Monthly Bulletin of Economic Trends

October 2017

Education and Subjective Well-Being

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, satisfaction, quality of interpersonal relationships, social and organizational 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 brief analysis focuses on the relationship between subjective well-being and educational attainment.

Subjective well-being is a measurement that examines quality of life based on individual subjective considerations beyond the social and economic indicators. Thus apart from the objective indicators this measurement provides an insight into how people generally feel in their everyday life. When measuring subjective well-being researchers focus on how the respondent assesses their own circumstances, to what extent they are satisfied with their own life, and with the quality of their life. Researches on subjective well-being explain the level of satisfaction with different factors. These factors are: labour market conditions, income level, health status, the quality and quantity of the individual's relations, how they spend their free time, the individual's attitudes, and other broader social, political and economic factors.[1]

The relation between subjective well-being and educational attainment can be detected both in direct and indirect ways according to studies. On the one hand educational attainment strongly correlates with factors defining well-being such as income and health status, thus these factors indirectly affect the individual's subjective well-being. On the other hand there is evidence that the level of educational attainment in itself has a positive impact on the subjective well-being.[2]

[1] Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of economic psychology*, *29*(1), 94-122.

[2] Blanchflower, D. G., & Oswald, A. J. (2004). Well-being over time in Britain and the USA. *Journal of public economics*, *88*(7), 1359-1386.

The OECD Gallup World Poll 2012 survey evaluation confirms the abovementioned.[3] According to this a twofold income rise on a 0-10 scale increases life satisfaction by 0.2 point, and there is a strong correlation between educational attainment and income. The same study demonstrates the direct relative strong impact of educational attainment: subjective well-being is 0.4- and 0.8-point higher in case of those with secondary education or with higher education, respectively compared to those with low-education. According to this study when the income doubles its effect is one and a half stronger with secondary education and the effect is three-fold with higher education on subjective well-being. This means that in the examined countries higher education compared to secondary education in respect of subjective well-being is a factor with the same effect as an eightfold income increase has; and the extent of the effect is similar to being employed compared to being unemployed or to being healthy compared to suffering from health problems.

Via the relation between educational attainment and subjective well-being it can clearly be demonstrated that high-educated people are generally more satisfied with their lives than those with low education. According to the OECD (2016) study[4] in the member countries in 2015 92% of the highly educated people were satisfied with their lives, while concerning people with secondary education the rate was only 83%. In 2015 in Hungary 59% of the people with secondary education were satisfied with their lives (this is the lowest rate among OECD countries), while among the higher educated people this rate was 83%. This is the highest difference between people with secondary or higher education among the examined countries apart from Portugal.

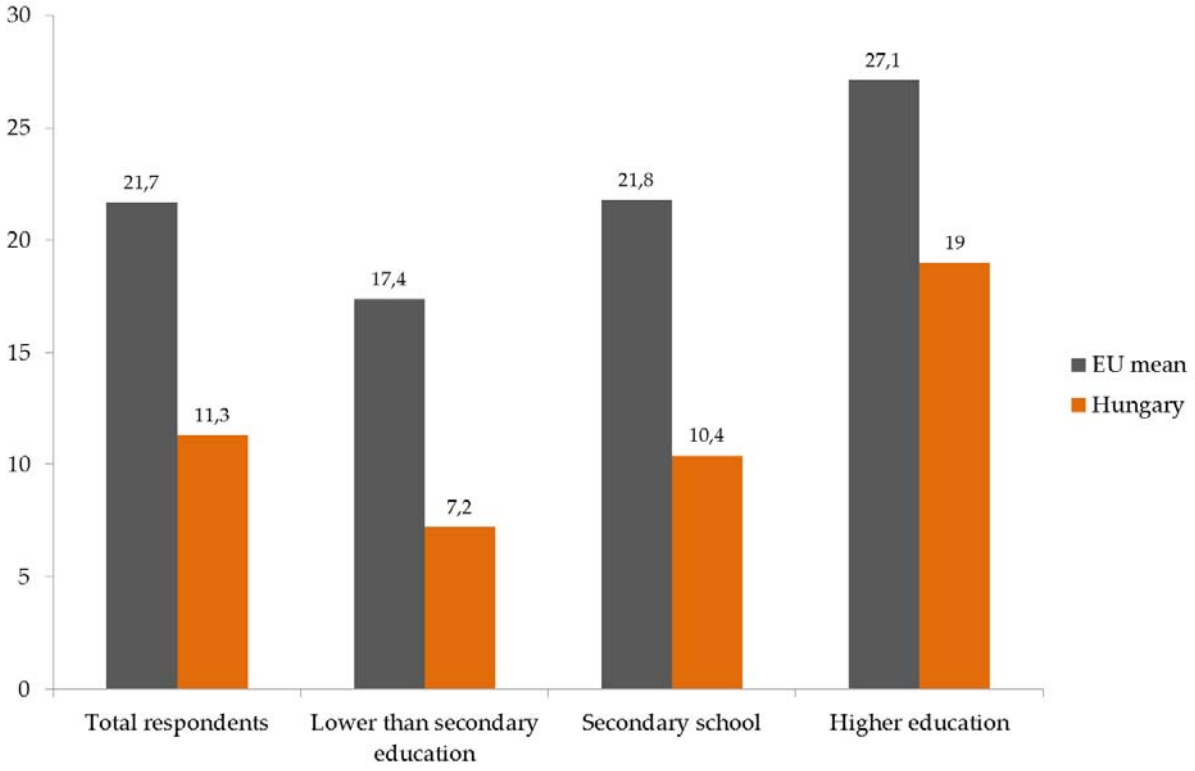
The 2013 Eurostat study on income and living standards (EU-SILC) study[5] on subjective well-being also indicates the fact that in Hungary the rate of life satisfaction among the low-educated is significantly below that of the European average (see Figure 1). Among those with elementary education the rate of highly satisfied is 7.2%, the rate among those with secondary education is 10.4%; lower rates among EU member states can only be found in Bulgaria (3.2% and 6.2% respectively). It can be seen that the difference concerning the rate of satisfaction among people with secondary education and those with higher education can be considered high compared to other member states. Therefore it can be assumed that the relation between educational attainment and subjective well-being is relatively strong in Hungary.

[3] Boarini, R., et al. (2012), "What Makes for a Better Life?: The Determinants of Subjective Well-Being in OECD Countries – Evidence from the Gallup World Poll", *OECD Statistics Working Papers*, No. 2012/03, OECD Publishing, Paris.

[4] OECD (2016). Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris. http://dx.doi.org/10.187/eag-2016-en

[5] Eurostat: EU-SILC 2013. Available: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_pw05&lang=en

Figure 1: The rate of highly satisfied according to educational attainment in the EU and in Hungary (2013, %)



Source: Eurostat, EU-SILC 2013

Summary of the WEF Global Human Capital Report 2017

Each year, the World Economic Forum publishes the Global Human Capital Report, a comprehensive analysis of human capital development around the world. The 2017 Report is based on data from 130 countries and has found that the world develops on average 62% of its human capital, while neglecting 38% of its talent. Hungary places 39th overall, and while this ranks the nation in the first third of the 130 countries examined, the country scores low in comparison with other EU member states and other countries in the region. As human capital is a key factor to long-term economic growth and its development benefits individuals, firms and nations alike, the findings of the report should be of vital importance for policy-making. This brief analysis therefore aims to summarise and draw conclusions from this report, laying special emphasis on Hungarian human capital development.

The Global Human Capital Index

Human capital is the knowledge and skills people possess that enable them to create value in the global economic system. Human capital is a dynamic concept, as it can be enhanced by education, skills-training and the employment of skills, while lack of use can depreciate it. The development of human capital is crucial for individuals, firms and nations. Learning and working provides individuals with livelihood, meaning and identity, and opportunities to contribute to society. A skilled workforce enables companies to innovate and maximise productivity. By developing their human capital and providing equal opportunities in education and employment, nations can maximise their economic growth and competitiveness, as well as enjoy positive economic and political outcomes. Due to these evident high returns, human capital development should be at the forefront of policy-makers' and business leaders' agendas. Through quantifying measures of human capital, the Index provides a practical tool to developing human capital efficiently.[6]

The Global Human Capital Index enables the assessment of countries' progress, and the identification of opportunities of development as well as cross-country learning and exchange. The Index ranks the 130 countries on a scale from 0 to 100 (worst to best) based on their distance from the ideal state of fully developed human capital. It has four thematic dimensions (capacity, deployment, development and know-how) and provides analysis on human capital split into five distinct age groups (0–14 years; 15–24 years; 25–54 years; 55–64 years; and 65 years and over) to provide a full picture of the human capital profile of countries and enable comparative analysis.[7]

The four subindices of the Index quantify human capital development in the areas of

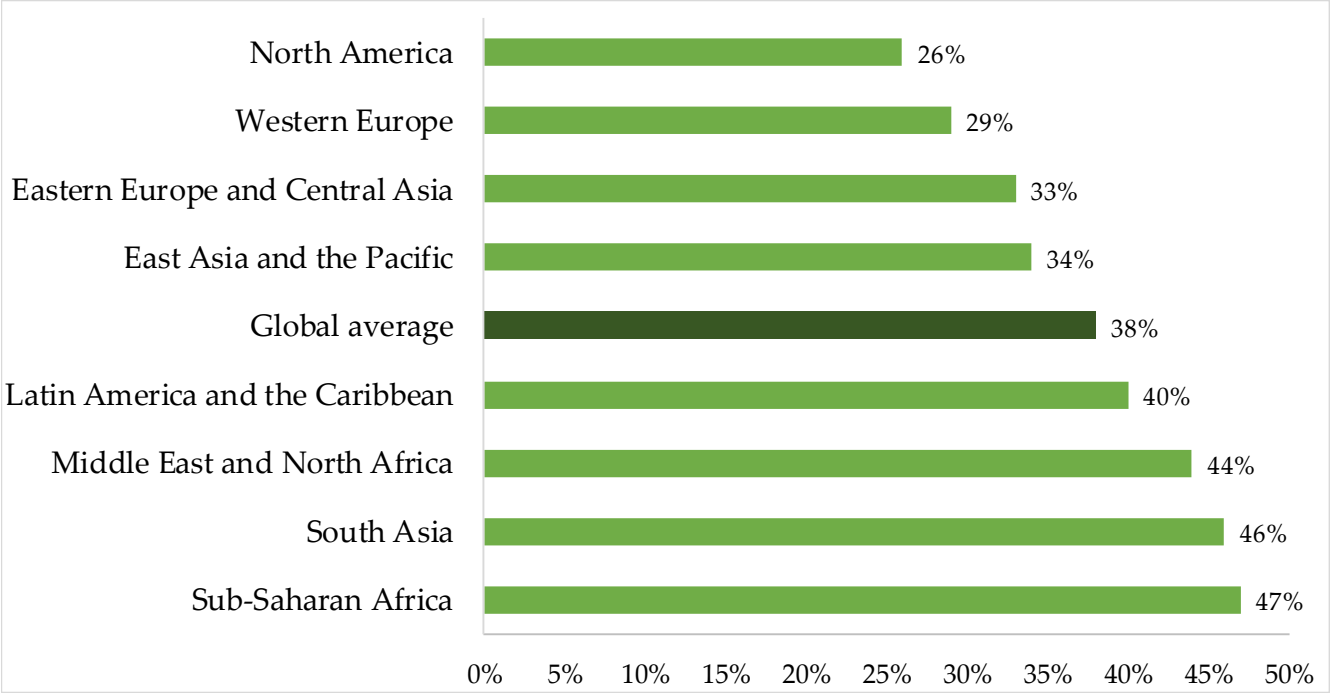
[6] WEF Global Human Capital Report 2017, p. 3. http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf [Last accessed: 15.10.2017]

[7] WEF Global Human Capital Report 2017, p. vii, 4.

capacity, deployment, development and know-how, and account for 25% of the overall result each. The Capacity Subindex reflects the existing stock of education across generations, measuring literacy and numeracy, and the percentage of the population that has achieved at least primary, secondary or tertiary education. The Deployment Subindex covers skills application and skills accumulation while working, through learning-by-doing, tacit knowledge, exchange with colleagues and formal on-the-job learning. This subindex is composed of measures of labour force participation rate, employment gender gap, unemployment rate and underemployment. The Development Subindex reflects current efforts to educate, skill and upskill the next generation and the current workforce. It measures access to education on primary, secondary and tertiary level, as well as secondary enrolment gender gap and vocational education enrolment rate and the extent of staff training. It also includes two qualitative indicators on the quality of primary education and on how well the education system meets the needs of a competitive economy, as well as an assessment of the skill diversity of a country's recent graduates. Lastly, the Know-how Subindex quantifies the breadth and depth of specialized skills used at work. Its economic complexity measure quantifies the degree of sophistication of a country's "productive knowledge" as can be empirically observed in the quality of its export products. It also provides measures of high-skilled and medium-skilled employment share and employer's perceptions of the ease or difficulty of filling vacancies.[8]

[8] WEF Global Human Capital Report 2017, p. 5-6.

Figure 1: Gap in human capital development, by regions, 2017



Source: World Economic Forum,
http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf

Main findings of the Global Human Capital Report 2017

The Global Human Capital Report 2017 has found that this year, the average Global Human Capital Index for the world stands at 62. This means that the world develops 62% of its human capital, in other words, nations are neglecting or wasting 38% of their talent. Only 25 out of the 130 nations included reached an index of above 70%, while 50 countries scored between 60% and 70%. 41 countries reached scores of 50% to 60%, while 14 countries have made use of less than 50% of their human capital.

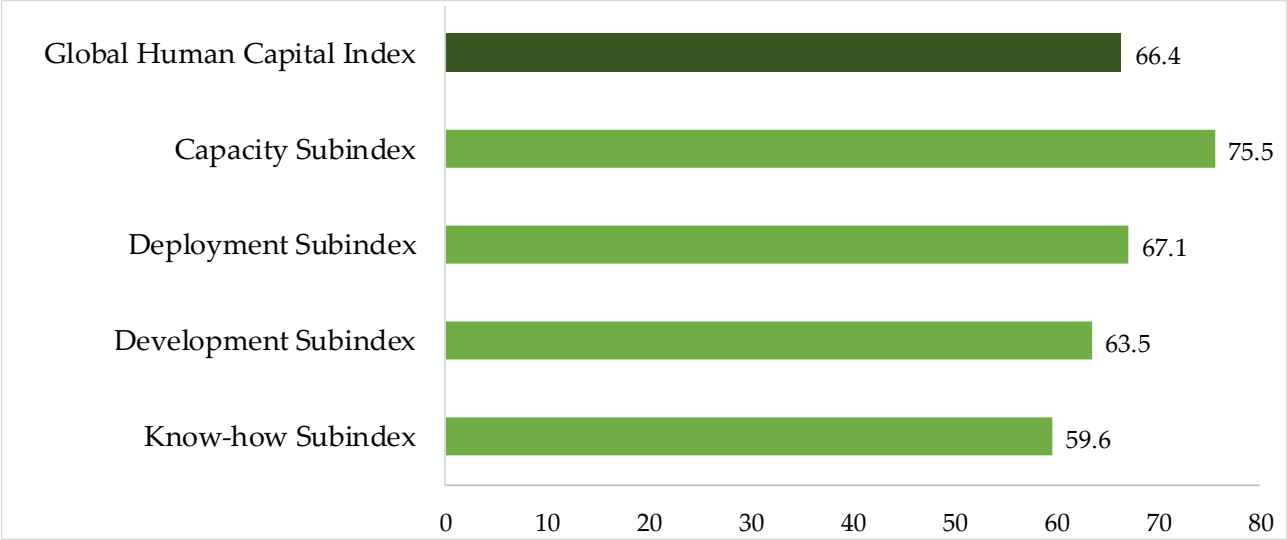
The leaders in human capital development are predominantly high-income economies with a longstanding commitment to education attainment and with a large share of employees in high-skilled jobs in the workforce.[9] The country with the highest score was Norway, which develops 77.12% of its human capital. Second and third came Finland and Switzerland respectively. Some large economies, namely the US and Germany, also made it into the top 10, coming 4th and 6th. In the top 20, there are four nations from the East Asia and the Pacific region (New Zealand being 7th, Singapore 11th, Japan 17th and Australia 20th), three countries belong in the Eastern Europe and Central Asia region (Slovenia coming 9th, Estonia 12th and the Russian Federation 16th), while Israel (18th) was the only country from the Middle East and North Africa region. On a regional level, the human capital development

[9] WEF Global Human Capital Report 2017, p. 10.

gap is smallest in North America, followed by Western Europe, Eastern Europe and Central Asia, East Asia and the Pacific, Latin America, and Middle East and North Africa, while it is the largest in South Asia and Sub-Saharan Africa.[10]

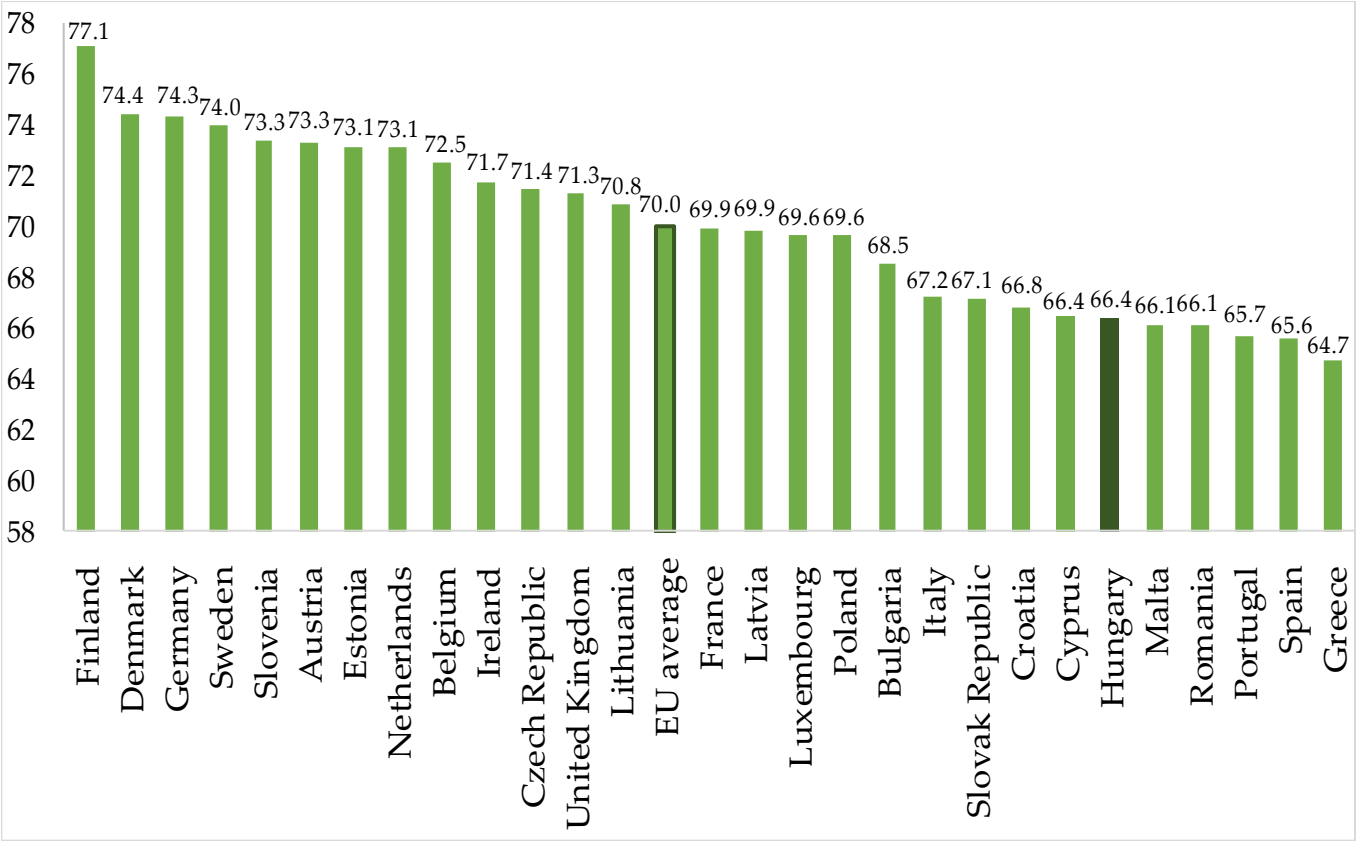
[10] WEF Global Human Capital Report 2017, p.10-16.

Figure 2: Global Human Capital Index and Subindices, Hungary, 2017



Source: World Economic Forum,
http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf

Figure 3: Global Human Capital Index, EU member states, 2017



Source: World Economic Forum,
http://www3.weforum.org/docs/WEF_Global_Human_Capital_Report_2017.pdf

Hungary in the Global Human Capital Report

The Global Human Capital Report includes country profiles with detailed, indicator-level information for all 130 countries analysed. This provides opportunities to identify the areas where improvements need to be made to harness a country's human capital potential. With a score of 66.4, Hungary ranks 39th overall out of the 130 countries. The country scores relatively high in the Capacity and Know-how Subindices, coming 33rd in the former with a score of 75.5 and 36th in the latter with a score of 59.6.[11] As for the components of the subindices, its secondary education attainment rate (ranking between 13th and 18th in all age groups measures), secondary education enrolment rate (32nd) and secondary enrolment gender gap (1st tied with other countries) place the country among the best. In the Deployment Subindex the underemployment rate is among the lowest (ranking between 12th and 36th in the age groups measured), while in the economic complexity measure of the Know-how Subindex, Hungary ranks 9th.

On the other hand, the country scores low in numerous areas which play a crucial role in harnessing the human capital potentials of the country. In the Deployment and Development Subindices Hungary ranks only 56th and 69th respectively. In the Development Subindex, low scores indicate the low quality and outdated nature of the education system that fails to efficiently develop the human capital of the current and next generation and equip them with the skills and knowledge required for success in employment. The low quality of education is reflected in the fact that the country ranks only 105th out of the 130 countries for quality of the education system. It also ranks very low, 109th on the extent of staff training, and the quality of primary schools (86th) and primary education enrolment rate (75th) rankings also place the nation in the lower-ranked half of the countries measured.

In the Deployment Subindex, the indicator for labour force participation rate is also particularly low. In this, the country ranks between 107th and 128th in three out of the four age groups measures. The employment gender gap is significant as well, ranking 70th and 76th in the 16-24 and above 65 age groups respectively. The unemployment rate is also relatively high at rankings between 51st and 75th for the four age groups measured. In the Know-how Subindex, in the indicator of the availability of skilled employees, Hungary ranks 123rd out of the 130 countries, which yet again shows the Hungarian education system failing to equip workers with the right skill set for employment.[12]

Hungary in regional perspective

Hungary forms part of the Eastern Europe and Central Asia region, which performs reasonably well in the ranking, coming third out of the seven regions. Slovenia (9th), Estonia (12th) and the Russian Federation (16th) are all in the top 20, and the Czech Republic (22nd), Ukraine (24th) and Lithuania (25th), all score above the 70% threshold as well, making up about a quarter of the countries scoring above that threshold. The bottom-ranked countries of the region are Macedonia (67th) with an index of 61.8, and

[11] WEF Global Human Capital Report 2017, p. 8.

[12] WEF Global Human Capital Report 2017, p. 105.

Albania (85th) with an index of 58.2.[13] In Eastern Europe and Central Asia there is great scope for improvement in deploying the countries' high capacity talent more efficiently, as well as investing in education modernisation and developing talent across the lifecycle.[14]

With its index score of 66.4, Hungary is in the lower midrange in the region. In Eastern Europe specifically, only Romania (42nd), Serbia (60th), Macedonia (67th) and Albania (85th) rank lower than Hungary.[15] As for the subindices, many countries in the region share the tendency of lower scores in the Deployment subindex that characterises Hungary as well. However, the Development Subindex is particularly low in the country in comparison with that in other Eastern European countries, indicating a comparatively low standard of the education system.

If we engage in an EU-wide comparison, similar results emerge.[16] Out of the 28 member states of the European Union, Hungary only comes 23rd in the ranking, meaning that nearly all EU member states harness and develop their human capital better than Hungary. The nations scoring below Hungary, namely Malta (41st), Romania (42nd), Portugal (43rd), Spain (44th) and Greece (48th), only rank slightly lower.[17]

Conclusion

As shown above in many areas of human capital development, the Hungarian economy needs urgent reform. While in the global Human Capital Index ranking Hungary does place in the first third of the 130 countries analysed, its score in comparison with countries of similar economic development is well below average. The country's scores in numerous indicators show a pressing need for education reform and modernisation. Hungary's especially low scores in the Development Subindex show without question that urgent reform of the education system is vital for ensuring long-term economic growth and competitiveness.

[13] WEF Global Human Capital Report 2017, p. 8-9.
[14] WEF Global Human Capital Report 2017, p. 13.
[15] WEF Global Human Capital Report 2017, p. 8-9.
[16] WEF Global Human Capital Report 2017, p. 15.
[17] WEF Global Human Capital Report 2017, p. 8-9.

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
Germany	Unemployment Rate	(Sept)	**5.6%**	**5.7%**	**5.7%**
	Manufacturing Purchasing Managers Index	(Oct)	**60.5**	**60.2**	**60.6**
	IFO Business Climate Index[1]	(Oct)	**116.7**	**115.2**	**115.3**
France	INSEE Business Climate Index[2]	(Oct)	**109**		**109**
USA	Unemployment Rate	(Sept)	**4.4%**	**4.3%**	**4.4%**
	CB Consumer Confidence Index	(Sept)	**119.8**	**120.0**	**120.4**
	Manufacturing Purchasing Managers Index	(Oct)	**54.5**	**53.5**	**53.1**
China	Manufacturing Purchasing Managers Index	(Sept)	**52.4**	**51.5**	**51.7**

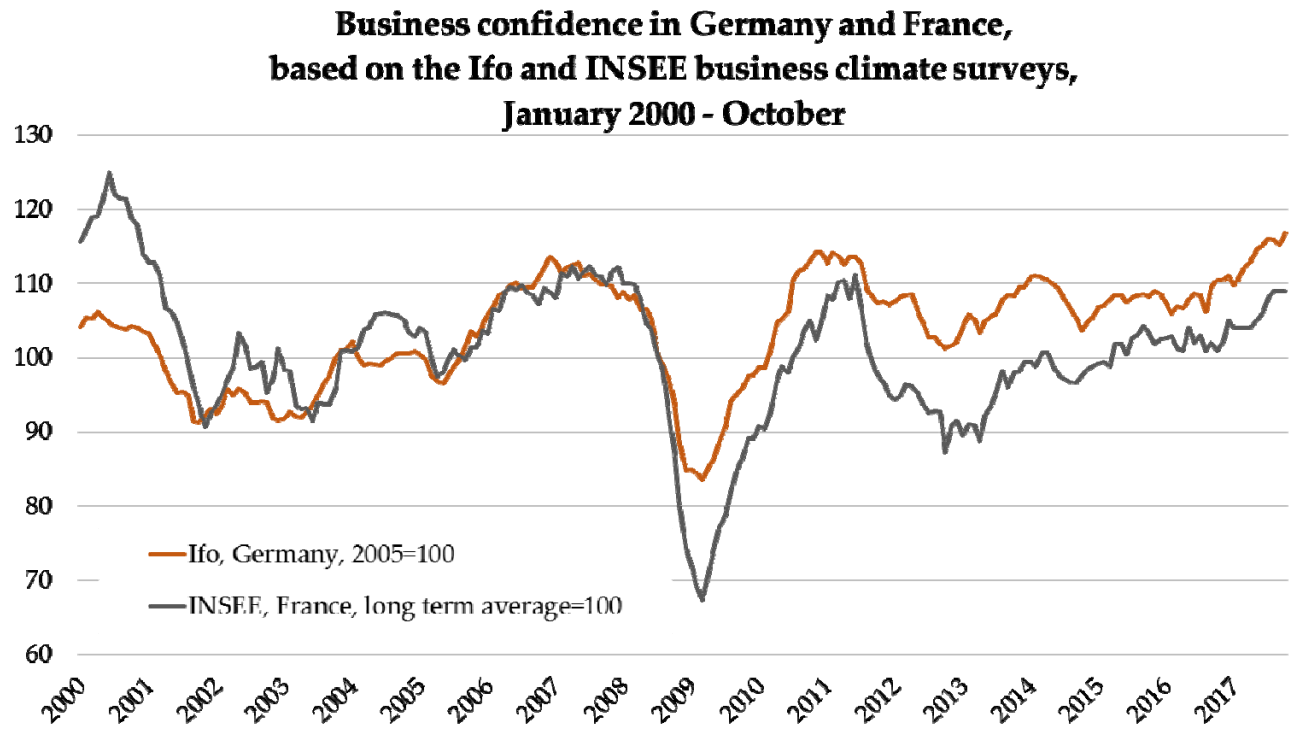
[1] https://www.cesifo-group.de/ifoHome/facts/Survey-Results/Business-Climate/

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

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

The German economy performed above the expectations in October. The level of unemployment stagnates around the 6 percent rate, and has not changed since August. The manufacturing purchasing manager index (PMI) has increased moderately compared to the previous month and the expectations. After a slight decline in September the IFO business climate index continued the rise seen in the previous months and hit a new high in October. The French INSEE business climate index has stagnated at the same level as last month, consolidating the improvement seen in the previous months. In the United States, the CB consumer confidence index was slightly lower than in the last month and the expectations. The manufacturing PMI shows a modest increase from September. The level of unemployment has remained unchanged since last month, and was slightly higher than expected. The Chinese manufacturing PMI, after an unexpected increase in August, continued to perform significantly better than the expectations.

Long-term changes in business confidence indices



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

Contact
Address: MKIK GVI
1034 Budapest, Bécsi út 120.
Tel: 235-05-84
Fax: 235-07-13
E-mail: *gvi@gvi.hu*
Internet: *http://www.gvi.hu*

Prepared by:
Hanna Fölsz, intern, MKIK GVI
Ágnes Makó, analyst, MKIK GVI
Fruzsina Nábelek, analyst, MKIK GVI
Emília Kompaktor

Research manager:
István János Tóth, research fellow, MTA KRTK KTI,
Managing director, MKIK GVI
E-mail: *tothij@econ.core.hu*

In case of publication please cite as follows:
HCCI-IEER: Monthly Economic Bulletin,
October 2017. Budapest,
2017-10-25