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Evaluation of Business Support Measures in Estonia¹

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Executive Summary

This report evaluates eight key business support measures, six of them funded by the European Union (EU) structural funds and two guaranteed by the Government. The evaluation was carried out in 2006-2007 and for most of the measures it covers the years 2003-2004. We looked at the relevance, efficiency and effectiveness of the measures. A "bottomup" approach was applied through web survey of beneficiaries and interviews with firm's managers or project managers. This paper summarises the features applying to more than one measure.

The evaluated grants were predominantly relevant and compatible with the objectives specified in national economic policy documents. An exception was the consultancy grant meant for strategic counselling but used mainly for preparing project proposals.

While the usage rate of support money is good there were also some shortcomings in terms of efficiency. First, application process and subsequent reporting have been very costly to firms. Second, regular overviews or electronic databases were missing for many important indicators.

In terms of overall impacts start-up grant was the most and export plan program the least successful. Additionality also varies greatly across the measures depending both on the type of support, the co-financing terms and the risk level of the projects. It was the smallest in case of low-risk infrastructure projects and the greatest in case of start-up and training grants. Effectiveness could be improved by better adhering to the preferences established in the national development plan (NDP), by using a stage-based approach in the case of long-term projects (1-3 years) to overcome the current rigidness of programs' terms and conditions, and by additionally varying the co-financing rate according to project type and/or duration. The study also revealed changes in the behaviour of firms and many positive spillovers, although sustainability and spillovers varied across grants.



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Introduction

This report evaluates eight business support measures, six of them funded by the European Union (EU) structural funds and two guaranteed by the Government. These measures fall under the four broad areas of business support:

1. Improving Access to Finance for Enterprises

- a. Start-up grant
- b. Business infrastructure grant
- c. Business loan guarantees

2. Human Resource Development

- a. Training grant
- b. Consultancy grant

3. Supporting Enterprises' Export Opportunities

- a. Export plan program
- b. Export guarantees

4. Supporting Research and Development

a. Support for R&D projects

The evaluation was carried out in 2006-2007 and for most of the measures it covers the years 2003-2004. The goal of the evaluation was to analyse whether support measures are still relevant and comply with economic policy objectives, and to make recommendations on how to improve, if necessary, the grants and their implementation principles. It was a first comprehensive impact evaluation of the EU structural funds in Estonia.

For each support measure a separate detailed report was prepared. This paper summarises the features applying to more than one measure.

The evaluated measures were the key instruments of enterprise and innovation policy.

The results were

used in develop-

ing new policy

measures.

1. Short background on business support policy

The evaluated schemas are the instruments of enterprise and innovation policies. In contrast to the initial stages of transition, by the late 1990s government policy was beginning to place more explicit emphasis on encouraging and supporting small and medium-sized enterprise (SME) development. In 2002, Estonian Enterprise Policy document "Enterprising Estonia - National Policy for the Development of SMEs in Estonia in 2001-2006" was elaborated. It recognized, firstly, that SMEs may suffer from size-related market failures; and secondly, the potential contribution of SMEs to job generation and to regional development. The aims of Enterprise Policy were to favour enterprising spirit, create new jobs and improve the competitiveness of Estonian businesses. The main priority activities were connected with development of human resources, improvement of access to finance, development of the business support structure, distribution of information and reduction of administrative burdens.

The most important research, development and innovation (RD&I) policy outline was the Estonian R&D Strategy "Knowledge-based Estonia" for the years 2002-2006. The strategy underlined the national consensus on the importance of RD&I for the future economic development and set out the strategic goals and courses of action. Two key complementary priorities were identified as strengthening of the knowledge base and increasing the competitiveness of enterprises. The strategy also defined key areas for support and foresaw increase of resources for these areas which were: user-friendly information technologies, biotechnology, and materials' technologies.

All the described objectives were reflected in the Estonian National Development Plan 2004-2006 (NDP) which formed the basis for distribution of the EU structural funds over these years. In order to meet the objectives of NDP, several grant schemas were developed and co-financed from EU structural funds, including six of the evaluated schemas:

- start-up grant for establishing new companies,
- training grant for human resource development,
- consultancy grant for engaging external advice to support company's development,
- export plan program to increase success of marketing activities in international markets,
- business infrastructure development grant to overcome shortcomings in business environment,
- support for financing the R&D projects of companies.

All these measures were managed by special institution – Enterprise Estonia (EE).

The other two schemas were managed by the Credit and Export Guarantee Fund KredEx:

- business loan and leasing guarantee for companies to overcome collateral problems,
- export guarantee for exporters to diminish the risks of export activities.

Uptake of the programs is presented in Table 1 and Table 2.

Measures were managed by two special bodies — Enterprise Estonia and KredEx.

Table 1. Financing of the EE's business support programs in 2003-2005

	Start-	up prog	,	Consu progra	,	Trainir progra	ım			elop-	R&D f progra		U		Export plan program*	
	2003	2004	2005	2004	2005	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
Applications	380	668	331	328	496	466	807	65	279	111	40	94	59	na	67	64
Approved applications	170	193	153	189	412	267	615	45	44	66	26	61	46	62	47	36
Rate of approval	45%	29%	46%	58%	83%	57%	76%	69%	16%	59%	65%	65%	78%	na	70%	56%
Supported companies	170	193	153	186	384	242	460	36	39	65	25	46	43	62	47	36
Total size of the grant (mil EEK)	na	27,3	18,5	6,4	11,9	9,1	29,4	32	60	66	42,6	141	69,8	na	41,8	31,4
Total size of the projects (mil EEK)	na	42	32	12,9	24,5	14	47,5	na	132	149	na	218	114	na	85,3	62,9
Average grant (thous EEK)	na	141	121	34	29	34	48	711	1364	1000	1638	2305	1517	na	889	872

Source: Enterprise Estonia, calculations of the authors.

na – not available.

Table 2. Financing of the KredEx's short-term export guarantees, business loan and leasing guarantees in 2001-2006 (number, mil EEK)

	2001	2002	2003	2004	2005	2006	TOTAL
Export guarantees							
Applications	62	93	240	505	350	251	1 501
New contracts	37	51	151	408	314	203	1 164
Rate of approval (%)	60%	55%	63%	81%	90%	81%	78%
Guaranteed firms	14	20	56	96	77	65	160
Guaranteed credit limit	53	42	130	326	352	186	na
Guaranteed export turnover	31	112	167	648	742	588	2 288
Investment and leasing guarantees*							
New contracts	60	126	97	130	130	170	713
Total loans (mil EEK)	197	402	199	317	300	537	1 952
Total guarantees (mil EEK)	78	156	95	152	159	231	871
Investment loans							
Applications	72	134	104	119	119	163	688
New contracts	60	104	85	110	110	157	626
Rate of approval (%)	83%	78%	82%	92%	92%	96%	87%
Total loans (mil EEK)	197	273	176	236	254	509	1 645
Total guarantees (mil EEK)	78	129	88	133	143	220	791
Leasing							
New contracts		22	12	20	20	13	87
Total loans (mil EEK)		129	23	81	46	28	307
Total guarantees (mil EEK)		27	7	19	16	11	80

Source: KredEx, calculations of the authors.

^{* -} Includes only implementation phase.

^{* -} Table is imprecise for the contracts for which the amount of guarantee has been changed during the contract period. na – not available.

2. Methodology

2.1. Evaluation Questions

Evaluation focused on questions whether grants are still relevant and whether the implemented activities have achieved their targets. In case of all grants the following general questions were examined:

- 1. **Relevance** do grants meet the needs of beneficiaries and are in line with market situation; if and what changes are needed in programs?
- 2. **Efficiency**—can the impacts be achieved by using resources more efficiently?
- 3. **Effectiveness** how have the grants impacted financial outcomes of the firms; have firms implemented planned activities and achieved their goals; do the results and impacts persist after the end of projects?

Depending on the differences in analysed implementation periods of measures, time lags in the occurrence of impacts and gaps in the knowledge of policymakers needed for planning respective strategies and activities, the emphasis on evaluation questions varied by measures.

2.2. Methodology³

SME policy impacts can be measured at both macro and micro (project) level. In this project "bottom-up" (or project based) approach was applied and mainly qualitative methods were used for two reasons. First, in addition to analysing impacts, the objective of the evaluation was to gather information on the relevance and functioning of the measures. And second, in 2004 the size of programs was still small and this makes macro level impact assessment difficult.⁴

Storey has classified different methods of evaluating SME policies calling it "six steps to heaven" with sophistication increasing from the Step 1 describing "Take up of schemes" to Step 6 "Taking account of selection bias".5 At the same time one must keep in mind that the goals and measures of SME policies are very diverse. Therefore the optimal methodology varies across measures depending on the strength of causality, the cost of evaluation, program size and relevance etc.⁶ For training grant with weak causality between input and results it is costly to use sophisticated methods, but for investment grants the causality is much stronger and more rigorous methods are suitable.7 Since we want to compare the impacts of different measures it is important to use same methodology for all measures. Otherwise the results are not comparable and the impacts gotten by using simpler methods will probably be relatively overestimated.8 As this project covers diverse measures, including soft policy measures like training and consultancy grant, we used the simpler method of beneficiaries' own assessment to assess additionality (Step 3). In addition, we took into account observation that one should avoid assessing additionality merely by beneficiaries' own assessments because these often overestimate the impacts compared, for example, to secondary data like financial statements.9 For that reason we used interviewers' assessment whenever possible.10

EE support measures

Evaluation is based primarily on web survey of beneficiaries and semistructured personal interviews with firms' managers or project managers. The latter's goal was to get detailed information on program implementa-

approach was applied and mainly qualitative methods were used.

"Bottom-up"

The evaluation is based on the web survey of beneficiaries and personal interviews.

³ Detailed description of methodology is given in each measure's report.

⁴ English Partnerships (2004). Additionality Guide. English Partnerships. 2nd ed. September 2004.

⁵ Storey, D (1998). Six Steps to Heaven. CSME Working Paper No. 59. September 1998.

⁶ Rossi, Peter, Howard Freeman, and Mark Lipsey (1999). Evaluation: A Systematic Approach. 6th ed. SAGE Publications.

⁷ OECD (2004). Evaluation of SME Policies and Programmes. Paris: OECD.

B EIM Business and Policy Research (2004). Review of Methods to Measure the Effectiveness of State Aid to SMEs. Zoetemeer: EIM.

Venetoklis, Takis (2000). Methods Applied in Evaluating Business Subsidy Programs: A Survey. VATT Research Reports 106, Government Institute for Economic Research (VATT)

¹⁰ HM Treasury (1995). A Framework for the Evaluation of Regeneration Projects and Programmes. London, January 1995.

tion and impacts on beneficiaries, and to cross-check the web-survey results on additionality. **Only the projects of 2004** were questioned¹¹ to avoid comparing beneficiaries who applied under different regulations or in different economic environment. However, since many of the surveyed companies have applied for or received business support grants also later on, their answers could to some extent represent mixture of experiences from the analysed and later period.

The web survey was carried out among all applicants whose project either received or not support in 2004. Overview of respondents is given in Table 3. In addition, for each measure 15-30 interviews with beneficiaries (in some cases also with unsuccessful applicants) and ~10 interviews with training companies, consultants, research institutions and local governments were conducted. Initial plan was to use the answers of unsuccessful applicants as a comparison group, but in case of training, consultancy, R&D and export plan programs the response rate was so low that survey answers could only be used as supplementary information sources. Even by telephone recruitment we were not able to raise the response rate much, partly due to EE's outdated database of contacts and partly due to negative experiences the firms had had in their dealings with EE.

The survey and interviews focused on project results/impacts. Taking into account that many impacts are difficult to measure (too early for impacts to emerge or they are inherently declaratory, e.g. change in competitiveness) the questionnaires also dealt with companies' internal processes of project preparation, selection and implementation. EE's project selection procedures, communication with firms during project implementation phase and the general satisfaction of beneficiaries with EE were dealt only insofar it was important for analysing impact evaluation questions.

In selecting the interviewees the following factors were considered: answers to web survey concerning additionality, sector, location of the beneficiary (county) and other factors connected with the specifics of measures.

All the applicants were questioned.

Response rate of the unsuccessful applicants was too low.

Table 3. Overview of web survey and interview participants amongst the beneficiaries of EE grants

Grant type	Supported/ not supported applicants	Firms	No contact data	Questionnaires sent	Responses	Response rate	Interviews*
Start-up grant	Supported	192	9%	174	93	48,4%	15
	Not supported	320	18%	264	64	20,0%	10
Business infrastructure	Supported	39	0%	39	29	74,4%	8+8
development grant	Not supported	128	0%	128	23	18,0%	
Training grant	Supported	242	0%	232	110	45,5%	15+8
	Not supported	180	3%	148	8	4,4%	
Consultancy grant	Supported	184	5%	174	69	37,5%	15+9
	Not supported	142	15%	121	6	4,2%	10
R&D grant (firms)	Supported	33	0%	33	20	60,6%	15
	Not supported	2	0%	2	1	50,0%	
R&D grant (institutions)	Supported	14	0%	14	9	64,3%	13
Export plan program	Supported	73	0%	73	21	28,8%	15
	Not supported	101	0%	101	3	3,0%	2
TOTAL		1 663	8%	1 342	472	28,4%	143
Total (supported firms)		777	5%	739	351	45,2%	96

Source: PRAXIS, calculations of the authors.

^{* -} Interviews with firms + other interviews.

KredEx's guarantees

For guarantees the report covers the years 2002-2004. The evaluation was based on the same principles as in the case of EE's support measures. Web survey was conducted amongst all the beneficiaries of this time period. Overview of response rates is given in Table 4. In addition ~15 companies who had used the guarantees

and 3-4 private sector firms offering guarantees were interviewed in case of both guarantee types.

We also interviewed interested parties involved in managing of or in the policy-making process of the EE and KredEx programs to evaluate the relevance and program management of the support measures.

Table 4. Overview of web survey and interview participants amongst the beneficiaries of KredEx's guarantees

Guarantee type	Firms	No contact data	Questionnaires sent	Responses	Response rate	Interviews*
Export guarantee	128	9%	116	18	14,1%	12 + 4
Loan and leasing guarantee	320	32%	219	46	14,4%	17 + 3
TOTAL	448	25%	335	64	14,3%	35

Source: KredEx database, PRAXIS, calculations of the authors.

2.3. Assessing net impact

Net impact or additionality is the impact that would not have occurred without the grant. Thus the reality is compared with "the case of the lack of grant". In case of the bottom-up approach the net impact of measure is found from gross impact 12 using the following formula:

Net impact = (gross impact – deadweight) x (1 – leakage) x (1 – displacement) x (1 – substitution) x supply multiplicators x income multiplicators

Assessment of net impact is based on the following methodology and assumptions:

 Deadweight – outcomes that would have occurred even without the grant.

The analysis of deadweight is based on the opinions of beneficiaries about what would have happened had they not received the grant. Assessments are based on the following questions:

- Would you have implemented the project without the grant?
- Did the grant change your investment plans (size/timing/content)? Also, in case of some measures as-

sessments of unsuccessful applicants were used to get additional information. For objectivity, assessments of interviewers not respondents were used. If available, economic data of beneficiaries were compared with general trends in business sector.

- Leakage outcomes obtained by beneficiaries outside the measure's target region or group.
 - For most programs (training, consultancy, export plan, R&D) leakage is not a problem since the target region is Estonia. Since for other programs the assessment of leakage would be too complicated for this project, it was considered equal to zero.
- **Displacement** outcomes obtained at the expense of other similar outcomes in target region. Displacement could take place in factor or product markets.

Displacement was assessed based on firm's sector and its share of exports in turnover.

• **Substitution** – outcomes obtained by the firm when it replaced an activity with another similar one to get the grant.¹³

^{* -} Interviews with firms + other interviews.

Deadweight was assessed based on the opinions of the beneficiaries.

¹² Gross impact – overall change in beneficiary's (economic) indicators that are used to evaluate the measure.

¹³ E.g. as a result of the grant firm's employee was replaced by previously jobless person, and hence a new job was not created.

Substitution was not assessed in this evaluation project.

Thus we looked at deadweight and displacement, but did not quantify those indicators.¹⁴

2.4. Indicators

The evaluation of the design and impact of EE programs is based on comparison against goals and indicators given in the NDP. For guarantees, objectives and indicators from KredEx's strategic documents were used. In case of some programs a lot of attention was paid to behavioural changes (which were not included among the official indicators) and project results instead of final impacts because measuring the quantitative impacts was too complicated.

3. Conclusions and recommendations

The conclusions and recommendations have been presented in the detailed reports for each measure and summarised in Annex 4 of this report. Hereinafter only the main conclusions and recommendations applicable to more than one measure will be given.

3.1. Relevance

The current study did not analyse the gaps in the market; rationale and objectives of the grants were rather taken as given. We examined if the support measures were compatible with the objectives specified in national economic policy documents and whether these objectives were met.

Unfortunately, rationales of the instruments were often vaguely specified in the policy documents; the objectives and indicators changed yearly, target values of the indicators were not set, etc. These weaknesses made the evaluation exercise difficult. Unclear or missing descriptions of the logic and expected outcomes of the support measures make it almost impossible for outsiders to assess the results and impacts as well as to generate open discussion on the topic. In order to overcome the problem we specified the rationales in the beginning of the project while interviewing the relevant policymakers.

Finally, the conclusion was that the evaluated grants were predominantly relevant and compatible with the objectives specified in national economic policy documents. As much as could be said based on the web survey, the measures also conformed to the needs of the beneficiaries and to the market situation. An exception was the consultancy grant whose weak design caused unexpected outcomes -2/3 of the grants were used for preparing project proposals while the initial idea of the program was to provide strategic counselling. It is recommended to differentiate these two types of consultations and focus more on the substantive counselling of firms.

Still, improvement of design could increase the effectiveness of several instruments:

· As regards the training and consultancy grant, intervention has been demand-oriented until now (i.e. support has been given directly to the firms that consume the service), whereas, at the same time, the supply side, i.e. the training and consultancy market, also needs developing both in terms of market structures (like the existence and availability of quality-related information), and the range and quality of the services offered E.g. if to broaden the range of available training courses it could be possible to commission training in important topics currently not offered by training providers in Estonia and/ or to invite foreign training providers to render the service.

Rationales of the instruments were vaguely specified.

Grants were predominantly relevant.

Training and consultancy grant focused only on demand side.

¹⁴ Quantified measurements for some grants are given for example in PRAXIS Working Paper 31/2007: Merit Tatar, Kadri Kuusk. Riikliku Arengukava 2004-2006 mõjuindikaatorite saavutusmäärade väljaselgitamine ja analüüs (includes a summary in English).

For some grants target groups should be either more focused or broadened.

Indicators need better identification.

Administrative burden is high.

Monitoring system needs improvement.

- In the case of some programs, the target groups should be more specified (in case of R&D support different type of companies¹⁵ should be approached differently starting already from the evaluation of project applications) or broadened (the export plan program should not be oriented only towards enterprises already experienced in exporting).
- Impact indicators need better identification. The currently used jobcentred indicators fail to encompass the whole impact of the grants and also some of the objectives set by the NDP (e.g. an increase in competitiveness). This could result in the rejection of "good" projects and failure to reach the target levels of the indicators established. For example, most beneficiaries do not consider the main result of training or consultation to be the creation of new jobs, but instead, "softer" processes and longer-term impacts within the firm. Therefore, it is advised that in the future more consideration should be given to qualitative indicators and indicators targeted at the measurement of productivity. We also suggest that more of the so-called interim indicators be used which make it possible to observe, at the outset, whether the operation of the program meets expectations and whether the presumed results could be attained in the future.
- Additionality should be kept in mind already in the assessment phase of the project applicatios.

3.2. Efficiency

The usage rate of support money is good – as of the end of 2006 for the six measures applications had been granted to the extent of \sim 90% and payments had been made to the extent of above 1/3 of the budget. But in terms of efficiency there were also some shortcomings:

- First, in case of several grants application process and subsequent reporting have been very costly to enterprises.¹⁷ Furthermore, the processing of smaller-scale projects with the same administrative burden as large-scale projects makes the processing of the former inevitably more expensive in relative terms. In case of training grant this could, for example, be improved by increasing the share of centrally financed standardised training courses and by introducing the accreditation of training providers or training courses. In the case of the infrastructure grant (and other large-scale grants) with its high demand, and the expensive reviewing and preparation of bulky applications, resources could be better managed both for EE and firms by introducing a two-stage application process. In the first round of short "business project" descriptions (1-2 pages), i.e. in the round of preliminary proposals the potentially eligible projects would be selected and these applicants would be invited to draft comprehensive applications.
- Secondly, it appeared in the course of evaluation that regular overviews or electronic databases were missing for many important indicators (e.g. the fields of training and consulting, application grades, etc.). It is advisable to improve the monitoring system to ensure that data necessary for making management decisions is collected and to gear the system more to supporting the management and analysis of measures (rather than only for financial reporting). The objective should be for the heads of program to always have an overview of what is happening within the scope of the program and be able to provide input for example for the evaluation committee and policymakers.

¹⁵ Different type of firms include for example: starting high-tech companies, large companies engaged in R&D activities on a regular basis, as well as firms operating in traditional sectors which have not carried out R&D activities earlier.

¹⁶ National Development Plan Monitoring Report 2006. Ministry of Finance, 2007.

¹⁷ For further information please see: Survey of Administrative Burden. Ministry of Economic Affairs and Communications, 2007.

On some occasions the efficiency has been hindered by sudden depletion of funds or frequent modification of program conditions. These have also damaged the reputation of EE as a reliable partner. In the future, more attention should be paid to financial management and to the possibility of reallocating funds between various measures. And although problems in implementation, firms' changing needs and altering market situation may sometimes necessitate the modification of program rules these should be early on communicated to stakeholders.

3.3. Effectiveness

In terms of overall impacts start-up grant was the most and export plan program the least successful. Additionality varies greatly across the EE support measures depending both on the type of support, the co-financing terms and

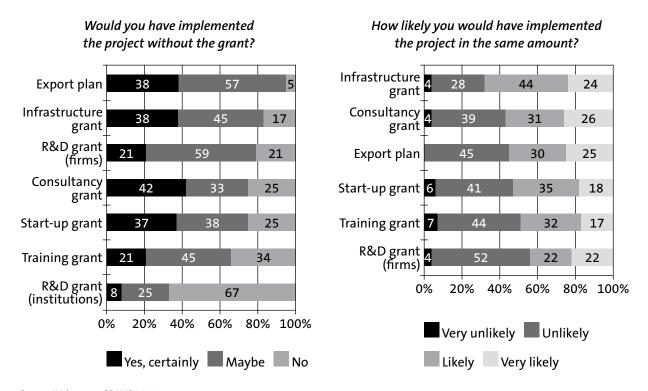
the risk level of the projects. The net impact was the smallest in case of low-risk infrastructure projects and the greatest in case of start-up and training grants (see Figure 1)¹⁸. Answers referring to the great net impact of low-risk training projects can largely be explained by the low self-financing rate. On the other hand, the net impact of R&D projects which typically have a high risk level is better characterised by the large share of those who would "probably" carry out the projects even without the support and, if they do so, at remarkably lower cost.

The additionality is high in the case of both guarantees. Upon absence of KredEx's export guarantee companies would not have been able to secure their transactions elsewhere. Although most of the transactions would have been concluded without a guarantee, their volume would have been smaller and the terms of payment would have been worse for the buyer. Upon the absence of a loan

In terms of overall impacts start-up grant was the most and export plan program the least successful.

Some measures have high additionality, others do not.

Figure 1. Approximate assessment of the deadweight of the projects*



Source: Web survey, PRAXIS 2008.

^{* -} In case of the export plan program, one important intended outcome of the grant was the impact on the contents and structure of activities. Therefore, the question concerning the implementation of the project does not exactly measure additionality. For a more precise evaluation, please refer to the evaluation report of export plan program.

¹⁸ The evaluation of the net impact is based first of all on the relative share of those who would certainly have given up carrying out the project if the application for support was rejected.

Grant conditions are too rigid for longterm projects.

More attention could be paid to cross-usage of the measures.

guarantee most of the projects would not have been implemented. 48% of the respondents thought that they would not have been given a loan and quite a large portion of the respondents (41%) was not certain of their possibilities of getting a loan.

Some of the reasons behind modest results in terms of effectiveness:

- erences established in the NDP should be better adhered to or additional (more specific) preferences should be established for the allocation of support as this would contribute to the attainment of the objectives of the program and increase its net impact. For example, in case of consultancy grant consultations about the enterprises' strategic decisions should be preferred to consultations about the preparation of project proposals.
- As regards training grant, it would be advisable to limit the eligible training fields aimed at different target groups, as at present large enterprises use the majority of the support for general management training which they should be able to finance themselves and the net impact of which is low. Also, in the allocation of support the priorities established in the NDP should be followed – e.g. innovation, production management, marketing training, etc., should be preferred to accounting training. Even though projects of prioritised areas already get "bonus points" in the assessment of applications, this has not resulted in greater funding for these areas. As the demand for the support has not lead to the desired outcome, it is recommended to focus on the supply side (where the absence of appropriate training courses is the problem) or increase the relative financial attrac-

- tiveness of the training courses for enterprises (where the low demand for such training is the problem).
- As the net impact varies depending on the project type and/or duration, it is advisable for some grants to additionally vary the co-financing rate accordingly. ¹⁹ For example, one could lower the co-financing rate for training grant after certain amount of support is exceeded, since one goal of the grant is to advertise the usefulness of training for enterprises. Also, it could be possible to consider lowering the co-financing rate of the export plan expenses in the later stages of the project, as with the development of the project the export risks decrease.
- In the case of long-term projects (1-3 years) the terms and conditions of programs for training, export planning and R&D support were too rigid and not in conformity with the planning processes of enterprises themselves. Entrepreneurs often had to plan their activities in too detailed a way for one or two years ahead (e.g. knowing in advance the names of lecturers, training times, precise list of fairs, etc.) and when obstacles or changes occurred, it was not possible to choose more expedient activities or change the action plans based on new knowledge. As a result, projects produced modest impact (e.g. activities were not carried out at all or it was impossible to receive the support for the activities which in essence would have been eligible). It is recommended that the terms and conditions of programs be adapted to the requirements of long-term projects, using a stage-based approach - each project would be divided into stages and the financing and activities of the next stage (year, 6 months, etc.) would be agreed upon at the end of the previous stage.20

¹⁹ The rate of co-financing varies at present in case of infrastructure grant depending on the location of projects and in case of training support depending on the type of training and the size of the enterprise. For the rest of the grants, the co-financing rate is usually 50%.

²⁰ Such a system is partly already applied to R&D support.

Table 5. Overview of the cross-usage of EE grants in 2004-2005 (number of firms)

	Supported/not supported firms			Consultancy grant*	Training grant	Infrastructure grant	R&D grant	Export plan program	Only 1 grant**	Only 1 grant %
Start-up	346/400	Supported		72	11	1	1	1	264	76,3%
grant		Not		8	1	4	0	1		
Consultancy	543/143	Supported	72		59	37	18	25	370	68,1%
grant		Not	45		9	26	3	7		
Training	660/241	Supported	11	59		25	10	37	553	83,8%
grant		Not	5	12		15	1	6		
Infrastructure	101/142	Supported	1	37	25		5	16	44	43,6%
grant		Not	0	2	1		0	2		
R&D grant	74/18	Supported	1	18	10	5		5	46	62,2%
		Not	0	3	0	0		1		
Export plan	110/54	Supported	1	25	37	16	5		53	48,2%
program		Not	0	6	1	5	1			
		Guarantees							Received EE grants	%
Export guarantees	128/na	9		9	22	9	1	11	32	25,0%
Leasing/loan guarantees	320/na		10	19	20	5	3	8	52	16,3%

Source: Enterprise Estonia, KredEx, calculations of the authors.

Explanations: The table should be read row by row. For example, the row "Start-up grant" sets out information about the companies that have received start-up grant, indicating their eagerness and success in applying for other types of support. For example, the uppermost number "72" in the column "Consultancy grant" indicates that 72 of the companies that had received start-up grant also received consultancy grant; the second number "8" in that column indicates that 8 of the companies that had received start-up grant also applied for consultancy grant, but were not successful.

The bottom part of the table covers KredEx's guarantees. Most column headings are the same; differences are given in the table. na - not available.

The cross-usage²¹ of different types of support is modest (see Table 5). Less than 15% of the firms which received support in 2004 and 2005 have used more than one type of grant, and most of the firms that received consultation grant as the second support type probably used it for the preparation of the project proposal. Even though the cross-usage of grants had not been defined as a goal on its own in the given period, it is recommended that more attention be paid to its potential in the future. The interviews confirmed the positive influence of complementary grants on the achievement of expected project results. For example, the export planning support contributed remarkably to the realisation of the results of R&D projects which, because of marketing problems, would otherwise have remained unapplied or their application would have been postponed into the future.

- The cross-usage could be increased by improving the awareness of potential and existing beneficiaries of the grants offered. The evaluation indicated that awareness is low at present.²² In the web survey many said that the reason for not using other types of support was lack of information. Also the wish to receive a monthly newsletter about various grants was mentioned in the interviews on several occasions.
- In addition, more attention needs to be paid to mentorship, enterprise diagnostics and the maintenance of active contacts between EE and entrepreneurs.
- One possibility to use support more

Closer contacts between EE and entrepreneurs are advisable.

Introduce "growth pack-age" aimed at most successful firms.

^{* -} As regards consultancy grant it must be borne in mind that many companies used that support just for the preparation of applications for other types of grants.

^{**-} Number of firms that used only one type of grant. The table does not include the support used by firms if the firm was not the direct applicant (e.g. training courses organised for start-ups centrally by EE).

²¹ Cross-usage means the use of several different grants by an enterprise for different projects or for different activities within the scope of one large-scale project

²² Surveys were conducted from October 2006 to January 2007. 21 The loan guarantee offered by KredEx could also in some cases be suitable for

The study revealed many positive spillovers.

Training and consultancy grants led to shift in attitudes.

Support for R&D acttivities and export guarantee changed behaviour of enterpreneurs.

effectively is to shift from supportbased approach to an approach which is based on the type of firm (e.g. exporter, high-growth firm, R&D firm, life-style entrepreneur etc.). As the expected influence of support and the needs of the beneficiaries differ across target groups, it would be more expedient for EE to use more resources for dealing with projects that would potentially have a greater impact or that would be carried out in the prioritised fields of activity, and to do so starting already in the phase of application assessment.

- At present there are no instruments (except export plan) to further support the beneficiaries of start-up grant who have reached the growth phase or to specially support firms with high growth potential.²³ After the start-up phase a firm usually reaches the situation where additional investments are needed to enter the phase of fast growth. Without investments the firm's development may reach a standstill. A solution could be a second stage of support targeted at the most successful firms to encourage them to grow, so-called "growth package" prepared in accordance with the needs of the firm, covering both operating costs and investments (e.g. consultation, training, product development, equipment, export planning, loan guarantee premium, project management costs, etc.).
- The regional division of support is compatible with the regional division of firms.

3.4. Spillovers and sustainability

In the long run, spillovers and behavioural additionality are often even more important than immediate results and impacts. The study revealed changes in the behaviour of enterprises and many positive spillovers although sustainability and spillovers varied across measures:

- One of the objectives of training and consultancy grant was to influence the behaviour of entrepreneurs and their attitude towards training/external consultation. At present it seems that the behavioural influence has not yet been achieved, but one can observe a certain shift in attitude. For example, some entrepreneurs overcame the reluctance to use external advice and, in ideal cases, longer term relationships were developed with the consultants. However, the long-term impact of consultancy grant used for the preparation of applications on the entrepreneurs' knowledge or behaviour in using consultations is questionable.
- The sustainability of the export plan program was inhibited by many unfinished projects and by the poor quality of many export plans (the plans were unrealistic, activities were inadequately planned, inappropriate markets were chosen, etc.). Program still had a longterm positive impact, as many entrepreneurs obtained information about the value and usefulness of different marketing activities for their company.
- The positive long-term influence on the behaviour of entrepreneurs could be observed in the case of the support for R&D activities managerial skills improved, relations with old partners were enhanced and new partners were found, new project ideas were generated and many firms/agencies have later carried out new projects and were now more successful in doing so probably due to previous experience and the newly obtained knowledge.
- A longer-term positive effect is visible also in case of export guarantees. Transactions guaranteed by KredEx were aimed at new markets or new business partners. The companies have remained active on these markets to date and most of them also have the very same partners with whom they continue doing business without a guarantee.

ANNEX 1.

Overview of EE's business support measures in 2004-2005²⁴

Table 6. Distribution of projects by firm size in 2004-2005 (number)

Firm size	Projects	Share
Micro	905	46,8%
Small	520	26,9%
Medium	414	21,4%
Big	74	3,8%
Unknown	22	1,1%
TOTAL	1 935	100%

Source: Enterprise Estonia, calculations of the authors.

Table 7. Distribution of supported firms by sector in 2004-2005 (number)

Sector	Firms	Share	# of firms in Estonia	Share*
Agriculture, hunting, forestry, fishing, mining	14	0,7%	10 229	
Manufacturing	671	31,3%	5 991	18,6%
manufacture of food products and beverages	68	3,2%		
manufacture of textiles and wearing apparel	76	3,5%		
tanning and dressing of leather; manufacture of leather products	2	0,1%		
manufacture of wood and wood products	195	9,1%		
manufacture of pulp, manufacture of paper and paper products; publishing	7	0,3%		
manufacture of chemicals and chemical products	26	1,2%		
manufacture of rubber and plastic products	27	1,3%		
manufacture of other non-metallic mineral products	31	1,4%		
manufacture of metals and fabricated metal products	121	5,6%		
manufacture of other machinery and equipment	34	1,6%		
manufacture of electrical machinery and optical instruments	42	2,0%		
manufacture of transport equipment	23	1,1%		
other manufacturing (incl. furniture)	272	12,6%		
Electricity, gas and water supply	21	1,0%	282	0,9%
Construction	177	8,3%	3 622	11,3%
Wholesale and retail trade	83	3,9%	17 928	
Hotels and restaurants	209	9,7%	1 990	6,2%
Transport, storage and communication	88	4,1%	6 006	18,7%
Financial intermediation	12	0,6%	563	
Real estate, renting and business activities	125	5,8%	11 201	34,8%
Education, health and social work	110	5,1%	1 471	4,6%
Other community, social and personal service activities	382	17,8%	1 599	5,0%
TOTAL	2 145	100%	60 882	100%
Unknown	88	4,1%		

Source: Enterprise Estonia, Statistics Estonia, calculations of the authors.

^{* -} excluding sectors which are in general not eligible for support (primary sector, wholesale and retail trade, financial intermediation).

²⁴ Includes only support measures co-financed by the EU structural funds and covered by the report.

ANNEX 2.

Overview of KredEx's short-term export guarantees in 2002-2004

Table 8. Impact indicators in 2001-2006 (mil EEK, number)

	2001	2002	2003	2004	2005	2006
Guaranteed export turnover	31	112	167	648	742	588
Share of Estonia's total export			0,2%	0,87%	0,81%	0,49%
Firms using guarantees	14	20	56	96	77	65
Export partner countries exported to	13	20	25	29	27	35
Guaranteed buyers	50	52	155	398	395	203
Guaranteed credit limit	53	42	130	326	352	186

Source: KredEx database, Bank of Estonia, calculations of the authors.

Table 9. Guaranteed export by export region in 2003-2006 (mil EEK)

	2003	%	2004	%	2005	%	2006	%	Total	%
Western Europe	96,99	58,1%	511,73	79,8%	577,87	79,4%	328,56	55,9%	1515,15	71,4%
Central and Eastern Europe	47,50	28,5%	97,36	15,2%	93,13	12,8%	146,97	25,0%	384,96	18,1%
Russia/CIS	6,24	3,7%	4,97	0,8%	8,23	1,1%	28,03	4,8%	47,47	2,2%
Other developed countries	14,81	8,9%	26,82	4,2%	47,86	6,6%	84,20	14,3%	173,69	8,2%
Developing countries	1,30	0,8%	0,19	0,0%	0,36	0,1%	0,23	0,0%	2,08	0,1%
TOTAL	166,84	100%	641,06	100%	727,45	100%	587,99	100%	2123,34	100%

Source: KredEx database.

Table 10. Distribution of guaranteed firms by size in 2002-2004 (number)

Firm size	Firms	Share	Share of exporters in Estonia
Micro	26	24,3%	27%
Small	39	36,7%	44%
Medium	29	26,7%	
Big	13	12,2%	29%
Unknown	32		

Source: KredEx database, Commercial Register, The survey of Estonian exporters in 2004, calculations of the authors.

Notes: Firm size is based on the number of employees. Number of firms is the unweighted average of the firms of respective size group in 2001-2005. As the distribution by medium-sized and big firms was lacking in the survey of Estonia's exporters only aggregate number is given for the share of these two size groups.

Table 11. Distribution of guaranteed firms by sector in 2002-2004 (number)

Sector	Firms	Share
Agriculture, hunting, forestry, fishing, mining	0	0%
Manufacturing	91	74,6%
manufacture of food products and beverages	9	7,4%
manufacture of textiles and wearing apparel	12	9,8%
tanning and dressing of leather; manufacture of leather products	1	0,8%
manufacture of wood and wood products	20	16,4%
manufacture of pulp, manufacture of paper and paper products; publishing	6	4,9%
manufacture of chemicals and chemical products	4	3,3%
manufacture of rubber and plastic products	2	1,6%
manufacture of other non-metallic mineral products	4	3,3%
manufacture of metals and fabricated metal products	7	5,7%
manufacture of other machinery and equipment	3	2,5%
manufacture of electrical machinery and optical instruments	2	1,6%
manufacture of transport equipment	1	0,8%
other manufacturing (incl. furniture)	20	16,4%
Electricity, gas and water supply	0	0,0%
Construction	0	0,0%
Wholesale and retail trade, repair	29	23,8%
Transport, storage and communication	0	0,0%
Services, incl. hotels, restaurants, business activities, finance	2	1,6%
Education, health and social work etc.	0	0,0%
TOTAL	122	100%
Unknown	6	4,9%

Source: KredEx database, Commercial Register, calculations of the authors.

ANNEX 3.

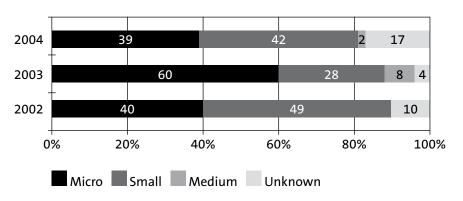
Overview of KredEx's investment loan and leasing guarantees in 2002-2004

Tabel 12. Distribution of clients by sector in 2002-2004 (number)

Sector	Loan	Leasing	Total	Share
Manufacturing	122	32	154	43%
manufacture of food products and beverages	26	10	36	10%
manufacture of textiles and wearing apparel	13	1	14	4%
manufacture of wood and wood products	37	4	41	12%
manufacture of pulp, manufacture of paper and paper products; publishing	2	6	8	2%
manufacture of chemicals and chemical products	4	1	5	1%
manufacture of rubber and plastic products	4	1	5	1%
manufacture of other non-metallic mineral products	2	0	2	1%
manufacture of metals and fabricated metal products	14	5	19	5%
manufacture of other machinery and equipment	2	1	3	1%
manufacture of electrical machinery and optical instruments	2	0	2	1%
manufacture of transport equipment	1	0	1	0%
other manufacturing (incl. furniture)	15	3	18	5%
Electricity, gas and water supply	9	0	9	3%
Construction	6	3	9	3%
Wholesale and retail trade	54	9	63	18%
Hotels and restaurants	39	3	42	12%
Transport, storage and communication	11	1	12	3%
Real estate, renting and business activities	9	2	11	3%
Health and social work	13	0	13	4%
Other community, social and personal service activities	29	4	33	9%
Education	3	0	3	1%
Unknown	4	0	4	1%
TOTAL	299	54	353	100%

Source: KredEx database, calculations of the authors. Note: Distribution is given by the number of contracts.

Figure 2. Distribution of clients by firm size in 2002-2004 (%)



Source: KredEx database, calculations of the authors. Note: For 26 guaranteed firms (7%) there is no data on the size in KredEx database.

ANNEX 4.

A. Start-up grant

The overall goal of start-up grant is to "... stimulate the emergence of new en-

terprises" and the specific objective is to "increase the possibilities of creation, survival and development of SMEs through improving access to financing."

Relevance / Design

- Although over the last three years the availability of finances as a bottleneck in the development of SMEs has decreased, the existence of grant can still be considered relevant in this regard.
- The existence of the counselling component is highly relevant.
- At the same time consultancy grant's content and its real benefits to the company's economic activities are insufficient, as a result of which the efficiency of the start-up grant will probably be potentially lower.
- The beneficiaries considered supporting the acquisition of equipment fully justified and necessary for their project.
- The application appraisal criteria foster selection of entrepreneurs with high success potential.
- The principles of differentiating between the grant of 50,000 (called start-up support) and 160,000 kroons (growth support) need a more detailed analysis, given that the share of the latter exceeds 2/3 of the volume of support.

Future opportunities:

- Improving the counselling service.
- To create possibilities for more intense support of enterprises which prove rapid growth, incl. access to additional investment funds.
- **CDCs**²⁵ **should take a more active role** in stimulating establishment of new enterprises in counties where the overall enterprise birth rate and the use of the start-up grant is lower than on average.
- It is possible to **use loan guarantees more actively** in supporting start-ups.

Efficiency

- The number of beneficiaries (150-200 a year) is modest, but according to a very approximate assessment ~15% of the start-ups receive start-up grant.²⁶
- The share of beneficiaries who have high growth potential and represent the knowledge sector is lower than expected.
- The high share of beneficiaries in rural areas is positive.
- Although on the whole the regional division of support is fully satisfactory, the higher activeness of some areas is evident (e.g. Ida-Viru, Saare).
- Training and consultancy grant is used relatively modestly once the start-up grant has been received.
- **Financial leverage is good**, because the actual co-financing rate is usually lower than the established limit of 75% (the annual average was 65% in 2004 and 57.8% in 2005).²⁷

²⁵ County Development Agency

²⁶ Estonian Statistical Office. The author's calculations.

²⁷ The database of Enterprise Estonia. The author's calculations.

- If EE or the partners involved in implementation of the programs lose contact with the final recipients, the possibility to influence their further development and activities is very small. EE should consider turning the so-called **control visits** conducted in the course of present ex-post assessments into substantive **counselling visits**, which contribute to the development of the company. The present visit, which is confined to simple questioning, is not efficient use of the EE's funds.
- The reputation of the grant suffered a blow when the funds were exhausted in the middle of the fiscal year.

Future opportunities:

- One could involve the advisors, CDCs and incubation centres (who are involved in the process of drawing up a business plan) later on as a mentor/supervisor/monitor instead of EE, especially in the case of firms with growth potential.
- It is possible to raise the awareness of potential entrepreneurs and increase grant applications in regions where the number of applications is low. If the success in some regions is due to the active work with and the counselling of potential applicants, it would be possible to increase the efficiency by improving these activities in under-represented regions.

Effectiveness

- A high survival rate of start-ups (89% 2 years after commencement of the project).
- A high share of start-ups in manufacturing.
- 182 enterprises supported in 2004 employed **556 paid employees** in 2006.
- However, it should be noted that many enterprises did not achieved the turnover forecasts of the year following the receiving of the grant.
- Grant has been an important source of start-up capital and upon absence thereof many would have been forced to finance the project with a loan.
- **Deadweight is medium.** At the same time, without the grant most of the entrepreneurs would have implemented their projects on a smaller scale and over a far longer period. Thus, the additionality in terms of volume and time reduces the initial deadweight estimate considerably.
- It is positive that 88.4% of the web survey respondents noted that they drew up the business plan themselves or in cooperation with a consultant and over 50% found that the drawing-up of the business plan was "very helpful" or "helpful" in managing the company afterwards. At the same time the interviews indicated that in reality the business plan was not used later (some had used it either upon applying for a new grant or bank loan) and had not made any changes to the business plan later.
- It was mentioned that the impact of involving a consultant did involve getting a clearer picture of the plans of the company, but their main role was nevertheless adjustment of the business plan to the needs of EE.
- The feedback to the beneficiaries after the end of the project has been insufficient. Only 21% of the web survey respondents said that they have received such feedback. In general the role

of EE/CDCs was confined to counselling upon drawing up the application and compiling later reports. There was no substantive assistance to the companies (incl. diagnostics).

- The mentorship program has been welcomed by entrepreneurs.
- The low awareness of entrepreneurs of the support possibilities and their desire to receive new information about the activities of EE.

Future opportunities:

- More attention should be paid to monitoring and mentorship of recipients of start-up grant, incl. establishment and maintenance of relations between the mentor and the entrepreneur.
- Increasing awareness of the possibilities of start-up support (incl. training and counselling).
- The present start-up grant does not encourage submission of larger projects, because the grant has a maximum limit. If the maximum limit were given up, a progressive co-financing rate could be considered (for instance, a reducing co-financing rate in the case of major projects).

Spillovers

- Business plans and counselling have been weak. Often the contact between the consultant and the entrepreneur is confined to the adjustment of the business plan with the requirements of EE and the consultant does not have any interest in the substantive quality or realism of the business plan.
- Entrepreneurs have used few external training/counselling services and support.
- It is very positive that over 30% of the companies applied for a loan later and all received it. However, it should be noted that approximately 25% of them had received a positive credit decision even before receiving the start-up grant.

Future opportunities:

 A possible solution could be the lengthening of the contact between the consultant and the entrepreneur. The business plan consultant could act as the supervisor/instructor of the company's activities in the first year, being liable for, among other things, achievement of the forecasts.

Sustainability

 At present there are no instruments for further support of recipients of start-up grant who have entered the growth phase and for purposeful supporting of firms with high growth potential.

Future opportunities:

• A solution could be two-stage grant in the framework of which the most successful would be rewarded after the start-up phase, in order to encourage them to grow. The support of the second stage could be a so-called growth package, which would cover the running as well as investment costs (counselling, training, product development, export plan, compensation of loan guarantee premium, project management expenses, etc.). The package would be aimed only at the most successful ones and be compiled pursuant to the company's needs.

B. Training grant

The goal of the training grant is to "support training and retraining of entrepreneurs and employees, in order to maintain and increase the competitiveness of employees in the labour market, to develop entrepreneurship, to create conditions for creation of new jobs, and to increase people's capacity in the field of research and development and technology development."

Relevance / Design

- The cost of training remains the biggest obstacle for many entrepreneurs in training employees. 24% of managers have a business or management degree from a higher education institution.²⁸ Thus, the program remains relevant for resolution of these problems.
- The grant is aimed at all enterprises that comply with the conditions and there are no significant preferences in appraising applications in terms of business sectors or fields of training. Although training relating to "introduction of innovative and modern management methods or production technologies" are given bonus points in appraising application, this has not ensured a high share of such training in using support.
- So far intervention has been that of the demand side (firms using the service have been supported), while the supply side (training market) also needs to be developed in terms of the market structures (in particular, the existence and availability of information on quality) as well as the selection and quality of services provided (there are problems in finding training in the areas of production management and increasing effectiveness). If the supply side is not attended to, prices may start increasing in the conditions of rising demand.
- Beneficiaries were mostly pleased with the program conditions. Field training and study visits were mentioned among the uncovered aspects.

- Accreditation of training companies and/or some training courses could be considered as a tool for providing and intermediating information about the quality of training providers.
- In addition to providing information to entrepreneurs, accreditation would allow for reduction of the current high administrative burden (of enterprises, training providers as well as EE) if different application procedures and documentary requirements were applied with regard to training companies whose quality and reliability has been declared acceptable through accreditation.
- To increase the selection of training offered it is possible to commission training in the requested topics which are currently not offered and/or invite foreign instructors.
- Since most of the beneficiaries do not see creation of new jobs, but "softer" processes taking place in the enterprise as the main results of training, the introduction of more qualitative indicators and those aimed at measuring the productivity could be considered.
- EE could treat training providers more like key partners who work towards the same goal. At present, cooperation with training providers is modest.

Efficiency

- Ineffective use of available funds by EE:
 - Although by today organisation of **centrally funded training** in the framework of the training plan has been introduced, the share of such simpler training which allows for standardisation could be higher in order to achieve economies of scale.
 - Many very small projects are financed. Also, many companies, including bigger ones, have submitted nearly 10 projects in 18 months.
- Training providers and final recipients have not noticed a steep rise in prices in the training market.
- The requirement of asking three price offers has resulted in numerous "empty" offers being made.
- The structure of beneficiaries is not balanced. Some very large projects receive a large portion of the support funds. Three most supported enterprises used over 20% of EE support money in 2004-2005.

Future opportunities:

- To increase the share of training centrally funded by EE in the case of simpler training which allows for standardisation.
- Consistent work for the purpose of ensuring the functionality of the requirement of three price offers. Raising the limit to 90,000 kroons was a step in the right direction.

Effectiveness

- The division of support with regard to the objectives established by the NDP is out of balance in terms of the training areas. Most of the training funds are spent on general management training and there is little related to marketing and software; in terms of quality management the situation is satisfactory.
- EE supports merely the organisation of training, although the stage following the training course (where the knowledge obtained must be disseminated and applied) is of critical importance in terms of the effectiveness of the training. Often a project comes to a halt at this stage and results in a low use of new knowledge.
- Regionally, the use of grant is concentrated, but in line with the location of Estonian enterprises enterprises of Harju County use half of the support and, jointly with Tartu County, 2/3 of support. In terms of the sectoral division the share of manufacturing firms is above the Estonian average, but the distribution is similar in terms of sub-sectors.
- The share of micro enterprises is high. 10% of the support money goes to large corporations.
- In the case of 2/3 of projects the proposal for training was made by the management or by an employee who had undertaken training.
- Most of the companies found that the training corresponded to their needs.
- Almost everyone who participated in training has applied the obtained knowledge at work.
- The share of projects which would not have been implemented without grant is quite high. Also, upon absence of grant the size of projects would have been considerably cut. Thus, the deadweight is medium.
- 39% of the beneficiaries are engaged in export and export forms over

- 50% of the turnover for 16% of the beneficiaries.²⁹ Thus, attention must be paid to displacement and it reduced the net impact of grant.
- 20 out of the 53 projects of large corporations were aimed at general management knowledge.³⁰

Future opportunities:

- Training in the priority fields of the NDP should be favoured more.
- Since the expected impact of the training grant and the needs of beneficiaries differ by target groups, it is preferable to treat them differently in application procedures. The present uniform but complicated bureaucracy is too expensive for all parties and it results in a waste of resources. SMEs and large corporations, larger and small projects should be applied different application requirements.
- Since usually the introductory standardised training courses are suitable for start-ups and SMEs, the activities financed in the framework of the training plan should be continued and their share should be increased.
- Eligible fields of training aimed at different target groups could be limited. For instance, at present, large corporations spend a large portion of grant on general management training which they should be able to finance themselves and whose additionality is therefore low.
- Since one of the goals of the grant is to show to entrepreneurs the necessity and usefulness of training, the net impact of grant should decrease once the enterprise has used training more. Thus, the binding of the co-financing rate with the number or volume of previously used training grants could be considered.
- The fostering of the successfulness of the post-training stage through amending the terms and conditions of the training grant could be considered.

Spillovers

- The demand for training has increased, because according to training providers, firms that could not afford it previously have started using training.
- Prices have risen with regard to short-term training courses.
- The bureaucracy arising from the grant has affected the work of training firms (e.g. some of them have hired an employee to attend specifically to training grant).
- It is positive that beneficiaries have made more training plans than on average in Estonia.

Sustainability

• The growth in demand has not yet resulted in positive feedback to the market – there is not yet a self-sustaining cycle where the demand results in the growth of quality and better quality in higher demand. Thus, the training grant is not yet sustainable and the positive impact would be lost if support will be terminated. At the same time a positive change in the attitudes of entrepreneurs can be noticed, but the impact on the behaviour has not materialised yet.

²⁹ Follow-up evaluation of training support of Enterprise Estonia in 2004. Enterprise Estonia, December 2006.

³⁰ The database of Enterprise Estonia.

C. Consultancy grant

The goal of consultancy grant is to support the growth of companies and

creation of new jobs, by providing the expertise required for business and helping the entrepreneurs to find new markets.

Relevance / Design

- The initial idea and rationale of the program remain relevant.
- The subject of a large number of projects was the preparation of applications for support from other programs. This contributed to the attainment of program's goals merely indirectly.

Future opportunities:

- The program should involve **more active communication** (e.g. articles with positive and negative examples, seminars, environments for exchanging experiences, etc.) of the usefulness of external consultations, the selection and use of a consultant, etc., which would increase the interest in using external expert assessment (for other than writing financing applications).
- The use of foreign consultants should be favoured more, because there is a lack of specialists with area-specific knowledge in Estonia and in the case of using foreign consultants the financial problems (and thus, the additionality) are greater.
- Application assessment criteria and performance indicators could be different in the case of start-ups and already active enterprises, because the needs, expected results and the methods of their achievement are different for these target groups.

Efficiency

- The program has not been very efficient in terms of attainment of its main goals in the case of many financed projects it is contributed indirectly to the attainment of the goals through other support programs (if the application is successful).
- Entrepreneurs often did not engage in the selection of a suitable consultant with sufficient thoroughness.
- The preparedness of entrepreneurs to use external expertise (not related to a new financing application) is relatively low.

Future opportunities:

- To reduce support for preparation of financing applications.
- The program should involve more active communication (see above).
- The problems of finding a suitable consultant can be solved by activities aimed at increasing the quality of consultants, dissemination of information (quality standards, databases, etc.) and respective counselling (e.g. in the framework of preliminary diagnostics).

Effectiveness

- The additionality of the program is relatively low, i.e. many projects would have been implemented even without the support (in particular, projects preparing new project applications).
- The impact of the program on the economic results of the enterprises was relatively low, excl. start-ups.

Future opportunities:

- To reduce support for preparation of financing applications, because the additionality of such support is low and positive spillovers are modest as well (see the next part).
- Respectively, to increase support for other consultations services, which are not related to preparation of project applications. I.e. to increase the use of professional experts (if necessary foreign consultants) for which enterprises lack funds themselves.

Spillovers

- The program has contributed to the development of the consultation market. The supply has increased. The program has had an impact on the quality and price of the services rendered, but this needs a more thorough analysis.
- The program contributed to the rise of the quality of project applications and reduced barriers arising from a heavy administrative burden, which hamper the preparedness of enterprises for applying for business support. Especially smaller enterprises have difficulties to keep up with all the requirements.
- Project compilation and management capacity of supported projects improved.
- The use of external experts by supported enterprises and the respective preparedness to use counselling have increased.
- The relationship between an entrepreneur and a consultant continues more often if project's goal was not the preparation of a new financing application.
- Positive effects were the strongest if foreign experts were used (new ideas, knowledge, contacts).

Future opportunities:

 By reducing the support for preparation of financing applications the spillovers of the program and the behavioural additionality will increase further.

Sustainability

• The use of external expertise has increased. In the case of larger projects new cooperation relationships emerged, which continued after the end of the project.

D. Business infrastructure development support

The goal of the infrastructure grant is to "improve the business environment of the existing companies by supporting the creation of the required business infrastructure and industrial real estate equipped with modern infrastructure".

Relevance / Design

- Since there is plenty of infrastructure that is in poor condition and unsuitable for industry in Estonia, the program aimed at resolving this problem **remains relevant**. This is proven by surveys carried out among SMEs where 12-15% of firms mentioned the lack of infrastructure or suitable working premises as an important obstacle to development both in 2002 as well as 2005. 31, 32, 33
- In general, entrepreneurs are pleased with the design of the program; the main worry is the time spent on applying for support.
- The program is demand-based and there are no general/ uniform quality standards on the basis of which to evaluate the need for/usefulness of the projects from the point of view of the firm or state.
- Projects are enterprise-centred, not aimed at local development. The role of the local authority is technical, being confined to preparation of the required application documents and there is no substantive cooperation with companies regarding the projects.

Future opportunities:

- It would be good if evaluators of applications had instructions and principles as to the quality standards of the industrial infrastructure desired by the state so that these can be followed in selecting the projects.
- In order to attain wider impact of support the transfer of the project selection mechanism to the regional level may be considered.

Efficiency

- The program is not large, covering only a small portion of potential beneficiaries.
- **Demand has been high** approximately half of the project ideas are financed eventually. On the one hand the abundance of applications allows for selecting higher quality projects, on the other hand it means a relatively high program administration cost, because applications are very long and technical.
- The round-based approach is justified, because the rounds are the only moment when projects are compared with one another, they are put in an order of priority and it is chosen which projects are to be financed and which are not.
- If the grant is evaluated from a broader social perspective, the efficiency of the program is negatively affected by weak cooperation with local authorities and other nearby enterprises.

³¹ In rural areas the problem may be even more serious, because the surveys also include Tallinn and other major cities.

³² Development trends of Estonian small and medium-sized enterprises. Saar Poll, August 2005.

³³ Development trends of Estonian small and medium-sized enterprises. EMOR, February 2003.

• As a rule, the financial status of the beneficiaries would have allowed for implementation of the project either by using corporate funds or a loan. Since most of the firms did not have problems with the collateral, the "cost" of such investment to the firm is interest expenses.

Future opportunities:

- Since it is expensive to analyse and prepare technical and voluminous applications, the application process should be divided into two stages to reduce the project document examination workload: at the first stage of short descriptions of "business" projects (1-2 pages) potentially suitable projects would be selected.
- Interest subsidies could be considered as an alternative support mechanism of infrastructure investments.
- For the purpose of more efficient use of the Structural Funds one should consider making the **enterprise-centred approach more focused on local development**.

Effectiveness

- The regional and sectoral division is satisfactory. Projects from nearly all counties have been financed and 2/3 of projects are located in rural areas. At the same time several projects have been financed in the proximity of large cities where their effectiveness may be lower. The high share of the manufacturing and the representation of various industries among beneficiaries are positive.
- The main effect of the support lies in the growth of the value of the benefiting enterprise. Important impact from the point of view of the state (i.e. job creation and growth in turnover) become visible through larger investments involved (establishment of production, expansion). Upon absence of a "larger" project the connection with the production process and productivity is weak and therefore the direct impact on the turnover and jobs is also weak.
- The additionality is modest, because the project application appraisal criteria prefer a good financial position of firms over the benefits arising for society, as a result of which projects with a low risk level are supported and a large portion of the projects could have been implemented without the grant. The high share of export in the turnover of the supported enterprises and preferring projects with an innovative technology are positive.
- Not enough time (i.e. two years) has passed from the end of the projects in order to measure impact indicators. As for jobs it can be noted that although creation of jobs is indirectly connected to most projects, it is unlikely that the goals are attained, given the high deadweight. On the contrary, the overall growth of turnover has been higher than the goal of 10%. But so has the growth of firms in Estonian on the whole (~33% for industry in 2003-2005). 35
- Since half of the enterprises which have been analysed more closely export over 50% of their products the displacement effect of the grant can be considered low and the structure of beneficiaries can be considered positive from the point of view of the state.

³⁴ Growth of turnover through 2003-2005.

³⁵ Database of the Estonian Statistical Office.

- The support **speeded up the implementation of projects** (0.5 to 1 years).
- In many cases successful growing enterprises receive the support and it determines the supported sectors (e.g. timber sector).

Future opportunities:

Since the broader impact of the investments is virtually non-existence and projects are often implemented even if no support is received, the raising of the self-financing rate could be considered.

- Adding a broader local impact to the application appraisal criteria could be considered.
- Taking into account the additionality in the appraisal criteria could be considered.

Spillovers

- Since the infrastructure grant is very enterprise-centred, the broader impact of the investments is modest. In the case of most projects there are no positive spillovers to other (current or future) enterprises and/or nearby industrial sites.
- To a certain extent the program impacts also enterprises which have not received support. Considering that many enterprises noted the desire to use the infrastructure grant as a reason for making the investment at this point in time and that projects were implemented in spite of not receiving support, the grant certainly speeded up the implementation of their investment plans.³⁶
- It is positive that nearly half of the projects have been either environmentally friendly or aimed directly at resolution of environmental problems.
- If an investment did not have a direct connection with or impact on the production processes of the beneficiaries, the entrepreneurs mentioned softer and estimated changes such as improvement of the workplace's look as the essential impact of the investment (owing to which they are no longer ashamed of bringing over their foreign partners to take a look at the plant).
- The main spillover channel in the case of projects which would have been implemented anyways is activities which were carried out from the funds released due to receiving the grant. Thus, from the point of society there can be broader impact only in the case of supporting enterprises who are expanding their activities or planning a considerable rise in the productivity.

E. Research and development support

The goal of the measure was to apply the developed technologies and innovations in

business, thus increasing the effectiveness and improving the performance indicators of the company implementing the project and the Estonian business sector on the whole.

Relevance / Design

- The program corresponds to the objectives set out in policy documents, i.e. contributes to the implementation of innovations in business and thus to the improvement of the competitiveness of the supported companies.
- The impact of the program on the performance of enterprises remains more modest than expected (and forecasted by enterprises).
- The program remains relevant, because corporate R&D investments are lower than desirable and the ties between the research and business sectors are weak.

Proposals for improvement of the program design, which might contribute to attainment of a stronger impact:

- Expansion of the supported activities could be considered (e.g. the new idea of supporting mobility is a step towards this end), because problems often arose at the stages following development.
- Very different firms are supported (e.g. high-tech start-ups vs. enterprises operating in traditional industries that have not engaged in development before) and to a certain extent their differences should be taken into account upon implementation of the measure (different assessment criteria, flexibility of the program, counselling).
- Besides impact indicators more attention should be paid to behavioural additionality to evaluate changes in the R&D activities and capacity of enterprises (e.g. innovation audits).

Efficiency

- Projects of the key areas set out in the R&D strategy (information and communication technology, biotechnology, material technology) and energy and environmental technology projects dominated among the supported projects.
- The efficiency was reduced by a heavy administrative burden, the relatively small flexibility of the measure (changing plans is time-consuming) and little transparency (according to those who received support).
- Information on the expected results and impact of the project was gathered from companies on the basis of different indicators and inconsistently.
- Preliminary surveys provided important information about the feasibility of the project and the possibility of using the results thereof.

- In the case of high-risk projects the program should be more flexible (e.g. to ease and speed up the process of amendment and clarification of plans).
- The monitoring system could be modified (to gather information consistently, e.g. about project technology areas, enter assessments on the additionality of the project from the application). Evaluation of performance of the established impact indicators also calls for similar and ongoing gathering of the respective information from the enterprise.

- The administrative burden should be reduced (to demand, for instance, the conduct of an audit instead of submitting all the expense receipts in several copies).
- A method of receipt of applications that would prevent the occurrence of long pauses in the receipt of applications should be used.

Effectiveness

- The additionality of the program is high in comparison with other business support measures, but not on the basis of international comparison. Thus, more should be aimed for in the next period.
- Nearly half of the projects were financially unsuccessful. Thus, they did not have a direct positive impact on the corporate performance indicators, but they did have an indirect impact (see the Spillovers). Problems arose mostly at stages following development (attainment of the production capacity, marketing).

Future opportunities:

- To pay more attention to **additionality** at the stage of application assessment (are we supporting projects that would be implemented even without grant?).
- In the case of major projects the so-called project supervisor or mentor could be used. Their role would be to communicate with the entrepreneur, raise issues concerning attainment of results and help to find solutions to the problems.

Spillovers

- The management skills of such projects, technological knowledge and competencies which allow for launching new and more successful projects increased.
- New development ideas were generated and new projects were initiated on the basis thereof. For firms with no prior development experience the behavioural additionality was especially high.
- Equipment and infrastructure required for further development work was acquired.
- Relations with the existing partners were strengthened and/or new partners were found. Cooperation with these partners has continued, sparking new development ideas.
- Cooperation of R&D institutions with companies influenced the priorities of their further research – more attention is paid to cooperation projects with companies.
- In the case of R&D institutions the quality of publications rose and it became easier to publish them in science magazines.

Future opportunities:

- The use of **competent project supervisors** might increase the behavioural additionality further (e.g. bring them together with potential partners and consultants, etc.).
- The behavioural additionality would also be increased by binding the financial support for knowledge transfer (e.g. through planned program of enhancing mobility and recruitment of top specialists).

Sustainability

• In particular, new knowledge and skills (behavioural additionality) have a long-term impact and refer to the sustainability of the program.

F. Export plan support

The goal of the export plan program is "to support enterprises in planning the entry to foreign markets and in consistent implementation of planned activities." Further objectives were "to moti-

vate entrepreneurs to perceive the need for and benefits of consistent planning of export activities; to motivate entrepreneurs to draw up and implement export plans; to support entrepreneurs in drawing up and implementing long-term export plans."

Relevance / Design

- Considering the increasing trade deficit of Estonia, development of export remains very important.
- Due to the small size of the Estonian economy the long-term competitiveness of companies depends on their export capacity.
- Since the program has so far concerned few firms, it **remains** relevant.

Future opportunities:

 The export plan program is aimed at firms that have prior export experience, but at the same time enterprises that are about to start exporting certainly need support in developing their exports.

Efficiency

- The biggest problem in the case of the export program lies in **underspending** many projects were interrupted or only a part of the planned activities was implemented. Four main reasons why projects were not implemented were:
 - Various changes were made in the program conditions in 2002-2004, as a result of which the initially planned expenses approved by EE proved ineligible for support later.
 - Though the former program conditions allowed for the redirection of expenses to other cost items and, where necessary, other target markets (in the case of a lapse of a planned export market), in most cases mostly that was not backed.
 - In addition to ineligible expenditure various eligible expenditures were also deprived of co-financing. The reason lied in incorrect compilation of the documentation required for compensation of expenses, because firms did not have the necessary information.
 - Also, the quality of export plans proved weak in the process of implementation the plans were unrealistic, the activities were poorly planned, unsuitable target markets were chosen, etc.
- Most of the final recipients proceed from the maximum rate in applying for support. About half of the support is granted in the amount of 1 million kroons.

- To prevent the unexpected and/or frequent changes in the program conditions, because it usually has a negative impact on the effectiveness and impact of the support.
- In order to identify underspending it is advisable to regularly monitor and gather information about the actual and potential use of grant money.

Effectiveness

- Many projects were not implemented to the planned extent. Some firms gave up implementation of the project already at the beginning, some spent about a half of the support. 40% of the respondents of a web survey did not achieve the goals set.
- Most of the final recipients replied that they would have implemented the export plans also without support, which refers to a high deadweight in the export activities on the whole, and thus the main net impact of support can become evident in changes in the behaviour of the company and in the approach to the export activities.
- Although 80% of the respondents of the web survey replied that
 they would have drawn up export plans without the support or
 already had an export plan, it became evident in the interviews
 that they would have not done that in exactly the same manner as
 required in the program.
- 90% of the respondents of the web survey said that now they regularly update their plans of activities in their export markets. However, it became evident during the interviews that none of them had made a new export plan. The form of the export plan was considered unsuitable for that the reason lied in the excessive level of detail.

- To avoid the unexpected and/or frequent changes in the conditions of the program, because it usually has a negative impact on the effectiveness and impact of the support.
- To make implementation of the export plan much more flexible. A possible solution could be the following:
 - To allocate support in a general sum and approve the export strategy and a detailed action plan for the first stage, but establish specific interim deadlines for project implementation. A report on the activities of the previous stage and an action plan for the next stage would be submitted by the interim deadlines and a sum for the next stage would be allocated.³⁷ This would allow for amendment of the expenditure structure, where necessary, and obtaining feedback on the use of the support, which would enable better overall planning of the program activities.
 - It is preferable to appoint a **project manager in charge** of each project who would also act at the interim deadlines (and in between) as a partner of the firm regarding future project activities and as an advisor regarding the further action plan in the decision-making system of EE.
- In order to prevent delays in using the funds some overall volume limits could be established in the program conditions for certain periods (e.g. years). In addition, at later stages the co-financing rate may be reduced, considering that the risk of export activities decreases over time.
- Expansion of the list of eligible expenditure may be considered (in particular, the recruitment of an export manager). However, the size of the net impact and eligibility under the EU rules of various cost items needs to be analysed beforehand.

Spillovers

- According to 40% of the web survey respondents, the support also affected activities in the home market in addition to export activities.
- Enterprises noted that good contacts for the future were established in the framework of the project.
- A positive impact became evident in the rise of the quality of advertising materials.
- Although 40% of the respondents say that the support has not resulted in organisational changes, some enterprises have hired representatives in foreign markets or an export manager.
- It is positive that in comparison with the recipients of other support, the beneficiaries of the export plan program have actively used other support granted by EE as well.

Sustainability

- Many entrepreneurs noted that they received information about the value and relevance of various marketing activities from the point of view of their firm.
- However, the quality of export plans often proved insufficient in the course of implementation. Therefore firms were deprived of the experience of successful export planning and the entry into the planned export market never took place.

- Since entrepreneurs often noted in the interviews that the structure of the export plan does not fit in their overall system of planning sales activities, the potential need for amending the structure of the export plan should be examined. It is possible that it would be wiser to differentiate between the export strategy and a more detailed short-term action plan.
- More attention should be paid to ensuring the quality of export plans.
- **Possibilities of cooperation with KredEx** in developing exports (e.g. communication of each other's services) should be examined.

G. Export guarantee

The goal of the export guarantee is "to increase the competitiveness of Estonian enterprises, increase export volumes and create new jobs through better availability of capital and reduction of export risks."

However, in the case of the short-term guarantees analysed upon this evaluation the direct impact on the economic performance of enterprises has not been established as a goal. A further goal of the export guarantee is to support the development of the private credit insurance market in Estonia.

Relevance / Design

- Although various private credit insurers have entered the market, there is a market failure in the case of high-risk target countries. Estonian factoring companies do not offer insurance for various riskier eastern markets (notably the CIS states) and foreign insurers are available only for large corporations. No direct interest in insuring riskier transactions could be noticed in the course of interviews. Thus, as far as this kind of transactions are concerned, the provision of the state export guarantee may be considered relevant. The private sector may also not be interested in small enterprises that want to insure smaller or single transactions.
- Factoring companies / banks refer clients who have addressed them
 for the purpose of obtaining insurance to KredEx only in the case
 of transactions that they do not want to insure. Thus, KredEx does
 not compete with the private market and these transactions
 would not have been insured if it weren't for KredEx's export
 guarantees (or they would not have taken place at all).
- The need for the export guarantee is also confirmed by the calculated use of KredEx's products in the case of only selected products.
- State export guarantees corresponded to the client's needs and expectation in the evaluated period. But this may not be true any longer due to the restrictions on state aid which entered into force as of 2005, because these days only a very limited portion of risks is ensured.
- Clients highly value KredEx's client friendliness and are satisfied with communicating with KredEx.

Future opportunities:

• In the case of medium-term and long-term export guarantees the existence of a market failure may be presumed. However, the respective products of KredEx have not been successfully launched. We recommend that the demand for the given products, the cost-effectiveness and the correspondence to the state's economic policy goals be investigated.

Efficiency

- The coverage of the export guarantee is modest. Through 2002-2003 there were 2,346 exporting companies in Estonia³⁸, but through 2002-2004 only 128 companies, i.e. 5.5% used KredEx's export guarantees. By today the number of companies using the export guarantees has fallen to 36.
- If the volumes of the export guarantee continue falling, the provision of the guarantees may not be self-sustaining. First, in the case of low volume it is difficult to spread risks. Second,

- the share of administrative expenses would increase.³⁹ Both developments may drive the price of the guarantee up too high (which would reduce the demand and guarantee volumes).
- Since the private sector is currently not interested in providing guarantees to riskier transactions it cannot be concluded that the provision of these guarantees by the state is more efficient than by the private sector.

Future opportunities:

- If the number of clients and the volumes of the export guarantee continue decreasing, the provision of the guarantee may not remain self-sustaining. To ensure self-sustainability the price of the guarantee should be increased. This may, in turn, reduce the demand and guarantee volumes. In connection with the limits of state aid that entered into force in 2005, i.e. the prohibition to guarantee exports directed to the EU and OECD the export turnover secured with short-term guarantees has fallen considerably over the last two years and payments for losses have exceeded premiums. Since KredEx is serving a relatively small guarantee niche, it is unlikely that former volumes will be restored in the case of short-term guarantees. Two possible solutions for the future include, for instance:
 - increasing guarantee volumes through medium-term and long-term export guarantees. Since it is a product aimed at a small circle of companies it calls for a strategic decision by the state, because the spreading of risks will be inevitably modest. According to KredEx, the product has not been successfully launched primarily due to their lack of capital and restricting risk standards.
 - state subsidy for short-term export guarantees to ensure feasibility.

Effectiveness

- KredEx's export guarantees have increased trade volume. This applies directly (on the supply side), by supporting the firm's decision to enter into a transaction with the specific buyer, as well as through the fact that the firms have greater opportunities for reaching a deal, because they could offer better terms of payment to their partners (on the demand side).
- Often, the transactions guaranteed by KredEx are aimed at new markets or a new partner of a company (nearly half of the web survey respondents) and most companies are still active on these markets and most of them have the very same partners (often without a guarantee). The number of target export countries has increased over the years. Thus, KredEx has contributed to entry into new markets.
- Through 2004-2005 the share of guaranteed export exceeded 0.8% of exports in Estonia and KredEx achieved the goal (set in 2003) of bringing the share of guaranteed export volume to 0.75%. However, over the last year the indicator has fallen considerably (to 0.5%).
- It is positive that the guarantee volumes and share of Russia and CIS states in the portfolio have increased in the last few years (albeit remaining at a low level on the whole only less than 0.5% of the total exports of Estonian enterprises to this region is covered with KredEx's guarantees⁴⁰).

- Enterprises see the coverage of commercial risks relating to buyers
 as the main benefit of the guarantee. Another important advantage
 noted by entrepreneurs lies in the possibility of offering better terms
 of payment for the buyer. Thus, entrepreneurs value aspects of
 guarantee which affect provision of export as well as demand.
- The additionality is high. Most of the transactions could not have been insured elsewhere if it weren't for KredEx's guarantee. Although most of the transactions would have been concluded without a guarantee, their volume would have been smaller and the terms of payment would have been worse for the buyer (e.g. advance payment would have been asked). Also, the absence of the guarantee would have had a negative impact on the working capital of the firm, if the guarantee was a prerequisite for entry into a factoring transaction.
- 1/4 of the clients have had loss claims through 2002-2006. However, many of them ended with the payment of an invoice by the buyer. In the interviews it was noted that even if the non-payment on the transactions would have put the firm in a difficult situation in some instances had they not had the guarantee, the transactions were not big enough to be fatal for the firm.
- In recent years the number of exporters and buyers using KredEx's guarantee has dramatically decreased due to changes in product conditions.

Future opportunities:

 The share of export volume in Estonian export has dramatically fallen in recent years and due to restrictions on state aid it is unlikely that shortterm guarantees will achieve the former high volumes. It is advisable to consider revision of indicator's target level taking that into account.

Spillovers

- Sometimes a KredEx's guarantee is a **prerequisite for obtaining factoring** and thus also for increasing working capital without which the company would be unable to enter into export transactions on the same scale.
- Half of the web survey respondents found that using the KredEx's guarantee has had an impact on the risk management system of their company.
- One of the goals of KredEx was to contribute to the development of the private credit insurance market. In comparison with the first years of KredEx's operation various private insurers have entered the market, but they mostly guarantee short-term export transactions. KredEx's activities in raising entrepreneurs' awareness have certainly had a positive impact in private sector development.

Sustainability

 While the transactions guaranteed by KredEx were aimed at new markets or a new partner of a company (nearly half of the web survey respondents), the companies are mostly active on these markets to date and most of them also have the very same partners (often without a guarantee).

⁴⁰ The author's calculation based on KredEx's database and the balance of payments data from Eesti Pank.

⁴¹ KredEx's database

H. Investment loan and leasing guarantee

The goal of the measure of loan

and leasing guarantee is "to increase competitiveness and create new jobs through improving enterprises' access to capital."

Relevance / Design

- The program corresponds to the goals established in policy documents and has contributed to elimination of the market failure, i.e. has improved enterprises' access to capital.
- The program remains relevant. Although financial problems are no longer as serious a problem for Estonian firms as they were a few years ago, there are firms that, regardless of the economic conjuncture and the situation in the loan market, lack collateral for obtaining a loan. Start-ups, smaller enterprises and rural enterprises have difficulties.
- Although the established goals describe start-ups, micro enterprises and enterprises of less developed areas as the preferred target groups, the respective preferences are not manifested in the process of assessing of guarantee applications. Thus, the target levels of the indicators are rather forecasts (of what the distribution of demand-based guarantee might turn out to be) than real goals.
- According to KredEx, taking other aspects into account upon assessment of applications besides economic cost-effectiveness would call for additional support by the state. But since KredEx is self-sustaining, it does not want to take excessive risks (i.e. problematic target groups are not preferred), but guarantee is provided to projects that can get loans, but firms lack necessary collateral.
- Although in the real process of assessment of applications the enterprises of no target group are given preference over another, the demand-based distribution of guarantee has resulted in a relatively high share of the clients of the desired target groups being supported (start-ups, micro enterprises and enterprises operating in less developed regions).
- A good program design hinders occurrence of deadweight and ensures high additionality (most of the projects would not have been implemented without the guarantee).
- The firms are quite pleased with the size of the guarantee fee, especially those that would not have been able to implement their project without the guarantee.
- There were **shortcomings in the monitoring system** during the evaluated period (2002-2004). Several of the established indicators are not considered reasonable by KredEx and no information is gathered on attainment of the indicators (as a result of which it has not been possible to evaluate the attainment of the goals, e.g. favouring achievement of regional balance). By today the situation has changed new indicators where approved in 2006.

Future opportunities:

• To clarify the indicators and improve the monitoring system (more detailed proposals in the report of the program).

Efficiency

- Ingeneral KredEx is highly valued and the firms that communicated
 with KredEx (many of the users of the guarantee do not have any
 direct contacts with KredEx) found the communication swift and
 effective.
- Firms usually end up using KredEx's guarantee via banks, i.e. banks play an important role from the point of view of implementation of the program. So far advising firms to use the guarantee has largely depended on the client relationship managers some recommend KredEx much more often than others. Such practice may result in unequal opportunities for entrepreneurs.
- One group of entrepreneurs had not quite grasped why they needed the guarantee and could not comment on the size of the guarantee fee. The bank's requirements were fulfilled at the time of applying for a loan (incl. using KredEx) without getting into details, because they wanted to get a loan quickly. Such ignorance may cause dissatisfaction (because people do not understand the benefits of the guarantee) and reduce the preparedness to use KredEx the next time or recommend it to others.
- KredEx's guarantee concern a very small market share of commercial loans (according to estimates, a few percentages of all commercial loans), which means that the impact obtained is not very high when having the entire business sector in mind. However, KredEx has achieved its goals in terms of the volume and the number of guarantee users.
- The share of rejected applications has fallen, referring to a rise in the effectiveness of the measure.

Future opportunities:

• More attention should be paid to raising awareness. On the one hand, this would ensure equal opportunities for firms in using KredEx's products. On the other hand, it would allow for reaching potential clients who belong to program's target groups and who have not been reached so far. Furthermore, higher awareness would give clients a better overview of the possible alternatives to pledging their personal property.

Effectiveness

- The additionality is relatively high (projects would not have been implemented without the guarantee). However, the ignorance of the users of the guarantee makes evaluation of additionality difficult several respondents admitted that they do not actually know if they would have received a loan without the guarantee and on what conditions, because they did not look for alternatives and therefore were unable to evaluate the situation objectively.
- The relatively high additionality has been supported by guaranteeing the right target groups – additionality is higher in the case of smaller enterprises.
- The main impact indicators included the growth of turnover and jobs created. It became evident that projects financed with the help of the guarantee contributed more to the growth of turnover than to creation of new jobs.
- KredEx had established the goal of creating 1,500-2,000 new jobs by 2006 with the help of business guarantee. By 2005 nearly 1,600

jobs had been created in the firms guaranteed through 2002-2004 (excl. guarantee of working capital loans contained in KredEx's forecast). However, there is not enough information to clarify how large a portion of the new jobs were created directly with the help of guarantee, which makes it difficult to evaluate the attainment of the established goal.

- There was no accurate target level for the growth of turnover. According to the commercial register, up to 84% of the enterprises that used the guarantee through 2002-2004 have increased their turnover.
- The program had a **positive impact on regional development** firms from Tallinn were relatively modestly represented among the clients of KredEx in comparison with their high share among all Estonian enterprises.
- For many companies the investment made with the help of guarantee was important from the point of view of their survival.

Future opportunities:

• As of 2006 the program's focus and the expected impacts have changed a lot. Before, the supporting of start-ups and micro enterprises whose growth ambitions were not very high and whose supported investments were often important for their survival was emphasised. Now it is aimed at target groups that have high growth potential, and a rapid growth of turnover and value added is expected from the supported enterprises. However, no new goals are kept in mind upon appraising of applications, as a result of which the type of supported firms and the impact of the program may still remain the same (only the evaluated indicators change).

Spillovers

- After taking a loan with KredEx's help the usage of new loans is much more active afterwards. Thus, the desired result has been achieved – enterprises have better opportunities for getting a loan afterwards.
- However, many enterprises have used the guarantee again when applying for a loan afterwards, although it could be expected that they could get a loan without guarantee. These are probably young and rapidly growing enterprises that still lack assets.
- They did not obtain much new knowledge from the communication with KredEx or banks. The entrepreneurs who used the assistance of an external advisor in preparing documents required for obtaining a loan did acquire new knowledge and skills (40% of the web survey participants). A half of those interviewed found the business plan useful in further work. The desire and preparedness to use external advisors has increased, but it is impeded by difficulties in finding a suitable advisor.

Future opportunities:

• The experience of other states shows that the effectiveness of the program (especially Spillovers) increases when financial support is provided in combination with counselling. This ensured that the implemented project is sufficiently thought through and in line with the strategic development plans of the enterprise. One

of the possibilities towards this end would be more extensive integration of the products of KredEx and EE (e.g. KredEx and banks recommend using the counselling services financed by EE, distribute respective leaflets, etc.).

Sustainability

- According to the staff of KredEx, with the slowdown of economic growth the demand for KredEx guarantee will rather rise than fall (banks want to hedge their risks).
- The sustainability of the supported projects depends largely on the substance of the investment. In the present market situation where there is a lack of labour force and wages rise faster than productivity the development of new products and services, increasing effectiveness and acquisition of new equipment are key issues for many enterprises from the point of view of their survival. In the course of the analysis it became evident that projects financed with the help of KredEx were often aimed at solving such problems, which gives reason to believe that the guarantee has helped to secure the future of firms and prepare them for more difficult times.
- One KredEx's problem lies in its **lack of capital** due to the standards of enterprises' own funds provided by law it may not be possible to grant any additional collateral in the near future. This may threaten as active continuance of the past work.

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9/2005 Business Support Measures in the State Budget Strategy for 2007-2013

Authors: Anne Jürgenson, Tarmo Kalvet, Rainer Kattel

The objective of the study is to develop proposals for priorities and measures for the support of business, and their hierarchy, in the single programming document for 2007-2013. The recommendations are based on a survey conducted among 810 companies. The results of the survey indicate lack of cooperation, limited development activities that are not related to subcontracting activities as well as lack of skilled workers as main inhibitors of development. The authors make recommendations for supporting businesses in a way that enables them to move into activities and fields that allow rapid increases in productivity and inter-company cooperation as a result of which positive feedback mechanisms are created. In conclusion, Estonia must essentially create an industrial policy that has been lacking to date.

8/2004 Men and Women in the Estonian Labour Market: An Assessment of the Gender Wage Gap in Estonia Authors: Tairi Rõõm, Epp Kallaste

The aim of the study is to assess the gender pay gap in Estonia and its causes. The reasons leading to differences in pay levels, such as personal characteristics and job characteristics, are examined on the basis of Estonian Labour Force Survey Data from 1998-2000. The analysis utilizes both descriptive and econometric tools. The results of the study indicate that in 1998-2000 women earned on average 72.7% of the pay of men. One third of the pay gap can be explained by differences in human capital and job characteristics, two thirds of the pay gap remain unexplained with observed factors.

4/2002 Digital Divide in Estonia and How to Bridge It. Executive Summary

Authors: Mari Kalkun (Emor), Tarmo Kalvet (PRAXIS)

The study focuses on social aspects of information and communication technology use in Estonia. The issue of digital divide has not enjoyed much attention, although several empirical surveys indicate that the problem does exist in the country. There exist certain groups of the population who do not use the Internet at all. At the same time, it is obvious that information technology can help raise productivity. Hence, it will be paramount to tackle the problem of digital divide more than has been until now. The authors make policy recommendations for popularising information and communication technology in order to encourage computer and Internet use among Estonian population.

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