# ECONOMISTI ASSOCIATI

# IMPACT EVALUATION OF THE CEP MATCHING GRANTS AND LINE OF CREDIT COMPONENTS

## FINAL REPORT

submitted by

### **Economisti Associati**

in collaboration with

Associazione per lo Sviluppo della Valutazione e l'Analisi delle Politiche Pubbliche

**Agrex NGO** 

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#### MAIN ABBREVIATIONS AND ACRONYMS

ASA	Ancheta Structurală Anuală
BAS	<b>Business Advisory Services</b>

BNS Biroul Național de Statistică al Republicii Moldova

CCI Chamber of Commerce and Industry
CDD Conditional Difference in Difference
CEP Competitiveness Enhancement Project

CL Credit Lines

CLD Credit Line Directorate
DID Difference in Difference

EBRD-BAS European Bank for Reconstruction and Development - Business Advisory Services

GDP Gross domestic product IEE Industrial Energy Efficiency IMF International Monetary Fund

LOC Line of Credit

MGF Matching Grant Facility

MoSEFF Moldovan Sustainable Energy Financing Facility

MSME Micro, Small and Medium Enterprise
MSTQ Metrology, Standards, Testing and Quality

OECD Organization for Economic Co-operation and Development

OLS Ordinary Least Squares
PIU Project Implementation Unit

PSM-DID Propensity Score Matching Plus Difference-In-Differences

RF Rapport Financiar

SME Small and Medium Enterprises

SP Service Providers
TOR Terms of Reference

#### **Currency**

Moldovan Lei (MDL)

#### **Exchange Rates**

2006 US\$ 1.00 = MDL 13.149 2007 US\$ 1.00 = MDL 12.117 2008 US\$ 1.00 = MDL 10.362 2009 US\$ 1.00 = MDL 11.113 2010 US\$ 1.00 = MDL 12.366 2011 US\$ 1.00 = MDL 11.736 2012 US\$ 1.00 = MDL 12.113

#### Symbols used

- ~ means approximate value
- .. means not available
- means not applicable

0 means zero or a quantity less than half than the unit shown

In all tables, totals may not add due to rounding.

# **EXECUTIVE SUMMARY**

#### **Purpose and Nature of the Report**

This Report provides an evaluation of two key components of the Competitiveness Enhancement Project (CEP or "the Project"), namely the Matching Grant Facility (MGF) and the Line of Credit (LOC) components. In line with the Terms of Reference (TOR) the focus of the evaluation is primarily on the "impact of the project on participating enterprises". However, the exercise also extends to other aspects, with a review of implementation arrangements, an analysis of additionality, and the assessment of economywide effects.

The Reports builds upon three main elements, namely: (i) a survey of enterprises receiving support under the two components, (ii) a counterfactual impact assessment exercise, and (iii) a series of in-depth interviews. The survey covered a sample of 188 enterprises, of which 147 receiving support under the MGF and 57 benefitting under the LOC (with 16 enterprises benefitting from both components). The counterfactual impact assessment involved the application of various econometric techniques analysis to a set of data provided by the National Statistical Office and by the Customs. In-depth interviews concerned more than 20 entities involved in project implementation and other stakeholders (financial institutions, donors, providers of business development services, etc.).

#### **Key Features of the MGF and LOC Components**

MGF Component. Administered by the Camera de Comert și Industrie (CCI), the MGF provides financial support on a matching basis (50%) to enterprises interested in using technical assistance and consulting services to upgrade their operations. Launched in 2006, the MGF component had a total budget of US\$ 2.9 million. The MGF is subdivided into two sub-components, namely: (i) the Quality Certification subcomponent, providing financial support to firms seeking to obtain international quality certifications (i.e. ISO 9001, HACCP, etc.) and (ii) the Business Advisory Services (BAS) sub-component, supporting firms interested in obtaining advisory and training services (e.g. business plans, feasibility studies, etc.). Over the 2006 - 2012 period, the CCI received applications from over 550 enterprises. As of end 2012, 335 enterprises had received support from the MGF, of which 214 for Quality Certification, 105 for BAS and 16 for both sub-components. The average value of MGF grants is about US\$ 6,000, with little difference between the two sub-components. The MGF provided support to enterprises active in all sectors, with a concentration in manufacturing (38% of the total), services (26%) and commerce (18%). Almost 80% of beneficiaries are based in Chisinau, with firms located in Moldova's Northern and Central regions accounting for, respectively, 9% and 8% of the total. The MGF mostly supported micro, small and medium enterprises (MSME) but the presence of large enterprises is also not negligible (about 25% of the total, with a higher share for the Quality Certification sub-component).

LOC Component. The LOC component provides funding to banks for on-lending to export-oriented enterprises in support of their working capital and investment financing needs. It is administered by the Credit Line Directorate (CLD), an autonomous structure within the Ministry of Finance, entrusted with the management of various internationally-funded credit lines. Launched in 2009 with a total funding of US\$ 22.5 million, the LOC is was fully disbursed during 2012 and it is currently managed as a revolving fund, as repayments are received. Investment loans are capped at € 800,000, while working capital loans cannot exceed € 500,000. Maximum maturities are eight years for investment loans and four years for working capital operations. Loans can be denominated in MDL or in foreign currency, Euros or US\$. Interest rates vary depending upon the currency and are adjusted every six months: in the case of foreign currency loans, rates are typically between 100 and 200 basis points lower than those charged by banks on loans funded with own resources. The LOC saw the involvement of six commercial banks, of which one, however, eventually withdrew. As of end 2012, a total of 74 loans had been disbursed to 60 enterprises, with an average of about US\$ 400,000 per loan. Nearly half of LOC beneficiaries are active in agri-business, with a strong presence of wine producers and other food processors. About half of LOC borrowers are based in Chisinau, quarter is located in the Central Region, with the rest being subdivided between the Northern and Southern regions. While the majority of beneficiaries fall within the definition of MSME, more than one third are large enterprises, sometimes with turnovers well in excess of US\$ 10 million.

#### **Impact on Participating Enterprises - MGF Component**

Influence on Beneficiaries' Activities. In the case of the Quality Certification sub-component, MGF support was mostly used to obtain ISO 9001 certification and, to a much lesser degree, food safety-related certifications (ISO 22000 and HACC). In the case of the BAS sub-component, funding was mainly used for market studies, feasibility studies and management information systems. Interventions co-financed by MGF appear to have resulted in a number of positive effects. More than three quarters of the beneficiaries interviewed report improvements in organizational effectiveness, technical efficiency, and managerial skills as well as an increased credibility and reputation vis-à-vis clients and suppliers. According to about half of the firms, participation in the scheme also had positive effects in improving the product mix and in accessing new markets. Instead, the program did not have any appreciable influence on the access to finance, with only a handful of firms reporting some progress. Overall, the influence appears to be stronger in the base of firms benefitting from the Quality Certification sub-component. To some extent this is linked to the fact that, in the case of the BAS sub-component, several measures deriving from the advice received have been only partly implemented, and therefore have not (yet) deployed their effects.

Impact on Performance – Counterfactual Analysis. The impact of MGF was assessed by comparing the results achieved by beneficiary firms with those achieved by a 'control group' consisting of firms that had applied for support but in the end did not participate in the scheme. The exercise assessed the impact over a three year period, comparing the results achieved in the year preceding the application with those achieved two years later, using a variety of econometric techniques. The analysis detected a positive and statistically significant impact on export sales: in fact, in the two years subsequent to the application, MGF beneficiaries exported on average between MDL 9 to 12 million more than their peers in the 'control group'. The analysis also detected a positive relationship between MGF support and turnover. However, in this case the degree of statistical significance is much lower, below the levels typically considered acceptable for this type of analyses. No conclusive results were achieved regarding the other variables analyzed, i.e. employment, investment, productivity, value added, and operating profits. Similar results were achieved for the sub-set of firms receiving support under the Quality Certification sub-component, while no similar analysis could be carried out for beneficiaries of the BAS sub-component, due to the limited number of observations.

**Impact of Performance** – **Self Assessment**. Results from the counterfactual analysis are broadly in line with the 'perceived' impact self reported by the sample of MGF beneficiaries interviewed, although there are some differences. In the case of exports, a significant impact (i.e. 'high impact' or 'some impact') is reported by more than 50% of firms actually active in export markets. However, the share declines to a much less impressive 22% when the whole sample (i.e. including non exporters) is considered. The perceived influence is stronger in the case of turnover, with almost 70% of interviewees reporting a significant impact, compared with little more than 10% reporting no impact or unable to answer. Instead, MGF-funded activities appear to have had much less influence on employment, with 56% of interviewees reporting 'no impact' compared with less than 40% indicating a significant impact.

#### **Impact on Participating Enterprises – LOC Component**

Influence on Beneficiaries' Activities. Two thirds of LOC borrowers received working capital loans, one fifth got investment loans, and the rest obtained both types of loans. In line with the prevalence of working capital financing, three quarters of interviewees indicate that LOC loans played an important role in the purchase of raw materials and other inputs (which could be bought in larger quantities and/or at the most appropriate time) and in reducing delays in payment to suppliers. To a lesser degree, loan proceeds were also used to support the entry in new markets or market segments, to expand production capacity and/or modernize existing facilities (in the case of investment loans) and to extend more favorable payment conditions to clients. Instead, little influence is reported regarding the development of new products.

**Impact on Performance**. The majority of LOC beneficiaries report an improvement in key performance indicators, such as employment, exports and (especially) turnover. However, access to LOC loans appears to explain only part of the positive developments. The influence is comparatively greater in the case of turnover, with about 40% of beneficiaries reporting a 'significant' impact, compared with 30% indicating a

'limited' impact and a similar share reporting no impact or unable to provide an answer. In the case of employment, 37% of respondents report a 'significant' impact, compared with a similar share indicating no appreciable influence. Somewhat strikingly, given the export-orientation of the scheme, only 31% of LOC beneficiaries report a significant impact on export sales, compared with 28% indicating a limited impact and 21% reporting no impact (with the rest being unable to provide an assessment).

#### **Assessment of Economy-wide Effects**

**Influence on Export Sales**. Over the 2007 – 2012 period, Moldova's export sales displayed an oscillating trend, with a grow in 2008, a decline in 2009, a recovery in 2010 and 2011, and another drop in 2012. Overall, in 2012 exports stood at US\$ 2.2 billion, compared with US\$ 1.3 billion in 2007. Based on the results of the counterfactual impact assessment, the value of incremental exports attributable to the participation in the MGF can be estimated in the range of US\$ 55 to 73 million. The corresponding value for the LOC component is lower, in the order of US\$ 14 to 20 million. Overall, the incremental exports associated with the two components account for between 7% and 11% of the US\$ 0.9 billion total increase in exports recorded between 2007 and 2012.

**Influence on the Market for Consulting Services**. The MGF component played an important role in the development and consolidation of the consulting services sector. Since the launch of the MGF the number of service providers has increased significantly, and this was coupled with an improvement in the quality of services provided. Even more importantly, the MGF greatly contributed to increase the awareness of the benefits of professional advisory services in the business community, thereby stimulating a spontaneous demand for consulting services. Indeed, while only 7% of MGF beneficiaries made frequent use of consultancy services before enrolling in the scheme, more than two thirds express their intention to purchase advisory services with their own money in the near future.

**Influence on the Financial Sector**. The LOC exerted a limited influence on the financial sector. The possibility of accessing long term resources at a reasonable cost was obviously appreciated by participating banks, but this did not lead to major changes in their operating modalities. Some banks reported being able to offer loans with a longer maturity, at least in the case of working capital loans, but none appear to have developed specific products in connection with access to LOC funding. In addition, most of the sub-loans went to well established, traditional clients and no significant contribution in broadening access to finance can be noticed.

#### **Assessment of Implementation Arrangements**

MGF Component. The CCI was quite effective in disseminating information about the opportunities offered by the scheme: about three quarters of the firms interviewed learned about MGF through the CCI, either directly or indirectly (i.e. through the CCI website or the participation in promotional event organized by the CCI). Even more importantly, less than 50% of beneficiaries were CCI members at the time of the application, a clear indication that promotional efforts were able to reach out a wide range of businesses. The MGF application process was quite simple and this was generally highly appreciated by beneficiaries, with more than 80% of firms providing a positive assessment of the various procedural aspects. A marginally less positive assessment is voiced regarding the reimbursement process (i.e. documentation to be submitted and time required to get the money), but even in this case outright negative views concern less than 10% of respondents. Overall, the near totality of MGF beneficiaries expressed a positive or very positive assessment of MGF implementation arrangements, with one single interviewee holding a neutral view.

**LOC Component**. Views about procedural aspects are generally positive, although with some qualifications. The near totality of interviewees appreciate the information received about the scheme and the assistance extended by banks' personnel and a solid majority provides a positive assessment regarding the loan application process. Instead, views are much more divided regarding the time required for loan approvals, with only 40% of interviews providing a positive assessment, the rest being equally subdivided between neutral and negative opinions. The existence of delays in the approval process was also frequently mentioned by participating banks, although the situation improved over time. However, once approved, the loans were usually disbursed fairly rapidly. Almost half of LOC beneficiaries received monitoring visits from the CLD

and the assessment was invariably positive. Overall, 88% of LOC borrowers provide a positive or very positive assessment, the rest holding a negative or, more often, neutral view.

#### **Assessment of Additionality**

MGF Component. The level of additionality of MGF support appears to be quite high. The vast majority of beneficiaries had no or very little experience with consultants before applying for MGF support and the scheme was therefore instrumental in exposing them to advisory services. In addition, only half of the interviewees declared that they would have been able (and willing) to pay the full cost of certification and/or consulting services, in case MGF support was not available. The level of additionality is higher in the case of the BAS sub-component (only 40% would have been able to implement the initiatives on their own), due to the prevalence of micro and small firms with limited financial means. The opposite holds true in the case of the Quality Certification sub-component, where the higher share of well established companies obviously translates into a higher ability to pay for consulting services.

LOC Component. The LOC component displays a lower level of additionality. All beneficiaries already had experience in dealing with banks and the vast majority did not have major problems in accessing bank lending in the past: about 80% of interviewees got one or more loans in three years before applying for LOC financing and those who did not have any loan, usually did not apply as they had other sources of funding. All in all, only few LOC borrowers can be regarded as truly 'finance constrained'. The limited additionality is confirmed by the fact that the interest rate is almost unanimously regarded as the most important advantage of the LOC, while other features (e.g. multi-currency lending, ability to finance working capital, longer maturity compared to standard loans available in the market) are scarcely mentioned.

#### **Comparison with Other Similar Programs**

Comparison of MGF with Other Support Schemes. About one fifth of interviewees were in the position to compare the MGF with another support scheme, the EBRD-funded BAS program. Launched in 2005, the EBRD-BAS also provides financial support to firms interested in using consulting and advisory services, but its operating modalities present some differences compared with the MGF (i.e. focus on MSME only, higher co-financing rate – 75% compared with 50% for MGF, no assistance provided in the area of quality certification). For most of the aspects considered in the comparison, the views expressed by interviewees are in favor of the MGF, although in several cases (e.g. eligibility criteria, assistance provided to applicants, etc.) a significant share of respondents considers the two programs as broadly equivalent. The only two aspects for which the EBRD-BAS receives a more positive assessment are (i) the nature of activities eligible for co-financing (but the majority of respondents are neutral on unable to pass an informed judgment), and (ii) unsurprisingly, the co-financing rate.

Comparison of LOC with Other Credit Lines. About one third of interviewees were able to compare the LOC with other donor/IFI-funded credit channeled through Moldovan banks. The low interest rate and the fast disbursement procedures emerge as the main positive features of the LOC, with positive assessments outnumbering opposite views by 5 to 1. Instead, the loan application process and the time required for loan approval are perceived as the main 'problem areas', with a clear majority of interviewees expressing a preference for other credit lines. In the case of the other aspects considered in the comparison, such as the maximum size and maturity of loans and the possibility of receiving financing in various currencies, views are more divided (with an equal number of interviewees favoring the LOC or other credit lines) or neutral.

#### **Conclusions and Recommendations**

Overall, available evidence suggests that the MGF and the LOC components were successful interventions. Both components were implemented in a fairly smooth manner and favorably influenced the activities of beneficiary firms. There are, however, differences in terms of additionality and impact, with the MGF performing comparatively better that the LOC.

MGF Component. Survey results suggest that there is a keen interest for the continuation of the scheme. In case this option was indeed pursued, some modifications in the design and operating modalities of the

intervention could be advisable. Recommendations include: (i) the broadening of the range of services eligible for support, in order to better suit the needs of potential beneficiaries; (ii) the tightening of eligibility criteria for beneficiaries, with more focus on MSME and/or locally owned firms, in order to increase the additionality; (iii) the reduction of the co-financing rate from 50% to 40% to enhance cost effectiveness; and (iv) the setting up of a more sophisticate management information system, which inter alia could facilitate future M&E activities.

LOC Component. The margins for improving the design of the LOC are more limited. As its 'competitive positioning' vis-à-vis other credit lines essentially rests on the low interest rate, any change that might result in an increase in the cost of funding is likely to drastically reduce the attractiveness of the initiative in the eyes of banks and, therefore, to negatively impact on absorption. Similarly, there appears to be limited scope for the simplification of procedural aspects, as the procurement rules of World Bank-funded projects are intrinsically different from those applicable to credit lines funded by institutions such as the IFC or the EBRD, that can directly interact with private banks. A possible area of improvement concerns the eligibility criteria for potential borrowers, which could place a comparatively greater emphasis on lending to MSME and/or locally-owned firms, with a view to increase the additionality of the intervention.

## **MAIN TEXT**

#### 1 INTRODUCTION

#### 1.1 Nature of the Report

This Final Report (the "Report") is the fourth deliverable submitted to the Project Implementation Unit (PIU) of the World Bank Competitiveness Enhancement Project (hereinafter referred to as the "Client") in the framework of the 'Impact Evaluation of the CEP Matching Grants and Line of Credit Components' (hereinafter referred to as "the Assignment" or the "the Evaluation"). The Report was prepared by a grouping led by *Economisti Associati* (lead firm) and including the *Associazione per lo Sviluppo della Valutazione e l'Analisi delle Politiche Pubbliche* (ASVAPP) and *Agrex NGO* (Agrex) (hereinafter collectively referred to as the "Consultants").

The Report provides an assessment of the Competitiveness Enhancement Project (CEP or "the Project"), with focus on two components, namely (i) the Matching Grant Facility (MGF) component, and (ii) the Line of Credit (LOC) component. In line with the Terms of Reference (TOR) the focus is primarily on the "impact of the project on participating enterprises". However, the exercise also extends to several other aspects, including an assessment of the influence exerted on export flows and on the broader business environment as well as the analysis of implementation arrangements and of project additionality.

The Reports builds upon three main elements, namely: (i) a survey of enterprises receiving support under the MGF and LOC components, (ii) a counterfactual impact assessment exercise, and (iii) a series of in-depth interviews. The survey covered a sample of 188 enterprises, of which 147 receiving support under the MGF and 57 benefitting under the LOC (with 16 enterprises interviewed for both MGF and LOC). The counterfactual impact assessment involved the application of various econometric techniques analysis to a set of data provided by the *Biroul Naţional de Statistică al Republicii Moldova* (BNS) and the Customs administration. In-depth interviews involved over 20 entities involved in project implementation and other stakeholders (financial institutions, donors, providers of business development services).

#### 1.2 Structure of the Report

The Report is structured as follows:

- Section 2 provides background information on the Project and illustrates the methodological approach utilized;
- Section 3 focuses on the MGF component, with an assessment of the results achieved and an analysis of implementation arrangements and additionality;
- Section 4 also focuses on the MGF component, and provides a quantitative estimate of the impact on the performance of enterprises;
- Section 5 focuses on the LOC components, again with an assessment of the results achieved and an analysis of implementation arrangements and additionality;
- Section 6 analyzes the influence exerted by the Project on Moldova's economic context, with focus on key economic variables and on the business environment;
- Section 7 summarizes the key findings and formulates some recommendations for future, similar operations.

The Report also includes four Annexes. In particular:

- Annex A, listing the persons and entities interviewed during fieldwork;
- Annex B, listing the firms surveyed during the Matching Grant Facility and the Line of Credit surveys;
- Annex C, providing a detailed review of methodology for counterfactual assessment;
- Annex D, providing all estimates of the counterfactual analysis;
- Annex E, providing details on the sampling methodology used for the enterprise surveys;
- Annex F, providing a detailed analysis of the survey of Matching Grant Facility beneficiaries;
- Annex G, providing a detailed analysis of the survey of Line of Credit beneficiaries.

#### 1.3 Authorship and Acknowledgements

The Report is the result of the work of a team including Roberto Zavatta (Team Leader), Alberto Martini (Deputy Team Leader), Viorel Botnaru, Nicolae Dumbraveanu, Enrico Giannotti, Lainus Sibeterting, and Gianluca Strada. Research assistance was provided by Giulia Maria Stecchi.

Throughout the implementation of the Assignment, the Consultants enjoyed the full support from the staff of PIU and of other entities involved in the management of the Project, who kindly supplied background documents and, most importantly, provided crucial assistance to obtain the data required for the analysis. In particular, the assistance provided by the Program Manager, Mr. Aureliu Casian, proved instrumental in a number of occasions and is gratefully acknowledged here.

As it is customary for consulting reports, especially in the case of independent evaluation assignments, the views expressed in this Report are those of the authors only and should not be attributed in any way to the PIU, its staff and, in general, the World Bank Group.

#### 2 BACKGROUND AND METHODOLOGICAL APPROACH

#### 2.1 Introduction

This Section serves to dual purpose of (i) providing some background information on the Project, and (ii) illustrating the methodological approach adopted for the evaluation. A summary presentation of the Project is provided in Section 2.2, while Section 2.2 concentrates on methodological aspects. Mode details on the methodological approach, in particular regarding the counterfactual impact assessment, are provided in Annexes.

#### 2.2 Project Background

**Objective**. The Competitiveness Enhancement Project (CEP or "the Project") supports the Government of Moldova's efforts to promote economic growth and job creation. In a context of low investment levels, limited productivity and poor export competitiveness, the Project aims at enhancing Moldova's private sector activity and investment. The Project *development objective* is to "assist Moldova in enhancing competitiveness of enterprises through improvements in the business environment, enhancing access to finance, and making adequate standards, testing and quality improvement services available to enterprises."

**Timeline**. The Project, which was approved by the World Bank Board of Directors on *October 27, 2005*, was preceded by some preparatory analytical work carried out between November 2004 and August 2005.<sup>2</sup> The Project became operational on *February 10, 2006*, with an expected completion date set for *June 30, 2013*.

**Components**. Initially, the Project included four components, focusing on (i) the improvement of the regulatory environment for private sector operations; (ii) the modernization of the Metrology, Standards, Testing and Quality (MSTQ) system; (iii) the facilitation of access to finance, with special reference to small and medium enterprises (SME); and (iv) the strengthening of enterprises' competitiveness through an increased use of MSTQ services, whose utilization was to be facilitated through a Matching Grant Facility (MGF). The scope of the Project was expanded in 2009, with the addition of a Line of Credit (LOC) component, aimed at countering the difficult economic and financial conditions brought about by the global crisis, and the broadening of the MGF, to include also business advisory services<sup>3</sup>. As a result, the Project in its final configuration consists of *five components*, whose objectives are summarized in Exhibit 2.1.

**Exhibit 2.1** Project Components

Component	Objective
#1 – Business	Helping the Government of Moldova to implement its regulatory reform agenda for the
Environment	enterprise sector
#2 – Modernization of MSTQ Systems	Strengthening the national capacity to provide internationally acceptable (especially, EUcompatible) MSTQ services
#3 – Access to Finance	Carrying out preparatory work to provide a conducive environment for the establishment of a credit information system at the national level, including the preparation and adoption of the relevant regulatory framework
#4 – Matching Grant	Strengthening the competitiveness of Moldovan enterprises (mainly SME) by increasing
Facility Component	their use of MSTQ services, and improving access to business development services
#5 – Line of Credit	Helping enterprises finance long-term investment and working capital needs on suitable borrowing terms, and improving the ability of local banks to finance real sector projects

<sup>&</sup>lt;sup>1</sup> See World Bank, *Project Appraisal Document*, September 26, 2005.

<sup>&</sup>lt;sup>2</sup> World Bank, *Project Information Document – Concept Stage*, November 9, 2004, and *Project Information Document – Appraisal Stage*, August 3, 2005.

<sup>&</sup>lt;sup>3</sup> See World Bank, *Project Paper on a Proposed Additional Financing Credit*, September 25, 2009 as well as World Bank, *Financing Agreement*, November 17, 2009.

**Budget**. The Project started with a budget of US\$ 14.3 million, including a US\$ 5 million IDA credit, an US\$ 5 million IDA grant and a US\$ 4.5 million PHRD grant. Following the enlargement of the Project's scope, in 2009, an additional US\$ 24 million was made available to the Project, bringing the total budget to **US\$ 38.3 million**. The LOC is the largest component, accounting for nearly 60% of total Project costs, followed by the modernization of MSTQ systems, accounting for 25% of the total. The breakdown of Project costs by component is illustrated in Exhibit 2.2 overleaf.

**Exhibit 2.2** Project Costs by Component

Component	Amount (US\$)
#1 – Business Environment	2,200,000
#2 – Modernization of MSTQ Systems	9,600,000
#3 – Access to Finance	300,000
#4 – Matching Grant Facility Component	2,900,000
#5 – Line of Credit	22,500,000
Project Management and Unallocated	800,000
Total	38,300,000

#### 2.3 Methodological Approach

**Overview**. The overall objective of the Assignment is to "evaluate the impact of the project on participating enterprises", with respect to the MGF and LOC components. The general objective is further articulated into the following specific objectives:

- to determine the impact of the MGF on beneficiaries, with separate analyses for the quality certification and the business advisory services sub-components;
- to determine the impact of the LOC on the borrowers' financial and operational performance as well as on the types of financing made available to enterprises in Moldova;
- to draw conclusions and formulate recommendations for possible, future activities in the abovementioned areas.

In order to achieve the above objectives, the evaluation adopted a three pronged approached, including: (i) a survey of enterprises receiving support under the MGF and LOC components, (ii) a counterfactual impact assessment exercise, involved the application of econometric techniques, and (iii) a series of in-depth interviews with entities involved in project implementation and other stakeholders (financial institutions, donors, providers of business development services). The nature of these activities is briefly illustrated below.

Enterprise Surveys. Two enterprise surveys were carried out, dealing respectively with the MGF and the LOC components The survey of the MGF beneficiaries (the 'MGF Survey') covered a sample of 145 firms, i.e. about half of the total number of beneficiaries, and was carried out during the period January - March 2012. The survey was aimed at collecting the beneficiaries' opinions on several aspects of their participation in the MGF - from the application and administrative procedures, to the quality and timing of the services cofinanced, to its merits compared with other, similar programs. The MGF survey also allowed eliciting a qualitative assessment of the MGF additionality and of its influence on the beneficiaries' performance with respect to key variables (i.e. sales, employment and exports). The survey of LOC beneficiaries (the 'LOC Survey') was conducted largely in parallel (between February and March 2013) and covered 57 enterprises, i.e. almost all the firms that have received funding under the scheme. The survey aimed at collecting information on aspects related to the implementation of the LOC and on the characteristics LOC loans (e.g. views on the procedures for loan approval, importance attributed to different aspects, such as maturity, interest rate, etc.). As in the case of MGF, the LOC survey also allowed gathering qualitative information on additionality and on the influence exerted on beneficiaries' performance and financial structure (e.g. expansion of production capacity, ability to offer better payment terms to customers, etc.). A more detailed presentation of the methodology used for the enterprise surveys is provided in Annex E while the list of firms surveyed is provided in Annex B.

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<sup>&</sup>lt;sup>4</sup> See page 11 of the Request for Proposal sent to the Consultant on October 8, 2012. In the remainder of this Report, quotations without reference to any specific source are intended to be drawn from the TOR.

Counterfactual Impact Assessment. The purpose of this exercise was to obtain a quantitative estimate of the impact of the Project activities by comparing the performance of beneficiary firms with that of firms that did not take part in the Project (the so called 'control group'). In the case of the *MGF component*, the counterfactual econometric analysis involved the analysis with various econometric techniques to a set of firm level data ('micro data') provided by the BNS and by Moldova's Customs Administration. The control group was comprised of firms that had expressed interest in participating in Project activities but in the end did not receive any support. The dataset used for the analysis is quite large, encompassing some 550 firms, both beneficiaries and 'control group' firms. However, the presence of numerous gaps in time series reduced the number of observations that could be actually used in the analysis, with some negative effects on the significance of results. No counterfactual impact assessment could be carried out for the *LOC component*. In fact, as already explained in detail in earlier reports, 5 the analysis was prevented by two factors, namely: (i) the excessively short time span over which the LOC was implemented, with the vast majority of funds released in 2011<sup>6</sup>; and (ii) the impossibility of identifying a proper 'control group'. In fact, unlike the case of the MGF, for the LOC there are not (enough) rejected firms that can be used as 'comparators' A more detailed presentation of the methodology used for the counterfactual impact assessment is provided in Annex C.

**In-depth Interviews**. The purpose of in-depth interviews was to collect qualitative elements to complement the results of the enterprise survey and of the impact assessment exercise. Interviews were carried out with a wide range of stakeholders and key informants, including entities responsible for day-to-day administration of Project components (the Chamber of Commerce and the Credit Line Directorate), business support schemes promoted by other donors, selected providers of business development services, and representatives of all commercial banks participating in the LOC scheme. All in all, 21 interviews were carried out during the two field missions implemented in December 2012 and February 2013. The list of entities interviewed is provided in Annex A.

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<sup>5</sup> See in particular the Inception Report, Section 3.3.

<sup>&</sup>lt;sup>6</sup> Given that the latest available data from the BNS refer to year 2011, a quantitative analysis based on the same year is of limited significance as it is extremely unlikely that the participation in the LOC may have translated into any observable effect in such a short period of time, especially in the case of borrowers using money from the LOC for capital investment purposes.

<sup>&</sup>lt;sup>7</sup> In fact, only a dozen firms had their loan application rejected. In most cases, rejection was motivated by administrative considerations regarding procurement and several firms later successfully re-applied for financing under the scheme.

#### 3 EVALUATION OF THE MGF COMPONENT

#### 3.1 Introduction

This Section provides an overall evaluation of the MGF component. Section 3.2 provides a summary presentation of the component and of beneficiary firms. Section 3.3 reviews implementation arrangements. Section 3.4 analyzes the activities implemented with MGF support. Section 3.5 reviews the influence exerted by MGF-supported initiatives on the activities of beneficiary firms. Section 3.6 assesses the impact of beneficiaries' performance. Section 3.7 compares the MGF with other similar schemes. Section 3.8 deals with the issue of additionality. Finally, Section 3.9 provides a summary assessment. The analysis presented here is mostly based on the results of the survey of MGF beneficiaries, integrated as needed with data retrieved from Project documents or provided by the entities involved in the MGF implementation and with information retrieved during in-depth interviews.

#### 3.2 Component Overview

**Basic Features**. The MGF Component became operational with the launch of the CEP in 2006. In its first version, the MGF Component aimed at strengthening the competitiveness of Moldovan enterprises – mainly of small and medium sized enterprises (SME) – by increasing their use of Metrology, Standards, Testing, and Quality (MSTQ) services. With the expansion of the scope of the CEP in 2009, this Component widened the range of services eligible for grants, with the aim of improving firm access to Business Advisory Services (BAS). In its present configuration, the MGF component provides financial support on a matching basis (corresponding to 50% of total expenditure) to enterprises willing to access (i) external technical assistance for obtaining international quality certifications, such as ISO 9001, ISO 22000, HACCP (the '*Quality Certification sub-component*'), and/or (ii) other consulting and advisory services, including the preparation of business plans and feasibility studies, the delivery of on-the-job training, management and investment plans (the '*BAS sub-component*').

The MGF is administered by the *Camera de Comerț și Industrie* (CCI), which was selected by the PIU through a tender. The CCI was responsible for promoting the scheme in business circles, for the management of the application and selection process as well as for the management of administrative aspects related to the payment of the MGF contribution. Eligibility criteria are quite basic and in practice the scheme is open to all types of firms, irrespective of their size, line of business, legal status and ownership structure. Initially, public entities were also eligible, although this changed at later stages.

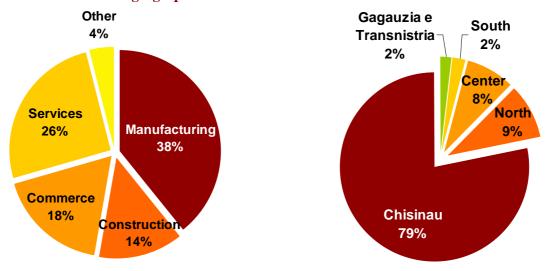
The MGF was endowed with a total budget of US\$ 2.9 million. Over the 2006 – 2012 period, the CCI received applications from over 550 enterprises. As of end 2012, 335 enterprises (plus six non commercial entities) had received support from the MGF, of which 214 for Quality Certification, 105 for BAS and 16 for both sub-components. The average value of MGF grants is about US\$ 6,000, with individual values ranging from less than US\$ 1000 up to (and, in a few cases, over) US\$ 10,0008. BAS grants are, on average, higher than Quality Certification grants, and have a higher variability, due to the more diverse nature of the services supported.

**Beneficiary Firms**. MGF beneficiaries distribute over virtually all economic sectors. Firms operating in manufacturing are relatively the majority, although the group itself is extremely heterogeneous, including a significant share of firms operating in the wine and beverage industry, as well as in food production. The service sector accounts for roughly a quarter of the beneficiaries. The concentration in the business location of the firms, whit almost 80% of the beneficiaries operating in the capital city, largely reflects the national productive structure.

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<sup>&</sup>lt;sup>8</sup> The ceiling of US\$ 10,000 equivalent to reimbursement was introduced in 2009 with the Additional Financing. Before that, thus, there are some – very rare – cases of firms which were provided grants up to US\$ 16,000.

**Exhibit 3.1** Sectoral and geographical distributions of MGF beneficiaries



Based on data on annual turnover, about three quarters of MGF beneficiaries could be classified as micro, small or medium enterprises (MSME) at the time of their application<sup>9</sup>, with large companies accounting for the rest. Some MGF beneficiaries are quire sizeable enterprises, sometimes with a turnover in excess of MDL 250 million (US\$ 21.5 million). As a result, the average turnover of MGF beneficiaries is around MDL 63 million (approximately US\$ 5.4 million), a quite substantial figure compared while the median value of only MDL 14 million (roughly US\$ 1.2 million). There size distribution of beneficiaries is quite different between the two MGF sub-components: in the case of the BAS sub-component, micro and small firms account for nearly three quarters of the total, compared with just 10% of large firms. Instead, in the case of the Quality Certification sub-component, large enterprises account for one third of the total, compared with less then 30% of micro and small firms

**Exhibit 3.2 Size of MGF Beneficiaries** 

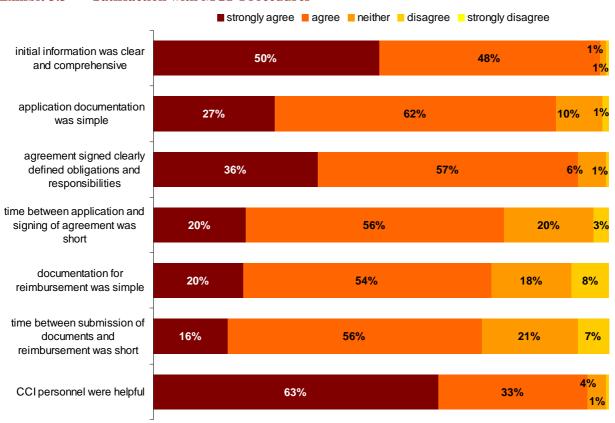
<b>Category of Enterprises</b>	Quality Certification	BAS	Total
Micro Enterprises	4%	29%	11%
Small Enterprises	25%	45%	30%
Medium Enterprises	38%	17%	33%
Large Enterprises	33%	10%	26%
Total	100%	100%	100%

#### 3.3 Implementation Arrangements

**Promotional Activities**. Together with management of the procedures for selection and implementation (see below), the CCI was entrusted with the promotion of the MGF. To this aim, the CCI has implemented a variety of initiatives, including, among others, the organization of national and regional dissemination events, the conduct of media information campaigns (press releases, radio and TV announcements), and the creation of an add on its web-site for the distribution of information and the download of documents for application. Findings from the MGF survey clearly highlight the importance of the promotional role played by the CCI, with about three fourths of the interviewees reporting to have learnt of the existence of MGF from the CCI (through the participation to a dedicated meeting or event, directly from the CCI, or from its website). CCI dissemination efforts went beyond the circle of its members. Indeed, only slightly more than half of the interviewees (56%) are currently members of the CCI, and this share decreases to just less than 50% when businesses that were already members at the moment of the application are taken into account (in other words, less than a dozen firms joined the CCI after being involved in the MGF).

<sup>&</sup>lt;sup>9</sup> The size has been defined according exclusively to the annual sales revenues. In particular: (i) micro enterprises: below MDL 3 million; (ii) small enterprises: below MDL 25 million; (iii) medium enterprises: below MDL 50 million; (iv) large enterprises: equal or above MDL 50 million.

**Operational Management**. The MGF application process was quite simple and this was generally highly appreciated by beneficiaries, with more than 80% of firms providing a positive assessment of the various procedural aspects. The assistance extended throughout the process by the CCI personnel is also highly praised by interviewees, with a positive assessment being provided by no less than 95% of respondents. A marginally less positive assessment is voiced regarding the reimbursement process (i.e. documentation to be submitted and time required to get the money), but even in this case negative views concern less than 10% of respondents. During the late stages of implementation, issues emerged regarding the reimbursement of projects undertaken by state owned enterprises, which were initially considered eligible and later excluded, but the problem concerned only a small number of applicants.



**Exhibit 3.3** Satisfaction with MGF Procedures

The CCI also had a role in connecting the beneficiaries with the potential service providers (SP) through the organization of meetings and other networking activities. Over 80% of the interviewees in the MGF survey refer that they got information on the consultants from the CCI and this information was invariably regarded as useful by interviewees.

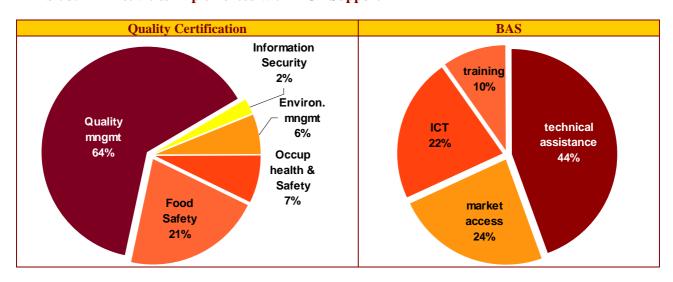
#### **Box 3.1 – Operational Management – Views from Service Providers**

Service providers had to be accredited with the CCI in order to have their activities eligible for co-financing under the MGF. Interviews with selected service providers indicate that the accreditation procedure did not pose particular problems and was considered as broadly appropriate to the purpose. The few criticisms voiced focused on two main aspects. First, a couple of consulting firms lamented the fact that, contrary to earlier indications, a ceiling to the number of beneficiaries that could be assisted by a single service provider was introduced during implementation ("One year after being involved in the MGF, we were informed that each service provider could not assist more than 10-14% of the total number of beneficiaries, so we had to inform some clients, with whom we had already signed a contract, that they could not get the reimbursement through CEP. It's not fair to change rules during implementation"). Second, a couple of well established service providers lamented an excessive rigidity in the application of the least-cost selection method. In their opinion, the lack of consideration of technical merit and other qualifications among award criteria could penalize more professional and experienced providers.

**Overall Assessment.** Overall, the near totality of MGF beneficiaries expressed a positive or very positive assessment of MGF implementation arrangements, with one single interviewee holding a neutral view. Furthermore, procedures seem to have become even easier overtime as reported by about one third of the (few) firms that benefited from MGF co-financing more than once. However, this positive assessment is likely to be determined by an increased knowledge and experience in dealing with various procedural aspects.

#### 3.4 Activities Implemented with MGF Support

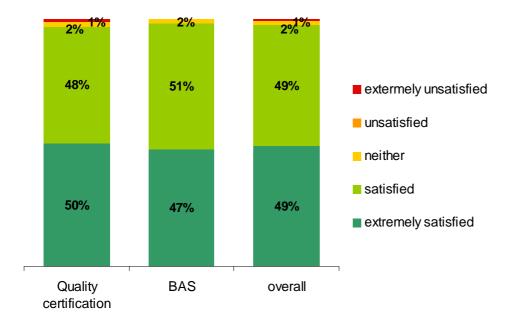
Nature of Services Supported. In the case of the Quality Certification sub-component, MGF support was mostly used to obtain general quality management certifications (i.e. ISO 9001) and, to a much lesser degree, food safety-related certifications (ISO 22000 and HACC). In the case of the BAS sub-component, the situation is more variegated. The main category concerns 'technical assistance' services aimed at improving capabilities in the management and planning of operations. Used by almost half of BAS beneficiaries, these interventions range from business plans to feasibility studies and from investment plans to assistance in the reorganization of the firm. Market access services also constitute a fairly popular area, being used by a quarter of BAS interviewees, followed by ICT services (e.g. development of information management systems) and training services. The nature of activities implemented with MGF support is summarized in Exhibit 3.4 below.



**Exhibit 3.4** Activities Implemented with MGF Support

Quality of Services Received. The services purchased with MGF co-financing were, in general, delivered on time and were of a satisfactory quality. In the case of the Quality Certification sub-component, virtually all enterprises were able to receive the quality certifications sought, and only one interviewee reported abandoning the process due to financial difficulties. The same applies to BAS-supported activities, with only three interviewees reporting some delays in the delivery of services. Overall, MGF beneficiaries were highly satisfied with the services received, although in some cases the price paid was deemed to be too high. The level of satisfaction is broadly similar for the two sub-components and virtually none of the interviewees reported of problems in dealing with the consultants.

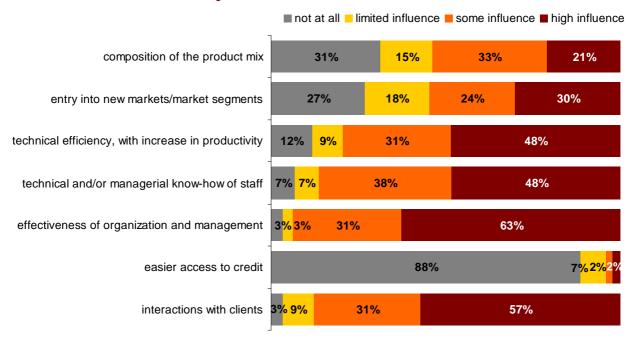
Exhibit 3.5 Level of Satisfaction with the Services Received



#### 3.5 Influence on Beneficiaries' Activities

Overview. Interventions co-financed by MGF appear to have resulted in a number of positive effects. More than three quarters of interviewees report improvements in organizational effectiveness, technical efficiency, and managerial skills as well as an increased credibility and reputation vis-à-vis clients and suppliers. According to about half of respondents, participation in the scheme also had positive effects in improving the product mix and in accessing new markets. Instead, the program did not have any appreciable influence on the access to finance, with only a handful of interviewees reporting a positive influence in this area. Overall, the influence appears to be stronger in the base of firms benefitting from the Quality Certification subcomponent. To some extent this is linked to the fact that, in the case of the BAS sub-component, a significant share of the recommendations formulated by the consultants had only been partly put in place and, therefore, MGF-funded activities had not (yet) deployed their effects.

**Exhibit 3.6** MGF Influence on Operations and Structures of Beneficiaries



**Influence on Relations with Customers**. Relationships with customers are one of the areas where the influence of MGF-supported activities appears to have been particularly appreciated by beneficiary firms. Several interviewees pointed out that the assistance to quality certification helped them to improve their credibility and reputation. In particular, firms operating in the food and in the beverage industries highly benefited from the implementation of food safety standards, while firms operating in international environment (either as local branches of international corporations or as exporters in foreign countries) took advantage of the standards to build their reputation beyond national boundaries. In addition, IT enabled systems were praised for allowing a faster and simpler interaction with clients through websites and other tools, thus expanding contacts with clients. Some examples of the effect of the facility on these aspects are reported in the Box 3.2 below.

#### Box 3.2 – Examples of improvements in the relationships with customers

- Example #1. A small company, established in 2010, active in advertisement and public relations received assistance for the implementation of an information management system between 2011 and 2012. Thanks to MGF support, the company development a web-based solution enabling to properly advertise its products and to receive orders on-line. The company thus managed to enlarge the customer base, reaching clients which, beforehand, could only be contacted individually. The sales of the company increased of approximately 10% in one year, and the staff increased by 9 experts.
- Example #2. A medium size firm operating in the food industry applied for MGF assistance in 2007 to obtain food safety certification (ISO 22000). In the opinion of the director, the firm would have not been able to autonomously purchase the same services without MGF co-financing. The activities led to an improvement of business organization and, more importantly, of its credibility on the market, which, in turn, allowed attracting new clients and consolidating the relationship with old customers. Since 2007, company sales increased by nearly 70%, and, thanks to the expanded financial possibilities, the management recognized the relevance of the certification, and had the willingness and the possibility of autonomously renewing it.

**Influence in Other Areas**. A strong positive influence was also perceived on the organizational setting and on the technical efficiency of operations (respectively 63% an 48% of interviewees reported of high influence). In particular, a number of interviewees expressed their satisfaction with improvements in the internal information flow, in the clarity in organization (e.g. introduction of time sheets for employees), and in the traceability of products. Furthermore, the MGF-funded activities allowed several beneficiaries to diversify their product mix, and, in turn, to enter new market segments: over half of the interviewees reported of 'some impact' in this respect. The certification obtained through the co-financing allowed, for instance, the participation in public and private tenders for several of the firms interviewed. In other cases, quality standards were mandatory requirements to access foreign markets – and in particular EU countries. Market studies and business plans were identified as major contributor in the development of new products and services, as well as for activities such as re-branding and on-line orders. Some examples are provided in the Box 3.3 below.

#### Box 3.3 – Examples of diversification of product mix, and entry in new markets and new market segments

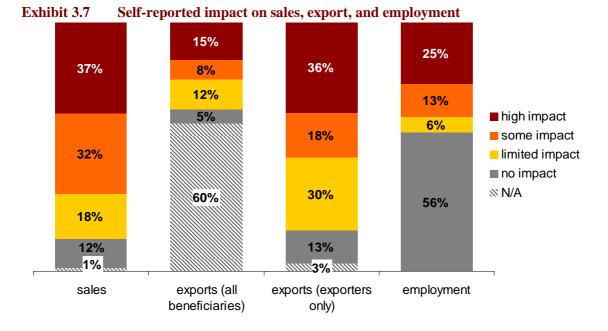
- Example #1. A small wine producer and exporter, located in Chisinau, obtained in 2010 support from the MGF for the implementation of a feasibility study concerning activities aiming at increasing the company's exports towards the EU. Even if, at the moment of the interview, the company had only been able to implement some of the actions recommended in the study due to a lack of internal resources, some positive impacts had already materialized. In particular, the rebranding and label change of some of their products already allowed attracting some new EU clients. Between 2010 and 2012 the company experienced a 20% increase in turnover, and exports grew from 20% to 30% of the total sales.
- Example #2. A medium-size company active in construction obtained MGF co-financing in 2011 to obtain environmental management certification (ISO 14001). The certification was smoothly obtained and allowed the company to successfully participate in several public tenders. The awarding of some tenders for the construction of residential building works puts the company in a very favorable future perspective. Notwithstanding the recent completion of the certification, the firm is already benefiting significantly from increases in the turnover of approximately 50%, and the creation of 20 new jobs.
- Example #3. A liqueur producer was co-financed the activities needed to obtain food safety certification (ISO 22000).

The company was already exporting before the certification, but thanks to the international standard could access new markets, in particular Canada and the US, and compete with internationally known brands, on which they had a competitive advantage due to lower selling prices. The company received the assistance in 2007, and already renewed the certification autonomously. Between 2007 and 2012 the company increased its sales of 150%, tripled the staff, and significantly increased its exports.

#### 3.6 Impact on Beneficiaries Performance

**Trends in Performance**. Three quarters of MGF beneficiaries recorded an increase in *turnover* between the year of application and 2012. The average increase (heavily influenced by the presence of some very large companies) is in the order of MDL 21 million (i.e. US\$ 1.8 million), while the median increase is a much more modest MDL 3 million (i.e. US\$ 250,000). Positive developments were also recorded in terms of *employment*, with nearly half of interviewees reporting an increase, compared with about one third indicating no change and one sixth reporting a decline. The average increase of 7 employees is again influenced by the presence of some large employers (with a few companies increasing their staff by more than 100), and the median increase of 3 employees is more representative of the situation of the majority of firms. Regarding *exports*, the number of exporters increased by some 10% (in our sample, from 53 to 59) and three quarters of those who were already exporting at the time of the application recorded an increase in expert sales. The average increase is a quite significant MDL 7.9 million (i.e. some US\$ 680,000). However, the bulk of the increase can be traced to only three companies, who posted increases in excess of MDL 100 million each. When these outliers are excluded, the average increase is a much more modest, falling to around MDL 4.2 million (corresponding to roughly US\$ 350.000).

MGF Impact. The support provided by MGF appears to have exerted an influence on beneficiaries' performance, although the magnitude of the self reported impact varies considerably. In the case of exports, a 'significant' impact (i.e. 'high impact' or 'some impact') is reported by more than 50% of the interviewees actually active in export markets. However, the share declines to a much less impressive 23% when the whole sample (i.e. including non exporters) is considered. The perceived influence of MGF-funded activities is stronger in the case of turnover, with almost 70% of interviewees reporting a 'significant' impact, compared with little more than 10% reporting no impact or unable to answer. Instead, MGF-funded activities appear to have had much less influence on employment, with 56% of interviewees reporting 'no impact' compared with less than 40% indicating a significant impact. In this respect, it should be noted that some interviewees maintained that activities supported by MGF had a 'labor saving' effect, as improvements in efficiency and productivity reduced the need for manual labor. The self-reported MGF impact on different performance variables does not appear to be influenced by the type of assistance received (e.g. Quality Certification or BAS), nor by the main structural variables.



#### 3.7 Comparison with Similar Schemes

Other Support Schemes. MGF is not the only support scheme aimed at improving the effectiveness of private enterprises active in Moldova. In particular, the ERBRD is running a Business Advisory Service (EBRD-BAS), also aimed at facilitating access to consulting services and operating on a matching grant basis. Other initiatives include the USAID-funded CEED II, which targets advocacy and policy analysis capabilities of traditional industries (such as apparel and textile, fashion accessories, home furnishing and wine) and the UNIDO Industrial Energy Efficiency. The salient features of the EBRD-BAS, the main competitor of MGF, are summarized in Box 3.4 below.

#### **Box 3.4 – Salient Features of the EBRD-BAS**

Launched in 2005, the EBRD-BAS also aims at facilitating Moldovan firms' access to a diversified range of consulting services by supporting the implementation of projects with local consultants on a cost sharing basis. Since its launch, the EBRD-BAS has implemented about 500 projects, covering a wide range of services. Before 2010, the bulk of projects focused on the implementation of management information systems. Currently, assistance for the development of marketing plans/strategies and energy efficiency account for the majority of supported projects<sup>10</sup>. While sharing some important features, the EBRD-BAS and CEP-MGF also display significant differences. First, neither foreign-owned firms nor large companies are eligible for EBRD-BAS co-financing. Second, EBRD-BAS does not provide support for quality certification (only for quality certification consultancy services), whereas, as indicated above, it increasingly provides support towards the implementation of energy efficiency consulting services. Third, in the case of energy efficiency projects, the EBRD-BAS co-financing rate is higher, up to 75%.

Comparison MGF – EBRD-BAS. About one fifth of interviewees were in the position to compare the MGF with the EBRD-BAS. For most of the aspects considered in the comparison, the views expressed by interviewees are in favour of the MGF, although in several cases (e.g. eligibility criteria, assistance provided to applicants, etc.) a significant share of respondents considers the two programs as broadly equivalent. The only two aspects for which the EBRD-BAS receives a more positive assessment are (i) the nature of activities eligible for co-financing (but the majority of respondents are neutral on unable to pass an informed judgment), and (ii) unsurprisingly, the co-financing rate.

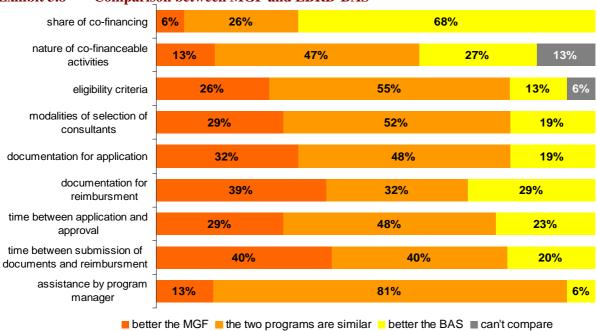


Exhibit 3.8 Comparison between MGF and EBRD-BAS

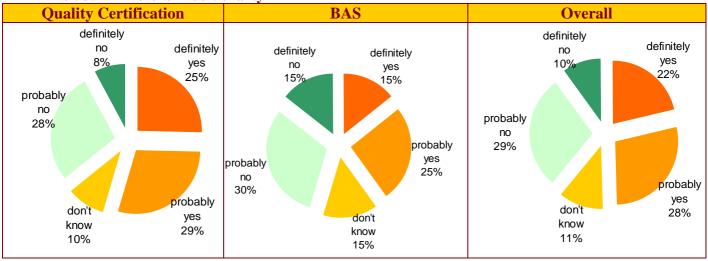
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<sup>&</sup>lt;sup>10</sup> The high and rising share of energy efficiency services is partly linked to the existence of a dedicated EBRD-funded Credit Line, the Moldovan Sustainable Energy Financing Facility (MoSEFF), which provides loans from €25,000 to 2 million (with a grant component of up to 20% of the loan amount).

#### 3.8 MGF Additionality

Survey results suggest a remarkable level of additionality of the MGF component. Indeed, less than half of the beneficiaries interviewed maintain that they would have been able and willing to pay the full cost of the services, in case MGF support was not available. The level of additionality is higher in the case of the BAS sub-component (only 40% would have been able to implement the initiatives on their own), which is consistent with the average smaller size of beneficiaries. The opposite holds true in the case of the Quality Certification sub-component, where the higher share of well established companies obviously translates into a higher ability to pay for consulting services.

**Exhibit 3.9** Level of Additionality



Irrespective of the opinions voiced by interviewees, which might be influenced by tactical considerations regarding the possibility of future access to similar forms of assistance, the overall fairly high level of additionality is confirmed by the very limited use of consulting services made in the past by MGF beneficiaries. In fact, less than 10% of respondents reported a significant use of consultants in the three years preceding the application, 30% declared making only a sporadic use of consulting services (only one time over three years) and more than 60% indicated that they had not used any consultant at all in that period.

#### 3.9 Overall Assessment and Future Prospects

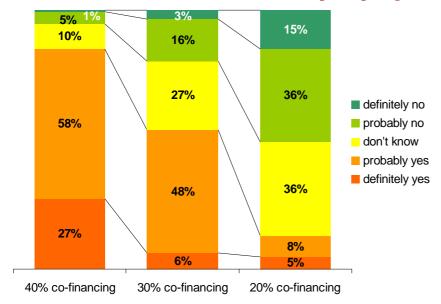
Overall, MGF beneficiaries are definitely satisfied with their experience with the scheme, with 99% of positive or very positive assessments, and only one neutral assessment. Given this fairly enthusiastic assessment, unsurprisingly more than 90% show a more or less strong interest in participating in possible, new editions of the program.

The positive assessment of the MGF experience and the interest in future participation are nonetheless accompanies by a number of suggestions regarding both procedural and substantive aspects. As for procedures, predictably, a significant share of respondents supports a simplification and/or clarification of the documentation as well as shortening the time lags (presumably with respect to the reimbursement process). In substantive terms, the vast majority of respondents venturing the formulation of suggestions support the broadening of MGF's scope to encompass sector-specific services and training, such as management training for the food industry, the hotel and hospitality sector, etc. Other areas of prospective interest include (i) market access and international networking, such as the support for the participation in international exhibitions, international exchanges with businesses operating in the same sector, and (ii) energy efficiency consultancy services, similar to those provided by EBRD-BAS and UNIDO.

It is important to note that the reported interest in participating in future matching grant schemes is obviously influenced by the co-financing rate, although it would take a quite significant reduction in the level of co-financing for the interest to disappear. In fact, as shown in Exhibit 3.10 below, 85% of respondents would still be interested (definitely or probably) in participating if the co-financing rate were reduced by 10

percentage points to 40%. However, the share of potentially interested decline more markedly to 54% in case the co-financing rate is reduced to 30%, while a reduction to 20% percent would leave only a modest 13% of firms potentially interested. This sort of sensitivity exercise one the one hand confirms the high level of additionality of the MGF in its present form, on the other hand, it suggests that there is some (but not too much) room of maneuver for achieving higher levels of cost effectiveness.

Exhibit 3.10 Share of interviewees interested in participating in case of lower co-financing rates



#### 4 EVALUATION OF THE MGF COMPONENT – IMPACT ASSESSMENT

#### 4.1 Introduction

**Overview**. The purpose of this section is to establish whether the MGF produced the desired effects on some pre-established dimensions of interest by identifying and estimating causal effects through counterfactual methods. The central question is rather narrow, "how much difference does MGF make?" Answers are numbers, or more often differences, to which it is plausible to give a causal interpretation based on empirical evidence and some assumptions. In other words, this section aims at answering the question of whether the difference observed in firm-level outcomes after the participation in the MGF is caused by the MGF itself, or by something else.

In principle, variables of potential interest for the analysis encompass a broad range of firm's performance indicators, given the MGF final objective of enhancing the competitiveness of Moldovan firms. However, due to limitations in the micro data availability, the analysis focused on the following seven variables: (i) total sales, (ii) number of employees, (iii) value added, (iv) operating profit, (v) productivity, (vi) investment, and (vii) export sales. Most of micro data on enterprises were extracted from two large business datasets, managed by the BNS, and namely: (i) the *Ancheta Structurală Anuală* (ASA), run annually since the early 2000s; and (ii) the *Rapport Financiar* (RF), submitted annually by enterprises. Data on exports were obtained from the Customs Administration. For all the three sources, data obtained cover the period from 2005 to 2011.

#### Box 4.1 - Retained Outcome Variables

Some basic information about the outcome variables retained for the counterfactual analysis as well as few comments on data availability and reliability are as follows:

- *total sales*: reference is made to sales, with exclusion of the capitalized production. Estimates were performed from both the ASA and the FR datasets and substantial consistency in the results achieved from the two sources was detected:
- *number of employees*: data on employment came form the ASA dataset, in two forms: (i) average number of employees during the year, and (ii) number of employees at the end of the year. In principle, the former measure would be preferable, especially for the calculation of productivity (see below). However, experience shows that this measure is often imprecise (as it requires more cognitive burden for respondents) and, therefore, reference is made to the number of employees at the end of the year;
- *value added*: data on value added can be computed using the ASA dataset, as the difference between total sales and the cost of goods and services purchased. This variable cannot be calculated from the FR dataset, which does not distinguish among the various production costs;
- *operating profit*: data on operating profit are available from both the ASA and the FR datasets, although the way they are operationalized is slightly different. Given the nature of the analysis, the operating profit was preferred to the gross profit or net profit (net profit is influenced by taxation, which may vary overtime, irrespective of the role played by MGF activities);
- *productivity*: reference is made to average productivity, i.e. the ratio between total sales and employment for any given year. Productivity could therefore only be calculated from the ASA dataset, the only one who provides data on employment level per firm;
- *investment*: reference is made to investments in long term tangible and intangible assets. More specifically, investment have been calculated as the difference between the value of assets in two consecutive years based on data from the FR dataset;
- *export sales*: data were retrieved from the customs datasets. Therefore, they have the advantage of having no recall (or other) bias in the outcome variables, as it happens in the firm-level surveys such as ASA or FR. On the negative side, data on exports have the highest rate of missing values.

**Control Group**. In order to identify the (causal) effect of the MGF, the changes observed among the supported firms need to be compared to the changes that would have been observed over the same time period for the same firms, had they not received the MGF support (the latter hypothetical figure, not observable by definition, is labeled 'counterfactual'). Therefore, the counterfactual change must be retrieved from data pertaining to other firms that, while not supported by the Facility, are similar enough to credibly

reproduce what would have happened to the supported ones in absence of the MGF grant (this group of similar firms is labeled 'control group').

Two alternative strategies could have been adopted to identify the control group. The *first strategy* is based on the availability of pre-intervention observable characteristics for both the supported firms and all the other eligible ones that did not apply for support, whose number is typically many times larger than the number of supported firms. With the appropriate techniques, one can select firms that share the same pre-intervention characteristics but did not receive support, giving more weight to those characteristics that are correlated with the participation in the program. The *second strategy* depends upon the presence of firms that applied for support but were rejected or otherwise did not receive the required assistance. These firms share with the supported firms the same intention to undertake the actions supported by the program, which is an important proxy of unobservable features such as business strategies and managerial abilities, as well as specific market trends to which the firms are exposed.

As the first strategy was not feasible due to due to the impossibility of obtaining the whole datasets from the BNS, the counterfactual analysis of the MGF adopted the second approach, i.e. comparing the firms that did benefit under the MGF (the 'beneficiaries') with a 'control group' consisting of those firms that applied for MGF support but in the end did not carry out the project and, therefore, did not receive any funding (the 'applicants only'). To some extent, the selection of the 'applicants only' as 'control group' has solid conceptual reasons. Indeed, those who applied for the MGF support were obviously informed about the initiative and interested in it, and this 'self selection' mechanism (that refers to 'unobservable' features) makes them a good match for the beneficiaries a priori. Obviously, the fact that these firms in the end did not participated in the initiative suggests that their interest declined along the way and/or that the firms did not have the money to finance their part of the projects (which in turn, it suggests that they might have been financially weaker than the 'beneficiaries'). However, the existence of some differences between the 'beneficiaries' and the 'applicants only' is unavoidable by definition. In practice, the best trade off between the available alternatives needs to be found and the subgroup of 'applicants only' can thus be assumed as more similar to the beneficiaries than any other 'control group' that could potentially be identified on the basis of structural features of the firms (such as location, legal form, staff, total sales).

#### 4.2 Data Set

The counterfactual analysis has been performed on a data sample including 538 records, namely: (i) 325 beneficiaries, and (ii) 213 applicants only<sup>11</sup>. Micro data for individual enterprises on the seven retained outcome variables for these firms provided from the three above mentioned sources (ASA, FR, and customs data on exports). Therefore, the final dataset is a panel of yearly activity, with an average of six years of data per firm during the 2005-2011 period.

Overall, the group of the beneficiaries and the control group appear quite close to each other in terms of structural variables. In particular, as illustrated in Exhibit 4.1 and 4.2 below:

- as for sectoral distribution, manufacturing and commerce sectors represent about two thirds of both the MGF beneficiary and control group samples;
- the distributions of MGF beneficiaries and control firms across locations is very similar, with both groups largely concentrated in Chisinau (about three fourths of firms for each group);
- the distribution of the type of ownership is also analogous between the two groups, although foreign owned firms are more comparatively more present among beneficiaries (24% versus 14%);
- finally, a somewhat more important difference between the two groups emerges in terms of distribution of the size of the firms (as measured by the number of employees). Indeed, the control group includes a

<sup>&</sup>lt;sup>11</sup> The identification of the data sample involved several steps. First, the lists of both 'beneficiaries' and 'applicants only' were created based on the collection and verification of different sources of information. Second, some data inconsistencies were corrected and some records poorly fitting the purpose of the analysis were eliminated (e.g. non commercial entities and firms whose request for reimbursement was rejected for various reasons, such as false documentation, conflict of interest in selecting consultants, etc.). These activities led to creation of a final list of 548 firms (335 beneficiaries and 213 applicants only), for which micro data for individual enterprises were obtained from BNS and Customs. Finally, 10 large beneficiary firms, for which no similar control could be found, were eliminated in order to reduce the asymmetry between beneficiaries and control group.

higher share of micro firms (16% as opposed to 8% of MGF beneficiaries) and a smaller share of large firms (12% as opposed to 17% of MGF beneficiaries).

Exhibit 4.1 Comparison for beneficiaries and 'applicants only' for some structural variables

Sector of activity			Ownership			Location		
Group	Manufac- turing	Commerce	Others	Private	Public	Foreign part.	Chisinau	Rest of the Country
Beneficiaries	133 (41%)	88 (27%)	106 (32%)	242 (74%)	8 (2%)	77 (24%)	245 (75%)	82 (25%)
Non beneficiaries	78 (38%)	51 (24%)	80 (38%)	174 (84%)	5 (2%)	30 (14%)	154 (74%)	55 (26%)

Exhibit 4.2 Comparison between beneficiaries and 'applicants only' in terms of the size of the firms

	Micro (1-10)	Small (11-50)	Medium (51-250)	Large (over 250)
Beneficiaries	17 (8%)	83 (38%)	84 (38%)	37 (17%)
Non beneficiaries	20 (16%)	47 (39%)	40 (33%)	15 (12%)

MGF beneficiaries appear quite similar to the control group also in terms of export sales. By contrast, all other outcome variables, including total sales and staff, take on larger values for beneficiaries, as illustrated in Exhibit 4.3 below). However, this unbalanced situation was in part expected, given the comparatively smaller size of applicants only (as indicated above), and more importantly, the fact that control group firms eventually did not implement the projects, at least in some cases, due to a lack of money to finance their part of the projects (which in turn, suggests that they might have been financially weaker than the 'beneficiaries').

**Exhibit 4.3** Panel Data on Outcome Variables

Outcome		2005	2006	2007	2008	2009	2010	2011
Eurosut	Beneficiaries	12.363	18.873	20.827	24.430	16.113	20.029	20.690
<i>Export</i> (in MDL -	[N]	[83]	[111]	[118]	[118]	[116]	[118]	[124]
million)	Non beneficiaries	9.697	17.498	15.958	16.808	12.959	14.365	18.486
1111111011)	[N]	[52]	[57]	[57]	[55]	[49]	[54]	[49]
Sales	Beneficiaries	25.951	27.13	29.49	33.17	27.21	32.20	49.99
(in MDL	[N]	[233]	[252]	[269]	[294]	[294]	[303]	[305]
million)	Non beneficiaries	18.78	17.00	20.08	22.24	17.03	17.16	18.95
1111111011)	[N]	[136]	[149]	[164]	[175]	[184]	[192]	[188]
	Beneficiaries	160	136	122	120	98	96	96
E1	[N]	[149]	[179]	[211]	[218]	[248]	[251]	[259]
Employment -	Non beneficiaries	173	139	109	110	82	75	70
	[N]	[78]	[98]	[122]	[122]	[138]	[147]	[152]
T	Beneficiaries		3.29	2.94	3.66	2.20	1.70	1.49
<i>Investments</i> (in MDL	[N]		[234]	[255]	[269]	[280]	[291]	[298]
million)	Non beneficiaries		1.87	2.49	1.91	1.31	1.15	1.17
1111111011)	[N]		[137]	[151]	[164]	[169]	[177]	[179]
Duo du ativitu	Beneficiaries	0.49	0.44	0.52	0.61	0.54	0.78	0.94
<i>Productivity</i> (in MDL	[N]	[149	[179]	[210]	[217]	[246]	[251]	[258]
million)	Non beneficiaries	0.33	0.37	0.37	0.66	0.60	0.50	0.77
1111111011)	[N]	[78]	[98]	[121]	[119]	[137]	[147]	[148]
Value Added	Beneficiaries	9.62	10.49	12.04	13.59	13.35	16.34	17.79
(in MDL	[N]	[133]	[166]	[201]	[207]	[223]	[239]	[244]
million)	Non beneficiaries	9.23	9.27	6.24	11.42	10.23	9.79	10.66
minion)	[N]	[72]	[91]	[111]	[112]	[129]	[141]	[138]
Operating	Beneficiaries	1.10	0.74	0.45	1.30	0.82	1.93	1.73
Profit	[N]	[245]	[260]	[281]	[291]	[304]	[311]	[309]
(in MDL	Non beneficiaries	0.76	0.57	1.02	0.97	0.61	0.77	1.18
million)	[N]	[149]	[157]	[173]	[184]	[192]	[195]	[191]

#### 4.3 Methodology

A major issue in conducting the quantitative analysis concerns the fact that the inclusion among MGF beneficiaries is far from random. In fact, beneficiaries may differ substantially from other firms in those characteristics that affect participation as well as the outcome variables (and, indeed, as illustrated above 'beneficiaries' and 'applicants only' differ quite significantly in terms of outcomes). Under these conditions, non-experimental methods have been used to correct for selection bias and obtain credible estimates of the impact of MGF assistance. In particular, two approaches were used to conduct the quantitative analysis of the impact of the MGF: (i) a *propensity score matching - difference in difference estimator (Model A)*; and (ii) a sensitivity analysis through *two regression models (Model B)*. The key steps undertaken to perform the former model are briefly illustrated here below, whereas the specifications of two regression models - an ordinary least squares (OLS) and a robust regression (Huber estimator) - to perform a sensitivity analysis are provided in Annex C.

Model A consisted in a *propensity score matching plus difference-in-differences* (PSM-DID) estimator. This estimator has been widely used in evaluations of programs in several areas, and in particular in the area of firm subsidies. The approach consists in two steps as follows:

- first of all, a statistical *matching procedure* to associate each beneficiary with the closest non-beneficiary is conducted. More specifically, each beneficiary was matched to the 'applicant only' most similar in terms of probability of receiving the MGF grant (this probability, calculated on the basis of individual, pre-treatment characteristics<sup>12</sup>, is called 'propensity score'). While matching assumptions ensure that the only remaining difference between the two groups is the receipt of MGF grant, they also lead to the drop of a number of beneficiary firms whose propensity score is higher than the maximum or lower than the minimum score for the control group (in our case, this results in a half loss of beneficiary firms). The propensity score matching was performed using three strategies: (i) Kernel matching (identified as the best option, as it maximizes the number of observations); (ii) Nearest Neighbor matching; and (iii) Radius matching<sup>13</sup>;
- once the two groups have been identified, the impact estimates were obtained through a *difference* in *difference* procedure (DID), i.e. by comparing the performance of 'beneficiaries' and 'applicants only' observed before and after the intervention. More specifically, the pre-intervention year was set at one year before firm's application for MGF assistance, while two years after the application was considered as the most adequate post-intervention year. Indeed, a period of two years since the MGF application is considered sufficiently long to fully implement MGF supported activities and, more importantly, for MGF impacts to materialize, on the one hand, and prevent the lost of an excessive number of observations, on the other hand<sup>14</sup>. The difference in difference procedure allows controlling for local economic and sector specific market conditions that may affect the outcomes in different ways between MGF beneficiaries and applicants only, independently from the participation in the MGF initiative.

#### 4.4 Results

First of all, it is worth stressing that, whatever the econometric approach adopted, similar patterns were found. In particular, and as illustrated in Exhibit 4.4 below, a *positive and statistically significant impact on export performance two year after the application was found*. Based on the results of Model A, the size of the effects on export sales is larger for MGF beneficiaries compared to the control group, and the incremental value of exports is included in the MDL 9 and 12 million range (roughly, between US\$ 780,000 and US\$ 1,040,000). The results of the regressions (Model B) are partially consistent with the findings of

<sup>&</sup>lt;sup>12</sup> The explanatory variables included a large set of firm's characteristics: (i) a set of dummies for location, sector and type of ownership, (ii) a categorical variable for firm size in terms of employment, (iii) two vectors for sales and employment pre-treatment differences, and (iv) two vectors for sales and employment pre-treatment trends.

<sup>&</sup>lt;sup>13</sup> For detailed description of the three matching strategies see Annex C.

<sup>&</sup>lt;sup>14</sup> As indicated above, 2011 is the last year for which data are available in BNS datasets. This means that the firms which applied in 2010 are excluded from the sample, as 2012 data would be necessary to calculate the post-treatment difference. If the post-treatment difference is considered on a three-year period, which eliminates also the firms which applied in 2009, a larger number of firms are excluded from the sample.

Model A, showing positive and statistically significant impact on export sales two years after the application in the order of MDL 8.9 million.

**Exhibit 4.4 Export: Two year DID estimates** 

Estimator	Impact on Export	Sign.	N treated	N control
PSM-Kernel	9.070*	0.056	59	19
PSM-Nearest neighbor	12.053**	0.035	62	19
PSM-Radius	10.180**	0.026	55	19
OLS	8.975*	0.083	68	20
Robust regression	1.968	0.320	68	20

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

Estimates taking into consideration a three-year post-treatment period were calculated to test if the impact on exports has a decreasing or increasing trend. Again, all estimations from Model A produce statistically significant positive impact, with a value of impact ranging between MDL 9 and 12 million in favor of beneficiary firms three years after the application. Given that the impact on export is right of the same size as the one estimated two years after the application, it can be inferred that the *MGF impact on export shows a downward trend* after the second year after the treatment.

**Exhibit 4.5 Export: Three year DID estimates** 

Estimator	Impact on Export	Sign.	N treated	N control
PSM-Kernel	10.470***	0.010	51	18
PSM-Nearest neighbor	12.318***	0.004	51	18
PSM-Radius	9.842**	0.020	47	18
OLS	8.842	0.171	55	19
Robust regression	3.373	0.271	55	19

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

As illustrated in exhibits from 4.6 to 4.11, for *all other outcome variables, no significant effect two year after the MGF application was detected*. The only partial exception is represented by the sales variable. Indeed, the robust regression shows a positive significant impact on total sales. Given that this is the only estimation reporting a similar result, no robust conclusions on the validity of this finding can be inferred. Notwithstanding, considering that the *impact on sales is always positive for all estimations*, some conclusions at least on the sign of the impact can be drawn.

Exhibit 4.6 Turnover: Two year DID estimates

Estimator	Impact on Total sales (ASA)	Sign.	N treated	N control
PSM-Kernel	14.045	0.150	102	57
PSM-Nearest neighbor	10.789	0.323	103	57
PSM-Radius	13.122	0.130	102	57
OLS	6.996	0.118	117	68
Robust regression	4.755***	0.004	117	68

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

**Exhibit 4.7 Employment: Two year DID estimates** 

Estimator	Impact on the Number of employees	Sign.	N treated	N control
PSM-Kernel	4.214	0.751	102	57
PSM-Nearest neighbor	5.301	0.738	103	57
PSM-Radius	2.528	0.876	102	57
OLS	1.713	0.880	117	67
Robust regression	1.589	0.624	117	67

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

**Exhibit 4.8** Investment: Two year DID estimates

Estimator	Impact on Investment	Sign.	N treated	N control
PSM-Kernel	-0.099	0.973	100	58
PSM-Nearest neighbor	0.051	0.986	101	58
PSM-Radius	-0.171	0.940	100	58
OLS	-1.136	0.699	124	73
Robust regression	-0.255	0.496	124	73

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

**Exhibit 4.9** Productivity: Two year DID estimates

Estimator	Impact on Productivity	Sign.	N treated	N control
PSM-Kernel	0.051	0.408	102	57
PSM-Nearest neighbor	0.043	0.532	103	57
PSM-Radius	0.047	0.546	102	57
OLS	-0.339	0.105	117	67
Robust regression	0.032*	0.091	117	67

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

**Exhibit 4.10 Value Added: Two year DID estimates** 

Estimator	Impact on Value added Sign.		N treated	N control
PSM-Kernel	5.716	0.465	99	53
PSM-Nearest neighbor	1.808	0.838	100	53
PSM-Radius	5.063	0.452	99	53
OLS	1.565	0.628	112	61
Robust regression	0.489	0.567	112	61

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

**Exhibit 4.11 Operating Profit: Two year DID estimates** 

Estimator	Impact on Operating profit Sign.		N treated	N control
PSM-Kernel	2.237	0.196	102	63
PSM-Nearest neighbor	3.354*	0.070	103	63
PSM-Radius	2.308	0.142	102	63
OLS	0.825	0.394	128	86
Robust regression	-0.001	0.999	128	86

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

Finally, the separate analysis of the impacts generated by the two MGF sub-components (quality certification and BAS) was severely limited by the small sample sizes<sup>15</sup>. Indeed, since BAS was introduced in 2009, the significance of MGF effects as two years differences would be excessively diminished by the lack of suitable outcome data. The analysis replicated for firms that benefitted of MGF assistance for quality certification confirmed the positive effect on export activity. As indicated in Table 3.12 below, two out of three matching procedures (Radius and Kernel) show positive and statistically significant growth in export, between MDL 7.9 and 8.3 million two years after the application. However, such as result was largely expected, given that this type of assistance was received by the large majority of the sample firms.

Exhibit 4.12 Export: Two year DID estimates for Quality Certification Sub-Component

Estimator	Impact on Export	Sign.	N treated	N control
PSM-Kernel	7.876**	0.041	56	19
PSM-Nearest neighbor	5.873	0.205	60	19
PSM-Radius	8.304**	0.033	55	19
OLS	9.004*	0.087	66	20
Robust regression	1.542	0.468	66	20

Results in million of MDL

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

To sum up, even if the selection of the 'applicants only' as 'control group' has a plausible motivation, the major weakness of the analysis lays in the small sample sizes, in particular the size of the control group. Not only for the small number of controls included in the analysis but also for the impossibility of selecting any control firms outside of the applicant firms.

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<sup>&</sup>lt;sup>15</sup> Of the 325 beneficiaries, 206 benefitted from assistance for quality certification, 103 for BAS, and the remainder received grants for both types of assistance.

#### 5 EVALUATION OF THE LOC COMPONENT

#### 5.1 Introduction

This Section provides an overall evaluation of the LOC component. Section 5.2 provides a summary presentation of the component and of beneficiary firms. Section 5.3 reviews implementation arrangements. Section 5.4 reviews the influence exerted by LOC-supported initiatives on the activities of beneficiary firms. Section 5.5 assesses the impact of beneficiaries' performance. Section 5.6 compares the LOC with other donor/IFI-funded credit lines. Section 5.7 deals with the issue of additionality. Finally, Section 5.8 provides a summary assessment. The analysis presented here is mostly based on the results of the survey of LOC beneficiaries, integrated as needed with data retrieved from Project documents or provided by the entities involved in the LOC implementation and with information retrieved during in-depth interviews.

#### **5.2 Component Overview**

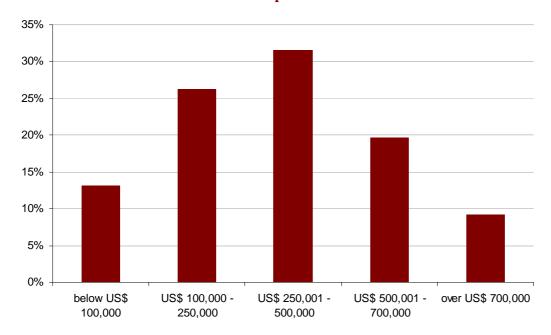
**Basic Features**. The LOC component provides funding to banks (or participating financial institutions – PFI) for on-lending to eligible enterprises in support of their working capital and investment financing needs. The LOC saw the involvement of six commercial banks, of which one, however, eventually did not make use of available funding. Launched in 2009, the LOC is administered through an apex arrangement by the Credit Line Directorate (CLD), an autonomous structure within the Ministry of Finance, entrusted with the management of various internationally-funded credit lines.

The key characteristics of LOC loans can be summarized as follows:

- maximum size of the LOC loans is up to € 800,000 (or equivalent) for financing investments and up to € 500,000 equivalent for financing the working capital. The maximum amount of all LOC loans provided to one beneficiary (or group of connected parties) shall not exceed the equivalent of € 1 million;
- loans have been financed in three *different currencies* MDL, US\$ and Euros based on beneficiary's and PFI's decision;
- the *maximum maturity* is up to eight years for investment loans and up to four years for working capital loans;
- the *interest rates* vary depending upon the currency and are adjusted semi-annually, based on inflation rate for loans in MDL and the 6-month LIBOR for loans denominated in foreign currency. The interest rates are typically between 100 and 200 basis points lower than those charged by banks on loans funded with own resources;
- **businesses eligible** for financing include private enterprises registered in Moldova that have been in operations for at least two years and are engaged in a variety of sectors (agriculture, agro-processing, manufacturing or other economic activities) providing/planning to provide goods, services and works directly related to generation of export revenues.

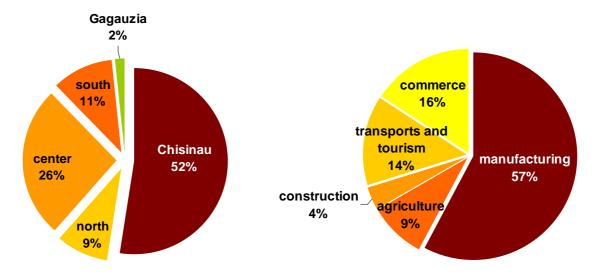
The US\$ 22.5 million total funding of the LOC is now fully disbursed (with the bulk of funding disbursed during 2011) and it is currently managed as a revolving fund, as repayments are received. Between mid-2010 and the end of 2012, a total of 74 loans had been disbursed to 60 enterprises, implying a non negligible occurrence of repeated beneficiaries (over one fifth of the firms got more than one and up to four loans). Two thirds of LOC borrowers received working capital loans, one fifth got investment loans, and the rest obtained both working capital and investment loans. The average size of LOC loans is about US\$ 400,000. The majority of loans fall in the US\$ 100,000 - 500,000 range, while a handful number of loans exceeded US\$ 800,000 and a similar number had a very small size, below US\$ 50,000. The distribution of loans disbursed by size illustrated in Exhibit 5.1 overleaf.

**Exhibit 5.1 Distribution of LOC Loans per size** 



Beneficiaries Firms. The vast majority of LOC beneficiaries are well established businesses, in almost all cases set up before mid 2000s and including a couple of operations dating back to the 1960s. From a sectoral point of view, manufacturing and, more specifically, agri-business account for the majority of the beneficiaries. The service sector, including trade, transport and tourism accounts for almost another third of beneficiaries. The remainder includes handful agricultural operations and a couple of construction companies. About half of LOC borrowers are based in Chisinau, one quarter is located in the Central Region, with the rest being subdivided between the Northern and Southern regions.

**Exhibit 5.2** Sectoral and geographical distribution of LOC beneficiaries



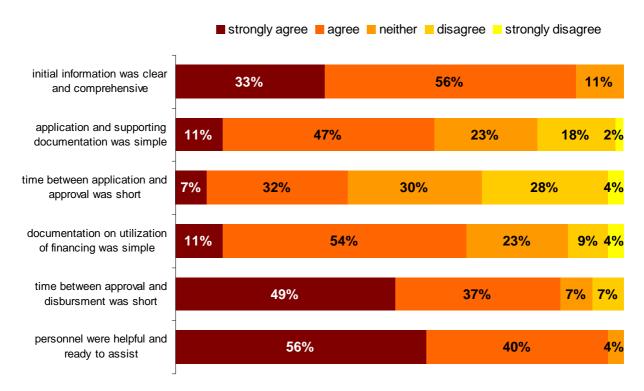
The incidence of established businesses among LOC beneficiaries is also confirmed by firm data on annual turnover and employment before the disbursement of the LOC loan. Half of the beneficiaries have a medium (one fifth) or large (30%) size, sometimes with turnovers well in excess of US\$ 10 million. Overall, the average turnover posted by LOC beneficiaries was in the order of MDL 50 millions (approximately US\$ 4.2 million). Consistently, more than half of the firms have at least 50 employees, with an average of above 100.

#### **5.3 Implementation Arrangements**

**Application/Approval Process.** The overall opinion held by beneficiary firms on the LOC application process is broadly positive. Information initially provided by PFI about the LOC is regarded as clear and comprehensive by the vast majority of interviewees. The loan application and the supporting documentation to be provided attracted a comparatively smaller degree of appreciation, but they were still regarded as simple by the majority of beneficiaries (58%). The less satisfactory aspect concerned the time elapsed between the application and the approval of the loan, with less than 40% of beneficiaries interviewed providing a positive assessment, the rest being equally subdivided between firms holding a neutral opinion and firms considering this delay excessively long. Indeed, the prolonged duration of the approval process was also mentioned by some of the PFI (and, in particular, was pointed out as the key reason for the failure to use available funding by one retained PFI). Nevertheless, the situation reportedly improved over time.

**Disbursement Process**. Beneficiaries' opinions on administrative procedures after loan approval are even more positive. The general view on the documentation about the utilization of the financing (quotations from suppliers, invoices, etc.) is largely positive, being considered fairly simple by almost two thirds of interviewees. Opposite to the above mentioned delays in the approval process, it has emerged that, once approved, LOC loans were typically disbursed fairly rapidly. Indeed, the vast majority of the interviewed firms (86%) judged the time elapsed between the approval of the loan and the actual disbursement of the money short enough. Finally, almost half of beneficiaries interviewed had received a monitoring visit from the CLD after receiving the LOC loan. Again, this monitoring exercise does not seem to represent a nuisance at all. Indeed, no single interviewee reported any problem/difficulty in interacting with CDL staff, and, as a matter of fact, in most of the case the interaction with CDL was regarded as useful and productive.

**Exhibit 5.3** Satisfaction with LOC Procedures



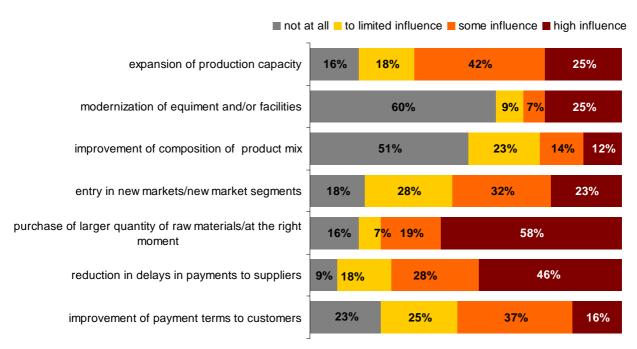
**Overall Assessment**. Overall, the opinion regarding LOC procedural aspects is definitely positive. Almost 90% of the beneficiaries assessed their experience with procedures to obtain LOC loan(s) as a positive or very positive one, with only a handful of interviewees providing a negative or, more often, neutral view.

#### 5.4 Influence on Beneficiaries' Activities

**Introduction.** Despite the fairly recent disbursement of many LOC loans, activities to be financed with loan proceeds have been already fully implemented in the vast majority of the cases. Only a handful firms, typically repeated beneficiaries that recently obtained an investment loan, have not carried out the envisaged activities in full yet. As a result, activities financed through LOC loans have already exerted a wide range of positive influences, both in a direct and indirect way, on the several aspects of business operations as illustrated below.

Main Direct Influence. Consistently with the prevalence of working capital financing, about three fourths of the interviewees ascribed to LOC loans a positive effect on their ability to (i) purchase raw materials in larger quantity and/or at the most appropriate time, and (ii) improve their payment terms to business suppliers. In case of less frequently occurring investment loans, beneficiaries typically reported an appreciable influence on the modernization of business equipment and/or facilities (e.g. expansion of bus/trucks fleet, installation of new equipment for sorting and packing seeds, modernization of bottling line, etc.), which, in turn, led to improvements in the technical efficiency of business operations and/or to an expansion of production capacity. To a lesser degree, loan proceeds were also used to support the entry in new markets or market segments. Finally, the influence exerted by LOC loans on the composition of the product mix (with the development of new products) appears rather modest. Nevertheless, some positive results were also achieved in this area, as illustrated in Box 5.1.

**Exhibit 5.4 LOC Influence on Operations and Structures of Beneficiaries** 



#### Box 5.1 – Examples of development of higher value added products and services

• Example #1. A leading agribusiness company involved in processing and exporting walnuts obtained an investment loan to modernize the processing process. Thanks to the purchasing of a walnut sorting machine investment, the company significantly improved the final product quality with reference to different international quality parameters, such as size, color, and packages, which are of paramount importance for foreign buyers. More specifically, the new machine allowed fully meeting an international standard concerning the marketing and commercial quality control of inshell walnuts (i.e. UNECE Standard DDP-01). This positively influenced the company's reputation vis-à-vis foreign importers and facilitated the penetration of new export markets: in 2012, the company moved beyond its traditional European markets to start exporting to China and Australia (and received its very first order from an US importer).

• Example #2. A company in the hospitality industry used LOC loan proceeds to complete the reconstruction and modernization of a hotel in Chisinau. As a result of this renovation works, the company was able to largely increase the hotel quality standards and to start and successfully conclude partnership negotiations with world's largest hotel chain (i.e. Best Western). After (and largely due to) the LOC loan, the company managed to double its annual turnover and to hire two additional full-time employees.

**Other Influences.** In addition to the above mentioned direct effects, several interviewees pointed out that LOC loans produced indirect and/or broad positive effects. In particular, some LOC (working capital) loans, in addition to the strong positive influences reported above, also allowed beneficiaries (i) freeing internal resources, which could be used for other investment purposes, and/or (ii) relaxing business financial constraints during difficult periods. A couple of examples of the effect of the LOC component on these aspects are reported in the Box 5.2 below.

#### Box 5.2 – Examples of 'broad' and indirect positive effects

- Example #1. Initially interested in using the LOC facility to expand the trucks fleet, the manager of an international transport company had to change his mind when he discovered that purchasing second-hand equipment was not allowed. Then, with the support from MGF, he prepared a business plan to support a successful application for a LOC working capital loan. The money received was utilized to buy a large quantity of fuel at a very good price, which, in turn, allowed freeing the internal resources needed to purchase second-hand trucks. Thanks to these Euro-5 trucks, the company managed to expand its activities in the CIS markets, and, more importantly, to enter the EU market. Overall, an over 50% increase in exports was recorded by the company since LOC disbursement.
- Example #2. A wine company working through financial distress was contacted by a PFI, as it was the major supplier of two of problematic clients of the bank. Once the PFI discovered the difficult cash situation of the company, assisted it in accessing substantial bank lending through different credit lines, i.e. LOC (but also RISP and IFAD), to extinguish its current liabilities. In addition to help restoring its critical financial situation, the LOC loan also supported the company in increasing exports and penetrating new markets. Indeed, (i) the procurement of specific packaging for new target markets and higher quality grapes was a precondition for the company shift from CIS (Russia) to EU markets (Germany, Poland, Baltic countries and Belarus), and (ii) loan proceeds denominated in Euros allowed hedging exchange risks. As clearly summarized by the company manager "the LOC influence went well beyond the sheer increase in the export value, it helped us to survive and to get back on track!"

### **5.5 Impact on Beneficiaries Performance**

Trends in Performance. Almost three quarters of LOC beneficiaries recorded an increase in turnover between the year of LOC loan disbursement (i.e. 2010 and, most commonly, 2011) and 2012. The average increase is about MDL 12 million (about US\$ 1 million). However, this value is largely influenced by few firms, typically operating in the agri-business sector. Indeed, the median increase is much smaller, i.e. MDL 2.3 million (roughly US\$ 190,000). A similar share of interviewees also reported an increase in terms of employment, while the remainder was more or less equally subdivided among firms reporting no change and firms indicating a decline. The average increase of about 10 employees is inflated by the inclusion of a number of seasonal/temporary workers, typically hired to harvest/process increased volumes of raw materials. When these workers are excluded from calculations, the average increase decreases to seven employees, while the median increase remains constant at five. Indeed, changes in employment level are more uniformly distributed among beneficiaries, with two thirds reporting at least two new jobs created. Regarding *exports* changes, a bimodal distribution emerges, with a slight majority of respondents recoding an increase in the value of exports and over 30% of interviewees experiencing a decline. As a consequence, the degree of concentration is even stronger than in the case of turnover: the average increase is MDL 6.5 million (above US\$ 500,000), but the median increase much smaller, i.e. below MDL half million (less than US\$ 40,000). Unsurprisingly, 9 out of 10 top-performers posting an increase of more than MLD 10 million are active in the agro-business sectors. Out of seven companies willing to start exporting, only two actually managed to sell some products abroad by the end of 2012. About one third of interviewees reported a more or less significant change in the geographical composition of exports, going from initial sales to regional markets (Romania, Georgia, Armenia) to a more substantial re-direct to European countries, but also China.

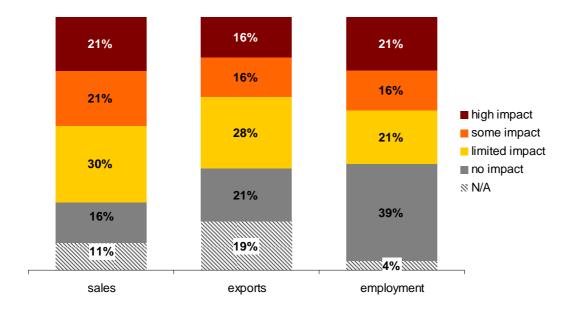
LOC Impact. Access to lending under the LOC appears to explain only part of the above positive developments. The perceived influence of LOC-funded activities is comparatively greater in the case of turnover, with over 40% of beneficiaries reporting a 'significant' impact (i.e. 'high impact' or 'some impact'), compared with 30% indicating a 'limited' impact and a similar share reporting no impact or unable to provide an answer. In the case of employment, 37% of respondents report a significant impact, compared with a similar share indicating no appreciable influence. Somewhat strikingly, given the export-orientation of the LOC, only 32% of LOC beneficiaries report a significant impact on export sales, compared with 28% indicating a limited impact and 21% reporting no impact (with the rest being unable to provide an assessment). However, it is worth mentioning that the very short time gap between loans disbursements and the measurement of their impacts is likely to have played an important role in this respect, as illustrated by the examples of beneficiaries confronted with more or less transitory problems to access foreign markets in the short-term reported in Box 5.3 below. On the positive side, the majority of firms experiencing a change in the geographical composition of exports gave some (or lots of) credit to LOC loans for these positive developments, as they allowed expanding the production capacity and/or increasing of product quality/assortment.

#### Box 5.3 – Examples of difficulties in accessing foreign markets in the short-term

- Example #1. Thanks to LOC investment loan, an agro-business company recorded a significant increase in productivity: the investment in new equipment allowed reducing the amount of time required for seed processing (previously done manually) from a full day to a few hours. However, for the time being, this productivity improvement failed to translate into increased exports, largely because of negative exogenous factors: in 2012, unusually high temperature accompanied by below-normal precipitation during much of the growing season negatively affected growth and yields of sunflower crop, reducing the availability of raw materials for production and export.
- Example #2. A well-established pharmaceutical company managed to get four different LOC loans: (i) one to purchase dedicated, processing equipment, and (ii) three to acquire production inputs, such as medicinal herbs and packaging materials. The main purpose of the company was to modernize the production process and optimize energy utilization. Foreseen activities were fully implemented, leading to an increase in the production capacity as well as to a more efficient energy consumption of cooling and heating systems. Despite these positive developments, the company recorded a collapse of their exports in 2012 due to the economic crisis faced by Belarus, by far their main export market. In 2012, also thanks to improvements linked to the LOC loan, they started penetrating the Armenian market, but the share of exports to that market is still negligible in their total export portfolio.
- Example #3. A relatively young SME involved in biscuit production for the domestic market largely benefitted from the CEP Project. After having received support for quality certification (ISO 9001 and ISO 22000), the company obtained an investment loan to purchase bakery equipment, with the aim of modernizing the production process to enter export markets. Indeed, the company managed to raise its production capacity and to double the number of workers. However, accessing foreign markets revealed to be a more complex task than initially envisaged. Romanian importers have different requirements compared to domestic buyers (e.g. boarder packaging varieties, longer expiration date) and, more importantly, ask for larger volumes to be delivered within a shorter amount of time. As a result, in 2012, the volume of export was minimal due to difficulties experienced in timely shipping consignments.

Overall, the near totality of interviewees reports a positive or highly positive impact of LOC lending. However, given the above, this fairly enthusiastic assessment appears to reflect more financial considerations than the impact on real variables. The impact of LOC on the three performance variables as perceived by beneficiary firms is summarized in Exhibit 5.5 overleaf.





# Box 5.4 - A tentative quantification of LOC impacts based on survey results

An attempt to quantify LOC impacts has been performed based on the indications provided by interviewed beneficiaries, i.e. by adjusting the recent trends of performance variables using self-reported impacts. More specifically, the increase in each performance variable recorded by beneficiary firms was multiplied by an 'attribution factor' reflecting the magnitude of the influence on these positive variations attributed to the LOC by beneficiary firms. As this exercise entails a high degree of approximation, the adjustment of LOC impacts was done by making reference to two scenarios, using the LOC attribution factors reported in Table 5.1 below. Furthermore, whenever available, the achieved estimates of LOC impacts on employment levels were compared with information directly collected from interviewees.

**Table 5.1 Impact Attribution Factors** 

Tuble 2.1 Impact fittibution factors					
LOC Self Reported Impact	Best Scenario	Worst Scenario			
High	80%	60%			
Medium	45%	25%			
Limited	15%	5%			

Based on the above approach, the LOC impacts have been estimated between MDL 280 - 400 million (US\$ 23 - 33 million) in terms of turnover increase and between MDL 170 and 240 million (US\$ 14 - 20 million) in case of exports increase, while the contribution to employment creation has been estimated between 100 and 170 new jobs (as illustrated in Table 5.2). Obviously, these estimates should be regarded with extreme caution and be considered overestimated, as the quantification approach adopted excludes records showing a declining trend from calculations.

Table 5.2 Estimated LOC impacts

LOC Impact		Best Scenario	Worst Scenario
Increase in	Total	400	280
Turnover	Average	8.2	5.7
(in MLD million)	Median	0.8	0.3
Increase in	Total	240	170
Exports	Average	5.0	3.5
(in MLD million)	Median	0.1	0.0
In crease in	Total	170	100
Employment	Average	3	2
	Median	0.7	0.2

# **5.6 Comparison with Similar Schemes**

In the three years before LOC application, about one third of interviewees obtained financing from one or more other donor/IFI-funded credit lines (CL) channeled through Moldovan banks<sup>16</sup>. Based on their comparative assessment of different financing received, the low interest rate and the fast disbursement procedures are regarded as the main positive features of the LOC, with positive assessments outnumbering opposite views. In particular, both features are considered more favorable in the case of LOC by the majority of relevant respondents and equally advantageous by another third. Instead, the documentation to be provided to justify the selection of suppliers and the time required to obtain the approval are perceived as the less competitive features of the LOC, with a clear majority of interviewees expressing a preference for other credit lines. In the case of the other aspects considered in the comparison, such as the maximum size and maturity of loans and the possibility of receiving financing in various currencies, as more balanced situation emerges, with an equal number of interviewees favoring the LOC or other credit lines or holding neutral views. The overall assessment is broadly positive, with more than half of the respondents expressing a preference for the LOC.

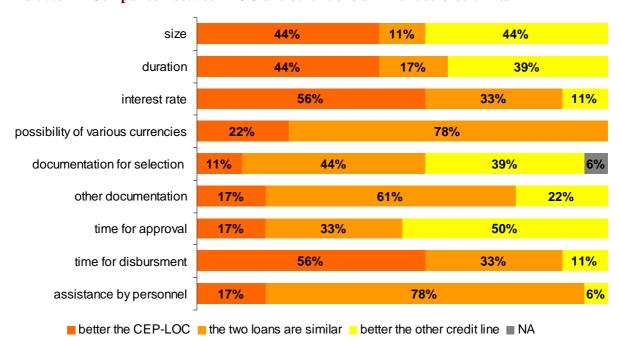


Exhibit 5.6 Comparison between LOC and other donor/IFI-funded credit lines

# **5.7 LOC Additionality**

Consistently with the medium-large size of a large share of the beneficiaries, several elements drawn form the LOC survey suggest that the majority of LOC beneficiaries can be hardly regarded as severely finance constrained. First, all beneficiaries already had experience in dealing with banks and the vast majority did not have major problems in accessing bank lending in the past: about 80 percent of the interviewees got, at least, a loan in three years before applying for LOC financing (in most of the case for both working capital and investment purposes). Furthermore, most of the LOC beneficiaries who did not have any loan, did not apply as they had other means to finance business activities. All in all, only 7% of interviewees can be regarded as 'finance constrained', i.e. firms that, despite their willingness to access bank lending, had not been able to do so due to excessively difficult bank procedures or unfavorable lending conditions.

<sup>&</sup>lt;sup>16</sup> In particular, LOC beneficiaries managed to obtain financing from seven different CL, including World Bank RISP (seven loans), IFAD (six loans), EBRD (four loans), EIB CL to support wine-making industry (two loans), and FMO, Millennium Challenge Account, and KfW (one loan each).

It is worth mentioning that the above picture largely refers to the 2007 – 2009 period, i.e. before the 2009 recession that hit the country as a result of the global liquidity squeeze and was expected to lead to a significant restriction of bank flows to the private sector. However, the LOC survey provides only modest evidence on the actual occurrence of this 'credit crunch'. Indeed, at the time of the survey, LOC loan(s) represented the only source of bank financing for less than a fourth of beneficiaries and the main source (i.e. accounting for more than 50 percent of total bank financing) to 35 percent of the interviewees (including a non negligible share of interviewees who also benefited from other CL over the last three years, as illustrated above). The limited additionality is further confirmed by the fact that the interest rate is almost unanimously (89%) considered as the most important advantage of the LOC, while other features (e.g. multi-currency lending, ability to finance working capital, longer maturity compared to standard loans available in the market) are scarcely mentioned.

Such a finding is somewhat challenged by information directly obtained from LOC beneficiaries on their ability to carry out the <u>same type of activities/investment</u> financed with LOC loan in case this had not been available. Indeed, about 40% of working capital loan would have not been able, and the proportion rises to over 50%, in case on investment loan. These results seem to suggest a somewhat higher level of additionality compared to what indicated above. However, this inconsistency seems to be largely theoretical. Indeed, even if most of LOC beneficiaries were not facing major problems in access to finance, they are likely to have increased the size of the loan to absorb all the directed credit that they can get (because it may be cheaper than other sources of credit).

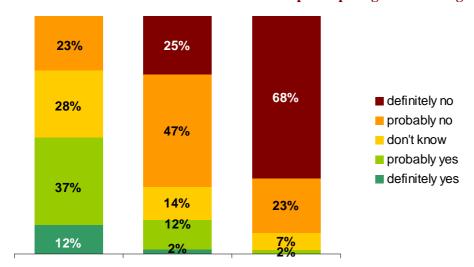
# **5.8 Overall Assessment and Future Prospects**

Virtually all interviewees rated their experience with LOC as 'positive' or 'very positive', coherently with the overall constructive opinion emerging on the different aspects taken into consideration by the evaluation. This definitely positive assessment is confirmed by the fact that more than 90% of the interviewees declared they were interested in applying again for LOC loan if the credit line was to be renewed under the present conditions. More specifically, over 40% of interviewees maintain they would apply for working capital loans, some 30% report interest in investment loans and the remainder expressed interest in applying for both types of loans.

High levels of willingness to re-apply did not come without suggestions for improving the scheme. Despite the overall positive assessment on LOC procedural aspects, a large share of recommendations put forward by interviewees focused on their simplification, going from requests for generic streamlining of bureaucratic procedures (suggested by about one fifth of interviewees) to a smaller number of more precise suggestions, mainly focusing on making procedures for the selection of suppliers less complex ("there is a need for a higher degree of flexibility in the selection offers to purchase equipment and agricultural machinery" or "The thee quotations from local market should be eliminated, reducing the time period from the day after the request until disbursement"). In line the findings of the above analysis of implementation arrangements, about one fourth of interviewees strongly advocated for a shortening of the time required to obtain the loan approval. As for the characteristics of the loans, the attention largely focused on the key distinctive feature of LOC loans, i.e. the interest rate. Indeed, about 40% of interviewees that formulated suggestions on the nature of the financial instrument proposed to further lower the applied interest rate and, to a lesser extent, to have fixed instead of variable rates.

Finally, and consistently with the above analysis, it is important to stress that beneficiaries' willingness to further utilize the LOC is extremely sensitive to an increase of the applied interest rate. Indeed, a one percentage point increase, even if associated with a simplification of procedures (more specifically, the documentation to justify the selection of the supplier), would suffice to discourage about half of beneficiary firms to apply again for a LOC loan. As illustrated in Exhibit 5.7, this share collapses to about 2%, if the interest rate was to be increased by three percentage points. This high level of sensitivity is not surprising considering that the limited differential between interest rates applied to LOC beneficiaries and the average commercial rate in the banking system, rarely exceeding one percentage point, and further confirms the limited additionality of the LOC, whose beneficiaries are primarily finance unconstrained firms, which used LOC as a substitute for other borrowing.

Exhibit 5.7 Share of interviewees interested in participating in case of higher interest rates



interest rate + 1% interest rate +2% interest rate +3%

#### 6 ASSESMENT OF ECONOMY-WIDE EFFECTS

#### **6.1 Introduction**

This Section provides an assessment of the broader effects of the MGF and the LOC components, beyond the immediate influence exerted on beneficiary enterprises. Section 6.2 focuses on the impact of the two components on exports, whose increase constitute a key objective for the whole CEP project. Section 6.3 reviews the impact of the MGF component on the market for consulting services, with reference to both quality certification and other business development services (BDS). Section 6.4 analyzes the influence of the LOC component on the financial sector.

# **6.2 Impact on Export Flows**

**Overview**. Over the 2007 – 2012 period, Moldova's export sales displayed an oscillating trend, with a grow in 2008, a decline in 2009, a recovery in 2010 and 2011, and another drop in 2012. Overall, in 2012 exports stood at US\$ 2.2 billion, compared with US\$ 1.3 billion in 2007. Wine and beverages are the main export product, accounting for between 8 and 12 percent of total exports of goods over the 2007-2012 period. In contrast with the negative evolution of total exports, the export sales of this main product increased between 2011 and 2012, reaching a value of US\$ 214 million in the last year. In 2012, over 40 percent of exports were destined to CIS countries, with Russia receiving the lion share and increasing its market share overtime. The EU27, especially Romania, Italy Poland and Germany, account for about half of total exports, but their overall incidence has slightly declined from 52% in 2007 and to 47% in 2012.

**Recent Evolution (US\$ million, current prices)** Main Export Destinations (as a share of total export) 35% 60% 2500 30% 50% 2000 25% 40% 1,591 1.541 20% 1500 1.283 30% 15% 20% 1000 10% 10% 500 0% 0% 2008 2009 2011 2007 2008 2009 2010 2011 2012 - - - Russia - Romania Germany - - Italy - - - Ukraine CIS - - - Belarus

**Exhibit 6.1 Main Trends In Exports** 

Source: ITC (UNCTAD/WTO): Trade Map online

**Estimated Impact**. Based on the results of the counterfactual impact assessment illustrated in Section 4, the value of incremental export associated with the *MGF Component* can be estimated in the MDL 630 – 840 million range (US\$ 55 – 73 million) for the period 2007 – 2011<sup>17</sup>. When compared with overall developments in national export flows, these are non negligible figures, representing between 6% and 8% of total increase in export between 2007 and 2011 (i.e. US\$ 875 million). Based on the analysis presented in Section 5, In the case of the *LOC Component* the value of incremental exports can be estimated at MDL 170 to 240 million (US\$ 14 - 20 million). While accounting for less than 1 percent of total expert sales, the figure is nonetheless of some significance considering that this impact has largely occurred in 2012, when the total value of exports experienced an over US\$ 50 million decline. Overall, the two components appear to have played a modest but non trivial role in fostering Moldova's exports.

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<sup>&</sup>lt;sup>17</sup> This figure is based on the positive impact on export sales ranging between MDL 9 and 12 million in favor of beneficiary firms two years after the application, multiplied by the total number of exporting firms that received MGF support covered by the quantitative analysis, i.e. 70 firms.

#### 6.3 Influence on the BDS Market

Aside the main objective of enhancing the competitiveness of Moldovan enterprises, the MGF component was also aimed at strengthening the supply and quality of local consulting services in the fields of international standards, quality improvements, and product modernization. According to information collected during interviews with some national and international service providers largely involved in MGFsupported projects, the number and the degree of sophistication of firms providing business consulting services in Moldova were extremely limited in the mid-2000s. Since then, the implementation of the MGF component reportedly had a strong 'push effect' on the development of a BDS offer, by rising awareness among the business community on the benefits of advisory services and positively influencing the riskreward profile of the local BDS market. This, in turn, has stimulated the setup of new BDS providers and supported the expansion of the range of services and/or the volume of activity of existing operators. For instance, a majority foreign-owned firm specialized in the provision of market access advisory and technical assistance services, such as market/sector studies, marketing strategies, business & restructuring plans, stated that "since late 2010, when we became involved with MGF, we recorded a increase in the volume of activity in the order of 50% - 60%"). Another interviewee, the manager of a firm providing consulting services for quality certification, pointed out MGF as the main motivation for setting-up his company ("when MGF was launched, I was working as quality manager at a company that was one of the first MGF beneficiary. MGF made it clear to me that there was a potential market, so, together with a partner, we decided to create our certification consultancy company").

Under these conditions, the coming to an end of the MGF is commonly believed to generate a more or less significant decline on service providers' activities (from negligible levels for a large certification body to significant reduction of the activities - estimated at about 35% - 40% - for a small quality certification consultant). Nevertheless, developments achieved so far are regarded as largely resilient and the domestic business consultancy market is currently viewed as somehow stabilized. Such an opinion is indeed corroborated by several elements. First, the sheer number of service providers accredited under both CEP-MGF and EBRD-BAS has steadily increased over time and is currently well above 100 firms 18. Secondly, the importance attributed to BDS, and, more specifically, to quality certification has largely increased among the business community, as illustrated by the results of the MGF survey. In fact, the vast majority (88%) of quality certifications obtained with MGF support, which had already expired, were renewed by beneficiary firms with own funds. This positive trend is likely to continue in the future, as no less than 85% of interviewees maintain that they plan to renew the certifications upon expiry of the initial certificate. Finally, the increased willingness-to-pay for BDS among firms is clearly illustrated by the comparison between the extremely low rate of BDS utilization before participation in the MGF and the very promising 'declarations of intent' on BDS utilization for the near future. Indeed, while only 7% of interviewees made frequent use of consultancy services before enrolling in MGF, more than two thirds express the intention of purchasing further BDS with their own money in the next two years.

Notwithstanding the above positive developments, the Moldovan business consultancy market can be hardly considered as fully developed yet. Indeed, the sector still remains largely fragmented and unstructured, as exemplified by the lack of a sector association, with relatively few providers of sophisticate services. In this respect, possible future MGF-like programs could certainly contribute to further improve the situation.

### **6.4 Influence on the Financial Sector**

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The LOC was conceived at a time when fears of a dramatic deterioration in the credit market were quite widespread. In 2009, Moldova was severely hit by the world economic crisis, which had serious repercussions on the financial sector: the volume of credit shrank by some 10% and interest rates on MDL-denominated loans increased to more than 20%. Therefore, the LOC was largely intended as sort of emergency 'life line' support to export oriented businesses, to help them weathering the major difficulties in access to credit that were expected to materialize in the future. Fortunately, subsequent developments were

<sup>&</sup>lt;sup>18</sup> In the case of MGF, the CCI list of accredited SP includes over 110 firms, while, in case of EBRD-BAS, the number of accredited companies is about 200, of which about 100 are reportedly constantly involved in project-funded activities.

not as bad as initially feared. Thanks to the aggressive monetary policy put in place by the National Bank of Moldova, credit growth resumed already in 2010 and this was accompanied by a significant decline in interest rates. In retrospect, the role of the LOC was not as vital as initially envisaged and its contribution in easing overall credit conditions was fairly modest. For instance, in 2010 and 2011, credit to the economy grew by some US\$ 600 million, which is a multiple of the total value of the LOC.

Looking at more micro economic aspects, the LOC was certainly welcomed by the participating banks, as it allowed a diversification in their sources of funding, with access to long term resources at a very reasonable cost. However, all the banks participating in the scheme make a quite intensive use of IFI/donor funded credit lines, which sometimes account for up to 20% of the total loan portfolio, and therefore the improvement brought by the LOC was at the margin.

**Exhibit 6.2 Utilization of IFI/Donor Credit Lines** 

Participating Bank	Use of IFI/Donor Credit Lines
Moldincombank	Credit lines with EBRD, Black Sea bank, FMO, plus ongoing discussions with IFC.
Moiaincombank	Credit lines account for about 12-15% of total loan portfolio
En one Dank	Credit line with EIB and discussions ongoing with EBRD. Credit lines account for
EnergBank	about 18% of total loan portfolio
MAIB	Several credit lines in place (IFAD, RISP, EBRD, IFC, KfW, etc.), accounting for about
MAIB	15% of total loan portfolio
Victoria Bank	Some credit lines in place (RISP, IFAD, MCC, etc.), accounting for an estimated 10%
vicioria bank	of total loan portfolio
Mobias Bank	Credit lines with EBRD, FMO, Black Sea Bank, EIB and IFAD, cumulatively
Modias Bank	accounting for 7-8% of total loan portfolio
D C ! !	Several credit lines in place (IFAD, RISP, EIB, Black Sea Bank), accounting for about
Banca Sociala	20% of the total loan portfolio

In terms of product development, the availability of LOC long term resources somewhat contributed to the lengthening of maturities offered to borrowers but this appears to hold primarily for working capital loans ("With our own resources, we cannot go beyond two years, and the LOC allowed us to extend longer working capital loans"); in the case of investment loans the impact was seemingly negligible ("the eight years maximum maturity is largely theoretical, because banks rarely go that far anyhow") and, in any event, not different from that of other credit lines ("eight years is good, but with ten years the EIB is even better"). None of the participating banks appear to have developed any specific product in connection with access to LOC funding. In this respect, the export orientation of the LOC was seen much more as a hindrance ("it limits flexibility, other credit lines are much better in this respect") than as an opportunity ("there are too few exporters around to justify the development of specific products or approaches").

As already indicated in Section 5, all the enterprises receiving LOC sub-loans had already experience in dealing with banks, most of them being fairly well established businesses. There were a couple of cases in which LOC funds were used to help businesses transitioning from a small to a medium scale, but in general no significant contribution in broadening access to finance can be noticed. Actually, the bulk of sub-loans were granted to well established, traditional clients, although at least one bank made a quite aggressive use of the LOC, being able to attract a significant number of new clients from competitors. In this respect, the LOC appears to have helped to generate some competition among banks.

### 7 CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Summary Assessment

Available evidence clearly suggests that the MGF and the LOC components were successful interventions. Both components were implemented in a fairly smooth manner and whatever problems were encountered in the early stages, they were usually addressed and solved along the way. Also, both components favorably influenced beneficiary firms' activities. There are, however, non negligible differences in terms of additionality, impact and effects on the broader environment.

The MGF was characterized by a good degree of additionality, as it largely supported activities that otherwise would not have been implemented. Participation in the scheme appears to have influenced beneficiaries' operations is a variety of ways. Although not all the changes triggered by MGF-funded initiatives can be easily measured in monetary terms (a feasibility study or a new MIS, however good, do not immediately translate into an increase in sales), the results of the counterfactual impact assessment also indicate a positive impact on beneficiaries' performance, at least in the case of exports. At the macro economic level, the US\$ 55 to 73 million incremental exports are a modest but non trivial contribution to alleviate structural balance of payments problems. Equally important, these results are indicative of a fairly positive cost – benefit ratio, as each dollar spent on the MGF generated between 18 and 24 dollars of incremental exports. The impact on the broader business environment, notably on the market for consulting services, is also difficult to measure (let alone to monetize) but it is certainly not negligible.

In the case of the LOC the situation is somewhat different. The credit line was conceived as a sort of 'emergency measure' at a time when fears of a dramatic deterioration in the credit market were quite widespread. Luckily, subsequent developments were not as bleak as initially envisaged, as witnessed by the decline in interest rates and the increase in the volume of credit to the economy. Under these more favorable conditions, the LOC was nonetheless fully disbursed over a short period of time but ended up being utilized by enterprises that in most cases cannot be regarded as credit constrained. This is <u>not</u> to say that the LOC did not have a positive impact: borrowers definitely benefitted from it, often over and above the immediate gains associated with a lower interest rate. Also, our estimates of incremental exports, however crude and not strictly comparable with the more rigorous results obtained with the MGF counterfactual exercise, suggest a positive impact on export flows. But its role was much less strategic than initially envisaged.

# 7.2 Recommendations – MGF Component

Survey results suggest that there is a keen interest for the continuation of the scheme. In case this option was indeed pursued by the Moldovan Government and by the World Bank, there appear to be some areas of improvement concerning both the design of the intervention and its practical implementation. First, as suggest by many MGF beneficiaries surveyed, it could be appropriate to expand the scope of the intervention. In addition to the services currently eligible for support, which retain a significant appeal, a future MGF-like operation could also cover areas/themes such as (i) market access and international networking services (e.g. participation to international exhibitions, exchange programs, etc.) and (ii) sectorspecific training and services. A third theme mentioned by some interviewees, i.e. advisory services on energy efficiency, could also be covered, subject however to the reaching of an understanding on the 'division of labor' with the EBRD-BAS, in order to avoid a competition between the two schemes. Instead, the co-financing of expenses related to the renewal of quality certifications obtained under the MGF, suggested by a few beneficiaries, should be avoided as it would make quality certification excessively depended upon the availability of grant money. Second, in order to increase the additionality of the intervention, one could possibly envisage a tightening of eligibility criteria for beneficiaries, which could be more geared towards MSME and/or locally owned firms, with the exclusion of large and/or foreign owned companies. This may require more promotional efforts to achieve a good pipeline of applications and/or the provision of more assistance to MSME applicants, but this appears to be a price well worth paying. *Third*, there appears to be some room of maneuver for increasing the cost effectiveness of the operation by slightly decreasing the co-financing rate. The results of the sensitivity analysis carried out within the framework of this evaluation suggest that with a 10 percentage points reduction in the co-financing rate, i.e. from the current 50% to 40%, the number of potentially interested firms remain quite substantial, with only a marginal

impact on absorption. However, this is admittedly a very sensitive matter and the results of our 'in vitro' experiment should need to be confirmed by further elements, in particular taking into account the operating modalities of other existing and possible future similar schemes. *Finally*, a further recommendation concerns the setting up of a tool for the integrated management of applications and related documentation. This does not originate from the views expressed by MGF beneficiaries but rather from the Consultants' own direct experience in dealing with CCI archives in the early stages of this evaluation. To be crystal clear: the CCI did an extremely good job in promoting and managing the MGF and, as clearly evidenced by the comments made by the firms surveyed, its work can only be highly praised. But the availability of a more performing management information system (e.g. with a unique identification code for each applicant, the storage of an electronic version of all document, etc.) would be definitely useful both during implementation and for future M&E needs. As the setting up and operation of such a system obviously entails costs, adequate resources should be allocated to the task.

### 7.3 Recommendations – LOC Component

The margins for improving the design of the LOC are more limited. *First*, the LOC's competitive positioning vis-à-vis the other credit lines available to Moldovan banks heavily rests on one single strong factor, the low interest rate. Any change in the design that could result, directly or indirectly, in an increase in the cost of funding is likely to drastically reduce the attractiveness of the initiative in the eyes of banks and, therefore, to negatively impact on absorption. Second, a change possibly worth considering concerns the introduction of stricter eligibility criteria concerning the size and/or nature of borrowers, with a comparatively greater emphasis on MSME and locally-owned firms, similarly to what proposed above for the MGF. In principle, this could increase the additionality of the intervention, although one has to realistically take into account possible side effects (many MSME may not be able to mobilize the required collateral, not all the banks may be interested in downscaling their lending), which might well limit absorption and, at a minimum, translate into a longer disbursement period. *Third*, a comment frequently heard from both borrowers and participating banks concerns the possibility of relaxing the export-orientation requirement for sub-loans. However, this would fundamentally alter the nature of the credit line, which would become scarcely distinguishable from other, similar instruments already available in the market. If an increase in exports is regarded as a strategically important policy objective, the export-orientation requirement is an obvious implication and its elimination does not appear to be justified. Fourth, an 'easy' recommendation concerns the simplification of procedures, an aspect frequently mentioned by borrowers and, more forcefully, by participating banks. However, it is quite clear that the procurement rules applicable to a credit line funded by a World Bank project are intrinsically different from those applicable to credit lines funded by institutions such as the IFC, the EBRD or the FMO. While some improvements at the margin are maybe possible, the vast experience of CLD staff in managing this type of operations (coupled with their determination in keep things moving otherwise, it wouldn't have been possible to disburse the full amount in less than two years), suggests that the opportunities for a major re-hauling of the system are in all likelihood negligible.

# **ANNEXES**

# ANNEX A – LIST OF PERSONS AND ENTITIES INTERVIEWED DURING FIELD WORK

Entity	Name	Position		
_	Mr. Ghenadii COTELNIC	Consultant, Development of Financial and Private		
World Bank	WII. Ghenadii COTELIVIC	Sector		
VV OTTA Dami	Ms. Melissa A. REKAS	Private Sector Development Specialist,		
Duaiset Implementation		Europe and Central Asia Region		
Project Implementation Unit	Mr. Aureliu CASIAN	Executive Director		
Implementation Agencies				
Camera de Comert si	Mr. Sergiu HAREA	Responsible of CEP-MGF		
Industrie	Ms. Anastasia LEANCA	Consultant, CEP-MGF		
	Mr. Raisa CAN TEMIR	Director		
Credit Line Directorate	Ms. Veronica JURMINSCHI	Deputy Director		
	Ms. Eugenia NEGRUTA	Monitoring Specialist		
Other				
Biroul National de	Ms. Lucia SPOIALA	General Director		
Statistica	Mr. Iurie MOCANU	Head of Statistical Infrastructure Division		
	Mr. Andrei CRACIUN	Head of Financial Reports Informational Service		
Participating Financial Inte	ermediaries – Line of Credit			
	Ms. Ala POLUSTANOVA	Head of Retail Product Department		
Moldova Agroindbank	M. I'I' AVDADIE	Main Product Specialist, Retail Product		
	Ms. Lilia VRABIE	Department		
Energbank	Mr. Iurii Vasile VASILACHI	President		
	Mr. Andrei UNTILA	Credit Specialist		
	Mr. Victor GIRLEANU	Director of the Credit Analysis and Management		
36.13		Department		
Moldinconbank	Ms. Tatiana GHEORGHIEV	Head of Division, Products for Legal Entities,		
		Retail and Network Development Department Head of IFI Resources & Correspondent,		
	Ms. Natalia NANI	Relations Division		
Banca Sociala	Mr. Iaroslav LEVINTA	Head of the Main Directorate for Credit		
Ms. Liliana MOCANU		Deputy Head of Loan Department		
VictoriaBank	Mr. Sergiu GROSU	Deputy Head, SME loans Department		
Mobiasbank	Ms. Lilia CEBAN	Head of Trade Finance		
	Ms. Alexandra LACUSTA	Economist Coordinator		
Matching Grant Facility Se	rvice Providers			
PRISMA-PRIM	Mr. Iurie POPESCU	Director		
EECA – East-Europe	Mr. Vladislav RAILEAN	Managing Director		
Consulting Associates				
PROF System	Mr. Serghei GUDIMA	Director		
PROinit	Mr. Evghenii SAMOTIIA	Director		
	Mr. Andrei VAGANOV	Commercial Director		
SGS	Mr. Sergiu CROITORU	General Manager		
EGGOMORE	Mr. Mugur UNGUREAN	Manager		
ESCOMOBIL A romagon Vitalia	Mr. Aramasau VITALIE	Director		
Aramescu Vitalie Other Donor-Funded Progr	Mr. Aremescu VITALIE	Director		
Competitiveness	ums			
Enhancement and		att a ab a at a second		
Enterprise Development	Mr. Douglas GRIFFITH	Chief of Party, Chemonics, USAID contractor		
Project II (CEED II)				

European Bank for Reconstruction and Development – Business Advisory Services (EBRD-BAS)	Ms. Veronica ARPINTIN	National Programme Manager, EBRD BAS Moldova
International Fund for Agricultural Development Credit Line (IFAD)	Mr. Victor ROSCA	Director, Consolidated Unit for the Implementation of IFAD Programmes

# ANNEX B – LIST OF ENTERPRISES SURVEYED

MGF BENEFICIARIES	
Acadivi SRL	Grape Valley SRL
Acorex Wine Holding	Haruz Grup SRL
Adamantin-com SRL	Hidroinpex SA
Agrotinlac SRL	Hirjauca Vin SA
Alfa Nistru SA	Imunotehnomed
ALIANTA VIN SRL	Incaso
Alimentarmas SA	INCOMAS SA
Amdaris	Incomlac SA
AMG Magroselect	Interactiv S.A.
Ampelos SRL	Introscop SA
Ampelos-plus srl	Invalc SRL
API Orhei SA	JLC SA
Argus-S SRL	Justar SRL
Armo Beton	Le Bridge Corporationa Company SRL
Aromint-Lux SRL	Lobi-GP SRL
Artasbocem SRL	Maestro Nut
Asconi	Magistrala SA
ASEM	Magnific SRL
Auto Prezent	Maximum Magnum IM
Azamet-Grup SRL	Maxino srl
Balcombe Srl	Maxlinie Comp SRL
Basarabia Lwin Invest SRL	Metar Grup SRL
Basavin and Co SA	Mineli Babelus SRL
Bastina-Radog SRL	MobElita SRL
Bavat Print SRL	Moldcell Moldcell
Becor SRL	Mold-Nord Falesti SA
Beldorn Vin SRL	MOLDSERCON
Berhord A&D	Monicol SRL
Berhord SRL	Monolit SA
BIComplex SRL	Natvex-com srl
Biofirbre SRL	Nicalin Grup SRL
Bucovat SRL	Nis-Struguras SA
Bugeacagrotehservice SA	Oldcom SA
Buslan Grup	Olmosdon SRL
Capital Leasing SRL	OM MoldCredit SRL
Cardiax Plus SRL	Orange Moldova SA
Carisma M SRL	Orhei-VIT
Cart-Cedru	Orlact SA
Carvigors SRL	Ozun Cons SRL
Chisla Noua	Palplast SRL
CLASIC SV	Panilino SRL
Costesti SA	Perpetus-auto srl
Credit Rapid	Podgoria Vin SRL
Cricova SA	Poliproject Exhibitions
Daac System Integrator SRL	Prisma-Prim SRL
Debutsor	Pronancons SRL
Di & Trade SRL	Puratos Mold
Dina Cociug SRL	Renaissance - Perfect SRL
Doina Vin SRL	Roa-Consulting Auto SRL
Easy Leasing SRL	Rodal-S SRL
Ecofin-Consult-Evaluare	Rogob SRL
Ecomedinterm	Rompetrol Moldova SA
Ecosem Grup SRL	Rumeon
Electro Test Grup	Rusnac-MoldAqua SRL
Electro Test Grup	Sapin Exim SRL
Liceno Test Orup	Dupin Laini DKL

Elevit-Prod SRL	Seneca SRL
Elit - Tur	SPAMOL SRL
Ergolemn SRL	Stejaur
Espason-Grup SRL	Sudzucker Moldova SA
Estodor Com SA	Sun Communications
Euroconfort SRL	Tehelectro-SV SRL
Eurodeviz SRL	Tehnocity Invest SRL
Euromol Management Consulting	T-Par SRL
Fabrica de conserve din Calarasi SA	Transarf Grup SRL
Farmacia Anenii Noi SA	Trendseter SRL
FEC SA	ULIM (Universitatea Libera Indipendenta di Moldova
Fidesco	Union Fenosa SA
First Line SRL	VICTIANA SRL
Fiting SA	Vila Verde SRL
Flornord-com SRL	Vinaria Bardar SRL
FOLICAIN SRL /Fautor SRL	VINIA TRAIAN
FPC MGM SRL	Viorica Cosmetic
Gardecor SRL	VM Plumcom
Ghilda Vinurilor Moldovenesti	Voiaj International &Co

LOC BENEFICIARIES	
ABS SRL	Pronutconagro SRL
Acadivi SRL	Romanesti SA
Alfa Nistru SA	Samiralagro SRL
Asconi SRL	Sarmetal-Prim SRL
Balcom-Agro	Steldis
Basvinex	Suvorov Vin
Bucovat SRL	Tehelectro SRL
Ceteronis SRL	Telemar SRL
Coval& Co SRL	Transaf Grup SRL
Depofarm 1 SRL	TransgrupService SRL
Dermatops SRL	Unicaps SRL
Doina Vin SRL	Valians-Tur
Elit Tur SRL	Vinia Traian SA
Fortuna Plus	Vitapharm-Com SRL
Fortus	Agrosudresurse SRL
Iacobas SRL	Apalex Com SRL
Iacon-Trans SRL	Cito-gaz service SRL
JLC SA	Cartnord SRL
Lobi-GP SRL	Eclat-Com SRL
Maestro Nut SRL	Hanuco SRL
Magas trans SRL	Macon SA
MMD SRL	Politrans Logist SRL
Mold Nord SA	RIKIPAL
Monicol SRL	RLT Interminal Ltd
NiC-OL SRL	Sindbad SRL
NIGEVIX SRL	Tras-Ager SRL
Oldcom SRL	Velar Auto
Orlact SA	Vest-Resurs SRL
Prometeu-T	

### ANNEX C - COUNTERFACTUAL IMPACT ASSESSMENT - METHODOLOGY

# C.1 Model A: Propensity Score Matching – Difference in Difference Estimates

The first approach (Model A) consists in a propensity score matching difference-in-differences (PSM-DID) estimator. This estimator has been widely used in evaluation of programs in several areas and in particular in the area of export promotion<sup>19</sup>. The PSM-DID controls for selection bias by comparing the change in outcomes for program beneficiaries relative to the change in outcomes for observationally similar control firms before and after the program.

The PSM-DID estimator is based on the twin assumptions that (i) assignment to treatment (or the decision to undertake it) is independent of potential outcomes, conditional on observed pre-treatment covariates; and (ii) there is sufficient overlap in the distribution of propensity scores between the treatment and control groups (i.e., it is possible to find matches for all or most treated firms). While the PSM-DID estimator is based on assumption (i) designated as selection on observables, by relying on a comparison of changes in outcomes, it does control for unobserved time-invariant pre-program differences across firms potentially leading to self-selection into the program and influencing outcomes<sup>20</sup>.

### **C.1.1 Propensity Score Matching**

The purpose of the statistical match is the identification of the most comparable firm for each of the MGF beneficiaries. In the evaluation literature, data often do not come from randomized trials but from (non randomized) observational studies. Since in observational studies assignment of subjects to the treatment and control groups is not random, the estimation of the effect of treatment may be biased by the existence of confounding factors. The idea behind matching is simply to select a group of non-beneficiaries in order to make them resemble the beneficiaries in everything, but the fact of receiving the MGF assistance. If such resemblance is satisfactory, the outcome observed for the matched group *approximates the counterfactual*, and the effect of the MGF intervention is estimated as the difference between the average outcomes of the two groups (in our case, the difference in the pre-post dynamics—see below).

The method of matching has an intuitive appeal because by constructing a control group and using difference in means, it mimics random assignment. The crucial difference with respect to a randomized controlled trial is that in the latter the similarity between the two groups covers *all* characteristics, *both observable and unobservable*, while even the most sophisticated matching technique must rely on observable characteristics *only*. The fundamental assumption for the validity of matching is that, when observable characteristics are balanced between the two groups, the two groups are balanced with respect to all the characteristics relevant for the outcome, including the unobservable ones. The larger the number of available pre-intervention characteristics, the higher the chance that this assumption holds true. Intuitively, each beneficiary is matched to the non-beneficiary who is most similar in terms of probability of being a beneficiary, where this probability is calculated on the basis of individual characteristics, and it is called *propensity score*.

Propensity score matching (S.O. Becker and A. Ichino, 2002) is a way to correct the estimation of treatment effects controlling for the existence of these confounding factors. The idea is that the bias is reduced when the comparison of outcomes is performed using treated and control subjects who are as similar as possible. Since matching subjects on an n-dimensional characteristics is typically unfeasible for large n, this method summarizes pretreatment characteristics of each subject into a single-index variable (the propensity score) that makes the matching feasible. This reduces the matching from a multi-dimensional problem (where the number of dimensions depends on the number of available variables) to a one dimensional problem. Once the two groups are formed, the average effect is estimated for each outcome by simply computing the difference in means between the two groups. It should be kept in mind that this only allows to reduce, and not to eliminate, the bias generated by unobservable confounding factors. The extent to which this bias is reduced depends crucially on the richness and quality of the control variables on which the propensity score is computed and the matching performed.

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<sup>&</sup>lt;sup>19</sup> Görg, Henry and Strobl (2008) and Volpe and Carballo (2008).

<sup>&</sup>lt;sup>20</sup> Blundell and Costa Dias (2009).

The estimation of the propensity score. Propensity scores were obtained from a cross-sectional probit regression explaining the probability of applicant firms receiving MGF grant in any year between 2007 and 2009. The explanatory variables are a rich set of firm covariates: a set of dummies for location, sector and type of ownership fixed effects, a categorical variable for firm size in terms of employment, two vectors for sales and employment pre treatment differences and two vectors for sales and employment pre treatment trends. The probit estimates show that firms operating in commercial sector are significantly more likely to receive a MGF grant, whereas smaller firms in terms of sales are less likely. The relatively large common support imply that most beneficiary firms can be matched to one or more control firms based on the closeness of propensity scores.

### **Box C.1 - Propensity Score Theory**

The propensity score is defined (Rosenbaum and Rubin, 1983) as the conditional probability of receiving a treatment given pre treatment characteristics:

[1] 
$$p(X) = Pr(D=1 \mid X) = E(D \mid X)$$

where D= $\{0,1\}$  is the indicator of exposure to treatment and X is the multidimensional vector of pretreatment characteristics. If the exposure to treatment is random within cells defined by X,it is also random within cells defined by the values of the one-dimensional variable p(X). As a result, given a population of units denoted by i, if the propensity score  $p(X_i)$  is known, then the Average effect of Treatment on the Treated (ATT) can be estimated as follows:

[2] 
$$E \{Y_{li} - Y_{0i} / D_i = 1\}$$

$$E [E\{Y_{li} - Y_{0i} / D_i = 1, p(X_i)\}]$$

$$E \{E\{Y_{li} / D_i = 1, p(X_i)\} - E\{Y_{0i} / D_i = 0, p(X_i)\} / D_i = 1\}$$

where the outer expectation is over the distribution of  $(p(X_i)|D_i=1)$  and  $Y_{1i}$  and  $Y_{0i}$  are the potential outcomes in the two counterfactual situations of (respectively) treatment and no treatment.

Formally, the following two hypotheses are needed to derive [2] given [1].

Lemma 1: Balancing of pretreatment variables given the propensity score.

If p(X) is the propensity score, then

$$D \perp X / p(X)$$

Lemma 2: Unconfoundedness given the propensity score.

Suppose that assignment to treatment is unconfounded; i.e.,

$$Y_l, Y_0 \perp D \mid X$$

Then assignment to treatment is unconfounded given the propensity score, i.e.,

$$Y_1, Y_0 \perp D \mid p(X)$$

If the Balancing Hypothesis of *Lemma 1* is satisfied, observations with the same propensity score must have the same distribution of observable (and unobservable) characteristics independently of treatment status. In other words, for a given propensity score, exposure to treatment is random and therefore treated and control units should be on average observationally identical.

After the estimate of propensity score, the Balancing Hypothesis (*Lemma 1*) was tested according to the following algorithm:

1. The following probit model has been fitted:  $Pr(D_i = 1 \mid X_i) = \Phi\{h(X_i)\}$ 

where  $\Phi$  denotes the normal c.d.f. and h(X) is a starting specification that includes all the covariates as linear terms without interactions or higher order terms: (i) total sales [both from ASA and FR], (ii) number of employees, (iii) value added, (iv) operating profit, (v) productivity, (vi) investment, and (vii) export sales.

- 2. Split the sample into k equally spaced intervals of the propensity score.
- 3. Within each interval, tested that the average propensity score of treated and control units did not differ.
- 4. If the test failed in one interval, split the interval in half and tested again.
- 5. Continued until, in all intervals, the average propensity score of treated and control units did not differ.
- 6. Within each interval, tested that the means of each characteristic did not differ between treated and control units.

Matching estimators of the ATT based on the propensity score. Various methods have been proposed in the literature to match treated and non treated units by propensity score. For the quantitative analysis conducted in this study, three of them were performed, namely:

- Nearest-Neighbor matching consists of taking each treated unit and searching for the control unit with the closest propensity score. The method is usually applied with replacement, in the sense that a control unit can be a best match for more than one treated unit. Once each treated unit is matched with a control unit, the difference between the outcome of the treated units and the outcome of the matched control units is computed. The ATT of interest is then obtained by averaging these differences. In the Nearest-Neighbor method, all treated units find a match. However, some of these matches are fairly poor because for some treated units the nearest neighbor may have a very different propensity score, and, nevertheless, he would contribute to the estimation of the treatment effect independently of this difference.
- With *Radius Matching*, each treated unit is matched only with the control units whose propensity score falls into a predefined neighborhood of the propensity score of the treated unit. If the dimension of the neighborhood (i.e., the radius) is set to be very small, it is possible that some treated units are not matched because the neighborhood does not contain control units. On the other hand, the smaller the size of the neighborhood, the better the quality of the matches.
- With *Kernel Matching*, all treated are matched with a weighted average of all controls with weights that are inversely proportional to the distance between the propensity scores of treated and controls. This type of matching maximizes the number of control units available and for such a reason we adopted it as our best choice. It is clear that these methods reach different points on the frontier of the trade-off between quality and quantity of the matches, and none of them is a priori superior to the others. Their joint consideration, however, offers a way to assess the robustness of the estimates.

### **Box C.2 - Matching Methods Theory**

Let T be the set of treated units and C the set of control units, and let  $Y_i^T$  and  $Y_i^C$  be the observed outcomes of the treated and control units, respectively. Denote by  $C_{(i)}$  the set of control units matched to the treated unit i with an estimated value of the propensity score of  $p_i$ . Nearest-neighbor matching sets:

$$C_{(i)} = \min_{\mathbf{j}} || p_i - p_j ||$$

The case of multiple Nearest Neighbors should be very rare, in particular if the set of characteristics X contains continuous variables. However, the likelihood of multiple Nearest Neighbors is further reduced if the propensity score is estimated and saved in double precision, as we did. In Radius matching more than one control unit can be matched to a single treated unit:

$$C_{(i)} = \{p_i \mid || p_i - p_i || < r\}$$

i.e., all the control units with estimated propensity scores falling within a radius r from  $p_i$  are matched to the treated unit i.

Both Nearest Neighbor and Radius matching denote the number of controls matched with observation  $i \in T$  by  $N_i^C$  and define the weights  ${}^{\omega}_i = 1/N_i^C$  if  $j \in C_{(i)}$  and  ${}^{\omega}_i = 0$  otherwise. Then, the formula for both types of matching estimators can be:

$$\tau^M = \frac{1}{N^T} \sum_{i \in T} \left( Y^T - \sum_{i \in C(i)} \omega_{ij} Y_j^C \right)$$

$$= \frac{1}{N^T} \left( \sum_{i \in T} Y^T - \sum_{i \in T} \sum_{j \in C(i)} \omega_{ij} Y_j^C \right)$$

$$= \frac{1}{N^T} \sum_{i \in T} Y^T - \frac{1}{N^T} \sum_{i \in C} \omega_{ij} Y_j^C$$

(where M stands for either nearest-neighbor matching or radius matching, and the number of units in the treated group

$$\omega_j = \sum \omega_{ij}$$

is denoted by NT): where the weights  $\omega_f$  are defined by

To derive the variances of these estimators, the weights are assumed to be fixed and the outcomes are assumed to be independent across units. Standard errors are obtained by performing bootstrap option.

The Kernel matching estimator is given by

$$\tau^K = \frac{1}{N^T} \sum_{i \in T} \left( Y^T - \frac{\sum_{i \in \mathcal{C}(i)} Y_j^C \mathcal{C}\left(\frac{p_j - p_i}{h_m}\right)}{\sum_{i \in \mathcal{C}(i)} \mathcal{C}\left(\frac{p_j - p_i}{h_m}\right)} \right)$$

Where  $G(\cdot)$  is a kernel function and  $h_m$  is a bandwidth parameter. Under standard conditions on the bandwidth and kernel,

$$\frac{\sum_{i \in \mathcal{C}(i)} Y_{j}^{C} G\left(\frac{p_{j} - p_{i}}{h_{n}}\right)}{\sum_{i \in \mathcal{C}(i)} G\left(\frac{p_{j} - p_{i}}{h_{n}}\right)}$$

is a consistent estimator of the counterfactual outcome  $Y_{0i}$ . Standard errors are obtained by bootstrap procedure. Bootstrapping is a non parametric approach based on random re-sampling as an alternative method for estimating the standard errors when the theoretical calculation is complicated or not available in the current software (Guan, 2003).

While a consistent estimator may be easy to obtain, the formula for the standard error is sometimes more difficult, or possibly even mathematically intractable. Bootstrapping relies upon the assumption that the current sample is representative of the population, and therefore, the empirical distribution function  $F^{\Lambda}$  is a nonparametric estimate of the population distribution  $F^{\Lambda}$ .

From the sample dataset, the desired statistic, i.e.  $\theta^{\wedge}$ , can be calculated as an empirical estimate of the true parameter  $\theta$ . To measure the precision of the estimates, a bootstrapped standard error can be calculated in the following way: (i) draw random samples with replacement repeatedly from the sample dataset; (ii) estimate the desired statistic corresponding to these bootstrap samples, which forms the sampling distribution of S^; (iii) calculate the sample standard deviation of the sampling distribution.

This approach utilizes the same theory underlying Monte Carlo (Robert and Casella, 2004) simulation methods, except it utilizes re-samples from the original data rather than from the population. When the sample size is large, the bootstrapping estimates will converge to the true parameters as the number of repetitions increases. We used 500 repetitions to obtain the standard errors of our propensity score matching estimations.

Imposing the common support condition for this matching (i.e. that there is sufficient overlap in the distribution propensity scores between the treatment and the control group) implies dropping treated firms whose propensity score is higher than the maximum or lower than the minimum score for the control group. In our case, this results in a half loss of treated firms. Our common support includes 158 MGF (335 is the total no. of beneficiaries) beneficiaries and 94 control firms.

To assess the quality of the matching we implemented tests for the balancing hypothesis proposed by Rosenbaum and Rubin (1985), Dehejia and Wahba (2002) and Smith and Todd (2005). The rationale behind the tests is to assess whether the matching is able to balance the distribution of covariates in the treatment and control groups<sup>21</sup>. Overall, the balancing tests suggest that our matching procedure generates sufficiently similar 'control firms' to match to each treated firm in the common support. Exhibit C.1 shows the inferior bound, the number of treated and the number of controls for each block.

**Exhibit C.1 Distribution of the firms per propensity score** 

Inferior block of p.score	Untreated firms	Treated firms	Total
0	108	132	240
0.2	7	5	12
0.4	43	49	92
0.6	50	102	152
0.8	5	37	42
Total	213	325	538

### **C.1.2 Difference in Difference Estimation**

Once the two groups are identified, the impact estimates are obtained through a *difference in difference* (DID) using one year before the application as the pre-intervention year (2007 is the first year of application) and two years after the application as the post-intervention year (2011 is the last year for which data are available in the BNS datasets). The DID estimator eliminates all unobservable heterogeneity that is fixed in time, but it cannot do anything to correct for time-varying differences.

All of the estimation models implemented in this analysis exploit the availability of panel data to implement a difference in difference scheme to control for local economic and sector specific market conditions that may affect the outcomes in different ways between treated and non-treated units, independently from the intervention. This is because by differencing the outcome variable, all pre-intervention characteristics that may be assumed to affect the outcome variable in a constant manner across different times are neutralized.

However, simple DID approaches would have the limit of relying on the assumption that every type of heterogeneity between treated and non-treated firms must have a constant influence on the level of the outcome variable in any of the times considered in the analysis. For most of enterprise support programs such strict assumption on the influence of unobserved heterogeneity may be hard to justify. This is because, in many cases, pre-intervention characteristics of firms may generate multipliers effects with no constant influence on levels or on the linear trends of the outcome variable.

For this reason, all the estimation models used in the analysis are Conditional Difference in Difference (CDD) approaches implemented with various techniques, and include data on pre-intervention outcome variables (basically sales and staff) as control variables. In this way, the estimation model yields unbiased impact estimates without having to assume that the observable pre-intervention characteristics are fixed effects, while the remaining possible unobserved heterogeneity between the treated and non-treated firms is still controlled for by the pre-post intervention differences in the outcome variables.

It must be noticed that the treatment year varies from 2007 to 2010, which progressively reduces the sample size across the years. The reason for this sample shrinkage is that firms that applied MGF in later years drop from the sample as the time differences grow larger: e.g., for a firm enrolled in 2010, the observations to compute its two years difference are not available. The following Exhibit shows the number of records for every difference calculation in outcome variables.

.

<sup>&</sup>lt;sup>21</sup> See Caliendo and Kopeining (2008).

**Exhibit C.2** Number of records per difference calculation

Variables	1 year diff.	2 years diff.	3 years diff.	No. of observations	Average coverage rate
Total sales (FR)	397	227	171	538	49%
Total sales (ASA)	290	185	147	538	39%
Number of employees	290	184	146	538	38%
Value added	277	173	146	538	36%
Productivity	289	184	148	538	38%
Operating profit	413	232	175	538	51%
Investment	341	208	161	538	44%
Export	138	92	78	538	19%

#### **Box C.3 – Difference in Difference Estimators Theory**

For the case of a single a single homogenous binary treatment category, the difference in difference (DD) estimators can be defined as:

$$\tau_{DD} \; = E \; [Y^1_{\; t+p} - \; Y^0_{\; t-r} \; | \; T_i \!\! = \!\! 1] \; - \; E \; [Y^0_{\; t+p} - \!\! Y^0_{\; t-r} \; | \; T \!\! = \!\! 0] \; .$$

Simple DD estimators yields unbiased estimates only if:

$$E[Y_{t+p}^0 - Y_{t-r}^0 | T=0] - E[Y_{t+p}^0 - Y_{t-r}^0 | T=1] = 0$$
.

Such condition requires that the expected value of the pre-post intervention change of Y, recorded in the excluded firms, corresponds to the counterfactual change of the treated firms. The size of the selection bias caused by any non-null difference:

$$E[Y_{t+p}^{0} - Y_{i,t-r}^{0} | T=0] - E[Y_{t+p}^{0} - Y_{t-r}^{0} | T=1]$$

can be reduced if a third observation, at a time t-r-1, is added for each area in the data sample.

The availability of a third temporal observation allows one to further refine the estimate of the counterfactual change and, thus, to reduce the amount of selection bias in the impact estimate. This is because a third observation, recorded at a time (t-r-1), allows one to estimate the difference between the pre-intervention growth rate recorded in the treated firms and the pre-intervention growth rate recorded in the non-treated firms.

This difference is then used to correct the estimate of the counterfactual change that would be obtained with the availability of just two temporal observations. The estimator Difference in Difference in Difference (DDD)  $\tau_{DDD}$  that can be implemented with a third temporal observation is defined as:

$$\tau_{DDD} \ = E[Y^1_{\ t+p} \ - \ (Y^0_{\ t-r} \ - \ Y^0_{\ t-r-1} \ ) \ | \ T=1] \ - \ E[Y^0_{\ t+p} \ - \ (Y^0_{\ t-r} \ - \ Y^0_{\ t-r-1}) \ | \ T=0].$$

### **C.1.3 Results of the Estimates**

Similar patterns emerge from all three econometric approaches: MGF has a positive impact on export performance two year after the application (which is likely to be approximately one year after the implementation of the projects). The results are shown in Exhibits C.3 to C.5

**Exhibit C.3** Propensity Score Matching: 2 years DID (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	14.045	0.150	102	57
Total sales (FR)	9.723	0.251	102	61
Number of employees	4.214	0.751	102	57
Value added	5.716	0.465	99	53
Productivity	0.051	0.408	102	57
Operating profit	2.237	0.196	102	63
Investment	-0.099	0.973	100	58
Export	9.070*	0.056	59	19

**Exhibit C.4** Propensity Score Matching: 2 years DID (Nearest Neighbour)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	10.789	0.323	103	57
Total sales (FR)	7.268	0.300	103	61
Number of employees	5.301	0.738	103	57
Value added	1.808	0.838	100	53
Productivity	0.043	0.532	103	57
Operating profit	3.354*	0.070	103	63
Investment	0.051	0.986	101	58
Export	12.053**	0.035	62	19

Exhibit C.5 Propensity Score Matching: 2 years DID (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	13.122	0.130	102	57
Total sales (FR)	9.187	0.191	102	61
Number of employees	2.528	0.876	102	57
Value added	5.063	0.452	99	53
Productivity	0.047	0.546	102	57
Operating profit	2.308	0.142	102	63
Investment	-0.171	0.940	100	58
Export	10.180**	0.026	55	19

Results in million of MDL.

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

The magnitude of the effects on export sales is large for MGF beneficiaries, compared to the control group. Every PSM estimator produces statistically significant (90% for Nearest neighbor, 95% for Radius and Kernel) positive impact on export sales: we can set an estimation range between MDL 9 and 12 million in favor of beneficiary firms two years after the application (MDL 4.5 and 6 million yearly). No other significant effect can be detected in any other outcome variable, even if a positive impact on total sales cannot be excluded.

# C.1.4 Longer time effects: three years after the application

Export sales of the MGF firms increase significantly relative to those of control firms as a result of the program. The three year DID allows to grasp whether the impact on export sales assumes an increasing or decreasing trend. The following are the same PSM-DID estimators described above but a three years time period after the application is here considered.

**Exhibit C.6** Propensity Score Matching: 3 years DID (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	15.632	0.525	84	46
Total sales (FR)	21.237	0.414	86	47
Number of employees	-11.328	0.647	84	46
Value added	3.783	0.796	82	41
Productivity	0.379	0.369	84	46
Operating profit	5.706*	0.088	86	47
Investment	3.323	0.173	82	45
Export	10.470***	0.010	51	18

Exhibit C.7 Propensity Score Matching: 3 years DID (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	19.588	0.461	84	46
Total sales (FR)	21.505	0.464	86	47
Number of employees	-14.000	0.682	84	46
Value added	8.989	0.633	82	41
Productivity	0.463	0.253	84	46
Operating profit	8.290***	0.004	86	47
Investment	3.447	0.223	82	45
Export	12.318***	0.004	51	18

Exhibit C.8 Propensity Score Matching: 3 years DID (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	12.569	0.586	84	46
Total sales (FR)	18.061	0.449	86	47
Number of employees	-11.760	0.625	84	46
Value added	1.236	0.936	82	41
Productivity	0.351	0.340	84	46
Operating profit	5.694	0.118	86	47
Investment	3.326	0.171	82	45
Export	9.842**	0.020	47	18

Results in million of MDL.

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

Again every estimation produces statistically significant (95% for Radius, 95% for Nearest neighbor and Kernel) positive impact on export sales with range between MDL 9 and 12 million in favor of beneficiary firms three years after the application (MDL 3 and 4 million yearly). Since these results are calculated over three years the yearly impact shows a decreasing trend after the second year after the treatment. No other significant effect can be detected in any other outcome variable, even if a positive impact on operating profit cannot be excluded but it strongly depends on the type of estimator.

#### **C.1.4** Effects of different treatments

The information available for the MGF allowed identifying possible difference between the effects of the two types of assistance provided by the facility. On the basis of the available data, the firms that received assistance under the MGF appear to be 335. Of them, 214 benefited from assistance for quality certification (T1), 105 were co-financed business advisory services (T2), and the remaining received grants (T3) for both types of assistance. The following Exhibit reports the number of observations available in the merged dataset.

**Exhibit C.9 Distribution of the firms per treatment category** 

Treatment	No. of observations
T1 – Quality Certification	206
T2 – Business Advisory	103
T3 – QC and BA	16
T - Generic	325

Since BAS assistance was introduced in 2009 and we measured the effects as two years differences (DID estimator previously exposed) no outcome data can be calculated for treatment T2 and T3. The analysis was replicated for treatment T1 and the following are the produced estimates by the matching procedures (Model A) considering two years differences (see Annex D for the detailed T1 estimations).

Exhibit C.10 Propensity Score Matching: 2 years DID (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	15.097	0.095	97	57
Total sales (FR)	10.464	0.188	97	61
Number of employees	4.769	0.752	97	57
Value added	4.671	0.470	94	53
Productivity	0.067	0.326	97	57
Operating profit	2.370	0.120	97	63
Investment	-0.658	0.775	95	58
Export	7.876**	0.041	56	19

**Exhibit C.11** Propensity Score Matching: 2 years DID (Nearest Neighbour)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	16.832	0.201	98	57
Total sales (FR)	10.968	0.220	98	61
Number of employees	19.878	0.296	98	57
Value added	3.157	0.737	95	53
Productivity	0.109	0.217	98	57
Operating profit	2.431	0.124	98	63
Investment	-0.208	0.951	96	58
Export	5.873	0.205	60	19

**Exhibit C.12 Propensity Score Matching: 2 years DID (Radius)** 

Exhibit C.12 Tropensity Score Watering, 2 years DID (Radius)						
Outcome	Impact	Sign.	N treated	N control		
Total sales (ASA)	12.811	0.114	95	57		
Total sales (FR)	8.815	0.219	96	61		
Number of employees	4.817	0.723	95	57		
Value added	4.222	0.479	92	53		
Productivity	0.067	0.333	95	57		
Operating profit	2.212	0.123	96	63		
Investment	1.649	0.455	94	58		
Export	8.304**	0.033	55	19		

Results in million of MDL.

Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

To analyze the effect of the different activities, PSM-DID were re-estimated with the dependent variable defining only beneficiaries implementing quality certification. Since these projects are the large majority of the sample the results confirm a solid effect on export activity. Two out of three matching (Radius and Kernel) show positive and statistically significant growth in export two years after the application: an average MDL 7.9 million (MDL 3.9 million per year) with Kernel estimation and MDL 8.3 million with

Radius estimation. That figure relies on the fact that quality certification was the treatment implemented by almost all the firms included in the PSM estimates and the positive impacts is based on the evidence produced by this type of project.

### C.2 Model B: Sensitivity analysis

Model B consisted in two sets of regression: an ordinary least squares (OLS) and a robust regression (Huber estimator). The overall range of the impact estimates yielded by the various models and specifications is such to grant a sufficient robustness of the main findings in all the cases in which the sample size was large enough to give statistical significance to the results.

### **Box C.4 - OLS and Robust Regressions Theory**

A multiple *ordinary least squares* (OLS) studies the relationship between a dependent variable and a series of independent variables, and allows controlling for the multiple factors that simultaneously affect a dependent variable. The following represents the relationship s between  $y_i$  and  $x_{i,i}$  based on a multiple linear regression involving m independent variables:

$$y_i = b_0 + b_1 x_{1,i} + b_2 x_{2,i} + ... + b_m x_{m,i} + \varepsilon_i$$

Coefficient  $b_0$  is the vertical intercept. The m coefficients  $b_1$  to  $b_m$  are slope coefficients; each coefficient  $b_i$  for j>0 represents the change in  $y_i$  induced by a change in variable  $x_{i,i}$  holding all other variables constant.

**Robust regression** is an alternative to least squares regression when data is contaminated with outliers or influential observations. Robust regression can also be used for the purpose of detecting influential observations. In linear regression, an outlier is an observation with large residual, whose dependent-variable value is unusual given its value on the predictor variables; it may indicate a sample peculiarity or may indicate a data entry error or other problem. Robust regression might be a good strategy since it is a compromise between excluding these points entirely from the analysis and including all the data points and treating all them equally in OLS regression. The idea of robust regression is to weigh the observations differently based on how well behaved these observations are, the larger the residual, the smaller the weight.

The following is the set of control variables included in the model:

- o\_STRA: a dummy for the ownership (1 for foreign firms, 0 for others)
- a\_COMM: a dummy for the sector (1 for commerce firms, 0 for others)
- CHISINAU: a dummy for location (1 for firms located in Chisinau, 0 for others)
- L\_PRE\_SALES: a vector for pre-treatment sales level (controlling for the size of the firms)
- D\_PRE\_SALES: a vector for pre-treatment sales yearly differences (controlling for trends)

#### **C.2.1 Results of the Estimates**

The results of Model B are partially consistent with those of Model A, showing positive and statistically significant impact on export sales two years after the application (MDL 8.9 million). Robust regression also shows a positive significant impact on total sales, but since it is the only estimation reporting such a result we are not confident in the validity of this finding.

Exhibit C.13 Regression (OLS): 2 years

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	6.996	0.118	117	68
Total sales (FR)	5.543	0.151	128	84
Number of employees	1.713	0.880	117	67
Value added	1.565	0.628	112	61
Productivity	-0.339	0.105	117	67
Operating profit	0.825	0.394	128	86
Investment	-1.136	0.699	124	73
Export	8.975*	0.083	68	20

Exhibit C.14 Regression (Huber Estimator): 2 years

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	4.755***	0.004	117	68
Total sales (FR)	2.110*	0.076	128	84
Number of employees	1.589	0.624	117	67
Value added	0.489	0.567	112	61
Productivity	0.032*	0.091	117	67
Operating profit	-0.001	0.999	128	86
Investment	-0.255	0.496	124	73
Export	1.968	0.320	68	20

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%

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# ANNEX D - COUNTERFACTUAL IMPACT ASSESSMENT - RESULTS

#### **D.1 Propensity Score Estimation**

Probit regression, reporting marginal effects LR chi2(11) = 19.69 Number of obs= 298

Prob> chi2= 0.0498

Log likelihood = -183.52361Pseudo R2= 0.0509

Benef_IC	dF/dx	Std. Err.	z	P>   z	x-bar	[	95%	C.I.	]
t_micro* t_small* t_med*  o_STRA* a_COMM*  CHISINAU* L_PRE_~S D_PRE_~S L_PRE_~F D_PRE_~F	1189738 .0853316 .0858662 .0484763 .1984895  0166928 .0019587  0029376  -4.85e-06 .0004855	.1949405 .1463856 .1267357 .0713579 .066157 .0627805 .0010106 .0022854 .0003548	-0.63 0.57 0.67 0.67 2.58 -0.26 1.93 -1.28 -0.01 0.68	0.530 0.567 0.504 0.505 0.010 0.791 0.053 0.199 0.989 8 0.49	.208054 .171141 .691275 36.9327 3.40188 123.849	20 1625 091 .068 13 0000	1383 3824 3974 022	.2631 .3722 .334264 .18833 .32815 .10635 .003939 .00154 .0006	42 5 5 5 5
obs. P   pred. P	+ .647651 .6583718	(at x-bar)							

(\*) dF/dx is for discrete change of dummy variable from 0 to 1  $\,$ z and P>|z| correspond to the test of the underlying coefficient being 0

\*\*\*\*\*\*\*\*\*\*\*\*\*

The treatment is Benef\_IC

Benef_IC	Freq.	Percent	Cum.
0 1	213 325	39.59 60.41	39.59 100.00
Total	538	100.00	

Estimation of the propensity score

Probit regression
LR chi2(11) = 19.69
Chi2= 0.0498 Number of obs= 298

Log likelihood = -183.52361Pseudo R2= 0.0509

Benef_IC	Coef.	Std. E	 rr.	z	P>   z	[	 95% Conf	. Int	erval]
t_small   .236 t_med   .236 o_STRA   .13 a_COMM   .60	343748 037926 456421 .005  008  000	0027 . 0132 . 3227 .	89 0.6 6 0 1 2	.67 .58 .26 1 -	0.530 0.504 0.505 0.010 0.791 .93 1.28 0.01 0.68 0.25	7 45 2	.281463 5708199 69159 607983 450394 383371 0000 0019 0026	1. .930 .52 1.0 .29 789 2259 9075 4928	596369 042579 0282 95479 62546 20868 .0107508 .0042204 .001881 .0051382 .758374

Description of the estimated propensity score

#### Estimated propensity score

Percentiles .3662295 .4272683	Smallest .3222954 .3661339		
.5408547	.3662295	Obs	298
.5878709	.3674459	Sum of Wgt.	298
.6254745	Largest	Mean Std Dev	.648025 .1196569
.707289	_	Bea. Bev.	.1170307
.8294148	.9337172	Variance	.0143178
.8591691	.9431494	Skewness	.1699133
.9337172	.9692063	Kurtosis	3.277793
	.3662295 .4272683 .5408547 .5878709 .6254745 .707289 .8294148 .8591691	.3662295 .3222954 .4272683 .3661339 .5408547 .3662295 .5878709 .3674459 .6254745 Largest .707289 .9153408 .8294148 .9337172 .8591691 .9431494	.3662295 .3222954 .4272683 .3661339 .5408547 .3662295 Obs .5878709 .3674459 Sum of Wgt. .6254745 Mean Largest Std. Dev. .707289 .9153408 .8294148 .9337172 Variance .8591691 .9431494 Skewness

\*\*\*\*\*\*\*\*\*\*\*\*

The final number of blocks is 5

This number of blocks ensures that the mean propensity score is not different for treated and controls in each blocks

The balancing property is satisfied

This table shows the inferior bound, the number of treated and the number of controls for each block

Inferior of block   ofpscore	Benef_IC 0	1	Total
0 .2 .4 .6 .8	108 7 43 50 5	132 5 49 102 37	240 12 92 152 42
Total	213	325	538

# **D.2** Estimates: 1 year Difference in Difference

# Propensity Score Matching (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-6.598	0.268	157	81
Total sales (FR)	-5.321	0.368	158	94
Number of employees	17.076	0.328	157	82
Value added	-5.287	0.119	152	78
Productivity	-0.743**	0.042	157	81
Operating profit	-0.022	0.985	158	93
Investment	2.761*	0.093	154	86
Export	-1.176	0.767	87	28

# Propensity Score Matching (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-1.316	0.727	155	81
Total sales (FR)	-2.376	0.548	156	94
Number of employees	20.991	0.046	155	82
Value added	-4.120	0.116	150	78
Productivity	-0.676*	0.095	155	81
Operating profit	-0.035	0.972	156	93
Investment	2.368	0.118	152	86
Export	-3.349	0.439	86	28

# Propensity Score Matching (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-1.233	0.768	155	81
Total sales (FR)	-2.278	0.619	156	94
Number of employees	20.908**	0.030	155	82
Value added	-4.145	0.160	150	78
Productivity	-0.670	0.156	155	81
Operating profit	-0.114	0.914	156	93
Investment	2.293	0.128	152	86
Export	-3.030	0.453	86	28

# Regression (OLS)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	2.525	0.330	192	98
Total sales (FR)	1.056	0.590	219	135
Number of employees	11.091	0.152	192	98
Value added	0.439	0.846	183	94
Productivity	-0.177	0.691	192	97
Operating profit	0.175	0.784	220	135
Investment	0.774	0.573	200	116
Export	-2.820	0.335	96	33

Regression (Huber Estimator)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-0.024	0.974	192	98
Total sales (FR)	0.014	0.980	219	135
Number of employees	-1.418	0.417	192	98
Value added	0.070	0.910	183	94
Productivity	0.025*	0.078	192	97
Operating profit	-0.039	0.838	220	135
Investment	-0.038	0.844	200	116
Export	-0.287	0.718	96	33

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%.

# **D.3** Estimates: 3 year Difference in Difference

# Propensity Score Matching (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	19.588	0.461	84	46
Total sales (FR)	21.505	0.464	86	47
Number of employees	-14.000	0.682	84	46
Value added	8.989	0.633	82	41
Productivity	0.463	0.253	84	46
Operating profit	8.290***	0.004	86	47
Investment	3.447	0.223	82	45
Export	12.318***	0.004	51	18

# Propensity Score Matching (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	12.569	0.586	84	46
Total sales (FR)	18.061	0.449	86	47
Number of employees	-11.760	0.625	84	46
Value added	1.236	0.936	82	41
Productivity	0.351	0.340	84	46
Operating profit	5.694	0.118	86	47
Investment	3.326	0.171	82	45
Export	9.842**	0.020	47	18

# Propensity Score Matching (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	15.632	0.525	84	46
Total sales (FR)	21.237	0.414	86	47
Number of employees	-11.328	0.647	84	46
Value added	3.783	0.796	82	41
Productivity	0.379	0.369	84	46
Operating profit	5.706*	0.088	86	47
Investment	3.323	0.173	82	45
Export	10.470***	0.010	51	18

# Regression (OLS)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	4.419	0.666	94	53
Total sales (FR)	8.665	0.332	104	61
Number of employees	-8.717	0.573	94	52
Value added	-0.046	0.996	91	47
Productivity	-0.240	0.608	94	52
Operating profit	0.892	0.733	105	61
Investment	0.294	0.889	98	56
Export	8.842	0.171	55	19

Regression (Huber Estimator)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	0.946	0.694	94	53
Total sales (FR)	0.900	0.638	104	61
Number of employees	9.171	0.133	94	52
Value added	-0.806	0.633	91	47
Productivity	0.002	0.922	94	52
Operating profit	0.210	0.665	105	61
Investment	0.076	0.880	98	56
Export	3.373	0.271	55	19

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%.

# **D.4** Estimates: T1 – The impact of quality certification

# 1 YEAR Difference in Difference

# Propensity Score Matching (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	1.650	0.780	124	81
Total sales (FR)	-0.920	0.839	124	94
Number of employees	25.556	0.079	124	82
Value added	-3.321	0.364	120	78
Productivity	-0.509	0.348	124	81
Operating profit	-0.385	0.784	124	93
Investment	3.235*	0.096	121	86
Export	-0.765	0.832	74	28

# Propensity Score Matching (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-0.381	0.931	122	81
Total sales (FR)	-2.062	0.623	122	94
Number of employees	21.947*	0.066	122	82
Value added	-3.686	0.275	118	78
Productivity	-0.571	0.118	122	81
Operating profit	-0.226	0.842	122	93
Investment	2.338	0.213	119	86
Export	-2.413	0.543	72	28

# Propensity Score Matching (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-0.834	0.865	123	81
Total sales (FR)	-2.487	0.515	123	94
Number of employees	23.289*	0.057	123	82
Value added	-3.950	0.186	119	78
Productivity	-0.606	0.084	123	81
Operating profit	-0.340	0.770	123	93
Investment	2.663	0.174	120	86
Export	-2.434	0.503	73	28

# Regression (OLS)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	2.023	0.453	143	98
Total sales (FR)	0.567	0.783	155	135
Number of employees	11.611	0.180	143	98
Value added	0.110	0.961	138	94
Productivity	-0.431**	0.039	143	97
Operating profit	0.286	0.674	156	135
Investment	1.491	0.290	149	116
Export	-2.872	0.334	80	33

Regression (Huber Estimator)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	-0.468	0.598	143	98
Total sales (FR)	-0.261	0.682	155	135
Number of employees	-1.383	0.489	143	98
Value added	0.001	0.999	138	94
Productivity	0.015	0.302	143	97
Operating profit	-0.029	0.890	156	135
Investment	-0.083	0.713	149	116
Export	-0.400	0.659	80	33

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%.

## 2 YEARS Difference in Difference

## Propensity Score Matching (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	16.832	0.201	98	57
Total sales (FR)	10.968	0.220	98	61
Number of employees	19.878	0.296	98	57
Value added	3.157	0.737	95	53
Productivity	0.109	0.217	98	57
Operating profit	2.431	0.124	98	63
Investment	-0.208	0.951	96	58
Export	5.873	0.205	60	19

## Propensity Score Matching (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	12.811	0.114	95	57
Total sales (FR)	8.815	0.219	96	61
Number of employees	4.817	0.723	95	57
Value added	4.222	0.479	92	53
Productivity	0.067	0.333	95	57
Operating profit	2.212	0.123	96	63
Investment	1.649	0.455	94	58
Export	8.304**	0.033	55	19

## Propensity Score Matching (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	15.097	0.095	97	57
Total sales (FR)	10.464	0.188	97	61
Number of employees	4.769	0.752	97	57
Value added	4.671	0.470	94	53
Productivity	0.067	0.326	97	57
Operating profit	2.370	0.120	97	63
Investment	-0.658	0.775	95	58
Export	7.876**	0.041	56	19

## Regression (OLS)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	7.310	0.109	112	68
Total sales (FR)	5.806	0.140	122	84
Number of employees	2.313	0.840	112	67
Value added	1.928	0.557	107	61
Productivity	-0.337	0.116	112	67
Operating profit	0.829	0.397	122	86
Investment	-0.370	0.896	118	73
Export	9.004*	0.087	66	20

Regression (Huber Estimator)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	3.423**	0.031	112	68
Total sales (FR)	1.963	0.104	122	84
Number of employees	1.537	0.616	112	67
Value added	0.661	0.436	107	61
Productivity	0.034	0.088	112	67
Operating profit	-0.004	0.990	122	86
Investment	-0.223	0.569	118	73
Export	1.542	0.468	66	20

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%.

ESTIMATES: 3 YEARS Difference in Difference

## Propensity Score Matching (Nearest Neighbor)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	9.681	0.708	79	46
Total sales (FR)	11.003	0.624	81	47
Number of employees	3.595	0.905	79	46
Value added	-3.429	0.849	77	41
Productivity	0.338	0.397	79	46
Operating profit	4.789	0.196	81	47
Investment	3.261	0.154	77	45
Export	9.144*	0.058	49	18

## Propensity Score Matching (Radius)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	9.542	0.603	77	46
Total sales (FR)	14.974	0.306	79	47
Number of employees	-10.253	0.668	77	46
Value added	1.783	0.893	75	41
Productivity	0.366	0.354	77	46
Operating profit	4.785	0.256	79	47
Investment	2.775	0.138	75	45
Export	8.763**	0.045	45	18

## Propensity Score Matching (Kernel)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	16.064	0.471	79	46
Total sales (FR)	20.953	0.375	81	47
Number of employees	-6.530	0.789	79	46
Value added	2.452	0.847	77	41
Productivity	0.371	0.469	79	46
Operating profit	5.615	0.126	81	47
Investment	3.121	0.165	77	45
Export	9.065*	0.075	49	18

## Regression (OLS)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	4.914	0.641	89	53
Total sales (FR)	9.104	0.322	98	61
Number of employees	-8.378	0.596	89	52
Value added	0.581	0.945	86	47
Productivity	-0.247	0.607	89	52
Operating profit	1.118	0.678	99	61
Investment	1.399	0.433	92	56
Export	9.383	0.157	53	19

Regression (Huber Estimator)

Outcome	Impact	Sign.	N treated	N control
Total sales (ASA)	0.520	0.830	89	53
Total sales (FR)	0.279	0.882	98	61
Number of employees	10.444	0.084	89	52
Value added	-0.229	0.887	86	47
Productivity	-0.003	0.911	89	52
Operating profit	0.201	0.681	99	61
Investment	0.029	0.954	92	56
Export	2.306	0.450	53	19

Results in million of MDL. Statistical significance: \*\*\* 99%, \*\* 95%, \* 90%.

#### ANNEX E - ENTERPRISE SURVEY - METHODOLOGY

#### **E.1 MGF Beneficiaries Survey**

The sample of MGF beneficiaries was stratified based on three criteria. The *first criterion* referred to the kind of assistance received, i.e. whether the firms benefited from assistance for quality certification, for business advisory services, or for both types of assistance. The *second criterion* was the sector of activity. To this purpose, 11 macro-sectors were identified based on the information available in the lists provided by the Chamber of Commerce and Industry (CCI) or from the scanned version of the application forms. The eleven macro-sectors were (i) agriculture, (ii) food industry, (iii) wine and beverages, (iv) other industries (v) construction, (vi) transport & tourism, (vii) trade, (viii) education and health, (ix) financial services and real estate, (x) IT & communication, and (xi) other services. The *third criterion* was the location of the enterprise. Six regions/areas were defined - North, Center, South, Chisinau, Gagauzia, and Transnistria – by grouping territorial divisions as classified by the BNS. In particular: (i) the North region includes Briceni, Donduseni, Drochia, Edinet, Falesti, Floresti, Glodeni, Ocnita, Riscani, Singerei, Soroca, and the municipality of Balti; (ii) the Center region covers Amenii noi, Calarasi, Criuleni, Dubasari, Hincesti, Ialoveni, Nisporeni, Orhei, Rezina, Straseni, Soldanesti, Telenesti, Ungheni; and (iii) the South region encompasses Besarabesca, Cahul, Cantemir, Causeni, Cimislia, Leova, Stefan Voda, Taraclia.

The initial sample included 150 firms. During the implementation of the survey, 15 sampled beneficiaries could not be contacted due to a variety of reasons (a couple of firms had gone bankrupt, one was fully reorganized, and a dozen could not be located despite repeated efforts). A similar number of firms refused to partake in the survey. Replacements were identified following the sampling criteria indicated above. The final number of interviewees was 147.

#### **E.2 LOC Beneficiaries Survey**

Given that the overall number of firms which received loans under the CEP-LOC is 60, the LOC Beneficiaries survey aimed at covering the whole universe of enterprises involved in the component. 3 firms refused to partake in the survey, or were impossible to contact. The survey therefore covers 57 firms, of which approximately two third received one or more loans for working capital purposes, 12 obtained one or more loans for investment purposes, and the remaining seven got loans for both purposes.

## ANNEX F – ENTERPRISE SURVEY - MGF BENEFICIARY SURVEY RESULTS

#### 1 Background Information

#### 1.1 In which year was your firm established?

Answer	Nr	Share
<1990	12	8.2%
1990-1999	59	40.1%
2000-2005	43	29.3%
2006-2010	33	22.4%
Total	147	100%

## 1.2 What is the legal form of your firm?

Answer	Nr	Share
intreprinderi individuale	1	0.7%
Soc in nume colectiv/ Soc in comandita	1	0.7%
Limited Liability Company	109	74.1%
Corporation	34	23.1%
Other	2	1.4%
Total	147	100%

#### Others:

Answer	Nr
education institute	1
state institute of higher education	1

#### 1.3 What is the ownership structure of your firm?

Answer	Nr	Share
Fully private – Moldovan owners only	108	73.5%
Fully private – Joint venture with minority foreign participation	11	7.5%
Fully private – Joint venture with majority foreign participation	16	10.9%
Fully private – Fully foreign owned	8	5.4%
Partly private - Public participation (from national and/or local government		
entities)	0	0.0%
Fully Public	3	2.0%
Missing	1	0.7%
Total	147	100%

## 1.4 Where is your firm located? In case of multiple locations, please indicate where the head office is located

Answer	Nr	Share
Chisinau	110	74.83%
North	11	7.48%
Center	19	12.93%
South	6	4.08%
Gagauzia	1	0.68%
Total	147	100%

## 1.5 What is your main activity/line of business?

Answer	Number	share
Agriculture	4	2.7%
Food Industry	16	10.9%
Wine and Beverage	26	17.7%
Other industries	17	11.6%
Construction	20	13.6%
Transport & tourism	6	4.1%
Trade	26	17.7%
Education and health	5	3.4%
Financial services and real estate	5	3.4%
ICT and communication	12	8.2%
Other services	10	6.8%
Total	147	100%

1.6 We understand that your firm has received support under the CEP-MGF for the following activity/ies or project(s). Is this correct?

## **Number of Projects**

Answer	Number	Share
1 Project	132	89.8%
2 Projects	13	8.8%
3 Projects	2	1.4%
Total	147	100%

## Type of Assistance

Answer	Number	share
Quality Certification	92	62.59%
Business Advisory Services	44	29.93%
Both	11	7.48%
Total	147	100%

## 2 Participation in the CEP-MGF and Procedural Aspects

## 2.1 How did you learn about the support available under the CEP-MGF?

Answer	Number	share
I was informed directly by the CCI	80	54.42%
I participated in a meeting/event in which the CEP-MGF was presented to the business community	10	6.80%
I heard about the CEP-MGF from other firms	33	22.45%
I learned about the CEP-MGF by visiting the CCI website	20	13.61%
Other	4	2.72%
Total	147	100%

#### Other:

Answer	Nr
Discussion with the Ministry of Education	1
Media	1
Informed by consultant	1
Logos-press newspaper	1

#### 2.2 Are you currently member of the CCI?

Answer	Number	share
No	65	44.22%
Yes	82	55.78%
Total	147	100%

## 2.3 Were you (already) member of the CCI at the time of your (first) application for support under the CEP-MGF?

Answer	Number	share
No	8	9.76%
Yes	73	89.02%
Missing	1	1.22%
Total	82	100%

## 2.4 What were the main motives for applying for support under the CEP-MGF?

Answer	Number
improve quality of products	30
raise reputation	25
efficiency	7
development	6
improve professionalism	6
information	5
reorganization of the company	5
understand the market	5
penetrate new markets	4
competitiveness	3
EU requirements	3
management	3
sales	3
modernization	2
new products	2
productivity	2
tender	2
better technologies	1
exports	1
get the LOC loan	1
new technologies	1
promotion of the association	1

2.5 How easy or difficult was the interaction with the entities responsible for managing the CEP-MGF? Please indicate to what extent you agree with the following statements

Statement	Strongly agree	Agree	Neither	Disagree	Strongly disagree	Don't know/ Remember	Missing	Total
The information initially provided by the CCI about the CEP-MGF was clear and comprehensive	73 (49.7%)	71 (48.3%)	2 (1.4%)	1 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147
The documentation to be supplied at the application stage was simple		90 (61.2%)	15 (10.2%)	2 (1.4%)	0 (0.0%)	1 (0.7%)	0 (0.0%)	147
The agreement signed with the CCI clearly defined the respective obligations and responsibilities	53 (36.1%)	84 (57.1%)	9 (6.1%)	1 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147
The time elapsed between the application and the signing of the agreement with the CCI was short	30 (20.4%)	83 (56.5%)	29 (19.7%)	5 (3.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147
The documentation to be supplied in order to get the partial reimbursement of the expenses was simple	29 (19.7%)	80 (54.4%)	26 (17.7%)	12 (8.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147
The time elapsed between the submission of the documents for the reimbursement and the receipt of the money was short	24 (16.3%)	82 (55.8%)	31 (21.1%)	10 (6.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147
The personnel of the CCI were helpful and ready to assist	92 (62.6%)	48 (32.7%)	6 (4.1%)	1 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	147

2.6 In case you received support for more than one project, have you noticed any difference in procedural aspects? (e.g. things became simpler or more complex overtime, procedures for the Quality Certification component were simpler or more complex than those for the Business Advisory component). Please provide your comments

Answer	Number
both were equal	5
things became simpler in time	4
BAS component was simpler	3
MSTQ was simpler	2
the person interviewed was not involved in the first project	1
Total	15

#### 2.7 Overall, how would you rate your experience with <u>procedural aspects</u> of the CEP-MGF?

Answer	Number	share
Very positive	21	14.29%
Positive	125	85.03%
Neutral	1	0.68%
Negative	0	0.0%
Very negative	0	0.0%
Total	147	100%

#### 3 Use of Consultants and Level of Satisfaction

3.1 In the <u>three years</u> preceding your (first) application for support from the CEP-MGF, did you purchase with <u>your own money</u> the services of consultants? (Please do not consider the services provided by accountants or tax advisors)

Answer	Number	share
No, we did not use any consultant	89	60.5%
Yes, we used consultants but only sporadically (once twice)	45	30.6%
Yes, we frequently used consultants (more than twice)	10	6.8%
Missing	3	2.0%
Total	147	100%

3.2 How did you select the consultant for the implementation of the activities co-financed by CEP-MGF? Please make a distinction between the Quality Certification and the Business Advisory components. In case you used more than one consultant, please make reference to the <a href="main one">main one</a> for each component

#### **Quality Certification Component**

Answer	Number	share
We already knew the consultant	6	5.8%
The consultant was recommended to us by another firms or by		
acquaintances	24	23.3%
We shopped around	60	58.3%
Other	13	12.6%
Total	103	100%

#### Other:

Answer	Nr
Tender	9
For the implementation, our internal capacity and competences	1
allowed us not to hire consultancy company	
Known consultant from the project selection	1
Through CCI	1
We only received certification body services, we are consultants	1

#### **Business Advisory Component**

Answer	Number	share
We already knew the consultant	4	7.3%
The consultant was recommended to us by another firms or by		
acquaintances	13	23.6%
We shopped around	36	65.5%
Other	2	3.6%
Total	55	100%

#### Other:

Answer	Nr
tender	2

3.3 Did you get any information or suggestions from the CCI regarding consultants that might have been used for the activities co-financed by CEP-MGF?

Answer	Number	share
No	27	18.4%
Yes	119	81.0%
Missing	1	0.7%
Total	147	100%

#### 3.4 If Yes, was this information useful?

Answer	Number	share
yes	111	94.1%
partially	6	5.1%
useful but not used	1	0.9%
Total	118	100%

3.5 In the case of the <u>Quality Certification Component</u>, were you satisfied of the services provided by the consultant? Please indicate to what extent you agree with the following statements. Again, in case you used more than one consultant, please make reference to the <u>main one</u>

Statement	Strongly agree	Agree	Neither				Missing	Total
The quality of the services provided by the consultant was appropriate	50 (48.5%)	49 ( <i>47</i> .6%)	1 (1.0%)	0 (0.0%)	1 (1.0%)	0 (0.0%)	2 (1.9%)	103
The price paid for the services provided by the consultant was reasonable	36 (35.0%)	54 (52.4%)	11	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (1.9%)	103
The services provided by the consultant were delivered on time	52 (50.5%)	46 (44.7%)	2 (1.9%)	0 (0.0%)	1 (1.0%)	0 (0.0%)	2 (1.9%)	103
Overall, I was satisfied of the service provided by the consultant	50 (48.5%)	48 (46.6%)	2 (1.9%)	0 (0.0%)	1 (1.0%)	0 (0.0%)	2 (1.9%)	103

3.6 In the case of the <u>Business Advisory Component</u>, were you satisfied of the services provided by the consultant? Please indicate to what extent you agree with the following statements. Again, in case you used more than one consultant, please make reference to the  $\underline{\text{main one}}$ 

Statement	Strongly agree	Agree	Neither	Higgaraa	IMICAMPA	Znow/	Missing	Total
The quality of the services provided by the consultant was appropriate	27 (49.1%)	27 (49.1%)	1 (1.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	55
The price paid for the services provided by the consultant was reasonable		29 (52.7%)	6 (10.9%)	2 (3.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	55
The services provided by the consultant were delivered on time	20 (36.4%)	30 (54.5%)	5 (9.14%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	55
Overall, I was satisfied of the service provided by the consultant	26 (47.3%)	28 (50.9%)	1 (1.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	55

3.7 Did you encounter problems in dealing with consultants? In case, what type of problems?

## 3.7.1 Quality Certification Component

Answer	Nr
no	98
the consultant did not do a good job. They simply provided some	
standard materials and presentations, without any effort to	
provide specific support to the company	1
There aren't consultants in the Republic of Moldova with the	
necessary awareness of the standards which are to be	
implemented. They lack practical experience.	1
Missing	3

## 3.7.2 Business Advisory Component

Answer	Nr
no	53
Missing	2

# 3.8 Are you planning to purchase with $\underline{\text{your own money}}$ further services from consultants in the $\underline{\text{next two years}}$ (2013 and/or 2014)?

Answer	Number	share
Definitely yes	25	17.0%
Probably yes	75	51.0%
Don't know	21	14.3%
Probably no	23	15.6%
Definitely no	3	2.0%
Total	147	100%

#### 4 Implementation of Activities - Quality Certification Component

4.1 We understand that your firm received co-financing under the CEP-MGF to obtain the following quality certification(s). Is this correct?

Answer	Nr
ISO 9001	90
ISO 22000	27
ISO 18001	10
ISO 14001	9
ISO 27001	3
HACCP	3

4.2 In case co-financing from CEP-MGF was  $\underline{not}$  available, would you have been able and willing to  $\underline{pay}$  the full  $\underline{cost}$  in order to get quality certifications?

Certification	Definitely yes	Probably yes	Don't know	Probably no	Definitely no	Missing	Total
ISO 9001 (quality management systems)	26	22	9	26	7	0	90
ISO 14001 (environmental management)	3	2	0	3	1	0	9
ISO 18001 (occupational health and safety)	4	1	1	3	1	0	10
ISO 22000 (food safety management systems)	8	11	2	5	1	0	27
ISO 27001 (IT security management)	1	1	1	0	0	0	3
HACCP (food safety)	2	1	0	0	0	0	3

Results Consolidated by firm (for firms having received co-financing for more than one certification, the answer closer to "definitely no" has been considered).

Answer	Number	share
Definitely yes	26	25.24%
Probably yes	30	29.13%
Don't know	10	9.71%
Probably no	29	28.16%
Definitely no	8	7.77%
Total	103	100%

4.3 Were the activities co-financed by CEP-MGF implemented as planned? In particular, did you actually get certified? Or is the certification process still ongoing? Or was it abandoned?

Certification	We did get the certification	We are still in the process of getting the certification	We decided to abandon the attempt to get the certification	Missing	Total
ISO 9001 (quality management systems)	89	1	0	0	90
ISO 14001 (environmental management)	9	0	0	0	9
ISO 18001 (occupational health and safety)	10	0	0	0	10
ISO 22000 (food safety management systems)	27	0	0	0	27
ISO 27001 (IT security management)	2	0	1	0	3
HACCP (food safety)	3	0	0	0	3

4.4 If the decision was made to abandon the attempt to get any of the above quality certifications, could you explain why?

Answer	Nr
Due to financial constraints we implemented only one of the certifications	1

4.5 If you did get certified, is the initial certification still valid? If not, have you renewed it?

Certification	Initial certification still valid	Initial certification expired and was renewed	Initial certification expired and was <u>not</u> renewed	Missing	Total
ISO 9001 (quality management systems)	38	44	7	0	89
ISO 14001 (environmental management)	5	3	1	0	9
ISO 18001 (occupational health and safety)	7	1	2	0	10
ISO 22000 (food safety management systems)	9	18	0	0	27
ISO 27001 (IT security management)	2	0	0	0	2
HACCP (food safety)	0	3	0	0	3

Results consolidated by firm (in case of firms having received co-financing for more than one certification, if at least one certification was not renewed, the firm was considered as "not having renewed"; otherwise, if at least one certification had already been renewed, the firm was considered as "having already renewed").

Answer	Number	share
Initial certification(s) still valid	40	39.22%
Initial certification(s) expired and was renewed	55	53.92%
Initial certification(s) expired and was <u>not</u> renewed	7	6.86%
Total	102	100.00%

NB: one firm was still in the process of obtaining the certification.

4.6 In case any of the quality certifications was not renewed, could you explain why?

Answer	Nr
Financial constraints	5
Disappointing outcomes/not necessary	2
Implementing different standards	1

4.7 What are your plans for the future? Do you plan to renew the certifications that will expire over the  $\underline{\text{next two years}}$  (2013 and 2014)?

Answer	Nr
yes	90
We are already in the process	1
probably yes	2
don't know	2
probably no	1
no	1
not this standard	1
only with co-financing	1

#### 5 Implementation of Activities - Business Advisory Component

5.1 We understand that your firm received co-financing under the CEP-MGF to obtain the following business advisory services. Is this correct?

Answer	Nr
Preparation of a feasibility study	16
Development of a business plan	9
Design and/or implementation of a management information system	16
Preparation of a market study/marketing plan	17
Preparation of a development plan/investment project	4
Assistance in the development of new services or products	1
Assistance in the re-organization/restructuring of the enterprise	2
Implementation of training courses for the personnel	7

5.2 In case co-financing from CEP-MGF was  $\underline{not}$  available, would you have been able and willing to  $\underline{pay}$  the full  $\underline{cost}$  in order to get the business advisory services?

Service	Definitely yes	Probably yes	Don't know	Probably no	Definitely no	Missing	Total
Preparation of a feasibility study	3	6	2	5	0	0	16
Development of a business plan	3	2	1	1	2	0	9
Design and/or implementation of a management information system	3	3	0	5	5	0	16
Preparation of a market study/marketing plan	2	4	5	6	0	0	17
Preparation of a development plan/investment project	1	2	0	1	0	0	4
Assistance in the development of new services or products	0	0	1	0	0	0	1
Assistance in the re- organization/restructuring of the enterprise	0	1	1	0	0	0	2
Implementation of training courses for the personnel	0	4	0	2	1	0	7

Results Consolidated by firm (for firms having received co-financing for more than one service, the answer closer to "definitely no" has been considered).

Answer	Number	share
Definitely yes	8	14.5%
Probably yes	14	25.5%
Don't know	8	14.5%
Probably no	17	30.9%
Definitely no	8	14.5%
Total	55	100%

5.3 Were the business advisory activities co-financed by CEP-MGF implemented as planned? In particular, were they completed on time and of the expected quality?

Service	Completed on time and of the expected quality	Completed with some delay and/or not fully of the expected quality	Not completed and/or of unsatisfactory quality	Missing	Total
Preparation of a feasibility study	16	0	0	0	16
Development of a business plan	9	0	0	0	9
Design and/or implementation of a management information system	16	0	0	0	16
Preparation of a market study/marketing plan	15	2	0	0	17
Preparation of a development plan/investment project	3	1	0	0	4
Assistance in the development of new services or products	1	0	0	0	1
Assistance in the re- organization/restructuring of the enterprise	2	0	0	0	2
Implementation of training courses for the personnel	7	0	0	0	7

5.4 If any of the above activities was not completed and/or was of unsatisfactory quality, could you explain why?

N/R

5.5 To what extent the advice received under the business advisory activities co-financed by CEP-MGF was actually <u>put in practice</u> (e.g. feasibility study implemented, new management information system set up and operational, etc.)?

Service	Fully put in practice	Partly put in practice	Not put in practice	Missing	Total
Preparation of a feasibility study	4	11	1	0	16
Development of a business plan	5	4	0	0	9
Design and/or implementation of a management information system	13	3	0	0	16
Preparation of a market study/marketing plan	7	10	0	0	17
Preparation of a development plan/investment project	0	3	1	0	4
Assistance in the development of new services or products	1	0	0	0	1
Assistance in the re-organization/restructuring of the enterprise	1	1	0	0	2
Implementation of training courses for the personnel	6	1	0	0	7

5.6 If the advice received under any of the business advisory activities was not put in practice, could you explain why?

Answer	Nr
Financial constraints	2

## 6 Impact of the Activities Co-financed by CEP-MGF

6.1 What has been the influence of the activities co-financed by CEP-MGF on the structure and/or operations of your firm? In particular, to what extent these activities contributed to ...

Aspects of business activity	To a high extent	To some extent	To a limited extent	Not at all	Missing	Total
improve the composition of the product mix,	31	48	22	46	0	1.45
with a shift towards higher value added products	21.1%	32.7%	15.0%	31.3%	0.0%	147
diversify sales, with the entry into new	44	36	27	39	1	147
markets/market segments	29.9%	24.5%	18.4%	26.5%	0.7%	147
improve the technical efficiency of	71	45	13	17	1	1 47
operations, with an increase in productivity	48.3%	30.6%	8.8%	11.6%	0.7%	147
improve the technical and/or managerial	71	56	10	10	0	1 47
competencies and the know-how of the staff	48.3%	38.1%	6.8%	6.8%	0.0%	147
improve the overall effectiveness of	92	46	4	5	0	147
organization and management	62.6%	31.3%	2.7%	3.4%	0.0%	147
improve the relationships with financial	3	3	11	130	0	147
institutions, with easier access to credit	2.0%	2.0%	7.5%	88.4%	0.0%	147
improve the interactions with clients, with	84	45	13	5	0	1.47
an increase in credibility and reputation	57.1%	30.6%	8.8%	3.4%	0.0%	147

6.2 Was there any other notable influence on the structure and/or operations of your firm as a result of the activities co-financed by CEP-MGF? If yes, please provide details

Answer	Nr
Allowed a better understanding of market trends and competitor	
strategies	14
Allowed participation in procurement/public procurement	9
Increased the quality of products/services	7
Improved internal communication	6
Too early to say	5
Allowed traceability of products	4
Consolidated/improved market position	3
Allowed opening of new branches/shops	3
Increased networking capabilities of the firm	2
Caused additional expenses	1
Increased information security	1
Opened new positions in the company	1
Became official representative in the country of a multinational	
corporation	1
Changed the strategic vision of the company	1
Increased competitiveness	1
Attracted new members	1
Planned the rebranding of some products	1
(No other influence)	(88)

6.3 How has your business evolved between ... (i.e. the year in which you submitted your (first) application for support under the CEP-MGF) and 2012? In particular could you tell us the value of turnover, employment and export sales both in .... and in 2012?

<b>Turnover (MDL million)</b>	Year Appplication	2012
Average	70.9	92.2
Median	15.5	19.6
Minimum	0.013	0.108
Max	2603	2603

Employment	Year Appplication	2012
Average	125.6	132.9
Median	53	68
Minimum	1	3
Max	1242	1034

<b>Exports (MDL million)</b>	Year Appplication	2012
Average	9.12	17.10
Median	0	0
Minimum	0	0
Max	152	380

6.4 To what extent the activities co-financed by CEP-MGF contributed to the increase (or helped in slowing down the decline) in turnover, employment or export sales?

Aspects of business activity	To a high extent	To some extent	To a limited extent	Not at all	NA/ can't say	Missing	Total
T	53	47	26	17	2	2	1.47
Turnover	36.1%	32.0%	17.7%	11.6%	1.4%	1.4%	147
T. 1	36	19	9	81	0	2	1.47
Employment	24.5%	12.9%	6.1%	55.1%	0.0%	1.4%	147
Ermont	22	11	18	8	87	1	1.47
Export	15.0%	7.5%	12.2%	5.4%	59.2%	0.7%	147

6.5 In case the activities co-financed by CEP-MGF had a direct and measurable impact on employment, could you please provide details and indicate the number of jobs that were 'created' or 'saved'?

Answer	Nr
1-5 jobs	18
6-10 jobs	5
11-20 jobs	4
21- 50 jobs	5
Over 50	3
Due to increase in efficiency, the number of employees decreased	20
The number of employees increased	28
Impossible to say	6
Helped saving jobs	1
Missing	2
(No influence)	(55)

6.6 Did the activities co-financed by CEP-MGF help to get some form of external financing (e.g. new bank loan, leasing, etc.) that otherwise would not have been accessible to your firm?

Answer	Number	share
No	137	93.20%
Yes	ç	6.12%
Missing	1	0.68%
Total	147	100%

#### 6.7 If yes, could you please provide details?

Answer	Nr
EBRD loan	2
LOC loan	4
Other credit	3

6.8 Has the geographical composition of export sales changed between .... i.e. the year in which you submitted your (first) application for support under the CEP-MGF and 2012 (e.g. more exports to EU countries and fewer to Russia)?

Answer	Nr	Share
Geographical Composition Changed	31	21.1%
No Change in geographical composition	116	78.9%
Total	147	100%

#### Main changes:

Answer	Nr
CSI	20
EU	15
USA/Canada	4
Middle East	4
Asia	3
Australia	1

6.9 If there have been changes in the geographical composition of export sales, to what extent are they linked to the activities co-financed by CEP-MGF? Please provide details

Answer	Nr
Yes	18
Partially	2
Indirect	1
No	4
Miss	6

6.10 Overall, how would you rate the impact of the activities co-financed by CEP-MGF on the performance of your firm?

Answer	Number	share
Very positive	33	22.5%
Positive	109	74.2%
Neutral	3	2.0%
Negative	0	0.0%
Very negative	0	0.0%
Missing	2	1.36%
Total	147	100%

6.11 In case you have received assistance under both the Quality Certification and Business Advisory component, which of the two components had the most positive impact?

Answer	Number
Activities under the Quality Certification component had the most positive impact	4
Activities under the Business Advisory component had the most positive impact	
Activities under the two components had a broadly similar impact	5
Total	11

#### 7 Comparison with Other Support Programs

7.1 Are you aware of the BAS program (managed by the EBRD), which also provides co-financing to Moldovan firms for the use of consultants? Have you made use of this program?

Answer	Number	share
I know about BAS and used it	12	8.16%
I know about BAS but did not use it	19	12.93%
I only heard of BAS	80	54.42%
I never heard of BAS	36	24.49%
Total	147	100%

7.2 In case you have used or know the BAS program, could you compare its features with those of the CEP-MGF?

Feature of the Programs	Better the CEP-MGF	The two programs are similar	Better the BAS program	Cannot compare/Not applicable	Total
Share of co-financing provided	2	8	21	0	31
Nature of activities for which co-financing is possible	4	14	8	4	30
Eligibility criteria for receiving assistance	8	17	4	2	31
Modalities for the selection of consultants	9	16	6	0	31
Documentation to be provided at the application stage	10	15	6	0	31
Documentation to be provided in order to get the partial reimbursement of the expenses	12	10	9	0	31
Time elapsed between the application and the approval/signing of the agreement	9	15	7	0	31
Time elapsed between the submission of the documents for the reimbursement and the receipt of the money	12	12	6	0	30
Assistance provided by the program manager	4	25	2	0	31

7.3 Are there other aspects regarding the comparison between CEP-MGF and BAS on which you would like to comment?

Answer	Number
Assistance provided by BAS Programme managers is too bureaucratized	1
EBRD-BAS does not co-finance companies with majority foreign capital	1
EBRD-BAS examination is more careful, so once assistance is accorded interaction is simpler	1
EBRD-BAS co-financing on energy efficiency projects is 70%	1
key positive aspects of EBRD-BAS are high share of co-financing and independent selection of a	
consulting company	1
No comments	26
Total	147

7.4 Over the last three years, did your firm receive assistance in the form of consulting services from any other donor-funded programs supporting the development of Moldovan enterprises? (e.g. Programul de guvernare corporative, Proiecturl "Inno-Food See", etc.)

Answer	Number	share
No	144	98.0%
Yes	3	2.0%
Total	147	100%

#### 7.5 If yes, from which program(s) did you receive assistance?

Answer	Nr
CEED II (USAID)	2
Energy efficiency consulting services (UNIDO)	1

 $7.6\ Could\ you\ compare\ the\ other\ program\ from\ which\ you\ received\ assistance\ with\ the\ CEP-MGF?\ In\ case\ you\ have\ received\ assistance\ from\ more\ than\ one\ program,\ please\ make\ reference\ to\ the\ one\ that\ you\ used\ most\ recently$ 

Name of program	Positive features	Negative features
CEED II (USAID)	<ul> <li>Exhibition co-financing;</li> <li>Assistance in re-branding;</li> <li>Direct interaction with project staff; consistent communication.</li> </ul>	<ul><li>No direct financial support;</li><li>Extremely different procedures.</li></ul>
Energy efficiency consulting services (UNIDO)	None	15-20% co-financing

#### **8 Summary Assessment and Prospects**

#### 8.1 Overall, how would you rate your experience with the CEP-MGF?

Answer	Number	share
Very positive	56	38.1%
Positive	90	61.2%
Neutral	1	0.7%
Negative	0	0.0%
Very negative	0	0.0%
Total	147	100%

#### 8.2 Based on your experience, which suggestions could you make to improve the program?

#### **Procedural Aspects**

Answer	Nr
Simplify documentation/make it clearer	33
Shorten time lags	32
Better promotion and information on the program	4
Loosen/correct bids requirement	3
Online application	3
Networking with firms before and after	2
Improve transparency	2
Larger list of consultants (also foreign)	2
Simplify procedures for small businesses companies w/ good reputation	
No Suggestions	77

## **Eligible Services**

Answer	Nr
Sectoral/specialized training	48
International exhibitions/exchanges/networking	27
Sectoral services	11
Energy efficiency	10
Infrastructure project assistance	2
Promotions	1
Property management system	1
Renewal of certifications	1
Requalification studies	1
Taxation advice	1
No Suggestions	52

## **8.3** If the CEP-MGF program were to be <u>renewed in its present format</u> in the future, would you be interested in participating again?

Answer	Number	share
<b>Definitely yes</b>	86	58.5%
Probably yes	52	35.4%
Don't know	9	6.1%
Probably no	0	0.0%
Definitely no	0	0.0%
Total	147	100%

8.4 In case you are definitely or probably interested in participating again, for which type of activity/project would you like to receive support?

Answer	Number	share
Quality Certification	38	27.5%
BAS	65	47.1%
Both	21	15.2%
Missing	14	10.1%
Total	138	100%

And in particular (when more precise answers were provided)

#### **Certifications:**

Answer	Number
ISO 22000	11
ISO 9001	8
ISO 14001	5
ISO 18001	4
HACCP	2
FSSC 22000	1
ISO 27001	1
ISO 16949	1
OHSAS 18001	1

#### BAS:

Answer	Number
market study/marketing plan	24
training	23
business plan	17
new products/services/rebranding	11
information system	11
management system	4
investment plan/development plan	4
reorganization	1

8.5 In case the CEP-MGF was modified, with a <u>reduction of the co-financing</u> from the current 50%, would you still be interested in participating?

#### Co-financing reduced to 40% of total eligible expenses

Answer	Number	share
Definitely yes	40	27.2%
Probably yes	85	57.8%
Don't know	14	9.5%
Probably no	7	4.8%
Definitely no	1	0.7%
Total	147	100%

## Co-financing reduced to 30% of total eligible expenses

Answer	Number share	
Definitely yes	9	6.1%
Probably yes	70	47.6%
Don't know	39	26.5%
Probably no	24	16.3%
Definitely no	5	3.4%
Total	147	100%

## Co-financing reduced to 20% of total eligible expenses

Answer	Number	er share	
Definitely yes	7	4.8%	
Probably yes	12	8.2%	
Don't know	53	36.1%	
Probably no	53	36.1%	
Definitely no	22	15.0%	
Total	147	100%	

## $\textbf{ANNEX} \ \textbf{G} - \textbf{ENTERPRISE} \ \textbf{SURVEY} \cdot \textbf{LOC} \ \textbf{BENEFICIARY} \ \textbf{SURVEY} \ \textbf{RESULTS}$

## 1 Background Information

## 1.1 In which year was your firm established?

Answer	Nr	Share
<1990	3	5.3%
1990-2000	22	38.6%
2001-2005	27	47.4%
2006-2010	5	8.8%
Total	57	100.0%

## 1.2 What is the legal form of your firm?

Answer	Nr	Share
intreprinderi individuale	0	0.0%
Soc in nume colectiv/ Soc in comandita	0	0.0%
Limited Liability Company	47	82.5%
Corporation	10	17.5%
Other	0	0.0%
Total	57	100.00%

## 1.3 What is the ownership structure of your firm?

Answer	Nr	Share
Fully private – Moldovan owners only	48	84.2%
Fully private – Joint venture with minority foreign participation	4	7.0%
Fully private – Joint venture with majority foreign participation	5	8.8%
Fully private – Fully foreign owned	0	0.0%
Partly private - Public participation (from national and/or local		
government entities)	0	0.0%
Total	57	100.0%

## 1.4 Where is your firm located? In case of multiple locations, please indicate where the head office is located

Answer	Nr	Share
Chisinau	30	52.6%
North	5	8.8%
Center	15	26.3%
South	6	10.5%
Gagauzia	1	1.8%
Total	57	100.0%

## 1.5 What is your main activity/line of business?

Answer	Number	share
Agriculture	5	8.8%
Food Industry	13	22.8%
Wine and Beverage	10	17.5%
Other industries	10	17.5%
Construction	2	3.5%
Transport & tourism	8	14.0%
Trade	9	15.8%
Total	57	100.0%

## 1.6 We understand that your firm has received funding under the CEP-LOC as indicated below. Is this correct?

## Number of loans

Answer	Number	Share
1 loan	42	73.68%
2 loans	14	24.56%
3 loans	1	1.75%
Total	57	100.00%

## Purpose of the Loan

Answer	Number	share
Working Capital	38	66.67%
Investment	12	21.05%
Both	7	12.28%
Total	57	100.00%

## 2 Participation in CEP-LOC and Procedural Aspects

## 2.1 How did you learn about the opportunity of obtaining financing under the CEP-LOC?

Answer	Number	share
Informed by my bank	44	77.2%
Informed by another bank	4	7.0%
Participated in meeting	2	3.5%
Heard from other firms	5	8.8%
Other	2	3.5%
Total	57	100.0%

#### Other

Answer	Number
Informed by the CCI	1
Through the internet	1

## 2.2 Did you get the CEP-LOC financing through your 'traditional' bank or through another bank?

Answer	Number	Share
Traditional bank	50	87.7%
Other bank	7	12.3%
Total	57	100.0%

## 2.3 What were the main motives for seeking financing under the CEP-LOC?

Answer	Number
Favourable Conditions of the loan	20
Need for liquidity	11
Modernization of plant/machineries/production	10
Develop/expand business	9
Free internal resources	3
Other	4

## 2.4 What is the single most important advantage of the loan(s) under the CEP-LOC?

Answer	Number	share
Size	1	1.8%
Duration	4	7.0%
Interest rate	51	89.5%
Foreign currency	1	1.8%
Other	0	0.0%
Total	57	100.00%

2.5 How easy or difficult were the procedures for obtaining financing under the CEP-LOC? Please indicate to which extent you agree with the following statements

Statement	Strongly agree	Agree	Neither	Disagree	Strongly disagree	Total
The information initially provided by the bank	19	32	6	0	0	
about the CEP-LOC was clear and comprehensive	33.3%	56.1%	10.5%	0.0%	0.0%	57
The loan application and supporting	6	27	13	10	1	
documentation (financial accounts, business plan, etc.) to be supplied to the bank was simple	10.5%	47.4%	22.8%	17.5%	1.8%	57
The documentation about the utilization of the financing (quotations from suppliers, invoices, etc.) was simple	6	31	13	5	2	57
	10.5%	54.4%	22.8%	8.8%	3.5%	
The time elapsed between the loan application	4	18	17	16	2	
and the approval of the loan was short	7.0%	31.6%	29.8%	28.1%	3.5%	57
The time elapsed between the approval of the	28	21	4	4	0	
loan and actual disbursement of the money was short	49.1%	36.8%	7.0%	7.0%	0.0%	57
The personnel of the bank were helpful and ready to assist	32	23	2	0	0	
	56.1%	40.4%	3.5%	0.0%	0.0%	57

2.6 In case you received more than one loan under the CEP-LOC, were there differences in procedural aspects? (e.g. things became simpler or more complex overtime). Please provide you comments

Answer	Number
no difference/intrinsecal differences due to the type of loan	7
things became easier in time	5
can't say	1
Missing	2
Total	15

2.7 After receiving the loan(s), have you received a monitoring visit from the Credit Line Directorate?

Answer	Number	share
No	31	54.4%
Yes	26	45.6%
Total	147	100%

2.8 If yes, how easy or difficult was the interaction with the Credit Line Directorate?

Answer	Number
Interaction was easy/useful/productive	26
Total	26

2.9 Overall, how would you rate your experience with <u>procedural aspects</u> for obtaining financing under the CEP-LOC?

Answer	Number	share
Very positive	5	8.8%
Positive	45	79.0%
Neutral	5	8.8%
Negative	2	3.5%
Very negative	0	0.0%
Total	147	100%

## 3 Use of Bank Loans and Importance of the CEP-LOC Financing

# 3.1 In the <u>three years</u> preceding your application for financing under CEP-LOC, did you get one or more bank loan?

Answer	Number	share
No	10	17.5%
Yes	47	82.5%
Total	147	100%

#### 3.2 If Yes, what types of bank loan(s) did you get?

Answer	Number	share
Working Capital	14	29.8%
Investment	7	14.9%
Both	26	55.3%
Total	147	100%

## 3.3 If No, why?

Answer	Number	share
We had no need of getting a bank loan, as we could finance our activities with own		
means	6	10.5%
We considered the procedures for getting a bank loan too complex	1	1.8%
We considered the conditions offered by banks inadequate to our needs and/or		
possibilities	3	5.3%
Other	0	0.0%
Total	10	100%

# 3.4 We understand that the loan(s) obtained under the CEP-LOC were used for working capital and/or investment financing purposes as indicated below. Are we correct?

Answer	Number	share
Working Capital	38	66.67%
Investment	12	21.05%
Both	7	12.28%
Total	57	100.00%

# 3.5 Were the activities to be financed with the loan(s) obtained under CEP-LOC implemented as planned? What is the status of implementation?

Type of loan	Activities fully implemented	Activities still under implementation but at a fairly advanced stage	Activities not yet implemented or at an initial stage of implementation	Total
XX/1	42	1	2	45
Working capital financing	g capital financing 93.3%		4.4%	45
T	15	2	2	10
Investment financing	79.0%	10.5%	10.5%	19

3.6 Did you also receive support under the CEP Matching Grant Facility (MGF) in the form of co-financing of consulting services for Quality Certifications and/or Business Advisory?

Answer	Number	share
No	41	71.9%
Yes	16	28.1%
Total	147	100%

3.7 If yes, were there synergies between the two forms of support obtained under the CEP? Please provide details

Answer	Number
Yes	6
Indirect	2
No	8
Total	16

3.8 If you hadn't received the loan(s) under the CEP-LOC, would you have been able to carry out the <u>same activities financed with working capital</u>?

Answer	Number	share
Definitely yes	5	11.1%
Probably yes	23	51.1%
Don't know	5	11.1%
Probably no	9	20.0%
Definitely no	3	6.7%
Total	45	100.0%

3.9 If 'Definitely yes' or 'Probably yes', how would you have financed the same activities? In case more than one source of financing could have been used, please indicate the main one.

Answer	Number	share
With own (Internal) funds	2	7.1%
With other loans from banks	26	92.9%
With other loans from other sources (e.g. family, friends, etc.)	0	0.0%
other sources of financing	0	0.0%
Total	28	100.0%

3.10 If you hadn't received the loan(s) under the CEP-LOC, would you have been able to make the  $\underline{same}$  investment(s)?

Answer	Number	share
Definitely yes	5	26.3%
Probably yes	4	21.1%
Don't know	2	10.5%
Probably no	7	36.8%
Definitely no	1	5.3%
Total	19	100.0%

3.11 If 'Definitely yes' or 'Probably yes', how would you have financed the same activities? In case more than one source of financing could have been used, please indicate the <u>main one</u>.

Answer	Number	share
With own (Internal) funds	0	0.0%
With other loans from banks	9	100%
With other loans from other sources (e.g. family, friends, etc.)	0	0.0%
other sources of financing	0	0.0%
Total	9	100.0%

#### 4 Impact of the Financing Received under the CEP-LOC

4.1 What has been the influence of the financing obtained under the CEP-LOC on the activities of your firm? In particular, to what extent the financing contributed to ...

Aspects of business activity	To a high extent	To some extent	To a limited extent	Not at all	Total
expand production capacity, with the ability	14	24	10	9	57
to increase the volume of activity	24.6%	42.1%	17.5%	15.8%	37
modernize the equipment and/or facilities,	14	4	5	34	
with an improvement in the technical efficiency of operations	24.6%	7.0%	8.8%	59.6%	57
improve the composition of the product mix,	7	8	13	29	
with a shift towards higher value added products	12.3%	14.0%	22.8%	50.9%	57
diversify sales, with the entry into new	13	18	16	10	57
markets/market segments	22.8%	31.6%	28.1%	17.5%	37
purchase raw materials or other goods in	33	11	4	9	
larger quantity and/or at the most appropriate moment	57.9%	19.3%	7.0%	15.8%	57
provide better payment terms to our	26	16	10	5	
suppliers, with a reduction in delays in payment	45.6%	28.1%	17.5%	8.8%	57
offer better payment terms to our customers,	9	21	14	13	57
with a lengthening of payment periods	15.8%	36.8%	24.6%	22.8%	37

4.2 Was there any other notable influence on the structure and/or operations of your firm as a result of the financing obtained under CEP-LOC? If yes, please provide details

Answer	Number
No other influence	44
Miscellaneous answers	13

4.3 How has your business evolved between ... (i.e. the year in which you received the (first) loan under the CEPLOC) and 2012? In particular could you tell us the value of turnover, employment and export sales both in .... and in 2012?

<b>Turnover (MDL million)</b>	Year Application	2012
Average	55.2	65.5
Median	27.6	31.7
Minimum	1.1	1.1
Max	595.0	700.0

Employment	Year Application	2012
Average	103.3	112.0
Median	44.0	54.0
Minimum	4.0	5.0
Max	800.0	865.0

<b>Exports (MDL million)</b>	Year Application	2012
Average	25.2	31.8
Median	6.5	7.0
Minimum	0.0	0.0
Max	134.0	227.4

4.4 To what extent the financing obtained from CEP-LOC contributed to the increase (or helped in slowing down the decline) in turnover, employment or export sales?

Aspects of business activity	To a high extent	To some extent	To a limited extent	Not at all	NA/ can't say	Missing	Total
T	12	12	17	9	6	1	57
Turnover	21.1%	21.1%	29.8%	15.8%	10.5%	1.8%	57
T 1	12	9	12	22	2	0	
Employment	21.1%	15.8%	21.1%	38.6%	3.5%	0.0%	57
E	9	9	16	12	11	0	57
Export	15.8%	15.8%	28.1%	21.1%	19.3%	0.0%	57

4.5 In case the financing obtained from CEP-LOC had a direct and measurable impact on employment, could you please provide details and indicate the number of jobs that were 'created' or 'saved'?

Answer	Nr
1-5 jobs	12
6-10 jobs	7
11-20 jobs	1
21- 50 jobs	2
The number of employees increased	1
Seasonal/temporary jobs were created	6
Indirect impact	1
(No influence)	(26)

4.6 Has the geographical composition of your export sales changed between .... i.e. the year in which you received the (first) loan from CEP-LOC and 2012 (e.g. more exports to EU countries and fewer to Russia)?

Answer	Nr	Share
Geographical Composition Changed	18	61.4%
No Change in geographical composition	35	31.6%
NA	4	7%
Total	147	100%

Answer	Nr
EU	12
CSI	4
Asia	3
USA	1
Middle East	1
Australia	1
Africa	1

4.7 If there have been changes in the geographical composition of your export sales, to what extent they are linked to the financing that you received under the CEP-LOC? Please explain

Answer	Nr
Yes	8
Partially	3
Indirect	1
No	6

## 4.8 Overall, how would you rate the impact of the financing from CEP-LOC on the performance of your firm?

Answer	Number	share
Very positive	9	15.8%
Positive	46	80.7%
Neutral	2	3.5%
Negative	0	0.0%
Very negative	0	0.0%
Total	147	100%

# 4.09 At present, what is the share of total bank financing accounted for by the loan(s) received under the CEPLOC?

Answer	Number	share
0%	2	3.5%
1-9%	9	15.8%
10-19%	10	17.5%
20-29%	3	5.3%
30-39%	4	7.0%
40-49%	3	5.3%
50-59%	8	14.0%
60-69%	3	5.3%
70-79%	1	1.8%
80-89%	1	1.8%
90-99%	0	0.0%
100%	13	22.8%
Total	147	100%

#### **5 Comparison with Other International Credit Lines**

5.1 Over the last <u>three years</u>, did your firm receive any financing from any other international credit line supporting the development of Moldovan enterprises? (e.g. RISP credit line, MCC credit line, etc.)

Answer	Number	share
No	39	68.4%
Yes	18	31.6%
Total	147	100%

5.2 If yes, from which credit line(s) did you receive financing?

Answer	Number
IFAD	6
EBRD	4
RISP	4
MOSSEF	2
EIB – Wine Supply Chain	2
Others	3

5.3 Could you compare the features of the CEP-LOC loans with those of the loans received from the other credit line? In case you have financing received financing from more than one credit line, please make reference to the one from which you most recently received financing

Feature of the Programs	Better CEP- LOC	The two loans were similar	Better the other credit line	compare/Not	Total
Size of the loan	8	2	8	0	18
Duration of the loan	8	3	7	0	18
Interest rate of the loan	10	6	2	0	18
Possibility of getting funding in various currencies (€, US\$, MDL)	4	14	0	0	18
Documentation to be provided to justify the selection of suppliers	2	8	7	1	18
Other documentation to be provided at the application stage	3	11	4	0	18
Time elapsed between the loan application and the approval of the loan	3	6	9	0	18
Time elapsed between the approval of the loan and actual disbursement of the money	10	6	2	0	18
Assistance provided by the bank personnel	3	14	1	0	18

5.4 Are there other aspects regarding the comparison between CEP-LOC and the other credit line on which you would like to comment?

Answer	Number
IFAD reimbursement is twice per year	6
FMO provides higher amounts of WC and interest rate is fixed	4

## 5.5 Overall, how would you rate the features of CEP-LOC compared with those of the other credit line?

Answer	Number	share
Very positive	2	11.1%
Positive	9	50.0%
Neutral	5	27.8%
Negative	2	11.1%
Very negative	0	0.0%
Total	18	100.0%

#### **6 Summary Assessment and Prospects**

#### 6.1 Overall, how would you rate your experience with the CEP-LOC?

Answer	Number	share
Very positive	14	24.56%
Positive	42	73.68%
Neutral	1	1.75%
Negative	0	0.0%
Very negative	0	0.0%
Total	57	100.0%

## 6.2 Based on your experience, which suggestions could you make to improve the program?

#### **Procedural Aspects**

Answer	Nr
Simplify documentation/bureaucracy/procedures	20
Reduce time for approval	9
More information/more transparency	3
Other	2
No Suggestions	22

#### Nature of the loans

Answer	Nr
Lower/Fixed Interest Rate	18
Increase duration	7
Increase size	6
Introduce grant element	5
Reduce collateral	5
Other	5
No Suggestions	11

# 6.3 If the CEP-LOC program were to be <u>renewed in its present format</u> in the future, would you be interested in participating again?

Answer	Number	share
<b>Definitely yes</b>	29	50.9%
Probably yes	25	43.9%
Don't know	3	5.3%
Probably no	0	0.0%
Definitely no	0	0.0%
Total	57	100.0%

# 6.4 In case you are definitely or probably interested in participating again, for which purpose would you like to receive financing (e.g. working capital, investment in fixed assets, etc.)?

Answer	Number	share
Working Capital	23	42.6%
Investment	15	27.8%
Both	16	29.6%
Total	54	100%

# 6.5 In case the CEP-LOC was modified with the introduction of the following changes, would you still be interested in participating?

# Simplification of documentation to justify the selection of suppliers AND increase of the interest rate by 1 percentage point (for loans in EURO)

Answer	Number	share
Definitely yes	7	12.28%
Probably yes	21	36.84%
Don't know	16	28.07%
Probably no	13	22.81%
Definitely no	0	0.0%
Total	57	100.0%

# Simplification of documentation to justify the selection of suppliers AND increase of the interest rate by 2 percentage points (for loans in EURO)

Answer	Number	share
Definitely yes	1	1.75%
Probably yes	7	12.28%
Don't know	8	14.04%
Probably no	27	47.37%
Definitely no	14	24.56%
Total	57	100.0%

# Simplification of documentation to justify the selection of suppliers AND increase of the interest rate by 3 percentage points (for loans in EURO)

Answer	Number	share
Definitely yes	0	0.0%
Probably yes	1	1.75%
Don't know	4	7.02%
Probably no	13	22.81%
Definitely no	39	68.42%
Total	57	100.0%

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