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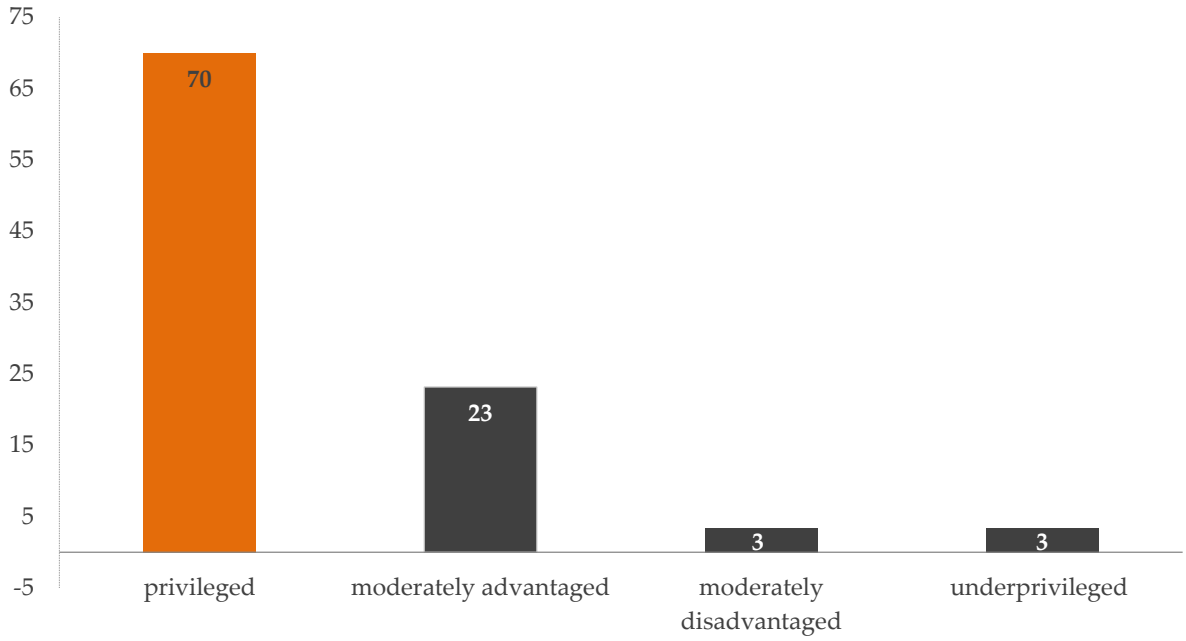
Where would students like to continue their education? The continuing education plans of students from the country's best high schools

The IEER analysis examines plans for further education of students from the nation's best high schools. The results show that a vast majority of students want to continue their education, namely at national institutions of higher education, and only 7% of them would study abroad (as well). The available statistics also indicate that Hungarian students do not participate in large numbers in (long-term) foreign study, but in recent years their numbers show a growing trend.

In the course of our research we asked 714 graduating high school students from thirty-one Hungarian state schools about their intentions concerning continuing education. In the sample -- those students from the best national high schools on the basis of the competence assessment – were a majority of students that had **a father with higher education** (56%) and **a high labour market status** (65%). More than two-thirds (70%) of students come from **privileged areas**, nearly a quarter (23%) were moderately advantaged, and only a small minority live in moderately disadvantaged (3%) or underprivileged regions (3%).

Distribution of high-school students according to the level of development of where they live (per cent), 2016



Source: IEER (N=704)

The vast **majority** of students attending the best national high schools (91%, 647 persons) **want to continue their education** after graduation. Among the most popular fields of study are **economics** and **technical** fields, as well as the **humanities and liberal arts**. This year, the majority of respondents (42%) named only a college or university in Budapest as their first three applicable possibilities, 31% applied to only rural higher education institutions, while 27% applied to both Budapest and rural institutions.

Our results show that only **7% of the country's best secondary school pupils applied to a foreign institution of higher education** (as well), they are typically those with an outstanding academic achievement, their father has a high level of education and he is employed in an executive position or entrepreneur. Most of them applied to tuition-free institutions and many of them want to stay abroad in the long term. The most popular destination country is the **United Kingdom**.

The fact that a large number of Hungarian students do not go abroad for their bachelor or master's degree is supported by Eurostat data as well as statistics from German, Austrian and British universities.

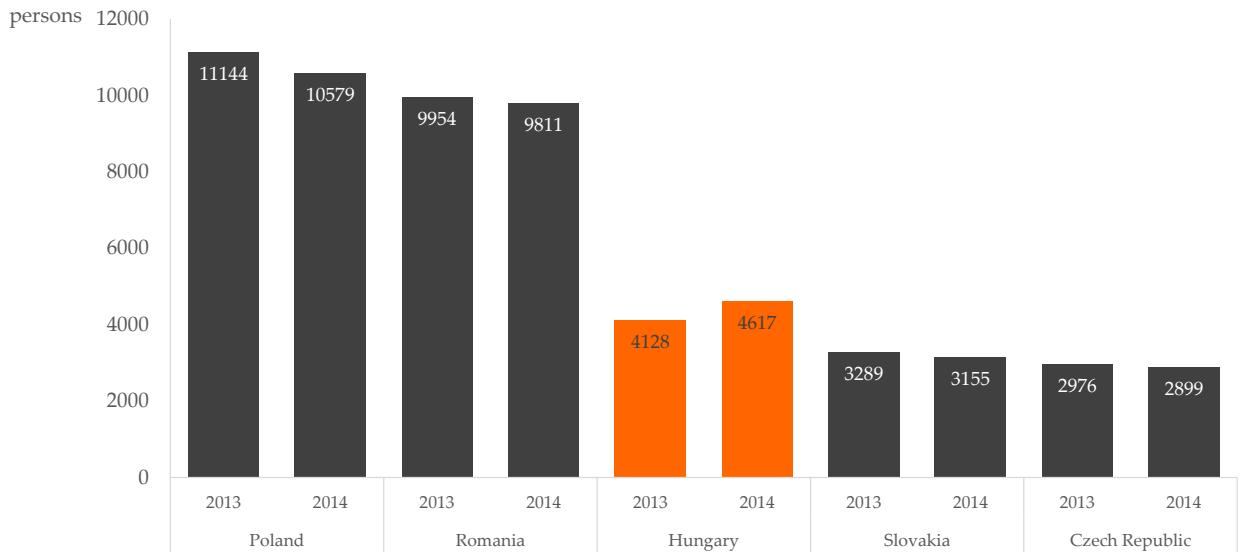
According to statistical data provided by Eurostat, **nearly 7,000 Hungarian students participated in foreign BA and MA**

programs in 2013, while in 2014 this number was roughly 6,500. According to HCSO (Hungarian Central Statistical Office) data, between 2013 and 2014 the number of Hungarian students enrolled in a BA program ranged from 194 thousand to 216 thousand; compared with that in 2013 roughly 3,700 and in 2014 there were 3,000 studying for a BA in another country, these numbers don't seem significant. On the other hand, the number of MA students studying in Hungary between 2013 and 2014 ranged between 37 thousand and 39 thousand; compared to that in 2013 nearly 4,000 and in 2014 roughly 2,700 Hungarian students studied abroad for their MA, these numbers are significant. Hence, **compared to the number of students studying in Hungary, not many opt to go abroad at the BA level, but at the MA level we have more students that choose to leave the country's higher education system**.

Among Hungarian migrant students the three most popular destinations are the **United Kingdom, Germany and Austria**. We comparatively looked at the number of mobile students from the Visegrád countries as well as Romania in the case of these three destinations. The **largest number** of mobile students -- a little more than 10 thousand in both years -- was **Polish students** studying in one of these three countries. They are followed by Romanian students, whose numbers in both years was close to 10 thousand. The number of **Hungarian students** in the three countries was approximately **4,100 in 2013** while it was a little more than **4,600 persons in 2014**, the number of Slovak and Czech students in both years was about three thousand.

Comparing the abovementioned data to the countries' national population shows that **Slovakia has the most mobile students** per million inhabitants (2013: 608 persons, 2014: 583 persons), the next is Romania where the same value is approximately 500 (2013: 497 persons, in 2014: 492 persons) for both years. In the case of **Hungary the value per million inhabitants in 2013 was 417 and in 2014 it was 467**. The Czech Republic (2013: 283, 2014: 276) and Poland (2013: 293 persons, 2014: 278) were at the end of the line, both countries not reaching 300 mobile students per million inhabitants annually.

Number of foreign students from the Visegrád countries and Romania (BA and MA courses) studying at a higher education institution in the United Kingdom, Austria or Germany (number), 2013-2014



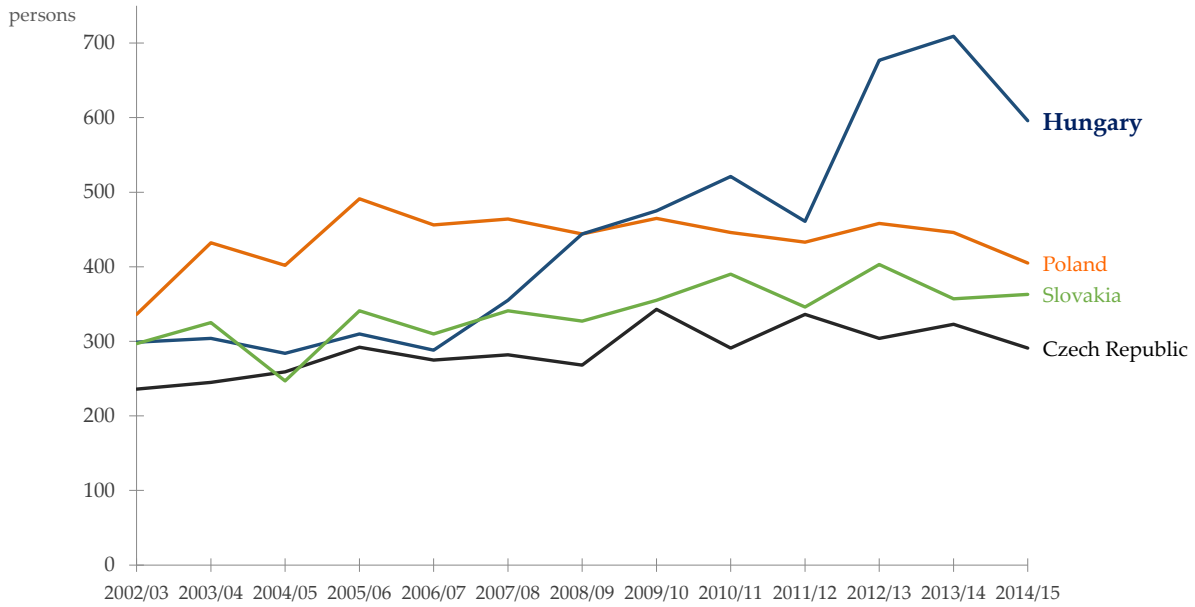
Source: Eurostat

Note: Data of students studying in the EU are limited to the following countries: Germany, Austria, and United Kingdom

For the United Kingdom, Austria and Germany, more detailed statistics are available. For **BA courses at British universities**, **underrepresented** are **Hungarian** (2015: 515 persons), Slovak (2015: 370) and Czech (2015: 570 persons) students, compared to the considerably more Polish students (2015: 1,655 persons) while the **highest** is and has been **Romania students** (2015: 2,450 persons) for each year since 2010.

The Austrian Ministry of Education gave data on the number of students from the Visegrád countries participating in a BA, MA, or exclusive training program of Austria for the period from the 2002/2003 school year until the 2014/2015 school year. Accordingly, for each year since the 2009/2010 school year, **among the Visegrád countries Hungary has sent the most students to Austrian universities for further education**. For the 2014/15 academic year at an Austrian BA, MA or exclusive training program, the number of first-year students was as follows: Hungary 596, Poland 405, Slovakia 363, and the Czech Republic with only 291.

Changes in the number Hungarian, Polish, Slovak and Czech students admitted to Austrian public universities BA, MA, and exclusive trainings between 2002 and 2015 (persons)



Data Source: Bundesministerium für Wissenschaft, Forschung und Wirtschaft

Data for Hungarian mobile students enrolled in BA and MA programs at German universities cover the period between 2002 and 2014. According to these figures, the **number of Hungarian students** enrolled in a BA **in Germany** has risen slowly but surely since 2005, while the number of students entering in a MA program has been **rising** slowly since 2009. In 2014 there were 258 students enrolling for a BA and 175 were studying for a MA.

At present we cannot speak of a mass migration of Hungarian students for further study, but we must also take into account that according to statistics the **number of Hungarian students studying abroad was on the rise** in recent years. The migration process is self-reinforcing, so we can't rule out that in the near future the number of Hungarian students participating in foreign BA and MA programs will increase significantly.

Expected economic effects of the climatic change in Hungary, 2020-2040

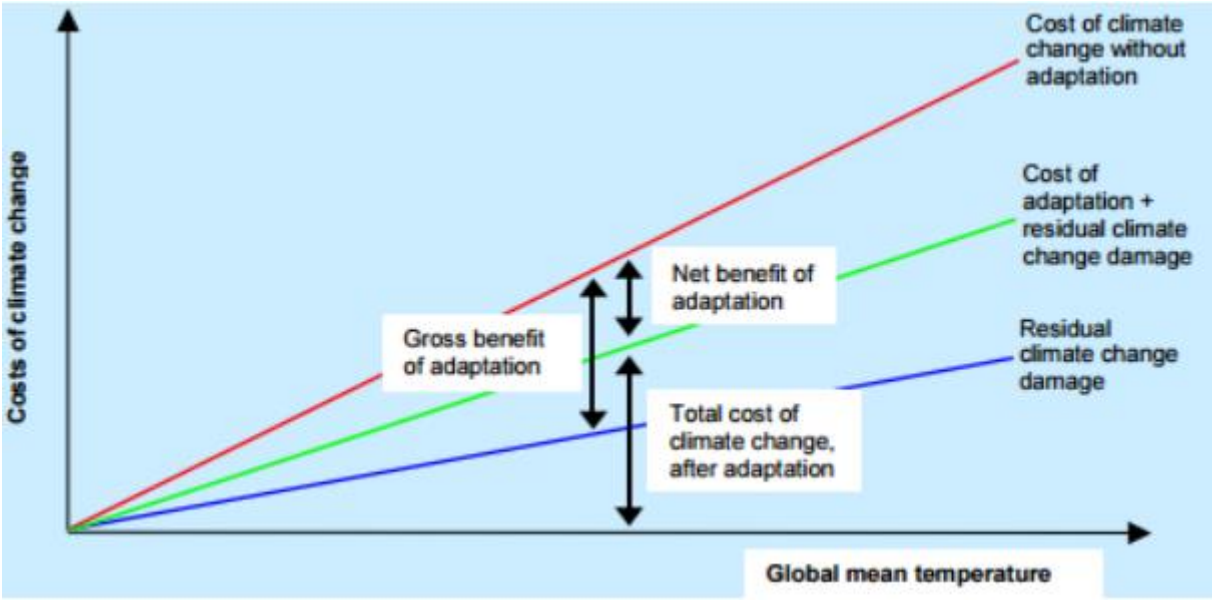
The following brief analysis investigates the diverse economic impacts of climate change, and besides that it also focuses on the description of the expectable effects on the Hungarian economy. Human activities like greenhouse gas emission are a major cause of climate change. In order to reduce the negative effects of climate change there are two general types of strategies: one of them attempts to reduce the extent of climate change (mitigation strategies) the other tries to find ways to adapt to the new conditions (adaptation strategies). Social and economic impacts of climate change can be examined by using dynamic mathematical and statistical models of multiple interdependent factors.

Free rider behaviour

Efforts to reduce global warming can be considered as a public good and there is a related free rider problem. Everyone benefits from the results of these efforts and non-payers (free riders) cannot be excluded. This results in a suboptimal level of innovations, R+D expenditures and investments related to greenhouse gas reduction.

The harm caused by greenhouse gases can be considered both as spatial and as dynamic externality. Consequently countries less willing to make efforts to reduce GHG emission impose a negative effect on other countries (spatial externality). The actions of the current generation impose an externality on the next generation welfare (dynamic externality).

The importance of adaptation in the aim of reducing climate change costs



Source: Stern, Nicholas, 2008. The Economics of Climate Change. American Economic Review, Vol. 98, No. 2 (2008), pp. 1-37., 2007

Rising temperature

The primary effect of climate change is the rise of average temperature. In Hungary average temperature is expected to increase 0.5-3 degrees Celsius until 2050. The number of frigid days will decrease by 12-15 days annually in contrast the number of days with a heat alert may increase by even 14 days compared to the second half of the 20th century.

As a result of increased temperature typical precipitation forms, frequencies and amounts are also going to change. In Hungary less frequent but more intense precipitation can be expected mostly in winter, which is becoming the wettest season.

Heavy rainfalls can result in soil erosion in the basin of Central-European rivers and in extreme cases changes in topography may also occur. From the same reason more severe floods can be expected. On the other hand drought hazard is also expected to become a serious problem in Hungary. Small lakes in the Great Plain may dry up completely and Lake Balaton may lose significant portion of the water it receives naturally.

Industry

Agriculture is one of the most vulnerable sectors to climate change in the economy. In Hungary the appropriate selection of cultivated species and other adaptation actions (e.g. installation of irrigation systems) may turn the effects of climate change to favourable.

The decreasing energy demand of the Hungarian industrial sector can increase the competitiveness of Hungary in the medium - and long term. Due to the climate change it is likely that industries like manufacturing of air-conditioning systems, heat insulators, solar panels and other industries related to alternative energy sources will represent a greater proportion of the GDP.

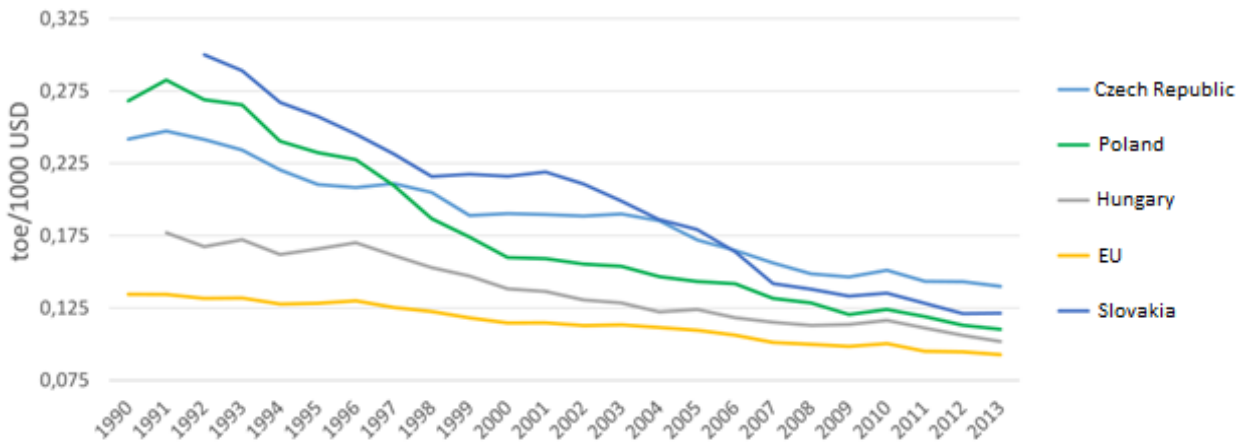
In the upcoming decades conversion to renewable energy sources will define the trend in the energy industry. On the consumption side, it mostly affects heating and transportation, and on the supply side, a large development of solar and wind energy use is expected. In Hungary the existing capacity of wind generators will increase and due to the increase of solar irradiance and the decreasing costs of solar power production a rapid advancement of solar power use is expected.

Further consequences

Climate change may speed up the depreciation of buildings and canal systems. Air-conditioning of buildings is not sustainable in the long term, however, heat insulators and insulated doors and windows can be a cost efficient and energy saving option. The test of green roofs is currently in progress.

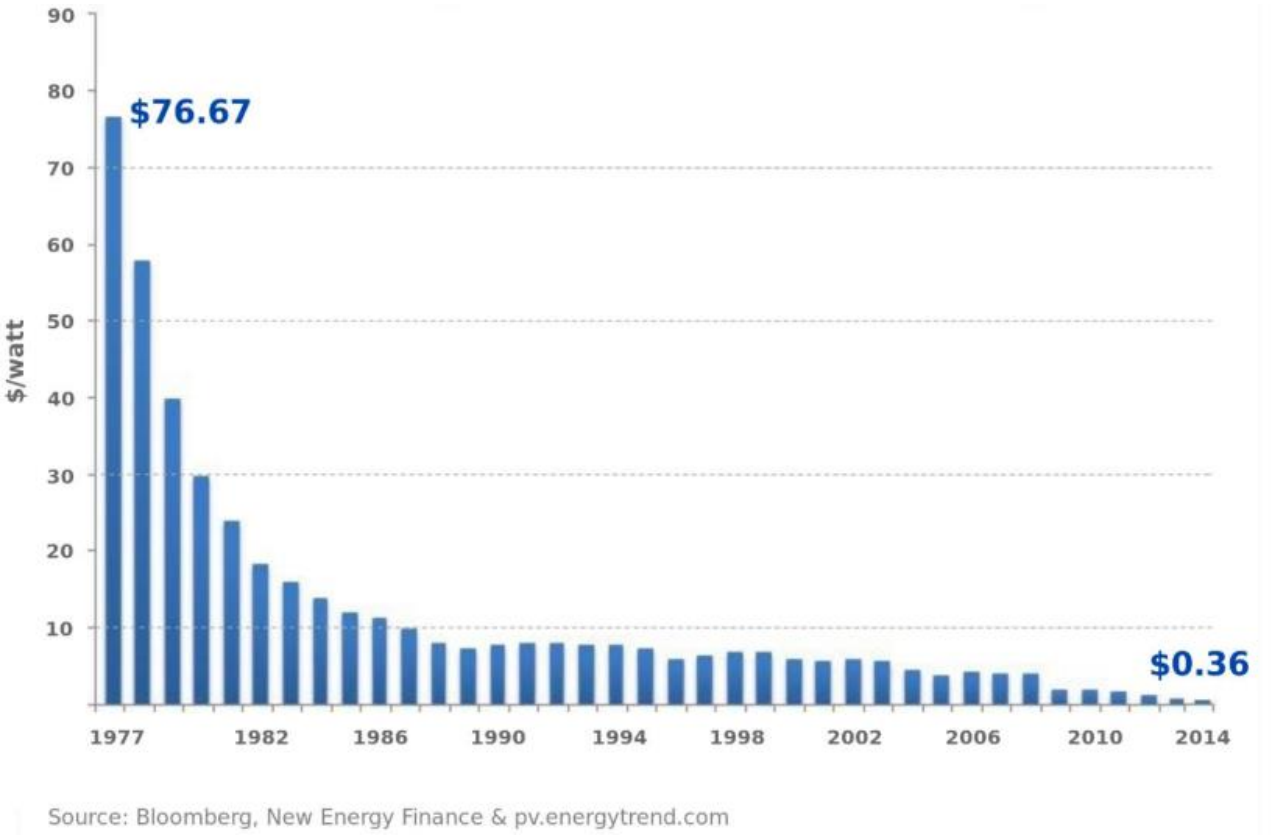
In the services sector the insurance services are the most affected ones by climate change, since they will have a key role in the management of the emerging risks. The decreasing amount and quality of natural freshwater will impose a negative effect on the tourism sector, however, it will be counterbalanced by the advancement of water tourism and the longer summer vacation period.

Energy intensity 1990-2013 (tonne of oil equivalent/1000 USD)



Source: World Bank (http://data.worldbank.orR/indicator/EG.USE.COMM.GD.PP.KD)

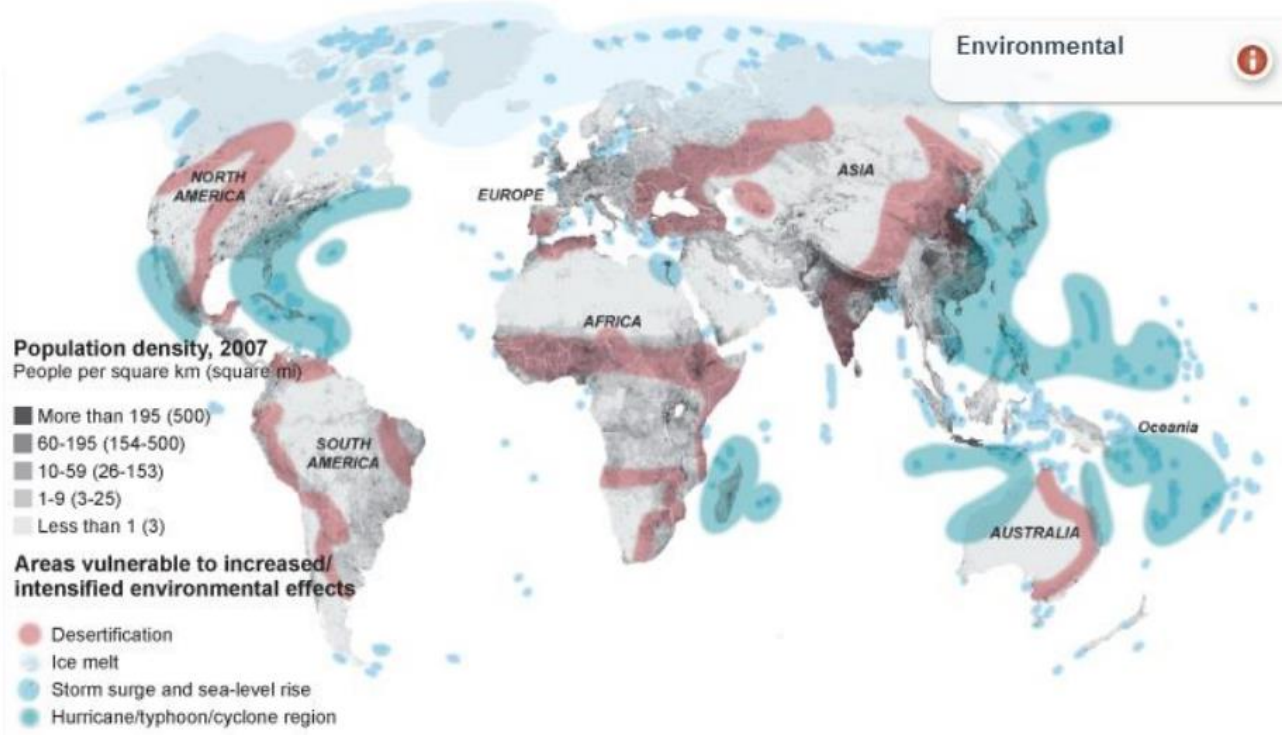
Price history of silicon PV cells in $ per watt



Source: http://gurulohordo.blog.hu/2015/04/02/a_napelemek_forradalma

Climate change related migration may occur due to the lack of drinkable water, desertification, increasing hazard of natural disasters or the raising sea level. Climate change caused migration may affect Hungary as well. Health impacts of the ever more frequent heat waves will be serious even in the medium term, and the health hazard caused by floods will also be significant. As a result of climate change the population of ticks, which is responsible for most vector spread diseases, will increase in Hungary. Longer blooming period of allergen pollen producing plants and the new invasive allergen plants will be a further negative impact.

Population density and areas vulnerable to increased environmental effects (2007)



Source: Bournay, Emmanuelle (2007). Atlas environment 2007 du Monde diplomatique. Paris; Landscan.
http://earthpulse.nationalgeographic.com/earthpulse/earthpulse-map

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 Change (thousand persons)	(Aug)	**-7**	**-5**	**-8**
	Manufacturing Purchasing Managers Index	(Aug)	**53.8**	**53.7**	**53.7**
	IFO Business Climate Index[1]	(Aug)	**106.2**	**108.5**	**108.3**
France	INSEE Business Climate Index[2]	(Aug)	**101**	**103**	**103**
USA	Philly Fed Employment	(Aug)	**-20.0**		**-1.6**
	CB Consumer Confidence Index	(Aug)	**101.1**	**97.0**	**96.7**
	Manufacturing Purchasing Managers Index	(Aug)	**52.9**	**52.9**	**52.9**
China	Manufacturing Purchasing Managers Index	(Aug)	**50.4**	**49.9**	**49.9**

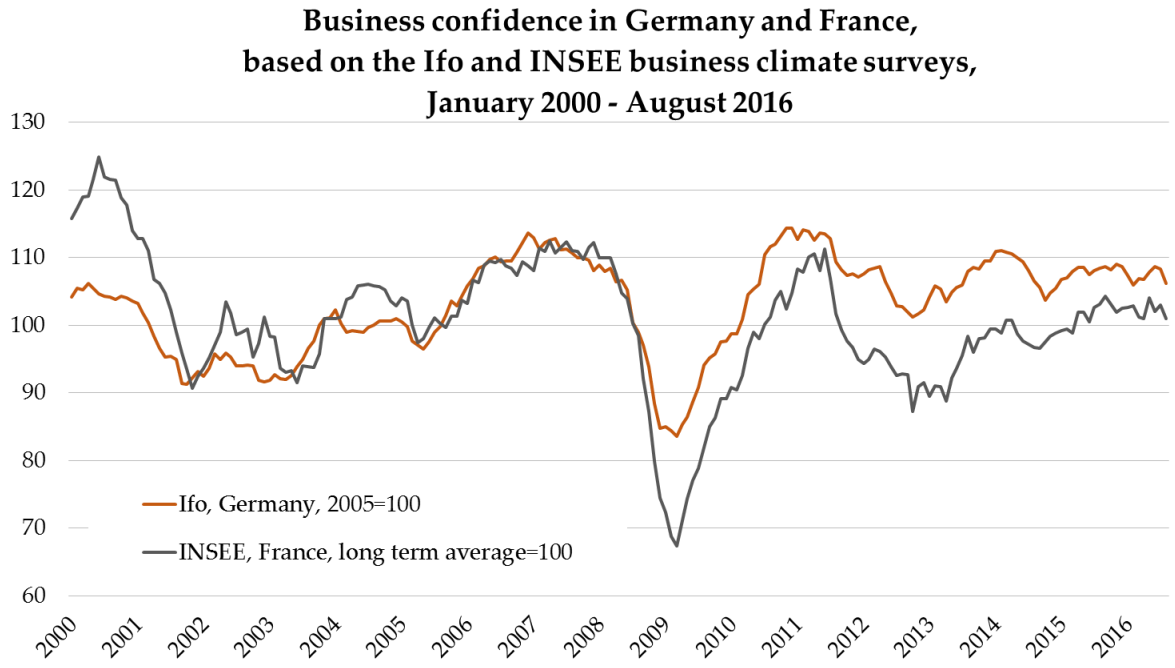
[1] https://www.cesifo-group.de/ifoHome/facts/Survey-Results/Business-Climate/

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

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

The German economy performed well once again: the unemployment rate decreased stronger than expected. The manufacturing purchasing manager index (PMI) and the IFO business climate index fell after last month's increase, but less than forecast. The French INSEE business climate index rose in July instead of the expected drop. In the United States the CB consumer confidence index and the manufacturing PMI performed well too as they increased stronger than projected. The Chinese PMI practically remained stable once again.

Long-term changes in business confidence indices



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

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