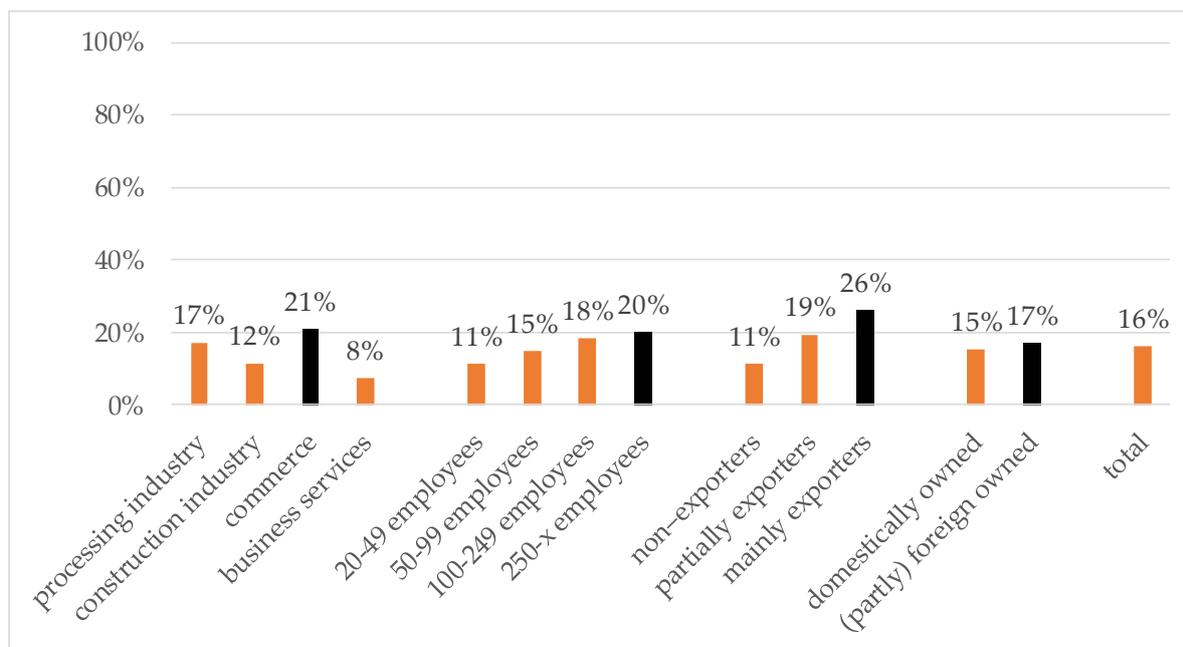




Hungarian companies as suppliers

This analysis is based on the July 2018 wave of IEER's Quarterly Business Climate Survey, in which 400 CEOs were involved. The structure of the sample is the same each quarter: it contains 300 small and medium-sized enterprises (20-249 employees) and 100 large enterprises (250+ employees). Economic output and sectors are both representative. The survey mainly concerns the business situation and short-term business expectations of enterprises. In this wave, the popularity of supplier activity was also surveyed.

Figure 1. The proportion of companies acting as suppliers, with regard to economic sector, company size, export activity and ownership structure, percent



Source: IEER 2018

Findings on how widespread supplier activity was in Hungary are presented in Figure 1. According to them, 16% of the surveyed 400 companies were involved in supplying to other companies in 2017. Of all the background variables examined, the only one whose correlation to supplying activity had statistical significance was exports. It may be safe to conclude that more export-oriented

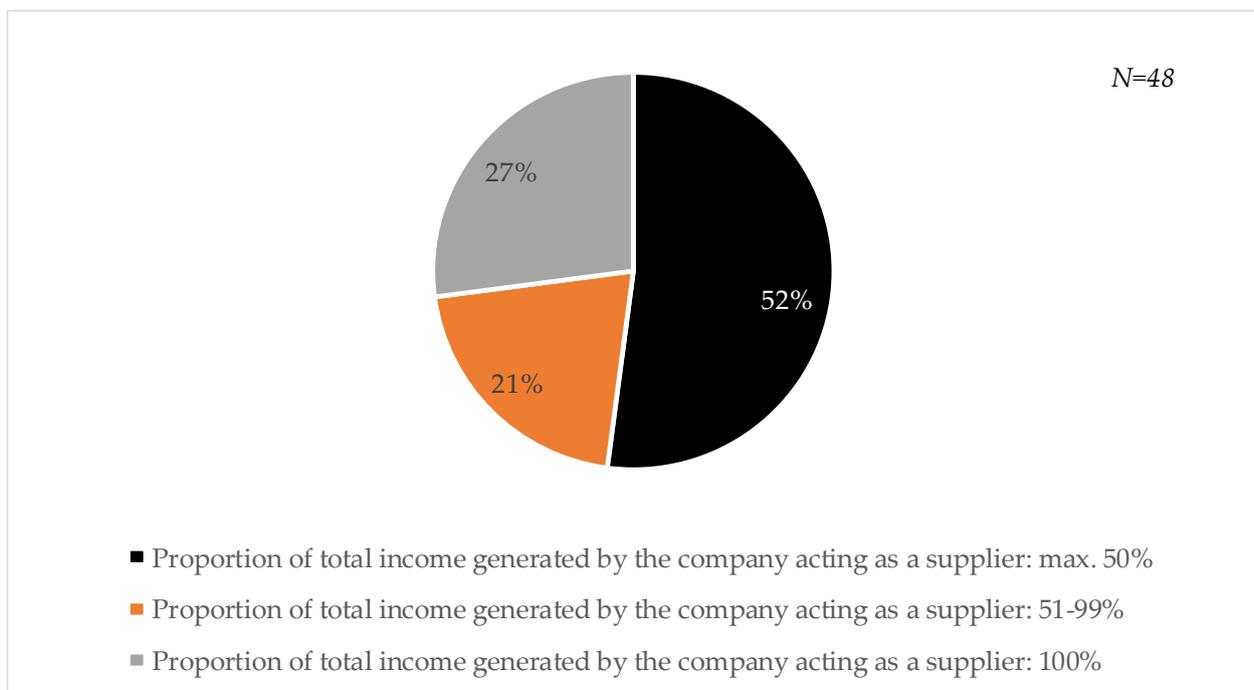
companies are also more liable to act as suppliers. (Only 11% of non-exporting companies act as suppliers, while mainly exporters that take over 50% of their annual revenues from exports are more than twice as liable, their proportion as suppliers being 26%.)

Looking at economic sectors one can see that companies active in commerce (21%) and

those in the processing industry (17%) are more likely to become suppliers than construction companies (12%) and companies offering business services (8%). According to our results, larger and (partly) foreign-owned companies are somewhat more liable to become suppliers than smaller and fully domestic companies, however, these differences stay below the statistically significant level.

Out of the 65 CEOs whose companies reportedly acted as suppliers only 48 (74%) responded when they were asked how many per cent of their annual revenues had actually come from their companies' acting as suppliers. Figure 2. shows that the proportion of a company's annual income that originates from being a supplier is below 50% for over a half (52%) of all surveyed companies, 51%-99% for over a fifth (21%), and 100% for over a quarter (27%).

Figure 2. Income originating from supplier activity in proportion to total income, among companies that also act as suppliers



Source: IEER 2018

As far as company revenues are concerned, the importance of acting as a supplier was also examined in relation to economic sector, company size, export activity and ownership structure, however, no statistically significant

correlations were found. Since the low number of elements may also play a role here, it may be a good idea to examine this issue on a bigger sample.

Education at a Glance 2018: overview of the main findings

Education at a Glance: OECD Indicators presents the state of education around the world. It provides key information on the output of educational institutions; the impact of learning across countries; access to education, participation and progression; the financial and human resources invested in education; and teachers, the learning environment and the organisation of schools. The 2018 report features data on the structure, finances and performance of education systems from 35 OECD countries, 2 partner countries that participate in the OECD Indicators of Education Systems programme (INES), and 9 other partner G20 and OECD accession countries that are not INES members. Here we overview the main findings of the report on three major topics, especially focusing on Hungary: the spending on education, the enrolment and attainment levels and the effect of education on the participation in labour market and on earnings. Our summary is based on the report [Education at a Glance 2018](#) and the [Country Note on Hungary](#).

Spending on education

In 2015, annual expenditure per student on educational institutions from primary through tertiary education on average across OECD countries (including Lithuania) is USD 10 400.¹ This represents about USD 8 500 per student at primary level, USD 9 900 at secondary level and USD 15 500 at tertiary level. Between 2010 and 2015, expenditure per student increased by 5 percent at the primary, secondary and post-secondary non-tertiary levels, and by 11 percent at the tertiary level.

Annual spending per student at all levels of education in Hungary is 6 346 dollars, about the 60 percent of the OECD average and the average of EU 23 countries member of the OECD (including Lithuania). The expenditure per student is the highest in tertiary education in the case of Hungary as well, at around USD 8 700 is just over half the OECD and EU23 average.

In 2015, OECD countries spent an average of 5 percent of their gross domestic product (GDP) on educational institutions from primary to tertiary levels, public and private expenditure combined, with large variations across OECD and partner countries. For example, in the Czech Republic, Hungary, Ireland and Italy, public direct investment represents around 3–4 percent of GDP, while Nordic countries, such as Finland and Norway devote around 6 percent of their GDP in public direct expenditure on educational institutions. Between 2010 and 2015, total expenditure on educational institutions from primary to tertiary levels as a share of GDP decreased in more than two thirds of OECD and partner countries, mainly due to the slower increase of public expenditure on educational institutions compared to GDP.

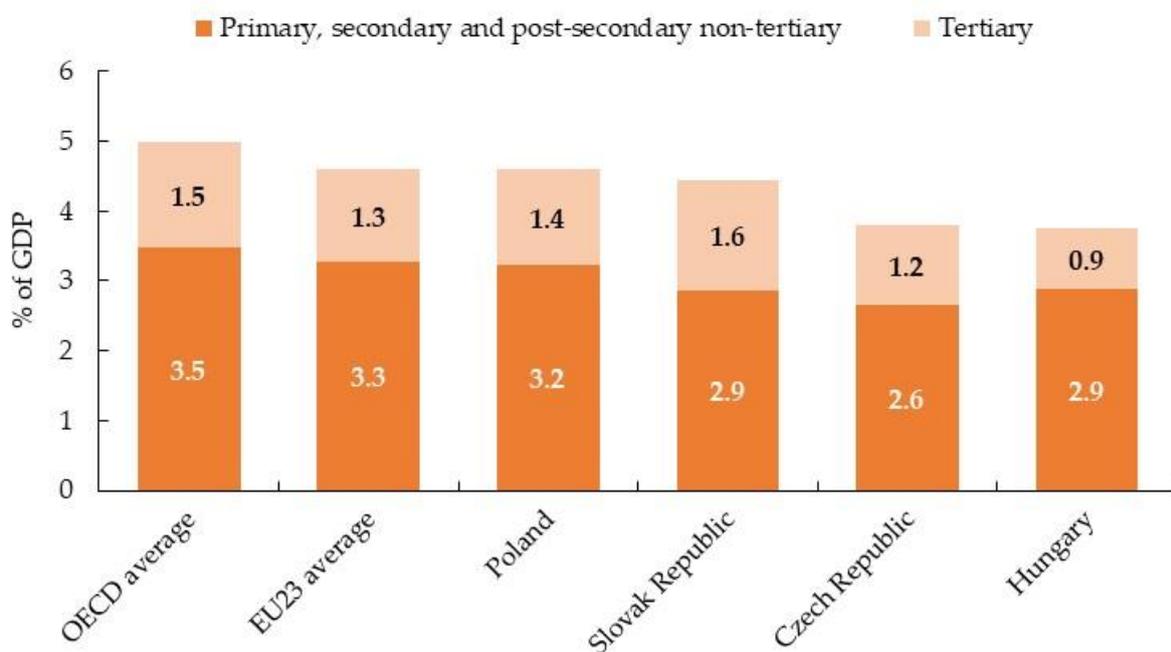
Hungary spends 3.8 percent of its GDP on educational institutions from primary to tertiary level, a much lower share than the OECD average of 5 percent. Expenditure on

¹ Values reported in equivalent US dollars (USD) have been converted using purchasing power parities (PPPs) for GDP.

educational institutions amounts to 0.8 percent of GDP at the primary level, 0.7 percent at lower secondary level, 0.7 percent in upper secondary general programmes and 0.4 percent in upper secondary vocational programmes. Hungary has one of the lowest levels of expenditure on tertiary educational institutions as a percentage of GDP among OECD countries, at 0.9 percent. Additionally,

the share of expenditure on educational institutions is strongly influenced by the demographic composition of the country. All the countries where investment in primary education is below 1 percent of GDP are Central and East European countries with low birth rates (Austria, the Czech Republic, Germany, Hungary and Lithuania).

Figure 1. Total expenditure on educational institutions as a percentage of GDP, by level of education (2015)



Source: OECD / UIS / Eurostat (2017), Table C2.1. (<https://doi.org/10.1787/888933804318>)

Note: From public, private and international sources. EU23 refers to the EU member states that as OECD members have been covered in the report.

Total public spending on primary to tertiary education as a percentage of total government expenditure averages 11 percent across OECD countries, and it ranges from around 6 percent to around 17 percent. Between 2011 and 2015, the average share of total government expenditure devoted to public spending on primary to tertiary education remained relatively stable across OECD countries, at

around 11 percent. In half of OECD countries, the share decreased, while in others the share increased by more than 10 percent over the same period.

In Hungary, total public spending at all levels as a percentage of total government expenditure is 6.9 percent based on 2015 data. Public expenditure on educational institutions fell by 8 percent between 2008 and 2011, and

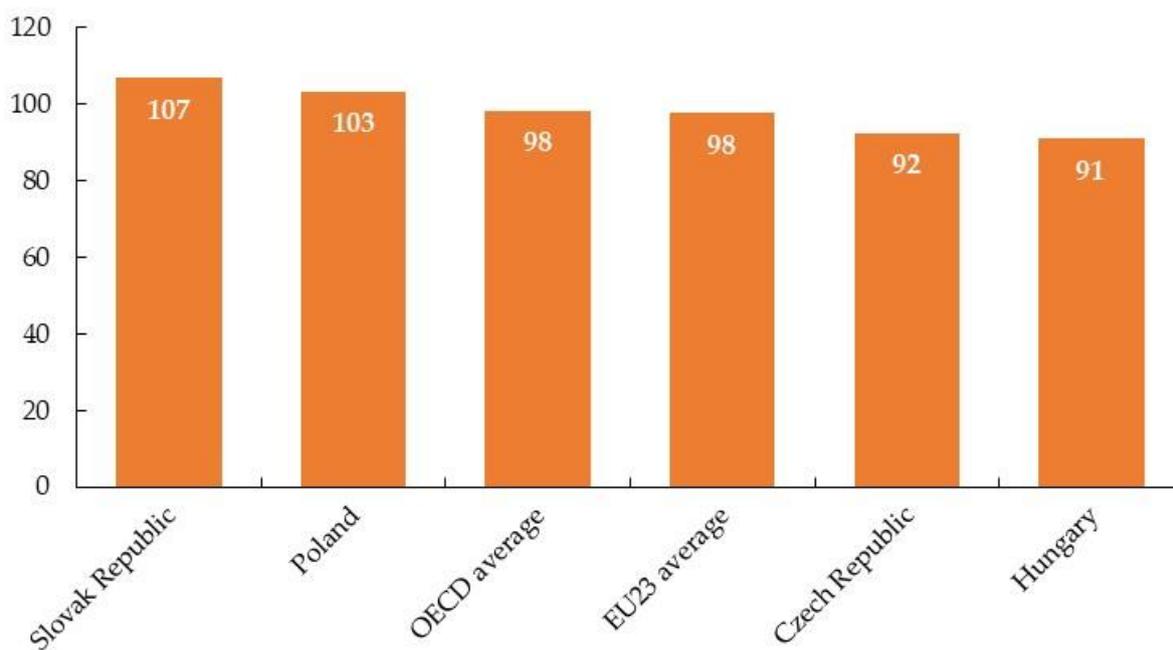
then by 9 percent over the period 2011–2015. Although during the period 2011–2015 many OECD countries – such as Italy, Spain, Germany, Finland, Czech Republic, Norway, Slovenia and Estonia – were cutting their public expenditure on education, Hungary’s cuts were the deepest.

Annual expenditure per student on educational institutions as a share of GDP per capita amounts to 22 percent at primary level, 25 percent at secondary level and 38 percent at tertiary level on average across OECD countries. In Hungary, these figures are lower

at all levels of education, 19 percent of per GDP for primary students, 22 percent for secondary and 34 percent for tertiary.

Educational institutions are still predominantly publicly funded: 90 percent of funding for primary, secondary and post-secondary non-tertiary education and 66 percent of funding for tertiary education came from government coffers on average across OECD countries.

Figure 2. Change in total public expenditure on education as a share of total government expenditure between 2011 and 2015 (2011=100, constant prices)



Source: OECD / UIS / Eurostat (2017), Table C2.1. (<https://doi.org/10.1787/888933804584>)

Note: Primary to tertiary education. EU23 refers to the EU member states that as OECD members have been covered in the report.

Educational enrolment and attainment

In 2016, at least 90 percent of the population was enrolled in education from age 4 to 17, and

85 percent of 15–19 year-olds were enrolled in education on average across OECD countries. Young adults spend more years studying: between 2005 and 2016, the enrolment of 20–24

year-olds in education increased by 6 percentage points on average across OECD countries with available data for both years.

On average across OECD countries, 56 percent of students in upper secondary education were enrolled in general programmes in 2016, while 44 percent were enrolled in vocational upper secondary programmes. In about one-third of the countries with available data, a larger share of upper secondary students is enrolled in vocational programmes than in general programmes, with at least 70 percent in the Czech Republic, Finland and Slovenia.

In Hungary, only one-fifth (21 percent) of students enrolled in upper secondary education are in vocational programmes much lower than the OECD and EU23 averages of 44 percent and 47 percent. However, all of the students are enrolled in combined school- and work-based programmes, which represent around twice the OECD and EU23 (both 11 percent).

The share of women among upper secondary graduates from vocational programmes is 38 percent in Hungary, lower than in the OECD and in the EU23 (46 percent and 45 percent). There are large differences in the share of men and women graduates across different fields. Only 8 percent of graduates in the fields of engineering, manufacturing and construction are women, whereas at the opposite end of the pole, 90 percent of graduates in health and welfare are women.

In Hungary (and in most of OECD countries), boys are more likely to repeat a grade and are less likely to complete the secondary general programmes (both lower and upper secondary) than girls. Men are also less likely

than women to attain tertiary education: 25 percent of men age 25–34 were tertiary-educated on average in 2017 (OECD average is 38 percent, EU23 average is 36 percent), compared to 36 percent of women the same age (OECD average is 50 percent, EU23 average is 49 percent), and this gap has been widening over the past 10 years.

Half (52 percent) of the 25–64 year-old population of Hungary has upper secondary education as the highest level attained (OECD average is 39 percent, while EU23 average is 41 percent), below only the Czech Republic, the Slovak Republic, Slovenia and Poland. In Hungary, only 13 percent of 25–64 year-olds have a bachelor's degree or equivalent as the highest level of education attained, below the EU23 and OECD averages of 17 percent and 14 percent, while 9 percent have a master's degree or equivalent, also below the EU23 and OECD averages of 14 percent and 13 percent, as well as 1 percent holds a doctorate, the same as the OECD and EU23 averages.

On average across OECD countries, 6 percent of 15–19 year-olds are neither employed nor in education or training (NEET), and this percentage increases to 16 percent among 20–24 year-olds and 18 percent among 25–29 year-olds. In Hungary, women are more likely to be neither in employment nor in education or training (NEET): 18 percent of 18–24 year-old women are NEET, above the OECD and EU23 averages (15 percent and 14 percent), compared with 12 percent of young men, below the OECD and EU23 averages (13 percent and 14 percent).

Despite significant expansion in educational attainment over the past decade, those people

with low-educated parents, a proxy for low socio-economic status, are less likely to complete upper secondary school and advance to higher levels of education than those with at least one tertiary-educated parent. While two-thirds of 25–64 year-olds whose parents have not completed upper secondary are expected to attain a higher level of education than their parents, most of them attain upper secondary vocational education. The story is similar at the tertiary level: across OECD countries with available data, 18–24 year-olds whose parents have not attained tertiary education represent only 47 percent of new entrants into bachelor's, long first-degree or equivalent programmes, although they represent 65 percent of the population of that age group.

Impact of learning in labour market and on earnings

The aforementioned inequalities are then reflected in the labour market: those who have attained only upper secondary education are less likely to be employed and earn much less than their tertiary-educated peers. These trends are particularly strong in Hungary.

On average across OECD countries, 81 percent of 25–34 year-old adults who have at least an upper secondary education are employed, compared to 60 percent among those who have not completed upper secondary education.

At 91 percent, Hungary has one of the highest employment rates of 25–34 year-old men with upper secondary or postsecondary non-tertiary education in the OECD, whereas the employment rate of women with the same educational attainment is only 69 percent, a difference of 22 percentage points. The gap

persists for those with tertiary education: 25–34 year-old tertiary-educated men have a 94 percent employment rate, one of the highest rates among the OECD, compared to 74 percent for women, a share below the OECD average of 80 percent. Moreover, it represents a difference of employment of 20 percentage points, one of the highest differences among the OECD.

The likelihood of being unemployed with an upper secondary or post-secondary non-tertiary education in Hungary is 3.8 percent, just over half the rate in OECD (7.8 percent) and EU23 (8.7 percent) countries, and lower than everywhere except the Czech Republic (3.2 percent) and along Germany and Iceland (both 3.8 percent).

On average across OECD countries, 25–64 year-old adults with a tertiary degree earn annually 54 percent more than those with only upper secondary education, while those with below upper secondary education earn 22 percent less. Attaining a tertiary education in Hungary provides one of the biggest earnings advantages across OECD countries. Individuals who attain a tertiary qualification can expect to nearly double (1.94 times) their earnings compared to those with only upper secondary education.

Despite better educational attainment, women still have worse employment outcomes. Across all levels of educational attainment, the gender gap in earnings persists, and a large gender gap in earnings is seen between 25–64 year-old male and female full-time workers with tertiary education: across OECD countries, tertiary-educated women earn only 74 percent as much as tertiary-educated men.

In Hungary, differences in earnings between women and men increase with the level of education. The average annual earnings of 25–64 year-old women are 83 percent of equivalent men's earnings for those with below upper secondary education and 84 percent for those with upper secondary education, above both the OECD average (both

78 percent) and EU23 average (both 79 percent). However, women between 25–64 years old with tertiary education earn only 67 percent of what men with similar education earn, which is one of the lowest percentages among OECD countries and the lowest among EU23 countries.

Chart 1. Average annual earnings of women as a percentage of men's earnings for 25–64 year-old full-time workers (%), by educational attainment (2016)

	Below upper secondary	Upper secondary or post-secondary non-tertiary	Tertiary
Czech Republic (2015)	81	79	69
Hungary	83	84	67
Poland	75	80	71
Slovak Republic	74	75	68
OECD average	78	78	74
EU23 average	79	79	75

Source: OECD (2018), Table A4.3. (<https://doi.org/10.1787/888933802171>)

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	(Sep)	5.1%	5.2%	5.2%
Germany	Manufacturing Purchasing Managers Index	(Sep)	53.7	53.7	53.7
	IFO Business Climate Index ¹	(Sep)	103.7	103.2	103.9
France	INSEE Business Climate Index ²	(Sep)	106		105
	Unemployment Rate	(Sep)	3.7%	3.8%	3.9%
USA	CB Consumer Confidence Index	(Sep)	138.4	132.2	134.7
	Manufacturing Purchasing Managers Index	(Sep)	55.6	55.6	55.6
China	Manufacturing Purchasing Managers Index	(Sep)	50.8	51.2	51.3

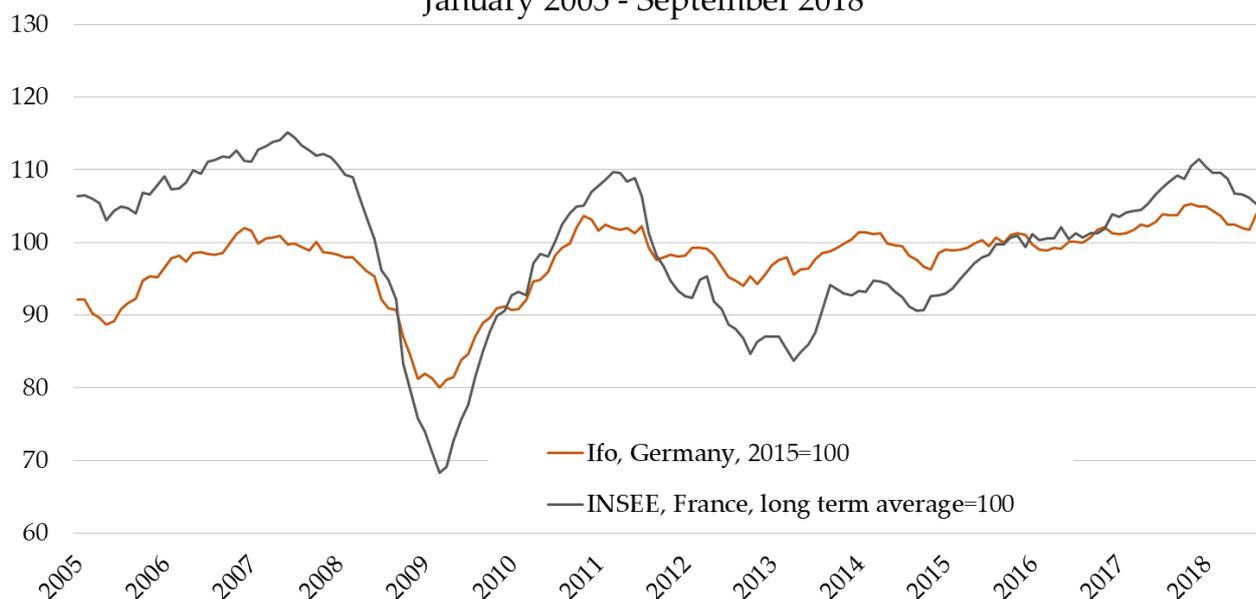
¹ <https://www.cesifo-group.de/ifoHome/facts/Survey-Results/Business-Climate/>

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

The rest of the data source: <http://worldeconomiccalendar.com>

In Germany, the unemployment rate slightly decreased and was lower than expected in September. The manufacturing purchasing manager index (PMI) stagnates at the same level as in August and performed as expected. The IFO business climate index decreased but was above the expectations. The French INSEE business climate index slightly increased compared to August. In the United States, the CB consumer confidence index performed better than in the last month and was above the expectations. The manufacturing PMI stagnates at the same level as in August and performed as expected. The unemployment rate slightly decreased and was lower than expected. The Chinese manufacturing PMI decreased and was below the expectations in September.

Business confidence in Germany and France,
based on the Ifo and INSEE business climate survey,
January 2005 - September 2018



Sources: www.cesifo.de, www.insee.fr

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In case of publication please cite as follows:
HCCI-IEER: Monthly Economic Bulletin.
September 2018. Budapest.

2018-10-09