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### **Hungarian National Bank: Hungary's competitiveness needs to be improved**

Although the macroeconomic bases of improving competitiveness exist, due to the relatively low productivity of companies Hungary is still in competitive disadvantage compared to other countries in the region, says the Hungarian National Bank's Competitiveness Report 2017. The average entrepreneurship is higher, but the added value of SME sector and the investment in R&D are considerably lower than among the larger, multinational companies. The deficit of qualified labour, the lack of marketable education, and the bureaucracy cause further difficulties for the SME sector.

The Hungarian National Bank published its first [Competitiveness Report in 2017](#). The Report analyses the competitiveness of the country in several dimensions like the macroeconomic environment; the labour market; the competitiveness of the governmental sector, banking system, education and healthcare; the competitiveness of the SME sector; the research, development and innovation both in the public and in the private sector.

According to the report in the recent years in Hungary the important macroeconomic bases of improving competitiveness, such as the stability of the public finances, the growth of corporate lending, the increase of real wages and parallel to this the increase of household savings, or the gradual growth of R&D expenditures are achieved. On the other hand, compared to the Visegrad countries Hungary is still in competitive disadvantage that is reflected in the low productivity of companies, especially of small and medium enterprises.

Productivity of work in the SME sector is similar to the level of neighbouring countries, however it is significantly lower than the EU average. The productivity of micro enterprises in Hungary is about 20 thousand euros/person, of small enterprises 30-35 thousand euros/person, and of medium enterprises about 40 thousand euros/person. If the level of productivity of multinational companies is considered 100 percentages, the level of productivity of micro enterprises is 30%, of small enterprises 50% and of medium enterprises 70%, which means a significant lag of SMEs behind larger companies. The report therefore considers the reduction of the productivity gap between smaller businesses and larger companies, and the raise of wages in these sectors as the most important conditions of increasing competitiveness.

The deficit of qualified labour is a major factor in the lag of productivity. This is shown in the annual economic activity report of the German-Hungarian Chamber of Commerce and Industry by interviewing CEOs about

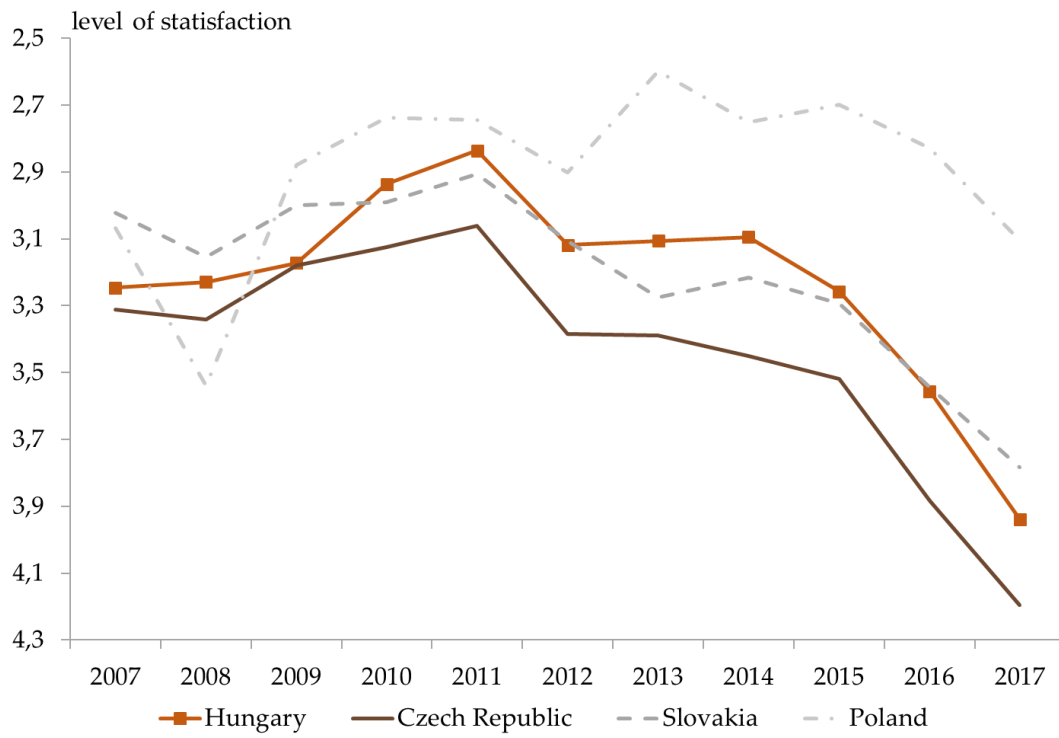
how satisfied they are, on a scale of 1 to 5 (1 meaning very satisfied, 5 meaning very dissatisfied), with the supply of skilled workers. Based on the survey, in the Visegrad countries the availability of skilled workers has worsen continuously since 2014, which is a serious challenge for these countries. In Hungary, the number of the vacant positions increased by 65% and the tightness of the labour market by 39% since 2007. To increase the added value of the SME sector it would be necessary to switch to a production model that instead of the low-cost of labour focuses on higher productivity. The availability of qualified labour is shown on Figure 1.

According to the report entrepreneurship, which is considered by the National Bank as one of the main driving forces of economic growth, is above EU average in Hungary. Between 2005 and 2015 the rate of intention to create a business almost duplicated. While in 2005 9% of the citizens would have created a business, in 2015 this rate increased to 15%. The same indicator in the European Union

changed in this period from 8% to 12%, while the average in the neighbouring (V3) countries was around 14%. Among these countries, Poland stands out with 20-23%, while in Slovakia the proportion of those who are considering starting a business is decreasing and currently reaching only 8%. The proportion of those who have intention to start a business is shown on Figure 2.

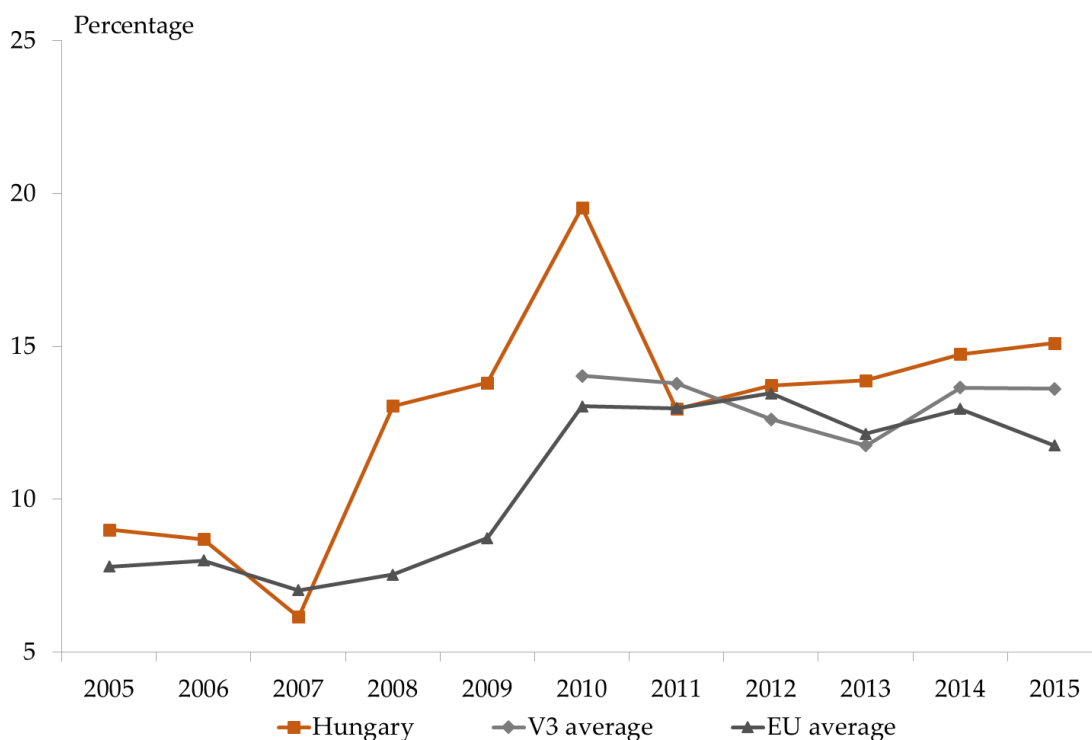
At the same time, the report emphasizes that entrepreneurship and corporate competitiveness could be further enhanced by reducing bureaucracy, as currently the time spent with administration by companies is the highest in Hungary compared to the region. According to the National Bank the reduction of state bureaucracy and the digitalization of administrative procedures could significantly simplify the daily operation of businesses. Furthermore, the state can contribute to increase productivity by developing a more supportive business and regulatory environment.

Figure 1: The availability of qualified labour



Source: Hungarian National Bank

Figure 2: The percentage of intention to create a business between 2005 and 2015



Source: Hungarian National Bank

The competitive lag of Hungary is worsened by the high level of export concentration. The Herfindahl index measuring the level of export concentration is averaging between 0.25-0.3 in the developed countries, while in Hungary it is between 0.35-0.4 which means a high level of concentration. The concentration of industry which is between 0.12-0.14 shows that the industry is diversified enough, and there is no branch that dominates the industrial sector. However, this level of concentration is higher than the EU average which was around 0.08 in the recent years.

Another factor contributing to the competitive disadvantage is that despite the gradual increase in R&D and innovation spending, Hungary still remains below the EU average in these expenditures. Since 2005, spending on research, development and innovation has risen in the whole EU, currently reaching an

average 2% of the GDP. In Hungary, however, the expenditure of R&D is only about 1.3% of the GDP. Regarding new patents Luxemburg is leading the competition in Europe with more than 250 patents/ million persons, Hungary is the 17<sup>th</sup> in this rank with about 40 patents/million persons while the EU average is 100 patents/million persons.

The number of employees in the R&D sector is also lower in Hungary than the average in the European Union. While in the EU 1.3% of the employees work in the sector on average, in Hungary this rate decreased from the peak of 1% in 2013 to lower than 0.9% in 2015.

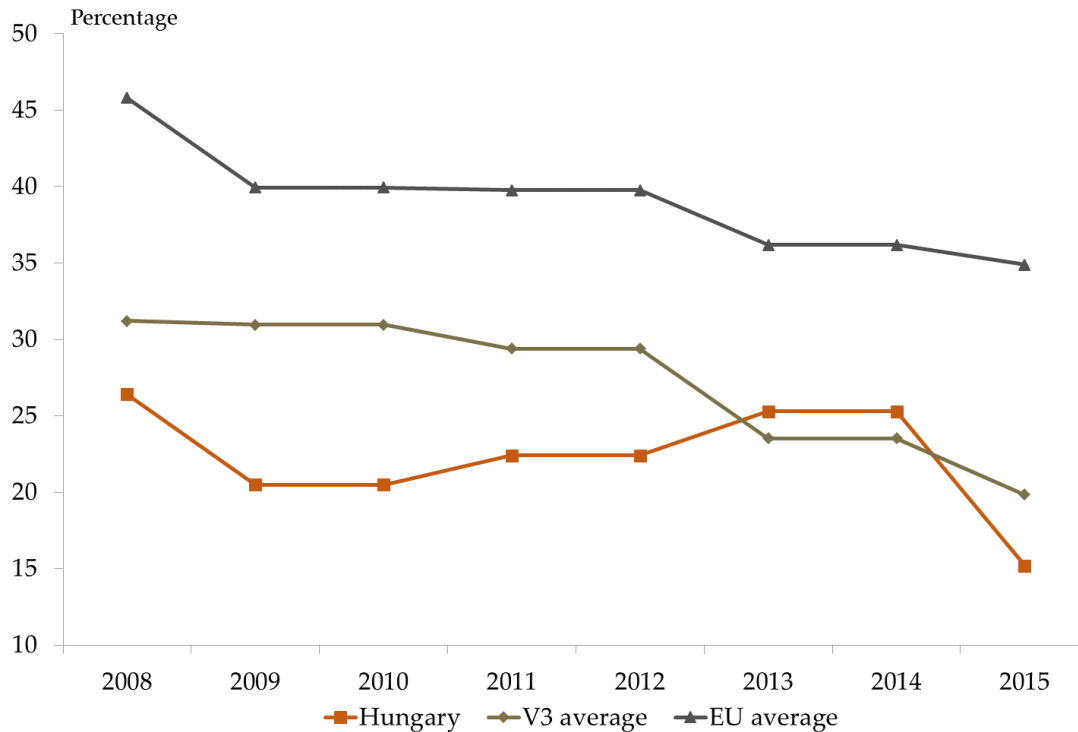
In addition, the proportion of companies engaged in organisational and marketing innovations among the SMEs decreases as well. While between 2012 and 2014 the proportion of SMEs using innovations increased from 20% to 25%, from 2014 to 2015

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this ratio fell to 15%. With these values Hungary is significantly below the EU average which typically ranges between 35

and 40%. The change of the ratio of SMEs is shown on Figure 3.

**Figure 3: The rate of SMEs using organisational and marketing innovation**



Source: Hungarian National Bank

## Educational attainment and prejudice

Education can generate several individual and social advantages. Out of these advantages the most marked ones in researches are the advantages education can create in the labour market (higher employment rate, higher wages). Apart from labour market and wage advantages educational attainment correlates with life expectancy, individual health status, satisfactions, quality of interpersonal relationships, social and organisational trust, and political participation. On societal level, educational attainment contributes to economic development and to a more effective redistribution and to the stability of social structures. Out of the individual advantages the following summary focuses on the relationship between prejudice and educational attainment.

Besides the several individual and social advantages of educational attainment sociology researches generally agree that higher educational attainment correlates with higher level of tolerance and lower level of prejudice towards other groups. Prejudice towards a group or a member of a group is a stable negative feeling that is based on an often faulty generalization about that group.<sup>1</sup> Prejudice often leads to discrimination<sup>2</sup> and can affect in a negative way the discriminator as well. Discrimination on the labour market, for example, besides pressing down the wages of the discriminated group, leads to

employing workers for higher wages which means that the same level of production can be achieved only with higher expenditures, putting the employer in competitive disadvantage compared to those who do not discriminate.<sup>3</sup> Prejudice, therefore, leads to indirect economic disadvantages.

The mitigating effect of education on prejudice was first described in the United States regarding the liberalization of attitudes towards the segregation of black people.<sup>4</sup> These researches argued that new generations due to the changes in the education were socialized in a different way than previous ones by not accepting racial discrimination and being less prejudicial towards black people. On the other hand, research on education and prejudice shows that not only

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<sup>1</sup> Allport, G. W. (1954). *The Nature of Prejudice*. New York: Addison.

<sup>2</sup> Burawoy, M. (1976). The functions and reproduction of migrant labor: comparative material from Southern Africa and the United States. *American journal of Sociology*, 81(5), 1050-1087.

Evans, M. D. R., & Kelley, J. (1991). Prejudice, discrimination, and the labor market: Attainments of immigrants in Australia. *American Journal of Sociology*, 97(3), 721-759.

Lewin-Epstein, N., & Semyonov, M. (1993). *The Arab minority in Israel's economy: Patterns of ethnic inequality*. Westview Pr.

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<sup>3</sup> Becker, G. S. (1957). *The economics of discrimination*. University of Chicago Press.

<sup>4</sup> Hyman, H. H., & Sheatsley, P. B. (1956). Attitudes toward desegregation. *Scientific American*, 195(6), 35-39.

Tumin, M., Barton, P., & Burrus, B. (1958). Education, prejudice and discrimination: A study in readiness for desegregation. *American Sociological Review*, 23(1), 41-49.

ethnic prejudice is affected but prejudices towards other minorities, like religious groups<sup>5</sup> or homeless people<sup>6</sup> as well. Thus, higher educational attainment can decrease negative attitudes related to prejudices in a general way.

A typical indicator of prejudice is when based on the negative stereotypes about other groups, one prefers that in the country everybody belongs to the same culture, speaks the same language and follows the same traditions. The European Social Survey 2014 examines to what extent people agree with these statements. In each country examined – including Hungary – the respondents with lower educational attainment value more if everybody belongs to the same culture than those who have higher educational level. In Hungary the proportion of those who gave this answer is higher than the European average in every educational level, the differences between each level, however, are similar to the other countries examined (see Figure 1 and 2).

The effect of educational attainment can work in several ways. One widely accepted explanation is that education decreases prejudice by providing knowledge and information on outer groups, thus, it reduces false stereotypes and the 'fear from the unknown' effect. Some authors explain the mitigating effect by cognitive reasons claiming that education increases cognitive

abilities: those who are more educated are more open to unfamiliar things, more adaptive to these, understand contexts better, and have a more complex view of the world.<sup>7</sup> These abilities make it easier to understand the roots of differences between groups and to identify prejudicial thinking. At the same time these often cause the refusal of schematic thinking and simplifying stereotypes.

Education has a socializing effect as well as schools convey values and behaviour patterns that are accepted in the society and those who spend more time in education are more exposed to this socialization. Values appearing in education often consider prejudicial behaviour unacceptable.<sup>8</sup>

The effect of education can work in an indirect way as well. Higher educational attainment often means higher status in the society and those who are in a higher status are generally less prejudicial than those who are in a lower social status. This is often explained by the lower level of feeling threatened by minorities among those who are in higher social status.<sup>9</sup>

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<sup>7</sup> Bobo, L., & Licari, F. C. (1989). Education and political tolerance: Testing the effects of cognitive sophistication and target group affect. *Public Opinion Quarterly*, 53(3), 285-308.

Nie, N. H., Junn, J., & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America*. University of Chicago Press.

<sup>8</sup> Hainmueller, J., & Hiscox, M. (2007). Educated Preferences: Explaining Attitudes Toward Immigration in Europe. *International Organization*, 61(2), 399-442.

<sup>9</sup> Hello, E., Scheepers, P., & Gijsberts, M. (2002). Education and ethnic prejudice in Europe: explanations for cross-national variances in the educational effect on ethnic prejudice. *Scandinavian journal of educational research*, 46(1), 5-24.

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<sup>5</sup> Quinley, H. E., & Glock, C. Y. (1979). *Anti-semitism in America*. Transaction Publishers.

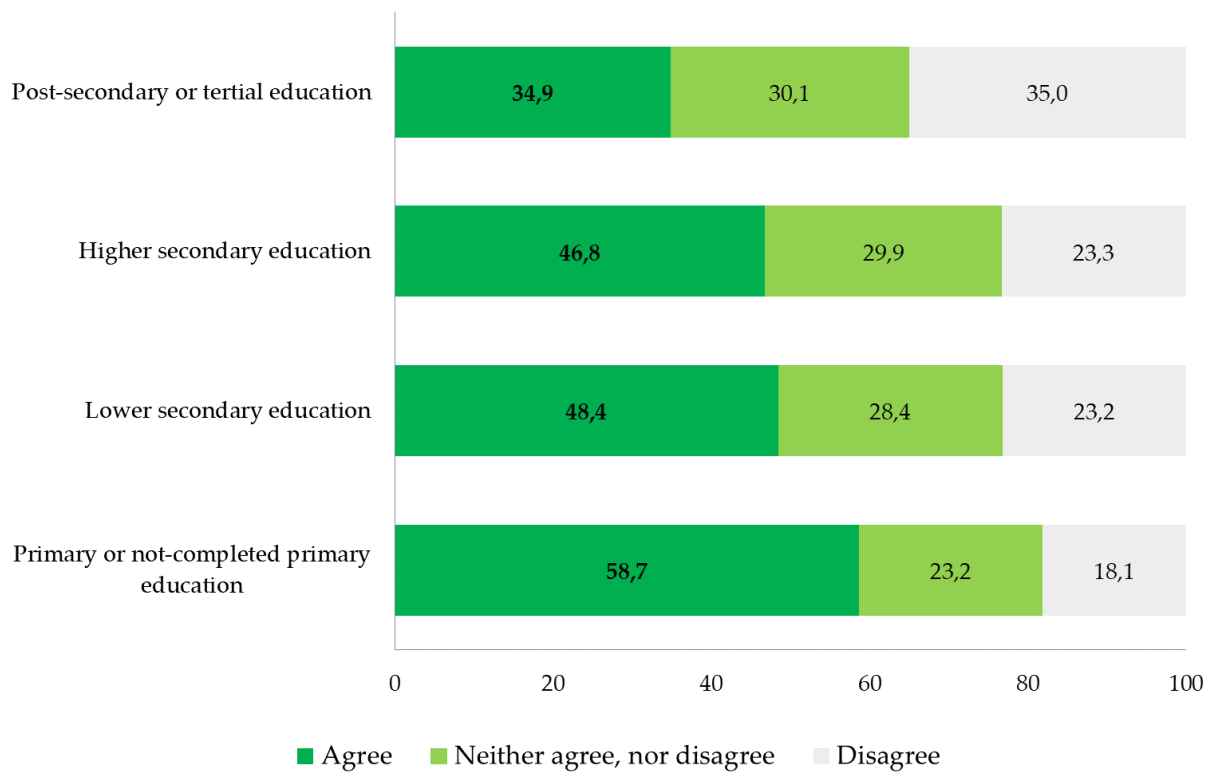
<sup>6</sup> Phelan, J., Link, B. G., Stueve, A., & Moore, R. E. (1995). Education, social liberalism, and economic conservatism: Attitudes toward homeless people. *American Sociological Review*, 126-140.

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As minority groups are often in lower social status themselves they can be in competition for potentially scarce resources like jobs and state transfers with members of lower social status of the majority group while other

members with higher education feel less affected.

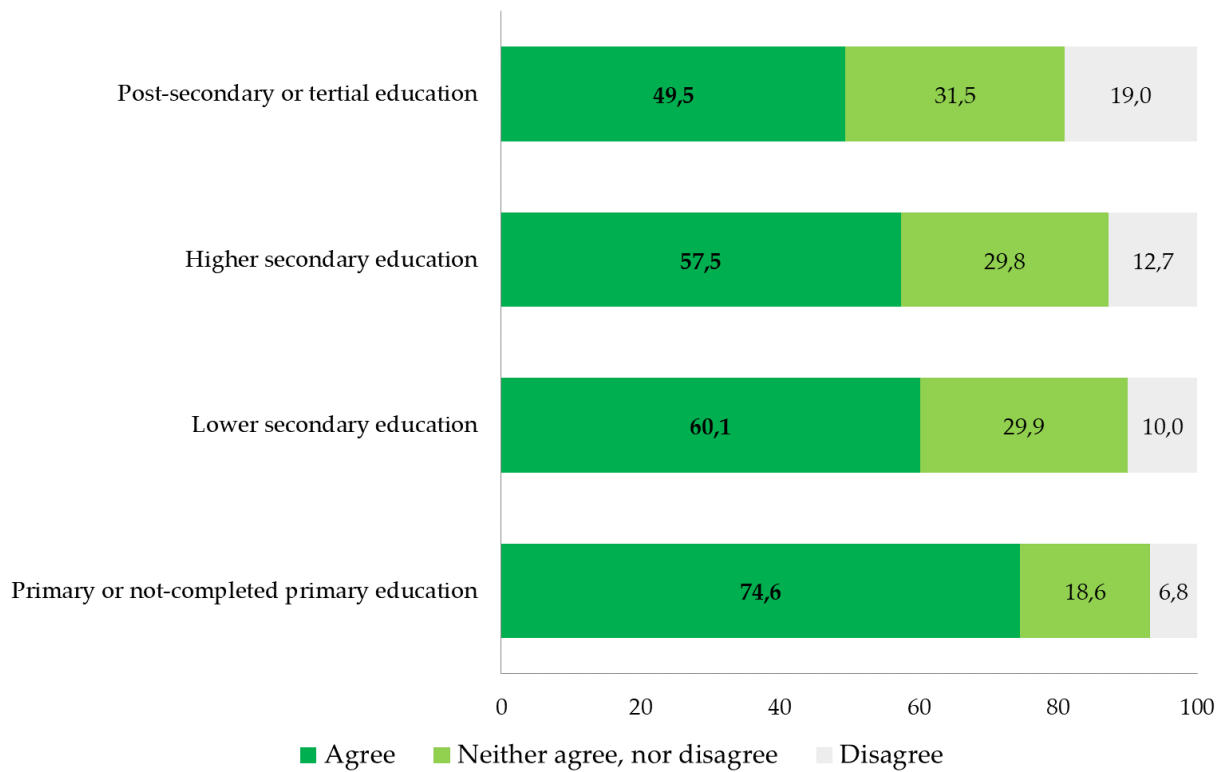
**Figure 1: How much do you agree with the following statement? 'Better for a country if almost everyone shares customs and traditions' – proportion of responses by the highest level of education among the countries participating in the ESS 2014 survey (%)**



Source: ESS Round 7 (2014), IEER



Figure 2: How much do you agree with the following statement? 'Better for a country if almost everyone shares customs and traditions' – proportion of responses by the highest level of education in Hungary(%)



Source: ESS Round 7 (2014), IEER

## International trends

Development of production, consumption and employment in certain globally significant economies, compared with expectations and values of the previous period.

		Period in review	Actual data	Expectations	Previous period
	Unemployment Rate	(Jan)	<b>5.4%</b>	5.5%	5.5%
Germany	Manufacturing Purchasing Managers Index	(Jan)	<b>61.1</b>	61.2	61.2
	IFO Business Climate Index <sup>1</sup>	(Jan)	<b>117.6</b>	109.4	117.2
France	INSEE Business Climate Index <sup>2</sup>	(Jan)	<b>110</b>		112
	Unemployment Rate	(Jan)	<b>4.1%</b>	4.1%	4.1%
USA	CB Consumer Confidence Index	(Jan)	<b>125.4</b>	123.1	123.1
	Manufacturing Purchasing Managers Index	(Jan)	<b>55.5</b>	55.5	55.5
China	Manufacturing Purchasing Managers Index	(Jan)	<b>51.3</b>	51.5	51.6

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

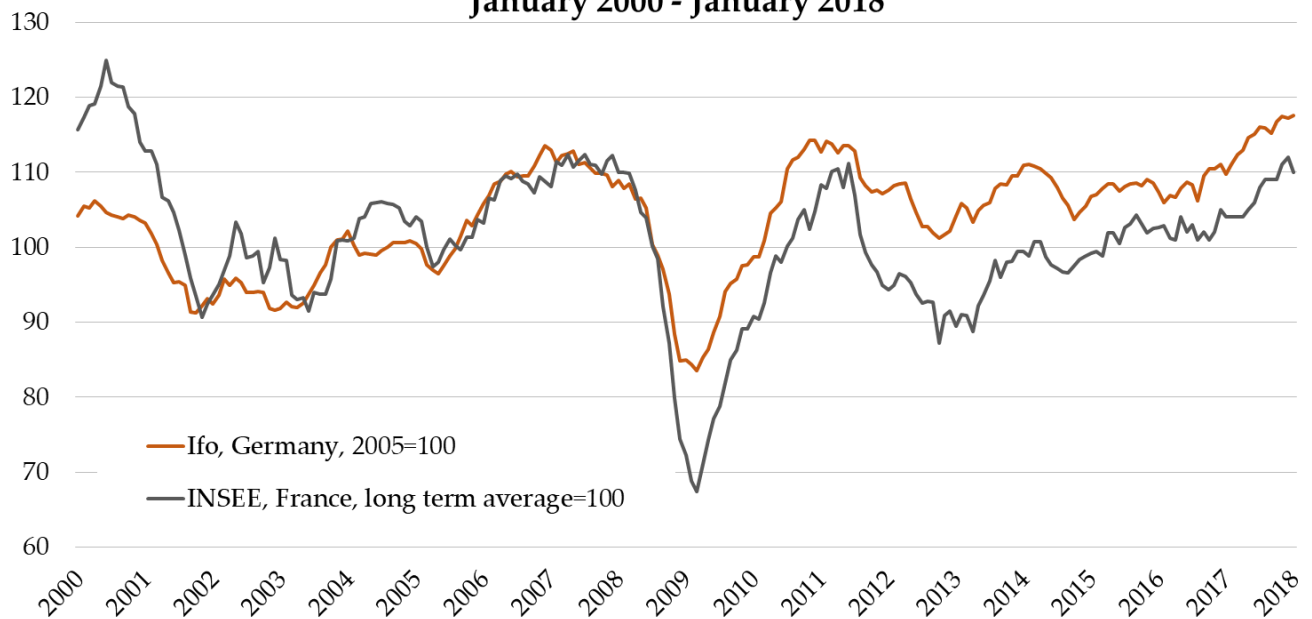
<sup>2</sup> <http://www.insee.fr/en/themes/indicateur.asp?id=105>

Source of the remaining data: <http://worldeconomiccalendar.com>

The German economy's performance continues to gradually improve in January. The level of unemployment decreased slightly again. The manufacturing purchasing manager index (PMI) has decreased moderately compared to the last month. The IFO business climate index, after a slight decrease in December, hit a new record in January again performing above the expectations. The French INSEE business climate index has declined this month. In the United States, the CB consumer confidence index was significantly higher than in the last month and exceeded the expectations as well. The manufacturing PMI stagnates at the level of previous months. The unemployment rate has remained unchanged since last month as well. The Chinese manufacturing PMI after a longer period of increase shows a slight decrease in this month.

Long-term changes in business confidence indices

**Business confidence in Germany and France,  
based on the Ifo and INSEE business climate surveys,  
January 2000 - January 2018**



Source: [www.cesifo.de](http://www.cesifo.de), [www.insee.fr](http://www.insee.fr)

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