European Commission

# NEWSLETTER on STI Data and Indicators

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

1. Eurostat data on regional GDP per capita

On 26 February 2019, Eurostat published a *news release* on regional GDP per capita. According to the release, in 2017, regional GDP per capita, expressed in terms of purchasing power standards, ranged from 31% of the European Union (EU) average in the Bulgarian region of North-West, to 626% of the average in Inner London - West in the United Kingdom. However, differences in wealth levels are in reality smaller. Firstly, while data are expressed in purchasing power standards and hence take differences in national price levels into account, this is not the case for regional differences in price levels (real estate prices for example are much higher in big cities compared to rural areas). Furthermore commuting plays a role, an inflow of commuters, contributes to high per capita GDP figures, since they are not part of the population in the denominator. The leading regions in the ranking of regional GDP per capita hence include many cities and urban areas. In 2017 after Inner London - West (UK), Luxembourg (253%, also affected by commuting), Southern in Ireland (220%), Hamburg in Germany (202%), Brussels Region in Belgium (196%), Eastern & Midland in Ireland (189%) and Prague in Czechia (187%) ranked highest. Among the 20 regions with GDP per capita below 50% of the EU average, five were in Bulgaria, four each in Greece and Hungary, three in Poland, two each in France and Romania.

Variation of regional GDP per capita within EU Member States in 2017
in PPS, EU28 = 100
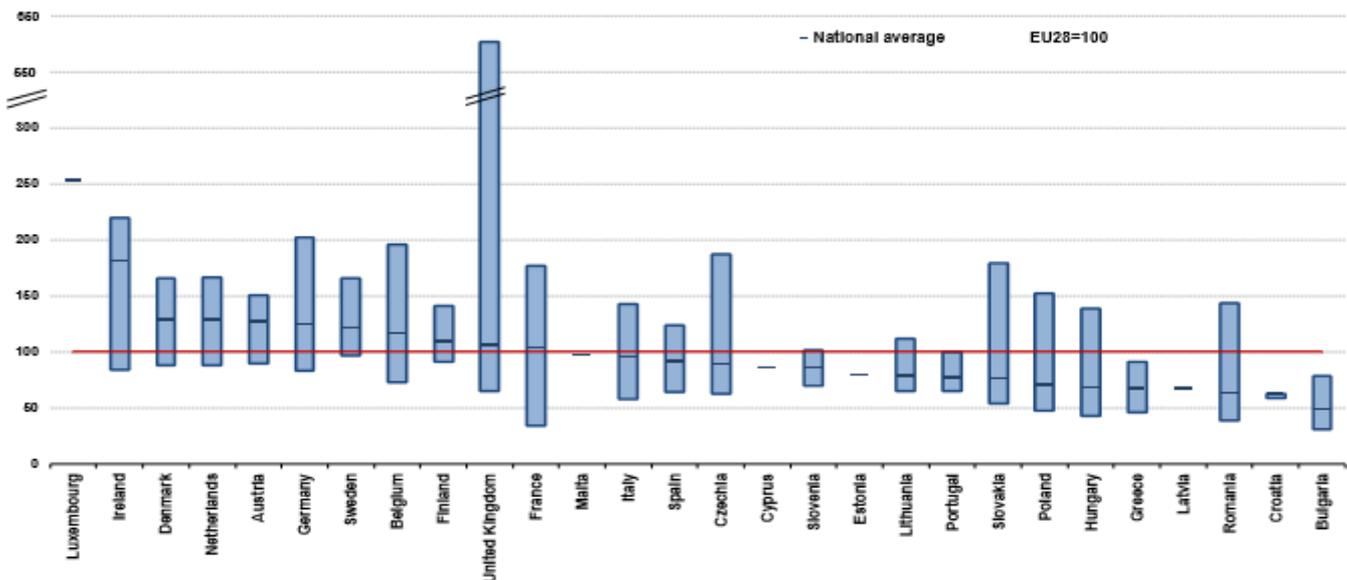
The bar shows for each Member State the range from the region with the lowest value to that with the highest value.

More info: https://ec.europa.eu/eurostat/documents/2995521/9618249/1-26022019-AP-EN.pdf/f765d183-c3d2-4e2f-9256-cc6665909c80

2. Eurostat data on turnover from web sales

On 27 February, Eurostat published data showing that 7 % of business turnover in 2017 was generated through web sales.

This was mostly via enterprises' own websites (6% of total turnover), while 1% of total turnover was via e-commerce marketplaces available on external websites or apps. Belgium and Ireland (both 15%) in 2017 had the highest percentage of turnover through web sales, followed by the UK and Sweden, while Bulgaria and Slovenia (both 2%) had the lowest proportion of turnover from web sales.

Turnover from web sales broken down by online marketplace or own website/apps, 2017
(% of total turnover)

■ Online marketplace   ■ Enterprises' own websites or apps
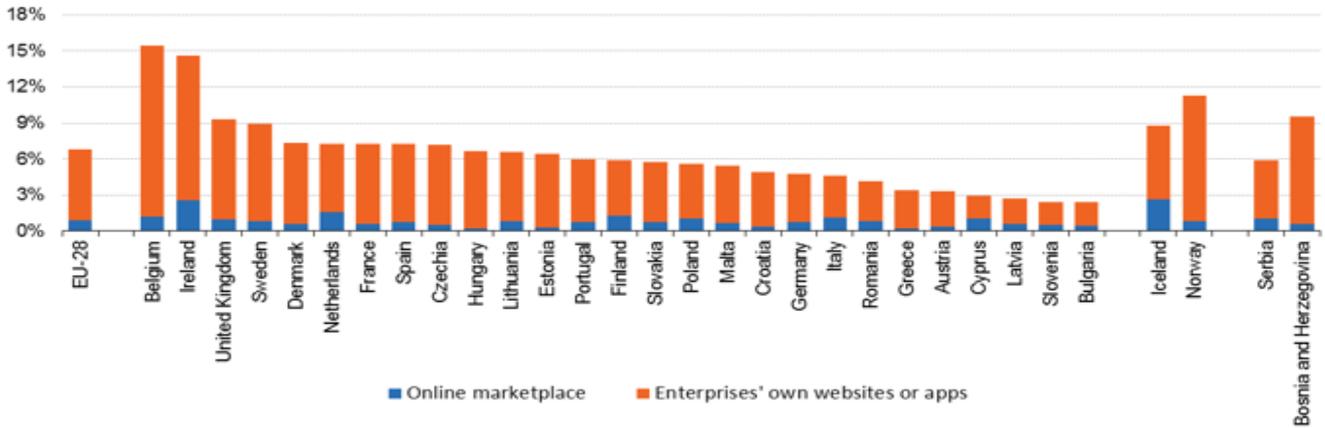
Note: Only countries with results available for both indicators are displayed.
Data for Luxembourg are not available.

ec.europa.eu/eurostat

More info: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190121-1?inheritRedirect=true&redirect=%2Feurostat%2Fnews%2Fwhats-new

3. Eurostat data on tertiary attainment

In February 2019, Eurostat published provisional 2018 results for the Europe 2020 target on the tertiary attainment of 30-34 year olds. Tertiary attainment in EU 28 increased from 39.9% in 2017 to 40.5% in 2018 (surpassing already the Europe 2020 target of 40%). Among Member States Lithuania had the highest tertiary attainment (57.6%, down from 58.0% in 2018), followed by Cyprus (57.1%), Ireland (55.4%), Luxembourg (54.7%) and Sweden (52.2%). Italy (27.9%) and Romania (24.9%) had the lowest tertiary attainment rates among EU Member States in 2018.

Tertiary attainment (30-34 years old)

■2017 ■2018

More info: https://ec.europa.eu/eurostat/data/database
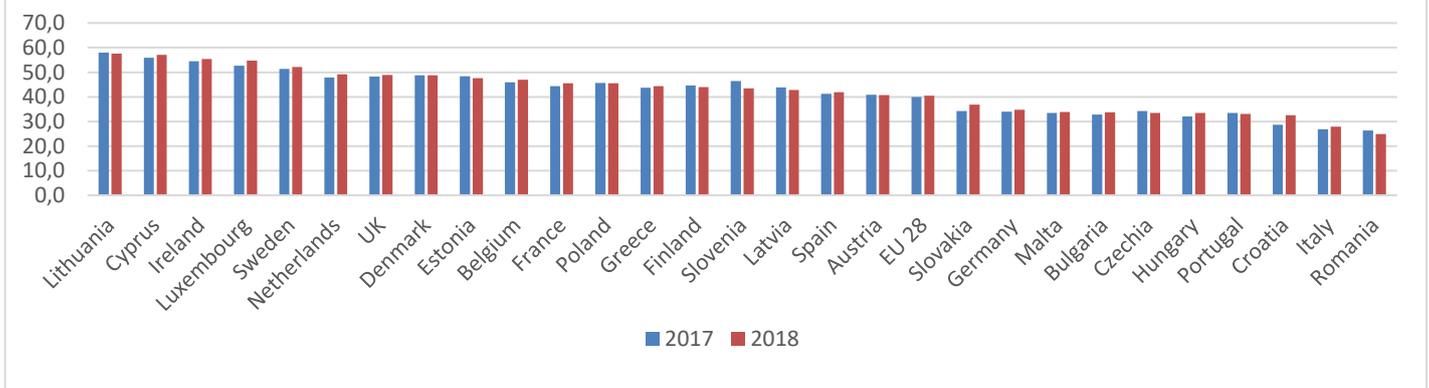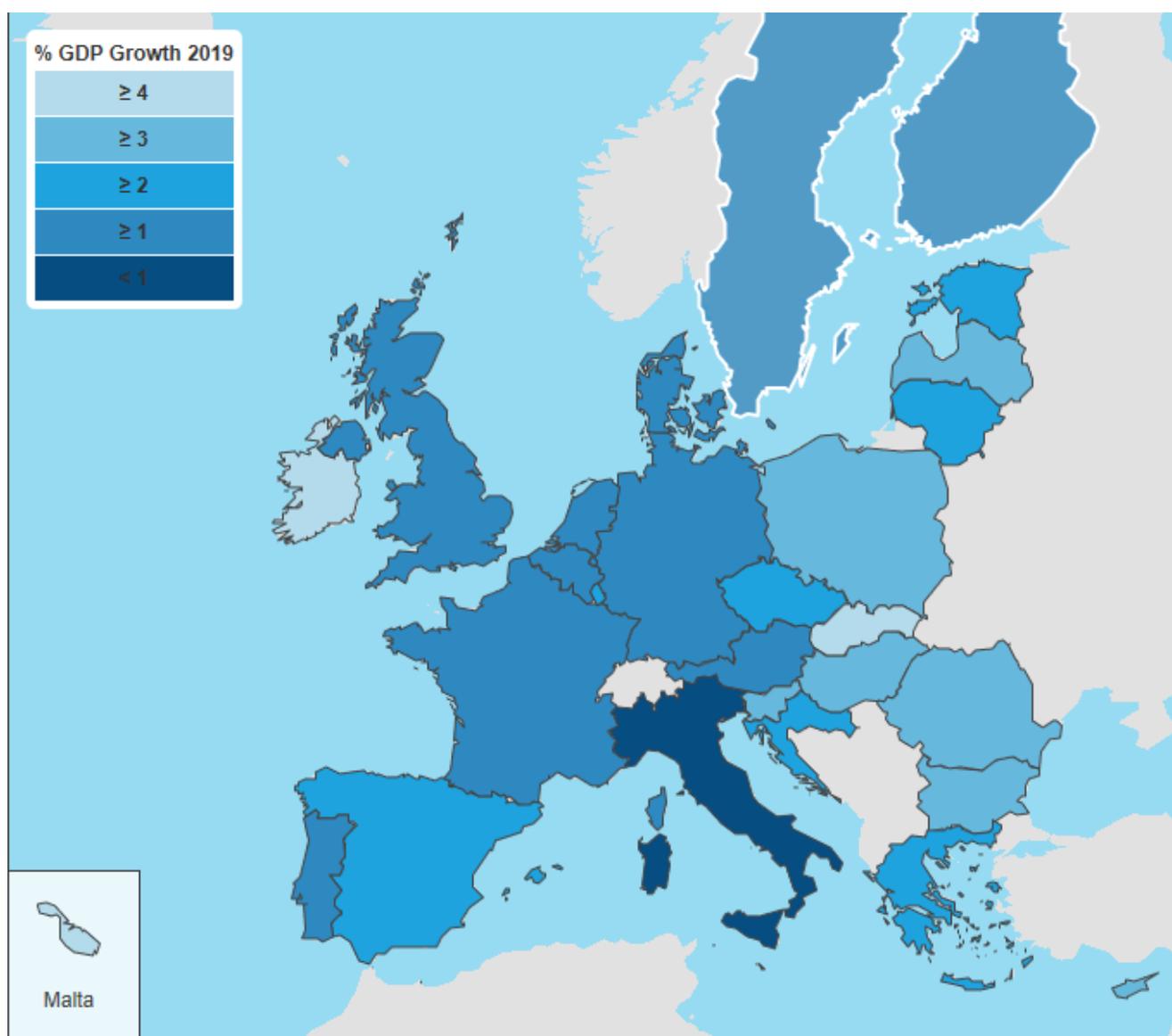
4. Commission Winter 2019 economic forecast

On 7 February 2019, the **Commission (DG ECFIN)** published the **Winter 2019 economic forecast**.

According to the forecast GDP growth in the EU economy as a whole is set to slow down in the coming years, from 1.4% in 2018 to 1.3% in 2019 and 1.2% in 2020. Inflation is also expected to decelerate from 2.3% in 2018 to 1.9% in 2019 and 1.7% in 2020.

In 2019, Malta is forecast to have the highest GDP growth (5.2%) among Member States, followed by

Ireland (4.1%) and Slovakia (4.1%), where a new car production facility opens. The slowest growth in 2019 is expected for Italy (0.2%) and Germany (1.1%).

In 2020, Malta (4.6%) and Ireland (3.7%) are forecast to have the highest growth, followed by Bulgaria and Romania (3.6% each). In 2020, Italy will again be the Member State with the slowest growth (0.8%) followed by Belgium (1.2%). The UK will be among the low growth economies (1.3%) in both years.

More info:
https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/winter-2019-economic-forecast-growth-moderates-amid-global-uncertainties_en

5. WIPO Intellectual Property Indicators

On 3 December 2018, WIPO published the 2018 edition of its *Intellectual Property Indicators*, covering amongst others, statistics on patents, trademarks and industrial designs.

Patents

Patent applications worldwide grew by 5.8% to reach 3.17 million in 2017. The Intellectual Property Office of China received 1.38 million applications (+14.2% compared to 2016, 44% of worldwide applications), more than twice the number received at the United States Patent and Trademark Office USPTO (607 000 applications, +0.2%). The Japan Patent Office ranked third, with 318 000 applications (+0.0%), followed by the Korean Intellectual Property Office (204 800, -1.9%) and the European Patent Office (167 000, +4.5%). Together the five offices represent 85% of the world total.

Patent applications worldwide grew by 5.8%
1.1. Patent applications worldwide, 2001–2017
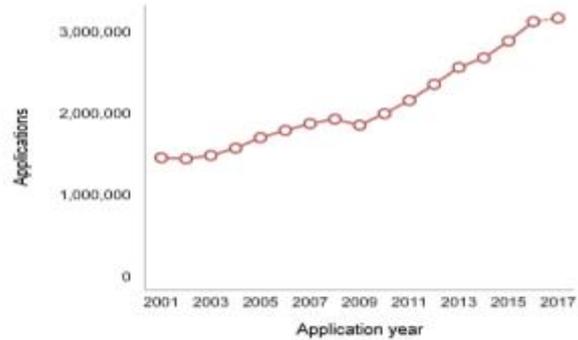
Source: Figure A1.

Trademarks

An estimated 9.11 million trademark applications were filed in 2017, 30% more than in 2016. China accounted for 90% of this increase and about 60% of all applications worldwide. Since trademark applications may refer to different classes of goods and services, WIPO also looks at the class counts to improve international comparability. The IP office of China had a class count of over 5.7 million (+55.2%), followed by the US with 0.6 million (+12.6%), Japan (0.56 million, + 24.2%), the European Union Intellectual Property Office (EUIPO, 0.37 million, +0.5%) and Iran (0.36 million, +87.9%). The top 5 offices represented 62% of world trademark filing activity in 2017.

An estimated 9.11 million trademark applications were filed worldwide
2.1. Trademark applications worldwide, 2007–2017
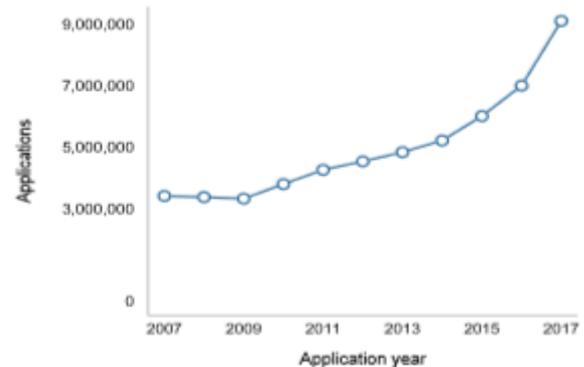
Industrial Designs

About 945 000 industrial design applications were filed worldwide in 2017, containing 1.24 million designs. The IP office of China received applications containing 51% of all design applications filed worldwide, representing over 628 000 designs. The European Union Intellectual Property Office (EUIPO, 111 000 applications, +6.2%) ranks second, followed by South Korea (67 000, -2.6%), Turkey (47 000, +1.2%) and the United States (46 000, +2.0%). As a result of a change in methodology in 2017 (only those applications for which fees have been paid are now counted), growth rates for China and the world for the year 2017 are not available.

An estimated 945,100 industrial design applications were filed worldwide
3.1. Industrial design applications worldwide, 2007–2017

More info:
https://www.wipo.int/publications/en/details.jsp?id=4369&plang=EN

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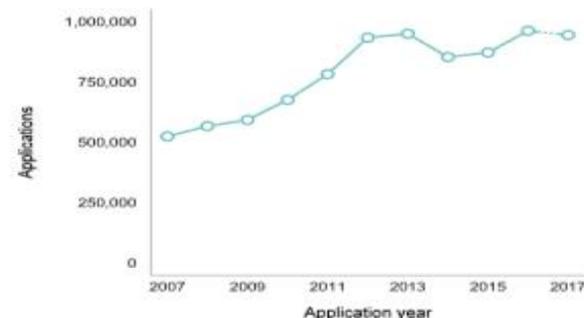
6. Miscellaneous results from national data sources

Finland : Government R&D funding increasing in 2019

On 21 February, *Statistics Finland* published data on government R&D funding in the state budget 2019. Budget appropriations for research and development increase by € 107.9 million (+3.8% in real terms) from the year before to reach € 1,991.1 million. The share of public research funding in gross domestic product is estimated to reach 0.83% in 2019. R&D spending by the Ministry of Education and Culture, representing over 60% of government R&D spending, will increase by 1.6%, R&D spending by the Ministry of Employment and the Economy by 12.7%. With regard to the funding of organisations, Business Finland will see the strongest increase (+13.2%), followed by the Academy of Finland (+3.9%), whilst funding for universities (+0.5%) and for universities of applied science (0.0%) will hardly grow. University central hospitals on the other hand will see a strong boost of funding (+37.4%). The budget for government research institutes will fall by 4.8%. As regards policy objective categories, industrial production and technology will see the biggest increase in R&D funding (+ EUR 68.3 million), while spending on energy research will also get a strong boost.

More info:

https://www.stat.fi/til/tkker/2019/tkker_2019_2019-02-21_tie_001_en.html

Government budget allocations for R&D (GBARD) in 2019

	R&D funding € million	Share of R&D funding, %	Change from 2018, € million	Real change from 2018, %
R&D funding total	1 991,1	100,0	107,9	3,8
Main administrative branches (ministries)				
Ministry of Education and Culture	1 206,1	60,6	41,7	1,6
Ministry of Employment and the Economy	563,7	28,3	72,7	12,7
Ministry of Agriculture and Forestry	54,8	2,8	1,2	0,4
Ministry of Social Affairs and Health	68,3	3,4	-1,6	-4,1
Funding organisations				
Universities	630,5	31,7	14,9	0,5
Universities of applied sciences	67,6	3,4	1,3	0,0
Business Finland	451,2	22,7	59,9	13,2
Academy of Finland	470,1	23,6	25,9	3,9
Government research institutes	183,5	9,2	-5,6	-4,8
Other R&D funding	167,3	8,4	5,5	1,5
University central hospitals	21,0	1,1	6,0	37,4

Germany: Innovation spending of SMEs lagging behind

In January 2019, ZEW (Mannheim) published the results of the German Innovation Survey 2018. The survey shows that large enterprises have expanded their innovation spending much more than SMEs. In 2017, innovation spending (which includes R&D) of large German enterprises amounted to € 139 bn, whilst SMEs spent only € 28 bn. While large enterprises plan to boost their spending by another 10 billion between 2017 and 2019, SMEs at the same time expect to reduce their spending by € 1 bn. With regard to sectors, the automotive sector (vehicle construction) is by far the largest spender (€ 52 bn innovation expenditure in 2017), followed by the electrical industry (€ 21 bn), the chemical and pharma industry (€ 19 bn) and ICT (€ 15 bn).

After declining for many years the share of innovation active enterprises remained stable in 2017. The share of enterprises with product or process innovations reached 36.0% in 2017, slightly less than in 2016. Within industry it fell from 44.9% in 2016 to 43.0% in 2017, while it increased from 31.7% to 32.4% in the services sector. 67.7% of large enterprises, but only 35.0% of SMEs, had product or process innovations in 2017.

More info: https://www.stat.fi/til/tkker/2019/tkker_2019_2019-02-21_tie_001_en.html
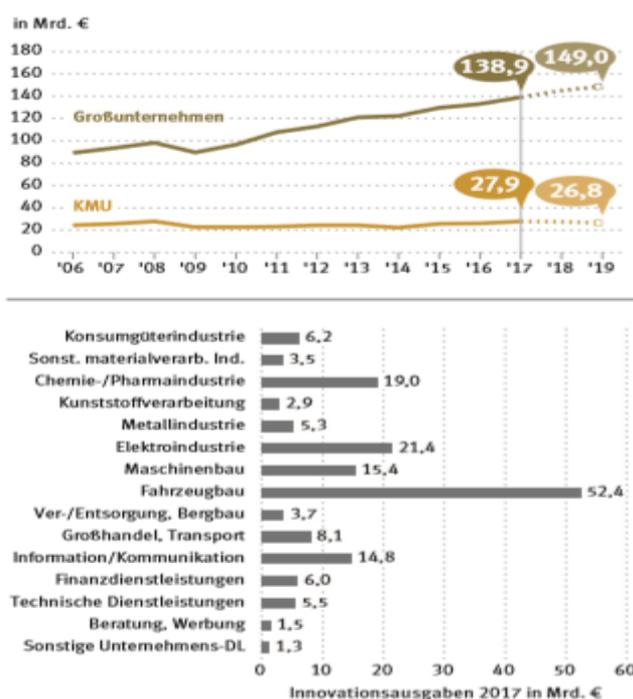
Calendar of data releases and indicator based publications
Update of: 28/2/2019 (grey= already published)

2019	Eurostat data updates	Commission indicator based reports	Data and indicator based reports of other organisations
January			Bloomberg Innovation Index INSEAD Global Talent Competitiveness Index
February	Community Innovation Survey (2016 data) Tertiary attainment (2018, prov.) High growth enterprises data (provisional, 2017)	Winter forecast (ECFIN)	OECD MSTI statistics (R&D expenditure)
March	R&D expenditure data update (revision of preliminary 2017 results)		European Patent Office , annual results OICA world motor vehicle production data OECD R&D Statistics
April	Education headline indicators (LFS, 2018 results)		Reuters Most Innov. Institutions Internet Minute (Excelacom/Allaccess)
May	High-tech trade (2018) Education enrolment, graduates Knowledge-int. activities (2018)	Spring Forecast (ECFIN) DESI index (CNECT)	Invest Europe European Private Equity Report IMD World Competitiveness Yearbook
June	Education spending Employment high-tech (2018) HRST education inflows (2017)	European Innovation Scoreboard (GROW/RTD) Regional Innovation Scoreboard (GROW/RTD)	Times Higher Ed. Reputations Ranking IRF Industrial robot sales
July			UNESCO UIS STI stats release WIPO/Cornell/INSEAD Global Innovation Index
August			Academic Ranking of World Universities (Shanghai)
September	Final high growth ent. data (2017) Economic data on high-tech (2018)	Europe 2020 publication (ESTAT)	OECD Education at a Glance
October	GBARD (2018 preliminary)	Education Monitor (EAC)	WEF Global Competitiveness Index World Bank Doing Business
November	R&D intensity (2018 preliminary, 2017 final) Knowledge-int. activities (2018) Employment high-tech (2018)	Autumn Forecast (ECFIN) Annual Growth Survey (ECFIN) Draft Joint Employment Report (EMPL)	Top500.org: Top 500 Supercomputer list OECD STI Outlook (2-yearly)
December	ICT household data (2019) ICT enterprise data (2019) HRST stocks (2018)	Industrial R&D Investment Scoreboard (JRC)	WIPO World Intellectual Property Indicators UNDP/MBRF Global Knowledge Index

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