

LENDING OF AGRICULTURAL ACTIVITIES: CHALLENGES OF EU INTEGRATION

- SUMMARY -

By the scientific approach followed by the doctoral thesis entitled "**Lending of agricultural activities: challenges of EU integration**" is proposed to approach a topic, both current and constant one - supporting the development of the agricultural domestic sector, but also acute topic, because of decreasing up to almost loss of agricultural credit from financing activities of agriculture. The thesis tries at the same time to present the issue from the perspective of commands related to Romania in the European Union, and in terms of agricultural enterprise equally with thematic approach related to lending of agriculture in terms of commercial banks.

The broader issue of need for agriculture financing derives from the finding that the infrastructure related to agriculture is at an insufficiently developed level, which by the conditions that it creates, it promotes the lack of motivation for development on agricultural producers and lack of prospects for the development of the sector as a whole. On the other hand, legislative inconsistencies, or often the lack of legislation in accordance with the requirements of the moment, stop access to financing instruments, particularly to external funding sources, the only ones that could allow the farming start. The one-sided and one-dimensional approach to agricultural credit without correlation with other sources of financing is also unrealistic because it does not account for the opportunity to other forms of financing, and also inefficient economically because by the proposed costs, it directly leads to decreased profitability, first at the enterprise level, and then at the sector level.

As it appears, closely related to the development stage of the Romanian village, the Romanian agriculture is facing a series of problems that indicates integration into the European Union, from the problems of employment in the rural world (surplus of employed population absorbed largely by economic migration to EU countries), to matters relating to excessive fragmentation of ownership, practicing subsistence agriculture, to the application of outdated and non ecological technologies, etc. All issues concerned means rethinking the Romanian agriculture through substantial, structural and legislative changes of the general activity framework of agriculture with EU requirements. All these require a resizing and an adequate evaluation of the financial burden linked to government and community programs. The approach of agricultural credit that is independent or uncorrelated with these ones, represents, either an unrealistic approach or may result, if such a unilateral approach implemented at the commercial banks, to further accumulation of bad loans with unpredictable consequences for the Romanian banking system.

In presenting the paper I went from an approach that takes into account the specific elements of each period of earliest or latest history of the Romanian agriculture, covering aspects related to historical specificity and socio-economic realities of a point or another, and economic impact. Lending, seen as an important form of financing for agricultural activities, had to follow, guided or not, depending on economic policies, guidelines for these policies, even if the effects obtained in the end were different from those expected by applying those measures.

The overall objective of the paper consists of analyzing how agricultural credit interrelates with other forms of agricultural financing, especially with financing tools from source of European Union, with cohesion funds, but also with the funds made available from the source of state budget, together with funding from own sources of enterprise and individual producers and agricultural credit impact that it had and has on the agricultural sector, as the main beneficiary, but also on the banking system in general.

The aim of the research is to identify the main features and specificities of agricultural credit reported to the reality of agriculture in Romania in recent years, and trying to identify the main ways of intervention of agricultural credit in financing economic projects for the 2014-2020 timeframe, given the needs and conditionalities imposed by the interaction between the European Union market and the Community legislation framework and the realities of Romanian agriculture.

Research methodology. In the development of the thesis I ran to different research methods as the comparative method the historical method, research method in the case, the econometric model and the sample.

In the first chapter I used as a research method the comparative approach about the stage which is the Romanian agriculture as for the competitiveness by presenting the results in agriculture from North America and Canada as well as the European Union. Everything in this chapter I used the historical method, using this I have analyzed the development strategy and the events recorded of Romanian agriculture, going to years of the command economy through the period of transition to the market economy continuing to the period before accession to the EU to 2020-2030.

In the second chapter I also used the historical method and I analyse the features of credit activity during the transition period to market economy, then, to the period before accession to the EU and also the approach in relation to the crediting of agriculture for the 2014-2020 years.

In the third chapter I used as a research methodology the case study, by the deduction method. Through this method I fixed the creditworthiness of the next banks BCR Erste Bank, BRD-GSG and Raiffeisen Bank.

Any research begin through clarifying the cause of the problem that will be examined, in this way the indicators on the crediting receipt on the risk categories to get the quantitative indicators: liquidity, solvency, return on equity.

In the fourth chapter I used as a research method an empirically study through I tried to identify what the linear regression the effectiveness of funds by the National Plan of Rural Development, to receive various suggestions, to build the tools of data collection.

In the last chapter I used as research method the sample.

What I watched it was getting a sample of 20.000 of commercial companies what agriculture feature representative for risk analysis of default credit.

The data methods of collection used for the research of credit's risk of default are the observation, the analysis of quantitative indicators related what the companies from the sample we analysed.

The analysis of data on companies indicators what agriculture features it includes both researchers in the methods which permit the identification and the development of a research problem, and the descriptives methods, that offer a large view.

The first chapter entitled "**Strategies for the development of agricultural activities: new approaches**" provides an analysis of the state in which the Romanian agriculture is, in terms of performance and competitiveness requirements, with reference to the results of agriculture of North America – the USA and Canada and the European Union. We have welcomed a review of the particularities linked to agricultural policies promoted in EU countries and EU agricultural community policies implemented in the countries of central and Eastern Europe, closer to Romania's situation in terms of culture and history. They deal with structural reforms to increase productivity, at the same time with development strategies and developments of the Romanian agriculture, starting from the years of the command economy, with a careful analysis of the main issues arising from developments in activities related to agriculture in the period of transition to market economy. Main performance criteria also appear, criteria that Romania's agriculture must achieve in the years 2020-2030, the work aiming to observe the extent to which the agricultural sector in Romania makes consistent with EU agricultural policies, to adjust the gap between the level of development of agricultural production base in our country and the competitiveness question, revealed by the average indicators registered in the European Union.

In this chapter "**Strategies for the development of agricultural activities: new approaches**" we offer a view upon the development strategies of agricultural activities, viewed in light of the trends observed in the development of agricultural activities in countries with advanced economy and aims to report the realities of the actual Romanian economy to the development models of the countries with modern agriculture. The chapter analyses the main features of the agriculture in developed countries in terms of the efficiency of the farm or production systems in North America (the USA and Canada), together with the current state of development of agriculture in the European Union countries. These patterns are examples only in terms of economic performance criteria (total production, productivity per area unit, the degree of satisfaction of the needs of domestic consumption, export availabilities, etc.) but are similar in terms of common cultural model, existence of similar food habits, the use of an organizational way comparable or similar in many respects and, very important, using similar means of financing in many respects.

We also analyze the changes that have occurred in Central and Eastern Europe, both in the pre - accession to the European Union and structural reforms and new methods of support aimed at the implementation of models of financial support through grant for the countries that have joined the community space since the last years of the last century.

The final conclusion of this chapter would be that, through the degree of implementation and the consistency with which the ongoing programs will be implemented, by increasing the capacity to absorb the funds made available through these programs, Romania can recover in the years 2014-2020 a significant portion of the gap of performance and competitiveness, date from which we could talk, possibly, by Romanian economic recovery by harnessing agricultural potential of the country.

The second chapter entitled "**Mechanisms for financing agriculture: the role of bank credit**" aims to present lending in the wider context of the funding mechanisms of agriculture, detailing both separately and interdependently main ways of financing agriculture: auto financing, leasing, funding from the state budget, funding from sources of bank credit and the European Union. Continuing lending activity of agriculture chronologically we wanted to

capture the characteristics of lending activity in the transition period to a market economy and then in the pre-accession period, explaining the recoil that it had interconnected with the crisis that comprised the entire Romanian economy with the collapse of the command economy. In this chapter we propose an approach in terms of credit for the years 2014-2020 agriculture, which starts from the observation that agricultural credit will follow a systemic approach closely with the European general policies aimed at agriculture, then complementing the other funding sources and, above all, supporting EU funding programs.

There is an obvious need to support the development strategies of the agricultural sector, and major policies in agriculture through appropriate financial instruments, but the mere use of them is as inefficient as their absence, where the amount of resources allocated and, especially, their optimal sizing are not appropriate to degree of development of the agricultural sector in a moment or another of its evolution. The issue of allocation and establishment of adequate volume by financial means was not one related to the choice of appropriate instruments and even the volume of resources, but one of allocation efficiency of these resources according to priorities for developing the agricultural sector. The lack of results from the allocation of these resources from pre-accession period was mainly due to wastage of financial resources through direct or indirect subsidy mechanisms of subsistence farms emerged, in turn, as a result of excessive fragmentation of land ownership.

Financing instruments of source of the European Union, both in the pre-accession period, and especially in the post-accession to the European Union, as well as funds and grants from the source of the state budget (it's true, insufficient ones and lacking in continuity in supporting economic programs) by their target, by cohesion and continuity they made possible a certain recovery achieved primarily between 2003-2004 and 2007 to date. The financing programs, besides providing support exclusively to farmers in realizing productive investments, give them the advantage of reduced costs in accessing them, costs that exclude the interests in structure and amount, as in the case of loans granted by commercial banks. In reality, funding programs from source European Union, far from covering all expenses related to the materialization of an investment project, open the way for accessing loans for agriculture, when they complement its own sources and those attracted through funding from European Union and aimed at a variable amount up to 20-30% in each eligible project, for covering the necessary funding regarding ineligible expenditure.

Also in the second chapter we analyze the evolution of agriculture lending in Romania, the way in which credit institutions have responded to the needs of agricultural financing corresponding to developments and strategies applied to the Romanian agriculture. Referring only to the pre-accession period we can make the observation that the Romanian banking system, as was presented in the early 1990s, it could not handle concerning size or structure, neither the adequacy of staff training to the challenges of the market economy. On the other hand, the market itself was a period that lasted until 2007 in a phase of continuous restructuring and relocation, both in terms of structure and ownership of the lands and the economic size of production farms. On the other hand, the resources available to Romanian commercial banks were limited and diminished by the inability of beneficiaries to repay at maturity the obligations contracted from banks. Therefore, chronic systemic and structural inability of Romanian agriculture was aggravated by the inability of banks to support programs for modernization of agriculture through credit. Crisis of the Romanian banking

system has caused, besides the restriction of resources that commercial banks had available, natural increasing and, I would say, galloping to the interest charged on the banking market in Romania, together with an emphasized inflationary process, particularly noticeable in the decade 1990-2000. The natural consequence of these developments resulted in a sharp decrease in lending volume for agriculture, which has had negative repercussions throughout the direct relation between producers - processors and direct consumers. Compared to this situation, the Romanian government has tried through economic policies, more or less questionable ones, or sometimes simply for the politicking sake, unrelated to reasons of economic efficiency, to subsidize interest rates on loans given to farmers or processing units. All measures aimed at reducing the costs of high interest rates, subsidizing those who were to pay, have failed, the result in this case being simply a waste of funds.

It is assumed (and the work can be supported by the figures presented in the paper) that the volume of loans to agriculture will increase proportionally with increasing absorption of funding from the European Union.

Explaining , disclosure of the entire lending process as it is done now in commercial banks, in the absence of specialized banking structures, is presented in chapter three entitled **"Foundation of lending decisions : new ways of investigation "** which deals with how to design and rationale lending decision by explaining the mechanisms of analysis resulting from the internal rules of commercial banks, of analysis stages and of hierarchical levels of review and approval at the level of branches and of stations of the commercial banks.

I considered to be necessary to present accurate and detailed various stages of analysis with reference to specific elements for companies in the agriculture, in order to extract the reasons why, in the current conditions of Romanian agriculture the agricultural lending is done so hard.

For a better understanding of the importance of analyzing the client's creditworthiness, leaving everything from a case study we point out that for the same company we can achieve using different methodological models, the classification in groups of different creditworthiness, which explains in part the acceptance or rejection of the lending of a company by a bank, while another bank reaches opposite conclusions.

The foundation of lending decision is treated by presenting peculiarities related to of qualitative and quantitative analysis of loan documentation presented for approval to commercial banks by economic agents with activity in the agricultural sector. Problems arising in particular resulting from the analysis of documentation of such operators are treated separately, with the specification of peculiarities resulted from lending of unfinished production on the one hand and separately for the investment activity. We also proposed a brief overview of the main economic and financial indicators followed in financial analysis of agricultural companies, insisting where needed on specific elements and "traps" placed before credit analyst when considering such a documentation. Even if a more detailed treatment regarding the financial analysis of the company (in our case agricultural company) is not the subject of this paper, I went from the fact that non-compliance of standards and of internal procedures and, furthermore, not respecting the principles of economic analysis goes straight to the registration of non-performing loans for the lending bank.

Also in the third chapter we presented a case study of a company focused on agricultural production - field crops, the applicant intending to make investments for the purchase of

agricultural machinery and equipment, while modernizing and extending storage capacity and silage, all of these realized in the idea of increasing the achieved added value.

Through a case study I watched how the analysis is performed to comply with the group of creditworthiness by using the methodology of calculation of creditworthiness, the analyzed models being used by the Romanian Commercial Bank - Erste Bank, Raiffeisen Bank and BRD-GSG. In analyzing patterns applied to the case in question I explained the possible interpretations of various indicators compiled based on methodologies of those commercial banks, the final result being different. Coming under risk category resulted in placement of the firm in category B "under observation", for BCR Erste Bank, in category A "Standard" for Raiffeisen Bank in category B "under observation" for BRD-GSG. The calculation of creditworthiness was performed taking into account both quantitative criteria, financial and qualitative criteria, the conclusions being the same, with differences only in terms of different ways of calculating an indicator or another, or share that the score of different indicators has in total score.

In the final chapter I developed an individual model of analysis of indicators of creditworthiness, model that, in my opinion, aims to reflect realistically assertions concerning management of the firm in quantifiable results, departing from reporting two or more quantitative indicators. It was proposed a model of analysis that gives up mechanical taking from balances, by applying corrections and adjustments in the calculation of the indicators of creditworthiness, by deducting amounts that are risk factors, such as non recoverable stocks or doubtful debts for balance sheet assets, while reconsidering the value of unfinished production within the stocks, when its value and volume are consistent with the technological criteria for each culture.

However, the use of undifferentiated analytical methods depending on the specific of the applicant's activity (we cannot use for agricultural lending the same unsuitable analysis models, as when we're dealing with a company with activities focused on trade) leads certainly, to distorted conclusions regarding reality, the greatest risk being that the bank not to refer to potential risks and, ultimately, to abandon prudence criteria in granting loans.

The fourth chapter entitled "**The Structural and Cohesion Funds - alternative instruments for financing agricultural activities**" I presented the implementation way of Community policies resulted in the allocation and distribution of resources necessary for restructuring and modernization of Romanian agriculture during the period of accession to the European Union in 2007 to present. The chapter reviews all structural funds, but also those of cohesion with direct application in agriculture, referring to sector development programs, while describing direct measures provided in the multiannual programs of the European Union explicitly provided for Romanian agriculture. At the same time we intended to analyze the extent to which farms were able to access European funds, and the absorption of these funds to the volume allocated by these programs, trying to identify the causes that led to slow the absorption process or prevented directly the access to these funds for potential beneficiaries. This chapter also presents the main features of macroeconomic models HERMIN and AGMEMOD measuring the impact of Structural Funds and the Cohesion on agriculture, HERMIN estimates are presented on employment in agriculture, estimating the impact of EU funds in 2007-2013.

Also in this section are estimated three econometric models, using linear regression, in which we try to measure the effectiveness of funds allocated through the National Plan for Rural Development in agriculture every year, and correlations for each year to observe performances of each county regarding the efficiency of funds in the agricultural sector.

The chapter covers the funding of agriculture in terms of resource made available by the European Union, investment projects materialized in contracts and payments made EAFRD throughout the period since the accession of Romania to the European Union from 2007 to the present. We tried to make an analysis of the use of these funds both globally, by summing all payments made by the contracting authorities at national level, and also broken down for developing regions.

The fifth chapter entitled "**The risks in lending activity**" provides an applied analysis of the main components of risk in lending, processing the data presented in the Annual Reports of Raiffeisen Bank for the period between 2011 and 2014. The risks resulted from lending are analyzed separately, risks arising from the analysis of bank liquidity and solvency risk.

We analyzed from practical point of view the Raiffeisen Bank example of each type of risk during 2011-2014. Brief assessment of banking risk after analyzing the data presented in the annual reports for Raiffeisen Bank, for the period 2011-2014, shows a steady improvement in banking results corresponding to a constant increase in the volume of investments, even if the bank does not record a spectacular dynamics, with annual rhythms of small increases, but under minimal risk. Both credit risk and liquidity and solvency risks are optimum, the bank's general activity can be described as cautious, but steady in terms of key indicators that define the credit risk.

In the final chapter we presented a statistical analysis in which we chose a sample of twenty companies with agricultural purposes, given the title of the thesis. In this analysis we built a logistic model on panel data, we ranked companies considering simultaneously the values of the indicators for each firm (multi-criteria hierarchy), we analyzed in the principal components the data for the twenty companies with agricultural purposes in each year, according to credit risk and built a logistic model to explain the risk of credit and determination of company groups based on indicator values. With the "K-means clusters" method, for each of the years 2009-2013 we identified the groups of companies as registered indicators. Analyzing the distribution of companies on clusters, the 2 clusters obtained each year were presented as follows: 2009 (19 firms in cluster 1 and 1 firm in cluster 2), 2010 (13 firms in cluster 1 and 7 companies in the cluster 2), 2011 (18 firms in cluster 1 and 2 companies in cluster 2), 2012 (18 firms in cluster 1 and 2 companies in cluster 2) and 2013 (19 firms in cluster 1 and 1 firm in cluster 2).

Commercial banks operate the lending activity in a framework controlled by the banking law and own lending norms. They do not explicitly aim to create social benefits, immediate sectorial results and nor have in view practical application of economic policies, or the implementation of strategic objectives, which are exclusively the privilege of government or community policies. Moreover, the Romanian banking system does not have a bank specialized in crediting for agriculture, this sector of activity being credited only to the extent that borrowers who are operating in this field are able to demonstrate that they perform profitable tasks. It is true that since 2007, agricultural economic agents can access funding from the European Union bound for modernization and development of agriculture in all its

components, in particular, by obtaining funds bound for investments of productive nature. Given these considerations we can make the observation that, in terms of mechanisms for financing agricultural activities, agricultural credit at this time is exceeded in importance of funds obtained from European Union source, funds that have an important quality to be irredeemable.

We mention the fact that any proposal to improve lending activity as in the final scores that determine lending for agriculture to be registered in the internal working norms of the banks, providing bonuses to the final score for companies that have obtained financing agreements, or that have ongoing projects approved in the European Union source.

Starting from Romanian pedo-climatic conditions we make the observation that, during the annual cycles, corresponding to the agricultural year (an agricultural year interfering, but not coinciding with the fiscal year) can be made generally one production cycle or maximum two, as in the case of vegetables in greenhouses, or aviculture. This feature that keeps essentially to the seasonality of agricultural activity makes it difficult to interpret financial performance indicators calculated based on annual reviews. Typically, for November and December in particular for economic agents who have as basic activity field crops, there is no possibility to record revenue, these registering, in the absence of other activities exclusively expenses, which usually leads to recording the financial performance indicators decreased in value. For this aspect I consider it necessary to practice the amendment of the final score after analyzing qualitative indicators, much more important in this case being the following indicators: debt service, the degree of consolidation of lands, the degree of technical equipment, professional and managerial qualification, degree of coverage of production by firm contracts. I believe that meeting these quality criteria is much more important than precarious conjuncture of quantitative indicators obtained in a time of the year, irrelevant economically and resulted from an activity done hitherto in low technical and technological conditions.

Even if the state, sometimes as part of the European Union mechanism, promotes grants for agriculture, there is often a situation when economic agents do not have the financial means for crop establishment. Access to short-term loans is rightly in this case limited by the inability of farmers, regardless of farm size to pay monthly interest and fees. A proposal to this effect would target capitalization of such interest in the grace period, even if in turn they would be interest bearing and their payment with capital ratios following that subsidies paid from government sources or the European Union sources to cover at the end of production cycle, most of the expenses incurred by the crop establishment. It is possible that this thing to be done only after agreements between commercial banks and the Government of Romania, provided that granting government guarantees for the payment of subsidies. Of course such mechanisms can be implemented only if there is budgetary funding sources. In any case, treatment of economic agents in the undifferentiated agricultural sector, often following a valuation methodology undiversified process applied mechanically and without understanding the agricultural industry, leads to the abandonment of the projects selected for funding and for which operators do not have the financial means necessary to cover ineligible expenditure and, consequently, the loss of many Romanian agriculture development funds.