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Off-farm role in stabilizing disposable farm income: A Lithuanian case study

*Vida Dabkienė**

Department of Market Research of Agricultural Products, Lithuanian Institute of Agrarian Economics, Vilnius, Lithuania

**Corresponding author: vida.dabkiene@laei.lt*

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Abstract: The paper aims to investigate family farm income volatility by decomposing disposable farm income (DFI) into the on-farm income, income from production support and off-farm income (OFI) over time. The research is focused on the OFI, assessing its role in achieving DFI above reference level based on the average net earnings. Three main indicators consistent with Farm Accountancy Data Network (FADN) were indicated. The research results revealed the significance of OFI. In 2017, 76% of the family farms were engaged in off-farm activities indicating, on one hand that such approaches as part-time farming or lifestyle farming are becoming more attractive to Lithuanian family farmers. On the other hand, research disclosed that farms mostly engaged in off-farm activities yield the lowest on-farm income levels. Moreover, the OFI tends to produce a stabilizing effect on quite a number of farmers as the majority of family farms cannot rely upon the on-farm income as their only income source. Thus, the agricultural and rural development policy makers, aimed at supporting viable farm income and strengthening farm resilience, have to answer the part-time farmers' needs.

Keywords: Farm Accountancy Data Network; farm income indicators; income volatility; net earnings; poverty threshold

Strategic plans for the next long-term EU budget 2021–2027 will be drawn by Member States under the EU Common Agricultural Policy strategic plan [COM (2018) 392; European Commission 2018] towards the transition to more sustainable farming. The sustainable development of farming is linked to one of nine main objectives to "support viable farm income and resilience across the EU territory to enhance food". In order to capture the important aspects of farm income sustainability, a number of criteria and indicators have been proposed by scientists. Some scientists developed indicators assigned to farm autonomy (Bachev 2017). Authors evaluate farm financial autonomy (Zahm et al. 2008), dependence on energy (Longhitano et al. 2012) or on subsidies (Zahm et al. 2008). Consequences of climate change resulting in a number of extreme weather events negatively affect farm economy, cause farm income instability. Herewith, the autonomy of the farm is viewed as a strategy of family farm or farm household income stability. As outlined by Van der Ploeg et al. (2002) the farm economic performance can be achieved with the help of additional activity and income strategies: deepening, broadening and regrounding. The broadening and deepening strategies that are often termed as diversification in the farm sustainability research (Paracchini et al. 2015) are related to the employment of the internal farm capacity, for example, the development of other gainful activities like agritourism, agricultural services, renewable energy production, processing and/or selling of agricultural higher value added, higher-quality, consumer need matching products in short food supply chains. The off-farm income (OFI) is linked to farm regrouding strategy, which shows the farm members engagement in the activities outside the farm, and is often termed in farm sustainability research as pluriactivity.

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The OFI has become an essential component of livelihood strategies among farm households in the EU (Spicka et al. 2019). The OFI is an important issue when estimating Lithuanian family farm sustainability. The OFI supports the livelihood of a large proportion of farm households in Lithuania. The results of the Farm Structure Survey 2016 (Statistics Lithuania 2018) in Lithuania leave no doubt about the relevance of off-farm work as 41.6% of Lithuanian farm holders and their family members had other paid work in 2016. Furthermore, only 15.3% of total number of farm workers (excluding temporarily hired) were engaged in agricultural work full-time.

This paper focuses on the role of OFI in stabilizing disposable farm income (DFI) of Lithuanian family farms considering the period 2012–2017. The empirical analysis begins with the estimation of Lithuanian family farm income volatility and income composition in 2012–2017. It then analyses the differences on income volatility and income composition along economic farm size classes and types of farming. In addition, the remainder of the analysis across economic size classes and types of farming goes on to explore the significance of OFI in 2014 and 2017.

LITERATURE REVIEW

The literature dealing with off-farm issue attempts to disclose the courses and consequences of the farms' labour allocation to off-farm activities. Based on the analysis of Dutch Farm Accountancy Data Network (FADN) dairy farms data, Vrolijk and Poppe (2019) conclude that the OFI lead to lower volatility of total farm income and have a positive effect on farm household wealth. Some other studies (El Benni and Finger 2013) conclude that OFI reduces income inequality within the farmers. Bojnec and Fertő (2019) found that OFI provide stability and additional income security for Slovenian farms due to its lower level of volatility and impact of reducing farm income inequality. Pension and lifestyle farms in Canada benefit from off-farm revenues and are more risk-averse as compared to commercial farms (Poon and Weersink 2011). The analysis carried out by Bojnec and Fertő (2013) provides evidence on a positive association between OFI and farm technical efficiency for Slovenian farms. Scientists stated that off-farm activities give an opportunity for farm family members to generate additional household income, particularly outside the working season. These earnings provide the stability of farm household income, opportunities to invest in the farm's technological development. The analysis conducted by Morris et al. (2017) showed that 24.5% of surveyed Welsh farms were identified as lifestyle farms supported by OFIs. In the contrast to the evidence provided by Bojnec and Fertő (2013), the authors found that lifestyle farms place potentially less emphasis on productivity and the adoption of technology. Some studies revealed that there is inverse relationship between OFI and farm size (Giannakis et al. 2018; Key et al. 2017). The research conducted in Cyprus by Giannakis et al. (2018) showed that farm households specialized in crop farming are more likely to work off the farm. Weltin et al. (2017) investigated income diversification strategies based on a survey of 2 154 farms from eleven European regions. The research findings showed that OFI is especially important in response to institutional risks, namely, under the hypothetical conditions of abolishment of economic support by the Common Agricultural Policy (CAP) an increasing share of farmers would apply OFI diversification as a survival strategy. An analysis developed in Slovenia by Gailhard and Bojnec (2015) revealed that the share of OFI positively influenced medium and large-sized farms participation in the agri-environmental measures.

The OFI issue received little attention in Lithuanian agricultural research. This paper contributes to the literature by being one of the first attempts to evaluate the significance of OFI across farm economic sizes and farming types in Lithuania.

DATA AND METHODOLOGY

The main source of the data used for empirical research is FADN. There is a lack of data about *OFI* in FADN (Spicka el al. 2019). The Lithuanian FADN has a broader set of data than the EU FADN and collects data on *OFI* received by family farm members. However, there is only aggregated data on the *OFI* from different *OFI* sources (non-agricultural wages and salaries, social transfers, other income) presented that limits the scope of this research. The analysis covers the income of family farm members who are engaged entirely in agricultural activity and in both agricultural activity and off-farm. For the analysis two types of the FADN data were employed: sub-grouped results of family farms presented in Lithuanian FADN publication "FADN survey results" (LAEI 2020) for 2012–2017 and primary FADN sample data (individual family farm records) for 2014 and 2017. In order to have comparable data between two datasets and consistent results to the other, presented by Lithuanian FADN, the weighted averages of results were computed. It should be noted that the results for fam-

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ily farms and for agricultural companies are presented separately in the publication "FADN survey results". Family farm is described as a business where the family owns, manages and supplies most of the labour, land and capital. Lithuanian family farm FADN sample consists of approximately 1 300 family farms each year. Based on Farm Structure Survey 2016 (Statistics Lithuania 2018), the family farms made up 99.4% of all farms and owned the major part (86.6%) of agricultural land. To investigate potential differences of *OFI* across farming types and economic size classes the analysis was carried out across economic size classes and farming types. This paper focuses on seven economic size classes according to standard output (SO) value: (I) 4 000 ≤ EUR < 8 000, (II) 8 000 ≤ EUR < 15 000, (III) 15 000 ≤ EUR < 25 000, (IV) 25 000 ≤ EUR < 50 000, (V) 50 000 ≤ EUR < 100 000, (VI) 100 000 ≤ EUR < 250 000, (VII) EUR ≥ 250 000. The analysis was carried out for the after-mentioned farming types: specialist cereals, oilseeds and protein crop (COP), general field cropping, horticulture and permanent crops, specialist dairying, grazing livestock, specialist granivores, field crops-grazing livestock combined and various crops and livestock combined. Farm family labour input on farm is expressed in family work units (*FWU*), i.e. total annual hours worked by family member converted into full equivalents (full-time person equivalents 2 036 hours per year). The data of family farm members on labour allocation to off-farm income is not provided in FADN. Therefore, *DFI* is divided by family work members who are engaged entirely in agricultural activity and in both agricultural activity and off-farm (hours spend on-farm and off-farm are not taken into account). The selected characteristics of investigated farm groups in terms of the labour structure, economic and physical size are presented in Table 1. Using primary FADN data the research results for horticulture and permanent crop farms are presented separately.

Three main income indicators, namely farm net income per family work unit (*FNI*/*FWU*), off-farm income per family work member (*OFI*/*FWM*) and disposable farm income per family work member (*DFI*/*FWM*), consistent with Lithuanian FADN methodology have been calculated (Figure 1).

The role of the off-farm work on income stabilization is also investigated by comparing the coefficient of variation (*CV*) calculated on *FNI* and on *DFI*, i.e. without

Table 1. Main characteristics of farms groups classified by economic size and type of farming; 2012–2017 average

	Number of observations	Annual work unit (*AWU*)	Family work unit (*FWU*)	Family work members (*FWM*)	Economic size (thousand EUR)	Physical size (UAA ha)
Economic farm size						
I	113	1.4	1.4	2.1	6.3	13.5
II	160	1.5	1.5	2.2	11.4	25.3
III	147	1.6	1.5	2.1	19.8	42.1
IV	244	1.7	1.6	2.2	36.1	66.0
V	232	2.1	1.6	2.1	71.9	119.5
VI	258	3.3	1.5	1.9	153.8	232.6
VII	149	7.6	1.4	1.8	415.8	567.5
Type of farming						
COP	447	1.7	1.3	2.1	44.2	85.7
Field crops	119	1.6	1.3	2.1	23.5	38.3
Horticulture and permanent crops	64	2.0	1.4	1.9	22.4	14.6
Dairy	321	1.7	1.5	2.3	20.9	29.8
Grazing livestock	106	1.6	1.5	2.1	12.1	34.0
Specialist granivores	14	2.6	1.5	2.0	72.2	24.4
Field crops-grazing livestock combined	178	1.6	1.5	2.1	20.6	44.0
Various mixed farms	52	1.5	1.4	2.2	8.9	13.1

COP – specialist cereals, oilseeds and protein crop; UAA – utilized agricultural area
Source: Own calculations based on Lithuanian FADN (LAEI 2020)

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$$\begin{matrix}\text{Total output (SE131)} \\ - \\ \text{Total intermediate consumption (SE275)} \\ + \\ \text{Balance current subsidies and taxes (SE600)}\end{matrix} = \begin{matrix}\text{Gross farm income (SE410)} \\ - \\ \text{Depreceation (SE360)}\end{matrix} = \begin{matrix}\text{Farm net value added (SE415)} \\ - \\ \text{Total external factors (SE365)}\end{matrix} = \text{Farm net income (SE420)} / \text{Family workunit (SE015)} = FNI / FWU; \quad (1)$$

$$\begin{matrix}\text{Non-agricultural wages and salaries} \\ \text{Social transfers} \\ \text{Other income}\end{matrix} = \text{Off-farm income / Family work member} = OFI / FWM; \quad (2)$$

$$\text{FNI (SE420)} + OFI = \text{Disposable farm income / Family work member} = DFI / FWM \quad (3)$$

Figure 1. Calculations scheme of farm income indicators based on Lithuanian FADN

FNI – farm net income; *FWU* – family work unit; *OFI* – off-farm income; *DFI* – disposable farm income; *FWM* – family work member

Source: Own construction based on OECD (2003), FADN (2018)

and with *OFI*. The importance of *OFI* is measured by its share in *DFI*. The role of the *OFI*/*FWM* on *DFI*/*FWM* is assessed by change of farms (percentage) in each economic size class and farming type with income above the net earnings in the whole economy in a certain year in Lithuania.

RESEARCH RESULTS AND DISCUSSION

Figure 2 provides the composition of income for Lithuanian family farms revealing the significance of the income sources. Farmers' income showed strong volatility over time due to fluctuations in purchase prices and yields, therefore stabilizing income was an important issue faced by Lithuanian farmers. The Lithuanian yields were most affected by extreme weather events during the analyzed period in 2016 and 2017. In Lithuania there are two main essential products, namely cereals and milk, accounting for approximately one-third and one-fifth in production structure, respectively. The purchase price experienced the lowest in 2014 for cereals and in 2015–2016 for milk levels. Due to aforementioned reasons, the family farm income excluding subsidies on production per family work unit (or market income) was negative in 2014 and 2016. The subsidies and *OFI* played a crucial role in stabilizing *DFI* level in Lithuania. In 2012–2017, on average, the subsidies were the most significant contributor to *DFI* (64%) followed by *OFI* (32%). The market income from agricultural activity (*FNI* excluding subsidies per family work unit) varied most (*CV* exceeded the mean), therefore the subsidies (*CV* – 23%) and *OFI* (*CV* – 31%) stabilized volatility of *DFI* (*CV* – 20%).

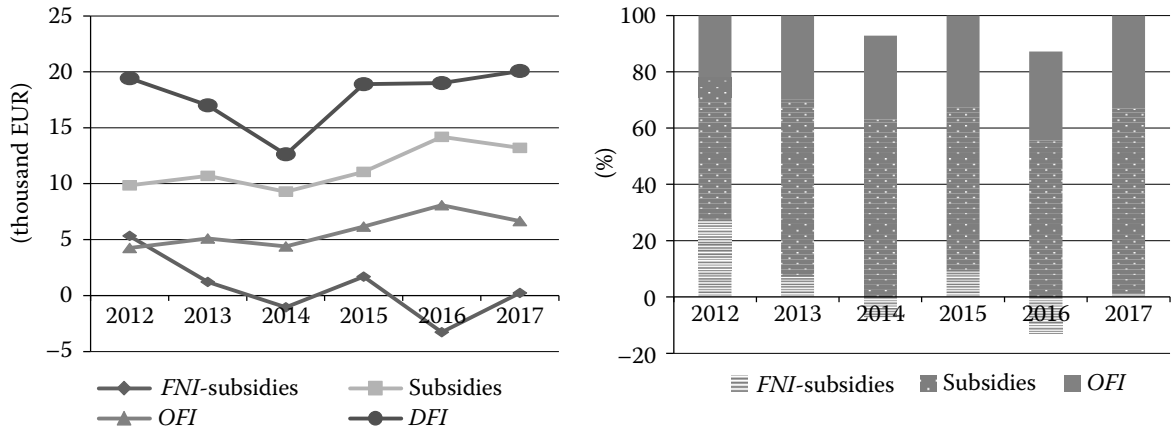

Figure 2. Income volatility and income composition of Lithuanian family farms in 2012–2017

FNI – farm net income; *OFI* – off-farm income; *DFI* – disposable farm income

Source: Own calculations based on Lithuanian FADN (LAEI 2020)

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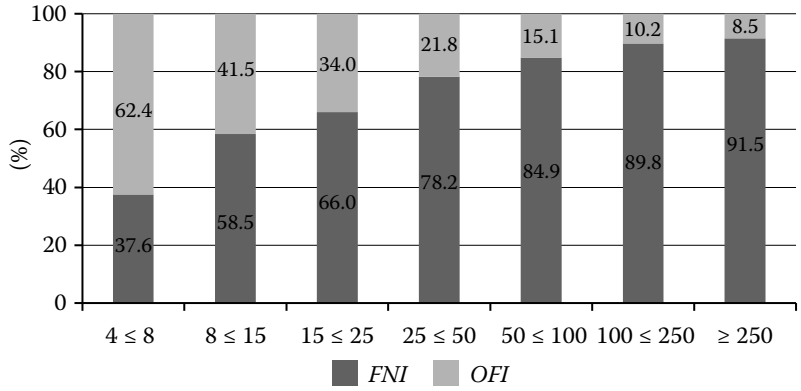

Figure 3. *DFI* composition concerning farm economic size classes; 2012–2017 average

DFI – disposable farm income; *FNI* – farm net income; *OFI* – off-farm income
Source: Own calculations based on Lithuanian FADN (LAEI 2020)

There are deep differences in the proportion of *OFI* in *DFI* across farm economic size classes. Figure 3 presents the picture of *DFI* composition from *FNI* and *OFI* intergroup differences among each economic farm size class in 2012–2017, on average. The *OFI* proportion in *DFI* income lies at just 8.5% for the largest-size farms (SO class VII) compared to 62.4% for the smallest-size farms (SO class I).

The most variable *FNI* across farm size classes was observed on farms in SO class VI (*CV* – 49%) and on the smallest-size farms in SO class I *CV* – 44%). The impact of *OFI* on *DFI* was evident by lower *CV*s through farm sizes: the highest *CV* was observed in the SO class VI, the lowest – in the SO class IV, 29% and 14%, respectively. The most stabilizing effect of *OFI* was observed for the smallest-size farms class (SO class I), as *CV* value of *DFI* was by 23% lower than compared to *FNI*. This is mainly because on the smallest-size farms, a bigger share of *DFI* comes from the *OFI*.

FNI/*FWU* was found not sufficient on farms in the SO classes I–II from the perspective of alternative income possibilities in the country. In this paper, the farms' income is compared to net earnings in the economy as a whole and to the poverty threshold set in Lithuania in a certain year. The generated *FNI*/*FWU* was below the net earnings in the SO classes I–II in Lithuania during 2012–2017, on average (Figure 4). Moreover, the *FNI*/*FWU* was below the poverty threshold in family farms in the SO class I in 2014, 2016 and 2017 and in the SO class II in 2014 during the analyzed period. When adding the *OFI* to *FNI*, the *DFI*/*FWM* in 2012–2017, on average, was above the poverty thresholds in all considered farm size classes, though still below the net earnings in the SO classes I–II. It is important to emphasize, that farms with the SO value up to EUR 15 000 (SO class II) represented 87% in the Lithuanian farm structure in 2016. It should also be noted that the small farms with SO below Lithuanian FADN threshold (EUR 4 000) constitute 58.4% in the Lithuanian farms structure (Statistics Lithuania 2018), indicating a small-scale nature of Lithuanian agriculture. The *OFI* issue on these farms unfortunately has not been studied because of the absence of data.

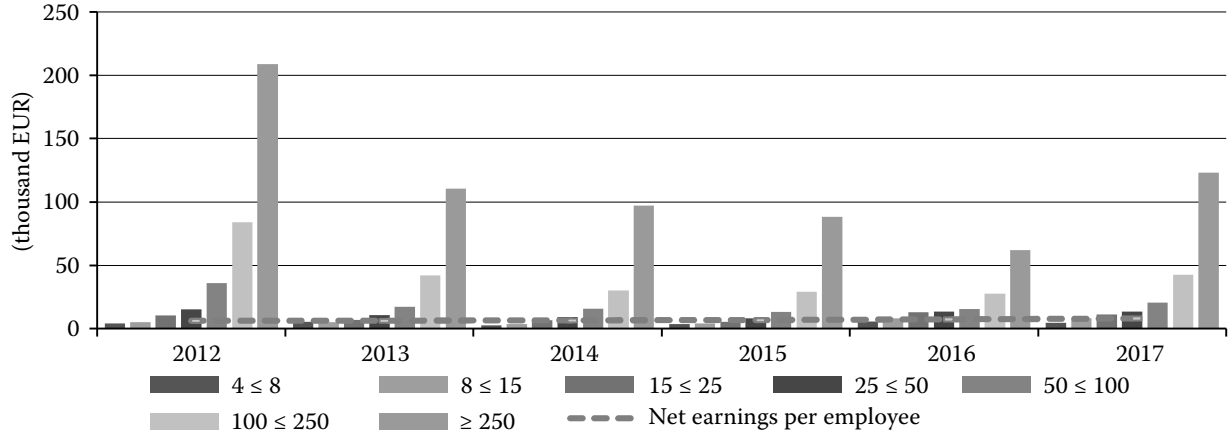

Figure 4. *DFI* per family work member for farm economic size classes in 2012–2017

DFI – disposable farm income
Source: Own calculations based on Lithuanian FADN (LAEI 2020)

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The use of the primary dataset of FADN allowed evaluating the *OFI* impact change across farm economic size classes. The results show that the percentage of farms which use the regrouding income strategy is increasing, as the share of farms with *OFI* increased by 8 percentage points in 2017, as compared to 2014, and attained 76% of total farms in the sample. In 2017, the percentage of farms with off-farm activities rose in all farm size classes, as compared to 2014. Most significantly, the *OFI* reduced the degree to which the household relied on the on-farm income for its living, was attained in small-sized farm classes. In 2017, the highest level of farms with *OFI* was achieved on farms in the SO farm size class III (84%). At the other end of the spectrum, farms in the largest SO farm size classes VI and VII were least engaged in off-farm activities (59%). The improvement of income situation in 2017, as compared to 2014, of Lithuanian family farms is reflected by the increase of percentage of farms with *FNI*/*FWU* above net earnings and poverty threshold. Nevertheless, the income level differed considerably across economic farm size classes: the lowest share of farms with *FNI*/*FWU* above net earnings per employee was indicated in farm SO class I and the highest – in farm SO class VII, correspondingly ranged from 3% to 90% in 2014 and from 14% to 91% in 2017. Income generated from agricultural activity was insufficient for the majority of Lithuanian family farms, as the average share of farms with *FNI*/*FWU* below the poverty made up 55% in 2014 and 47% in 2017. The significance of the *OFI* to *DFI* can be confirmed by the increase the percentage of farms above the net earnings per employee. The *OFI* increased farms (percentage) with the *DFI*/*FWM* above net earnings per employee from 1 (SO class VII) to 13 percentage points (SO class I, II and IV) in 2014, and from 2 (SO class VII) to 20 percentage points (SO class III) in 2017. In addition, the *OFI* contributes to reduce income discrepancies between small and large family farms. This is evident by the smaller gap between the highest and lowest share of family farms above net earnings for *DFI*/*FWM* than for *FNI*/*FWM* within considered economic farm size classes (Table 2).

The large differences of regrounding strategy use by family farms across farm typologies are provided

Table 2. Percentage of farms with income levels above the net earnings and poverty threshold for economic size classes in 2014 and 2017

SO class	Farms represented (%)	Farms (%)				
		OFI	*FNI*/*FWU* > net earnings	*FNI*/*FWU* > poverty threshold	*FNI*/*FWM* > net earnings	*DFI*/*FWM* > net earnings
2014						
I	45.7	71	3	21	2	15
II	25.1	67	20	52	11	24
III	9.6	75	41	70	34	42
IV	10.0	63	57	75	44	57
V	5.5	55	70	81	66	78
VI	3.2	46	79	82	77	80
VII	0.9	53	90	90	89	90
Total	100.0	68	23	45	18	30
2017						
I	41.4	80	14	26	6	23
II	26.2	74	36	59	27	41
III	10.5	84	44	71	31	51
IV	10.2	67	63	82	55	65
V	6.5	64	80	91	72	80
VI	4.2	59	88	90	87	91
VII	1.1	59	91	93	91	93
Total	100.0	76	36	53	28	42

SO – standard output; *FNI* – farm net income; *FWU* – family work unit; *OFI* – off-farm income; *DFI* – disposable farm income; *FWM* – family work member

Source: Own calculations based on Lithuanian FADN

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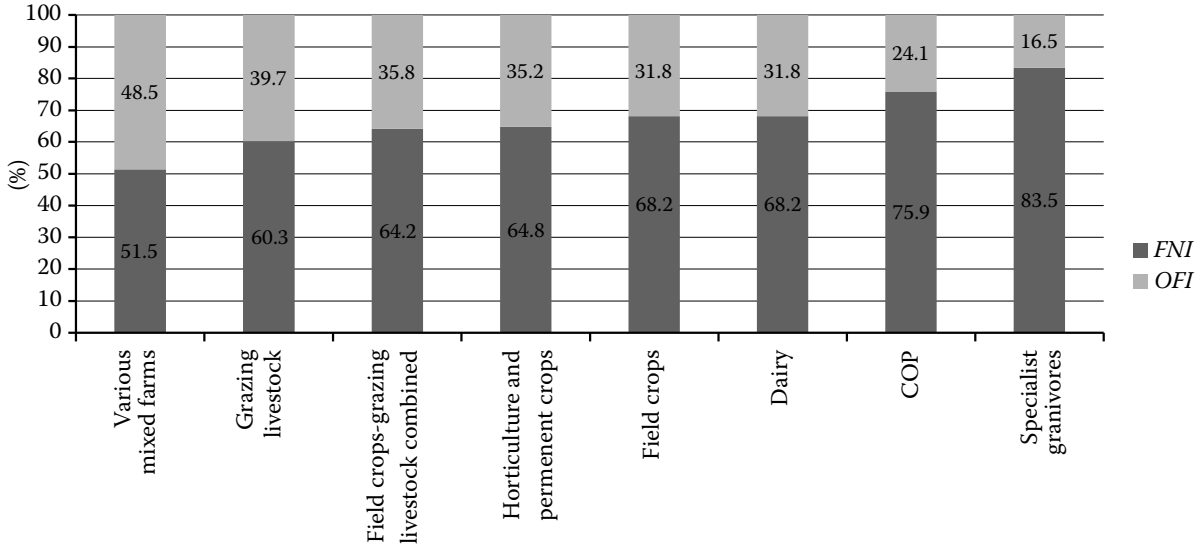

Figure 5. DFI composition concerning types of farming, 2012–2017 average

DFI – disposable farm income; *FNI* – farm net income; *OFI* – off-farm income; COP – specialist cereals, oilseeds and protein crop

Source: Own calculations based on Lithuanian FADN (LAEI 2020)

in Figure 5. The highest proportion of *OFI* in *DFI* was observed in various mixed farms (48.5%) followed by grazing livestock farm type (39.7%). On the contrary, the lowest *OFI* proportion was indicated in specialist granivore farms (16.5%). The *OFI* proportion in *DFI* for dairy farms averaged 31.8% and this result is in contrast to result reported in the study by Fertő and Stalgienė (2016).

The most variable *FNI* across farm types was found on granivore farms (*CV* – 73%) followed by grazing livestock (*CV* – 48%) and COP farms (*CV* – 47%), and the least variable – dairy farms (*CV* – 20%). The most stabilizing effect of *OFI* on *DFI* was observed for COP and grazing livestock farms, as their *DFI CV*s were correspondingly by 14% and 12% lower than compared to *FNI*. This is mainly because the off-farm income of COP and grazing livestock farms was found to be less variable.

From the perspective of the alternative income possibilities in the country, *FNI*/*FWU* was found not sufficient for various mixed (in 2012–2017) and graz-

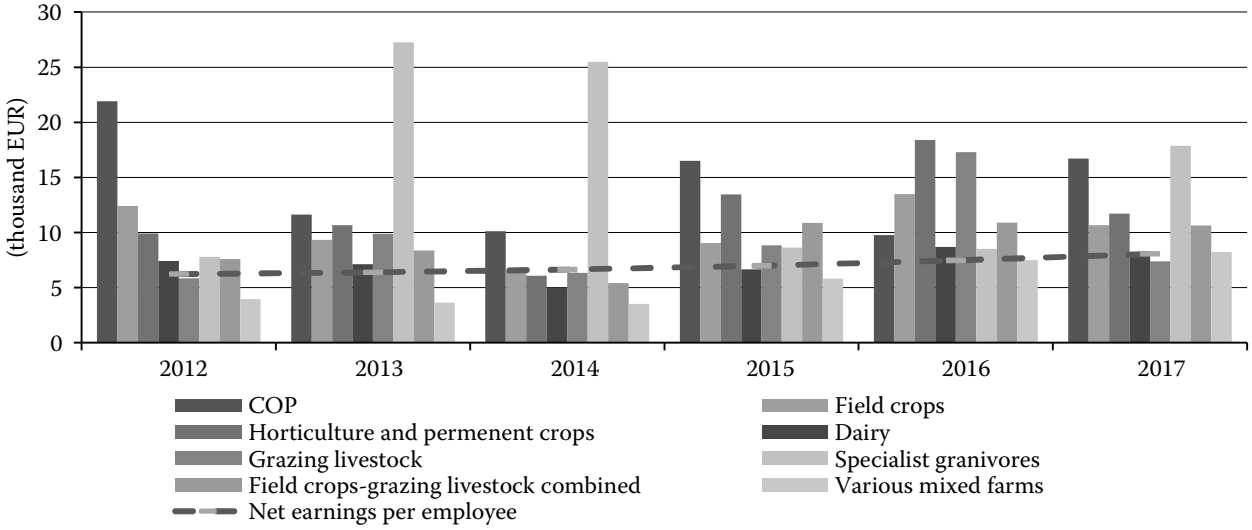

Figure 6. *DFI* per family work member for farming types in 2012–2017

DFI – disposable farm income; COP – specialist cereals, oilseeds and protein crop

Source: Own calculations based on Lithuanian FADN

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ing livestock (in 2012, 2014, 2015, 2017) farms during the analyzed period. Additionally, in 2014, the *FNI*/*FWU* was below the net earnings for all farming types (except for COP and specialist granivore farms). When adding the *OFI* to *FNI*, the *DFI*/*FWM* was above the net earnings for all types of farms, except in various mixed farms, in 2012–2017, on average, indicating that the *OFI* played an important role in terms of ensuring minimal income for all farming types (Figure 6).

The percentage of farms with off-farm activities rose in all farming types in 2017, as compared to 2014. In 2014, the percentage of farms with *OFI* varied from 9% for specialist granivore to 75% for horticulture farms, while in 2017 it ranged from 64% for specialist granivore to 94% for permanent crop farms (Table 3). The income level differences across farming types were not as significant as within economic farm size classes. The highest share of farms with *FNI*/*FWU* above net earnings per employee was indicated in specialist granivore and permanent crop farms, and the lowest – in various mixed and horticulture farms, in 2014 and 2017, respectively. The climatic conditions were unfavourable for cultivation of field crops and had a negative effect on harvest and economic results

Table 3. Percentage of farms with income levels above the net earnings and poverty threshold for farming types in 2014 and 2017

Type of farming	Farms represented (%)	Farms (%)				
		OFI	*FNI*/*FWU* > net earnings	*FNI*/*FWU* > poverty threshold	*FNI*/*FWM* > net earnings	*DFI*/*FWM* > net earnings
2014						
COP	22.5	63	36	55	29	43
Field crops	8.2	69	23	50	18	25
Horticulture	2.2	75	26	53	16	29
Permanent crops	0.3	70	47	74	46	56
Dairy	35.2	72	20	46	16	25
Grazing livestock	4.7	58	27	31	18	30
Specialist granivores	0.1	9	65	65	65	65
Field crops-grazing livestock combined	13.2	65	18	42	16	31
Various mixed farms	13.5	70	10	27	9	24
Total	100.0	68	23	45	18	30
2017						
COP	29.1	74	46	62	36	53
Field crops	5.9	75	32	66	29	38
Horticulture	1.3	86	9	24	9	26
Permanent crops	0.5	94	64	87	54	75
Dairy	30.8	76	34	47	26	34
Grazing livestock	7.6	75	23	55	13	23
Specialist granivores	0.1	64	33	67	18	33
Field crops-grazing livestock combined	13.1	73	34	50	33	50
Various mixed farms	11.6	82	28	40	18	43
Total	100.0	76	36	53	28	42

FNI – farm net income; *FWU* – family work unit; *OFI* – off-farm income; *DFI* – disposable farm income; *FWM* – family work member; COP – specialist cereals, oilseeds and protein crop

Source: Own calculations based on Lithuanian FADN

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of farms in 2017. The harvest of vegetables in 2017 was the lowest within the period of 2012–2017 in Lithuania. Consequently, only 24% of horticulture farms had income above poverty threshold in 2017.

The biggest effect of *OFI* to *DFI* was observed on field crops-grazing livestock combined and various mixed farms in 2014. The *OFI* increased the percentage of farms achieving the net earnings level for considered farming types by 15 percentage points. In 2017, the *OFI* played a vital role for various mixed and permanents crop farms achieving *DFI*/*FWM* above the net earnings by 25 and 21 percentage points, respectively.

CONCLUSION

The *OFI* is very important for the vast majority of Lithuanian family farms. In 2017, 76% of the family farms were engaged in off-farm activities. The present analysis confirms findings of the previous aforementioned studies, namely, the farm size affects the farmers participation in off-farm labour activities. The present paper revealed that the *OFI* varies inversely with the economic size of farm.

The biggest proportion of *OFI* in *DFI* across farming types was observed in various mixed farms and grazing livestock farms. The most stabilizing effect of *OFI* on *DFI* was achieved for COP and grazing livestock farms. Regarding farming types, the off-farm income played a vital role for field crops-grazing livestock combined, various mixed and permanent crop farms achieving *DFI* above the net earnings.

The research results revealed the significance of off-farm issue indicating, on one hand, the agricultural activity movement towards a more modernized, digitalized and less human labour required activity, as well as such farming approaches as a part-time or lifestyle becoming more attractive to Lithuanian family farmers. On the other hand, the research revealed that farms, mostly engaged in off-farm activities, obtained the lowest level of on-farm income. Addressing the income volatility of farm issue, the *DFI* volatility also has to be taken into account.

The findings of present research outline some policy considerations. The majority of family farms cannot rely upon the on-farm income as their only income source. Thus, the agricultural and rural development policy makers aimed at supporting viable farm income and strengthening farm resilience have to answer the part-time farmers' needs.

Farm income variability is of high importance for policy makers in Lithuania. Farm income stabilization tools are under development which aims to smooth the farm income variability between years. The research findings indicate that large farms in terms of economic size and specialist granivore and COP farms, i.e. farms with high variability of income derived from agricultural activities and with a small share of *OFI* in *DFI*, could benefit most from the implementation of income stabilization tools in Lithuania.

Starting from significance of *OFI* analysis, further research is needed on decisions of family farms households to allocate labour to the off-farm activities that could supplement the above findings.

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