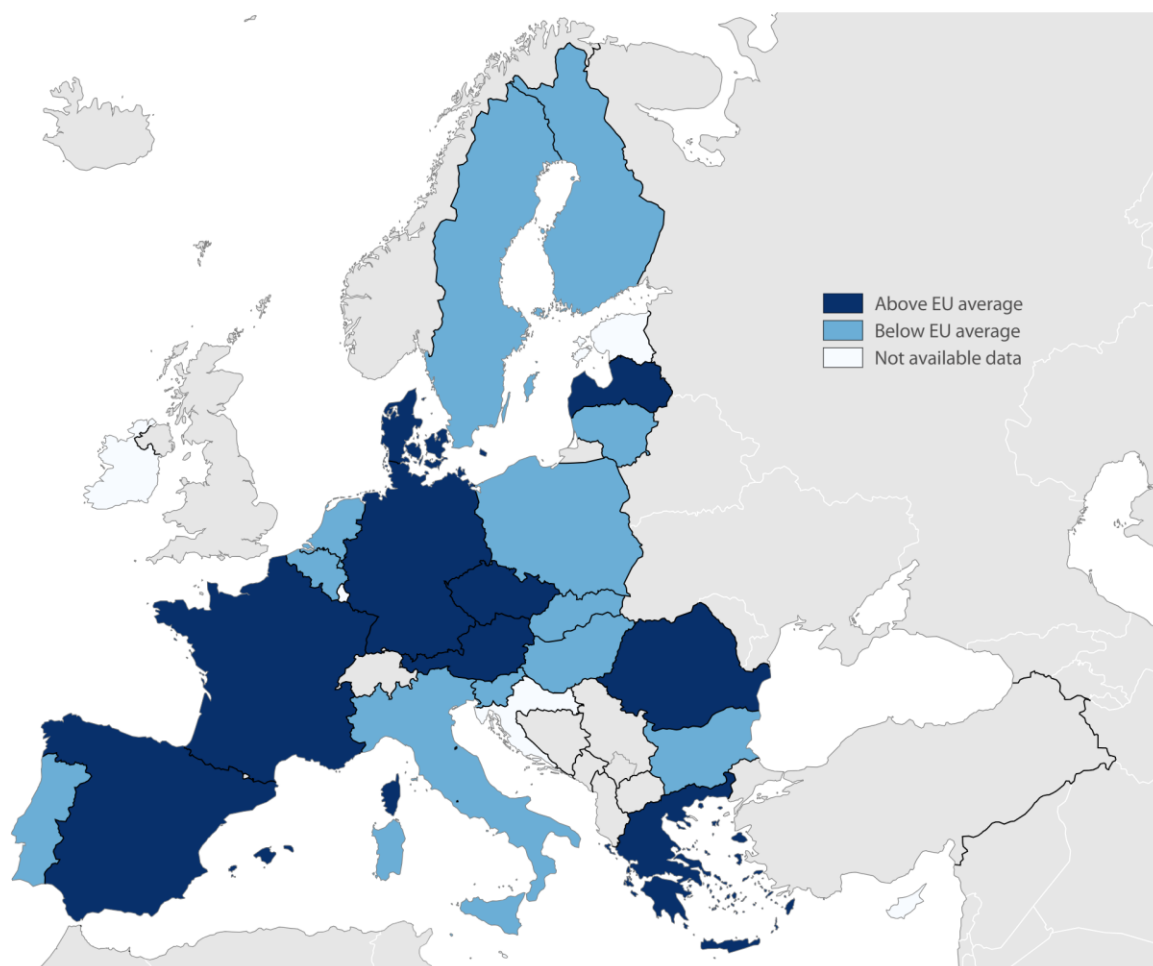


Economic performance of IPR indicators

2022 edition, June 2023 update

IPR indicators for selected EU Member States 2Q2023



Source: EUIPO

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ECONOMIC PERFORMANCE OF IPR INDICATORS

2022 EDITION, JUNE 2023 UPDATE

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In May 2021, the EUIPO presented the [economic impact of COVID-19 crisis in IPR-intensive industries](#) with data for the 2003-2020 period, including indicators⁽¹⁾ for all intellectual property rights (IPR), trade marks (TM), designs (DES), patents (PAT) and copyright (CR). The IPR-intensive industries included in this paper were those established in the third edition of the EPO/EUIPO report 'IPR-intensive industries and economic performance in the European Union'. In October 2022, the EPO and the EUIPO presented the [fourth edition](#) of this report with a new selection of IPR-intensive industries. Additionally, over the last 2 years, more countries have published short-term statistic (STS) indicators, which constitute the raw data for the IPR monthly indicators. The 2022 edition of the IPR indicators considers the new selection of IPR-intensive industries, new weights for calculating the indicators and all the available countries with data since 2019.

These new IPR indicators are based on deflated and volume indicators to eliminate the impact of prices using more aggregated data in the manufacturing sector (NACE divisions). The more extensive list of countries balances out the shorter time series allowing the analysis of economic developments since the COVID-19 pandemic.

The new IPR indicators will be updated every quarter to monitor their economic development for the European Union (EU) and 21 Member States (MS) with a total of 63 out of 135 possible indicators.

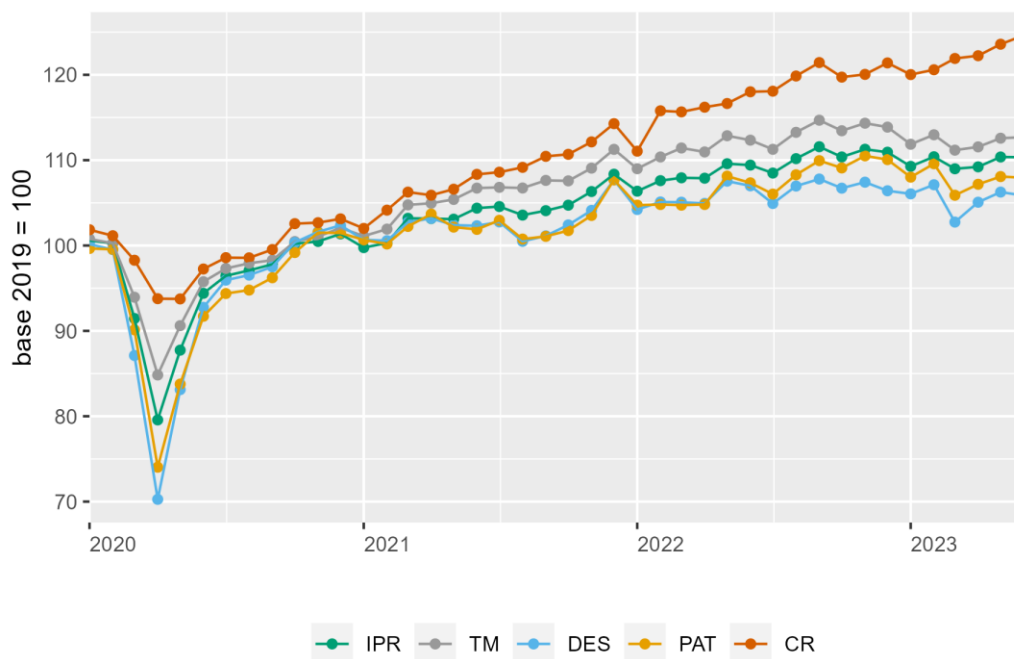
EU INDICATORS

The five EU IPR indicators registered a recovery in May followed by stabilisation in June, except the copyright indicator, which continued a 5-month upward trend. As a consequence, at the end of the second quarter of 2023, all the indicators registered a higher level than in March with design- and copyright-intensive industries resulting in an increase of more than 3 points in the

⁽¹⁾ IPR indicators are based on Eurostat's monthly short-term statistics (STS) covering all sectors of the economy and on previous research by the EUIPO and the European Patent Office (EPO). They monitor the economic performance of industries that use IPRs more intensively than the rest of the economy.

second quarter of 2023, while trade mark and patent indicators are about 2 points above their levels in the first quarter of the same year.

**Figure 1. IPR indicators in the EU, average 2019=100,
January 2019-June 2023**



As shown in Figure 2, the copyright indicator has shown the greatest annual rates of growth over the last 2 years. The average annual rate of growth in the second quarter of 2023 was 5.6 %, identical to the average growth during the previous quarter. The other four indicators continued a stable trend with average annual growth rates in the second quarter of below 1 % (except the design indicator, which registered a negative annual rate) with all of them, except copyright, registering lower rates than in the previous quarter.

In general, in all the IPR indicators, the service sector industries performed quite well with positive contributions in all indicators. The manufacturing industries registered the worst performance. Only 9 industries out of 27 in the manufacturing sector have shown positive annual rates in the second quarter of 2023 with NACE divisions 29 'Manufacture of motor vehicles, trailers and semi-trailers' and 30 'Manufacture of other transport equipment' registering two-digit growth reaching their pre-crisis levels.

In the service sector, NACE division 79 'Travel agency, tour operator reservation service and related activities' continue to lead the growth of copyright- and trade mark-intensive industries with an average growth rate above 10 %, as well as NACE division 58 'Publishing activities' which is intensive in all IPRs.

**Figure 2. Annual rates of change (%) of IPR indicators in the EU,
January 2019-June 2023**

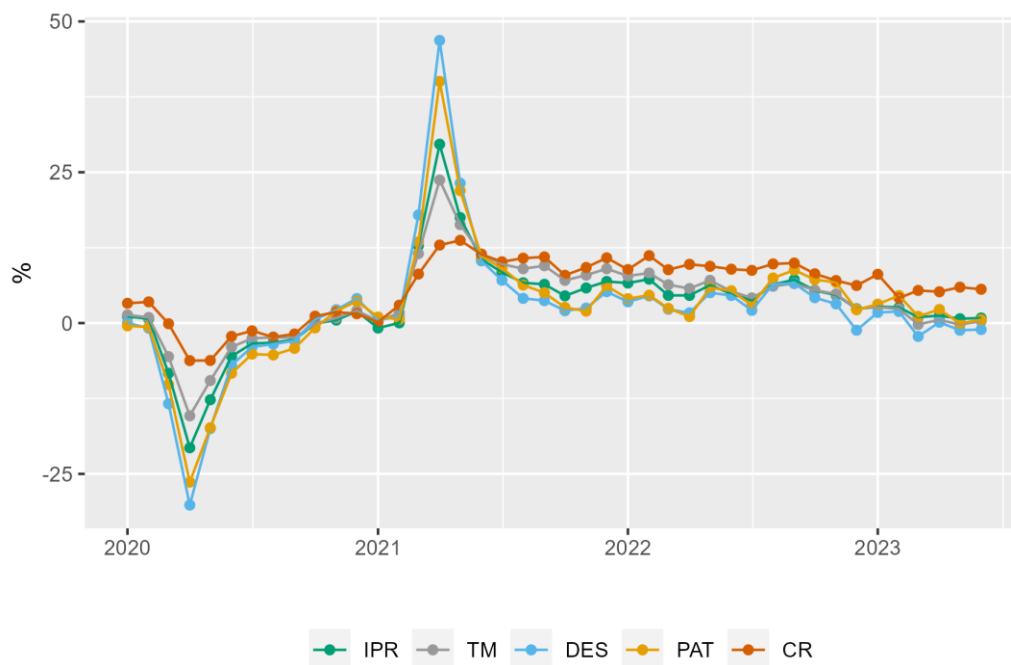


Table 1 summarises the evolution of all IPR indicators in the second quarter of 2023 with red numbers highlighting the indicators with negative annual rates during that period. The arrows in each cell indicate the direction of the trend, so that an upward arrow indicates that the annual rate in the second quarter of 2023 (compared with the same quarter in the previous year) is higher than the annual rate in the previous quarter and the opposite is indicated by a downward arrow.

IPR INDICATORS AT MEMBER STATE LEVEL

The performance of IPR-intensive industries in the EU Member States shows different trends, which is explained by the different structures of their IPR-intensive industries. Not all IPR indicators are estimated for all EU MS due to data limitations. Estonia, Ireland, Croatia, Cyprus, Luxembourg and Malta are the only MS for which no indicator is estimated; 8 MS allow the estimation of the five IPR indicators (Bulgaria, the Czech Republic, Germany, France, Latvia, Hungary, Poland (only since 2021) and Romania). IPR and trade mark indicators are available for the same 8 MS; copyright indicators are estimated for 12 MS; indicators for design-intensive industries are available for 13 MS and patent indicators for 17 MS.

For the analysis at MS level, Table 1 shows the annual average growth rates for all the IPR indicators and the GDP in the second quarter of 2023 (comparing the second quarter of 2023 with the same quarter of 2022) and the map on the cover page indicates those countries with an average growth rate below the EU rate in the second quarter of 2023 according to their IPR indicators in light blue. The dark blue countries are those with equal or higher average growth rates than the EU average. The arrows reflect whether the indicator has an increasing or decreasing trend in the second quarter of 2023 when its annual rates are compared with the previous quarter.

In general, the economic performance in the EU Member States has worsened in the second quarter of 2023, with only seven countries registering greater annual rates than in the previous quarter and almost half registering negative annual rates of their GDP. More than two thirds of all the IPR indicators estimated for the MS (or 40 out of 58) are in a decreasing trend.

Among the four biggest EU Member States, Italy registered lower annual rates than the EU average in all the calculated IPR indicators; Spain continues to register positive but decreasing annual rates and still above the EU average; and France registered the best performance in all the IPR indicators at MS level with positive rates and all above the EU average. Germany continues a path of weak growth with a negative rate of GDP and a very slow recovery of the IPR indicators, with design and patent indicators still below their pre-crisis level and only copyright-intensive industries registering significant growth although below the EU average.

Table 1. Average annual rate of GDP and IPR indicators in the second quarter of 2023

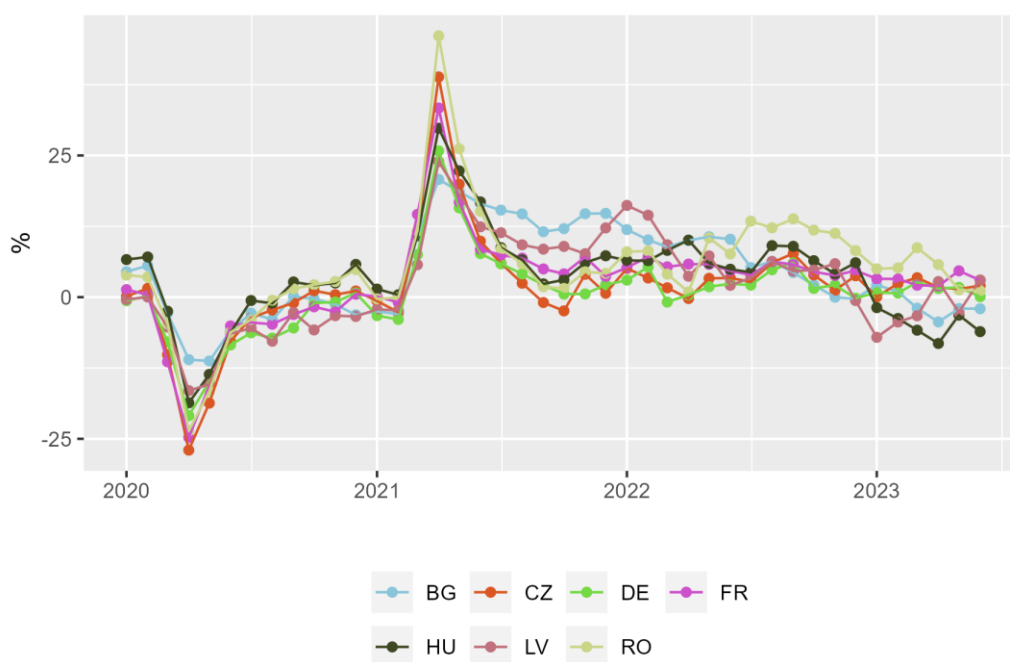
Country	GDP	IPR	TM	DES	PAT	CR
EU	↓ 0.4	↓ 0.9	↓ 0.2	↓ -0.7	↓ 0.9	5.6
AT	↓ -0.9				↓ 1.9	
BE	↓ 0.9			↑ 0.1	↓ -17.1	
BG	↓ 1.8	↓ -2.8	↓ -3.1	↓ -5.3	↓ -8.1	↓ 5.6
CZ	↓ -0.4	↓ 1.7	↓ -2.4	↓ 3.6	↑ 5.0	↓ -2.1
DE	↑ -0.1	↓ 1.1	↓ -0.6	↓ 2.0	↓ 1.6	↓ 4.7
DK	↓ 1.5				23.6	
EL	↑ 2.7			↓ 2.6	↑ 1.9	
ES	↓ 1.8				↓ 1.2	
FI	↑ -0.2					↓ 4.2
FR	↑ 1.0	↑ 3.2	↑ 2.8	↑ 0.9	↑ 2.3	↑ 8.2
HU	↓ -2.3	↓ -5.8	↓ -8.0	↓ -2.1	↓ -2.2	↑ -4.2
IT	↓ 0.4			↓ -3.2	↓ -1.0	
LT	↑ 1.0			↑ -4.0	↑ 0.6	
LV	↓ -0.1	↑ 1.0	↑ 3.1	↑ -2.3	↑ 2.8	↓ 5.9
NL	↓ -0.1			↓ -10.7	↓ -15.8	
PL	↓ -1.4	↓ -1.6	↓ -2.5	↓ -4.0	↓ 0.3	10.3
PT	↓ 2.3				↓ -7.9	
RO	↓ 2.7	↓ 2.7	↓ 3.0	↓ -0.5	↓ 1.0	↓ 11.8
SE	↓ -0.8					↓ -11.8
SI	↑ 1.6					↓ -1.5
SK	↑ 1.3					↑ -2.9

Legend: red numbers show negative annual growth rates. Upwards arrows show annual growth rates greater than previous quarter or increasing rates. Red downwards arrows indicate decreasing trends when the current quarter growth rates are below previous quarter rates.

When the performance of the overall economy is compared to the evolution of IPR indicators, in seven Member States the IPR indicators performed better than the GDP in the second quarter of 2023 in the Czech Republic, Denmark, Germany, France, Latvia, Austria and Finland. The worse performance of IPR indicators was in Hungary with all indicators registering negative rates. Other MS with negative and decreasing rates were: Bulgaria, Italy, Netherlands, Poland, Slovenia and Sweden. In previous quarters Romania registered the highest annual rates in the IPR indicators. Now it ranks second after France though all of them are in a decreasing trend with lower rates compared with the previous quarter.

The indicator for all IPR and trade mark-intensive industries is estimated for the same 8 MS: Bulgaria, Czech Republic, Germany, France, Latvia, Hungary, Poland and Romania. Both indicators show similar shapes in their annual rates since 2020 with the IPR indicator reaching its deepest trough in 2020 and highest peak in 2021.

Figure 3. Annual rates of change (%) of IPR indicators in some EU Member States, January 2020 – June 2023

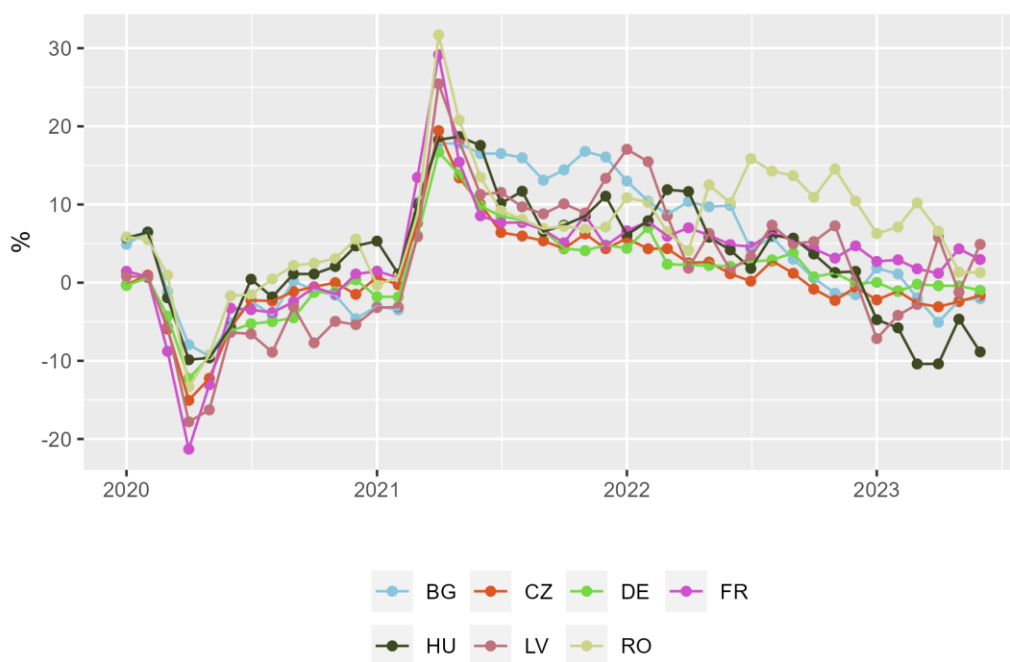


The highest rates among the IPR- and trade mark-intensive industries were registered in France and Romania, and were led by the service sector. In France, the NACE divisions 61 'Telecommunications' and 62 'Computer programming, consultancy and related activities'

showed the highest annual rates, while in Romania the indicator for NACE division 62 continued to register double-digit rates and its value in the second quarter of 2023 had doubled compared to its pre-crisis level. In the same quarter, NACE division 702 'Management consultant activities', also registered a double-digit annual growth rate taking both indicators to their highest relative levels compared to their pre-crisis levels, as shown in Table 2. Latvia is the third country with the most positive rates of growth in all IPR- and trade mark-intensive industries after a negative first quarter, during which it was the country with the worst rates for both indicators.

On the contrary, Hungary showed the worst performance in trade mark-intensive industries in the first half of 2023 with a -8 % rate during the second quarter mainly explained by the industries in the trade sector.

Figure 4. Annual rates of change (%) of trade mark indicators in some EU Member States, January 2020 – June 2023



The indicator for design-intensive industries was available for 13 countries and the patent indicator for 17 countries, representing 90 % of the GDP generated by patent-intensive industries between 2017-2019. Both indicators registered the deepest trough and highest peak of all the IPR indicators with the greatest differences among the countries being in the patent-intensive industries.

The only indicators that are still below their pre-crisis levels are these two indicators in Germany, design-intensive industries in Belgium and patent-intensive industries in Portugal, while the Dutch patent-intensive industries reached their pre-crisis level in the second quarter of 2023.

The best performance among the patent indicators continues to be the Danish one, which registered the highest annual rates since December 2022 and an average rate in the first half of 2023 of 24 %. The NACE division 21 'Manufacture of basic pharmaceutical products and pharmaceutical preparations' continues an impressive trend that has compensated for the more negative performance of the rest of the manufacturing sector.

Figure 5. Annual rates of change (%) of design indicators in some EU Member States, January 2020 – June 2023

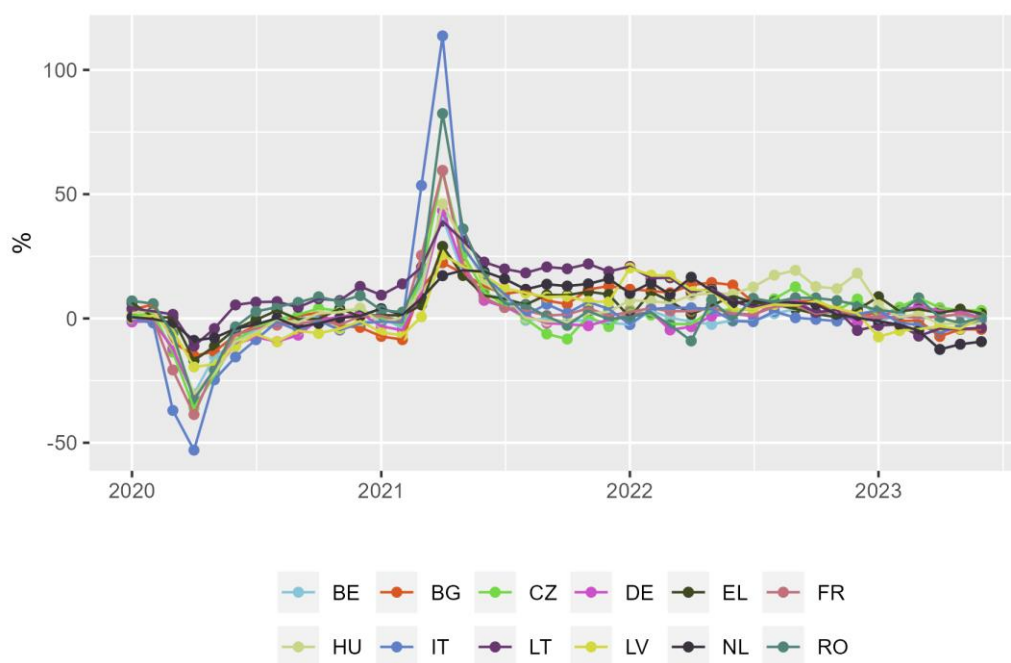
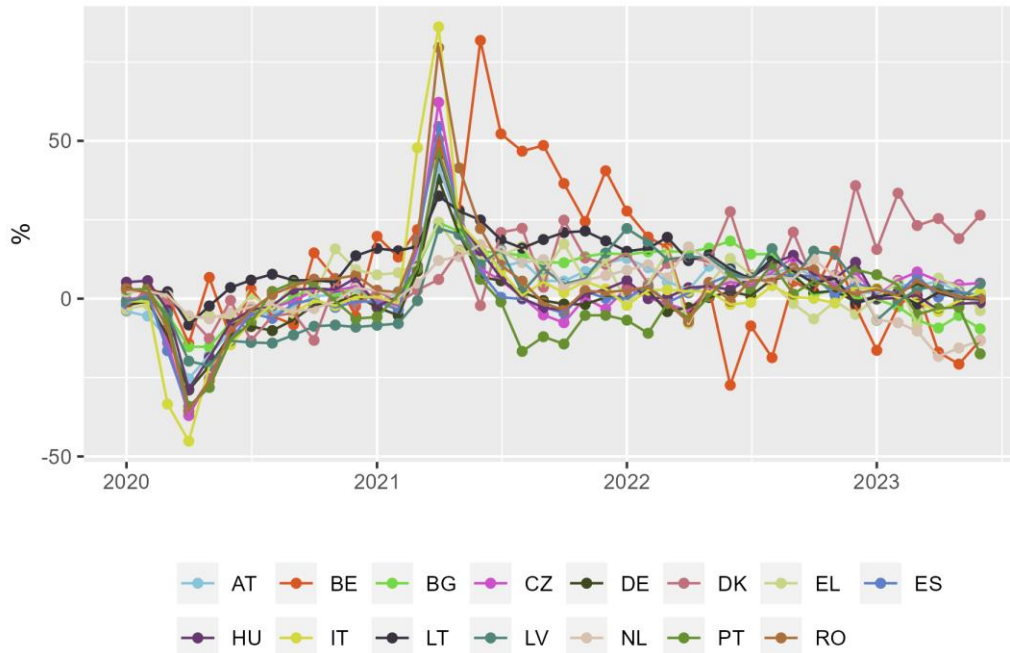
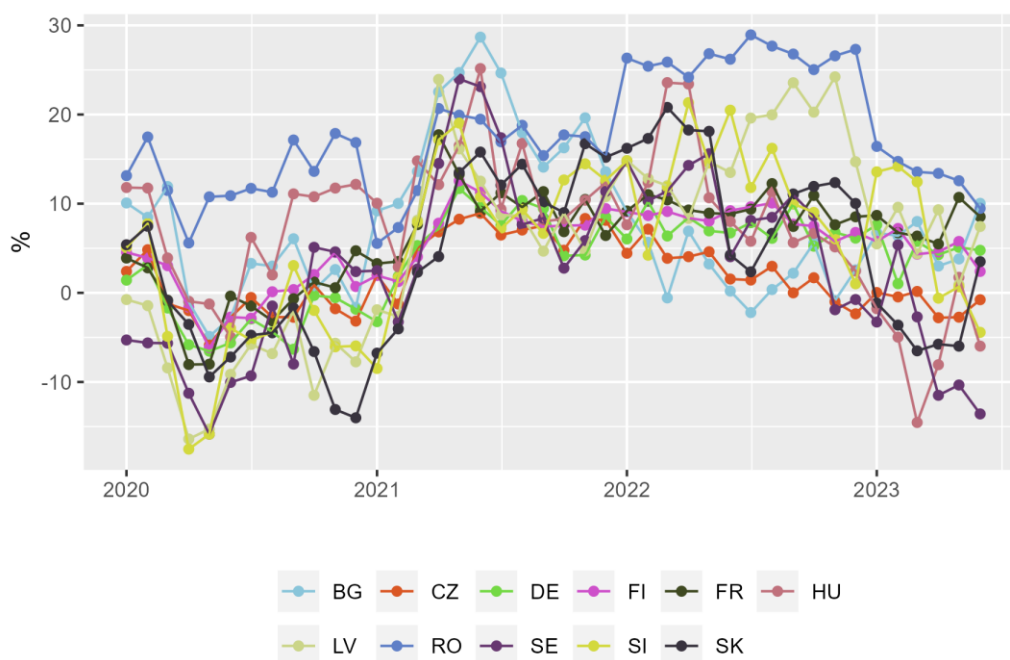


Figure 6. Annual rates of change (%) of patent indicators in some EU Member States, January 2020 – June 2023



The copyright indicator was available for 11 countries (including Poland since 2021). Although in past reports it registered the highest annual rates in many of the Member States, it is now in a decreasing trend in most of them with four countries showing negative annual rates.

Figure 7. Annual rates of change (%) of copyright indicators in some EU Member States, January 2020 – June 2023



Only Poland and Romania continue to register two-digit growth rates explained by the extraordinarily good performance of NACE division 62 'Computer programming, consultancy and related activities' in Romania added to NACE divisions 60 'Programming and broadcasting activities' and 61 'Telecommunications' in Poland.

The Swedish copyright indicator shows negative rates in the 3 months of the second quarter of 2023 with an average annual rate of -12 % explained by NACE divisions 73 'Advertising and market research' and 74 'Other professional, scientific and technical activities'.

IPR INDICATORS 2022 EDITION: DIFFERENCE TO PRE-CRISIS LEVELS, JUNE 2023

The table below shows the difference between the IPR indicator values in June 2023 and February 2020, with red numbers showing indicators that are still below pre-crisis levels and green numbers indicating where the indicator has reached or surpassed its pre-crisis level.

Table 2. Difference in IPR values between pre-crisis levels (February 2020) and June 2023.

Country	IPR	TM	DES	PAT	CR
EU	11.2	14.0	6.9	9.2	27.3
AT				16.9	
BE			-2.8	7.7	
BG	12.3	12.3	3.9	9.1	44.6
CZ	6.4	3.0	7.3	9.4	5.2
DE	1.1	3.5	-1.0	-2.6	17.3
DK				56.0	
EL			10.5	14.4	
ES				5.3	
FI					21.6
FR	12.0	14.7	4.0	2.5	32.4
HU	3.5	1.9	10.0	2.9	18.6
IT			0.1	2.0	
LT			35.5	49.2	
LV	10.2	10.5	4.5	10.3	29.8
NL			9.7	0.3	
PL*	NA	NA	NA	NA	NA
PT				-22.1	
RO	16.4	24.1	6.1	5.0	91.5
SE					3.1
SI					16.0
SK					16.6

* IPR indicators for Poland are only estimated from 2021 due to data availability issues, so the difference with pre-crisis levels cannot be calculated.

In June 2023 there were still two MS with design indicators and two MS with patent indicators below their pre-crisis levels. The lower value of the Portuguese patent indicator in comparison with the level in February 2020 reflects the worsened situation of their most important patent-intensive industries: NACE division 29 'Manufacture of motor vehicles, trailers and semi-trailers' is still 35 points below its pre-crisis level and NACE division 35 'Electricity, gas, steam and air conditioning supply' is 10 points below the pre-COVID-19 level.

ACRONYMS AND ABBREVIATIONS

Acronym	Term
AT	Austria
BE	Belgium
BG	Bulgaria
CR	Copyright
CZ	Czech Republic
DE	Germany
DES	Designs
DK	Denmark
EL	Greece
EPO	European Patent Office
ES	Spain
EU	European Union
EUIPO	European Union Intellectual Property Office
FI	Finland
FR	France
GDP	Gross Domestic Product
HU	Hungary
IE	Ireland
IPR	Intellectual Property Rights
IT	Italy
LT	Lithuania
LV	Latvia
MS	Member States
NACE	Statistical Classification of Economic Activities in the European Community
NL	Netherlands

Acronym	Term
PAT	Patents
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
STS	Short-term statistics
TM	Trade marks