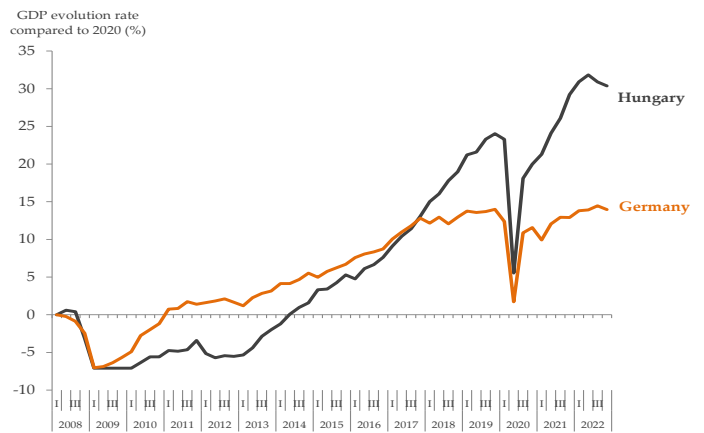


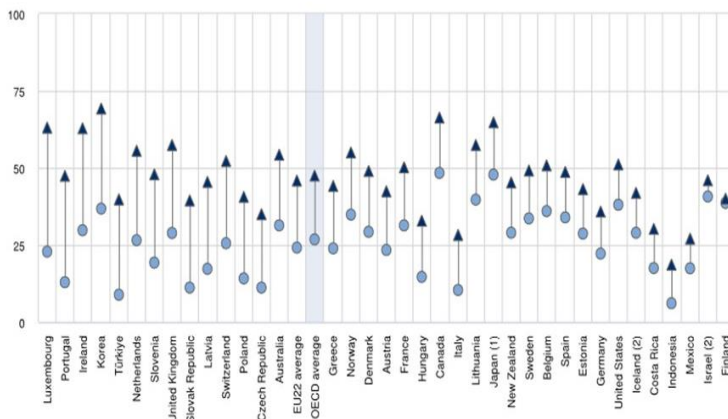
# Monthly Bulletin of Economic Trends

## The evolution of GDP by region compared to the 2008 and 2020 crises

The following short analysis compares the impact of the 2008 world financial crisis and the coronavirus epidemic in 2020 on the economy of Hungary and of other countries in the region. The quarterly change in GDP since the start of the crisis is used as an indicator in comparison to the previous quarters. [More](#)



Source: IEER, calculation based on KSH, Eurostat and Destatis



## Some characteristics of the Hungarian education system in international ...

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## International trends

In Germany, the IFO business climate index increased compared to March. The manufacturing purchasing manager index (PMI) decreased compared to the previous period, but performed slightly better than expected. [More](#)

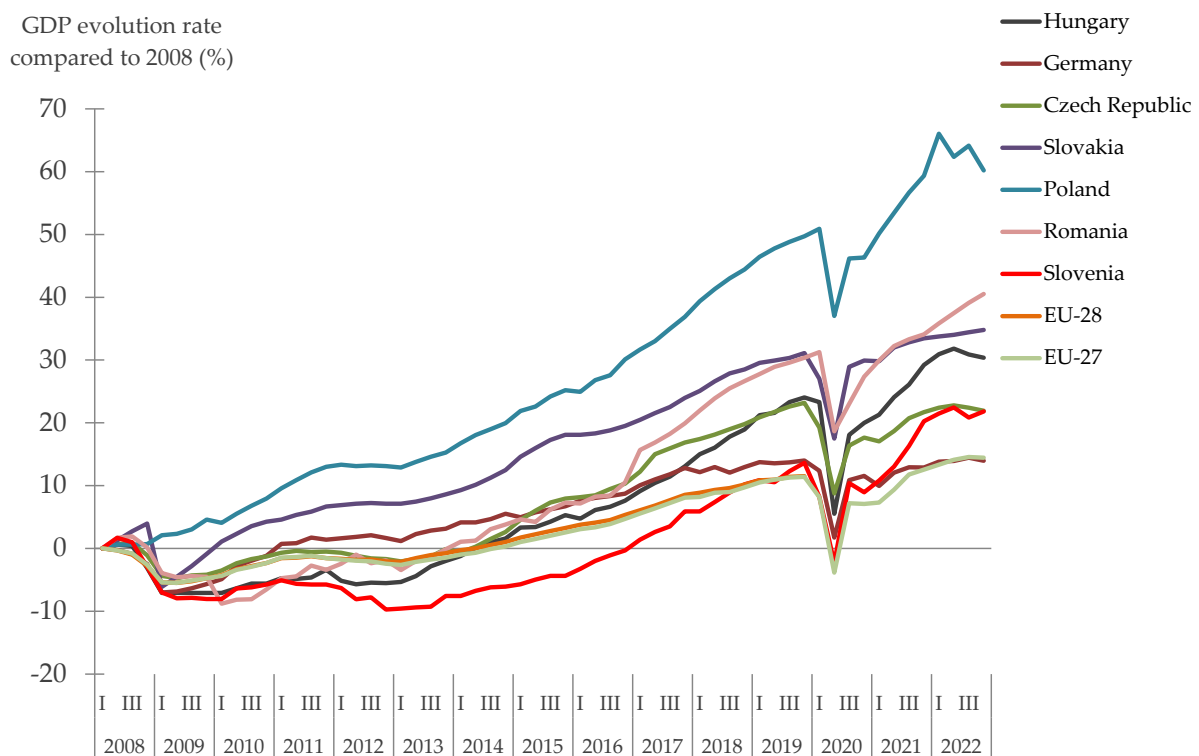
## THE EVOLUTION OF GDP BY REGION COMPARED TO THE 2008 AND 2020 CRISES

The following short analysis compares the impact of the 2008 world financial crisis and the coronavirus epidemic in 2020 on the economy of Hungary and of other countries in the region. The quarterly change in GDP since the start of the crisis is used as an indicator in comparison to the previous quarters.

The data on the Hungarian economy's recovery from the 2008 crisis show that GDP in Hungary reached its pre-crisis level much later than that in Poland, Slovakia, Germany and Romania (Figure 1). The outbreak of the coronavirus pandemic in the first half of 2020 significantly reduced the economic growth of the countries of the region. Although the Hungarian economy was particularly hard hit by the economic crisis, it still had one of the fastest growth rates in the region in 2021, alongside

Slovenia and Poland. However, while in Q4 2022, the GDP in Hungary was 30% higher than it had been before the global crisis of 2008 (Q1 2008), it was 60% in Poland and 41% in Romania. Thus, during this period both the Polish and Romanian GDP growth rates were higher than those of Hungary, and in the first half of 2020 and in 2022 those economies did not suffer, or, in the worst case, only a minor downturn occurred.

**Figure 1. At what stage are we in the Great Recession? Comparison in the Central-Eastern European Region (2008 q1 - 2022 q4)**

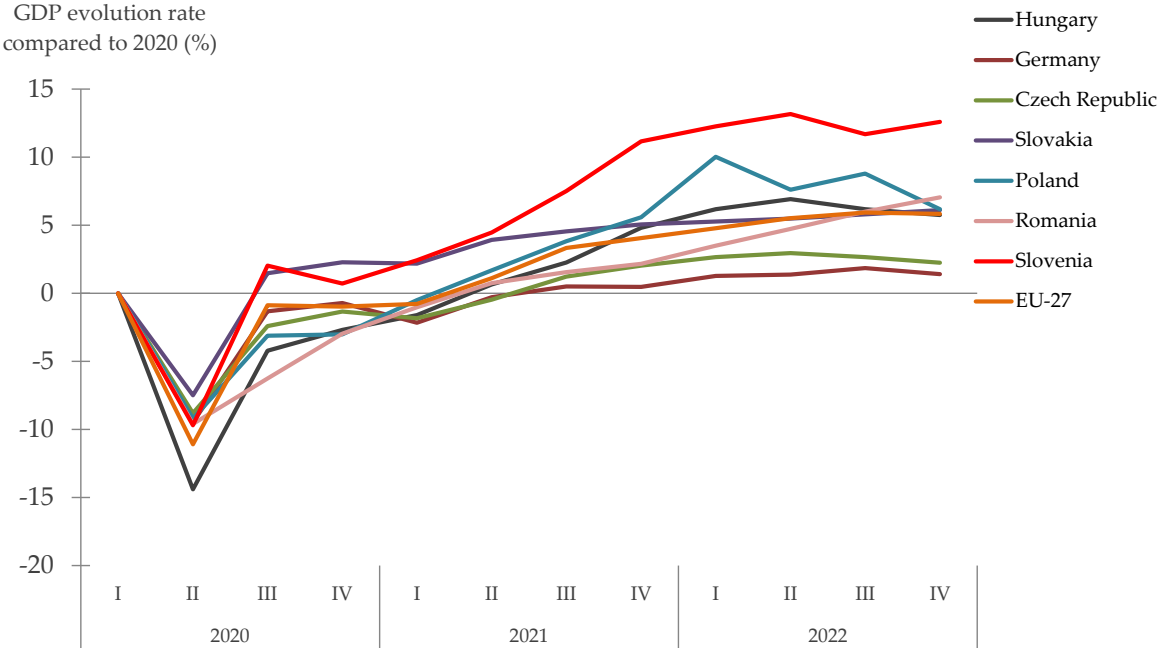


Source: IEER, calculation based on KSH, Eurostat and Destatis data

The economic crisis that emerged in the first half of 2020 as a result of the coronavirus pandemic affected Hungary more severely than other countries in the region, and the impact was also more severe than that on Germany and the EU-27 average, with a 14% quarter-on-quarter drop in GDP in the second quarter. By the end of 2021, however, GDP in the region and in the average of EU-27 exceeded the 2020 GDP levels. In line with the EU

average, by the end of Q1 2021 Hungary's GDP was already 4% higher than in Q1 2020, when the economic crisis had unfolded in the wake of the coronavirus pandemic. In Q4 2022, the figure was 6%, already reflecting the region-wide slowdown due to the war and the energy crisis. In the region, only Romania (7%) and Slovenia (13%) saw a stronger recovery than Hungary over the last three years.

**Figure 2. At what stage are we in the Coronavirus Epidemic? Comparison in the Central-Eastern European Region (2020 q1 - 2022 q4)**

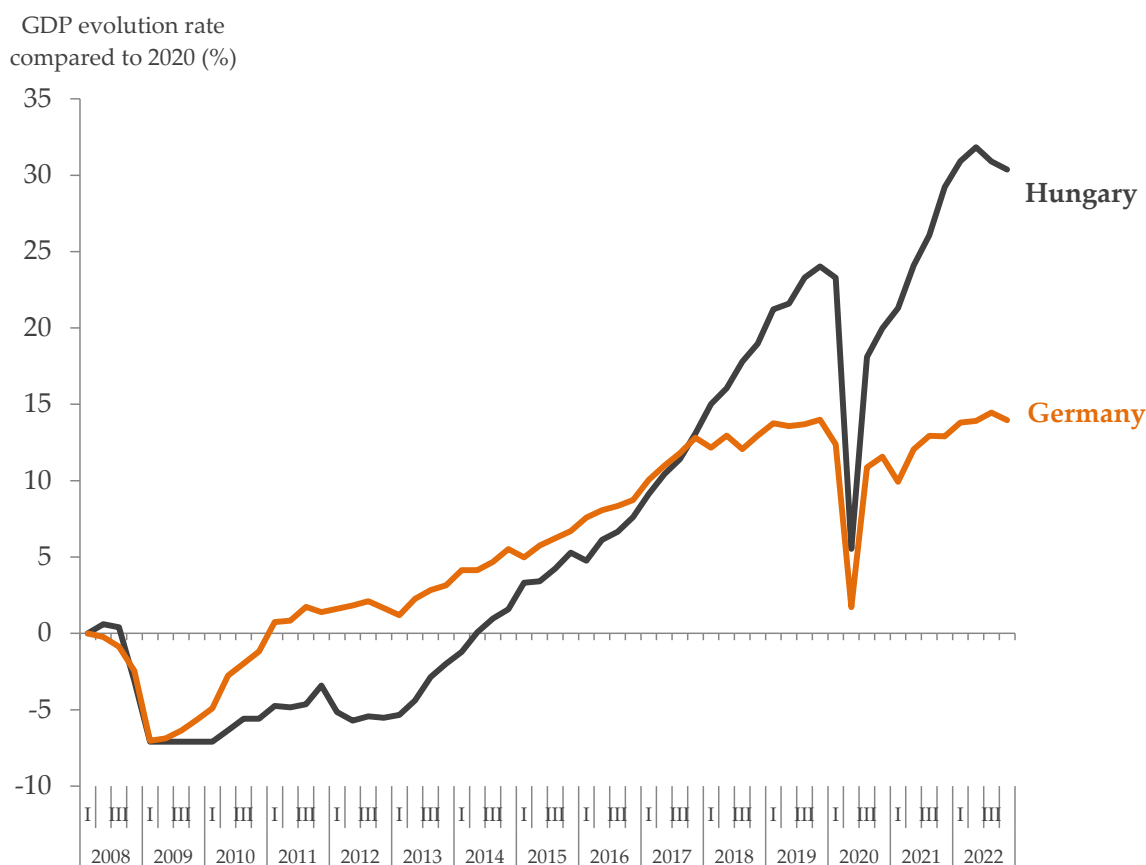


Source: IEER, calculation based on KSH, Eurostat and Destatis data

In comparison with Germany, the Hungarian economy was much slower to recover from the 2008 global economic crisis: the German economy reached its pre-crisis level in the first quarter of 2011, while the Hungarian economy only did so in the third quarter of 2014. The gap between the growth rates of the Hungarian and German economies closed between the first quarter of 2016 and the fourth quarter of 2017, with the Hungarian economy increasingly outpacing the German economy in 2018 and 2019. As a result of the economic crisis that unfolded in the wake of the

coronavirus pandemic, the gap between the growth rates of the two countries narrowed again compared to 2008, with the German economy essentially slipping down to the 2008 level. However, the recession was followed by a rapid rebound in both countries, and from the trough in the second half of 2020, the Hungarian economy quickly returned to a growth rate ahead of the German economy, which was not significantly affected by the stagnation and slight decline caused by the war and the energy crisis.

**Figure3. Comparing the situation of Hungary and Germany (2008 q1 - 2022 q4)**



Source: IEER, calculation based on KSH, Eurostat and Destatis

## SOME CHARACTERISTICS OF THE HUNGARIAN EDUCATION SYSTEM IN INTERNATIONAL COMPARISON

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Our summary presents some of the findings of the OECD's Education at a Glance 2022 publication for Hungary. This analysis is an important source of data on the state of education worldwide. It provides information on the structure, finances and performance of education systems in OECD countries and partner countries. We start by comparing the performance of educational institutions and the impact of learning on labour market opportunities in Hungary and OECD countries on average, then we compare the financial resources invested in education, and finally, we look at international comparisons of data on teachers, learning environments and schools.

### The output of educational institutions and the impact of learning

The OECD countries have seen an increase in educational achievements, especially at the tertiary level. Between 2000 and 2021, the share of 25–34-year-olds with tertiary attainment elevated on average by 21 percentage points. In Hungary, the share also increased but at a slower pace, by 18 percentage points (from 15% in 2000 to 33% in 2021). Out of the OECD countries, Hungary is one of those 12 countries where the highest level of educational attainment among 25–34-year-olds is upper secondary or post-secondary non-tertiary education, rather than tertiary education.

As in OECD countries, higher educational attainment in Hungary is typically associated with better labour market prospects. In 2021 the employment rate among 25–34-year-olds with tertiary education in Hungary was 32 percentage points higher than among those with below upper secondary attainment and 6 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate

among 25–34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment.

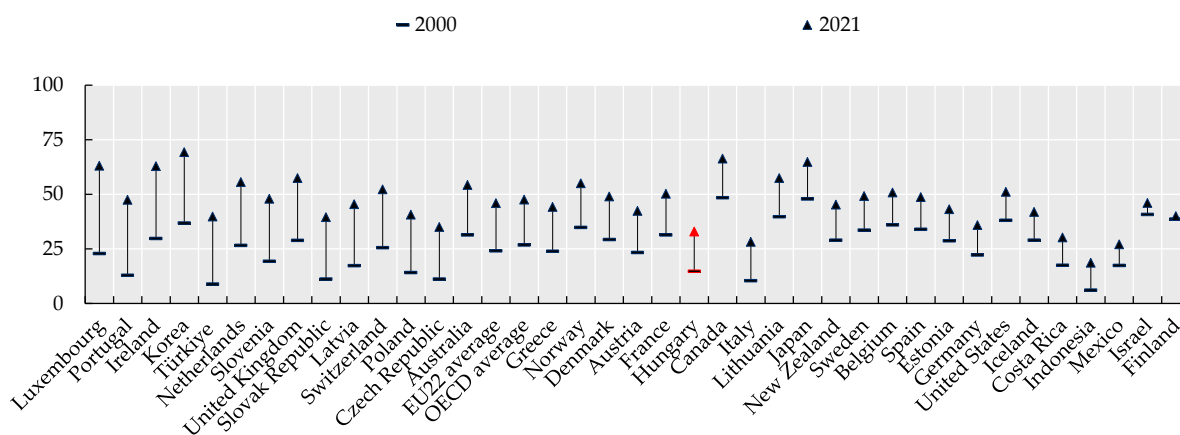
In OECD countries, the labour market benefits of higher educational attainment are particularly strong in times of economic crisis, such as the Covid epidemic. Between 2019 and 2020, unemployment for 25–34 year-old workers with below upper secondary attainment elevated by 3.4 percentage points, by 1.3 percentage points for workers with upper secondary attainment and by 0.7 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment decreased by 1.9 percentage points, compared to 2020, by 0.1 percentage points for workers with upper secondary attainment and by 0.4 percentage points for workers with tertiary attainment.

Educational attainment impacts not only employment prospects but also wage levels. In the OECD countries, workers

between the ages of 25-64 who have achieved upper secondary or post-secondary non-tertiary education earn an average of 29% more than those with below upper secondary education. Those with tertiary education, on the other hand, earn roughly double the amount. In Hungary, the earning advantage for those with

tertiary education was even greater than the average OECD rate. In 2020, workers with upper secondary or post-secondary non-tertiary education earned 43% more than those with below upper secondary education, while workers with tertiary education earned over twice as much.

**Figure 1. Trends in the share of tertiary-educated 25–34-year-olds between 2000 and 2021, (percentage)**



Note: The countries are ranked in ascending order by the share of 25-34 year olds with tertiary education in 2021. Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>.

**Financial resources invested in education**

In 2019, OECD countries spent on average 4.9 percent of their Gross Domestic Product (GDP) on primary and tertiary education, compared to 3.8 percent in Hungary.

7.1% of government expenditure was spent on education in Hungary, which is lower than the OECD average (10.6%). As a share of GDP, public spending on education (3.2%) is lower in Hungary than the OECD average (4.4%).

Examining the total amount of funding per student, on average, OECD countries spend USD 11,990 per student (in equivalent USD converted using PPPs for

GDP) annually on educational institutions from primary to tertiary education. In contrast, Hungary's spending per student in 2019 was USD 8,738, which is lower than the OECD average. Furthermore, the cumulative expenditure of educating a student from age 6 to 15 in Hungary was USD 78,969, which is significantly below the OECD average of USD 105,502.

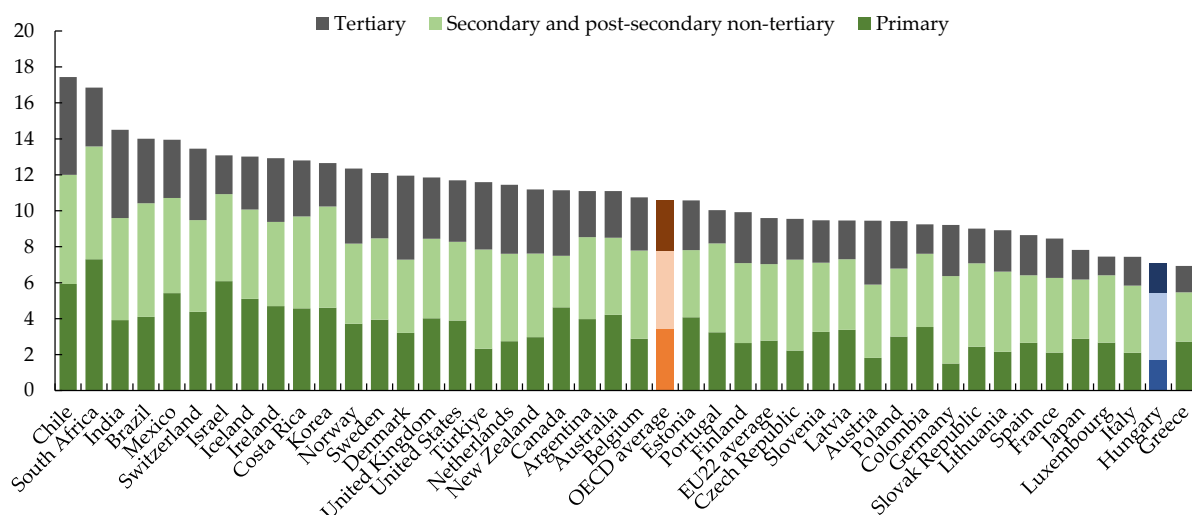
On average, OECD countries spend approximately USD 9,923 per student at the primary level and USD 11,400 per student at the secondary level. In comparison, Hungary's spending per student at the primary level is USD 8,262 and at the

secondary level, it is USD 7,827, which is one of the lowest among OECD countries.

While spending on primary and secondary education is relatively consistent among OECD countries, expenditure on tertiary education can vary greatly. In Hungary, the expenditure per student at the tertiary level is higher than at other levels of education,

which is also true for most other OECD countries. The average expenditure per student in Hungary is USD 12,107 per year, which is about USD 3,800 higher than that of the primary level and USD 4,300 higher than that of the secondary level. However, it remains among the lowest across OECD countries.

**Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure, 2019, (percentage)**



Note: Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

Source: OECD (2022), Education at a Glance Database, <http://stats.oecd.org/>.

### Teachers, the learning environment and the organisation of schools

The analysis highlights that teachers' and school heads' salaries are an important determinant of the attractiveness of the teaching profession, but are also the largest expenditure item in education. In public educational institutions of the majority of OECD countries, teachers (and school heads) receive higher statutory salaries based on the level of education they teach and their experience. Additionally, the

actual salaries for teachers increase with the level of education they teach. The average actual salaries for teachers across OECD countries range from USD 41,941 for pre-primary level to USD 53,682 for upper secondary level. However, in Hungary, the average actual salaries for teachers are USD 25,445 for pre-primary level and USD 29,158 for upper secondary level.

Between 2015 and 2021, the statutory salaries of teachers in lower secondary level with 15 years of experience and the most

common qualifications increased by 6% in real terms on average in OECD countries. However, in Hungary, the increase in salaries was below the average of OECD countries, at only 1%.

In almost all OECD countries, including Hungary, teachers are paid less than other tertiary-educated workers. In Hungary, lower secondary teachers earn 40.4% less than other workers with tertiary education. In addition, the actual salaries of school heads in Hungary are lower than the earnings of other tertiary-educated workers. This is in contrast to most OECD countries, where school heads typically earn significantly more than the average earnings of tertiary-educated workers.

In OECD countries' public education institutions, including Hungary, the

average number of teaching hours per year for an average teacher decreases with the level of education. This is also the case in Hungary. According to the legal regulations, the annual number of teaching hours in Hungary is 1 318 hours at the pre-primary level, 644 hours at the primary school level, 644 hours at the lower secondary school level and 641 hours at the upper secondary school level.

Teachers perform several non-teaching tasks during their work hours, such as preparing lessons, marking students' work, and communicating or collaborating with parents or guardians. In Hungary, at the upper secondary level, 61% of teachers' working time is formally allocated to non-teaching activities, which is higher than the OECD average of 56%.



## INTERNATIONAL TRENDS

Changes in the production, consumption and employment situation in certain major international economies compared with peer expectations and the previous period.

		Period in review	Actual data	Expectations	Previous period
	Unemployment Rate	(April)	<b>5.6%</b>	5.6%	5.6%
Germany	Manufacturing Purchasing Managers Index	(April)	<b>44.5</b>	44.0	<b>44.7</b>
	IFO Business Climate Index <sup>1</sup>	(April)	<b>93.6</b>	92.2	<b>93.2</b>
France	INSEE Business Climate Index <sup>2</sup>	(April)	<b>101.9</b>		<b>103.1</b>
	Unemployment Rate	(April)	<b>3.4%</b>	3.6%	<b>3.5%</b>
USA	CB Consumer Confidence Index	(April)	<b>101.3</b>	104.0	<b>104.0</b>
	Manufacturing Purchasing Managers Index	(April)	<b>50.2</b>	50.4	<b>49.2</b>
China	Manufacturing Purchasing Managers Index	(April)	<b>49.2</b>	51.4	<b>51.9</b>

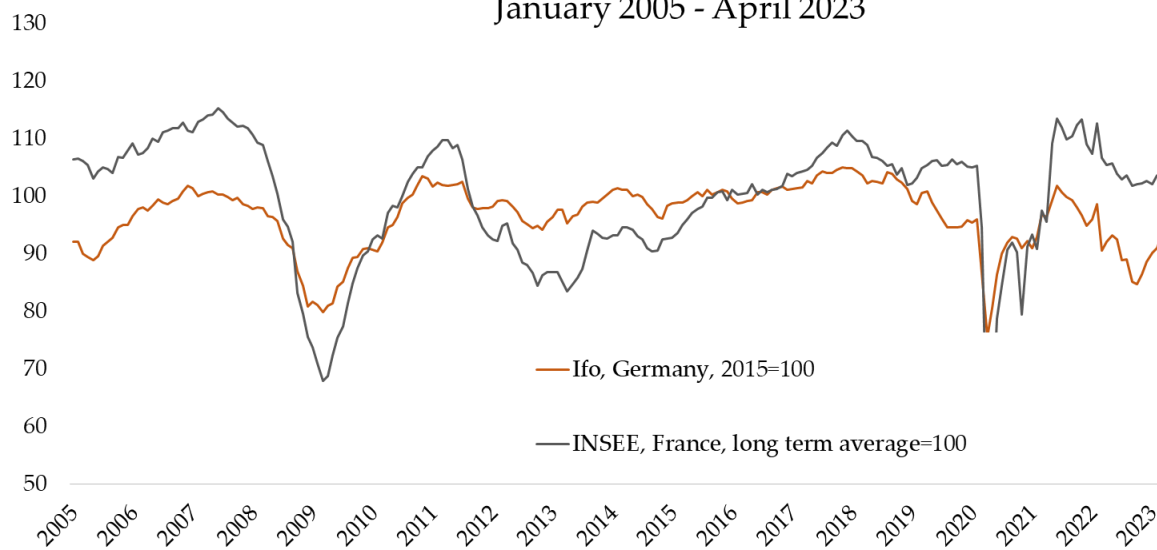
<sup>1</sup> <https://www.ifo.de/en/survey/ifo-business-climate-index>

<sup>2</sup> <http://www.insee.fr/en/themes/indicateur.asp?id=105>

The rest of the data source: <https://www.bloomberg.com/markets/economic-calendar>

In Germany, the IFO business climate index increased compared to March. The manufacturing purchasing manager index (PMI) decreased compared to the previous period, but performed slightly better than expected. The unemployment rate remained the same in Germany compared to the last month. The French INSEE business climate index decreased compared to last month. In the United States, the CB consumer confidence index decreased compared to the month prior. The manufacturing PMI increased compared to March in the USA. The unemployment rate slightly improved in the USA. The Chinese manufacturing PMI decreased compared to the previous month.

Business confidence in Germany and France,  
based on the Ifo and INSEE business climate survey,  
January 2005 - April 2023



Sources: [www.ifo.de](http://www.ifo.de), [www.insee.fr](http://www.insee.fr)

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