



## Converging at pace

Angela Merkel probably expected her refugee policy to make her a political piñata during her visit to Prague. Refugees force people to define just where the us becomes them. Some draw the line closer to the self, and some farther. No matter what she decided, someone was going to protest.

Mrs. Merkel must have scratched her head, though, when the papers reported that she would be asked to explain why Czech incomes have not converged more with German pay. This is not in her remit. She has some influence on German wages, but not absolute or direct. She can speculate why Czech companies pay the wages they do, but her only real contribution is the money Germany sends to Brussels that is used to finance investment through EU structural funds.

Nevertheless, Germany is the largest investor and the dominant destination for Czech exports. Salary convergence would have multiple effects on that relationship. It is, therefore, an interesting thing to study. How much convergence has occurred? Could it have gone faster? Is it going too fast? Let's take a look at the numbers.

Country Comparison	GDP Per Capita PPS, 2015	Net Income PPS, 2014	Productivity per hour % EU Average, 2015
Austria	36,600	26,075.26	117.1%
Czech Republic	25,000	13,573.67	74%
Germany	35,900	27,360.25	127.5%
Hungary	19,500	11,187.75	64.4%
Ireland	49,600	22,714.53	169.9%
Poland	19,700	13,634.10	59.3%
Slovakia	22,000	11,622.75	76.7%

The disparity between incomes in the two countries continues to be large. Czechs earn (according to PPS) approximately half of what Germans make. Has the gap been growing or narrowing? The numbers say narrowing. A single Czech person with no children who earns the average wage takes home 13,573 (PPS), which ranks 18th in Europe. His or her net income rose 41% from 2005 to 2014. A similar person in Germany had an increase of 26%, and, in Austria, 17%. In Great Britain, a similar person had a decline of 6% in the same period. The convergence seems to be happening at a good pace, but the distance to cover is large.

Could the gap have closed more quickly? The only way to know that truly is to run an experiment in a parallel world. Did the Germans, and/or other foreign countries, do something to slow down income growth? Some people have insinuated that Western foreign investors (or the CNB with their depreciation of the crown) have artificially kept wage levels down. Those who argue this base their theory on the level of dividend flows from the country and the high operating surplus generated in the Czech economy.

Corporate Dividends, 2014	Ratio Paid/Received	Amount, million euro	Reinvested Earnings, FDI, millions euro
Belgium	2.09	37,946	2,570
Czech Republic	6.00	13,893	3,977
France	1.16	179,660	1,502
Hungary	2.83	6,420	3,159
Netherlands	1.75	51,866	9,664
Slovakia	2.94	5,357	679

Less than half EU members report their dividend flows to Eurostat; therefore, a conclusive judgement of whether dividends are relatively high or low is not possible. From those who do report, the one trend that can be detected is that countries with a high GDP (France, Netherlands, Sweden) tend to have high levels of dividends flowing in and out, and the ratio between dividends paid to foreign investors and dividends coming from abroad to local corporations is close to 1 to 1. The Czech Republic sends out 6 euros in dividends for every euro it receives. Is this artificial, or is it the reality that the country needed to attract foreign capital to improve technology and maintain employment after 1989? That Romania, Slovakia, Hungary and Estonia also have high ratios gives some credence to the transitional explanation.

Any debate on dividends should also glance at how much earnings are being reinvested into a country. The level of reinvested earnings to dividends paid is much better in the Czech Republic than in countries such as Belgium and France. This again makes an argument that such

Gross Operating Surplus, 2014	%GDP	% Corporate	% Government
Austria	39%	56%	7%
Czech Republic	51%	56%	9%
Germany	39%	60%	5%
Hungary	42%	60%	8%
Ireland	52%	64%	4%
Poland	51%	45%	5%
Slovakia	53%	45%	7%

investment has been a net positive for earnings growth and convergence.

The criticism concerning gross operating surplus concerns its relation with compensation. In the Czech Republic, compensation totals 40% of GDP (2015). The EU average is 44%. Most of the advanced economies range from 48% (Austria) to 53% (Denmark).

The tables are flipped for gross operating surplus. The high GDP economies achieve an operating surplus of 34-40%. The CEE economies, for the most part, range around 50%. In 2014, this surplus was 51% in the Czech Republic.

We cannot conclude, however, that employees have lower salaries because companies have higher profits.

First, non-financial corporations comprise only 56% of 2014's gross operational surplus in the Czech Republic. The Czech government had the fourth largest proportion of the gross operational surplus (9%) in the EU. Households make up most of the remainder.

Second, the aggregate figures are not enough to establish causality between the two numbers. They could be coincidence. It also could be possible that individual companies with a high surplus also had high salaries.

Finally, we should remember that gross operating surplus and compensation includes domestic companies as well as foreign companies. It is possible that foreign companies had—on average—lower surpluses and higher compensation than domestic companies. One anecdotal piece of information that makes the higher compensation theory plausible is the report from two ministers that local companies had told them that CzechInvest should not recruit any more investors because investment was driving salaries above a sustainable level for domestic industry.

Maybe, or maybe not. Would an attempt to achieve a 50% compensation rate put sections of industry out of business? Hard to know. Is 40% the natural level? Well, it is the actual level, and it does represent a significant increase in income from 2005. That may be the best answer we will get to that question.

The more important question is what we can do to raise income levels at an even faster rate. To get a good answer to that, we probably should direct the question to German companies, and the vaunted German research institutes, not to Mrs. Merkel.

Incomes cannot be discussed in a vacuum, as if they could be raised simply by pressing some magical button. Incomes depend on companies generating the revenue to pay higher salaries. They do that by increasing the number of units a single worker can produce, or increasing the price of that unit (they can also decrease the cost of non-compensation inputs, but that does not increase revenue). The key, then, is to produce more units at a higher price for every employee or hour worked.

Germany still produces much more per labor hour. The story is similar to incomes: the Czech Republic is gaining rapidly, but coming from a distance. Although the average increase since 2010 has been about the same (3.7% for Czechs, 3.4% for the Germans), Czech productivity per hour since 2000 has risen to 74% of the EU average (better than Poland and Hungary, but behind Slovakia). Germany's productivity has been growing more slowly, but has inched up to 127.5% of the EU average.

Innovation is a primary contributor to German productivity. Research that leads to commercialized technology allows German companies to maintain high price levels. Research also leads to improved production techniques—including Industry 4.0, which Merkel trumpeted during her short visit in Prague— which can increase the number of units a worker can produce per hour.

Rising German compensation has pushed some production across the border into Poland and the Czech Republic. As long as this shift results in productivity and compensation rises in both countries, this can be seen as economically beneficial. For the Czech Republic to close the remaining compensation gap, however, the country will need to rely more on creating its own

Research Spending 2014	Amount Spent, euro million	% EU Total	Ratio Business:Other
Austria	9,833	3.46%	2.43
Czech Republic	3,091	1.09%	1.27
Germany	83,637	29.47%	2.14
Hungary	1,411	0.50%	2.63
Ireland	2,872	1.01%	2.75
Poland	3,864	1.36%	0.87
Slovakia	670	0.24%	0.58

competitive advantage in researching, developing and marketing a range of products that can achieve comparable price levels to those being created in Germany.

That can be done two ways. The country can recruit foreign investors with unique knowledge and the necessary capital to develop world-leading products here. These products need to be complex enough that a cluster of local suppliers can be built around the investor. The second way is to rely on Czech companies to create such products. Both are happening already (Honeywell, GE Aviation, FEI, Alliance Laundry, Linet, Avast, YSoft, Certicon— please tell us who we have missed). To catch up to Germany's ability to commercialize research, we will need more. In 2014, Germany spent 83.6 billion euros on research; German businesses spent 2.14 euros for every 1 euro of government or university money. In the Czech Republic, 3.1 billion euros was spent on research; businesses spent 1.27 euros for every euro spent by government. Germany has more capacity to create new technologies, and more of their money is guided by commercial interests.

Our ability to catch Germany in prosperity depends on our ability to compete with them in new technology. Increasing our capacity to do so will mostly depend on private sector capital. So the final, and most vital question that we can ask ourselves is how we can spend 1 euro in public research money so that it generates at least 2 euros (or more) in private research investment?

## The Prosperity Index

*The Prosperity Index is a measure used by the AmCham Czech Republic to assess the effectiveness of economic policy in achieving economic growth. It is a weighted collection of statistics divided into three categories: growth, sustainability, and equity. The Prosperity Index is published annually in September.*

all data from Eurostat, prepared by wms