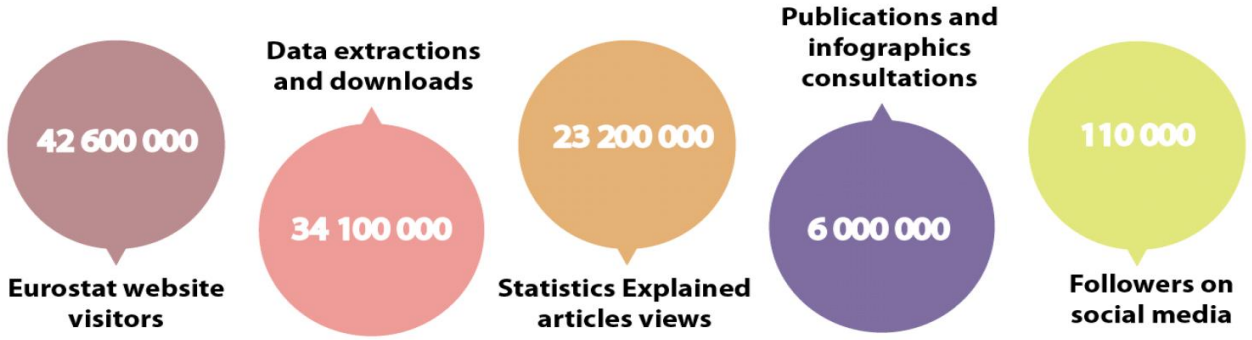
Interestingly Romania combines a low share of high growth enterprises (in terms of employment) with high GDP growth rates, which implies a strong growth of productivity.

Looking at a breakdown by economic activity, high-growth enterprises in the EU were more predominant in the service sectors than in the rest of the business economy in 2015. The highest proportion of high-growth enterprises was in the "Information and communication" sector (15.3% of active enterprises in this sector), followed by "Administrative and support service activities" (14.0%), "Transportation and storage" (12.0%) and "Professional, scientific and technical activities" (11.3%).



More info: http://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20171019-1?inheritRedirect=true&redirect=%2Feurostat%2Fnews%2Fwhats-new

2. European Statistics Day 20 October



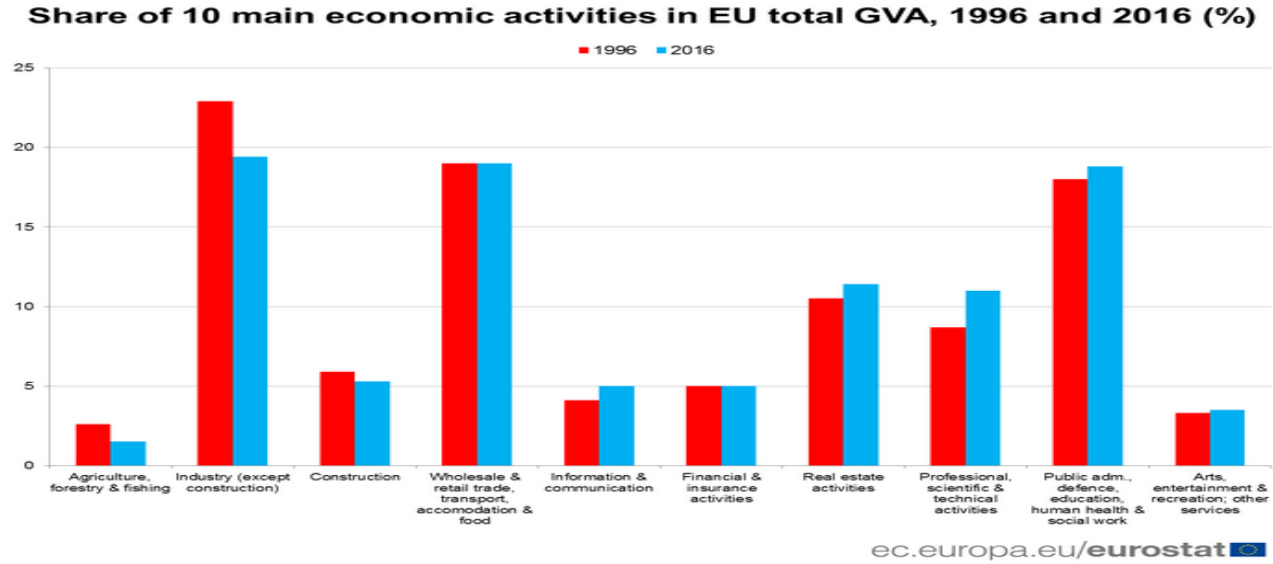
Source: Eurostat - 2016

On 19 October Eurostat published a news release on the occasion of the **European Statistics Day** (20 October). In that context Eurostat showed data on the use of Eurostat statistics (see info-graph). In 2016 the Eurostat website had 42.6 million visitors, there were 34.1 million data extractions and downloads and over 23 million Statistics Explained articles views. Eurostat furthermore had 110 000 followers on social media. On 20 October Eurostat furthermore informed through a quiz that it had published 44 billion data (individual data cells) online, that Eurostat unemployment data had the biggest media impact and that GDP and its main components was the most popular data set in the first half of 2017. Eurostat has 102 000 Twitter followers and 8000 Facebook followers.
In the context of the European Statistics Day Eurostat furthermore organised the conference 'Power from Statistics' (https://powerfromstatistics.eu/the-conference).

More info: http://ec.europa.eu/eurostat/documents/2995521/8320707/1-19102017-AP-EN.pdf/af372a1b-9042-44f5-95fe-d42970adda71

3. Eurostat data on gross value added by sector

On 23 October **Eurostat** published data on the gross value added share of the main economic activities in the EU. According to Eurostat
In 2016, industry was still the largest economic activity in the European Union (EU) in terms of output generated. It accounted for 19.4% of EU total gross value added (GVA), immediately ahead of the economic activities "Wholesale and retail trade, transport, accommodation and food services" (19.0%) and "Public administration, defence, education, human health and social work activities" (18.8%). "Real estate activities" (11.4%) and "Professional, scientific and technical activities" (11.0%) also accounted for a significant share of EU total gross value added. The percentage of gross value added grew in "Professional, scientific and technical activities" (from 8.7% in 1996 to 11.0% in 2016, or +2.3 percentage points – pp), "Information and communication" and "Real estate activities" (both +0.9 pp) as well as in "Public administration, defence, education, human health and social work activities" (+0.8 pp). In contrast, the share of industry decreased significantly (from 22.9% in 1996 to 19.4% in 2016, or -3.5 pp) as did that of agriculture, forestry and fishing (by -1.1 pp).
The share of industry in gross value added in 2016 was highest in Ireland and the Czech Republic (> 30%) and lowest in Cyprus and Luxembourg (< 10%).



More info: http://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20171023-1?inheritRedirect=true&redirect=%2Feurostat%2Fnews%2Fwhats-new

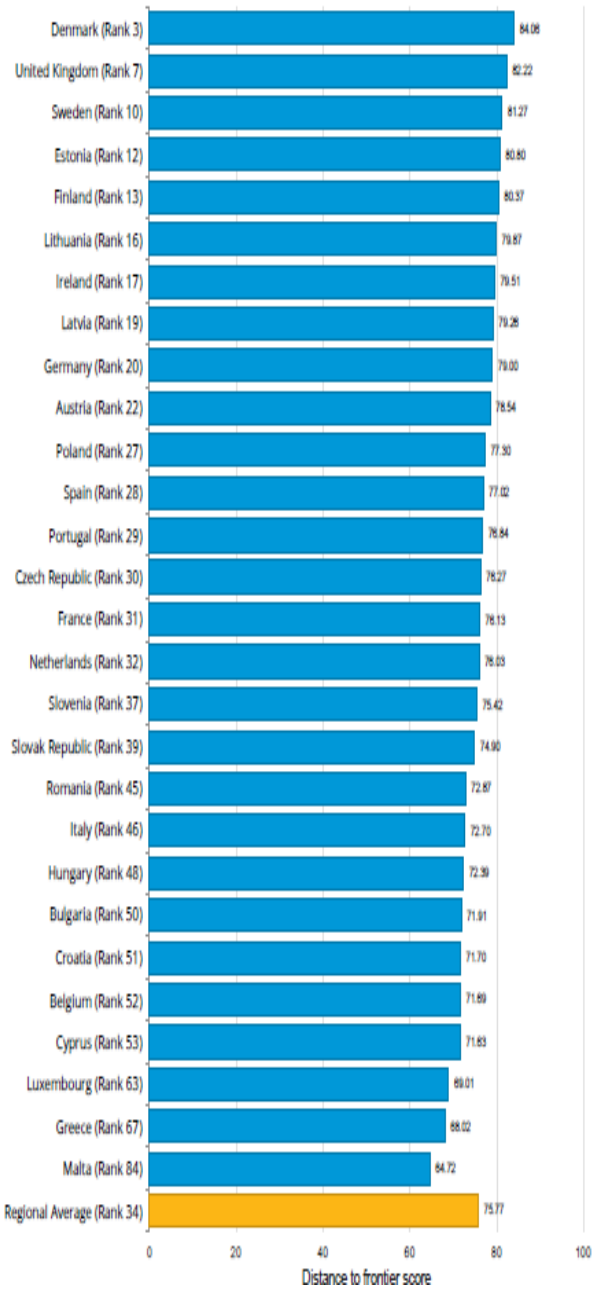
4. World Bank Doing Business Report 2018 edition

On 31 October 2017 the World Bank published the 2018 edition of its annual Doing Business report. Doing Business measures regulations affecting 11 areas of the life of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and labour market regulation. While New Zealand is the leading country world-wide in the ease of doing business, Denmark comes out as top performer in the EU, followed by the UK and Sweden. Greece and Malta perform lowest.

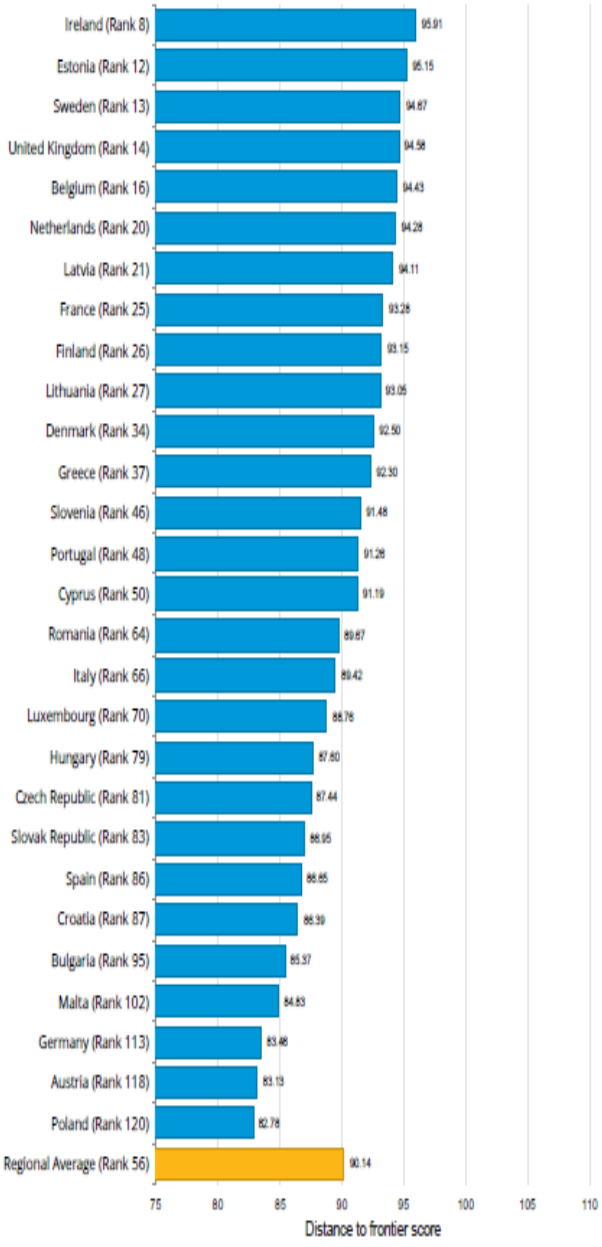
Ireland is the best performer when it comes to the ease of starting a business, followed by Estonia and Sweden. Germany, Austria and Poland rank lowest in the ease of starting a business.

On the important indicator 'days to start a business' Denmark, Estonia, France and the Netherlands perform best (3.5 days in each country). In Poland (37 days), in Bulgaria (23 days) and in Austria (21 days) on average it takes longest to start a business. The tax rate on profits according to the report is lowest in Luxembourg (20.5%) and Croatia (20.6%) and highest in France (62.2%) and Belgium (57.1%).

How economies in European Union (EU) rank on the ease of doing business



How economies in European Union (EU) rank on the ease of starting a business



Source: Doing Business database.

More information: http://www.doingbusiness.org/

5. PCH data on traffic at Internet Exchange Points (IXPs)

The US based research institute Packet Clearing House (PCH) publishes on its website data on traffic of 843 Internet Exchange Points (IXPs, see below). According to the latest data shown the world's busiest IXP is located in Frankfurt (DE-CIX, with an average data traffic of 3.7 terabits, or 3700 gigabits, per second, Frankfurt hence calims to be the largest Internet hub in the world), followed closely by Amsterdam and then London (however, the data are incomplete with results for many US and mainland China IXPs missing). Frankfurt is hence also nicknamed 'plumbing capital of the world wide web'
According to a 2016 study by the Borderstep Institute data centres in the Frankfurt region are already spreading over 450 000 m^2 (with an expected expansion to 600 000 m^2 in 2018) and directly occupy 20 000 people (with indirect employment amounting to 15 000), while nearly 2 billion is invested in data centres in the Frankfurt agglomeration per year. The data centres in the region already use more electricity than the Frankfurt airport and consumption is growing by 10-12% per year. The Amsterdam IXP has a similar size as regards traffic, surface and employment. In 2015 all data centres in the EU had a total surface of 7.5 million m^2, of which 1.9 million in Germany, 1.7 million in the UK, 1.2 million in France and 0.5 million in the Netherlands. Since cooling represents 25% of the increasing energy consumption of data centres, there has been a boom in data centres in cool climates in recent years, with Facebook setting up a centre in Lulea/Sweden in 2011, Google opening a data centre in Hamina/Finland in 2012, IBM opening a cloud data centre near Oslo/Norway in 2016 and Amazon announcing three new data centres in Sweden in 2017.

PCH data on the 25 top IXPs (no data available for mainland China IXPs and for some US IXPs).

Region	Country	City	IXP Name	Participants	Peak	Avg ▲
Europe	Germany	Frankfurt	Deutscher Commercial Internet Exchange DE-CIX Frankfurt	747	5.56P	3.69P
	Netherlands	Amsterdam	Amsterdam Internet Exchange	807	4.9T	3.46T
	United Kingdom	London	London Internet Exchange	770	4.24T	2.71T
Latin America	Brazil	São Paulo	Ponto de Troca de Tráfego Metro São Paulo	1200	2.95T	2.07T
Europe	Netherlands	Amsterdam	Neutral Internet Exchange	654	1.8T	1.21T
North America	United States	Seattle	Seattle Internet Exchange	271	993G	732G
Europe	France	Paris	France-IX	346	885G	652G
Asia-Pacific	China	Hong Kong	Hong Kong Internet Exchange	276	926G	592G
	Japan	Tokyo	JPNAP Tokyo I - Otemachi	120	838G	453G
Europe	Poland	Warsaw	Polish Internet Exchange	266	789G	450G
	Ukraine	Kiev	Giganet Internet Exchange	101	769G	436G
Asia-Pacific	Japan	Tokyo	Japan Internet Exchange	152	620G	376G
Europe	Ukraine	Kiev	Digital Telecom Internet Exchange	140	597G	331G
	Italy	Milan	Milan Internet Exchange	209	460G	326G
	Italy	Florence	Tuscany Internet Exchange	33	681G	326G
North America	Canada	Toronto	Toronto Internet Exchange	226	453G	321G
Latin America	Brazil	Rio de Janeiro	Ponto de Troca de Tráfego do Rio de Janeiro	137	381G	257G
Europe	Ukraine	Kiev	Ukrainian Internet Exchange	180	397G	250G
	Spain	Madrid	Punto Neutro Español de Internet	35	321G	220G
	Austria	Vienna	Vienna Internet Exchange	131	363G	217G
North America	United States	New York	DE-CIX New York	145	245G	192G
Europe	Bulgaria	Sofia	NetIX	100	284G	178G
	Poland	Warsaw	TPIX - Internet Exchange	214	213G	125G
	Bulgaria	Sofia	Balkan Internet Exchange	49	200G	123G
Asia-Pacific	Japan	Osaka	JPNAP Osaka	42	218G	122G

More info: https://www.pch.net/ixp/dir
https://www.borderstep.de/wp-content/uploads/2016/01/Studie-Rechenzentren-in-Hessen-2015-Stand-13-01-2016.pdf

6. Miscellaneous results from national data sources

UK: boom of unicorns continues

At the beginning of 2017 there were 7 unicorn companies (start-ups with a market valuation of at least 1 bn $) in the UK: the Fintech companies *Transferwise* and *Funding Circle*, the health care companies *Oxford Nanopore* and benevolent.ai, the Mobile services company *Shazam*, *Global Switch* and the eCommerce company *Farfetch*. In late 2016 the list included in addition the Scottish company *Skyscanner*, which was bought in November 2016 by a Chinese firm. In April 2017 the beverage company *Brewdog* joined the list, in May the Augmented/Virtual reality company *Improbable*, and in September the on demand company *Deliveroo*. In October yet another UK unicorn was added to the list, the financial services company *OakNorth Bank*.

Nearly half of the 24 EU unicorns are hence based in the UK (13 unicorns in other EU countries, of which DE 4, FR 2, SE 2, NL 2, LU 1, CZ 1, MT 1)

More info:
https://www.cbinsights.com/research-unicorn-companies

Croatia: emerging electric vehicle production

Neither OICA, the international organisation of motor vehicle manufacturers, nor ACEA, the European Automobile Manufacturers Association, lists Croatia among the car producing countries.
However, Croatia has an automotive component industry that employs about 10,000 people. It furthermore has a couple of small, but rapidly growing companies in the field of electric vehicles.
In 2007 Mate Rimac (also nicknamed 'Elon Musk of Croatia') founded in a garage what is now *Rimac Automobili*, a producer of electric supercars. Though the number of vehciles produced is still small, the company has already about 250 employees.
DOK-ING, founded in 1992 and specialised in unmanned multi-purpose vehilces, used mainly in mining, is another emerging producer. DOK-ING has already produced electric busses and scooters and has developed an electric city concept car, the XD, though production has not started yet.
In 2016 an employee of Rimac launched an own electric vehicle company in Rijeka, TORP, which, however, has not yet started to produce cars. Finally in summer 2017 K. Soong, a Chinese business man, who first planned to buy Rimac automobili, announced plans to start electric car production in Croatia.
When asked about the reasons why he came to Croatia Soong mentioned Nikola Tesla (1856-1943), the 'father of the electrical industry (and namegiver of Tesla car company), who was born in Croatia.

More info:
https://www.total-croatia-news.com/business/19058-new-electric-car-producer-in-croatia

https://www.total-croatia-news.com/business/19636-another-entry-in-croatian-electric-vehicles-industry

Australia: The end of automobile production

When the General Motors Australian brand Holden closed its factory on 20 October various media reported the end of car production in Australia. Two weeks before Toyota had shut its Camry factory in Australia. Twelve months before Ford closed its assembly line in Australia.

Production volumes in Australia with ist limited market were relatively small and Australian car exports couldn't compete with cheaper Asian competitors.

Since a Free Trade Agreement was concluded in 2005 with Thailand, many cars were imported from this low wage country (because of its booming automobile industry with an annual production of 2 million cars also nicknamed 'Detroit of the East'), contributing to the demise of the Australian car industry.

More info: https://www.autocar.co.uk/car-news/industry/end-car-production-australia-what-went-wrong

Japan: Ongoing aging of population

On 20 October 2017 the Statistical Bureau of Japan published final population estimates for 1 May 2017 and provisional estimates for 1 October 2017. On 1 May Japan had 126.7 million inhabitants , of which only 1.6% (2 million) were foreigners. Population remained largely stable in the 5 months till October, but there was a shift between age groups, reflecting the ongoing aging of the Japanese population (Japan combines a low birth rate with the highest life expectancy in the world).

From May to October the share of population aged under 15 declined from 12.4% to 12.3%, the share of 15-64 year olds, decreased from 60.1% to 59.9% and the share of the 65+ population, already one of the highest in the world, increased from 27.6% to 27.7%. The share of population 85 and older increased in the same period from 4.2 %to 4.3% or in absolute numbers from 5.37 million to 5.46 million.

More info: http://www.stat.go.jp/english/data/jinsui/tsuki/index.htm

Calendar of data releases and indicator based publications *Update of: 31/10/2017 (grey= already published)*			
2017	**Eurostat data updates**	**Commission indicator based reports**	**Data and indicator based reports of other organisations**
January			Transparency International Corruption Perception Index Bloomberg Innovation Index
February	Tertiary attainment (2016, prov.) High growth enterprises data (provisional, 2015)	Winter forecast (ECFIN)	OECD MSTI statistics (R&D expenditure)
March		DESI indicator (CNECT)	European Patent Office , annual results Reuters Most Innov. Institutions OICA world motor vehicle production data OECD R&D Statistics
April	Education headline indicators (LFS)		Internet Minute (Excelacom/Allaccess)
May	High-tech trade (2016) Venture capital (2016) Education enrolment, graduates Knowledge-int. activities (2016)	Spring Forecast (ECFIN) Skills forecast (Cedefop) Europe 2020 publication (ESTAT)	Invest Europe European Private Equity Report IMD World Competitiveness Yearbook
June	Education spending Employment high-tech (2016) HRST education inflows (2015)	European Innovation Scoreboard (GROW/RTD) Regional Innovation Scoreboard (GROW/RTD)	OECD MSTI publication Times Higher Ed. Reputations Ranking WIPO/Cornell/INSEAD Global Innovation Index
July	IPR (Patents, 2014), Community Trademarks (2016), RC Designs (2016)		UNESCO UIS STI stats release OECD Education at a Glance
August			Academic Ranking of World Universities (Shanghai)
September	Final high growth ent. data (2015) Economic data on high-tech (2016)		WEF Global Competitiveness Index
October	GBAORD (2016 preliminary)		World Bank Doing Business
November	R&D intensity (2016 preliminary, 2015 final) Knowledge-int. activities (2016) Employment high-tech (2016)	Autumn Forecast (ECFIN) Education Monitor (EAC) Annual Growth Survey (ECFIN)	Top500.org: Top 500 Supercomputer list OECD STI Scoreboard (2-yearly)
December	ICT household data (2016) ICT enterprise data (2016) HRST stocks (2016)	Industrial R&D Investment Scoreboard (JRC) Joint Employment Report (EMPL)	WIPO World Intellectual Property Indicators

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