Divestments in Polish agriculture – selected aspects

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***Abstract* - Currently it is deemed that receptivity and adaptability to changes are a fundamental factor behind the success and growth, in a broad meaning of the terms, of enterprises, including farms. Divestments, i.e. the reduction of scope and scale of operations in selected areas, serve to improve the financial standing and efficiency of management of farms.**

INTRODUCTION

Agricultural production is the result of the combination of production factors such as land, labor and capital in the production process. Their common shortage and a drive towards improving the efficiency of their use resulted in the need of their reallocation, i.e., withdrawing from operations where they are used less effectively and moving to the operations where such efficiency is higher. Reallocation requires divestments.

MATERIALS AND METHODS

The paper attempts at the evaluation of the scope and effects of divestments[2] of resources on commercial farms which keep farm accountancy (FADN). Data obtained from the Polish FADN database were used as source material. 6,881 farms were selected from the database which in 2004-2009 were covered by the system without any interruptions. However, only farms representing 4 agricultural types were analyzed, i.e. field crop, perennial crop, dairy cows and grazing livestock.

To eliminate farms where occurring changes were periodical fluctuations, the following criteria were introduced based on which it was possible to recognize the changes as permanent enough (i.e. resource divestments):

- in the case of land resources: the decrease of utilized agricultural area (UAA) of a farm by at least 20% and not less than 3.5 ha of UAA (calculated as the product of the average area of UAA of FADN farms and the adopted indicator at 20%),
- in the case of labor resources: the decrease of the amount of labor by at least 20% and not less than 0.35 AWU,
- in the case of capital resources as the production factor: the decrease of the value of total assets of a farm excluding land, permanent crops and input amounts by 20% and not less than PLN 53,500.

To satisfy conditions of the dynamic evaluation of the efficiency of a divestment enterprise, it is necessary to estimate total benefits/financial losses related to their introduction. Usually divestments are spread over time and their effects are visible only after the entity has adapted to new conditions, hence, in the study it was assumed that the evaluation of their efficiency will be performed after the lapse of one year and two years following the completion of the process. From among all farms, the farms which divested their assets and then within the period of two years did not significantly change the size of their production factors, were eligible for the analysis. 320 farms were selected for detailed analyses, including 117 farms cultivating field crops, 20 – perennial crops, 114 – raising dairy cattle and 69 - breeding grazing livestock.

RESULTS OF RESEARCH

Just like any other type of business, the agricultural production requires the application of specific resources – production factors, and farms' production potential is determined by owned resources of land and capital. The surveyed entities engaged in divestments were commercial farms with a clearly specified production direction. They were relatively large units (33.7 ha of UAA on average), and their area ranged from 2.5 to 298.1 ha (table 1). Farms cultivating field crops were characterized by the largest area (50.9 ha), while farms breeding dairy cows were the smallest. Labor resources per farm were quite similar. The highest AWU was recorded in regard of farms cultivating field crops (2.6 AWU), and the lowest – in the case of farms keeping grass-eating stock (2.3 AWU). On average in the surveyed sample of farms the value of assets excluding land approximated PLN 500,000. Following the assessment of the average value of income (PLN 47,600) it should be noted that it is slightly higher than in the case of total FADN units' population and its differentiation is strictly related to farm area.

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[2] "divestments on farms are the planned and deliberate reductions of agricultural production and/or committment of farmer's household resources to the farm's input aimed at releasing land, labor and capital resources in order to use them in other agricultural or non-agricultural activities which, as a result leads to the increase of the farmer's personal income and household income" [Wojewodzic 2010a].

Table 1. Characteristics of farms prior to divestments.

Type of farms	UAA (ha)	Labor outlay (AWU)	Total assets excluding land (in PLNk)	Farm income (in PLNk)
Field crops	50.9	2.6	599.1	60.3
Other permanent crops	40.4	2.4	520.8	51.3
Other grazing livestock	32.1	2.3	488.5	46.9
Dairy	25.5	2.5	458.0	41.4
Total	33.7	2.5	499.7	47.6

Source: own study.

Regarding the smallest farms in terms of UAA (up to 10 ha of UAA), characterized by very high labor efficiency, more than 90% of restructuring activities were connected with labor. A similar phenomenon was observed in the case of farms with 10-20 ha UAA – more than 95% of changes involved the reduction of employment. Further examples of very rational measures result from the analysis of the divestments of land (table 2). The process was mostly carried out on large farms (over 70 ha) cultivating field and permanent crops characterized by the definitely lowest land productivity (below PLN 1,000/ha of UAA). The percentage of the area of land withdrawn from production amounted to 11.6% and 10.8%, respectively, vis-à-vis base area.

Table 2. The scale of divestments in progress depending on types of farms.

Types of farms	An average scale of divestments of land resources		An average scale of divestments of labor resources		An average scale of divestments of capital resources	
	(ha)	(%)	(AWU)	(%)	(in PLNk)	(%)
Field crops	-5.9	-11.6	-0.5	-19.2	+ 13.4	+ 2.2
Other permanent crops	-4.3	-10.8	-0.5	-20.7	+ 10.3	+ 2.0
Other grazing livestock	-3.1	-9.6	-0.5	-23.5	-3.7	-0.8
Dairy	-2.3	-8.9	-0.6	-25.6	-10.6	-2.3
Total	-3.6	-10.6	-0.57	-23.1	-2.0	-0.2

Source: own study.

Analyzing the number of farms and the scale of divestments of capital, it was observed that the process was carried out almost only by farms characterized by insignificant efficiency of that factor – the smallest animal farms. Whereas in the case of the largest farms with the poorest technical facilities (plant farms) it was observed that the value of the assets slightly rose.

The withdrawal of production factors from agricultural activity (e.g. the reduction of land resources) is often accompanied by the decline in the production. Nevertheless, as a result of the process, the farm's incomes may also increase. On average, for the entire surveyed group the farm's income one year after the completion of divestment rose by 21.3% compared to the year before the introduction of the changes (table 3). A decline of income was recorded only with regard to 3.7% of the surveyed farms. The highest income increases were recorded by the smallest dairy farms where excessive labor resources were released. This means that the re-allocation of resources and the accompanying divestments in the area of production contribute to the "removal" of ineffective resources and production branches from farms. The increase of incomes of slightly bigger farms in terms of area was much lower, however, it still ranged from 16.9% to 18.7% which is a high level.

Table 3. Average changes of income earned by farms and the number of units recording its increase. depending on the types of farms.

Types of farms	% of farms recording income increase after the lapse of one year following divestments	An average change in income after one year following divestment completion (%)	% of farms recording income increase after two years following divestment completion	An average change of income after the 2nd year since divestment completion (%)
Field crops	96.2	18.3	65.8	22.8
Other permanent crops	95.6	16.9	64.6	28.0
Other grazing livestock	95.1	18.7	64.0	32.3
Dairy	97.5	28.2	70.1	41.0
Total	96.3	21.3	66.6	32.3

Source: own study.

Nevertheless, after two years since the divestment process's completion, only 66.6% farms could demonstrate its positive effect, i.e. a higher farm income.

CONCLUSION

It is a common (fallacious) belief that divestments are "necessary evil", result from previously made mistakes and are carried out at the stage of advanced crisis. However, the research showed that in the case of the majority of farm holdings, divestments were anticipatory. Having observed that a given production factor is not used effectively, owners of farms decided to have it re-allocated. Hence, it may be stated that such measures were highly rational.

On average, with regard to the entire surveyed group of farms, the income recorded after the lapse of one year since the divestments' completion rose by more than 21.3% vis-à-vis the year prior to such changes. The analyses of the changes of income earned by farming families showed that their efficiency was even higher and the related income increased by more than 32.3%. Nevertheless, the group of surveyed holdings also included those that engaged in "wrong" divestments. Their results were manifested in the second year after the re-allocation of resources and resulted in the decreased farm income.

REFERENCES

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