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THE POSSIBLE INTRODUCTION OF FINANCIAL INSTRUMENTS WITH REGARD TO THE FINANCIAL NEEDS IN THE AGRI-FOOD BUSINESS

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Abstract
Hungary is planning the introduction of repayable subsidies for the agricultural, food and fishery sectors for the 2014-2020 period in order to expand the financial opportunities. Financial instruments can be taken by enterprises who are profitable but – for any reason (eg. size, lack of funds) – they are not able to obtain other market sources of funding. In order to localize this group of businesses we made a GAP analysis.
During analysis our hypothesis was confirmed that the area based subsidies have protected certain agricultural sectors from the effects of the crisis. In agriculture the small and medium size enterprises (SME's) and individual farmers, in the food industry also the SME's, and in the fishery industry also the SME's are identified as business groups who are not able to or hardly able to be financed by market sources of funding. The reasons for the sub-optimal financing situation are primarily the size, the lower than average but still positive profitability, lack of funds, and the lack of documentation for individual farmers can cause the failure of the credit rating.

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1. Introduction

Both agricultural and food sectors face greater difficulties in receiving funding than other sectors. However, the reasons behind the challenges for the two sectors are different.

The financial problems of the agricultural sector is posed by its special structure of production and resources. Agriculture needs financial instruments which are uncommon in other sectors (integrator loans, member loans are significant in the case of individual farms) [1]:

- There is an annual cyclical nature in plant production, as long as expenditures arise from the beginning of the production cycle, incomes are realized primary at the end of this cycle. The livestock sector is also characterized by cyclicity, but in another way.
- The amount of fixed capital is significant in the sector and a large part of it is tied up in properties, machines and buildings.

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- Returns are relatively uncertain and fluctuates greatly due to the great impact of weather and global market trends in the sector.
- Individual farms follow special tax rules that weakens the transparency of the enterprises in financial term and therefore limits their access to loans because of their low credit rating.
- High exposure to natural factors poses great risks for investments and finance in the sector [4].

The above-mentioned factors explain why banks are hesitant to offer financial instruments for agriculture, and hence the sector relies on state support. Different systems of agricultural finance have developed in the various European countries [3]. Agricultural loans in Hungary are provided mainly by commercial banks. The government had ran subsidized loan programs for farmers to improve their financial sources until the accession of the EU. But harmonization of laws with EU standards required to phase out these programs after 2004. However, EU subsidies brought various benefit and created favorable situation in the sector.

In the food industry the financial difficulties are caused by special factors to a lesser extent. However, production in the sector also has a cyclical nature – primary in subsectors dealing with processing agricultural products -, but weather and environment factors cause less risk to the industry. Along with the EU accession, the sector was facing increasing difficulties and declining in importance. The high level of indebtedness, low incomes, and market challenges had already made the financial situation in the sector vulnerable before 2008.

The financial crisis had negative impact on the sectors as availability to financial resources decreased, interest rates rose and the fluctuation foreign currency increased. The way of thinking of the financial market players changed, they became more cautious to avoid risks while the economy was facing growing difficulties due to the limited access to financial instruments. The decline of the overall amount of credit in Hungary is considered to be significant and extended in comparison with other Middle- and Eastern-European countries [2].

As a first step the Member States needed to carry out an ex-ante (GAP) analysis to justify the application of financial instruments. Our research was based on GAP-analysis, the localization of segments with the lack financial sources assures to avoid the “crowding out effect” caused by state loan programs.

The hypothesis in the focus of our GAP analysis suggests that the shrinking private loans caused by the financial crisis had various impacts to the different parts of the agri-industry. The area-based subsidies acted as shield in two ways. Firstly, subsidies helped to expand financial opportunities for the businesses in an indirect way and as a result private lending fall together with the demand for financial instruments. Secondly, subsidies helped businesses to get access to special market instruments (e.g.: factoring, subsidy pre-financing loan, subsidy can serve as collateral at obtaining loan). Businesses without area-based subsidies suffered greater negative impact of the financial crisis [7].

In this article, we only present a smaller part of our research due to space limitations, giving thereby an overview on the status and financial requirements of agriculture. Further results of the study are planned to be published later on.

2. Methodology

Our research on agricultural and food businesses relied on the NAV (National Tax and Customs Administration) corporate tax database that provides detailed information on balance sheets as well as profit and loss statements of companies with double-entry bookkeeping.

Individual farmers play important role in agriculture. The analysis of individual farmers is based on the Hungarian data collection of the Farm Accountancy Data System (FADN) operated by the European Commission.

Furthermore, the data of the Agricultural Census 2013 and the Farm Structure Survey 2010 provided also information for the analysis of agriculture.

During the gap analysis, we examined the possibilities of supply and demand sides. On the supply side, we reviewed the funding opportunities that could provide a source for enterprises in the agricultural sector. On the demand side, we examined the basic results of agricultural and food industry enterprises and their financial situations. Individual and corporate farms were investigated separately as they are characterized by different attributes and needs. The study was complemented by questionnaires, which revealed the concrete opportunities and requirements in respect of the two sides. In the rest of our article, we will present only the summarized results of the investigations concerning the demand side.

3. Results

One of the basic aims of the research was to discover the relevant groups in the agricultural and food sector with regard to the financial instruments. In the field of financial instruments the solvent but non-bankable enterprises are relevant. These companies have viable business plans, gainful activities and the level of their incomes enable them to apply for loans but they are not able to get access to financial instruments for some reason. The aim of this paper is to shed light on the financial gap for enterprises in key sectors without presenting all the conclusions. Results are referred to 2013 because data from this year was available at the end of the research. After the closing the research we updated the results with data from 2014.

3.1. Financial indicators in the agriculture and food industry

The agriculture (including forestry and fishery sectors) contributed 4 per cent to the GDP in 2013 in Hungary. The share of agriculture was higher in investments and employment, 5.7 per cent and 4.9 per cent, respectively [6]. The real importance of the sector is significantly greater than the presented figures. The weight of the food industry and all sectors connected to agriculture (like input providers) far exceeds the values mentioned above. The share of the whole agribusiness is 15.8–16.3 per cent of the output, 11.8–12.5 per cent of the GDP and 13.4–13.7 per cent of the employment.

The position of the agriculture has improved since the EU accession. However, the sectors were affected in various ways. The beneficiaries of the system of area-based payments have gained access to new funding sources that improved their financial position. But opposite trends have emerged in the sectors that are not preferred by the normative subsidy system. The normative subsidy system significantly influenced the access to financial instruments and the applications for tenders.

The own capital of private farms were twice as much as that of corporate farms. The explanation behind the high rate of own capital is that private farms can own land contrary to corporate farms, and land is presented on the balance sheet. The land contributes to the rate of own capital of private farms (89,6 per cent, table 1). But landownership does not provide advantage on the field of financing because land is not a liquid asset and does not serve as collateral as the result of the incomplete system of mortgage credits [5].

But the 10.3 per cent indebtedness ratio of private farms shows that the sector has not taken advantage of its financial opportunities. There are many factors behind this (the significant weight of plant producers, sectors without preference are not able to gain loan, the relatively high burden on loans offered by banks).

The level of indebtedness is significantly higher in case of corporate farms than individual farms, which is explained by their credit amount of HUF 350 billion. In case of corporate farms the indebtedness of small and medium size enterprises was the most favorable according to our research. This is why SME’s still have scope to arrange more loans. With regard to profitability of corporate farms, the size of the enterprises shows negative correlation with their indicators. The microenterprises were the most efficient in the view of all of the three profitability indicators. The results did not fulfil our expectations, this could be explained by the sectoral structure of certain size categories and the significant differences of sectors. Consequently, the relative high profitability of microenterprises is thanks to the plant producer farms.

Foreign capital played an important role in the capitalization of the food industry. But the decline of the foreign capital inflow restrained the capital power growth of the enterprises. The rate of external financing accounted for 57.0 per cent, which means that there is no collateral for arranging further loans. It is worth noting that this ratio was below 45 per cent in the case of the whole processing industry.

With regard to the indebtedness the micro and medium size enterprises encountered the most critical situation. The profitability indicators of the sector are not favorable either. The return on revenue is the third that of the similar indicator of the agricultural cooperative enterprises. The value of the indicator in the sector is greatly influenced by the diverse characteristics of the subsectors.

Table 1: Financial indicators of corporate enterprises in various sectors in agriculture, 2013

per cent

Size category	*Capitalization*	*Indebtedness*	*Return on equity*	*Return on Sales*	*Return on assets*
Agriculture – corporate enterprises	59.1	39.1	8.8	8.0	5.2
Agriculture – individual farmers	89.6	10.3	13.4	43.8	12.1
Food industry	40.0	57.0	10.8	2.9	4.3

Source: own edition on the basis of Tanító-Lámfalusi, 2014, p. 23.

3.2. Financial sources in agriculture and food industry

The agricultural private and corporate farms finance their assets by their own capital. The amount of own capital in the sector grew by 60 per cent to HUF 4322.4 billion from HUF 2661.3 billion between 2008 and 2013. Short- and long-term bank loans plays the key role with HUF 412.6 billion in the external financial sources. Other short-term financial assets are also significant (HUF 328.3 billion) on the market, particularly the financial instruments offered by integrators.

The main financial features of whole sector is characterized by the main differences in financing individual and corporate farms. Owner funds accounted for 90 per cent of liabilities of private farms, other short-term financial liabilities contributed by less than 6 per cent to the cake, in case of loans this value is only 2 per cent. External liabilities plays much more important role in the case of corporate farms, the share of owner funding accounts for 59 per cent in the liabilities. The main sources of external liabilities are banks, suppliers, leasing companies and factoring. The difference between the two financial types is made by the borrowing capacity and the subsidized enterprise activities. The great share of owner funds in the financial structure explains the light administrative obligations that fail to ensure sufficient documentation for credit rating, and the small size of the enterprise and its one person responsibility means high risk factor. This means that the majority of private farms are not big enough or have no adequate documentation to be financed by banks or suppliers [5]. Furthermore, among private farms there are many plant producing enterprises that need no external financing as long as the proportion of livestock production and horticulture is higher among corporate farms.

Table 2: The structure of source of funds for individual farmers and corporate farms in the agriculture, 2013

Source of funds	*Individual farmers*		*Corporate farms*	
	HUF billion	*per cent*	*HUF billion*	*per cent*
Own capital	2699,3	89.6	1623,1	59.0
Liabilities	311,6	10.3	1061,9	38.6
Bank loan	61,7	2.0	350,9	12.8
Suppliers	10,9	0.4	254,5	9.3
Other short-term loans	165,8	5.5	162,5	5.9

Other sources	0,3	0.0	64,6	2.3
Total	3011,2	100.0	2749,6	100.0

Source: own edition on the basis of NAV database

The food industry has limited financial possibilities in comparison to the agriculture. Enterprises in the food industry has no or limited access to arrange loans from integrators, members or saving cooperatives. But there is another main reason behind the lack of funds in the sector. The poor indicators in the sector, structural changes taken place since the collapse of the former economic system, lack of perspective in the sector and the cautious banks after financial crisis have deteriorated the attractiveness of the sector in the eyes of the banks. The greatest difference compared to the agriculture is the lack of non-reimbursable subsidies. As long as the preferred subsectors in agriculture receive more than 300 billion HUF of non-reimbursable income subsidies, this value in the food industry is only 5-7 billion HUF. In the supported subsectors of the agriculture this serves not only as source of direct income, but collateral for gaining loans and factoring. The food industry fails to gain these advantages.

The total amount of liabilities in the sector records more than 130 HUF billion, covering 60 per cent of the complete source of funds. As long as the investment and development loans, other long-term loans as well as the short-term loans accounted for one-fifth of the complete source of funding in 2008, this proportion showed only 14.5 per cent in 2013.

The decrease is caused by the narrowing financial possibilities after the financial crisis. The external financial sources of the food industry in importance order are banks, suppliers, other liabilities and loans from members. There has been no change in the structure of the financial sources. This can be explained firstly by the high indebtedness, secondly by the poor profitability that prevents enterprises from the expansion of capital.

Table 3: The structure of fund sources for corporate farms in the food industry, 2013

Source of funds	*Corporate farms*	
	HUF billion	per cent
Own capital	890,5	38.4
Liabilities	1337,4	57.7
Bank loans	337,1	14.5
Suppliers	342,7	14.8
Other short-term liabilities	211,0	9.1
Other sources	89,9	3.9
Total	2317,8	100.0

Source: own edition on the basis of NAV database

In our research many fields were analyzed to identify groups that are incapable to arrange loans in the agriculture and food industry and hence have no or limited access to financial instruments and hence are addressed by the state financial programs.

In agriculture there are three key factor: the size of the enterprise, the reference of the area-based subsidies and the documentation requirements that are relevant mainly for the private farms.

In the view of the current situation in the food industry it can be concluded that the whole sector has no or only limited access to commercial financial instruments.

4. Conclusions

The GAP analysis provided the basis for us to design the new financial instruments. We assessed all the enterprise groups with insufficient access to commercial financial instruments that could help them to develop. We designed various instruments in the view of the size of relevant enterprises, profile and legal status.

One group of enterprises with lack of financial sources operates in sectors that are not preferred by subsidies (livestock farmers and horticulture). These enterprises have/had no or limited access to area based subsidies.

Other key direction is to create and expand financial opportunities for individual farmers. This could improve the efficiency of sources of subsidies. Unusual and innovative instruments could offer funds for these farmers without market distortions and help to increase the number of enterprises that can take part in the competition. This could improve the level and efficiency of the production.

The food industry is in similar situation in many regards as the agriculture. Many enterprises have no own fund to achieve development goals, no sufficient collateral and property for private bank loan.

For agriculture the development of the food industry is a key question. The next financial period provide more fund to support this area.

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