

FADN sample sustainability

– long-term participation in the Czech FADN survey

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AIM OF THE RESEARCH

Sustainable FADN/FSDN survey

The voluntary participation of respondents in the mandatory FADN/FSDN survey causes a problem regarding the acquisition and preservation of agricultural holdings in the sample.

The aim of this contribution is to reflect on the reasons that lead to the successful involvement of farmers in the survey.

RESEARCH QUESTIONS

- ④ Are there any specific characteristics of the long-term participants in the FADN survey?
- ④ What are the main factors in persistence in the sample?
- ④ Is there any relevant motivation to support participation in survey?
- ④ Can we learn a lesson to improve acquisition and standing of farms in the survey?
- ④ ...

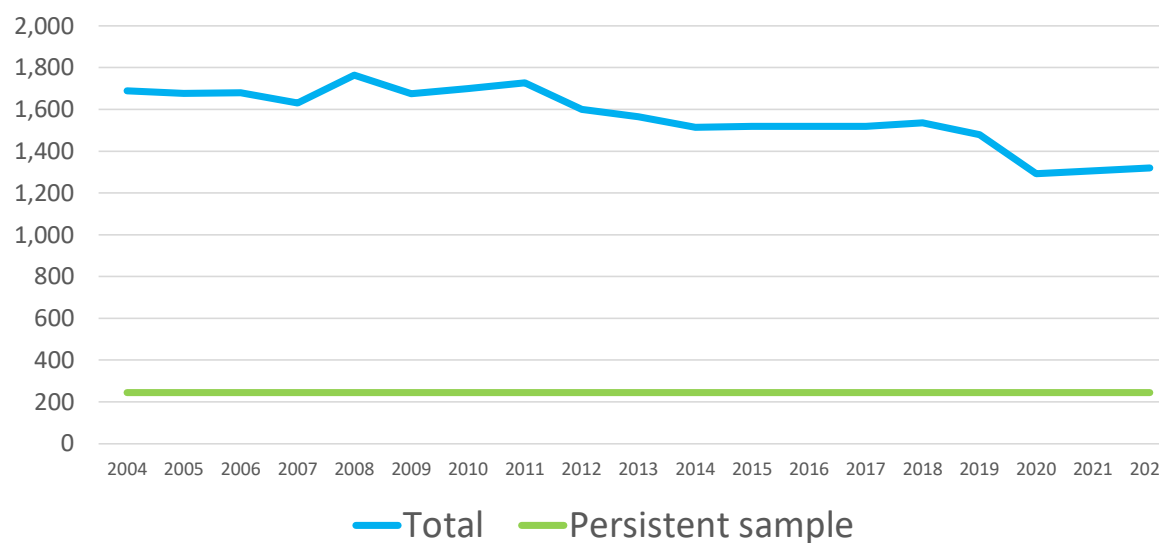
Data

245 farms stay
in the Czech
FADN sample
for 20 years

Analysed data
for last 19 years
as 2023 results
are not finalized
yet

4 655 records

Number of FADN respondents



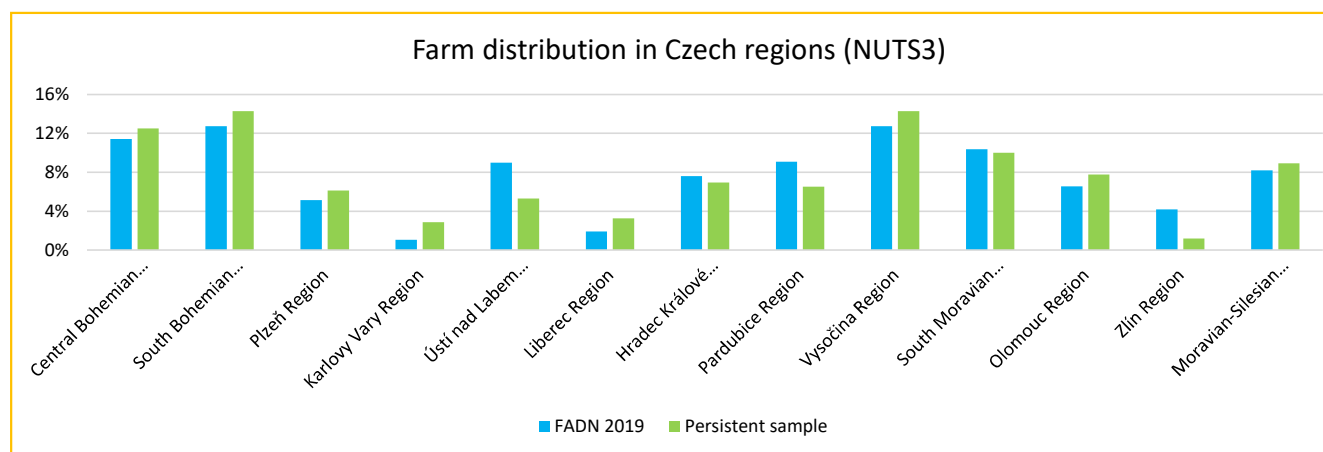
FADN CZ survey
consists of **higher**
number of farms than
is delivered to EC

Long-term tendency
of total number of
farms is constantly
decreasing

Characteristics of persistent farms panel

Some findings in the panel of persistent farms compared to the total sample

- ⊕ A larger share of farms with **mixed production** and **milk production**. Smaller representation of cattle farms and field crops farms.
- ⊕ Greater representation of **large holdings** and less of medium and small farms.
- ⊕ **Regional** distribution is very similar between panel data of persistent farms and whole sample.



Characteristics of persistent farms panel

Some findings in the panel of persistent farms compared to the total sample

- ④ **Equal** representation in LFA (ANC) areas.
- ④ Larger proportion of **conventional farming** versus organic farming.
- ④ Production type area: higher share in **potatoes** and **potatoes-oats** area:

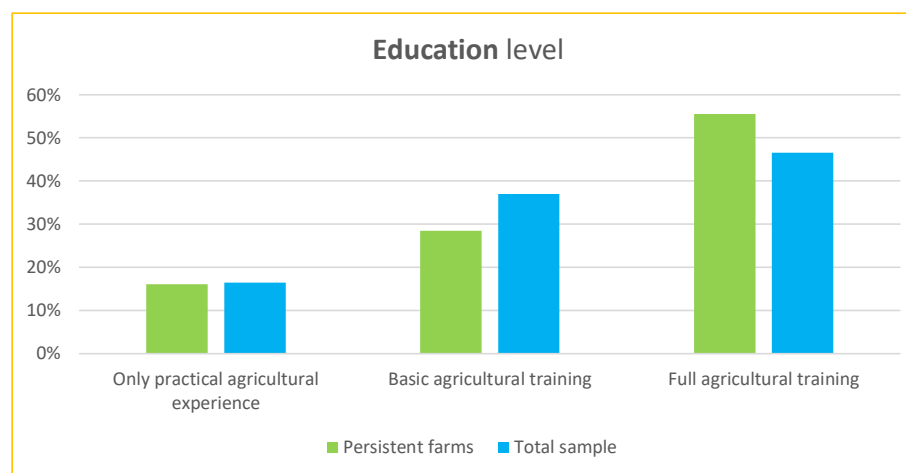
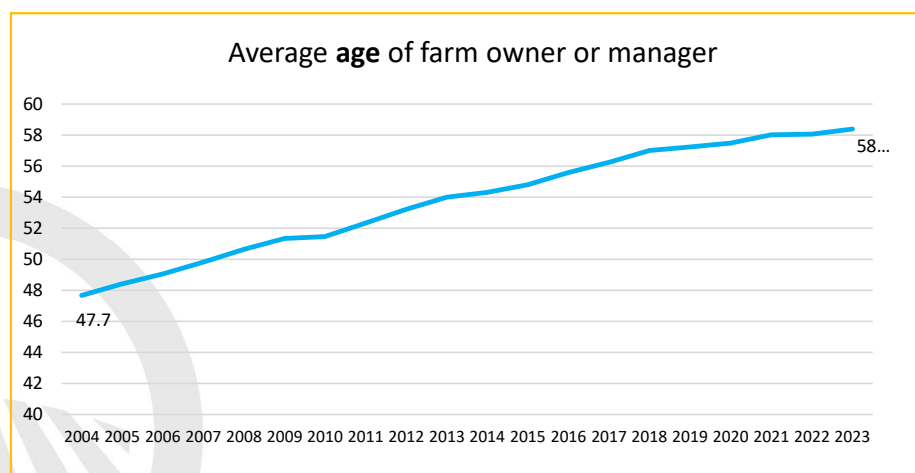
Average annual temperature 5–8,5° C, probability of occurrence of dry growing seasons 5–40 %, average annual rainfall 550 - 900 mm, the average elevation of the terrain 300-650 m, the terrain is slightly undulating to strongly sloping.

- ④ Slightly higher share of farms with precision farming technologies.

Characteristics of persistent farms panel

Some findings in the panel of persistent farms compared to the total sample

- Graph shows a partial **generational renewal** especially in the last five years.
- Education of persistent farms managers is **higher** comparing to whole sample.
- Gender rate is similar, around **10% of women** managers.



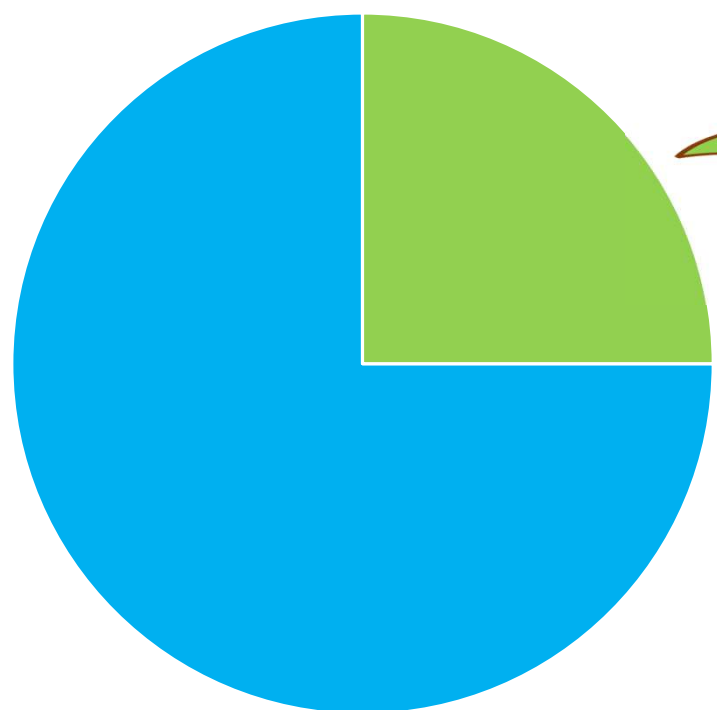
Characteristics of persistent farms

| Variable | Total unbalanced panel data | Persistent sample balanced panel data | | | |
|--------------------------|-----------------------------|---------------------------------------|---------|------------------|------------------|
| | Mean | Mean | Median | Lower Percentile | Upper Percentile |
| AWU | 17 | 27,83 | 14,10 | 1,32 | 74,37 |
| AWU paid | 16 | 26,98 | 13,76 | 0,00 | 74,37 |
| UAA in hectares | 580 | 951 | 664 | 40 | 2 248 |
| Livestock units | 282 | 437 | 177 | 0 | 1 185 |
| Total output/total input | 0,87 | 0,93 | 0,87 | 0,62 | 1,29 |
| FNVA/AWU | 560 037 | 563 018 | 472 104 | 137 115 | 1 057 633 |

97% paid labour
 86% rented UAA
 75% arable land
 20% pastures, grassland
 33,8 ha/AWU

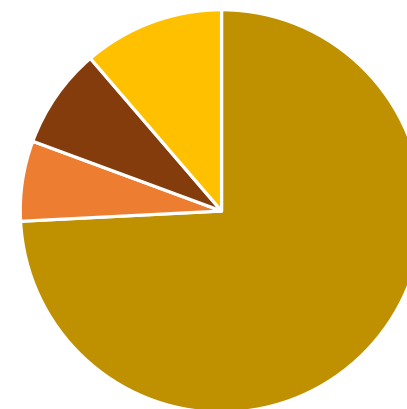
Data collectors in persistent farms

Impact of data collector



- 75 % farms with the same data collector
- 25% farms where data collector changed

Frequency of data collector change



- 74 % data collector changed in the first two or tree years
- 6 % dat collector changed only in the first and last year of evidence
- 8 % data collectors changed with similar number of collection years
- 11 % farms with change of more than 2 data collectors

Motivation of participation in survey

Why would farmers agree to share their data on voluntary basis?

No disturbing - very low time consumption

Data collector manage all workload with data processing and editing into the system.

Specific service

Data collector provide useful service for farmer e.g. book-keeping.

Financial contribution

Interesting for small farms or targeted on person processing data on the large farm.

Good relations, networking and good name of the survey

Data collector knows the farmer well, e.g. via the active farmers association. Recommendation e. g. farmer discuss with other FADN stakeholders, working groups at MoA level etc.

To have an appropriate agriculture picture

Farmers responsibility for the situation in agriculture and trust that the provision of real data will contribute to balanced policy.

Future directions towards motivation

Why would farmers agree to share their data on voluntary basis?

FSDN contribution to the sample sustainability

Idea in future motivation goes towards appeal on a proof of companies' sustainability.

Based on FSDN data we should be able to provide farmers with the certain **evaluation of their level of sustainability**.

Farms could use it for **market and propagation** purposes or/and as an input for a **report on ESG** (Environmental, Social and Corporate Governance) etc.

An important condition

Trust of farmers in data confidentiality is a key issue!

As one farmer said: „you don't show your medical record to anyone either“

CONCLUSION

First suggestions

Are there any specific characteristics of the long-term participants in the FADN survey?

- 🗣️ **Type-size-region spread in whole sample tendency, no significant difference.**

What are the main factors in persistence in the sample?

- 🗣️ **Important role of data collector, limited burden as much as possible (supported by progress in data sharing).**

Is there any relevant motivation to support participation in survey?

- 🗣️ **Less burden more chance to remain. Financial benefits for small farms. Socio-economic contribution to agri policy. Relevant data for policy conclusions. Good relations among stakeholders and well-known survey.**

Can we learn a lesson to improve acquisition and retention of farms in the survey?

- 🗣️ **Yes, we can. We can find a lot from the data, but more research on qualitative questions is needed towards the farmer and data collector willingness to participate in FADN/FSDN survey.**

...

Thank you for your attention

