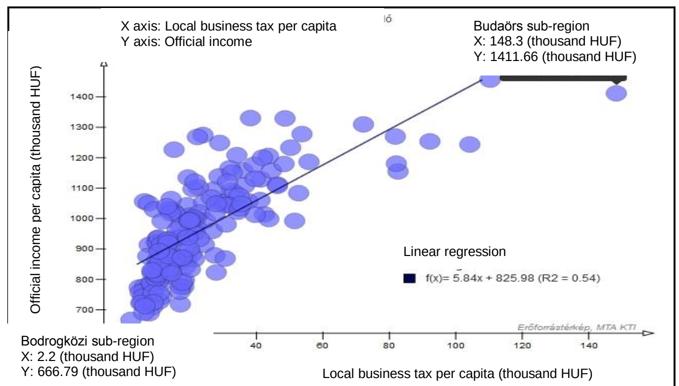
IEER Monthly Bulletin of Economic Trends April 2013

The latest analysis from IEER looks at unreported income and explores their spatial variations using mathematical and statistical tools. This assessment measured sub-regional income and consumption data from 2010. The results estimate that unreported income represents 17.3% of total – both reported and unreported – income. The estimated unreported income was adjusted to a constant value so that at the national level the rate of unreported income is 18%.

In terms of regional differences it can be established that the proportion of income from the hidden economy is lower than average in high-income areas and those areas where the local economy and labour market are based on a few large companies. Most significant is the proportion of unreported income in areas where income corresponds to the regional average or slightly below. Another important finding is that only a quarter of small regions have an unreported income rate of less than 18%, whilst half of the country's population live in these areas.

The study looks at unreported income and estimates their spatial variations using mathematical and statistical tools. We took into account sub-regional income and consumption data, both available for the year 2010. As a first step we estimated the sub-regional level of official (reported) income using tax statistics and data in the public domain regarding state transfers. We then determined the amount of official income by regressively estimating the values of consumption and other selected socio-economic indicators. We refer to the geometric mean value of the resulting estimated amount of official income for each sub-region as estimated official income. Due to the features of the regression this value is lower than the reported incomes in half of the sub-regions, so these values were multiplied by a constant to get the modified values of income. As a starting point we assume that unreported income represents 18% of the total (reported and unreported) actual income.



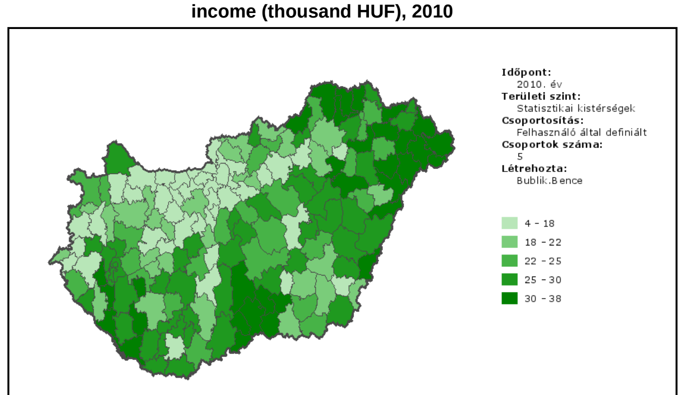
Source: http://www.regionaldata.org/

At the national level the calculated estimates from the reported earnings represents 82.7% of the estimated total income, that is, according to the results of the assessment the proportion of unreported income within all (reported and unreported) income is estimated to be 17.3%.

Adjusted estimates ultimately used in the calculations are subsequently obtained. This estimated amount of unreported income is adjusted by a constant value, so that at the national level of the rate of undeclared income stands at 18%.

The adjusted value of estimated income draws a regional picture broadly similar to that of the official income. However the differences between the two, in other words by looking into (unreported) income from the hidden economy, some interesting regional differences can be drawn.

Sub-regional values of adjusted estimated per capita income (thousand HUF), 2010

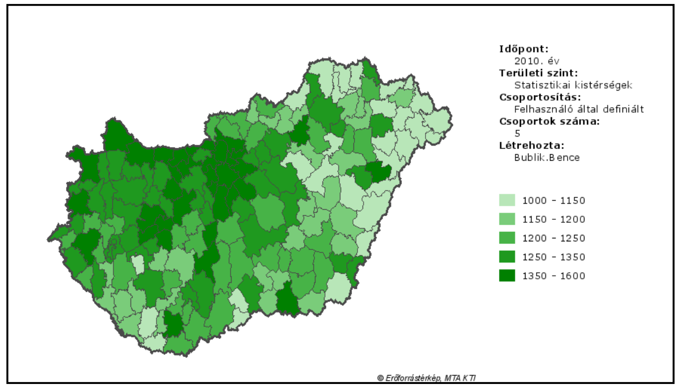


Source: http://www.regionaldata.org/

The proportion of income from the hidden economy was less than average in high-income areas and those regions where the local economy and labour market are dominated by only a couple of (mostly industrial) corporations. By contrast, hidden income was not apparent in the poorest areas, but in those areas with incomes corresponding to the regional average or slightly below. The best example is the entire county of Bács-Kiskun, where the sub-regional values of hidden income is well above the national average. A similar situation is in the western parts of Szabolcs-Szatmár-Bereg and Somogy counties.

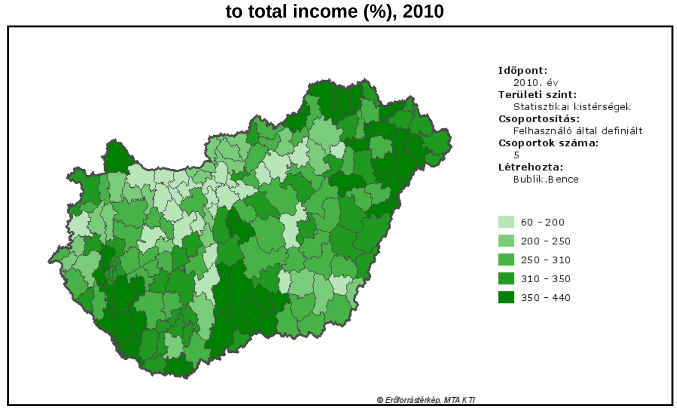
Another interesting observation is that only a quarter of small regions (forty sub-regions) have an unreported income rate less than 18%, while in these forty sub-regions lives half of the country's population. The high proportion of unreported income in the eastern part of the country is partly due to the fact that there is more hidden income while at the same time the level of the reported income is lower.

Sub-regional residues of adjusted estimated per capita income (thousand HUF), 2010



Source: http://www.regionaldata.org/

Proportion of per capita undeclared household income to total income (%), 2010



Source: http://www.regionaldata.org/

Employment growth explained

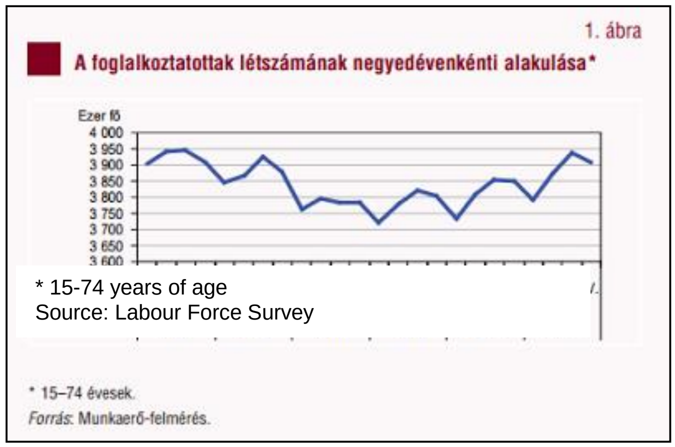
Statistical results from the 2012 Labour Force Survey by the Hungarian Central Statistical Office (HCSO) indicate an increase in the number of employees, while according to institutional statistics a decline occurred. The Labour Force Survey shows that in 2012 an annual average of 3,878 thousand people were employed, 66 thousand more than the previous year. By contrast, HCSO's institutional statistics show that among firms with at least five employees, as well as public sector institutions, a 20 thousand reduction in staff numbers occurred.
The HCSO has summarized the explanations which may lie behind the two different survey results. First and foremost one difference between the two is that the Labour Force Survey shows more community service employment than institutional statistics; secondly, the Labour Force Survey also included in some cases foreign workers; and, thirdly, a certain whitening of the economy is also behind some of the differences.

The HCSO Labour Force Survey data for 2012 shows an increase in the number of employees, while institutional statistics shows a decrease by contrast. The HCSO has now collected together the reasons which explain this difference.

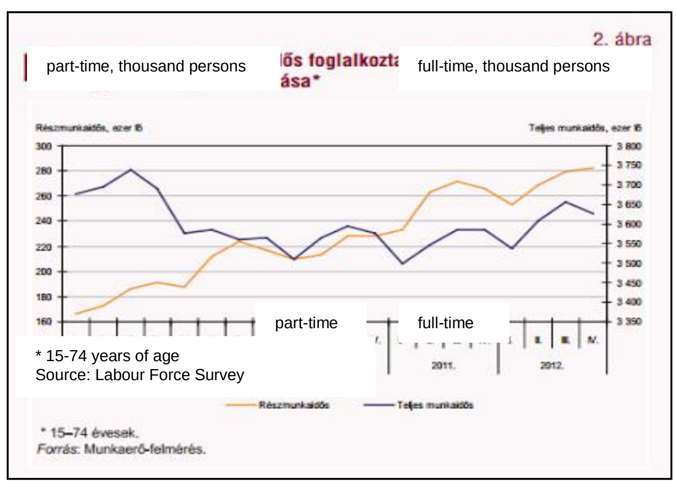
According to the Labour Force Survey – based on household surveys and in line with EU standards – the annual average number of employees in 2012 was 3,878 thousand, 66 thousand more than in 2011. The employment rate for 15-64 year olds was 52.7 percent, including 62.5 percent for men and 52.1 percent for women. In addition, it was found that there has been an upward trend since 2010, thus by the fourth quarter of 2010 employment reached pre-crisis levels. In 2012, the number of self-employed and assisting family members declined by 5.6 percent (305.1 thousand persons). At co-operatives and joint-ventures, the number of those employed increased by 148.1 thousand persons per member, the vast majority of those as regular employees. Organization size revealed that there was growth at firms with a maximum of 4 employees as well as companies with 300 or more workers, while employment at small and medium-sized enterprises moderately declined. In more than 50 percent of the cases employment growth can be explained by the increase in the number of community service workers. Without the community service workers the number of those employed only grew by 27.7 thousand. In 2012, however, as opposed to previous years, a higher proportion of community service represented full-time employment, so the full and part-time employed ratio did not change significantly in 2012.

By contrast, institutional statistics from the HCSO – which features labour developments at firms with at least 5 persons and public sector institutions – indicates that employment decreased compared to 2011. In the private sector in 2012, at firms with at least 5 persons 1,817.2 thousand people were employed, which is 98.2 percent of the workforce of the previous year. In the public sector, together with community service workers 751.3 thousand persons were employed; without community service workers this number was 660.6 thousand, which represents a 2.3% reduction in employment over the previous year. In the NGO sector, the number of

Quarterly changes in the number of employed persons*



Changes in the number employed full-time and part-time*



employees (106 thousand people) didn't change compared to last year's figure.

In 2012, at organizations within institutional statistics 2,674.4 thousand people were employed at least 60 hours a month, 0.6% (17.1 thousand) less than in 2011. This is despite the fact that the number of community service workers in the public sector increased by about one and a half.

To summarize, in 2012 the number of employees according to the Labour Force Survey data increased on annual average by 66 thousand compared to the previous year. Conversely, at firms with at least 5 persons and public sector institutions, a reduction of about 20 thousand employees is shown by the monthly earnings statistics data. It is despite the fact that in the public sector the number of community service workers increased by more than 30 thousand from the previous year. The HCSO has collected together the reasons which may explain the difference between the two underlying data, in addition to the fact that the opposite signs of the sampling error can cause the difference.

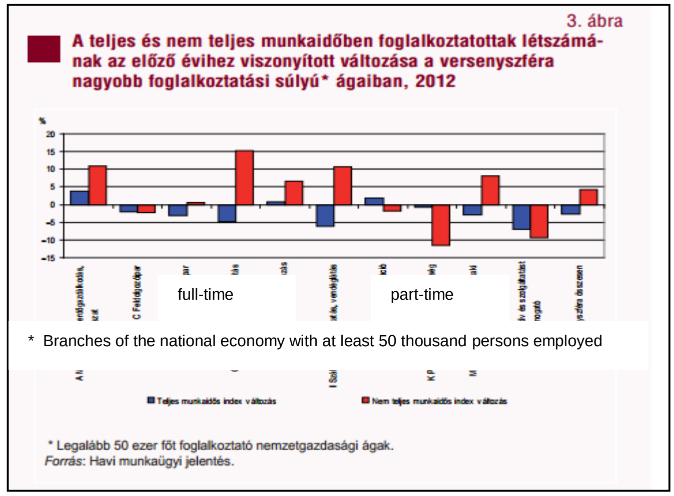
One possible explanation is related to the fact that in 2012 the scope of community service greatly expanded. The Labour Force Survey shows this greater than institutional statistics, on the one hand, because of the so-called recall error (memory error) and, on the other, because small-scale community service is carried out beyond the sphere of the public sector as well.

Another difference between the two surveys is that the Labour Force Survey include a certain number of employees who work abroad as domestic employees. The unit of observation is a Hungarian address (household), thus those working abroad appear in the survey data if they were identified by a respondent as a member of their household.

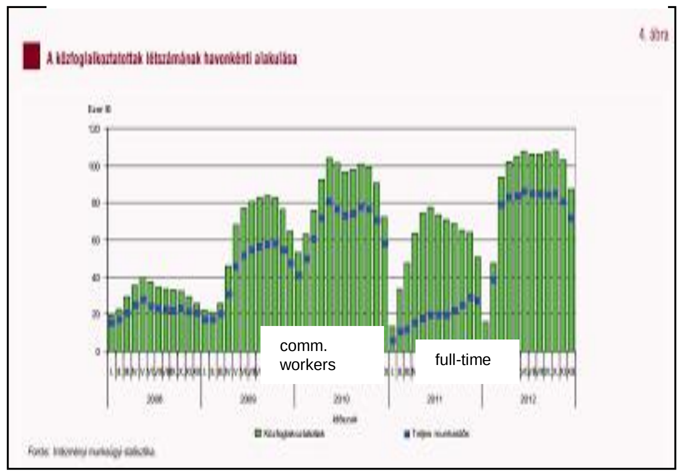
In the Labour Force Survey, 82.3 thousand people indicated a foreign workplace which is 18 thousand more compared to the previous year. This increase is not apparent in institutional statistics, or appears as a decline. However, the number of foreign nationals who have an employer in Hungary – thus they also appear in the institutional statistics – fell by a few thousand persons.

The third reason is a certain whitening of the economy (especially at small organizations) as a result of a take-up in the child tax benefit and the possibility of lower tax rates, as well as increased monitoring of social security benefits. Moreover, the consequences of the prolonged crisis resulted in some new, additional labour supply. Thus, employment growth among micro-enterprises, which is only reflected in the Labour Force Survey, was slightly more dynamic than the average.

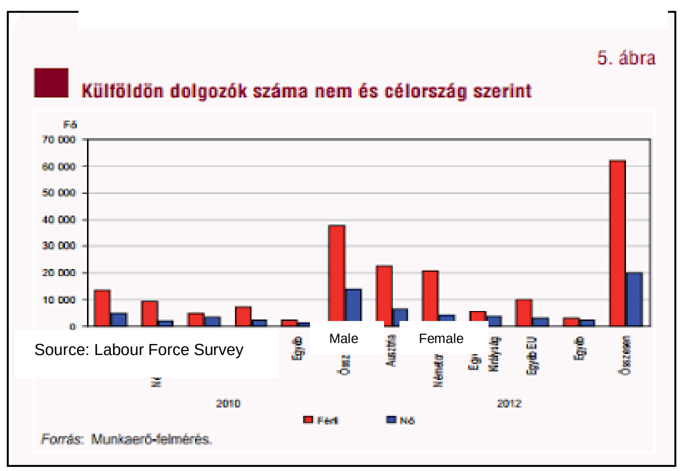
Changes in the number of full-time and non full-time employed compared to the previous year in employment intensive branches of the private sector*, 2012



Monthly changes in the number of community service workers



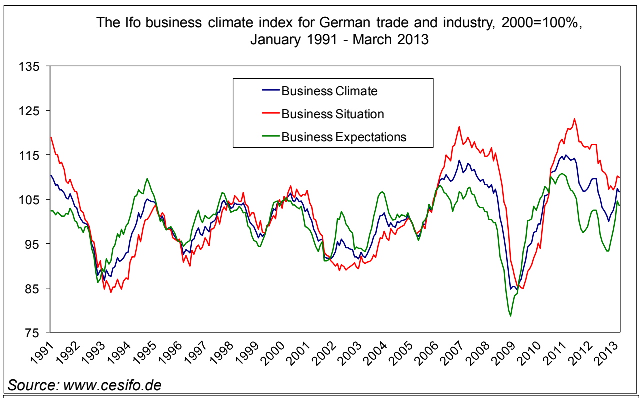
Number of workers abroad by gender and target country



International trends

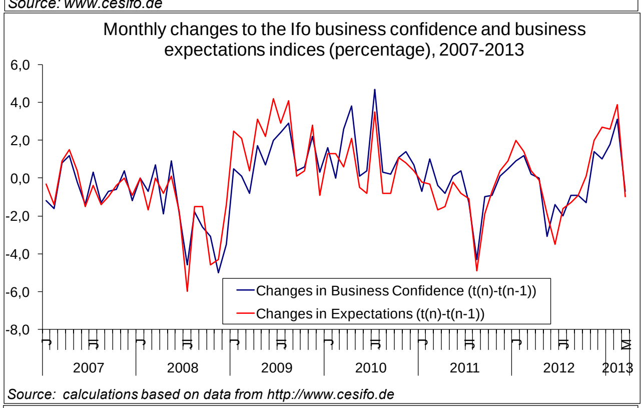
The Ifo Business Climate Index for German industry and trade in March 2013 showed a slight decrease after a significant rise in February. The current business situation has almost reached the high value of the previous month, but expectations for the next six months deteriorated slightly. The gap between the current business situation and the expected developments, as calculated by the IEER Index of Asynchrony, significantly decreased in March, so the business confidence index showed less uncertainty than in the previous month. Ifo analysts see the German economy continuing to perform in difficult conditions due to the strong domestic consumption. (Source: Ifo, http://www.cesifo-group.de)
The French statistical office (INSEE) survey of business leaders interviewed in March finds that the position of French business remains poor. The INSEE business confidence index remained unchanged from February's figure and is well below its long term average. The turning point indicator is in the uncertain business climate zone. French economic growth in the coming months is expected to be somewhat slower according to the forecast of managers of individual businesses, as the balance indicator declined slightly. The overall outlook index – which reflects a summary of respondent views toward industrial activity – declined in March from the previous month and the value of the balance indicator remains at very low levels. (Source: INSEE, http://www.insee.fr)

The Ifo business climate index for German trade and industry, 2000=100%, January 1991 - March 2013



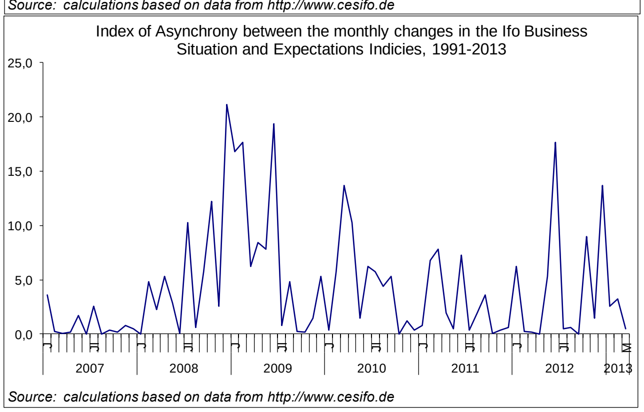
Source: www.cesifo.de

Monthly changes to the Ifo business confidence and business expectations indices (percentage), 2007-2013



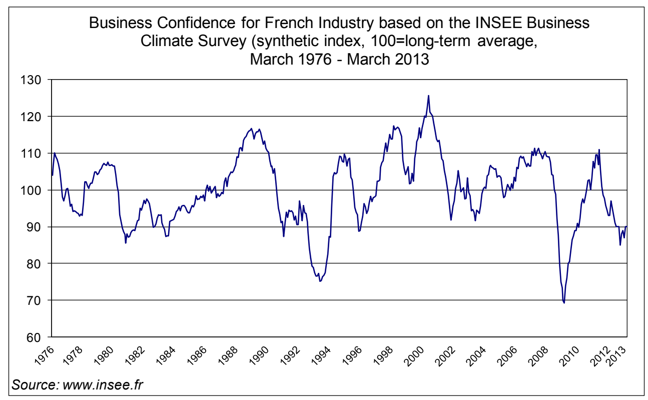
Source: calculations based on data from http://www.cesifo.de

Index of Asynchrony between the monthly changes in the Ifo Business Situation and Expectations Indicies, 1991-2013



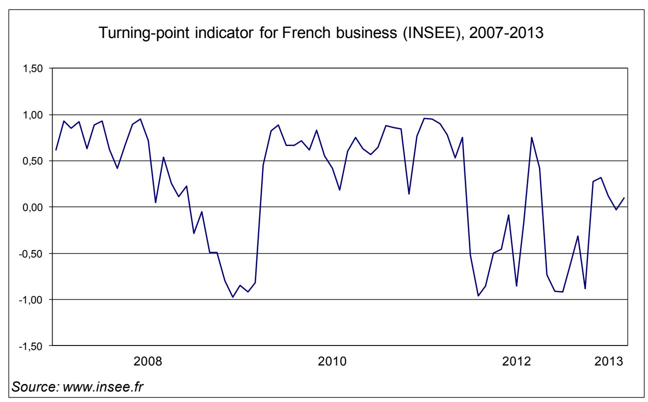
Source: calculations based on data from http://www.cesifo.de

Business Confidence for French Industry based on the INSEE Business Climate Survey (synthetic index, 100=long-term average, March 1976 - March 2013



Source: www.insee.fr

Turning-point indicator for French business (INSEE), 2007-2013



Source: www.insee.fr

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In case of publication, please cite as follows:
MKIK GVI: IEER Monthly Bulletin of Economic Trends, 2013 / April, Budapest, 2013-05-14