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A Brief Overview of Changes to the FADN Sampling Method

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Summary

The Swiss Farm Accountancy Data Network (FADN) has introduced a random sampling procedure to enable the income of Swiss farms to be estimated more precisely. Under the new system, the estimate for agricultural income is on average 7% lower than for the previous non-random sampling. The estimate for working income, corresponding to the income of a full-time family labour unit, is 21% lower. Since off-farm income has simultaneously increased by 14%, estimated household income is 4% lower.

Sample is now more representative

Agroscope's new income estimate is based on a random sample. With the exception of very small farms, all farms of the main types and legal structures (for the time being without legal entities) may be selected to make their accounts available to the FADN on a voluntary basis and in anonymised form. Compared to the previous non-random selection of farms, this process leads to a clear improvement in the representativeness of the sample. Thus, after a fairly long gap, farms from the canton of Ticino are once again represented in the new sample. Furthermore, data is now provided by over 240 as opposed to the previous 30 accountancy offices, thereby improving the diversity of the sample.

For the 2014 accounting year, Agroscope has access to 1,907 evaluable data sets. These are compared with the previous sample in order to analyse the differences associated with the income estimation method.

Lower agricultural income

The estimate for agricultural income, i.e. the remuneration of both the family workforce and the equity invested by the family in the farm, comes to an average difference of minus 7%. With the new random sampling, agricultural income stands at an average CHF 63,100 per farm as opposed to the previous CHF 67,800. Whereas this difference is minus 3% in the plain region (new estimate: CHF 75,400), it comes to minus 12% (CHF 57,400) and minus 4% (CHF 50,900) in the hill and mountain regions, respectively.

Apart from the new random selection method, there are other reasons for these differences:

- Firstly, the income calculation method plays a role. The main change here is the posting in the farm's accounts of the employer's contribution for the first and second pillars of the farm manager and his or her partner. The way in which the costs of the residence are calculated has also changed. Both changes lead to a lower calculated income with a simultaneous reduction in private consumption (calculated in part).
- Secondly, the switch from farm accounts to financial accounts can also influence the results. This is particularly true in the case of depreciations, repairs and in-house services, as well as services in kind from the farm to the private household.

- Lastly, the new criteria that determine which farms can actually furnish accountancies and for which Swiss farms the income is calculated, lead to a higher average farm sizes and to a higher estimate of agricultural income.

Greater effect on working income per family labour unit

Working income per family labour unit is deduced from agricultural income. After the equity invested in the farm has been compensated by the interest rate of the ten-year Swiss government bonds, the remaining amount is divided by the number of family labour units. The working income per non-remunerated full-time family member thus determined comes to CHF 41,800 in the new sampling method as opposed to CHF 52,800 in the old method, corresponding to a reduction of 21%. Said reduction arises not only from the lower agricultural income, but also from the considerably higher use of family labour on the farm.

As is the case for agricultural income, the estimate for working income is very different for the three regions. The average working income per family labour unit of the new sample differs from the figures of the reference-farm sample by the following percentages: 18% (CHF 52,100 instead of CHF 63,600) in the lowland region; 27% (CHF 37,700 instead of CHF 51,500) in the hill region; and 17% (CHF 31,900 instead of CHF 38,200) in the mountain region. The figures published here for the 2014 accounting year are provisional.

Household income slightly lower

Unlike agricultural income, off-farm income is 14% higher in the new sample, standing at CHF 29,000 as opposed to CHF 26,300 in the old sample. This partially offsets the lower agricultural income, with the difference in total income between the samples still standing at 4% (CHF 90,200 as opposed to the previous CHF 94,100).

2015 income estimate

The results of the new sample in 2014 serve as a benchmark for estimating income change in the 2015 accounting year. Agroscope is expected to publish the relevant results on 15 September 2016, on the occasion of the Tänikon Agricultural Economics Conference.

Further information (in German and French only):

www.einkommenssituation.ch > Methodische Grundlagen > Info Stichprobenumstellung ZABH (Folien)

Agroscope would like to thank all of the farm managers who have made their data available, as well as all of the accountancy offices that have prepared and supplied their accounts.

Farm Accountancy Data Network

Located at Agroscope in Tänikon, the Farm Accountancy Data Network is responsible for monitoring the income situation in the Swiss agricultural sector as per the Statistical Survey Ordinance (SR 431.012.1) and the Sustainability Ordinance (SR 919.118).