UDC 336.77:338.43(497.7)

# AGRICULTURAL CREDIT DISCOUNT FUND – AGRIBUSINESS SUPPORT CREDIT LINE IN MACEDONIA

**GoranKovachev, PhD**
Macedonian Bank for Development Promotion
goran.kovacev@mbdp.com.mk
http//:www.mbdp.com.mk

***Abstract***

*The main objective of this study is to emphasize the importance of creating special governmental refinancing institutions targeted towards strategic economic sectors. Such institution in Macedonia is Agricultural Credit Discount Fund, a separate unit within the Macedonian Bank for Development Promotion that administers a credit line meant to support the agribusiness. As it is commonly known agriculture is one of the most important economic sectors of the country. The ACDF* ***modus operandi*** *is a guideline to every similar potential fund, having in mind that it creates prerequisites of sustainable financial investments and substantial growth. The outstanding portfolio performance, fulfillment of the objectives and good impact on stakeholders is strong confirmation to this claim.*

***Keywords:*** *refinancing institutions, Agricultural Credit Discount Fund, Macedonian Bank for Development Promotion, agribusiness, sustainable financial investments*

## INTRODUCTION

The Agricultural Credit Discount Fund (ACDF) has been established in 2002, as a separate unit within the Ministry of Finance for the purpose of administration the Agricultural Financial Services Project (AFSP) or Second Loan Intervention of the International Fund for Agricultural Development (IFAD) in Macedonia (IFAD Loan 545-MK or IFAD II). IFAD has provided to Macedonia a Loan amounting SDR 6.2 mil. (USD 8 mil.) of which SDR 5.5 mil. (USD 7 mil.) i.e. the Incremental Credit Fund was for on lending to qualifying target group borrowers.[21]

As a result of ACDF's increased on lending activities, in 2005 the Macedonian Government capitalized the Fund with SDR 0.7 mil. (USD 1 mil.), remained from South and Eastern Regions Rural Rehabilitation Project

21) For IFAD 2 see: Official Gazette of Republic of Macedonia No. 107/2000

(SERRRP) or First Loan Intervention of IFAD in Macedonia (IFAD Loan 428-MK or IFAD I), previously administered by Sparkasse Banka Makedonija.[22]

In 2006, the volume of ACDF refinancing operations has increased rapidly, achieving significant portfolio growth, which resulted in overcoming the projections and faster disbursement of the Incremental Credit Fund. The biggest challenge ACDF faced at the beginning of 2007 was the insufficient amount of refinancing capital. This situation had significant consequences on ACDF refinancing operations. Suddenly, lending volume was reduced in a situation when Participating Financial Institutions (PFIs) had learnt to utilize the ACDF services as an instrument of expanding their rural finance operations and had ambitious plans to increase their rural outreach.

Fortunately, Government of Republic of Macedonia acknowledged the crucial role ACDF has played in the process of rural development. Especially having in mind that provision of affordable and at the same time economically viable agricultural loans is a significant element in strengthening the rural economy and reducing poverty in rural areas.[23] It has reviewed the possibilities of identifying additional funds for providing low-interest loans for the agricultural sector. Subsequently, the Government has decided to supplement the existing ACDF funds (from IFAD I and II sources) with the revolving funds from the two World Bank Private Sector Development Loans (PSDL I[24] and II[25]), previously administered by the National Bank of Macedonia (NBM) in order to increase the available funds for further agricultural lending. Following the Government decision, in November 2007 ACDF took over the whole responsibility for administration the PSDL I and II credit lines, consisted of EUR 8.2 mil. liquid funds and EUR 13 mil. outstanding portfolio i.e. receivables.

Due to excellent performance, the Government again in 2008 has decided to enrich the existing ACDF funds (now IFAD I, IFAD II, PSDL I and PSDL II) with the revolving funds from the European Investment Bank (EIB) APEX Global Loan, formerly also administered by NBM.[26] The transfer meant additional EUR 7.6 mil. liquid funds and EUR 9.7 mil. receivables. On the paramount of its operations at the end of 2008, ACDF revolving fund worth EUR 42 mil.  of which EUR 12 mil. liquid funds and EUR 30 mil. receivables.

As of mid-2010, ACDF unit has been operating within the state owned Macedonian Bank for Development Promotion (MBDP).

## OPERATIONS

The ACDF credit line is mainly targeted to agribusiness stakeholders i.e. individual farmers, rural households, agricultural, agro-processing and agro-export SMEs as well as Instrument for Pre-Accession Rural Development Program (IPARD) beneficiaries. The credit line's main objectives are:

- to create a framework for a sustainable agricultural finance sector within the Macedonian banking system;
- to integrate the smallholder agricultural SMEs and population in the banking system both as depositors and borrowers and
- to reduce the risk to agricultural sector financiers and borrowers through institutional and capacity building programs in support of sustainable commercial lending.

22) For IFAD 1 see: Official Gazette of Republic of  Macedonia No. 7/97

23) Efimija Dimovska – *Bringing Finance to Rural People – Macedonia's Case (working paper)*; EastAgri Annual Meeting; Istanbul, 2010; p. 1

24) For PSDL 1 see: Official Gazette of Republic of  Macedonia No. 47/1996

25) For PSDL 2 see: Official Gazette of Republic of  Macedonia No. 58/1997

26) For EIB APEX Global Loan see: Official Gazette of Republic of  Macedonia No. 4/2002 and 102/2008

ACDF is administered as discount or refinancing facility. Its refinancing operations are co-financing activities undertaken by both ACDF and selected PFIs. Twelve PFIs (10 banks and 2 saving houses) are utilizing ACDF revolving fund today. PFIs are eligible to draw down refinancing for a percentage of a sub-loan to qualifying beneficiaries at a rate of 80% that is set by the ACDF. PFIs are required to pre-qualify loans with the ACDF. They pay interest for the discounted amount at a level of 0.5% annually that serves as a financial incentive for them to expand agricultural lending activity.

The credit risk in on-lending operations is with the PFIs and there are absolutely none fiscal implications to the state budget. PFIs also provide a portion of the investment capital from their own funds (at least 20% of the loan amount) which is huge incentive for them to insist on-time repay by their beneficiaries. Each PFI is allowed to apply their own lending policies to sub-loans (i.e. collateral requirements, forms and documentation, repayment period, fees, etc.). For example, the operation fees vary between 0.5% and 3% of the loan depending the PFI, loan amount, investment type or repayment period. Only the interest rates are cupped and defined in the Subsidiary Loan Agreement signed between the PFIs and the Ministry of Finance. Beneficiaries are required to contribute a minimum of 20% to the cost of investment. The contribution is not mandatory to be in financial assets but in assets correlated to the investment credited. PFIs will then repay the discounted portion of the sub-loan to the ACDF in constant EUR terms and in accordance with the repayment schedule set for each sub loan. Individual sub-loans may also be indexed in foreign currency.

ACDF refinances a range of credit products defined in 3 categories:

- *Primary production loans* of max EUR 100,000 per borrower for investments and working capital meant for primary agricultural production (viticulture, horticulture, floriculture, livestock etc.);
- *Agro-processing loans* of max EUR 300,000 per borrower for investments and working capital meant for agro-processing industry (dairies, mills, wineries, fruit, vegetables and meat processing capacities etc.) and
- *Agro-export loans* of max EUR 300,000 per borrower for investments and working capital meant for primary and processed agro-products exports.

The best competitive advantage of this credit line is the interest rate cap for the beneficiaries. The interest rate is fixed and set to 4% annually (through banks) and 6% annually (through saving houses) for the first credit category and 5% annually (through banks) and 6.5% annually (through saving houses) for the second and third credit categories. These interest rates are the lowest on Macedonian credit market at the moment.

ACDF provides quality lending by continuously promoting it as commercial, not Government subsidized under the circumstances. The ceiling on interest rates lower than actual capital market rates was voluntary concession by the PFIs in negotiations with the Government. They received funds from ACDF under much favorable terms than the capital markets regime, which allows them a reasonable margin.

## PORTFOLIO ANALYSIS[27]

### *By Credit Category*

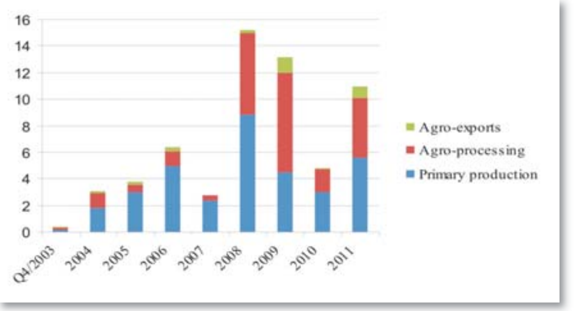
A total of 5,208 loans in amount of EUR 60.6 mil. have been approved from ACDF funds for the period October 2003 – December 2011 (*Chart 1*). This capital injection into the rural economy represents a substantial contribution to rural development from a scheme that has been fully operational for only eight full years. The overall amount of loans underestimates the total value of induced investment, since borrowers' own equity contributions to the associated businesses are not included.

27) Macedonian Bank for Development Promotion is a sole source of data presented in this subtitle.

***Chart 1***

ACDF Loans

Disbursement by Years (in million EUR)




The tendency of using credit funds for agro-processing i.e. for producing added value in the last 4 years is evident. This indicates that Macedonian agro-stakeholders are more and more oriented towards finalization, rather than producing primary agricultural goods.

Around 56% of the total credit portfolio ended for primary agricultural production, 38% were utilized for investments in agro-processing, while only 5% supported agro-export activities (Table 1). Unfortunately, the average loan size of EUR 11,629 is still too low and not according the requirements for intensive agriculture.

**ACDF Loans Disbursement by Credit Category as of December 31st, 2011**

***Table 1***

| Credit Category | Number of Loans | % | Amount (EUR) | % | Average Loan (EUR) |
|---|---|---|---|---|---|
| Primary Production | 4,854 | 93 | 34,113,515 | 56 | 7,028 |
| Agro-processing | 303 | 6 | 23,294,051 | 38 | 76,878 |
| Agro-export | 51 | 1 | 3,157,922 | 5 | 61,920 |
| **Total** | **5,208** | **100** | **60,565,488** | **100** | **11,629** |

## By Regional Distribution

The regional disbursement of the ACDF funds is diverse. On-lending activities are far more intensive in the Southeastern compared to Southwestern statistical region (*Map 1*).

***Map 1***

| | |
|---|---|
| | 0-3 |
| ACDF Loans | 3-6 |
| Disbursement by | 6-9 |
| Statistical Regions | 9-12 |
| (in million EUR) | 12-15 |

In 2009, ACDF unit has analyzed the disturbances in regional lending. The study showed that imbalances in credit demand are as a result of several factors:

- Mentality of the population in statistical regions with lesser lending activities is oriented towards friends and family financing (FFF), rather than commercial lending;
- Climate differences between regions cause the significance of agriculture in southern and eastern parts of Macedonia to be stronger. Population in these regions is more agriculturally active than others;
- The northern part of the country is predominantly urban, oriented towards industry and services, rather than agriculture. Three out of four biggest cities are far north. This causes necessity for additional financing in agri-business there to be limited;
- Southwestern and Polog population is traditionally oriented towards mid-term economic immigration in other countries. As a result, the remittances sent to these regions are high, hindering the demand for commercial credits.

**ACDF Loans Disbursement by Statistical Region as of December 31st, 2011**

*Table 2*

| Statistical Region | Number of Loans | % | Amount (EUR) | % | Average Loan (EUR) |
|---|---|---|---|---|---|
| Pelagonija | 633 | 12 | 7,749,598 | 13 | 12,243 |
| Skopje | 268 | 5 | 4,681,042 | 8 | 17,467 |
| Vardar | 1,285 | 25 | 11,190,686 | 18 | 8,709 |
| Southeast | 1,041 | 20 | 13,754,411 | 23 | 13,213 |
| Northeast | 743 | 14 | 5,295,154 | 9 | 7,127 |
| Polog | 125 | 2 | 3,847,324 | 6 | 30,779 |
| Southwest | 116 | 2 | 2,390,539 | 4 | 20,608 |
| East | 997 | 19 | 11,656,733 | 19 | 11,692 |
| **Total** | **5,208** | **100** | **60,565,487** | **100** | **11,629** |

As it can be seen in *Table 2*, about 23% of the loans have been approved in Southeast and only 4% in Southwest, creating ratio of 5.7 to 1. What seems to be more interesting is that average loan of Polog region (EUR 30,779) is the highest and the one of Northeast (EUR 7,127) is the lowest (ratio 4.3 to 1). This is an indication that economic strength of Polog farmers and agro-businessmen is 4.3 times stronger than Northeastern, showing the gap in economic performances between regions at the same time.

## By PFIs

As said before, the role of PFIs in disbursement ACDF funds is crucial. The beginning of ACDF in 2003 was supported by 3 banks only (Sparkasse Banka Makedonija, Komercijalna Banka and NLB Tutunska Banka), all of them mainly oriented towards SME's rather than individual farmers. The big breakthrough in lending to farmers happened in 2004 when saving houses Moznosti and FULM were introduced to the Program. Their flexibility in on-lending activities opened ACDF funds to individual farmers on great cheers by the later. This was actually for first time ever small individual agricultural producers to have access to favorable loans on the Macedonian capital market. Finding their own interest in attracting this focus group to their banking operations, other banks also signed Sub-Loan Agreements with the Ministry of Finance and joined ACDF refinancing activities (2 in 2005, 2 in 2008 and 3 in 2011). This action dramatically expanded the outreach of ACDF refinancing on level of some of the smaller Macedonian banks.

The best performed PFI in using ACDF refinancing is by far NLB Tutunska Banka, disbursing 32% of the number of loans and 33% of the refinanced capital, followed by Sparkasse Banka Makedonija (26% and 27% respectively) and others (Table 3).

**ACDF Loans Disbursement by PFIs as of December 31st, 2011**

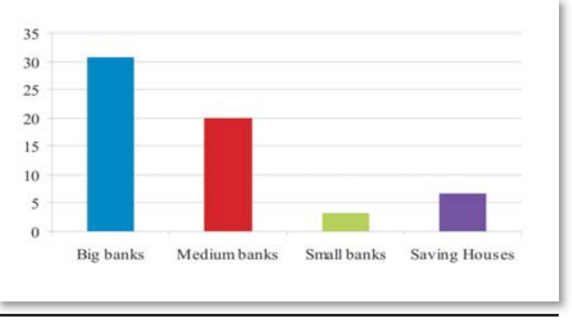
*Table 3*

| PFI | Number of Loans | % | Amount (EUR) | % | Average Loan (EUR) |
|---|---|---|---|---|---|
| Komercijalna Banka | 130 | 2 | 9,919,368 | 16 | 76,303 |
| Sparkasse Banka Makedonija | 1,364 | 26 | 16,101,857 | 27 | 11,805 |
| UNI Banka | 5 | 0 | 476,677 | 1 | 95,335 |
| NLB Tutunska Banka | 1,650 | 32 | 20,200,742 | 33 | 12,243 |
| Ohridska Banka SGG | 2 | 0 | 578,836 | 1 | 289,418 |
| Stopanska Banka Bitola | 32 | 1 | 1,333,981 | 2 | 41,687 |
| CKB Banka | 185 | 4 | 1,926,684 | 3 | 10,415 |
| FULM | 241 | 5 | 563,497 | 1 | 2,338 |
| Moznosti | 1,537 | 30 | 6,157,201 | 10 | 4,006 |
| ProCredit Bank | 61 | 1 | 3,265,994 | 5 | 53,541 |
| TTK Banka | 1 | 0 | 40,650 | 0 | 40,650 |
| Stopanska Banka Skopje | 0 | 0 | 0 | 0 | 0 |
| **Total** | **5,208** | **100** | **60,565,487** | **100** | **11,629** |

Analyzing average loan size, it is noticeable that PFIs with small percentage of approved loans (Ohridska Banka SGG, UNI Banka and to some extent Komercijalna Banka) have high loan average i.e. they exercise conservative lending policy oriented towards selected key clients. On contrary, PFIs with lower loan average (Sparkasse Banka Makedonija, NLB Tutunska Banka, Moznosti and FULM) have far more relaxed credit policy and mainly credit individual farmers and small agricultural enterprises.

***Chart 2***

ACDF Loans Disbursement by PFI Size (in million EUR)




As it can be expected, big banks have the biggest portion of refinanced loans of EUR 30.7 mil. or 51% (*Chart 2*), followed by medium banks (EUR 19.9 mil. or 33%), saving houses (EUR 6.7 mil. or 11%) and small banks (EUR 3.3 mil. or 5%).[28] Seeing this chart and considering total assets value compared to ACDF refinancing, it can be concluded that saving houses are more farmer friendly in lending than small banks and medium banks are more than big banks.

28) According to NBM regulations, “Big Bank” is considered every bank with assets of MKD 15 bil. (EUR 244 mil.) and over (here: Komercijalna Banka, Stopanska Banka Skopje, NLB Tutunska Banka and Ohridska Banka SGG). “Medium Bank” is considered every bank with assets between MKD 2 bil. and 15 bil. (EUR 33 mil. and 244 mil.), here: Sparkasse Banka Makedonija, UNI Banka, ProCredit Bank and TTK Banka. “Small Bank” is considered every bank with assets of MKD 2 bil. (EUR 33 mil.) and less (here: Stopanska Banka Bitola and CKB Banka).

### By Gender

ACDF strongly supports equal opportunities in funds availability to beneficiaries. In 2003-2011, exactly 4,340 loans amounting EUR 46.4 mil. (77%) were disbursed to male beneficiaries and 868 loans amounting EUR 14.2 mil. (23%) were disbursed to women. The average loan size (EUR 10,682 for male and EUR 16,366 for female beneficiaries) indicates that women have "more courage" when deciding to borrow than men and that they perform better when lending and repaying. ACDF is continuously informing PFIs that lending to women borrowers should be prioritized and increased to the satisfactory extent, having in mind that in some cases they are carriers of the households' rural and agricultural activities.

### By Credit Amount

Macedonian primary agricultural production is mainly small and fractious. Therefore, it's not surprising that a share of 82% of the disbursed loans and a share of 30% of the disbursed funds are EUR 10,000 and less (*Table 4*).

**ACDF Loans Disbursement by Individual Loan Amount as of December 31st, 2011**

***Table 4***

| Individual Loan Amount | Number of Loans | % | Amount (EUR) | % | Average Loan (EUR) |
|---|---|---|---|---|---|
| up to 10,000 | 4,277 | 82 | 17,823,816 | 30 | 4,167 |
| 10,001-50,000 | 704 | 13 | 16,399,082 | 27 | 23,294 |
| 50,001-100,000 | 151 | 3 | 11,807,952 | 19 | 78,198 |
| 100,001-200,000 | 64 | 1 | 10,739,263 | 18 | 167,801 |
| over 200,000 | 12 | 0 | 3,795,374 | 6 | 316,281 |
| **Total** | **5,208** | **100** | **60,565,488** | **100** | **11,629** |

*Note: The anomaly of higher average loan of EUR 316,281 than maximum limits of EUR 300,000 is due to higher temporary limits of EUR 700,000 for wineries and EUR 500,000 for the rest of agro-processors allowed for working capital procurements in the period 2009-2011, as well as EUR 400,000 for greenhouses in 2011.*

It is noticeable that few agribusinesses can sustain credit exposure of over EUR 200,000. Thus, the capacity of borrowing in Macedonian agro-industrial complex is limited on loans between EUR 5,000 and EUR 100,000 which is highly unfavorable for the efforts of improving the sector competitiveness.

### By Beneficiaries of National Financial Support Programs for Agriculture

In the analyzed period, 693 beneficiaries of national financial support programs for agriculture also used loans from ACDF. Compared to ACDF portfolio this is a share of 13% of the total number of approved loans. The structure shows that 508 beneficiaries were users of Direct Payments, 163 were participating in the Rural Development Program, while 22 were supported by the IPARD Program. All of these 693 beneficiaries are to be congratulated since they benefited from some or all Government incentives to agribusiness, showing therefore a strong entrepreneurial spirit.

ACDF unit operations also carry an obligation of analyzing quarterly reports from PFIs considering ACDF loans cumulative repayment rate, portfolio quality, collateral requirements, reasons for rejections with PFIs credit committees and rejection rate.

### Cumulative Repayment Rate

The full credit risk of all ACDF-refinanced loans is with the PFIs. Their obligation is to repay the refinanced principal plus interest back to ACDF revolving fund even in cases when the final borrowers delay their repayments. While the credit risk of individual loans is with the PFIs, it is of interest for ACDF to follow-up the actual repayment by clients.

Above all expectations, the cumulative repayment rate of ACDF loans is more than satisfactory. The worst, but still bearable result was notified in 2009 (94.5% cumulative repayment rate) when global financial crisis sharply stroke nearly everyone including agribusiness itself (*Table 5*). Fortunately, in 2011 only 2.9% of ACDF loans were default. This near excellence was partly a result of accelerated recovering or writing off in the banking system in general after the crisis. Considering that percentage of defaulters in Macedonian banking sector varied between 8% at the end of 2009, 9% end of 2010 and 9.5% end of 2011,[29] it is clearly evident that ACDF beneficiaries are far more sustainable and serious in fulfilling their repayment obligations than the rest of economic operators in the country.

### ACDF Loans Cumulative Repayment Rate (in %)

***Table 5***

| End of Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| Repayment Rate | 96.1 | 96.3 | 95.4 | 94.5 | 96.1 | 97.1 |
| Default | 3.9 | 3.7 | 4.6 | 5.5 | 3.9 | 2.9 |

### Portfolio Quality

In addition to cumulative repayment rate, ACDF also analyses the portfolio quality of loans disbursed (*Table 6*).

### ACDF Portfolio Quality Progress (in thousands of EUR)

***Table 6***

| Days in Arrears | End of 2008 | % | End of 2009 | % | End of 2010 | % | End of 2011 | % |
|---|---|---|---|---|---|---|---|---|
| Up to 30 | 16,825 | 92.4 | 23,347 | 81.0 | 19,803 | 92.3 | 20,580 | 94.8 |
| 31-180 | 1,217 | 6.7 | 5,151 | 17.9 | 932 | 4.3 | 746 | 3.4 |
| 181-270 | 94 | 0.5 | 144 | 0.5 | 364 | 1.7 | 180 | 0.8 |
| Over 270 | 71 | 0.4 | 179 | 0.6 | 356 | 1.7 | 199 | 1.0 |
| **Total outstanding** | **18,207** | **100.0** | **28,821** | **100.0** | **21,455** | **100.0** | **21,705** | **100.0** |

As it can be seen, the outstanding portfolio with up to 30 days in arrears varies between 81% in 2009 and 94.8% in 2011. This is considered to be highly satisfactory. Namely, due to the specific nature of agriculture and agro-processing industry, up to 30 days delay is not considered risky. Furthermore, it is commonly known that PFIs not always follow the sector's inflows and outflows when creating repayment schedules. Therefore, an up to 30 days delay in repayment is practically unnoticeable.

The burden of 2009 financial crisis is also evident in this aging portfolio analysis. High percentage of almost 18% of portfolio between 31 and 180 days in arrears in 2009 created a peak of 1.7% nonperforming loans (over 270 days in arrears) in 2010. As a result, the PFIs in 2010 introduced more conservative approach in lending by reducing the outreach and orienting towards feasible and profitable investment projects. This

29) UtrinskiVesnik – *No. 866* of April 26th, 2012; p. 6

credit policy caused total outstanding decrease by over EUR 7 million, but desirable credit risk reduction. The improvement came in 2011, manifested by a highest percentage of non-risky portfolio up to 30 days in arrears (94.8%) as well as bearable portfolio between 31 and 180 days in arrears (3.4%).

As an addition, ACDF within its authority has continuously monitored clients' lending performances in order to determine whether its funds were used properly and according to the criteria, policy and procedures. As of the end of 2011, ACDF unit has monitored 2,761 beneficiaries and discovered only 60 misuses and fouls, or about 2%. Considering number of clients inspected as well as total number of loans lent, this is a very small percentage of misuse indeed. The logical conclusion that indicates beneficiaries' responsibility, seriousness and honesty in using credit funds is therefore inevitable.

## Collateral

Since PFIs carry the risk of loans repayment, they have full discretion of loan collateralization according to their own policies and procedures. In this process all available instruments provided by law - tangible collateral (mortgages and pledges) and soft collateral (personal guarantees, cash cover, insurance policies, bills of exchange etc.) are used. Having this in mind, ACDF loans with PFIs were covered as following*:

- 1,109 loans with mortgage on housing and production facilities, 699 of which in urban and 410 in rural areas;
- 523 loans with mortgage on agricultural land;
- 269 loans with pledge on tangible assets (equipment, mechanization, herds, vehicles);
- 3,766 loans with personal guarantees (guarantors) mainly supported by bills of exchange,
- 196 loans with cash cover and
- 3 loans with insurance policies.

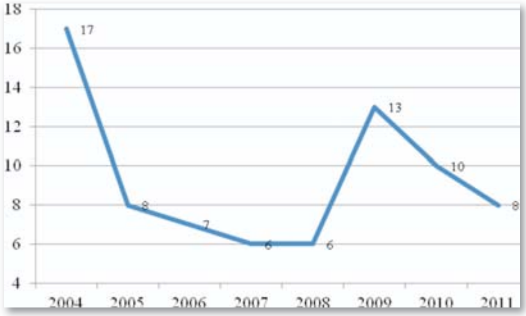
*) *Note: Some loans were covered by two or more collateral instruments.*

## Applications Rejection

The decision making for ACDF loan applications is bi-leveled, with the PFIs' loan decision bodies and later with the ACDF Credit Committee. The risk of default requires a specific in-depth analysis of loan applications mainly articulated by both quantitative and qualitative parameters. Unfortunately, sometimes one, several or all of these required performances are not fulfilled by the applicants, creating therefore grounds for rejection. *Chart 3* shows the rejection rate of loan applications by PFIs Credit Committees.

***Chart 3***

Rejection Rate by PFIs Loan Decision Bodies (in %)



The cumulative loan applications' rejection analysis indicates that 474 out of 5,836 loan applications received have been rejected by the PFIs' credit committees, which is 8.1% rejection rate. In Chart 3 is shown how the rejection rate followed the investment risk anticipated by the banking sector through years. For instance, the country's recovery from 2001 insurgencies and restraints in agricultural lending caused 17% rejection rate in 2004. The global and national economic and financial expansion lowered this rate to 6% in 2007 and 2008, but the opposite tendencies again brought it to 13% in 2009. The stabilization was seen in 2008 with bearable 8% of rejected projects for financing by the PFIs.

The most common reasons for rejection of the loan applications by PFIs' credit committees are presented in Table 7. It is noticeable that insufficient collateral is still an "open wound" for potential agricultural investments to be lent. Fortunately, compared to previous years PFIs have relaxed their collateral policy as one of the major obstacles in lending in general and they have put bigger emphasis on the businesses themselves.

**Reasons for Loan Applications Rejection by PFIs as of December 31st, 2011**

***Table 7***

| Reason | Applications Rejected | % |
|---|---|---|
| Incomplete Documentation | 57 | 12 |
| Insufficient Collateral | 172 | 36 |
| Cancelation by Applicants | 50 | 10 |
| Indebtedness | 42 | 9 |
| Insufficient Business Volume | 60 | 13 |
| High Risk | 54 | 12 |
| Potential Misuse | 35 | 7 |
| Other | 4 | 1 |
| **Total** | **474** | **100** |

The ACDF Discount Credit Committee on the other hand, has rejected 154 out of 5,362 loan applications received from PFIs, mainly because of potential misuse and non-compliance to ACDF refinancing credit criteria. This is less than 3% rejection rate, or by far better approvement flow than PFIs' credit committees.

## IMPACT

### On Beneficiaries

ACDF's most obvious impact on beneficiaries is *decrease of rural poverty*. The refinancing operation, with over EUR 34 mil. invested in primary agricultural production, successfully reached smaller-scale, asset poor households. The outcomes from the regular monitoring and assessment show that these borrowers develop their businesses and become economically stronger with the realized investments.

The ACDF borrowers also benefited from the *improved competitiveness* of their businesses, manifested by modernization of equipment and production technologies as well as improved products' quality and value added. The value of assets and equipment together with production capacities of agro-processing industry increased with the investment in equipment and working capital. Over EUR 15 mil. was used to buy working capital, mainly from domestic suppliers (individual farmers), who at the end of the day benefited from these lending arrangements. At the same time, the agro-processors spent over EUR 7 mil. to buy production equipment and restructure their production techniques in order to keep pace with the modern technologies, hence to improve their competitiveness.

ACDF operations also *influenced the unemployment rate* by increasing the engaged labor at the farm level and agro-processing companies. Individuals are engaged on longer term basis in agriculture, having larger income and feeling more secured. The number of employees in agro-processing companies had also permanently risen. The very poor, including those without agricultural assets, gained access to seasonal employment arising from production increases, enhanced marketing and hence increased employment requirements for product handling, sorting and packaging at the processor level. Exactly 14,266 new jobs were supported by ACDF loans in the analyzed period.

Last, but not least crucial importance of the ACDF credit line is *increased income* to beneficiaries. Considering the 2% average agricultural BDP growth in the period 2004-2011, the investments in primary agricultural production resulted in total value added of EUR 5.4 mil. The investments in agro-processing industry on the other hand resulted in total value added of EUR 16.1 mil. (considering 8% average agro-processing industry BDP growth).

ACDF strategy was the recognition of the family farm as the core entrepreneurial unit in the emerging market-oriented rural economy in Macedonia. By directing agricultural financial support to such, it was expected not only to improve the standard of living of farm families, but also to impact favorably on other rural poor without access to agricultural assets. Farmers and other rural entrepreneurs have become increasingly connected to the formal financial sector on a systematic and commercially viable basis. Greater production entailed an increased labor requirement and contributes to absorbing new entrants to the labor force. Intensification of production has increased the demand for on-farm labor and suppliers of inputs, while increased output offered scope for private investments in processing and trading enterprises, thereby creating further employment opportunity and means to enhance linkages in the rural economy. The appropriateness and success of the ACDF approach can be measured not only in terms of the absolute number and amount of loans refinanced, but also in terms of the wider effects induced among PFIs and the target population.

**On Participating Financial Institutions**

The provision of financial services to the rural and agricultural sector in Macedonia was rather limited until few years ago. The banks' perception of high risks in agricultural lending combined with high delivery costs as well as profits enjoyed in lending to other sectors, inhibited formal financial services' penetration into the agricultural financial market. Poor loan recovery with several donor-financed rural lending operations compounded bank concern. Most banks had limited experience in dealing with small and medium-scale agricultural producers and their enterprises and few trained staff to deal with rural clientele. In that environment, when the country's banks lent to agriculture, they tent borrowers to be large, commercial farming and agro-processing enterprises with well-established marketing channels for their products.

One of the basic objectives of the ACDF was to *create a framework for a sustainable agricultural finance sector within the Macedonian banking system*, through establishment an agricultural refinancing facility. After nine years of operation, ACDF has undoubtedly achieved it. Various PFIs now actively use the ACDF scheme to start their lending operations to small rural clients from their branch offices for the first time and have started to compete of clients by offering ACDF-refinanced loans.

The *increased competition between PFIs* in attracting new clients made the loans more available to individual farmers i.e. the loan terms (interest rates, repayment periods, collateral requirements, fees etc.) became more favorable. While there was an interest rate cup for ACDF loans, the repayment periods finally followed the specific needs in agriculture, the collateral policy was by far relaxed towards accepting mortgage on rural housing/production facilities, agricultural land, pledge on agricultural mechanization/equipment and fees have also been lowered. This "positive transfer" of appropriate approaches to service delivery and products between banks is among the key measures originally identified for ACDF success.

ACDF has succeeded in convincing PFIs to understand the unnoticed financial potential of agriculture. As a result, *the PFIs agribusiness credit portfolio has dramatically expanded*. In 2009, ACDF unit has conducted a survey asking PFIs about the impact its credit line has on their operations between 2003 and 2008. According to their responses, the results were positively astonishing:

- The share of agricultural credit portfolio in their total credit portfolio increased from 13.4% to 35.9%;
- The agriculture credit portfolio rose by 168%;
- The network of branches included in receiving and processing loan applications for agriculture expanded from 2 to 74;
- The number of credit officers included in agriculture lending rose from 18 to 189;
- Average annual interest rate for loans supporting agriculture plummeted from 15.7% to 9.2%;
- Most of the PFIs had experienced increased customer interest for loans in agriculture.

The achievement of the objectives set was a long process of joint cooperation between ACDF, PFIs and other involved partners. A number of activities were taken to this manner. ACDF has organized and implemented significant number of capacity building and training programs for PFIs' staff performed by highly respectable international financial training institutions, which had strong impact on increasing PFIs activities. This has included better involvement of their branches in the loan processing operations, mitigating credit risk, improving quality in processing loan applications etc. For example, in the above mentioned questionnaire, PFIs have responded that thanks to these trainings, duration of loan application processing was cut from 20 to 13 days. At the end of 2011, this figure has dropped to 11 days.

The excellent repayment rate of the ACDF refinanced loans is also having direct effect on the increased PFIs interest to expand their agricultural lending. Today, the financial institutions clearly see the potentials of the agricultural sector, as well as the effects from investing in it. This is pretty evident in the change of the loan portfolio of the financial institutions, where the share of the agricultural portfolio in the total portfolio is continuously increasing.

### On Macedonian Economy

To assess the impact of ACDF lending to country's agro-industrial complex and economy in general, it is of crucial importance to present a brief analysis of sub-sectorial loan disbursement (Table 8).

### Loan Disbursement by Agribusiness Sub-sectors as of December 31st, 2011

***Table 8***

| Sub-sector | Number of Loans | % | Amount (EUR) | % | Average Loan (EUR) |
|---|---|---|---|---|---|
| Livestock | 1,961 | 38 | 13,144,911 | 22 | 6,703 |
| Fruit | 459 | 9 | 3,662,017 | 6 | 7,978 |
| Viticulture | 883 | 17 | 5,030,147 | 8 | 5,697 |
| Horticulture | 1,551 | 30 | 12,276,441 | 20 | 7,915 |
| Dairies | 51 | 1 | 2,913,945 | 5 | 57,136 |
| Meat Processing | 14 | 0 | 1,472,368 | 2 | 105,169 |
| Mills | 83 | 2 | 6,962,967 | 11 | 83,891 |
| Vegetables Processing | 69 | 1 | 4,369,764 | 7 | 63,330 |
| Fruits Processing | 15 | 0 | 1,499,530 | 2 | 99,969 |
| Vineries | 44 | 1 | 4,766,569 | 8 | 108,331 |
| Other Agro-processing | 27 | 0 | 1,308,907 | 1 | 48,478 |
| Primary Agro-products Exports | 50 | 1 | 3,082,922 | 5 | 61,658 |
| Processed Agro-products Exports | 1 | 0 | 75,000 | 0 | 75,000 |
| **Total** | **5,208** | **100** | **60,565,487** | **100** | **11,629** |

As it can be observed from the table, the highest interest the beneficiaries had for livestock purchases. Out of listed 22% of the loan amount, 9% went for cattle, 4% for sheep and goats, 3% for pigs, 2% for poultry and the rest 4% for other livestock. These funds were mainly used to purchase:

- 32,632 sheep, lambs, goats and kids (6% of the nation's sheep/goats livestock)
- 11,034 cattle (6% of the nation's cattle livestock),
- 6,011 pigs (2% of the nation's pig livestock),
- 164,773 heads of poultry (6% of the nation's poultry) and
- app. 10,000 tons of fodder.

About 20% of the funds were used for horticulture, mainly to construct 177 ha of plastic tunnels and 6 ha of greenhouses. Practically, 40% of plastic tunnels and greenhouses in the country were built or reconstructed with ACDF funds. The loans for viticulture were used for raising 684 ha of vineyards (5% of the nation's vineyards) and those for fruit growing, for raising 574 ha of fruit yards (mainly apples, peaches and plums), or 4% of the fruit yards in the country. About 449 ha of agricultural land were covered with irrigation systems. The rest of the funds were used to buy 421 tractors (1% of the tractors in the country), 6 harvesters, 274 pieces of additional auxiliary mechanization and 72 ha of agricultural land.

The lending to agro-exporting companies influenced the *agricultural exports boost*. Nearly EUR 3.2 mil. went in purchasing domestic agricultural products for export purposes that resulted in net exports of approximately EUR 10 mil. added to the country's capital account.

One of the key roles of ACDF was *strengthening the supply chain connections*. Having in mind that the three loan categories form a supply chain circle, ACDF operations are an excellent example of how these three supply chain stakeholders should be financially supported. Besides direct supporting of new jobs, ACDF helped in supply chain integration of 64,291 individual suppliers of agricultural products by lending to agro-processors and agro-exporters. As mentioned before, the latter used the loans to purchase agricultural goods, expanding therefore their network of individual suppliers.

At the end, ACDF as a separate unit within the Ministry in Finance and latter within MBDP, in its operations strongly insisted in including farmers and other beneficiaries to formal channels of the economy, thus creating basis for taxation and *increased revenues to national budget*. Transferring loan assets directly to the banking accounts of the suppliers, insisting on payment by invoices and contracts registered with the notary and mandatory attachment of all necessary licenses and approvals to loan applications, narrowed the possibilities of tax evasion and other “grey economy” activities.

## CONCLUSION

### For Beneficiaries

ACDF is the most favorable credit line on the capital market. Nevertheless, during the analyzed period, ACDF has refinanced 4.369 loans to individual farmers which is less than 1% of people included in agriculture (according to 2007 Macedonian Agriculture Census). At the same time, 839 SMEs used ACDF funds which accounts about 25% of the enterprises registered to be working in the agro-industrial complex. This data appoint to certain lack of information among agribusiness stakeholders about the possibilities of gaining cheap finance to their businesses. Even the ones who are aware of the existence of such finances are reluctant to fulfill policy conditions required for granting a loan.

It is of great importance for farmers and agribusiness SMEs to be in constant search of improvement their competitiveness. One of these efforts is permanent and on time gathering information about availability, criteria, preconditions and innovative concepts of financing. Once these finances are located, next effort is to do all the best to meet their prerequisites in order to obtain these finances.

**For PFIs**

Between 2003 and 2009, the author of this paper made a survey on the problems beneficiaries faced when applying for ACDF credit at PFIs. On a sample of 509 beneficiaries a sole question has been posed: "*What was your biggest problem in the process of applying and getting ACDF loan*? The responses were as following:

- High collateral requirements – 198 beneficiaries (39%);
- Long process of approval – 112 beneficiaries (22%);
- Inadequate terms of repayment – 81 beneficiaries (16%);
- High interest rate - 31 beneficiaries (6%) and
- Did not have serious problems - 87 beneficiaries (17%).

This result suggests that PFIs still have strong, yet conservative approach in terms of collateral requirements. Even though ACDF credit line "has persuaded" PFIs to accept farmers as relevant business partners and therefore to accept their rural premises (agricultural land, rural housing and production facilities, equipment, mechanization, herds) as collateral it is clearly evident that PFIs' collateral policy needs further relaxation in order to expand their outreach.

It is also noticeable that remote, mountainous, border villages are under-represented in commercial lending. Financial institutions commonly justify their lack of operations to these rural areas with poor profitability that cannot generate the cash flows needed for adequate debt-servicing, high transaction costs, poor infrastructure, low value and unregistered property with unidentified ownership that generates high lending risk.

ACDF illustrates that with appropriate, tailored, commercially driven support measures in place, confidence of financial institutions in rurally based lending can be generated, including in the perceived "high risk" areas of lending to individuals in remote rural areas. The ACDF results also showed quite clearly that rural farmers and small-scale entrepreneurs are able to invest successfully on the basis of commercial borrowing and thereby markedly improve their incomes.

While initially offering incentives to all interested financial institutions to expand their rural operations, the longer-term objective of these interventions has been that the banks and other financial operators would increasingly start to consider rural small and medium-scale producers and enterprises as a part of their mainstream clientele that would in the future be served wholly with the banks own resources.

**For the Country**

The Macedonian Government acknowledges the crucial role ACDF has played in the past nine years and sees the role ACDF can play in the future regarding the usage of EU pre-accession funds. In short to medium-term, the Macedonian Government's emphasis on rural development as part of the EU convergence process is expected to ensure that preferential refinancing rates continue to be available through ACDF in order to encourage higher levels of PFI investment in agriculture and related industries and serve rurally-based customers.

Providing agricultural sector with preferable credit lines under terms and conditions acceptable to each farmer and SME will became a challenge for using favorable funds for achieving EU goals and standards. These loans would ensure resources for financing agriculture and rural development projects, thus preparing them to use pre-accession IPARD fund in near future.

## POLICY RECOMMENDATIONS

ACDF refinancing activity is an original method of soft subsidy to interest rates not in contrary to WTO Agreement on Subsidies and Countervailing Measures. This operation prevents direct subsidies on interest rates (forbidden by WTO) and states them as a voluntary concession by the PFIs in order to expand their outreach. It is evident that this was very effective way to encourage lending to agribusiness.

Recognizing the quality of ACDF operations, Macedonian Government decided as of July 1st, 2010, ACDF unit to be transferred from Ministry of Finance to MBDP and to continue administering the revolving credit fund on commission principle (on behalf of the Ministry of Finance) in best practice. However, foreign credit lines of which ACDF revolving fund is consisted are in deep process of repayment to the creditors. This creates continuous decrease of available funds for further lending to target groups. At the end of Q1/2012, ACDF account had balance of only EUR 0.9 mil. liquid funds and EUR 26 mil. receivables. Because of the importance the credit line has to all stakeholders (beneficiaries, potential borrowers, PFIs, the country) as well as huge financial potential of EU Pre-accession Funds for Agriculture and Rural Development designated to Macedonia it is our suggestion that:

ACDF revolving credit fund should be capitalized with at least EUR 10 mil. In order not to overpressure the national budget, this can be realized by annual transfers of EUR 2 mil. from state to ACDF account in the next 5 fiscal years. Practically, a new sustainable Fund would be created to meet the financial needs of the target group, once majority of liabilities to foreign creditors are repaid.

Along with the financial strengthening it is of great importance that human resources of ACDF unit should also be enhanced so it can appropriately respond to increased demands.

## REFERENCES

[1] Dimovska Efimija – *Bringing Finance to Rural People-Macedonia's Case (working paper)*; EastAgri Annual Meeting; Istanbul, 2010

[2] Macedonian Bank for Development Promotion, *data from internal sources*

[3] Official Gazette of Republic of Macedonia, *No. 47/1996, 7/1997, 58/1997, 107/2000, 4/2002 and 102/2008*

[4] UtrinskiVesnik, *No. 866* of April 26th, 2012